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Cultivating social-ecological relationships at the margins agroecology as a tool for everyday peace formation in fragile environments

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Cultivating Social-Ecological Relationships at the Margins: Agroecology as a Tool for Everyday Peace Formation in Fragile Environments.

By
Georgina E McAllister

Thesis submitted in partial fulfilment of the University's requirements for the Degree of Doctor of Philosophy

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Certificate of Ethical Approval

Applicant:

Georgina McAllister

Project Title:

REFORGING SOCIAL-ECOLOGICAL RELATIONSHIPS AT THE MARGINS: AGROECOLOGY AS A TOOL FOR EVERYDAY PEACE FORMATION IN FRAGILE ENVIRONMENTS.

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Chikukwa Wards, Chimanimani District

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Chikukwa focus group (taken after indicator development (November 2016) at CELUCT

To the CELUCT team for making me so welcome, and providing such a peaceful place to be, think and investigate – while organising and catering for the focus groups and related workshops. Particularly Johannes Mufakose on the peace team for making the visit possible, and to Mai B and Matron for all their care and conversation. Zeddy Chikukwa for the cultural guidance – taking me to a rainmaking ceremony and a dawn Jickenisheni convergence, visiting sacred sites and sharing important folk stories along the way. Shylet Muchaya for all the thoughtful help and heartfelt

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Mhototi Ward, Mazvihwa, Zvishavane District

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Mhototi Focus Group (taken after storytelling - February 2017) at the Mawere homestead

My grateful thanks to the Muonde Trust, particularly to director Abraham Mawere and his family for hosting me at their homestead for the duration of the research, and to Allyc Ndlovu and Ken Wilson for organising and arranging from afar. I am immensely grateful to Abraham (Abhu) Changarara for his thoughtful translation and guidance throughout, and to Daniel Ndhlovu and Emmanuel Hove Mhike who helped to organise and co-facilitate focus groups and workshops with Abhu – a wonderfully energetic team. And to the women of the Mawere household, particularly Mai D and Mai Timo for cooking for so many participants. My thanks are especially extended to all of my co-researchers who attended the focus groups and workshops with such enthusiasm and laughter each week, often walking extremely long distances and crossing rising rivers to share their experiences, ideas and thoughts. From this group (pictured above) emerged the survey team: Tendai Majoni (central), Angline Muparadzi (east) and Godfrey Gudo (west)

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Dema Ward, Matobo District

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Some of the Dema focus group team after the final storytelling (June 2017) at Foundation of Life church in front of Njelele Mountain.

ACRONYMS

AEW:	Agricultural Extension Worker
AGRITEX:	Agricultural Research and Extension Service
BSAC:	British South Africa Company
CA:	Communal Area
CAMPFIRE:	Communal Areas Management Programme for Indigenous Resources
CELUCT:	Chikukwa Ecological Land Use Community Trust
CF:	Conservation Farming
CIO:	Central Intelligence Organisation
CMC:	Conflict Management Committees
CPC:	Child Protection Committees
CSA:	Child sexual abuse
DA:	District Administrator
DAEO:	District Agricultural Extension Officer
DFID:	Department for International Development (UKAid)
DWR:	Development Work Research
EMA:	Environmental Management Agency
EPIs:	Everyday Peace Indicators
ESAP:	Economic Structural Adjustment Programme
FALG:	Farmer Action Learning Groups
FGD:	Focus Group Discussion
FMNR:	Farmer Managed Natural Regeneration
FPC:	Fambidzanai Permaculture Centre
FTLRP:	Fast Track Land Reform Programme
GBV:	Gender-based violence
GMB:	Grain Marketing Board
MDC:	Movement for Democratic Change
MNP:	Matopos National Park
MSC:	(stories of) most significant change
NLHA:	Native Land Husbandry Act
NPRC:	National Peace and Reconciliation Commission
NR:	Natural Region
OPV:	Open pollinated variety
PAR:	Participatory Action Research
PCC:	Permaculture Club Committees
RDC:	Rural District Council
SKI:	Seed Knowledge Initiative
VFU:	Victim Friendly Unit
VIDCO:	Village Development Committee
WADCO:	Ward Development Committee
WaPeTe:	Ward Peace Teams
ZANLA:	Zimbabwe African Liberation Army
ZANU(-PF):	Zimbabwe African Nationalist Union (-Patriotic Front)
ZAPU:	Zimbabwe African People's Union
Zimparks:	Zimbabwe Parks and Wildlife Management Authority
ZIMSTAT:	Zimbabwe National Statistics Agency
ZPP:	Zimbabwe Peace Project
ZIPRA:	Zimbabwe People's Revolutionary Army
ZRP:	Zimbabwe Republic Police

SHORT ABSTRACT

This research considers the transformative potential of agroecological processes in rural farming communities beset by a history of endemic violence, and where the unresolved national question of identity and nationhood, intrinsically linked to agrarian change, has contributed to a succession of protracted crises that continue to foment political violence and reinforce power asymmetries. The research question has sought to explore whether emerging agroecological learning processes have contributed to the resilience and agency of practicing communities, and how these might inform conflict transformation in the context of everyday peace. To answer this, the study was designed to unfold inductively around the participatory and heuristic principles of agroecology itself, and involved three communities of agroecological practice in Zimbabwe; each defining the central research concepts of resilience, agency and peace, and co-developing a series of emic indicators in order to explore how these are experienced in the everyday by others in their community. Viewed through a political ecology lens the analysis focuses on the social-ecological processes and relationships through which each community mobilises and shapes change on their own terms. With a highly masculinised and exclusory popular imaginary, intolerant of pluralism and driven by a centralising developmentalist state, even deviation from technocratic farming norms may be considered seditious. This research explores the extent to which these small 'non-movements' are able to move beneath the radar and employ agroecological strategies as a set of non-threatening and situated tools to shape their physical landscape and negotiate social change by forging farmer networks based on principles of reciprocity and trust. In drawing upon, questioning and contextualising 'transformation', the research proposes that the practice-based, bottom-up processes at the core of transformative agroecology that involve the re-membering of subordinated subjectivities have profound implications for culturing social change towards more equitable outcomes for sustainable peace at the rural margins.

CHAPTER 1

INTRODUCTION

1. INTRODUCTION

1.1 Research Motivation - Changing Horizons?

My motivation for this research has stemmed from a long-lapsed peace studies background and almost two decades of working within the development sector applying various aspects of agroecology, primarily to develop modes of training 'delivery' for improved resilience, with variable and sometimes surprising results. It was often the case as projects progressed, that communities increasingly asked more challenging questions associated with power and access to resources. Was it possible, simply by promoting a different way of working – with nature rather than against it – and encouraging a different way of learning, through observation and interaction with each other and with their landscape, that spaces were opening up within which people were able to discuss the causes of their marginalisation and to begin developing different strategies to challenge these? Authentic dialogue and praxis takes place when the familiar encounters the strangeness of 'other', and both are fused to build an awareness of our conceptual limits in order to transcend them. This fusing, to the point at which new horizons are projected, simultaneously removes that limited horizon - for the first time enabling one to see beyond that which has previously been impossible to see. In this new space lie possibilities to 'create and recreate a shared world of understanding' and common meaning, through which a shared reality might be restored and the basis for a new community established (Ramsbotham *et al*., 2007: 294). If this were indeed the case, then what would be the implications of such challenges in authoritarian states, such as Zimbabwe, where civic space is severely constrained? It was from these rudimentary beginnings, and having been fortunate to have worked, since 2008, with some of the pioneers that began crystallising and advancing the concept of agroecology in Zimbabwe during the 1980s, that I have sought to bring together the transformative strands of both peacebuilding and agroecology for the first time. The aim, therefore, has been to investigate the potential of agroecology as a situated approach to peacebuilding, not only in enhancing resilience, but also in forging stronger relationships capable of promoting change through critical thought in what have been termed 'violent environments' (Peluso and Watts, 2001).

1.2 Violent Environments

In the majority of global conflicts, attention tends to focus on complex inter-state and inter-communal violence. Yet in most contemporary civil conflicts, causation is thought to stem from power asymmetries resulting in grievances over exploitation, and the concentration of wealth and resources in the hands of distant, largely urbanised, national and international elite (Azar, 1990). Authoritarian states with a neoliberal veneer are reinforced by international capital and rooted in global centre-periphery relations. Often born out of a process of violent state formation,

they employ coercive social, economic and/or political strategies to supress pluralism – seen as antithetical to the constructed consensus around nation, growth and development. Under conditions of structural violence, where basic needs go unmet or are withheld, nodes of insecurity and tension proliferate, fuelling asymmetric power relations and intra-communal violence at the margins of conflict, far from the dividends of liberal peace. Like liberal peace- and state-building, the productivist technocratic agriculture agenda emerged from the same neoliberal ideology – both presented as if part of a post-political discourse, peopled by external 'experts' imposed by an international and national elite upon an otherwise 'unruly periphery' for their own good. In such complex and fragile environments, a prevailing negative peace can obscure the deep injustices which remain, and 'if unaddressed can contain the seeds of future violent conflict' (Schmid, 1968). Indeed, as Richmond (2005) points out, fifty percent of all conflicts see a return to violence within ten years of the signatory of peace accords, unable to connect with the subjects of peace or the deep-seated causes of conflict. To explore peace formation, 'We also need to understand how civil society (and what lies beyond this often Westernised social artifice) makes peace at its own level, but also how the small scale and often low-level efforts made beneath the state, often in hidden or marginal spaces, have actually been silently modifying the grand liberal peace and liberal state building project' (Richmond, 2011:8).

Smallscale farming continues to be the mainstay of rural livelihoods in states experiencing fragility (FSI, 2018) yet agriculture receives scant attention in peacebuilding strategies. Where peace and environmental concerns do coalesce, they more often focus on the governance of inter-state resources, such as watershed and dams, or wildlife 'peace parks' from which resource users are excluded. This study therefore positions itself in these often forgotten rural margins where long-held rural suspicions and low-level violence persists after periods of conflict, and where vulnerability is likely to be further exacerbated by changing climate, corporate and elite acquisition, and accelerated resource competition.

This research begins by acknowledging the non-linearity and interdependence of human-ecosystem interactions, and is underpinned by a broad interpretation of resilience; being the capacity to manage change, learn and develop as the basis for enhanced adaptive capacity in a complex world of rapid change, without blocking future transformations. (Folke *et al*., 2002). As such, the research recognises the value of resilience in creating environments within which people are able to function in the everyday, but emphasises the centrality of agency as the capacity of individuals and collectives to adapt and respond to the non-linear ebb and flow of socio-political and social-ecological change. It also emphasises the tensions that may repeatedly cross between cycles of violent conflict and peacebuilding – and the many gradations between that contribute to a persistent condition of negative peace and insecurity. The research examines

the extent to which action learning processes, when situated in the everyday, and practiced in the relative safety of a conflicts' margins might enable communities of practice to address the duel challenges of physical and social disruption that continue long after the cessation of violent conflict, while also serving to build cohesion and trust for a more just and sustainable peace.

1.3 Intersection of Theory and Practice

In considering the intersections between agroecology and peacebuilding in scholarship and practice, this study centres on social constructions of knowledge, power and discourse not only as a source of domination, but as potential points of creativity through which new pathways for emancipatory thought and action can emerge. The research begins setting out its stall in *Chapter Two* by presenting critical and actor-oriented perspectives that embrace complexity and discursive practice, as a counterpoint to homogenising technocratic tendencies and the inherent contradictions presented by surplus value extraction from labour and nature that drive competition, degradation and vulnerability. The key to this study is therefore the exploration of whether, and indeed how, agroecological practice might forge 'islands of calm and civility' (MacGinty, 2014:12) by reforging social farming systems rooted in reciprocity and trust, and building confidence in an ability to navigate and shape change in the everyday - and what this tells us about agroecology's potential for peace formation in rural communities.

Central to this exploration is the value of knowledge and experience as a vehicle for transformation towards a more socially just and equitable future that forges a contextual legitimacy for sustainable peace. In the face of the dominant Cartesian thesis, it is an essentially freeing proposition which questions power by repositioning where knowledge itself lies. In doing so, the chapter proposes that bottom-up, place-based and emancipatory approaches situate agroecology as highly compatible with peacebuilding in fragile socio-political environments, as a form of non-confrontational 'quiet encroachment of the ordinary' in otherwise highly contested spaces (Bayat, 2010:54). In investigating the value of agroecology in application to latent conflict, it is possible to suggest that, as with nonviolence, agroecological practice not only provides a framework for enhancing resilience and therefore creates an environment for livelihood development, but also provides a situated, discursive learning ground which 'prepares disempowered and oppressed groups for constructive conflict engagement' involving personal, cultural and structural relationships (Francis, 2002:47). In this way '… transformation views the presenting issues as an expression of the larger system of relationship patterns in response to everyday issues in real-time' (Lederach, 2003:4).

As the study unfolded, it became increasingly clear that power was the explicit variable shaping exploration and analysis, as opposed to the agroecological zoning or resource scarcity *per se*.

From a socio-cultural perspective, the disaggregation of the social from the ecological has eroded knowledge and undermined interactions for collective agency formation through which the agency found in adaptive capacity may be generated, leaving people highly vulnerable to change in its many forms. Just as the pace of change in the ecological realm affects the ability of the system to cope or recover, rapid social change and upheaval can result in moral panic and a suppression of change in favour of maintaining the stability of the status quo, and a reflexive reproduction or intensification of power dynamics that exacerbate existing vulnerabilities.

1.4 The Study in Context

In Zimbabwe, this separation of people from their landscape began with the colonial domination which saw the commodification of land and life. *Chapter Three* considers the legacy of these historical processes, from the introduction of capital and equipment such as ploughs, to voracious land acquisition, alienation and the creation of Native Reserves. Despite continuous attempts to remove Africans from the land to service the land and labour demands of white industrial and agricultural capital, prolitarianisation remained partial. Nonetheless, this process drove dramatic agrarian change that created intense landscape pressures but also opportunities for social change. The chapter explores how increasing class differentiation sowed the seeds of dissent and nationalism, driving irrevocably towards national liberation. In considering the violence that this unleashed, and the new state that emerged, it is necessary to consider the different struggles taking place at that time. In exploring violence and peace in the context of rural environments, it is recognised that the state does not sit outside of cultural politics, but can be seen in the integration of struggles over meaning, legitimacy and authority, reaching through layers of social practice and its institutions. For Donald Moore, these cultural practices and relations, rather than being symbolic manifestations of capital relations, were in fact already deeply embedded within them. He referred to these simultaneously symbolic and material conflicts as a battle over 'semiotics as well as soil' (1996:139).

Soon after the flourishing of independence, with its colonial legacy of a strong centralised state, the response of the new state, on finding itself in a process of disrupted nation-building as a result of structural adjustment and growing political opposition, was to revert to all the centralising tendencies within its means. This period of power consolidation saw extreme violence perpetrated against those threatening dissent to the constructed national narrative, an alignment of patronage structures, and the ongoing imposition of the control-orientated colonial developmentalism, under which even deviation from the modernising farming agenda was viewed with suspicion. It also saw a further blurring of the national vision (begun under colonialism) encompassing Christianity, modernity and productivism as part of one's patriotic duty to the party-state, despite declining resources to service such a vision. The chapter goes on

to explore the ecology of violence through the control over access to, and distribution of, natural resource and welfare entitlements via layers of patronage. In so doing, it considers how this history of coercion, control and division has reached in to every aspect of society, forming complex layers of resistance, compliance, apathy, activism and nostalgia. At one level, and despite its control orientation, the party-state has proven pathologically resistant to change. Until, that is, one considers that, in deflecting the multiplicity of internal challenges it has faced, it has remained in a constant state of adaptation to retain control. This view of resilience highlights the role of agency, not just that of the state to continuously re/assert its control through shifting alliances and patronage, but of the shifting alliances themselves in recursively challenging and shaping change.

1.5 Methodology and Field Studies

To explore how agroecological communities have emerged within, and responded to, this environment, in *Chapter Four* I present my research questions and methodological design for this investigation. This has centred on the thematic concepts of *resilience*, *agency* and *peace* to explore how these are experienced in the everyday, for which I selected and applied a mixed methods approach - leaning heavily on qualitative data from participatory action research (PAR). In alignment with the participatory and emancipatory ethic of transformative agroecology, I adapted a series of tools through which the three very different communities of practice could define and explore the research concepts, and through which we were able to surface further layers of experience. Here the relationship between the three themes are discussed as being far from static, overlapping as they do at various points of the analysis. However, true to the PAR approach, these thematic 'divisions' reflect how field work participants articulated their understanding of these concepts and their interconnections as the process unfolded.

Each of the case study chapters (*Chapters Five to Seven*) are presented in two parts. The first part presents a more localised and textural exploration rooted in place, and is grounded in political ecology to consider how historical and contemporary struggles for land, culture, power and resources have shaped meaning and identity. In order for the voices of contributors to be heard, the approach I have applied here has been to engage with a prominent strand, or strands, that emerged during the research interactions. This was used as a mechanism around which stories could be woven to explore changing attitudes and practices, as well as how idioms and habitus continue to inform and describe complex relationships around which interests and needs are framed and negotiated in the everyday. Here, I fully recognise that issues raised during field work represent a static temporal reality, which may relate to seasonality or other socio-political factors that foregrounded specific concerns pertinent at that period in time.

In the second part of the case study chapters I then introduce the origins, influences and/or evolution of the agroecological organisations and their interventions, before going on to present the data emerging through a combination of interviews, surveys, focus groups and observation. In doing so, I present the data to investigate the different perceptions, priorities and relationships between resilience, agency and peace in context. Emerging from a series of emic indicators, I compare survey responses from agroecological farmers to those of 'conventional' farmers, in order to investigate differences in social-ecological perceptions and relationships.

Chapter Eight is an opportunity to synthesise the findings from each site, using a series of categories as qualitative framing mechanisms to consider the different priorities under resilience, agency and peace. These frequency patterns tell three very distinct stories about the impact of different histories, influences and actions. This highlights the utility of examining three very different communities of practice with divergent approaches at different stages of organisational and network development; each in different agroecosystems and socio-political environments; and with varying degrees of negative peace and opportunities for opening creative spaces for co-action. With this in mind, I briefly consider the divergent responses to the PAR processes, intended to surface dissonance through which each community could identify objects of change, and develop strategies to engage with and mobilise others. Yet to explore this in any more detail would require a critical realism framework for longitudinal research to delve beneath the empirical, and to understand unfolding group functions, wider engagement, and reflexivity to change events, which lies beyond the scope of this study. I conclude the chapter with a summary of key findings that highlight the characteristics of peace across the agroecological communities of practice.

1.6 Discussion and implications

Chapter Nine briefly reflects on the prevailing condition of structural and social control as the overarching deterrence to creativity and pluralism in order to consider whether agroecological organisations and their networks are instead developing more critical ways of looking, thinking and acting within this environment that promote a culture of responsiveness and care. As the study unfolds, gender and generational dynamics, through which power was most visibly expressed, became an important lens through which power reproduction and social change, often in a complex interplay, could be viewed. Here, it was important to reflect on the degrees or stages of change that are observable, albeit iteratively, at different levels of social activity may be taking place as a result of the confidence engendered through collective endeavour.

In considering the different change responses stimulated by stresses and shocks, I explored the concept of margins of relative freedom - as places further from the centres of power

consolidation – to consider its impact on creating conditions for a flourishing of possibility within which the constrictive boundaries may be being tested (Gordon, 2015). This led to an examination of a return to social farming systems, emerging through an exploration of past-present-future relationships, and the development and evolution of agroecological networks and their alliances to mobilise further change and widen community and institutional acceptance, discussed here as an *adaptive dance*. In the context of a highly restricted and shrinking civic space, where organisations move beneath the radar in plain sight, the generation of these localised *non-movements* is a pragmatic response (Bayat, 2010). On one hand, this may be a functional dressing up of agroecological activities as food security, sustainable farming and livelihoods. Yet on the other, it reveals an internalisation of the technocratic and productivist agenda that risks stripping agroecology of its meaning. I conclude the chapter by exploring what this means for the transformative potential of agroecology in context, proposing instead that what might be taking place, through the introduction of more plural ways of knowing and doing, and through opening spaces for discussion and co-action, is *a radical culturing of social change* that engenders greater responsiveness and care (Stirling, 2014).

Having been locked in to poverty and inequality by a coercive culture of control, constrained by standardised technocratic boundaries, the resulting 'radical realization about the reciprocity and double directionality that exists between humanity and the planet as a whole' (Redclift and Woodgate, 2010:142) might just be aligned with Gadamer's opening up of limited horizons which, when reached, is a space in which 'we do not remain what we once were' (1989:341).

CHAPTER 2

AGROECOLOGY AND PEACEBUILDING: BRIDGING THE DISCIPLINARY DIVIDE

This chapter introduces some of the theoretical and conceptual foundations of both peacebuilding and agroecology, and their emergence at a critical juncture in time, in order to explore common themes and alignments in praxis. Scholars within both disciplines, intra-disciplinary disagreements notwithstanding, have been heavily influenced by structuralist and critical thought in order to counter more deterministic and essentialist technocratic approaches to emerging threats - instead developing ontological modes in enquiry that emphasise power asymmetries as causal to violent conflict and chronic resource degradation that further exacerbate vulnerability to both conditions. These centre on social constructions of knowledge, power and discourse not only as a source of domination, but as points of creativity within which the potential to open up new pathways through which emancipatory thought can emerge. What has unfolded is a more actor-oriented perspective that embraces complexity in relationships, and promotes discursive practices as a vehicle for transformation and social justice. Both disciplines therefore call for open-ended processes that forge contextual legitimacy as a counterpoint to homogenising technocracy, and dialogical approaches to knowledge generation and efficacy formation. In presenting these theoretical and conceptual alignments, and the many discussions therein, this chapter proposes that bottom-up, place-based and emancipatory approaches situate agroecology as highly compatible with promoting social justice toward sustainable peace at the margins of violent environments.

2.1 ENVIRONMENTAL PEACEBUILDING – THE VIEW FROM ABOVE

The debate on the causal relationship between environmental degradation and/or climate change and violent conflict endures due, in part, to the majority of conflicts being interpreted through normative technocratic diagnostics. A lack of access to or control over natural resources can play a role in conflict escalation, financing and recruitment, and indeed many conflicts can in fact be traced to land and resource claims such as Timor Leste (Brigg, 2010), Sudan (Komey, 2015) and indeed Zimbabwe (Rotberg, 2010). Yet the causal relationships remain unclear. Poor diagnosis of conflict causation and ongoing insecurity can lead to inappropriate or partial interventions which may exacerbate pre-existing inequities, leaving affected populations smarting from a sense of injustice as power dynamics and entitlement relations shift in favour of the victor's peace. This can result in a profound lack of resolution over access to and control over essential livelihood resources – an important pre-condition for a sustainable peace. Analysis of dynamic power structures and social relations are significant in understanding how conditions of resource insecurity, particularly in agrarian societies, contribute to a lack of rural opportunity and leave people exposed to political opportunism at times of heightened socio-political insecurity.

Environmental resources were identified as a significant risk factor in the 2006 UN Secretary Generals progress report on armed conflict prevention. Yet this same report also emphasised the potential of environmental protection initiatives in 'promoting dialogue around shared resources and enabling opposing groups to focus on common problems' (UNGA 2006:10). Under this thesis, a growing number of scholars and practitioners argue that post-conflict natural resource management (PCNRM) can be an important tool for preventing or ending conflict, and peacebuilding in a post-conflict setting, enabling access in otherwise difficult environments to create pathways for exploring shared knowledge through which to build trust and confidence based on the recognition of common interest (Weinthal, 2004; Conca *et al.*, 2005; and Dabelko, 2008). Indeed, in 2010 Ban Ki-moon called on member states and UN institutions 'to make questions of natural resource allocation, ownership and access an integral part of peacebuilding strategies' (UNSG 2010:12). The UN Environment Programme's (UNEP) Disasters and Conflict Programme has developed what it calls environmental diplomacy, with a scientific assessments of conflict-related environmental damage in eighteen countries.[1] The programme aims not only to evaluate damage but also to develop institutional strategies for putting the environment at the heart of *reconciliation and capacity building* across lines of conflict. These remain relatively small-scale but, importantly, link peacebuilding and livelihoods in fragile post-conflict settings, integrating practical steps by building natural resource management into its peacebuilding 'toolboxes'.

While the positive positioning of environmental issues in peacebuilding at this level is encouraging, initiatives remains largely inter-state, and its literature commonly framed around scarcity-abundance and greed-grievance causalities. This inexorably leads to technocratic prescriptions centred on governance mechanisms and processes that downplay the structural realities and needs of resource users, or excludes them altogether.[2] As such, much of the PCNRM literature fails to engage with underlying power and complex social relations that define access to and control over environmental resources, through which entitlements are contested and livelihoods are politicised. Here, political ecology provides different ways of understanding the relationship between violence and environment, in what has been termed 'violent environments' (Peluso and Watts, 2001). Here the environment is viewed as an arena in which conflicts and claims over property, assets, labour, and the politics of recognition play out. From this perspective violent environments are 'site-specific phenomena rooted in local histories and societies, yet connected to larger processes of material transformation and power relations.' (Peluso and

[1]Including Bosnia, Sudan, Liberia, Iraq, Afghanistan, Nepal, Rwanda, and the DRC.

[2]PCNRM include inter-state initiatives around water resources (Trottier, 2003; Asaf *et al.,* 2010; Fischhendler *et al.,* 2011) and trans-boundary peace parks (Buckles and Rasnak, 1999; Martin *et al.,* 2011; Ali, 2011).

Watts, 2001:25). With its focus on the struggles through which resource access and control structures emerge and are reproduced, it is interested in how a range of differentiated actors operate in manifold ways. In their actor-orientated analysis of the *political ecology of violence* in Sri Lanka, Bohle and Fünfgeld (2007) consider the relationship between the physical, structural and social spaces in terms of how resource entitlements are contested, and related livelihoods politicised. As seen in *Figure 2.1*, because resource access is moderated by violence, violence is seen at the centre as a form of agency.

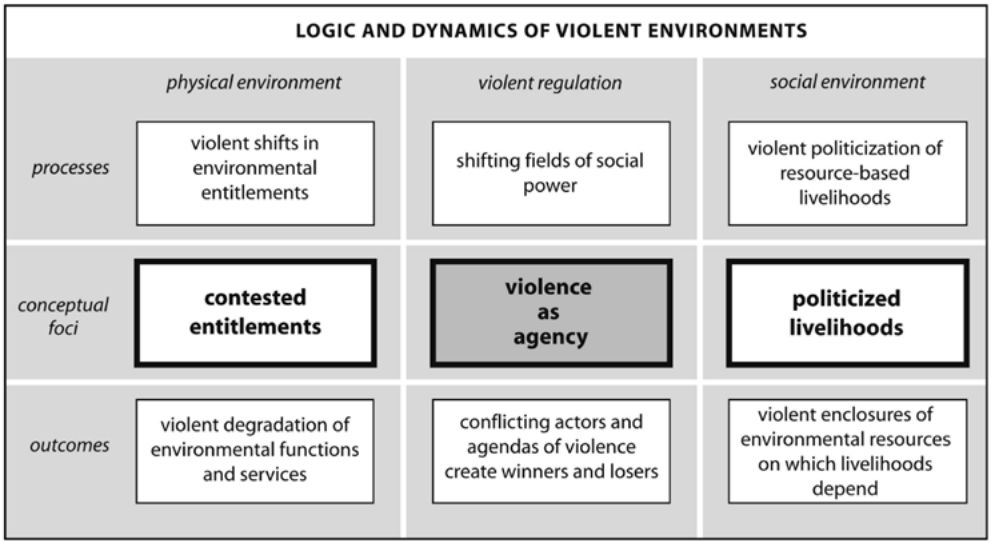

Figure 2.1: *Political Ecology of Violence (Bohle and Fünfgeld, 2000)*

In a post-colonial landscape marked by reconfiguration and upheaval, 'Violence is often deployed as part of a futile quest for certainty, as a means to reinforce essentialised ideas about identity and belonging' that can result from a bureaucratic simplification that drives social reconfiguration for the purpose of legibility (Broch-Due, 2005:1). This process not only erodes previous centres of power and identity to which belonging and entitlements have historically been attached, it is a cause for heightened anxiety based on new and arbitrary divisions, for which the habits of violence generated through war can be redeployed. Furthermore, Broch-Due suggests that we might view violent aspects of power in duality – both subordinating and producing, and destroying and creating - becoming possible to see the association between different forms of violence, and their connection to culturally accepted forms of regeneration and social reproduction during times of disruption and uncertainty. Viewed in this way, a bottom-up perspective is required to explore how diffuse power variously enables and constrains access to entitlements, and influences behavior, attitudes and trade-offs.

2.2 POWER, KNOWLEDGE AND DISCOURSE

If we understand every social order to be hegemonic in nature, then its origins are political. The social is thus constituted by sedimented hegemonic practices that conceal their institutional origins by appearing as the natural order of things (Mouffe, 2018). From this perspective, every order is the result of the transitory and precarious articulation of contingent practices, choices and exclusions of possibilities, and are the expression of a particular structure of power relations. For Chantal Mouffe (2010), it is from these practices that structures of political character stem, while at once giving the impression of being the natural order of things. If society and its institutions are dominated by social practices and representations that 'affirm the central values, interests and concerns of the social class in control of the material and symbolic wealth of society' (McLaren, 2003:75), then we can interpret hegemonies as 'the mainstream domination, not necessarily by the sheer exercise of force but primarily through consensual social practices, norms, and structures produced in specific sites such as the church, the state, the school, the mass media, the political system, and the family.' (McLaren, 2003: 74). In short, the powerful win consent of the subjugated through struggle, over ideas, knowledge and institutions, which is then reinforced and replicated through a system of class and/or economic structures. The reproduction of social relations and existing structures of domination and exploitation is achieved through institutions in ways that unite knowledge and power to sustain asymmetric power relations (Apple, 2003). However, this top-down power analysis runs the risk of reproducing the dualism of Hobsbawm's tradition invented by elites, idly adopted by the masses (Hobsbawm and Ranger, 1983) thereby absenting the complexity of power relations operating in manifold directions. In his subsequent reappraisal, Ranger (1993) stated that this work overestimated the permanence of traditions, without creating room for the continual reformulation of identities and institutional transformation. In arguing for more a complex analytical framework for postcoloniality, Ranger considers the role of different representations of ethnicity, religion and language which enter into a relationship of perpetual contestation to redefine the meaning of political community. In his everyday history, Lüdtke (1995) reflects on this with examples of where power relations are contested or secured in perpetually incomplete processes of negotiation that are rarely unambiguously gained or ceded.

Here, the understanding shifts in emphasis to how the subject is culturally and historically constituted in different times and places, and demonstrates how such culturally and historically defined subjects are also autonomous agents whose actions and modes of being both sustain and transform the structures that shape and influence them (McAllister, 2014). And while options to alter the rules of this structural game may be limited, choices to act within that framework are not. In this case, it is the very process of pushing against those limits that 'open up the flourishing

of possibility' for alternative futures, as a phenomenological process of generative relational change (Gordon, 2015). Power in this context is less about dominance, but the ability to effect change through experience, and the reconceptualisation of knowledge as knowledge*s*. The ability for the subaltern to effect change and resist domination, however, is influenced by many factors not least material surroundings and internalisation of ideological formations characterised by habitus. At the core of the constructivist view of knowledge is the drive for emancipation, social change and justice, and the view that all knowledge is created within an historical and cultural context. In an educational setting, this provides a new way of analysing social change, conflict and complexity which emphasises social agency as a driver for collective activity and self-determination (Darder *et al.*, 2003). In his radical alternative through a rigorous criticism and analysis of institutional structures, within which assumptions about the growth economy, political centralisation and unlimited industrial and technological advancement are embedded, Ivan Illich was an important inspiration for Freire for whom pedagogical questions of power, culture and oppression were central to the emancipatory discourse and emerging practice to promote social agency, voice and democratic participation.

Ultimately, 'deep knowledge is relational and contextual knowledge, not fragmented or reductionist knowledge' (Shiva, 2011). Yet the focus of development education hinges on the *how-to* which, while serving an important function, is of limited value without presenting the macro-learning objectives which provide meaning and context. This is what Giroux called 'productive knowledge' which connects the practical and technical to the wider social and political implications for ongoing consideration and discussion – fostering a dialectical mode of inquiry (McLaren, 2003:71). Habermas sought to reconcile the perceived conflict between technical knowledge (empirical, deductive and analytical) on one hand, and the practical (situational and experiential knowledge) on the other - in what he called *emancipatory knowledge*, which is interested in understanding the formation of social relationships and the effect of power distortions, as an educative foundation for social justice (Habermas, 1970; Kemmis, 2001). Where social constructions inform experience and perceptions built up over many years, our proximity to these textured encounters wills us to act in our environment, and builds confidence in that action.

2.3 AGROECOLOGY – A COUNTERPOINT TO CONSTRUCTED FRAGILITY

Within a relatively short period since the Second World War, the face of farming in industrialised economies has changed from being one primarily concerned with biological and social relationships to being almost entirely focussed on industrial and economic processes, as if to abstract itself from the messy business of social and ecological complexity, and ultimately to

simplify and subdue nature itself. As seen in *Table 2.1*, Green Revolution, industrialised, or what is commonly referred to as *conventional* agriculture resulted in dramatic increases in yields of certain input-responsive crops by the 1970s, with these gains beginning to plateau by the 1990s due to a combination of resource degradation and biodiversity loss, and with genetic uniformity increasing vulnerability, despite the ever-increasing quantities of inputs applied (IPES-Food, 2016). Despite being practiced by only 10% of the world's farmers producing approximately 30% of the food consumed globally, industrial agriculture contributes to one fifth of greenhouse gas emissions, which rises to one third when factoring in the industrial food system as a whole (Vermeulen *et al.*, 2012), the impacts of which are most keenly felt by smallholder farmers in some of the most biophysically challenging and socio-politically fragile environments. Nonetheless, the dominant neoliberal or technocratic agenda, doggedly pursued by governments at the behest of powerful donors, has long presupposed that smallholder farmers represent a primary threat to biodiversity conservation and development objectives, emphasising the need

SPECIALISED INDUSTRIAL AGRICULTURE	DIVERSIFIED AGROECOLOGICAL FARMING
Definitions	
Specialisation based on socio-economic efficiency. Industrial agriculture refers to intensification, scale and task segregation for productivity gains and is applied throughout a highly mechanised food chain.	Diversification of multiple outputs across landscapes and time. Agroecology maximises biodiversity to stimulate species interaction for fertility, resilience & social wellbeing, and represents a social movement.
Key Characteristics	
Crop monocultures and concentrated animal feeding operations at farm and landscape levels.	Temporal & spatial diversification (crop rotation, intercropping, mixed farming) at plot, farm and/or landscape levels.
Use of genetically uniform seeds & breeds for yield, adaptability & response to chemical inputs.	Locally adapted seeds & breeds according to local conditions, culture, taste preferences etc.
Segregation of product chains (vertical & horizontal).	Integration of production types to enhance natural synergies.
Highly mechanised for labour saving.	More labour intensive systems.
Maximisation of yield and economic returns, based on limited products.	Maximisation of multiple outputs to optimise outcomes (natural, social & economic).
Intensive use of external inputs (fossil fuels, chemical fertiliser, pesticides, antibiotics).	Low external input, nutrient cycling, closed loop / circular economy approach.
Long value chains of homogenous products in high volume.	Short value chains, product output diversity for income & livelihoods, & reduced risk.

Table 2.1: *Adapted from Key Characteristics of Specialised Industrial Agriculture and Diversified Agroecological Farming (IPES-Food, 2016).*

for land expropriation, market-driven reforms and technical solutions to increase investment and land-use efficiency (Pimbert and Pretty, 1995; Peet and Watts, 2004; Ranger, 1999; Neumann, 2005). Under this thesis, it is not the inequitable access to land that constricts economic viability and creates natural resource pressures, but the lack of access to technical expertise, inputs or credit. Thus we frequently see active hostility to policy interventions that advocate agrarian reform that interferes with the sanctity of market forces, the presumed cause of distortions (Amanor and Moyo, 2008). And so it is, under this technocratic model, that changing land-use practices have led to substantial deforestation and biodiversity loss, and soil degradation controversially estimated at a rate of 10 million hectares globally per annum (Pimentel and Burgess, 2013; Scoones, 2015).

In recognition of the urgent need to address the unsustainable levels of destruction and consumption of natural resources, and mitigate the impacts of climate change such as extreme weather events, agroecology is gaining prominence in formal institutions as a viable and alternative paradigm. Featuring prominently in the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTAT) report in 2009, agroecology was again highlighted in the United Nations Trade and Environmental Review, *Wake Up Before it is Too Late* (UNCTAD, 2013). During his tenure (2008-14) as the UN Special Rapporteur for Food, Olivier De Schutter consistently advocated a shift to agroecology. And in 2014 and 2018 the FAO hosted its first Agroecology Symposia in Rome.

As the 'application of ecological science to the study, design and management of agroecosystems' (Altieri, 1995), agroecology seeks to enhance agricultural production by mimicking natural patterns and processes by diversifying farming systems. The subsequent reduction in synthetic input dependence is particularly beneficial to the most remote rural communities on marginal lands with poor infrastructure. Transitioning away from high-risk, input-dependent mono-cropping systems and 'towards a low-carbon, resource-conserving form of agriculture that benefits the poorest' would significantly improve production and livelihoods to create rural opportunity and reduce urban migration (De Schutter, 2013a:34). In landscapes increasingly buffeted by extreme weather, agroecological systems have been found to be more resilient, absorbing the impacts of flooding and high winds. Studies of agroecological farms after natural disasters in Nicaragua and Guatemala (Holt-Gimenez, 2002), and Cuba (Rossett *et al*., 2011) were found to have suffered fewer losses and experienced more rapid recovery than their conventional counterparts due to improved adaptive capacity of landscape and farmers. Furthermore, in an extensive study of rain-fed agriculture, agroecology out-performed conventional by 76% (Pretty *et al*., 2006).[3] And in a thirty-year farm trial in the United States, while organic farming performed

[3] The study involved 286 interventions in 57 poor countries covering 37 million hectares (Pretty *et al.,* 2006).

comparatively against conventional systems, significantly outperforming it in years of drought and, with lower input and energy use, thus resulting in higher economic performance (Rodale Institute, 2011). Productive diversification that maximises synergies in polycultural systems serves a number of important functions. These include the management of field pests and weeds, protection and enhancement of soils for fertility and moisture retention, and represents a safety net against losses to extreme weather and pest attacks. Under monocropping, such losses would be near total, exhibiting greater yield stability during periods of drought and pestilence (Altieri, 2013). Agroecology is rapidly emerging as a counterpoint to the impacts of Green Revolution technologies, making an important contribution to the proposition of agronomic practice with reduced fossil-fuel dependence, increased nutrient cycling and the integration of natural processes to optimise synergies (De Schutter, 2014).

Much has been written about the evolution of agroecology, characterised as a science, a practice and movement (Wezel *et al.*, 2009; Wezel and Soldat, 2009), yet these distinctions reveal what some early physiological agroecologists may consider to be a somewhat problematic coalescence between the natural and social sciences (Buttel 2007). For Wezel *et al.*, (2009), the transdisciplinary nature of agroecology (*Figure 2.2*) represents something of a disciplinary confusion, while for others (De Shutter, 2013) it acknowledges the value of agroecology in re-forging important links between the social, scientific, political and indeed economic spaces, the Cartesian disaggregation of which gave rise to the 'wicked problem' (Batie, 2008).

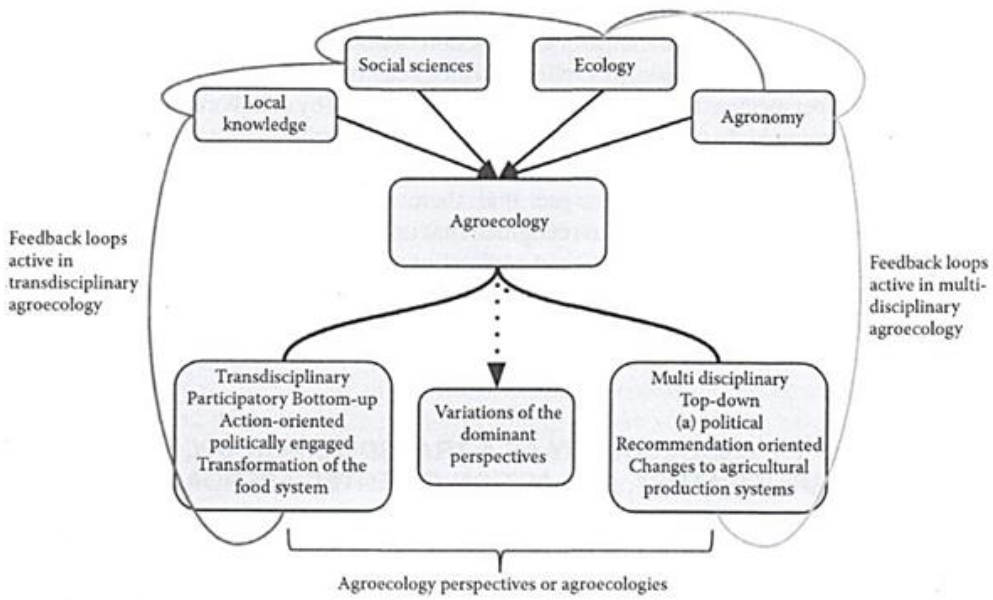

Figure 2.2: Schematic representation of the evolution of different agroecologies (Mendez et al., 2016)

This study proposes that agroecology is far more than the sum of its scientific and technical parts to be viewed as constituent of the contemporary knowledge economy, because it represents a different way of thinking about our relationship with nature and each other, and:

> … invites us to embrace the complexity of nature; it sees such complexity not as a liability, but as an asset. The farmer, in this view, is a discoverer as he or she proceeds experimentally, by trial and error, observing what consequences follow from which combinations and learning form what works best – even though the ultimate 'scientific' explanations may remain elusive. This is empowering; the farmer is put in the driver's seat, constructing the knowledge that works best in the local context in which he or she operates. (De Schutter, 2013b)

So while for its critics, agroecology is labourious and thus inefficient, for others this represents a key social advantage. By forging horizontal working practices to deepen democracy (Wakeford *et al.*, 2016), and diffusing the productive and labour benefits through the sharing of varied and creative rather than repetitive tasks, these processes provide opportunities for human potential to be developed and their efforts to be recognised, becoming a vehicle for *contributive justice* (Timmerman and Felix, 2015). For Pimbert (2017), 'a truly transformative agroecology aims to rebuild a diversity of decentralized, just and sustainable food systems that enhance community and social-ecological resilience … based on conviviality and plural definitions of well-being.'

2.3.1 Knowledge Erosion

Before going on to explore the potential of agroecology within peacebuilding, it is useful to consider why the facilitative processes associated with agroecology might be less suited to building skills and aptitudes most applicable to conventional agriculture. While a direct comparative analysis lies beyond the scope of this study, the answer may lie in the way the problem is framed and who frames it, and thus how the solutions are arrived at. As with conventional education where people are told what to learn and how to think (Moncure and Francis, 2011:83), conventional agriculture provides exogenous solutions to problems that communities may or may not view as pivotal to their development needs, or appropriate to their own process of enquiry. With its generic systems, inputs, and technology *transfer,* conventional agriculture, committed as it is to uniformity, centralisation, control and expansion, need extend the concept of participation no further than farmer involvement in training on input applications – or what Freire referred to as *pseudo-participation* as a form of paternalistic manipulation (Freire, 1970:51).

As such, farming risks becoming a highly individualised and competitive activity, requiring minimal social interaction to manage natural resources, the costs of which are externalised. The corrosive impacts of the *Green Revolution* technologies on local knowledge are felt most acutely by smallholders in the Global South, caught in between a system of top-down agricultural extension

driven by trade liberalisation and (uneven) competition on one hand, and a social system which is organised through kinship and participation, based on shared resources, reciprocity and solidarity on the other. The result is a rapid loss of the knowledge that connects people to their past, upon which future adaptive capacities and strategies depend. This is not to suggest that farmers are not interested in new information which can enhance their production systems, but that they tend not to want completely replace one with the other.

From a socio-cultural perspective, this pairing down, stripping back and disaggregation of the social from the ecological and political under scientism has also undermined interactions for collective agency formation, leaving people highly vulnerable to change in its many forms, just as the pace of change in the ecological realm affects the ability of the system to cope or recover. According to farmer networks, loss of knowledge over a relatively short period has led to a 'lack of understanding of factors contributing to change in agricultural systems; Inadequate recovery, adaptation, transfer and internalisation of relevant knowledge; and a lack of analysis of external barriers to change and ways to influence them' (HIVOS-Oxfam Novib, 2014:12). Instead, a more integrative, participatory and experimental approach would result in what Jasanoff describes as 'polycentric, interactive, and multiple processes of knowledge making' (Jasanoff, 2003: 235). As tensions and contradictions that are often laundered from view are revealed through investigation, so new thinking and action is required as part of a dynamic process of social transformation, to overcome the 'epidemic of conceptual amnesia' which resists the very existence of complexity (McLaren, 2003:92).

2.4 TRANSFORMATIVE AGROECOLOGY AND CONFLICT TRANSFORMATION

In transformative agroecology's rejection of post-political discourse, Guzman and Woodgate (2016) propose that the disciplinary divisions within agroecology, discussed above, are unhelpful precisely because they obscure the diverse socio-political, historical and cultural contexts from which different agroecological practices and movements emerged and have subsequently been supported through its scientific endeavours. Here, the combination of natural and social sciences is essential in understanding the dynamic interplay between political, social and ecological factors. As such, these different viewpoints might be discussed as 'agroecologies' contributing to an improved understanding of what is an extensive field of existing indigenous knowledges (Mendez *et al.*, 2016:3). Environmental sociology, political ecology and indeed social-ecology provide the political basis for a transformative agroecology in presenting an understanding of how nature is socially constructed in discourses, and how nature in turn informs social practice, each co-evolving with the other, yet often not under conditions of their own choosing (Woodgate and Guzman, 2016). This helps us to understand the social processes that maintain traditional forms of agriculture (as structures) as well as the phenomenological emergence of agrarian social

movements (as agency) which oppose the socio-cultural and ecological deprivations which result from industrial agriculture and the wider external political and economic forces at play characterised by the communication of knowledge and natural resources.

Just as we might discuss contextualised agroecological knowledge in the plural, each of its movements have emerged with a distinctive complexion. In Brazil, for instance, the movement that emerged from its technical and practice-base has become an increasingly strident civil resistance to the loss of food sovereignty, with demands for agrarian change rooted in a history of elite control and landlessness. What emerged has an inherently social complexion spanning both movement and practice, bringing people together as a rallying counterpoint to share experiences, and to integrate knowledge and skills for rural development (Wezel at al. 2009). In Sub-Saharan Africa, with its technical agricultural inheritance, agroecology is articulated through the need for improved food security, driven by a dominant technocratic agenda.[4] However, a growing agroecological movement represents civil society resistance to the wholesale commercialisation of natural and genetic resources, from land and water to seed, formed around demands for food sovereignty (AFSA, 2015). Here it is important to note that a large-scale movement may be perceived as a threat where political legitimacy and civic space is contested, and agroecology as a movement defined by a strident counter-hegemonic discourse may be too blunt an instrument perhaps precisely because, as suggested Miall, such 'a non-violent campaign can transform conflict by detaching the props sustaining it' (2004:4).

Around the same time as the emergence of agroecological thought, the work of peace scholars such as Johan Galtung, Adam Curle, Edward Azar, John Burton and John Paul Lederach were increasingly oriented towards people-centred engagement for development and social justice. This is because they saw the deficit of social justice as an inhibitor of positive peaceful relations. Like agroecologists, this generation was influenced by the work of Paulo Freire (1970). This shift in emphasis towards a structural approach seeking social justice, and contextualising conflicts to build the capacities of local actors also recognised the role of agency, and responds to the non-linear ebb and flow of conflicts, crossing repeatedly between cycles of violent conflict and peacebuilding.

Of particular importance are the different forms of violence that unfold prior to, during and often continue long after the cessation of violent conflict. Johan Galtung (1969; 1990) identified three type of violence: direct, structural and cultural. As it implies, direct violence is intentional harm, while structural violence is perpetrated through forms of deprivation, either for strategic purposes or as a result of inequitable distribution of wealth, causing harm by preventing people

[4] This technocratic agenda is particularly prominent in Anglophone Africa, resulting from the highly developmentalist colonial inheritance.

from meeting their basic needs. These are interlinked, with structural violence causing stresses that can lead to ongoing direct violence, albeit at a lower level after the conflict. Cultural violence is associated with symbolic markers of identity that give voice to and justify direct and/or structural violence. This is sometimes referred to imprecisely as a culture *of* violence to indicate levels of structurally sanctioned and culturally embedded discrimination.

	Unpeaceful Relations		Peaceful Relations
Balanced Power		3. Negotiation	4. Peaceful Development
Unbalanced Power	1. Conscientization	2. Confrontation	
	Latent Conflict	Overt Conflict	

Figure 2.3: *Transforming Asymmetric Conflicts (Curle, 1971)*

For Adam Curle conscientization was required at the point of latent conflict, where people become aware of the imbalances as well as the actual or perceived injustices to find new ways of articulating, thinking, and organising, requiring discursive conflict as a form of dissonance to produce change (*Figure 2.3*). In relation to socio-ecological dissonance, O'Donahue and colleagues (2007) argue that risk, discontinuity and tensions in local contexts provide situated processes which facilitate transformative opportunities. Indeed, instead of seeing peace as a 'static end-state' conflict transformation views peace as a continually evolving set of relationships – and indeed conflict as an enabler of change, allowing the marginalised to find new ways of articulating and challenging oppressive structures which may have given rise to the conflict. In this regard, conflict should be considered part of the normal human state based on ever-changing relationships which require constant nurturing (Francis, 2002). Viewed in this way, conflict and its transformation provides the route to building healthy relationships, and requires different ways of relating to one another through 'the search for greater understanding and clarity … [and] keeps relationships and social structures dynamically responsive to human needs' (Lederach, 2003:1-2).

In investigating the value of agroecology in application to latent conflict, it is possible to suggest that, as with nonviolence, agroecological practice not only provides a framework for enhancing resilience and therefore livelihood development, but also a situated, discursive learning ground which 'prepares disempowered and oppressed groups for constructive conflict engagement.' (Francis 2002:47). This is because, rather than concentrating exclusively on the context and substance of the dispute, transformation requires the development of creative change processes which represent less visible aspects of a relationship, and yet which form a network of social

relations informing the broader context. For Lederach (2003) these incorporated personal, relational, structural and cultural relationships. Here the presenting issues connect the present with the past - the exploration of which is rarely possible with the resolution of single operational solutions that emerge from an essentially deterministic and normative standpoint. In this way '… transformation views the presenting issues as an expression of the larger system of relationship patterns' in response to everyday issues in real-time' (Lederach, 2003:4).

> Transformation must be able to respond to life's on-the-ground challenges, needs and realities. How do we address conflict in ways that reduce violence and increase justice in human relationships? To reduce violence we must address both the obvious issues and content of any given dispute and also their underlying patterns and causes. To increase justice we must ensure that people have access to political procedures and voice in the decisions which affect their lives. (Lederach, 2003:2)

Transformative Agroecology		Conflict Transformation
1. Constructivist - central importance of power, local institutions, actors, resources, & dynamics in enabling transformation.	⟺	1. Constructivist - central importance of power, local institutions, actors, resources, & dynamics in enabling transformation.
2. Co-operation between living organisms - characteristic of a functioning ecosystem.	⟺	2. Co-operation within & between communities characterise functioning social relations.
3. Key drivers of vulnerability & poverty – lack of power over access to resources, representation, & social & economic exclusion.	⟺	3. Lack of power & basic human needs result in poverty & grievance which both drives & is driven by violent conflict.
4. Rejection of top-down technological solutions that remove power from people.	⟺	4. Rejection of top-down technocratic solutions that remove power from people.
5. Transformation of relationships around resource- & land-use.	⟺	5. Transformation of relationships around disputes or conflict
6. Embracing & responding to socio-ecological change & complexity.	⟺	6. Embracing & responding to socio-political change & complexity.
7. Managing multi-level & inter-group interests for landscape-level resource management by building critical capacities & agency.	⟺	7. Managing multi-level & inter-group interests by building discursive & negotiation capacities, & agency.
8. Participatory & dialogical – recognition of habitus, respect for local knowledge & practices to build trust.	⟺	8. Participatory & dialogical – recognition of different world views, & respect for social difference & conventions to build trust.
9. Community-based knowledge, multiplicity of experiences, observation & reflection, concept forming, & testing.	⟺	9. Reframing & engagement in change processes based on repetitive, cumulative, situated learning.
10. Valuing margins, cultivating edge.	⟺	10. Valuing marginalised voices on the periphery.
11. Open-ended problem solving & innovation to optimise resource-use efficiency for productivity and resilience.	⟺	11. Open-ended problem solving & innovation to optimise co-operation & dialogue for sociability.

Table 2.4: *Conceptual links between agroecology and peacebuilding (authors own)*

In this way, identifying goals and seeking innovative solutions is about addressing these at the same time - formulating questions and creating innovative options for action. For Lederach, there are three guiding principles characteristic of change and exploration: *honesty and iteration*, incorporating *repetitive and cumulative learning*, which is *situated and appropriate*. Like transformative education as applied in facilitative agroecological action-orientated learning,

transformation focuses on the relationships, interests and discourses which perpetuate poverty to promote legitimate decision-making capacity, while strengthening autonomous development. In this regard, multiple lenses bring the often numerous aspects of a complex reality in to view. These can help to shed light, and assist others in finding meaning by enabling us to: a) see the immediate situation; b) see past the immediate problem/s to view the deeper relational patterns and structures that form the context; and c) envision a framework which brings these together to find creative responses and solutions. (Lederach, 2003).

In Zimbabwe, Tarusarira and Manyena (2016) point to the inherent sensitivities of reconciliation processes found in restorative justice, that requires acceptance that violence took place, putting people at risk, and deterring participation. Nonetheless, they suggest more indirect routes, embedded in livelihoods projects, through which 'reconciliation processes can provide an opportunity for communities to transform existing systems; they do this by making time and space for people to ask questions about the stakeholders, institutions, practices, structures, problems, and social relations that must change' (2016:67)

In exploring the conceptual linkages between agroecology and peacebuilding in *Table 2.4* key similarities can be seen in the development of frameworks that envisage how to build an alternative desired state – facilitating constructive responses through praxis. This is a common strand that runs through the conflict transformation strand of peacebuilding, transformative or emancipatory education, and transformative agroecology.

2.5 RESILIENCE – TO ADAPT OR TO TRANSFORM

Having considered the value of knowledge to emancipatory processes, it is necessary to engage briefly with the debate on 'resilience' and its complex relationship with adaptation and transformation. Since its emergence from landscape ecology as the capacity of a system to absorb disturbances without losing its essential functions or identity (Holling, 1973) the concept of resilience has exploded across disciplines and yet remains somewhat opaque and its utility deeply contested (Davidson, 2010); and with many definitions and interpretations arising, including within and between user communities themselves (Brown, *et al*., 2005).

Conventional systems of resource management that are designed to prevent or block disturbances may be effective in the short-term but may, in the longer-term, accentuate the impact of these changes which are in fact an inevitability within ecosystem renewal. In this way, 'as the buffering capacity of the system gradually declines, flexibility is lost, and the linked social-ecological system becomes more vulnerable to surprise and crisis' (Folke, Berkes and Colding, 2000:416). Conversely, by allowing disturbance to enter at a lower level, absorbed through

continuous innovation and adaptation, resilience is developed through action-oriented learning, as has been the basis for highly adaptive social and ecological systems.

While resilience and adaptation are often used interdependently, and indeed share many of the same characteristics and resources, their disciplinary origins offer different insights. Being actor-oriented, adaptation is concerned with adjustments within a given system to retain stability. While resilience, within which adaptation is a key feature, focuses on complex systems and, as such, differentiates between incremental adjustments and transformation (Nelson, *et al.*, 2007). Nonetheless, the emphasis here is to build enough resilience in to a social-ecological system to enable it to absorb intense shocks, thus averting fundamental systems transformation.

While desirable for natural ecologists and no-doubt populations living in fragile agroecosystems, this stabilisation thesis is problematic for social scientists considering triggers and thresholds for social change through transformative action. This is because resilient systems strive for a level of continuity and stability and, as such, can be inherently conservative and may be maladaptive, and thus resistant to change (Lotz-Sisitka *et al*., 2015). Gunderson and Light describe this *pathological resilience* as one where 'the management system is trapped in a structure that is not only resistant to change, but able to withstand change' (2006:324). Furthermore, the stable equilibrium thesis has long-troubled political ecologists, it having influenced exclusory policies and human clearances based on a pristine imaginary (Pretty and Pimbert 1997; Ranger 1999; Peet and Watts, 2004; Neumann, 2005). And for peace scholars, failing to make a connection with societies in transition has, through the imposition of *stabilisation strategies*, 'lower[ed] the horizons of peace and peace interventions, moving us away from the realm of dissent and emancipation towards the realm of control.' (MacGinty, 2012:26). Critical realists instead call for the use of transformative, transgressive learning, as embodied in agroecology, which generates forms of social agency to break down this conservative resilience, as opposed to focusing on the promotion of social resilience as a stabilisation or coping strategy in the face of an ultimately destructive hegemony. The call here is therefore not simply to problem-solve, but to transform the way we think about the wicked problem by taking a transdisciplinary approach to 'decolonise environmental pedagogy' by transgressing and disrupting the pedagogical disciplinary strictures which legitimates and perpetuates it (Lotz-Sisitka *et al.*, 2015:75).

Identifying the threshold between incremental adaptation and transformation, and indeed what constitutes a tipping point that may herald a transitional shift, is dependent on context and cross-scalar considerations, including the generating event or series of pressures that caused the disturbance. These triggers, which may appear as compound stresses or sudden shocks, also provide adaptation opportunities, stimulating shifts in policy and/or community responses in the form of activities and the establishment of networks or institutions for the co-management of

local resources (Berkes, 2002; Adger, 2003; Nelson *et al.*, 2007), whether the intention is to build reflexivity to cope or recover within the parameters of an existing system, or to prepare the ground to transition in to a new one. This potential to manage complex social-ecological systems is referred to be Olsson *et al.* as 'an "adaptive dance" between resilience and change' (2004:87).

Systems ecologists increasingly evaluate ecosystem functions from a standpoint that emphasises both stability and transformation (Redman, 2005). For Andy Stirling (2011) this is key to understanding decision-making about available pathways for transformation to reduce vulnerability, with stability associated with control, and adaptation with responsiveness – which he later describes as 'mutualities of caring' (2014). Here also, control-response actions are seen not as binary choices, but as trade-offs plotted on an axis between the two, based on degrees of stress or shock experienced, representing important generating moments for change. These tipping points were also important for Bourdieu's thesis on *habitus* (2000), particularly for those living with a sense of having no future – an existence over which no control or choice can be exerted. When such points are reached, the suspension of habitus can result in a search for new meaning and ways of being, within which a renewed agency may be found in imagining or experimentation. The emphasis here is less about allowing stresses and shock to enter the system, but how we prepare for and respond to them.

Far from representing constrictedness within the tight confines of a social-ecological system, for Neil Adger (2003) adaptive capacity, from the standpoint of human action, is intricately bound to people's ability to work collectively, and is rooted in local world views and knowledge specific to cultural norms. As such, the process of adaptation as collective action builds interconnectedness and, in so doing, enhances social trust, co-operation, exchange and reciprocity - characteristics of social capital, and of peace. This brings us closer to identifying the formation of adaptive capacity as process and, importantly for this research, as a critical connector between resilience and agency, and how these processes may contribute to a sense of collective endeavor and peace.

2.5.1 Adaptive Capacity and Innovation

When considering the origins of agroecology, it becomes clear that researchers engaged with the socio-cultural and -ecological practices employed by peasant farmers found to be working with nature rather than against it, and sought to understand and learn from these experiences (Gliessman, 2013). This researcher-practitioner interaction as *participatory action research* has provided the foundation of agroecology, cataloguing pre-existing knowledge and evolutionary practices based on complex interactions and social needs, the ongoing co-generation of knowledge, and its diffusion across academia, practitioners, social movements and institutions world-wide (Guzman and Woodgate, 2016).

Indeed, there is no doubt that science has played an important role in framing, validating and informing agroecological practice-based endeavours. And despite being marginalised within technocratic interventions, the appropriation of indigenous knowledge drives innovation in a Western scientific context. And because 'it is contextual, it has adaptation built in to it.' (Shiva, 2011). This has been seen in the case of natural pest management using spatial, temporal and biological control techniques, which have been practiced by farmers globally perhaps for millennia, across different regions using a vast array of inter-related techniques and species in combination (Altieri, 1995). In the 1960s this approach emerged as Integrated Pest Management (IPM) in response to the increasing use of pesticides, and then again under a joint initiative by the FAO and the Indonesia government in the late 1980s in response to a devastating pest outbreaks as a result of increasing resistance to pesticides (Scialabba and Hattam, 2002).[5] At which point, scientific research institutions began to take notice, resulting in the development and dissemination of push-pull (Hassanali *et al.*, 2008);[6] and Sustainable Rice Intensification (SRI) (Uphoff, 2002).[7] In each case, researchers have observed, interacted, documented and built on these local processes, without which they would not have been communicated so widely. The point here being that agroecology represents a synthesis between existing knowledge and research (local and formal) as an iterative process which views socio-cultural practices, and ecological and political processes as intrinsically linked. The prospectus at the heart of agroecology is therefore the repositioning of farmer-practitioners as citizen scientists and experts capable of identifying obstacles which could otherwise improve the agricultural system and plan relevant actions to optimise agrobiodiversity for both ecosystem and socio-cultural functions. In this way all knowledge informs practice, and practice can be seen to inform science, representing a dialogue which is central to the development of critical social consciousness.

Adaptation and innovation in the face of uncertainty become a critical capacity for managing complexity. As central to questions of human agency, it is necessary to draw upon different interpretations of 'innovation'. Most refer to innovations as the *generation of new knowledge to meet a set of needs or tackle specific problems*, often through an iterative series of multiscalar exploratory processes (Chema, Gilbert and Roseboom, 2002; World Bank, 2006; Bacon *et al.*,

[5] In this case, IPM was developed as a programme to improve local knowledge networks through institutionalised participation and farmer-centred approaches, reaching approximately one million farmers (Fakih *et al.*, 2003). Indonesia subsequently banned 57 broad-spectrum pesticides and is thought to have saved $120 million on pesticide subsides (Scialabba and Hattam, 2002).

[6] The approach adopted was a more simplified version than the inter-related techniques and species discussed by Altieri (1995) or those used by the Kenyan farmers. Nonetheless, as a result of these researcher-farmer observations in Kenya, a collaboration between the International Centre of Insect Physiology and Ecology (ICIPE) in Kenya and Rothamstead Research in the UK in 1993 resulted in the isolation and testing of insect attractants and repellents intercropped with maize affected by parasitic pests and weeds.

[7] A posting to Madagascar in the 1990s led a priest with a scientific background to observe unusual local practices resulting in higher yields without external inputs, and subsequently undertook extensive participatory research with local farmers

2008; Mukute, 2015). While these tend to be restricted to the technical, they do acknowledge social aspects related to adoption, adaptation and scaling. Many innovation scholars, however, underplay the role of social, ecological and economic factors, and most ignore the contingent power dynamics at play. For this reason Stirling *et al.* are persistent in their calls for a more critical, constructivist and reflexive approach in interrogating questions of 'who governs', 'whose systems count' and 'whose sustainability is prioritised' in innovations pathways (Stirling *et al.,* 2007).

In a more recent definition developed by Midgley and Lindhult, *systemic innovation* 'emerges from a process that supports innovators and their stakeholders in using systems concepts to change their thinking, relationships, interactions and actions to deliver new value.' (2017:19). This explicitly recognises complex interactions impacting upon the process itself, as well as what changes are sought – such as developing technologies that are appropriate in the service of farmers' needs and interests (Heeks *et al*., 2013), through to wider societal changes or transformations. Systemic innovation is therefore less focused on the end product, but on the process of systems thinking itself, encouraging a critical awareness of boundaries, and openness to properties and purposes. In this way, systems thinking is seen as integral to the process of systemic innovation and is ethical and participatory at its core - seeing the potential to foster collaboration and self-organisation for transformation. Midgley and Lindhult's model is designed to understand innovation imperatives and responses in the context of marginalisation and conflict. These involve recognition of the ethical need to overcome conflict and marginalisation; the value of innovation to address these conditions; and of conflict and marginalisation being barriers to innovation (2017:19). However, as we will see in the following chapters, resource scarcity and social exclusion, or resistance to it, can be considerable motivators of innovative emancipatory strategies (Moulaert *et al.,* 2005). Välikangas and Gibbert (2005) refer to these boundaries as simultaneously enabling and constraining human activity. The boundary concept within systemic innovation is important because its recognition enables the questioning of priori judgements that are taken for granted and entrenched.

Expanding access to processes that define resilience, adaptation and innovation pathways are critical in incorporating local knowledge of social-ecological systems, thus improving acceptability and adherence through co-development and –management, emphasizing both rights and responsibilities. Adger (2003) refers to this as *bonding*, where adaptation activities may take place in alliance with, and building trust in the state, or in its absence - particularly where a coercive state may exacerbate vulnerability or exclusion. A failure to engage with and recognise contingent power relations in resilience building can reinforce inequities and deepen divisions between groups of resource users. As such, resilience needs to be viewed through different lenses, 'rooted

in local histories and societies, yet connected to larger processes of material transformation and power relations.' (Peluso and Watts, 2001:25).

2.6 THE LOCAL TURN IN PEACEBUILDING AND IMPLICATIONS FOR RESOURCE MANAGEMENT

To adherents of both liberal peace and technocratic projects, the local is often rhetorically characterised as part of an unruly periphery, to be pacified and reformed in its own image by imposing a form of 'liberal governance as riot control' (Duffield, 2001: 9). With little or no genuine participation of the citizenry in liberal peace or nation building, opportunities for recognising and enhancing existing capacity towards articulating common ground seems a distant consideration. While civil society is often repressed by overtly strong regimes, as these states have weakened and/or receded, so too the mechanisms of civil society have often been afforded the space to breathe and develop (Zartman, 1995) forming local agency for development and peacebuilding. Viewed in such a way, heralded by creative acts of dissonance based on need, these may represent a point of genuine transition, driven by a process which emerges from below rather than that which is externally imposed and/or gifted from above (McAllister, 2002). Even where, as in the case of Zimbabwe, these spaces have subsequently been suffocated beneath a strong centralizing state, continuing technocracy and the rise of authoritarianism populism, rural communities far from the structural centre may exist in relative 'margins of freedom' able to reappraise the conditions of their habitus (Bourdieu, 2000).

Local agency, viewed through the prism of pre-existing customary institutions, is essential to bottom-up peacebuilding - providing a forum through which grievances can be aired in an accessible, transparent, and oral tradition which is culturally intuitive and process-based (Kaindaneh 2012). Yet the search for the *local* and *authentic* can frustrate rather than facilitate local peacebuilding if it is not situated and relevant. In designing an albeit hybridised local peace it may be unrealistic to assume that customary institutions, as once constituted, might automatically take up the reins where they left off. In fact, customary approaches are unlikely to be transformative in and of themselves, given that they are essentially conservative, usually patriarchal, and designed to reinforce existing privilege through exclusionary practices. Indeed, these factors may have precipitated the breakdown of social relations in the lead up to violent conflict (MacGinty, 2010). Furthermore, the ensuing social upheaval, including significant displacement and loss of life, is likely to render a return to pre-existing customary mechanisms untenable.

In which case, how might the local be reinterpreted and transformed by its citizenry to forge a more emancipatory peace? An important step, for Duffield, is to support the creation of 'adaptive learning and networking organisations' capable of addressing complexity (2001:264-265). Just as

the notion of *community* as a construct ought not be viewed as static, but rather constantly being made and re-made, MacGinty (2015) suggests that we might rather consider the local in terms of types of activity, systems of thinking, or collective agency - as communities of practice that transcend conflict groups or boundaries. As such these practices may be linked by social-ecological relationships, through which interests and needs might be negotiated. For Rotberg (2010) a process of traditional peacebuilding needs to be broadened to include local knowledge, climate change and its impacts, and adaptation mechanisms, with much to be learned from existing practices and patterns for managing socio-ecological change and complexity before these skills and capacities are lost to the habitualisation of antagonism. And while cautious of concretations around the *traditional* and the *local* in peacebuilding narratives, were resource-users in fact at the centre of re-defining their institutions, not only would they have a collective stake in sustaining the peace, it would prioritise the conservation of the ecosystem upon which their livelihoods depend.

Oliver Richmond (2011) refers to this bottom-up process of institution building as *post-liberal peace formation*, which is unscripted and emancipatory, and which often occurs simultaneously and in parallel with formal peacebuilding processes. In this way, critical agency which is grounded in local-cultural needs, interests and expectations, could represent a 'contextual legitimacy' which might be more intrinsically stable. Far from being a binary consideration, under this hypothesis, an emerging hybrid local-liberal peace formation would act as a counterpoint and serve a moderating role between a liberal top-down homogenising technocracy, and the exclusionary tendencies of the customary. As an important consideration, were these processes successfully working in parallel to support and/or build agency, Richmond (2013) proposes that they should also influence international responses to peacebuilding, demonstrating the importance of different processes and levels of engagement in creating and supporting structures that are representative and responsive.

While accepting Lederach's assertion of the need to generate processes which promote capacities to address immediate needs and challenges at the conflicts epicentre (Lederach, 2003), the discussion that follows will propose that these activities need not necessarily take place at the conflict epicentre but can be facilitated in the relative safety of the margins; in an open-ended action-oriented way - as praxis. After all, these margins are significant not only because they are often where grievances foment into conflict, but also because 'they are often zones of informality, yet also the places where important interactions take place that allow individuals and collectives to gauge if a society is becoming more or less peaceful' (MacGinty, 2016:205).

2.6.1 The transformative potential of agroecology for peace formation in practice

We now return to the intersection between the critical agency enabled by agroecology, and peace formation as a form of bottom-up contextual legitimacy based on local networks and relationships (Richmond, 2011). Through Morgan and Peacocke (2016) we can see agroecological practice providing the tools for autonomous decision making and conflict transformation, in the midst of a complex combination of social, political, economic and environmental drivers in Darfur. By strengthening critical agency for the representation of the most marginalised which harnesses the adaptation process of collective experience and reflection, and bridges the socio-ecological and political dimensions, it recognises that the best people to understand this complexity are those rural communities themselves. Complexity and its reframing is a central theme within both conflict transformation and agroecology in recognition that social, cultural, political, economic and ecological change is constant, and thus recognises the mechanisms people use to manage this change. It is this critical form of collective agency, informed by discursive practice that is of particular interest to this study.

Another example of substantial mobilisation for landscape restoration may be found in Niger with a form of agroforestry known as Farmer Managed Natural Regeneration (FMNR).[8] This has grown from its relatively small base of 100 practicing communities to cover five to six million hectares in Niger by 2008 (Abbasse *et al*., 2008). The now widespread practice has influenced changes in national policy, with inclusive and participatory monitoring and governance structures integrated in to the national agriculture policy, handing back responsibility of arbour management and regeneration to user-communities. FMNR decision-making committees sit between customary and formal institutions, bringing different people together for the first time, including farmers and pastoralists, men and women, researchers, extension services and policy makers. With a combination of improved relations, accountability and increased availability of natural resources, Issoufou Baoua (2006) found that in most cases FMNR has led to conflict reduction, and one study found a reduction of eighty percent (in Rinaudo *et al.*, 2007). Today FMNR is practiced by farmers with supportive national policies in Mali, Burkina Faso, Chad, and Ethiopia (UNCCD, 2013). Importantly for this study, the success of FMNR has hinged on local skills, experiences, knowledge and systems of organisation. As user-led research, experimentation, evaluation and dialogue, FMNR has engendered consultative and co-operative relations which transcend socio-political division in the face of extreme biophysical and socio-political fragility.

[8]FMNR is a simple coppicing technique to restore 'underground trees' denuded by conventional cropping practices above ground. Key concerns were initially that trees would affect crop yields, and national laws which prohibited the coppicing or felling of trees, placing these resources in the hands of, often corrupt, government officials. In addition, theft of fuel-wood was a common source of inter-communal conflict, resulting in few farmers growing trees on their land as a conflict avoidance strategy (Rinaudo, 2007)

As needs are not finite like interest-based resources, they can be addressed by opening up a space for recognition. This requires behaviour change in order to transform relationships around the conflict, aligned with an ontological shift towards problem solving, central to Burton's thinking (1990b). Within structuralist discourse, therefore, the proposition is for a dialogical and discursive approach to institution building. But while the negotiation of these interests may lead to short-term gains, it would not necessarily lead to long-term resolution, if simultaneously failing to address the need for recognition, security, and identity and development. Building capacities for identifying and mobilising change around shared interests may, however, if approached in a more holistic way, provide a learning ground for negotiating and creating wider collective agency to secure these needs.

Of course it is also important to recognise that conflicts over actual or perceived interests can also reify in to a sense of identity, as 'powerful fictions and negotiated half-truths' (Nordstrom and Robben, 1995:5), with natural resources becoming symbolic drivers of a wider struggle for recognition, motivated by cultural discourse, elite narratives and/or strategic action, and through which concepts of justice and fairness are constructed - pointing to the mutability of the most tangible of relationships (Feardon and Laitin, 2000). In this way, the experience of conflict itself dramatically affects identity constructs relating to the past, present and future, and as an expression of highly sedimented and ever-changing relationships. As pointed out by Arthur Green, while the greed-grievance thesis might explain both underlying feelings of exclusion and incitement, as well as fuelling escalation and control over high-value stakes by protagonists, it fails to explain protracted conflicts and ongoing fragility in areas attributed to 'identity resources' such as sacred forests, fisheries, water and seemingly unproductive lands in others (Green, 2015:25). When viewed instead as complex constructions influenced by social roles, discourse, context and historical experience, it is possible to conceive of relationships between natural resources and their users characterised as flexible identities that can be reframed around common interest. This reframing, for Green, offers an opportunity for natural resource management and peacebuilding by 'deemphasizing some identity claims, while creating new identity frames [which rest] less on how intragroup roles interact and more on how categories (or frames) are formed through intergroup interaction' (Green, 2015:22). However, these shifting frames can travel in both directions, either softening or entrenching positions. The ability of users to recognise and critically reframe social identities therefore becomes an important key-change, shifting between the supposedly non-negotiable values and needs, towards the realisation of shared interests, as proposed by Burton (1990b), for a procedural justice that contributes to trust and co-operation. Critical engagement with these most complex issues is therefore essential to NGOs working in fragile or violent environments under the aegis of agroecology.

2.6.2 Agroecology in Development Discourse and Practice

The typologies discussed under the banner of agroecology are typically more descriptive of the technologies and techniques employed within each, yet most are guided by a set of principles or ethics that can be considered constitutive of their own movements. These include, but are not limited to, organic farming (certified or otherwise), agroforestry, permaculture, biodynamic farming, sustainable rice intensification (SRI), and holistic livestock management. In practice, each borrows from and can strengthen the other. An important consideration in the context of this research has been that the divisions between agroecology and conventional systems may not always be so clear-cut, with conventional farmers using some agroecological methods, and some agroecological farmers using external inputs (Holt-Gimenez, 2002). Nonetheless, given its socio-cultural foundations, agroecology includes any ecologically sensitive 'place-based agricultures' found in traditional farming (Guzman and Woodgate, 2016:38) where the term agroecology may not necessarily be in use. Traditional farming which still predominates is rooted in cultural heritage and consists of a wide range of systems and designs which maintain functional on-farm biodiversity and support resilient agroecosystems (Uphoff, 2002). What links all of these is that each is highly contextual in its recognition of socio-ecological complexity 'promoting continuous adaptation to build resilient systems' (Francis *et al.,* 2003:76). This is not to suggest that all agroecology initiatives have all of these attributes, particularly if they are exogenously designed as interventions and/or lack facilitative processes. As highlighted in *Table 2.6*, participation tends to vary in application (Pretty and Pimbert 1997; Moncure and Francis, 2011; Wakeford, 2017).

By and large, agroecological initiatives remain poorly supported, much less understood, and thus exist in the margins, out of sight from the technocratic interventions associated with conventional modes of human development and biodiversity conservation (Pimbert and Moeller, 2018). Indeed, in order to win funding, many agroecology NGOs feel compelled to comply with normative donor narratives and demands. So while these initiatives may retain an outward thrust of diversification in the service of the productivist *food security* discourse, food sovereignty and local agency as important drivers of social justice may be a lesser consideration, beyond the promotion of *local ownership* to facilitate predefined outcomes and *exit strategies.* Yet as Pretty points out, in and of themselves 'technologies are not sustainable: what needs to be made sustainable is the process of innovation itself … not simply a package. It must become a process for learning and perpetual novelty' (1995:1249).

Typology	Components of Each Type
1. *Passive Participation*	People attend a unilateral announcement by an administration or project management about what is going to happen without listening responses. The information being shared belongs to external professionals.
2. *Participation in Information Giving*	People participate by answering questions posed by extractive researchers or project managers using surveys or similar approaches. People do not have the opportunity to influence proceedings, as the findings of the research or project design are neither shared nor checked for accuracy.
3. *Participation by Consultation*	People participate by being consulted, and external agents listen to views, defining both problems and solutions (which may be modified in light of people's responses). Does not concede any share in decision-making and professionals are under no obligation to take on board peoples' views.
4. *Participation for Material Incentives*	Participation through resource provision, e.g. in return for food, cash or other material incentives. Much in-situ research falls in this category, as rural people provide the fields but are not involved in the experimentation or process of learning. Commonly referred to as participation, yet people have no stake in prolonging activities when the incentives end.
5. *Functional Participation*	Participation through group formation according to predetermined objectives, outcomes and goals defined by an external organisation. Tends to be take place after major decisions have been by external initiators and facilitators, but may become self-dependent.
6. *Interactive Participation*	Participation by joint analysis. Leads to action plans and formation of, or the strengthening of existing groups. Tends to involve transdisciplinary methodologies that seek multiple perspectives and make use of systematic and structured learning processes. Groups take control over local decisions, and so have a stake in maintaining structures or practices.
7. *Self-Mobilization*	People participate by taking initiative independent of external institutions to change systems. Such self-initiated mobilization and collective action may, or may not challenge existing inequitable distributions of wealth and power.

Table 2.6: A typology of participation - adapted from Pimbert and Pretty (1997)

2.7 SEEDING CHANGE AT THE MARGINS

In agroecology, the concept of *edge* or margin is the fertile area between different plant communities, systems or boundaries, which share opportunities arising from the convergence of ecosystems, for instance between pastureland and forest (Holmgren, 2002).[9] This 'edge effect' also provides an interesting metaphor for the social margins discussed in this study, where people may come together in a mutually beneficial, co-operative interchange, with the risks and opportunities that this brings (Henfrey, 2018). As a socio-political concept this also resonates with actively marginalised communities, or those left on the margins, seemingly forgotten and yet periodically manipulated. Yet, when conceived as fertile edges, it is possible to see the emergence of agricultural experimentation and re-evaluation as people look for new solutions that are less input-dependent and more resilient in the face cumulative stresses and persistent shocks.

[9] The concept of 'edge' belongs specifically to the permaculture strand of agroecology, which is an approach to designing human settlements and perennial agricultural systems that mimics the patterns and relationships found in natural ecologies (Holmgren, 2002)

Contrary to assuming Hardin's tragedy of the commons (1968) which presupposes an over-exploitation of commonly managed resources, there are historical and contemporary examples of local, community-led institution formation which have successfully negotiated agreements to govern resource access and use, through the development and use of either legal, customary or hybrid instruments (Berkes and Folke, 2000; Rinaudo, 2007; Ramsbotham *et al.,* 2011; Morgan and Peacock, 2016; Robbins, 2012). The essence focuses less on resource scarcity or abundance, but on the establishment of relationships for collective resource-use and developing sensitive strategies for co-evolution and regeneration. As Adrian Martin (2005:330) points out:

> Environmental scarcity and resource use competition are part of the everyday politics of life . . . The most usual outcomes are peaceful ones, where broadly accepted rules lead to cooperative outcomes of one kind or another. Thus, theoretically at least, resource use conflict can form part of a virtuous circle, in which cooperative responses contribute to social capital, thus encouraging robust institutions and future cooperation.

Governance of natural resources shaped by local knowledge and traditional practices propagated farmer-to-farmer can and do lead to co-operation between resource users, with new meaning and units of organisation and governance emerging (Ostrom, 1999). To be relevant and appropriate to the needs of marginalised rural people clustered around the resources upon which they collectively depend, signifies an important space for the formation of dialogue and agency. If not between conflicting groups in the initial stages, then as a learning ground for the critical capacities required to manage change and complexity, while navigating a path between political actors and customary authorities. Ostrom's work also defines effective self-governing institutions as a complex design-task requiring experimentation and feedback mechanisms to facilitate co-learning through which behaviour can be adapted. Such conditions are best established when resource users have the authority to craft the rules governing access to resources, to monitor and enforce the rules, and to amend or adapt rules that are not working. For this to take place, as with conflict transformation, what is needed is the building of an inclusive consensus, finding common ground, the re-ordering of relationships, and a new concept of governance (Francis, 2002: 36).

With this in mind, some theorists posit that transformation related to sustainability occurs in niches at a local level, from which emerges wider social change. From expansive learning and environmental sustainability research in Africa, Lotz-Sisitka and colleagues provide insights on the role of *germ cell* activities in motivating substantive social change. These germ cell activities are those 'that embody a potential response to deep-seated societal contradiction, and combine critical social and/or historical-material processes with values, dispositions, cognition and individual and collective agency capabilities to lead expansion, change and transformation.' (Lotz-Sisitka *et al.,* 2015:77)

What takes place at the periphery may at first seem insignificant in its informal origins and scale; small acts claiming access to resources or freedoms - 'thus theirs is not a politics of protest, but of practice, of redress through direct and disparate actions.' (Bayat, 2010:20). In this way, a large number of people with shared practices embody a social change which seeks to reclaim power in seemingly non-ideological ways, with no recognisable leaders, or definable organisation, yet these *non-movements* have distinct identities, propelled by 'a type of fluid, flexible, and self-producing strategy' (Bayat 2010:14). These are formed around resources for everyday survival. These apparently disparate acts taking place at the margins are of relevance precisely because, in an authoritarian state, they allow us to view everyday social practices as an expression of resistance and agency in a way that transcends the limiting binaries of active or passive, individual or collective, civil or political. For Stirling (2014) these are not unlike other progressive struggles in history, with radical shifts similar to natural flocking behaviour performed by grassroots culture. In this way, radical change is often generated by bottom-up, collective and spontaneous 'culturings' of knowing and doing. Furthermore, these 'culturings do not depend on rigidly disciplined '*integrated science*' and monolithically-structured '*planetary management*'. Instead, real hope of radically progressive social transformation may lie more in the mutualities of caring, than in the hierarchies of control. And among the greatest obstacles to this, are ideologies of technocratic transition.' (2014:iii).

2.7.1 Collective Agency and Self-efficacy

For cognitive social theorists, we are continually being shaped by and are shaping our environment. In which case, while self is socially constituted, social structures are created by human activity. In exerting or exercising influence, the self produces human agency capable of operating proactively to generate change either individually or collectively. 'Unless people believe that they can produce desired effects and forestall undesired ones by their actions, they have little incentive to act' (Bandura 2000:75). While this may indeed be so, perceptions of one's ability or power to act on and in their environment are in turn influenced by enabling or constraining factors in that environment. These social determinants, such as family, culture, society and/or institutions may serve to variously empower or disempower. In environments where structural and/or direct violence has been a response to deter *individual agency* to initiate change, this may lead to what social cognitive theory defines as *proxy agency* where, for reasons of perceived lack of confidence, skills or will to take on the responsibility to act, power and decision making is devolved to others. Collective efficacy formed around shared beliefs and the desire for change therefore represents an important entry point for developing human agency. According to Bandura, 'efficacy beliefs influence whether people think erratically or strategically, optimistically

or pessimistically' affecting our ability to identify goals and appropriate actions, our perseverance in the face of adversity, and the outcomes which are achieved (Bandura, 2000:75).

However, the relationship between personal, proxy and collective agency is far from clear, with people likely to employ concordant strategies depending on the outcomes sought, prevailing environment, and the cost or trade-offs involved (Uphoff, 2005). The incremental attainment of desired outcomes through collective action builds confidence in group activity for further co-ordination and transformation. Even if developed at an individual level, a high sense of self-efficacy promotes a 'prosocial orientation' seen through co-operation and sharing (Bandura, 2000:77). Learning to pool skills and perform collectively builds further capacity and impetus for ongoing action. In this regard, Bandura points to perceptions of self-efficacy as having an influential role in human development, enabling adaptation to change, through which human agency results in a belief in being not only producers of experience but shapers of events.

In linking resilience to agency and empowerment, which we take here to refer to individual or group capacity to effect change, these changes, by definition, are a response to a pre-existing condition that the group identifies as requiring modification, if not total revision. The research here is therefore interested in whether and how the process of experimentation and co-investigation frees people from past dogma of social or technical norms which may be failing them, and if, as a part of this process of inclusive decision-making to build skills and confidence, participants feel empowered to begin shaping the events which in turn shape their lives, and leads to an enhanced perception of self-efficacy and collective agency. Of course, these processes are multiple and non-binary in terms of how successful change is defined and qualified, and non-linear in how it is achieved or arrived at (Uphoff, 2005). In this regard, degrees or stages of change achieved iteratively are likely to be observable at different levels of social activity, from household, family, group, and community to wider levels of social engagement and interaction. With this in mind, the research first investigated the extent to which agroecological communities of practice consider themselves to be products of their environment or producers of effects - able to make meaning from experiences, agree on priorities, formulate strategies and produce desired change effects.

2.7.2 Shaping Networks for Change

As we move to consider how Stirling's *culturings of care and responsiveness* might emerge from the everyday practices of knowing and doing, Kenneth Boulding's *integrative theory of power* is useful in explaining 'the capacity to build organizations, to create families and groups, to inspire loyalty, to bind people together, to develop legitimacy' (1990:25). Accordingly, it manifests cooperation and reciprocity, collective identity and a sense of community, and the ability to

construct a positive image of the future based a pro-social orientation. Within the same strand of critical functionalism, Evin Laszlo (1989) talks of positive-sum relations to combat competitive, aggressive zero-sum relations that lead to social injustice and ecological unsustainability - particularly in relation to complex dynamic systems and their emergent properties.

Seen alongside the formation of institutions or networks, the accumulation of social, cultural and symbolic capital takes place through a range of transfers. Yet forms of capital accumulation can also obscure causes of inequality, and may reproduce structures of domination (but may themselves provide the catalyst for new networks and co-action around which to mobilise change). These divisions are not always clear because different forms of power often function in manifest ways. Furthermore, networks gain legitimacy through different power structures, be they political, religious, customary or bureaucratic with which vertical linkages may be forged. In this way 'Nuanced notions of power are found in the skillful play, ambiguous meaning and pragmatic affiliations' (Rocheleau, 2006:434). For this reason, to the conceptualisations of power *over* as domination, and power *to* as transformative capacity (Giddens, 1984) that opens up consideration of power *within, in* and *with*; to which Rocheleau (2006) adds: power *alongside*, power *from beneath* and power *in-spite of*. These capture the gradations of what, in practice, are a series of highly entangled network relationships, and the need to better understand these dynamic and responsive social-ecological systems.

Spatial and temporal considerations are also central to the following discussion, as these networks are rooted in power and the distinct territories that shape and are shaped by them in a constant interplay. In this way, territories are a defining characteristic of the network itself – the dynamic connective tissue between the polycentric structures of natural and social elements. Networks are therefore constantly forming and re-forming in response to these existing structures, events and external stimuli, and are predisposed to particular responses and actions by habit forming practices (found for example in culture and tradition) while not necessarily defining future decisions and actions (Rocheleau, 2006). This is what Olsson *et al.* describe as 'a collective learning process that builds experience with ecosystem change [that] evolves as a part of the social memory, and embeds practices that nurture ecological memory' (2004:77), and Putnam (2001) referred to as *path-dependence* – the more social capital is used, the more it accumulates. Of course these same habit-forming practices may equally predispose networks to change or inertia based on past experience or prior structures, or to perpetuate conditions of conformity and inequality (Pretty and Ward, 2001; Putnam, 2001; Rocheleau, 2006; Midgley and Lindhult, 2017). Yet, acting in concert within and upon one's own environment builds confidence in shaping change as continuous interaction, forming new habits and capacities, through which self-organisation from below within otherwise fixed and deterministic rules of social-ecological

interaction may emerge. And, in doing so, this process expands the range of available futures as seen from multiple standpoints, and from which new knowledge can emerge (Escobar, 2004).

Drawing on a range of different models that seek to understand how group formation and transformations in human and social capital occur: from Argyris' learning cycle (Argyris and Schon, 1978), types and depth of participation (Pimbert and Pretty, 1997) and types of knowing and world views (Habermas, 1987), Pretty and Ward (2001) developed a typology to investigate changes or stages of network formation, activity and stability. These are based on three evolutionary stages: *reactive dependence*; *realisation-independence*; and *awareness-independence*, each with five cross-cutting themes. In calling this the three stages of evolution, it presupposes that linear transitions occurs as a group or network matures, when it fact it may be possible to see how groups might move between or across types, or fit within one type while exhibiting some characteristics of another. Nonetheless, this is a useful framework through which to consider the features of agroecological networks under discussion here. Of particular pertinence are criteria such as: world view and sense-making, views of change, attitudes and values, norms, reciprocity and trust, sharing ethic, capacity to experiment and involvement of external facilitation. Furthermore, their framework usefully maps collective action designed with a single issue-focus often in response to shock or threat. It then moves through expansion and diversification as groups investigate inter-related and emerging issues. It also considers transitions from technical functionalism for cost efficiencies, through to innovations based on new ways of thinking. This culminates in an irreversible shift in world view, arrived at by drawing upon critical reflections and expectations of change, or what Pretty later refers to as *crossing the internal frontiers* (2002).

2.8 IN SUMMARY

The marginalisation of rural populations on the periphery, with enduring social division, shattered infrastructure and lack of adequate access to productive resources, points to an urgent need to reconcile the demands of often protracted peacebuilding and development with these rural realities in order to create more equitable and thus durable outcomes. Nonetheless, sensitivities around conflict and its transformation often require indirect strategies. In this way, it is possible to create discursive spaces that are relevant and situated in peoples' everyday realities. Within these spaces people can grow in confidence by questioning, experimenting and formulating new ways of thinking, being and acting with one another and within their environment. Here it is seductive to consider types of activity, systems of thinking, and collective agency formation as transcending conflict groups or boundaries, forming a more stable contextual legitimacy, in the face of habituated to authoritarianism and control. Before considering the extent to which

agroecological communities of practice within this study in Zimbabwe either consider themselves as shapers of change, or products of their environment, it is first necessary to examine the conditions which have shaped their social world and landscape, and how these have both enabled and constrained opportunities for negotiation and change.

CHAPTER 3

ZIMBABWE IN STUDY CONTEXT:

STRUGGLES WITHIN STRUGGLES

3.1 INTRODUCTION

Zimbabwe today is the product of a brutal colonial past rooted in a series of complex struggles for liberation and violent subjugation of political opposition. What has emerged is a strong centralising post-independence state increasingly reinforced by authoritarian populism as political and economic pressures have mounted. At the centre of the state- and nation-building project has been the struggle over people and land, increasingly crafted around an exclusory form of highly masculinised cultural nationalism. The land question, the co-option and reinvention of customary structures, and continual technocratic intervention so central to colonial and post-independent state-making and crisis also continue to shape popular political discourse and competing visions of nation. In considering the environment within which agroecological communities function, and how each might employ more responsive strategies, these complex layers, their modes of domination and reproduction provide the contextual backdrop for this chapter. In so doing, it begins by considering the role of colonial constructs and capital in driving land alienation and labour demands, and the impacts of these on shaping agrarian and social change. It also reflects on the legacy of political and everyday forms of resistance employed to retain natural and farming assets in the face of over a century of imposed developmentalism and centralised land-use planning. The aim of this chapter is to explore the origins of a political ecology of violence that surround entitlements, which remain powerful drivers of diverse national and local struggles for power and patronage in the search of legitimacy, consent and control.

3.2 FROM SECOND RAND TO NATIVE RESERVES

From its autochthonous Khoisan hunter-gatherers, the history of pre-colonial Zimbabwe is one of migrations, conquests and assimilations first by Bantu people moving north across the Limpopo to the Zimbabwe 'plateau' from the 13th Century. While sharing similar cultural and linguistic attributes, the Venda, Karanga, Tonga and Rozvi people, and the Manyika and Ndau in the east, it was not until the late 19th Century that these dispersed peoples came to be known as 'Shona' (Mazarire, 2009). It is also a history marked by the rise and fall of regional states, most notably the Rozvi, between the 17th-19th centuries, and Ndebele states. What were to become the 'Ndebele' arrived in Southern Zimbabwe from the 1840s as a result of divisions within the Zulu Kingdom to the south and, on arrival, its regiments variously conquered or assimilated existing groups, such as the Rozvi, Karanga and the early Banyubi farmers of the Matopos Hills, settling and expanding across western Zimbabwe, in what today is Matabeleland.[10] This complex and

[10] Terrance Ranger points to the development of Ndebele identity, for instance, amongst the urban Bulawayo elite during the rise of nationalist thinkers during the 1930s and 1940s, but maintained that the existence of rural Ndebele ethnicity preceding this was a white invention (Ranger, 1999:101-2).

layered history influenced political disputes over dynastic genealogy as ritual, tradition and chieftaincy were subject to persistent changes and consolidation with the rise and fall of different polities (McGregor, 2005).

Spurred by promises of a 'second Rand' the British South Africa Company (BSAC) under Cecil Rhodes began its march north from the Transvaal to the Zimbabwe plateau in the 1890s, reaching Mashonaland in 1890 and later taking Matabeleland by force in the Anglo-Ndebele War of 1893 (*Imfazo I*). The overthrow of the Ndebele state and the acquiescence of the Shona-speaking peoples to the east was followed by drought and pestilence. The imposition of a series of taxes and demands for forced labour soon resulted in open rebellion, thought to have been instigated by the Ndebele (*Imfazo II*), and joined by the Shona who refer to it as the *First Chimurenga*, or revolutionary struggle (Arrighi, 1970:202-3). In the Matopos Hills, where the BASC and Ndebele forces fought each other to a standstill in 1896-7 (despite there being no clear victory for either side), Rhodes' settlement, negotiated with promises of land, set in motion powerful land claims that would fuel nationalist movements in later decades (Ranger, 1999).

On finding only scant gold reserves, alternative sources of capital accumulation were soon sought by the BSAC that resulted in an invitation to white settler farmers, in part to support the nascent mining economy. This second settler phase from the early 20th Century was predominantly made up of British and poor Afrikaner farmers, as well as gold prospectors, land speculators and absentee landlords. This was to have a significant impact on the African populations, whose lands were systematically alienated, beginning a series of evictions and migrations that would last for a generation.

Capitalising on and fomenting divisions between and within what BSAC broadly understood to be the monolithic blocks of Shona-speaking peoples and the Ndebele resulted in uneven benefits. In Matabeleland, punishment for the uprising was exacted harshly on the Ndebele. Nonetheless, elements of the Ndebele ruling class, or *indunas* that collaborated with the BSAC were spared, while those who did not were stripped of their land and cattle which was handed to those considered of administrative utility, irrespective of traditional lines of succession. This set in motion divisions and jealousies which would last for generations, undermining chiefly standing and therefore legitimacy and authority (Ranger, 1999). While its peasantry retained its usage over these lands and was, to some extent, released from the demands for tribute labour by its ruling class, Matabeleland was subsequently far less able to integrate itself into the emerging colonial cash-crop economy (Phimister, 1986:247).

Conversely, with the sacking of the powerful Ndebele state, the Shona-speaking peoples were released from perpetual raids and tributes that had exacted a heavy price. For those on the

Ndebele-Shona hinterlands, production had largely been focused on wetland areas around secure hilltop settlements where gardens and labour had been closely controlled by chiefly lineages. Livestock recovery after the rinderpest pandemic[11] and the cessation of Ndebele raids served to increase cattle numbers for draft power, with the missionary introduction of the plough opening up opportunities for extensive dryland farming (Scoones, 1997b).[12] This shift to an extensive, plough-based agriculture also saw an increasing reliance on plough owners, the new *big men*, for land clearance, ploughing or other assistance. This subsequent expansion on to new lands disrupted ties to old lineages and tribute labour based on kinship obligations to produce grain at the 'chiefs field' (*zunde raMambo*) for storage, and resulted in the rise of individualised farming, with entrepreneurs accumulating considerable assets, including new patronage networks (Scoones, 1997b). These new settlements and labour-intensive farming practices also required shared labour in the form of reciprocal work groups for clearing, planting, weeding and harvesting, known as *humwe* or *nhimbe* (in different Shona dialects) or *ilima* (in Ndebele). Involving refreshment, song and storytelling, *ilima* or *humwe* would traditionally have been an occasion.[13] This freeing up of labour surplus and emerging social networks meant that farmers were able to sell their goods, and later labour, in to the emerging white settler economy, resulting in cash income and investments in agricultural assets. This gradual prolitarianisation led to growing class differentiation within the Shona peasantry, with a small emergent class of commercial African farmer able to purchase labour and extract rents from others (Phimister, 1986:249). The nature of uneven capitalist development under the settler state was to fundamentally change land ownership and thus relations of production, resulting in the emergence of dramatically new social and economic forces (Raftopoulos and Mlambo, 2009).

The creation of native reserves as early as 1894 in Matabeleland (Thebe, 2017), followed by boundary redrawing in the 1909 Native Reserve Commission, Territorial Segregation of 1923, the Native Affairs Act of 1927, the Land Apportionment Act (1930) and the Native Law and Courts Act (1937) enacted racialised segregation that marked the beginning of indirect rule, with judicial authority over Africans in reserves handed to back to customary authorities, also resulting in increased control over the labour of women (Schmidt, 1990).[14] Until this time, those permitted

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[11] A virus affecting ruminants, particularly domesticated cattle and wildlife, thought to have been introduced by the importation of cattle from India by Italians in Eritrea. Having decimated an estimated 80-90% of stock, it cross the Zambezi to Zimbabwe in 1896 leaving only 14,000 head remaining in African hands by the following year. Causing considerable privations, it was nonetheless considered useful in subduing any dissent by native commissioners (Mutowu, 2001).

[12] Using the example of Chivi in Masvingo, where eighteen ploughs were recorded in 1903, increasing to 1,300 within a decade, to over 5,000 by 1939 (Scoones, 1997)

[13] While still taking place today, it is more often seen more as *practice* than *performance* – a practical exchange of labour upon invitation.

[14] Female emancipation from restrictive customs and authority had been promoted by missionaries, and was countered by chiefs - creating tensions between chiefs and the NCs dependent on customary authority to impose order and collect taxes (Schmidt, 1990).

to remain on alienated land lay beyond the control of chiefs. Yet settlement was insecure, dependent on the whims of owners who demanded high rents and labour of young men for up to four months of every year – preventing settlements from being built, crops being produced or gardens cultivated, further undermining African food production and incomes (Ranger, 1999).The Land Apportionment Act, however, saw the enforced eviction of Africans in significant numbers from good agricultural land, that was now almost entirely in the hands of white farmers, prospectors or the Crown. While it was anticipated that this would release a pool of cheap labour for white agrarian and industrial capital, each in increasing competition (Moyo and Yeros, 2005), the ongoing dislocation and forced migration often served to create the opposite effect.

During the inter-war depression, with white agrarian capital having shifted its focus to external markets, particularly for crops such as tobacco, black commercial and peasant farmers benefited from good prices due to food shortages. Policy intervention was once again sought in the form of the Maize Control Acts (1931 and 1934) with the aggressive international marketing of maize produced by white farmers, effectively subsidised by black producers – with the former receiving prices 40% higher prices on global markets while the latter received local prices (Palmer, 1977: 211-2).The cumulative effect of these policies had a devastating impact on peasant farming. Whereas produce had accounted for 70% of cash earnings at the turn of the century, by 1932 this had already plummeted to 20% (Arrighi 1970:216).With the new terms of trade so tilted in favour of white farmers, there was little left for the peasant farmers than subsistence on crowded native reserves, or waged labour. Earlier land redistribution by the settler state had been undertaken to satiate the demands of a growing black middle class with 'Native Purchase Areas' in 1930, yet was broadly seen as an attempt to suppress demands for wider reforms. This class remained relatively unsupported on remote and marginal land (Moyo and Yeros, 2007b; Scoones, 2017a).

3.3 RATIONALISATION AND DEPEASANTISATION

Central to the settler state's modernising vision on marginal reserves that began with the Native Affairs Act of 1927 and the Land Apportionment Act (1930) was to culminate in the Native Land Husbandry Act (NLHA) that involved highly interventionist technical strategies imposed from 1951 until the 1960s. What connected these policies was that they 'assumed the superiority of western culture and science, and the laziness and irrational conservatism of the African' (Alexander, 2006:24). Central to this line of thought was the missionary expansion of the plough, which the settler state was to identify as causal to erosion. But it was also the result of unwelcome competition by African farmers, with pressure put on the state by its increasingly powerful and vocal settler farmers. The language of conservation was progressively adopted, under which pristine landscapes were to be protected from the ravages of native agriculture, at all costs, and

'African farming methods were, in effect, criminalised on the authority of science' (Alexander, 2006:25). Nowhere was the reality of this new ethos and authority more sharply felt than in the Matopos Hills, where the conservation logic finally saw an end to an almost continuous relationship between people and the land, its population thinned and eventually evicted.

Beginning in 1926, the settler state that superseded the BSAC established a series of 'conservation measures' led by American missionary E.D Alvord. These comprised: *demonstration,* to convert farmers to scientific agriculture, representing a civilising phase to de-peansantise and de-tribalise African society (within which the expansion of reserves was planned); and *centralisation* (1930-50) that saw the linear reorganisation of settlements on reserves to make them more 'visible', and with separated arable and grazing areas.

These were followed in the 1940s by more interventionist measures. *Destocking* (1945) was based on inaccurate measurements of carrying capacity, despite rising peasant prosperity and animal health (Drinkwater, 1989).[15] Alongside losses of land and now cattle, resources by which rural wealth is measured, those subjected to these draconian politicises believed it to be a deliberate strategy to impoverish and control (ibid). The 'high point of the Rhodesian technical imagination' (Alexander, 2006:25) was the NLHA from 1951-1961. This was founded on the need to increase land-use efficiency on reserves to accommodate more people – a position that effectively denied African demands for more land. This latter phase, supported by the World Bank, was implemented in the interests of rationalisation and market logic, with cadres of agriculturalists, economists and conservationists dispatched to the reserves to map, plan and enforce good husbandry according to technically defined parameters.[16] For Drinkwater, the combination of these rationalisation policies which impoverished rural communities on one hand, while 'developing' them on the other, was an exercise in 'mental gymnastics' and one which was understood by those affected as representing a 'concentration of irrationality' (1989:295).

These periods of rationalisation also saw the introduction of 'new ideas of status and authority' that challenged chiefly authority (Alexander, 2006:22), causing disruption so significant that it generated 'the greatest crisis of authority the settler state had faced since its foundation' (Alexander, 2006:44). As part of its rationalisation, the native administration set about overturning customary land rights and limiting land access by issuing saleable rights to promote individual responsibility and investment. It also aimed to prevent the ongoing movement of people between urban and rural areas, and set in motion a process of self-prolitarianisation - with

[15] Destocking policy obscured the long-term reality of healthy livestock, rising peasant production, sales and incomes within the rural economy, and thus rising prosperity over a twenty year period. The state's draconian response suggests the stresses that this prosperity trajectory represented for white agrarian capital.

[16] Levies on the sale of African produce, partly through enforced destocking overseen by embattled chiefs, were to pay for NLHA implementation.

those excluded from the land providing a stable industrial workforce. Envisaged as a form of detribalisation through individualisation, the policy sought a fundamental transformation in economic participation – in which power relations, expressed and reproduced through social and political structures, would be replaced by capitalist modes of production – an ideological emphasis that was to remain evident in the post-colonial states technocratic impositions (Drinkwater, 1991; Rutherford, 1997). As the Chief Native Commissioner in 1947 wrote 'the native will either become a peasant farmer, or an industrialised worker with his tentacles pulled out of the soil' (Alexander, 2006:46).

The ultimate failure of NLHA implementation was seen as technocratic. Many regions' yields and productive diversity were adversely affected by a lack of capital and available fertiliser, particularly in areas affected by destocking, leading to a contraction of dryland cropping (Scoones, 1997a). On top of this, population increases of 18% between 1956 and 1961, and slow growth of the economy by only 5%, meant that the commercial farming and industrial economies, as well as urban infrastructure, were unable to absorb those excluded from the land, leading to a significant number of unemployed, landless and homeless people (Alexander, 2006:48).

Furthermore, the artificial separation of social, cultural and economic life in to these two distinct worlds ignored urban-rural interdependence. Remittances and food, kinship relations and support networks moving in both directions at different times, leading to the reproduction of a semi-proletariat, presented contingent challenges of poverty, migration, and social cleavages based on ethnicity and gender, compounded by an increasingly repressive state (Moyo and Yeros, 2005). Today this relationship, often articulated in terms of one's participation in the formal or informal economy, in practice remains dynamic and fluid not least due to the dramatic economic contractions since structural adjustment in the 1990s. Nonetheless, this early form of stratification based on modes of production and economic participation still informs how the contemporary inhabitants of these urban and rural worlds perceive their value in relation to their contributions to state and society.

3.4 SOCIAL CONTROL, EROSION AND DISSENT

The gospel of the plough as part of a modernising package became an early symbol of developmental and educational zeal, playing a central role from the end of the nineteenth century. Dramatically expanding cultivable land and, with it, the number of Africans who came to settle within missionary reach, this new mastery over nature lay in stark contrast to earlier relationships between people, their ancestors, and their ecology, as well as with chiefly lineages and related cultural intermediaries so central to defining political and social relations. This was to play a critical role in advancing literacy, changing labour relations, and so too the role of women

in society (Schmidt, 1990; Ranger, 1999; Mazarire, 2007). With the failure of rains, shrine keepers blamed the interference of Christian missionaries, while the missionaries pointed to the impotence of the keepers and their superstitions. In this way a new generation of Christian 'progressives' was to emerge and wage a form of ideological warfare against traditional culture and religion, described as a war 'about the definition of community, patterns of production and hence about landscape' (Ranger, 1999:53).

During centralised land-use planning under the NLHA, a strategy pursued for both social and erosion control, the forced relocation from riverine settlements to upland interiors that involved periods of forced destocking and grazing management, put an end to shifting cultivation, or what Ranger refers to as the 'peasant option'. On sandy soils, where shifting cultivation was practiced, fertility and structure was provided by falling organic matter from trees, which were also understood to represent important cultural and spiritual resources within the agroecosystem.[17] The enforced clearance and levelling of upland vegetation for maize cropping had the effect of degrading wildlife habitats so vital for seasonal hunting and wild harvesting that it was resisted by local people on the basis of a more complex understanding of social-ecological interactions and, with it, the benefits of maintaining a more diverse ecosystem[18] (Wilson, 1995). Furthermore, the loss of upland vegetation increased the variability of seasonal accumulation of water in the wetlands that had been focal points for cropping and grazing, and which was later also prohibited (Pots, 2000). As a further layer of NLHA conservation intervention, thousands of kilometres of field contours were ordered to be dug using forced village labour, overseen by the police. As documented in Mazvihwa from local accounts, these changes resulted in significant soil loss, gully formation and river siltation (Wilson, 1995), confirming a pattern found elsewhere in an earlier study by Stocking (1972; 1978), and concentrating downstream impacts during heavy rainfall (Scoones and Cousins, 1989; Grant, 1995; Wilson, 1995).[19] Furthermore, the linearity of settlement and roads augmented by vertical drainage lines from contours also became shortcuts and thoroughfares, contrary to the traditional wisdom and practice of winding pathways, which would be regularly amended to prevent erosion. That these superimposed blocks and linear roads and villages are thought to have 'undermined the capacity of rural people to work collectively to design and manage collective path networks' (Wilson, 1995:291) may also be viewed figuratively.

[17] Unlike surrounding nutrient-rich clay soils where trees were seen as being in competition to crops (Wilson, 1995).
[18] Including increased animal forage and soil conservation and, through detailed local observation, reduced termite activity and longer-term damage to grassland. It was also recognised that natural depressions, when levelled by ploughing, were subsequently unable to capture and sink rainwater (Wilson, 1995).
[19] These poorly constructed contours (swales with bunds) divert rather than sink water and thus intensify the flow velocity during heavy downpours. This led to the development of alternative approaches - discussed in case study 2 (chapter 6).

The technical and economic failures of centralised land-use planning were just as far-reaching, if not more so, for social control, with resistance fomented by a combination of coercion of the people and disregard for local knowledge and complex agro-ecosystem interactions (Drinkwater, 1989; Scoones and Cousins, 1989; Wilson, 1995; Potts, 2000). With reference to Scott's 'weapons of the weak',[20] Alexander points to significant acts of defiance including fence cutting and poach grazing, hiding cattle in refusal of destocking or dipping, and evading taxes and levies. Yet acts of quiet resistance, such as maintaining trees within homesteads (Mukamuri, 1995a) were to later surface as acts of violence against officials, reported in 1961 (Drinkwater, 1989), and in the coercion of perceived adherents to colonial practices, such as Master Farmers (Kriger, 1991). These different expressions and tactics employed against the state, either with active or passive participation, deception, or outright resistance, cemented deep opposition to colonial authority itself, and influence peoples' actions and attitudes today (Drinkwater, 1991).

These conditions increasingly frustrated the efforts of Native Commissioners (NCs), who were charged with controlling the African population through its network of traditional leaders, variously employing authoritarianism, paternalism and obligation to manage growing dissent (Alexander, 1991; 2006). Yet the role of customary authorities was complex and dynamic. Far from being a homogenous or stabilising force, chiefs represented divergent interests and ideologies, in some cases navigating a careful balance to negotiate land claims with NCs, and in others inciting open rebellion and resistance (Alexander, 2006). This aligned with popular mobilisation through nationalist-cultural discourse gaining considerable traction, and underpinned the call for a return to *traditional* and *cultural* values and a neo-traditionalism motivated by chiefs' own ambitions (Alexander, 2014).

Crucial to growing resistance to imposed developmentalism was the role that natural resources played as symbols of identification and legitimisation of ruling lineages, acting as supporting pillars linking conservation and resource control. As Mukamuri argues, rather than simply seeing local traditional and religious systems for conservation management as a form of benign 'ritually directed ecosystem', we should also understand these systems as 'local religious institutions [that] are used by ruling lineages for political control, to grant preferential access to particular resources, and to enhance political hegemony.' (1995a:297). As such, the rituals and taboos associated with sacred places were more influential than state-imposed conservation regulations. The modern agricultural practices that saw the destruction of sacred places lay in stark contrast those cultural practices, particularly as they marked points of control and ownership by shallower lineages intent on strengthening their chiefly authority. These sacred resources were again

[20] Scott's account of consistent forms of everyday peasant resistance against colonial subjugation in Malaysia, demonstrating different strategies employed to subvert, evade and resist (Scott, 1985)

threatened during the liberation struggle, resulting in widespread environmental destruction, or *madiro* 'doing what you will' or 'freedom farming' – in a symbolic casting-off of the constraints imposed by, and embodied in colonial bureaucratic forms (Mukamuri, 1995a:308).

3.5 POLITICS OF LIBERATION AND DIVISION - STRUGGLES WITHIN THE STRUGGLE

By the end of the 1950s the collective impact of these polices inspired and fuelled the, by then, unstoppable force of African nationalism, which linked urban and rural, customary and 'progressive' and transcended class, if not the competing visions of nation and nationhood which were to emerge. As farming surplus expanded, so long-standing trade and patronage networks to cities were strengthened. Successful African farming enabled control over its labour to be re-asserted, depriving white capital of its labour demands. While sending young men to South Africa or to cities for education or work had long been a feature of social and economic life, changes in labour and gender relations, as well as the drive by the Native Affairs Department to fundamentally transform economic relations, all conspired to accelerate these exchanges (Ranger, 1999). This, at a time of the nascent African National Council (ANC), proved significant to the development of an African national consciousness which spread from the urban areas through patronage, trade and mission networks to the rural heartlands, coalescing around chiefly land claims. This period demonstrated the multi-faceted nature of rural politics which belies any binary characterisation as a single political culture, with alliances formed of a range of organisations and institutions with both competing and complementary political and identity claims (Mlambo, 2009).

As Rhodesian nationalism hardened against growing international calls for an end to white minority rule, so too African nationalists called for unity within its own ranks. As the basis for the national project, a popular *imaginary* developed out of a mix of the cultural, traditional, and political (Ndlovu-Gatsheni, 2009). This could be seen in the way that nationalist leaders, such as Joshua Nkomo donned the symbolism of cultural dress and reinvented ritual (Ranger, 1999). African nationalism emerged at its most performative, becoming 'highly evangelical as it positioned itself as a counter-ideological, cultural and political movement to settler colonialism' (Ndlovu-Gatsheni and Willems, 2013:5). Nationalist inscriptions, drawing on different pathways and symbolic resources, were soon to fragment under competing visions, particularly when exposed to attempts at consolidation and subordination. The Zimbabwe African People's Union (ZAPU), formed in 1961 by Nkomo, was born out of urban intellectuals and the union movement, consisting of both Shona and Ndebele, and was closely aligned with the ANC. The more territorially defined Zimbabwe African Nationalist Union (ZANU) was born out of a subsequent split within ZAPU in 1963. These divisions were followed by a period of inter-nationalist violence,

met by further colonial repression, when nationalist movements were banned and their leaders were imprisoned or exiled.

As regional liberation movements took hold within the international context of the Cold War dynamics, so the ground was rapidly shifting from beneath Ian Smith's Federation,[21] opening the fronts to the west and north, and made more porous to the east in Mozambique. ZAPU and ZANU began to send their recruits for training in guerrilla tactics, funded by different interests, thus exposing them to different ideologies. ZAPU sent its militant wing ZIPRA west to Botswana and Zambia where, with Soviet training, it was influenced by Marxist-Leninist ideology that informed its strategy of worker mobilisation. ZANU sent its militant wing ZANLA east to Mozambique forging its relationship with FRELIMO leftists during the Mozambican war of independence after 1964 where, with funding from, and training in China, it was influenced by Maoist ideology centred on the mobilisation of the peasantry. The reification of these two distinct visions, or pathways to liberation, and the state that was to follow, continue to inform the contemporary political landscape. This is what Moyo and Yeros call the battle of the 'two Lefts': the *nationalists* on one hand, and the *internationalists* on the other, the latter of which they maintain have become embroiled in the centre-periphery relations of international capital and coercion (2007a). Nonetheless, the work of Lan (1985), and Ranger (1985) wove together a history of resistance, oppression and heroism that was acculturated to form the central strands of cultural nationalism, presenting a radical peasant consciousness.

By 1966 the ensuing conflict was both a war of liberation and a civil war, fought in three ways, that emboriled the rural population in extreme levels of brutality as people were variously moved to 'protected settlements' by the government, and accused of being 'sell-outs' by nationalist forces. Countering Lan's and Ranger's radical peasant consciousness, Norma Kriger (1991) depicts a reluctant peasantry coerced into supporting guerrilla activity, with violent guerrilla-peasant relations being normalised, and this being instrumental in forging the character of the state that was to emerge. Furthermore, Kriger asserted that these experiences were responsible for rural passivity during and after the war, when coercion and authoritarianism in rural areas through local party structures became a regular feature of the exercise and maintenance of power.

> Guerrilla psychology opposed the basic tenets of tolerance of individual values and identities in the military training camps and in the operational areas, especially in the 'liberated zones'; in other words, it opposed the formation of civil society. This psychology continued after Independence with the same consequence. (Moyo, 1993:13).

[21] Federation of Rhodesia and Nyasaland established in 1953 consisted of colonial dominated Southern Rhodesia (Zimbabwe), Northern Rhodesia (Zambia) and present day Malawi.

The situation was markedly different in Matabeleland, with its history of nationalist organisation, and where ZIPRA guerrillas had a shared agenda and were expected to observe rules of behaviour moderated by commanders, party and civilian leaders, resulting in fewer reports of peasant-guerrilla violence at that time (Robins, 1996; Alexander and McGregor, 2005). Kriger's coercion thesis nonetheless presupposes binary experiences and positionalities - either tacit or active support for guerrillas. Many interests and agendas were undoubtedly at play beneath the wider objective of throwing off white minority rule, not least those around lineage, age and gender, as 'struggles within the struggle' (Kriger, 1988:312). For others, support for guerrillas promised an end to state interference in peasant agriculture (Beinart, 1984; Ranger, 1985). Accepting that there were indeed divergent experiences, spatially and temporally, what Kriger's work did at that time was to challenge the prosaic notion of a collective peasant identity, united in a single nationalist struggle, as viewed from a structuralist standpoint. In doing so, she highlighted the role of human agency, albeit in response to structural contradictions, within which new systems and practices, or rules and resources were recursively being challenged and structured in political culture (Giddens, 1979:5). Of course, these generating moments can in fact be traced to colonial coercion, violence and authoritarianism that preceded and produced the war, as well as in reproducing and reinforcing inequitable social practices that constituted the *struggles within the struggle* which, as we will see, continue today.

> There was an infantilisation of the African which resulted in the feeling of emasculation amongst African men, and thus induced much frustration and anger. It is evident, then, that the nationalist liberation movements were triggered by the desire to regain the self through regaining a sense of masculinity. …This means that while collectively, it was a fight to regain space on a personal level, there was a simultaneous drive to assert a lost masculinity. This very much shaped the violent nature of the response to oppression. …Another aspect of the gendered nature of not only the liberation movement itself, but also its remembrance, is the sexual violence that was perpetrated. The use of sexual violence as a tactic of war and as a part of the lives of the female guerrillas was widespread and systematic during the liberation struggle. Within the camps and outside, women faced the pain of abuse, which was silenced by the marginalisation of women in general from spaces of power (Mojapelo, 2014).

3.6 SONS OF THE SOIL

Blood spilled by combatants during the long liberation struggle (1964-1979) was largely sanctioned by spirit mediums, with fighters considered 'sons of the soil'. Cases of civilians killing 'strangers', often fighters from different militia crossing their territory, were common, as were killings of fellow villagers accused of being sell-outs, sometimes in the settlement of old scores (Schmidt, 1997). Many of the perpetrators were *mujibas* and *chimbwidos*, local young male and female non-combatants acting as auxiliaries, who wielded considerable power. According to

some accounts, *mujibas* caused more harm to civilian populations than guerrillas (Ranger, 1985:292),whereas according to others, guerrillas encouraged *mujibas* to make accusations and commit retribution to avoid being personally afflicted by *ngozi*, the aggrieved spirits of those murdered unjustly and that would possess the perpetrator or their lineage (Schmidt, 1997). Nonetheless, for Kriger, this was a further manifestation of the search for emancipation from oppressive lineage, class, age and gender relations so central to rural politics and division. As the war came to a close, any optimism for emancipation was, however, short-lived as traditional leaders, with support from guerrillas now seeking legitimacy, quickly reasserted their authority, and any hope of transformation was quickly thwarted (Kriger, 1988; Alexander, 2014). For Donald Moore (2005) these reasserted interests were discursively constructed through a complex infusion of belief, aspiration and grievance. In this way, the violent legacy of pre-colonial original accumulation (control over labour and conscription in to regiments), and thus political economic struggles, were fought out on the terrain of culture. Just as Richards (1996) likens agriculture as performance embedded in culture in Sierra Leone, so too social violence, often in defence of patriarchy, is a form of performance.

After the war, the nation was said to be haunted. For Ranger, 'collective sense needed to be made of the war … [through which] atrocities were turned in to history' (1992:705). In 1979 a Swedish report noted the existence of 'hopeless refugees; massive unemployment; drunkenness; hunger; and gang-warfare' resulting from years of war (Ibid). Social healing practices were reinvigorated during the post-war period, as communities surfaced their experiences in search of collective memory formation, and to locate those who lay unburied. Healing also became an important service offered by churches. Within his study area, Schmidt found a significant increase in the number of churches at this time, and apostolic churches, with their exorcisms of *ngozi*, proved particularly potent (Schmidt, 1997:307). In this post-war environment, traditional mechanisms for transitional justice also served a number of important purposes: traditional courts were established to hear cases of unjust killings, to assuage *ngozi*, and as an act of community healing (Benyera, 2014). The ways in which the legitimacy and righteousness of killings was gauged, as well as which spirits were assuaged and how, were highly complex and problematic.[22] Traditional leaders also sought to reassert control to restore order - noted as the re-entrenchment of patriarchy - through healing rituals, healers and spirit mediums (Reynolds, 1990). Healing was therefore a practical response to overcoming the everyday realities of violence and, as Ken Wilson's paper on Mozambique pointed out, it demonstrated how difficult it proved 'to escape

[22]Not least as compensation often involved reparation in livestock and a young girl who would bear a child to the afflicted family to appease the avenging spirits (Schmidt, 1997).

the spiral of a violence which has long ceased to be contained by societal and moral constraints' once understood as regime and counter-regime violence (Wilson, 1992).

> 'Liberation movements may have needed to use force to overthrow settler regimes, and nationalist states to defend themselves against destabilisation. Nevertheless, some forms of violence even in those contexts are immoral, excessive, and counter-productive, making it difficult for liberation movements to attain governability within ungovernability, and for successor states to claim legitimacy.' (Ranger, 1992).

3.7 THE FOURISHING OF INDEPENDENCE

Having been left with a considerable national debt from the colonial state's military spending to prosecute its 'Bush War'[23] (Murisa, 2015), the inclusive growth agenda of the newly independent state embarked on high levels of public spending without requisite revenues. The 1980s was viewed as Zimbabwe's heyday, with the government implementing its social reform agenda based on widening access to services and democratic participation for the majority that had been excluded from settler infrastructure. By the late 1980s around 40% of the national budget was dedicated to social spending and infrastructure development - building schools, hospitals, clinics, and much needed urban housing – which was highly dependent on international borrowing.

Central to the inclusive growth vision was the introduction of local representative structures feeding up to the national level, through which government could implement its developmental agenda. This included the establishment of village development committees (VIDCOS) and Ward development committees (WADCOS) constituted of locally elected representatives to define local developmental needs and to promote community participation. These were established alongside Rural District Councils (RDCs) headed by District Administrators (the successors to Native Commissioners) as an elected infrastructure to secularise and democratise local structures.[24] According to Alexander, the reformed structures sought to: a) create a unified modern state linking village to national level, b) replace customary authority with democratically elected structures; c) create a new foundation for rural authority; and d) institutionalise the development agenda (Alexander, 2006:107-111). Yet VIDCOs and WADCOs remained weak, without resources or decision-making authority.

The promise of post-independence brought a flourishing of popular optimism, a period discussed by Ndlovu-Gatsheni (2009) as *developmental nationalism,* with rapid signs of rising social mobility, health and literacy. And so with a collectively imagined future emerged an optimism formed

[23]R$30 million to R$400 million between 1971-1979. Prior to which Southern Rhodesia had been one of the fastest growing global economies between 1945 and 1975 in terms of GDP at the expense of its majority black population in the form of expropriated land and resultant cheap labour, and thus in no way reflected actual per capita income.
[24]NGOs also played a role, supported by government to promote participation and engagement in the form of co-operatives and community funds, under the ethos of self-reliance and collective action (Murisa, 2015:3).

around the sense of being active participants in the nation-building project, with much-anticipated equity resulting from social inclusion in decision-making.

3.8 CONSOLIDATION OF POWER

This first decade of independence also represented a period of power positioning, reassertion and consolidation. During this time, a series of inter-related struggles were taking place: between ZANU and ZAPU as the ongoing battle over the ideological heart of the national project continued until the Unity Accord in 1987;[25] between the state and customary authority; between traditional leaders and their subaltern populations; and within the triumphant ZANU as the party elite sought to wrest control from local party members to consolidate control over its ranks. The process of bureaucratisation in rural areas, which was historically mistrusted, was taking place alongside demobilisation, while building and maintaining patronage networks through promises of land and reparations to war veterans. The internal centre-rural struggle and curtailment of local party autonomy was achieved by the centralisation of development resources. These were distributed through party structures headed by co-opted elderly male power holders, reinforcing patriarchal authority over development committees, and directly benefiting local officials and party members (Alexander, 2014). Thus the heady days of the 1980s and its period of popular mobilisation quickly turned into a bureaucratic public control exercise augmented by local alliances (ibid). Equally, layers of government bodies and functionaries with competing agendas illustrated contestations within and between bodies as much as between peasants and the state (Moore, 1996). This demonstrated that structures, in their various forms, were often reactive, wary of historical precedents and claims, and highly conscious of their liberation narrative – and thus of the need to be seen to be in control of the national project at all times. For Drinkwater, the most important colonial legacy was the power embedded in the state which, after independence was transferred to a post-colonial state that became the centralising and dominant source of power (Drinkwater, 1989).

One sub-text to the state's rationalising reforms was the side-lining of customary authority and its power-base. As the new bureaucratic centre pursued control over its local party structures, it also sought to dismantle customary levers of power, which traditional leaders once again responded to in their pursuance of a populist revival of 'tradition' which appealed to a constituency whose interests were similarly threatened by an autocratic state and the transformation of the subaltern. In this way, the democratisation of land, alongside the rights of women projected through legislative measures, were subsequently resisted by traditional authorities on the basis of customary law (Alexander, 2014). In light of structural adjustment and rising political opposition, the government capitulated in 1999 to secure its rural support-base,

[25] That led to the creation of ZANU-PF.

and the role of chiefly authority over communal land (and some resettlement areas) was restored (Murisa, 2007).

Global centre-periphery relations brought further pressure to bear, as international borrowing came home to roost. The Economic Structural Adjustment Programme (ESAP) adopted by government in the period of 1991-95 marked a seismic shift from inclusive growth to a policy of economic liberalisation, correspondingly signalling the end to developmental nationalism, and the beginning of a national narrative driven by a highly defensive return to cultural nationalism (Ndlovu-Gatsheni and Willems, 2013). Under ESAP, with reform of the public sector, trade liberalisation and deficit reduction, per annum growth was anticipated at 5%. Instead growth went in to sharp decline, from 4% to 1.4%. The impact of ESAP was the shrinking of many sectors, most significantly the industrial sector which was intricately bound to the agricultural sector and thus to rural livelihoods. Budget cuts of up to 50% in public services and retrenchments led to increasing levels of unemployment in urban areas, and reverse migration to rural areas, compounded by the introduction of user fees for public services such as health and education. With many simply unable to pay, the gains that had been made in the previous decade were quickly reversed. While rising confrontations in the 1990s were mainly seen in urban areas, with strikes and protests organised by unions met by police brutality, for the first time even farm workers, who made up one-sixth of those on the poverty line, protested their low pay (Yeros, 2002:180). Through its continuation of the colonial Public Order and Security Act, strikes were banned, and NGOs threatened, at once squeezing the public space for dissent. Urban-rural migration put further pressure on rural communities, not only due to the loss of remittances, but also increasing pressure on the communal lands to which many were returning. This had the effect of significantly renewing popular demands for land, and propelling the state inexorably towards Fast Track Land Reform (FTLRP) in 2000 as the party-state sought to retain its rural support-base.

Soon after independence political consolidation had reached an early low in Matabeleland and Midlands Provinces, despite earlier agreements and demobilisation. During a period known as *Gukurahundi* (the rain that washes away the chaff), different forces converged on areas suspected of ZAPU support, including the infamous North Korea-trained Fifth Brigade, perpetrating extreme violence against the population which was suspected of sustaining ex-ZIPRA guerrillas, and branded as 'dissidents'. With civilians now caught in-between, and old ties and codes of conduct from the liberation war having eroded, the relationship between civilians and ZIPRA guerrillas was fundamentally altered (Alexander and McGregor, 2005). Between 1982 and 1987 it is thought that up to 30,000 people were killed, and many more thousands tortured and raped in camps often over many years (Catholic Commission for Justice and Peace, 1997). The

suppression of Ndebele culture and identity in the emerging national narrative served to dramatically affect its inclusion in the new state, the implications of which will be explored further in the Matobo case study below. The constitutional establishment of the National Peace and Reconciliation Commission (NPRC) in 2013 signalled an important opportunity to hear evidence and provide compensation to those affected during *Gukurahundi*, as well as during subsequent political violence since 2000. However, the lack of independence of the NPRC, has led to mistrust amongst those affected, and to questions about how a process of transitional justice can take place before any political transition, and without any mention of 'truth'.[26] Furthermore, because of the intra-village nature of much of the violence across Zimbabwe, many people remain reticent to speak out or engage with overt processes aimed at restorative justice (Tarusarira and Manyena, 2016).

3.9 POLITICS OF LAND AND AGRICULTURE

At independence in 1980 some 6,000 mainly white commercial farmers (less than 5% of the population) owned over 15 million hectares (42%) of the land, contributing to 75% of agricultural output and 96% of sales. To achieve this, they had benefited from considerable subsidies alongside preferable land and pricing, infrastructure and marketing policies, and extraction of surplus labour value from in excess of 250,000 farm workers (Moyo, 2001; Scoones *et al.,* 2010). As one of the key drivers for land reform, at this time it was estimated that communal areas were carrying thrice the number of people they could sustain. The reformist agenda of the Lancaster House Agreement that paved the way for independence prevented any large-scale land redistribution in the first decade of independence, preferring instead a market-led technocratic approach to stabilisation, thus protecting property rights and allaying the fears of both its white minority and international investors. Land acquisitions therefore took place through the policy of willing buyer-willing seller, and financial compensation made for settler farms.[27] During the initial phase (1980-88), land was redistributed to applicants selected according to social need, with criteria including age, unemployment or landlessness, and those who had been displaced or injured as a result of the war. As the bureaucratic process expanded, beset by delays and spiralling costs, critics pointed to ambitious resettlement targets, and the over-valuing of under/unutilised

[26] According to a DFID governance advisor, 'No-one really believes in the commission being able to proactively work on sensitive issues - around peace, reconciliation or addressing grievances of any kind. And also the [ten year] time limit that's imposed also means that any of the relevant issue - how you can get communities to discuss any past atrocities and ways of community together again - that just doesn't seem to be on the horizon … and it's just being delayed. … If it endangers the status quo or risks uncovering scandals, they're either side-lined or starved [of funding], or deliberately slowed down.' Interview - HRE/DFID/M/17.7.17)

[27]During this period £44 million was released in compensation to white farmers by the then British Overseas Development Agency (ODA) and USAID (Murisa, 2015:10).

and marginal land (Ranger, 1999; Neumann, 2005; Amanour and Moyo, 2008).[28] Nonetheless, several reports pointed to the benefits of the programme, recommending continued support.[29]

With the end of Lancaster House restrictions in 1988, and emboldened by national elections in 1990, land tax was adopted in the 1990 *National Land Policy* and controls on pricing applied in the 1992 *Land Acquisition Act*, marking the beginning of a new compulsory acquisition phase, and with it a series of legal challenges by the CFU.[30] This phase also coincided with ESAP, under which the social equity focus was replaced with technical and economically defined criteria that emphasised the productive potential of applicants, managed under an increasingly bureaucratic, centralised and modernising state apparatus. This favoured the positioning of 'a narrow class of politically-entrenched accumulators' opening up another conflict front – this time based on growing class differentiation (Hammer and Raftopolous, 2003:23). The elite capture taking place during this phase, and the failure to deliver redistributive land reform at expected levels, left its majority rural population highly exposed to economic decline, increasing levels of inequality, exclusion and poverty (Nafziger *et al.,* 2000).

Despite the urgency with which reparations were required, as pointed out by Kinsey 'the pace of two decades was dictated by a lethargic government' which failed to recognise the role of land redistribution as an escape valve for class tensions (2004:1673). With pressures building from different directions, not least due to the increasingly vocal demands of war veterans, and rising political opposition and protests, compulsory purchase orders were stepped up by 1997. This set in motion what was to become the Fast Track Land Reform Programme (FTLTP), as well as legal battles and the international response that was to follow. As the legal battles dragged on in the courts, local claimants began to take matters in to their own hands in 1998, invading mostly white farms in an often highly 'contested, localized and complex process comprising a range of actors such as war veterans, politicians and traditional leaders' (Moyo *et al.,* 2009:5) in spontaneous expressions of *jambanja*.

> Land reform was war, the 'Third Chimurenga'. *Jambanja* described a political practice that celebrated lawlessness. Technocratic plans were transmuted into 'Fast Track' reform, and legitimised through patriotic appeals. Occupiers became 'settlers' while whites were reified as 'foreigners' and farm workers as 'aliens'. The new language of authority and land played on, distorted and displaced the long history of appeal to the discourses of custom, technocratic development and nationalism. No one story of land – or of power over the

[28] 65% of commercial farmland was found to be underutilised, pointing to considerable inefficiencies (World Bank, 1991), and was vehemently defended by the Commercial Farmers Union (CFU) under the aegis of conservation.
[29] The ODA's 1988 evaluation reported evidence of the benefits of land reform for those resettled, in comparison to communal counterparts, (Cushworth and Walker, 1988). Kinsey points out that one in ten communal households in fact benefitted from the programme, and production gains in resettlement areas were by no means insignificant (2004:1682).
[30] Commercial Farmers Union representing mostly white farmers at that time.

> land – easily encompasses this process. Instead, the many strands of Zimbabwe state-making combined anew. (Alexander, 2006:194-5)

Yet debate continues around the motivation of *jambanja* and FTLRP. One view is that war veterans were part of a ZANU-PF inspired 2000 election strategy, having lost the constitution referendum earlier that year (Hammar and Raftopoulos, 2003; Shaw, 2003); while the other is that the land movement was driven by popular frustration at the pace of technocratic market-based redistribution, and a growing suspicion by the war veterans that ZANU-PF had failed to live up to the liberation vision (Moyo, 2001; Moyo and Yeros, 2005). After all, land invasions were not a new phenomenon; resistance and the capture of land through 'freedom farming' (*madiro*) and more recent 'self-provisioning' had been a feature of rural struggles since the days of the NLHA, peaking during the 1980s and 1990s and the collapse of the formal economy and its contingent threat to semi-proletarian livelihoods (Thebe, 2017). Continuing today, also affecting communal areas, self-provisioning has consequences for existing inhabitants and natural resource depletion. And, becoming more visible to the authorities, *jambanja* may be seen not only as an expression of land hunger but of grievance over economic failure and lost opportunities, thus representing a challenge to the authority and legitimacy of traditional leadership and the state (Ibid).

Re-peasantisation, begun under the earlier technocratic agenda, was opened up under FTLRP driven by the land hungry from below. This agrarian reform was more capable of conferring rights to a mixed group of occupiers, resulting in redistribution based on social justice. Within the emerging post-FTLRP agrarian structures of small, medium and large farms, and despite low levels of land registered to women, women were more able to break free from the neo-traditionalism of communal relations, forming groups for production and trade to generate wealth and widen their livelihood options on their own terms, using versatile tactics and available strategies (Bhatasara and Chiweshe 2017). Chiefs also sought to cement their authority and accumulate economic and political advantage within these new lands, over which many had historical claims if not customary authority (Wilson, 2017).

Following the violence of the contested 2008 election, and the formation of the power sharing government of national unity in 2009, a new constitution was negotiated and agreed in 2013. This not only paved the way for the 2013 elections, it also put in place the legal framework for the NPRC and the Land Commission, which established the urgent need for a land administration to undertake an audit through which land could be valued and compensation made to former owners, and to establish what land has been allocated, and to whom. Despite white settler farmers having been issued freehold titles under colonial administrations, since FTLRP most land in Zimbabwe became state land, with a multi-form tenure system comprising leasehold, permit, communal, state and some freehold land. State land consists of parks, forestry and farms. Today

approximately 145,000 households occupy 4.1 million hectares under smallholder (A1) resettlement schemes, and 3.5 million hectares are occupied by around 23,000 medium-scale (A2) farmers (Scoones, 2018a). Since 2013, the process has been hampered by a lack of funding, administrative capacity and political will. Primarily the Commission must tackle the complex question of rights and tenure systems which is likely to open up tensions. The lack of clarity on tenure, however, leads to considerable uncertainty, and leaves the system open to manipulation, corruption and patronage.[31] In resolving these questions, some advocate retaining the multi-form system, not least to protect the value of customary or social tenure directly embedded in social relations; and to reassert the policy of non-interference by the state on communal lands (Cousins, 2005 and 2017; De Schutter, 2011; Rukuni, 2012). Others, meanwhile, advocate freehold titling to stimulate land markets and capitalisation (De Soto, 2001). On taking office in November 2017, President Mnangagwa re-stated the commitment of compensation to those who lost their land under FTLRP, and accelerated the 99-year leases to increase land security and stimulate the release of capital for investment by resettled farmers.

The dominance of the modernisation agenda within the political sphere continues to drive agricultural policy. Under this agenda, none of the political protagonists see a future for smallholder farming as a form of growth from below, instead viewing economic growth through the prism of formal employment and, as such, the migration of rural populations to service economic centres - commercial farms, mines or other industries – with all its historical redolence. And despite a process of re-peasantisation and the vibrant informal sector that has emerged due to persistent economic crises, formal employment remains the primary means of measuring economic well-being (Murisa and Chikweche, 2015; Chigumira, 2018). As Scoones *et al.* point out 'the dualistic agricultural economy – separating small-scale (read backward, inefficient and in need of 'development') and large-scale farming (read modern, efficient and forward-looking) has deep roots in people's understanding of what a successful agricultural economy looks like … Anything that deviates from this model is deemed a failure.' (Scoones *et al.,* 2010:9).

3.10 PATRONAGE AND ENTITLEMENTS

Just as subsidies in the 1980s targeted communal areas that had supported the liberation struggle, and in the 2000s had targeted A1 smallholders as the core of ZANU-PF's support-base, so the state's more recent and highly centralised Command Agriculture scheme[32] has identified

[31] To prevent land concentrations, transfers are permitted through inheritance or by sale at a nominal fee back to the state, and restrictions on multiple farm ownership.

[32]The scheme, costing a reputed USD 192 million, provides loans for equipment and inputs including fuel, hybrid seed and fertilisers, on the proviso that loans are repaid in grain at an ambitious rate per hectare to the Grain Marketing Board (GMB), at above market price (Ndlela, 2017).

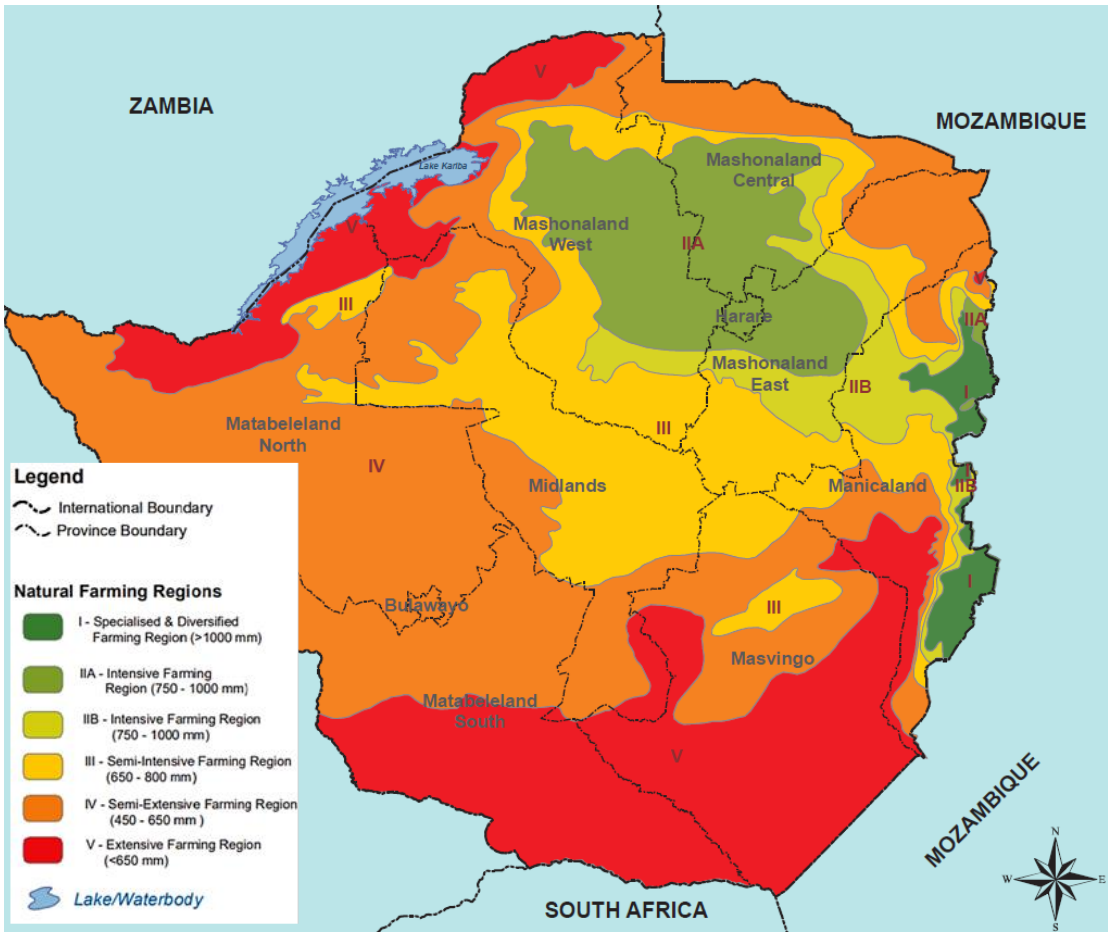
its newly powerful support-base, the A2 farming class.[33] No doubt taking its lead from the subsidies for settler farmers that formed the basis of successful white commercial agriculture in the preceding century (Scoones and Cousins, 1989), this large-scale commercially-backed subsidy package was fist implemented over the 2016-17 season. Furthermore, Command Agriculture has been overseen by the army and Central Intelligence Organisation – pointing to the political nature of subsidies, particularly at a time when intra-party factionalism was at its height.[34] As Scoones (2017b) points out, A2 farmers are politically important to the ruling party because they represent 'the core of the middle class, professional, business and security service elite who benefited from such land, but had not been using it effectively, securing their support politically and ensuring greater economic viability of A2 farms (while securing food for the nation) had become a political imperative.' Nonetheless, prior to the 2018 election, and due to good rains over the 2016-17 season, at the start of the 2017-18 season the scheme was extended to communal small-scale farmers in high potential regions (as seen in *Map 3.1* below).[35] Surrounding the scheme are questions of efficiency and sustainability, given the repayment cost, level of expected returns, and weather dependence, as well as Grain Marketing Board's (GMB) lack of liquidity and reputation for late payments that put farmers at risk.

These same patterns are associated with food and input entitlements distributed from the Department of Social Welfare via ward councillors and development committees headed by traditional leaders - despite the 2013 Constitution prohibiting this.[36] Nonetheless, there is a tendency by the ruling party, when its support wanes, to fall back on traditional institutions by using praise, cultural symbols and 'gifts' – to which chiefs may respond actively or tacitly, thus 'absorbing the violence' (Tarusarira and Manyena, 2016:67). Reports of partisan distribution include the dissemination of food and farming inputs during party meetings, with recipients required to be card-carrying party members (DFAT, 2016; ZHRC, 2016).[37] Concerns were raised about increasing military involvement in food distribution towards the end of 2016 and again in 2017 (FCO, 2017), when it was thought that violations were likely to persist towards to 2018

[33] Under FTLRP A1 plots were identified for smallholder farmers consisting of land up to 6 ha, while A2 were for medium-sized commercial farmers of up to 500 ha.
[34] During its first year, the scheme prioritised 2,000 relatively resource-rich A2 resettlement farmers in high-potential regions (Scoones, 2017b)
[35] Of the three field research sites, only Chikukwa farmers were involved in the scheme, with distribution highly securitised, and discussions around the scheme hushed. Interestingly, the two other research sites had not come across Command Agriculture, perhaps due to their being located in regions iv-v, and for which a livestock-related scheme was reportedly mooted for following years, pending an assessment of the 2017 scheme. No such assessment has been made public.
[36] Section 281 of the Constitution states that traditional leaders must not be members of any political party or in any way participate in partisan politics, act in a partisan manner or further the interests of any political party.
[37] Zimbabwe Human Rights Commission (ZHRC) statement on reported food aid cases at a press conference in September 2016.

election in relation to vote buying.[38] In 2017, the Zimbabwe Peace Project (ZPP) reported that 'Despite [the Zimbabwe Electoral Commission] acknowledging that some traditional leaders were engaging in corrupt activities and using [biometric voter registration] to settle personal scores; no action has been taken against the said traditional leaders. The credibility of the 2018 elections is in doubt as ZANU-PF meetings and rallies continue to go ahead while meetings organized by opposition parties are disrupted by police.'[39] Despite the presidential transition in November 2017 ongoing factionalism within ZANU-PF proved to be the major source of friction, dividing existing local power holders and further narrowing access to entitlements (ZPP, 2018).

This adds to the ongoing sense of disarticulation between the state and society as a whole which, for Azar, was a source of violence within society, created between identity groups and 'incompetent, parochial, fragile, and authoritarian governments' either unable or unwilling to provide for basic human needs (1990:10). The resulting crisis of legitimacy involves relations of dependency as well as political-military links that constitute clientalist patterns determined by perceived threat (Kinsey, 2004; Ramsbotham, 2010).



Map 3.1: Zimbabwe Agroecological Zone (OCHA 2009)

[38] Zimbabwe Peace Project monthly monitoring report (ZPP, October 2016).
[39] Monthly monitoring report - ZPP October 2017.

3.11 TECHNOCRATIC APPROACHES TO LAND AND FARMING

Despite the legacy of colonial technical development policies, the post-independence state was to replicate much of the same logic. Perhaps, ultimately, the 'liberation initiatives have found it very difficult to "unthink" the epistemologies created by others' (in Murisa and Chikweche, 2015: xx). One such example was Zimbabwe's National Conservation Strategy (1985) that emphasised voluntary adoption and community mobilisation (Zimbabwe, 1987). Nonetheless, coupled with demand for land and the slow pace of reform, the drive was to improve land-use efficiency of the communal areas – evidenced by the continued policy of de-stocking and 'villigisation'. The objectives of popular participation on the one hand and forced livestock reductions on the other sit very uncomfortably together (Scoones and Cousins 1989). As before, de-stocking led to a reduction in draft power and available manure for extensive dryland cropping, which drove a return to garden production dominated by women, either around homesteads or on wetlands (for which prohibitions were relaxed in the 1990s), all of which had considerable implications for gender relations (Scoones, 1997a). Furthermore, far from being a simple story of population pressures and scarcity, a more complex and layered picture emerges when considering deforestation in the context of changing land-use, tastes and specialisation. For McGregor (1995) influences on resource-use comprising state penetration of rural areas, and increased regulation of environmental resource-use, tenure changes, and agricultural intensification - cannot be separated from questions of availability.

In an attempt to break free from these contradictions, CAMPFIRE (Communal Areas Management Programme for Indigenous Resources) was established in the 1990s to promote community engagement in wildlife management by providing income for communal areas from trophy hunting. This has seen mixed results due to animal migration and spiralling administrative costs (Logan and Moseley, 2002).[40] The scheme is administered by Rural District Councils which distributes 50% of the income to communal area development projects prioritised by ward and village development committees, often using the funds to subsidise their own projects as central government funding has been squeezed.[41]

There have also been more recent attempts to increase consultation for the formulation of locally appropriate regulations by the Environment Ministry, through its Environmental Management Agency (EMA) that works with district councils and traditional leaders. However, this spirit of co-development was short-lived, hampered by the habitus of technocrats who either did not fully

[40] As migrating animals are targeted by trophy hunters at watering holes, the communal areas in which they are shot become the beneficiary locations, leaving those over whose territory they travel without remuneration. The programme has been implemented in fifty-eight districts, many of which are in Matabeleland.
[41] Interview with Environmental Resource Officer, Matobo District (08.06.17)

comprehend the process of co-development or mistrusted traditional leaders – suspecting them of acting in self-interest and/or actively working to undermine laws and bodies that traditional leaders perceive as usurping their role as custodians. Furthermore, wider public participation remains at the discretion of the traditional authorities who rarely consult with resource users. For both the RDC and traditional leaders, the focus remains on enforcement rather than public participation. At all levels, the capacity, conditions and a willingness to explore participatory approaches were found to be lacking (Naome and Jerie, 2012:411).

This picture is not dissimilar at the Department of Agricultural, Technical and Extension Services (Agritex), the successor to Alvord's technical development of the 1920s. Today Agritex extends technical support to communal areas and resettlements through its network of ward-based agricultural extension workers (AEWs) who promote standard packages of hybrid maize and nitrogen-based fertilisers as a form of technology transfer. With many NGOs resolutely refusing to engage in post-2000 resettlements, due to their relationships with international donors, in many cases Agritex remains the only form of available advice. The mainstay of this support is provided through Garden Clubs primarily made up of women producing on wetlands or riverine sites; occasional Farmer Field Schools, and Master Farmer Clubs that are often considered to comprise elite farmers due to the assets required to qualify for the scheme. In more recent years, conservation farming (CF) techniques have dominated Agritex instruction. This advocates minimum tillage, use of crop residues for mulch and fertilisation, and rotation or inter-cropping. In Zimbabwe, this instruction incorporates its technical package of hybrid seed and micro-dosing with fertiliser and pesticides, irrespective of availability and/or affordability. Despite its heavy promotion, emanating from the FAO, the uptake of CF remains relatively low due to being largely input-dependent and thus less accessible to smallholders (Wall, 2013).

As discussed in the case studies, where AEWs have been exposed to more plural approaches, they have been able to adopt and integrate these to augment their extension advice. This is particularly important at the geographic margins where the dominant order is least consolidated, and where resource and service penetration is at its most sparse. Most AEWs, however, have not fared so well, pointing to the limited value of agricultural diplomas which have left many woefully ill-equipped in the face of poor policy coherence and highly variable farming realities (Mutimba and Khaila, 2011).[42] With little understanding or integration of participatory approaches, innovation, despite being part of the development narrative, is actively discouraged if not part of pre-defined 'technology transfer'. In developing consultative planning with VIDCO and WADCO structures,

[42]The mainstay of the two-year agricultural diploma is reportedly focused on tractor-based tillage systems and engineering, using a computer where there is often no electricity, and chemical applications using knapsack sprayers despite neither sprayers nor chemicals being available. Interview DMA/AEW/F/09 (19.06.17)

Maseko *et al.* (1988) note that it was first necessary to apply for legal exemption orders from government to support technology development and adaptive implementation by farmers.

Despite the patronage relations that increasingly dictate input distribution, with little thought for soil or rainfall conditions, the challenge for technocrats may however be found in more mundane explanations. 'Those who work for state institutions are trained and socialised into the language of goals, policies, programmes and plans, and hence accept as normal that bureaucracies should function according to a purposive rationality' (Drinkwater, 1989:288). As we have seen, this rationality is not always understood by traditional leaders or resource users, who have an altogether different relationship with their ecology.

3.12 SOCIAL-ECOLOGICAL RELATIONS TO THE LAND

Of course, the state does not sit outside of cultural politics, or vice versa. Moore aptly demonstrates this in his account of cultural relationships to the land in Zimbabwe's post-independence Eastern Highlands, described as a 'constellation of practices and institutions constituted through struggles over meanings of rights, legitimacy and authority' (Moore, 1996:140). This proposes that the prism through which we look at natural resource-use struggles must go beyond a simple economic mode of production to incorporate cultural modes of production. A gendered and therefore patriarchal view of production, which in large part predates the advent of capital in its distinctly colonial form, nonetheless accepts that these cultural relationships continue to be shaped by the demands of capital. In this way 'culture is laced with power, and power is shaped by culture' (Rosaldo, 1994:525 – in Moore, 1996). Through idiomatic expressions of suffering for the land related to forced evictions, defence of ancestral claims to grazing, hunting and arable land, and the subsequent demarcation of national parks and the technocratic management and allocation of resettlement lands, Moore describes these simultaneously symbolic and material conflicts as a battle over 'semiotics as well as soil' (Moore, 1996:139). These cultural practices and relations, rather than being symbolic manifestations of capital relations, are in fact already deeply embedded within them. And it is through this highly sedimented cultural-capital production of landscape that meaning is produced for the strident negotiation of land access and resource-use.

The more recent adoption of climate narratives associated with reduced rains is thought, in part at least, a strategy by local people and their traditional leadership to deflect the historical state-advanced discourse on environmental degradation and conservation. For Wilson (1995) this demonstrates the use of discourses to serve different interests, from which one can draw a direct line between coercive state control, conservation and farming. When laid over Zimbabwe's land question, these culturally defined and embedded 'structures' and their inter-related discourses

are just as likely to be employed for the benefit of one group over another within any given community. Yet, the complex and artful negotiation that incorporated many competing local interests and narratives, layered beneath those of state and international capital, can also be seen in the blending of 'indigenous knowledge, contemporary permaculture and spiritual resource governance.'[43] This is echoed in Moore's (1990) exposition of material deprivations and symbolic ancestral claims which, when creatively fused and adapted in defence of livelihood, culture and environment, produce cultural meaning that can be employed effectively as a form of resistance to external (structural) interference. In this way, 'the micro-politics of resource struggles are animated by local history, mediated by cultural idioms, and gendered through the different practices [that] men and women have pursued in defence of local livelihoods' (Moore 1996:140).

These livelihoods are grounded in traditional religious practice and belief that moderates resource-use through rules, relationships and norms, within which peoples' identity, cosmology, and knowledge are embedded (Bernard, 2003). In Zimbabwe, traditional religion revolves around the High God Mwali or Mwari, and the indivisibility of the tripartite relationship between people, nature and the spirit world inhabited by the ancestors (Gonese *et. al*. 2003). Religious practices are highly ritualised, marking respect for the ancestors and spirits who inhabit natural features such as pools, rocks, trees and soils (Bernard, 2003). Mwali adepts and spirit mediums act as intermediaries during rituals bound to farming seasons, and define peoples' obligations and relationships with the surrounding landscape. For adherents, to damage one's ecology is to undermine human existence. According to one African proverb, '"Our world is like a drum; strike any part and the vibration is felt all over" ... ringing in the ears of the ancestors, the owners of the land' (Tarusarira, 2017:408). In its way of knowing, being and meaning-making for knowledge production, African religion enhances and generates self-confidence, provides meaning and direction, and is a source of dynamism and creativity. For Tarusarira it also has the capacity to increase one's ability to resist exploitation and domination. This way of life has long-been under attack from 'civilising' forces of science and Christianity[44] that are also associated with progress and modernity, and elided with visions of nation and nationalism. Drinkwater describes this as the 'colonisation of the lifeworld of the Africa people in Zimbabwe' (a condition he also associated with subsequent generations of technocrats) that has led to the marginalisation of traditional religion and its adherents (1991:107).

[43] Ken Wilson, unpublished book chapter. Shared December 2017. Shashe Agroecology School is now the base for the Zimbabwe Organic Smallholder Farmers Forum (ZIMSOFF), which holds the secretariat of La Via Campesina.

[44] Native Commissioners allocated a religion to their area – having been influenced or lobbied by the dominant mission there. Many Africans therefore became, by default, followers of a particular denomination, while others were directly influenced by mission teachings.

Many of those dispossessed of their land and landscapes have either lost their connections to their knowledge and traditions, reinvented them around new lineage structures, or renounced them in favour of monotheism and/or capitalism. In rural communities across Zimbabwe today, where these rituals and relationships persist in varying degrees, they do so syncretically with Christianity. Many, sometimes reluctantly, still observe *chisi* or the chief's day, a traditional day of rest for the soil as a mark of respect for the ancestors that reside there. Open pollinated and drought-tolerant small grains may still be collected and mixed together before being taken to the shrine to soak in the waters to ask the ancestors for rains, good harvests or protection against extreme weather. Just as agrarian change shaped reciprocal labour-sharing practices such as through *humwe* or *ilima*, these practices embedded in social relations and place that enable responsiveness to change or stress (Richards,1989) have, over time, been eroded by social division, corruption and mistrust. These forces of coercion and modernisation have resulted in significant social and agrarian change, for which much traditional knowledge no longer seems applicable – further compounding the erosion of social-ecological landscapes.

3.13 ZIMBABWE AND AGROECOLOGY

Zimbabwe was an early adopter of 'agroecology', since Australian permaculturalist Bill Mollison was invited to host the first workshop there by a pioneering group of concerned teachers in 1988. This group went on to develop a network of community and training organisations, linked under the Participatory Land Use Management (PELUM) Association which was developed to grow and support a movement promoting a range of integrated and holistic approaches to smallholder production and land-use. As a mark of this original vision, PELUM is now hosted in twelve countries across Southern and East Africa, consisting of many hundreds of local and international NGOs actively engaged in promoting agroecology. At times the movement's future has been far from clear, having struggled under constraints on civil society activity and funding. Nonetheless, an increasingly confident agroecological network has grown to incorporate organisations engaged in a range of fields, from permaculture to agroforestry, organic farming and processing, and holistic livestock management. Perhaps in recognition of these early agroecological pioneers, and Zimbabwe's historically significant struggle for land, since 2013 the international operational secretariat of La Via Campesina has been hosted by the peasant organisation, Zimbabwe Smallholders Organic Farmers Forum (ZIMSOFF).

3.14 IN SUMMARY

The colonial legacy of a strong centralising state, predisposed to technocratic developmentalism driven by a purposive rationality (Drinkwater, 1991) has proven deeply intolerant of pluralism in any form. The imposition of technocratic solutions has exacerbated degradation and increased natural hazards, and has often been met with low levels of adoption or outright resistance. Despite more recent attempts at consultative regulatory planning, the state has long-assumed responsibility for natural resources, under presumptions of mismanagement by local people – a bureaucratic habitus that has proved difficult to break. So too, associations and networks with customary responsibilities underpinned by traditional bonds and norms that define land-use and labour sharing have been broken by the commodification of land and life, and their knowledge eroded (Ghimere and Pimbert, 1997; Pimbert and Pretty, 1997; Pretty and Ward, 2001; Scoones *et al.,* 2017).

Yet as events have expanded or contracted opportunities at one level, so they have shaped and been shaped by human responses and agency on another (Scoones, 1997a). Within the nexus of peacebuilding, ecology and development critical agency is a core ingredient in both driving and sustaining peace. To understand how this might take place in the context of the everyday, often hidden from view in the margins, it is important to explore how agroecological activities and relationships might be being used to negotiate and maintain peaceful relations, despite being most acutely affected by the everyday realities of violent environments. To explore this further, the case study chapters (*Chapters Five to Seven*) will consider how these conditions have influenced everyday experiences, and how some of these same features may be used to open contested spaces for more creative agroecological activities. The following chapter will first consider how participatory action research contributed to this exploration.

CHAPTER 4

METHODOLOGY

4.1. ZIMBABWE AS THE RESEARCH FOCUS

Zimbabwe was selected for this study for a number of reasons. Its history of land struggles combined with its legacy of technocratic control centred on a modernising and developmentalist agenda, presents a fairly typical picture. Far less typical have been its land reform experiments, and that these have been driven by a strong centralising state. The exclusory authoritarian populism that has come to characterise this strong state has resulted in a profound lack of resolution to important questions of nation and identity that perpetuates power asymmetries and a sense of pervasive negative peace. In 2018 Zimbabwe was once again placed in the 'high alert' category within the Fragile State Index.[45] Yet in the midst of this, and in recognition of the impact of the erosion of traditional farming knowledge and practice, emerged a group of early agroecological pioneers. The persistence of these organisations seeking, and increasingly achieving, network coherence in the most unlikely circumstances, provided a useful launch pad and access points for this study. Furthermore, and despite its reputation and failing infrastructure, Zimbabwe is a relatively safe and easy country to move around independently.

4.2 CONSIDERATIONS FOR METHODOLOGICAL DESIGN

4.2.1 Research Question

The question the research has sought to answer is: *How have emerging agroecological learning processes contributed to the resilience and agency of practicing communities, and how might these inform conflict transformation in the context of everyday peace?* Related sub-questions are:

a) *How do practicing communities define and experience resilience and agency, and in what way does this impact on how they articulate and experience everyday peace?*
b) *To what extent has co-enquiry taken place in the context of critically reframing social-ecological relationships, and how are these understood, articulated and negotiated?*
c) *What has been the impact of these processes in terms of how communities of practice have developed creative change strategies, and how have these manifested in collective action?*

Using grounded theory to explore the research question, a multi-site research approach was selected, applying a range of mixed methods leaning heavily towards the qualitative, to investigate the experiences of agroecological communities of practice, each referred to here as a 'community'. Sites were selected in three provinces exposed to different agroecological conditions, conflict histories and social and political dynamics. As the field studies also focused

[45] FSI methodology includes categories of group grievance, structural inequality, factionalised elites, state legitimacy, human flight, security apparatus, public services, human rights, and economic decline and inequality (FSI, 2018)

on the implementation of agroecological learning processes, the aim was to investigate the parameters of the implementation variables to reveal where and how social-ecological innovation and/or change were taking place and the extent to which communities have been able to initiate and affect change. With this in mind, the research has investigated the processes and ideas that make and transform particular worlds and allow certain things to be said and done (Comaroff and Comaroff, 1992). The complexity of the subject matter required a flexible inductive approach to methodological design, with reflexivity operating at all stages of the project to allow space for the research to unfold (Charmaz, 2014).

As both a practitioner and a researcher, this presents a two-fold challenge: first it is important to analyse what the present situation is - whether or not participatory learning and action (PLA) has been a feature of collective agroecological processes - through which to examine changes in values and behaviour which might be observable; before separating the *what is* from *what might be* in relation to the changes which may result from the application of participatory processes throughout the action research itself. The research therefore set out a systematic approach to analyse the emerging data, less focused around *what* had been learned in technical terms, but on *how* (and indeed *if*) learning was taking place as part of an open-ended, formative and participatory process.

4.2.2 Designing for Participation

Here, the inherent challenges which arise when making claims of 'participation' are recognised in that the research question was framed, and themes and methods selected long before the commencement of fieldwork.[46] For this reason, a level of flexibility was maintained in terms of the application and use of the tools according to how participating groups and individuals responded to them. The purpose was therefore not only to investigate the degree to which groups perceive their ability to shape events, but also to facilitate the surfacing and exploration of issues of importance in order to collectively produce meaning, for both themselves and the research. As such, host communities and their organisations were considered co-owners of the research process, outputs and findings, in accordance with the principles of agroecological co-learning and -enquiry (Francis *et al.,* 2016). In this way, farmers were encouraged to undertake their own research to stimulate the consolidation and co-production of knowledge, which can be communicated and used to evolve the ideas that emerge from the research process. As such, a series of activities which built participant confidence and trust through interactive group processes was selected in order to both increase understanding of, and contribute to the process

[46] In accordance with university ethics requirements.

of self-reflection and co-enquiry stimulated by the different strategies of engagement, and investigate how each farming community engages in collective activities to negotiate change.

In relation to the methodological applications to field work, the use of participatory action research (PAR) was essential in alignment with, and as a complement to the transdisciplinarity of agroecological, and participatory learning and action (PLA) with farmers. This is a form of double loop learning which facilitates and advances problem-solving through four key steps: (1) discovery of assumptions, based on present theory-in-use, (2) discovery of new meanings, (3) production of new actions, and (4) generalisation of results. As this process is repeated, assumptions underlying current views and actions are iteratively questioned and tested (Argyris, 1976; Argyris and Schön, 1978). Furthermore, this transformative learning involves psycho-social processes for cognitive, emotional and potentially for social change which may/not be achieved normatively (Lotz-Sisitka *et al.*, 2016). Such an understanding of learning includes acquisition of culturally accumulated knowledge and experience, but emphasises the learning of what is not yet there (Engeström, 2016). These contradictions inspire transformation through the identification of three dimensions: the socio-spatial that brings together the circle of people involved in the field of activity; the temporal that brings the history and the future of the activity together; and the political and ethical, which questions the aspects and relationships within that activity that are often taken for granted, as well as accepting agentic responsibility for the consequences of those actions within that field (Mukute *et al.* 2018:8). Engeström's expansive learning cycle has therefore been influential in the selection of tools contributing to sequential participatory activities, which itself draws upon the earlier work of Argyris.

4.2.3 Positionality

In recognition of the dialectic between objectivity and subjectivity, it is important to note that I have worked with agroecology advocates and practitioners in Zimbabwe since 2008, thus providing an introduction to a network of agroecological NGOs and practitioners in Zimbabwe upon which it was possible to draw for the purposes of this research.[47] However, apart from Fambidzanai, this background was unknown to two of the host NGOs prior to field research.

Being a woman from within the Western liberal, and largely secular tradition, there were consistent reminders of the need to acknowledge the impact of these divergent traditions when researching with both men and women. This was largely accepted as part of my outsider status and was mediated through a reflexive dialogical approach to inquiry, and a good dose of humour. As a white person it is common to be offered a chair with the men, while the women sit on mats on the floor. Given the implied racial and gender dynamics, this provided a constant source of

[47]Undertaken between UK NGO GardenAfrica and Fambidzanai (McAllister, 2015).

inner tension, while being of great amusement to the women when I instead chose to sit with them. Dependent as I was upon translators, much of the nuance that exists linguistically, particular in the use of idiom, was often lost unless a percipient translator felt that detailed interpretation was necessary.

While I do not have an agronomic or natural science background, this offers some benefits in avoiding all-too-common productivist assumptions. Yet having worked with agroecological NGOs and farmers for almost twenty years it was possible to discern between different approaches, and to detect contradictions in decision-making on farming choices and trade-offs. Being in the privileged position of having learned from many skilled trainers and farmers across different countries and locations over the years, and experimenting back in the UK to create a productive garden, it was often possible after interviews to walk around and share ideas and techniques, such as grafting and layering, while learning from farmers who were trialling, for instance, creative techniques to prevent damage to maize caused by Fall Army Worm. This sharing was part of the research ethic, leading not only to a more open relationship, but also in a bumper sweetcorn harvest back in my own garden.

4.3 METHOLOGICIAL CONSIDERATIONS FOR REFLEXIVE ANALYSIS

Given the nature and characteristics of violence in Zimbabwe already discussed, for the purpose of this research, it was important to explore localised and seemingly trivial disputes in order to understand how communities of agroecological practice have come together to address these in the context of the everyday. In contrast to simplistic dualisms of conflict on one hand and peace on the other, more nuanced terms such as tension, friction, contestation, ambiguity, negotiation and compromise were more helpful in describing the dynamics of everyday life (Cubitt, 2007).

Prior to field work, resilience and sustainable livelihoods frameworks were considered for the analysis of dynamic pressures and responses to threat and risk, but these proved inadequate in providing the tools through which to analyse power - what Blaikie and colleagues refer to as the 'structural scaffolding' (1994). Here, even Blaikie and colleagues' adapted *Access Model*, which attempted to address these shortfalls, was critiqued for failing to take in to consideration attributes of importance to this research, specifically: (a) non-tangible assets, such as creativity, experience and inventiveness; and (b) failure to draw relationships between political and socio-economic processes (Haghebaert, 2001). Instead, a political ecology lens is applied more reflexively to explore and analyse these layered relationships as *a unity of the diverse*, a dialectical approach which attempts to avoid 'a chaotic conception of the whole' by moving back and forth between detailed empirical observations and the more conceptual abstractions to arrive instead at a *rich totality of many determinations and relations* (Marx, 1973 in Scoones, 2016). As a stark

reminder to a researcher, Scoones warns that 'Locality, place, context, and the specific, textured understandings of differentiated livelihood strategies and their changes all are vital, but are merely descriptive without a wider appreciation of political economy and structural forces of power and politics that intersect with them' (2016:9).

Given the centrality of agency to this research, here it is also useful to consider and combine more recent definitions of agency, and its empowerment subset, as an ongoing process underpinned by information which enables participation in the identification and expression of preferences for informed decision making to increase bargaining power (Khwaja 2005), and through which responsible institutions may be held accountable (Narayan, 2002). For Kabeer (1999) the process involves honing bargaining and negotiation skills, as well as the ability to resist manipulation. For Chambers the process is particularly linked to control over productive assets to improve livelihoods, through which complexities associated with rapid change might be better understood and exploited (Chambers, 1993). In order to explore the constraints on agency, four types of power were considered. Power *over* recognises power as dominance at different levels of the analysis, be it directly applied and/or resisted, or habitualised as a form of symbolic power, which often goes unnoticed and/or accepted by those subjected to it as part of the natural order (Bourdieu, 2000). Power *within* as the power to re/imagine and relates to a sense of self-efficacy and -worth. Power *in* allows us to explore its transformative capacity to achieve outcomes (Giddens, 1984) or to produce change (Miller, 1982). Power *with* emphasises collective efficacy based on relationships of mutual support, collaboration and solidarity.

4.4 DESCRIPTION OF RESEARCH PROCESS

Fieldwork was undertaken between September 2016 and July 2017, and was preceded by a review of related literature, which crystallised three key thematic areas around which potential change and interaction could be explored. These centred on *resilience* and *agency*, and their relationship to everyday *peace* in its inherently political social-ecological context. However, the sub-domains relating to each were surfaced by the farmers themselves - taking part in a series of focus group discussions, mapping exercises and storytelling for narrative enquiry which link the past to, and inform, the present.

As these were revealed incrementally, emerging issues formed the co-development of a community-generated survey based on a series of emic indicators identified and ranked by participants. Furthermore, community's own definitions of the research concepts has formed the basis of coding to carry the PAR process through to the analytical stage which, to some extent, puts those contributing to the research in the passenger seat, if not the driving seat, long after I had returned from *their* field of everyday practice and experience.

To measure resilience at a practical-technical farming level, a review of grey literature, such as host NGO reports and monitoring frameworks, where available, was undertaken to gauge crop yields and agrobiodiversity pertaining to each research area. Yet it was also important to establish where communities have innovated beyond what is likely to have been part of technical 'training' (Pretty, 1991), and to assess the extent to which communities were working together to overcome challenges at different scales (on-farm and/or landscape levels) through an iterative process of collective enquiry and knowledge co-generation. Except where such innovations have been documented, as with change, it is often difficult for practicing communities to identify where innovations have taken place, particularly if these have evolved over time. The process was therefore designed to reveal these through both PAR activities and interviews.

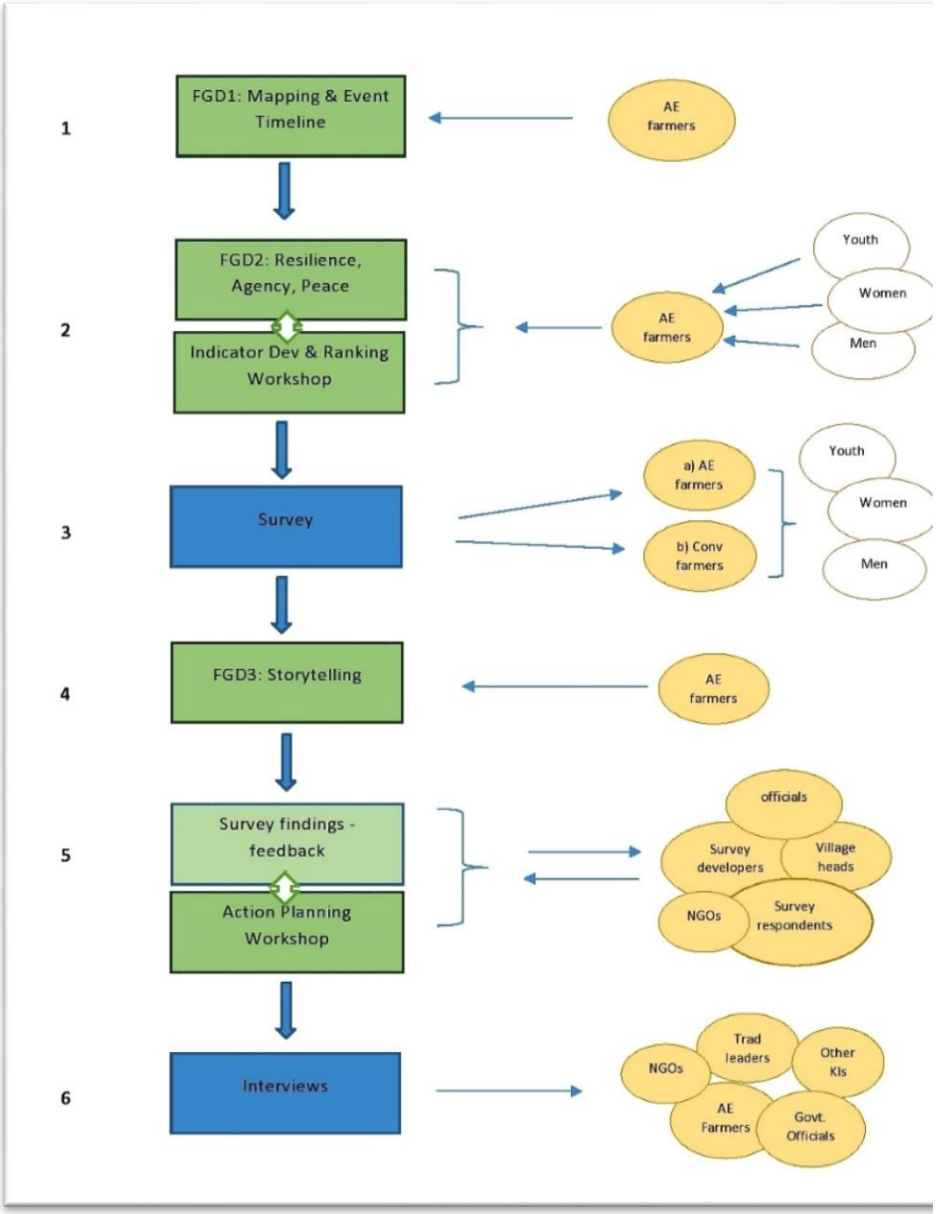


Figure 4.1: Field Research Activities
(see also Annex 6 – Data Collection Methods Table)

4.5 SELECTED RESEARCH SITES AND PROCESSES

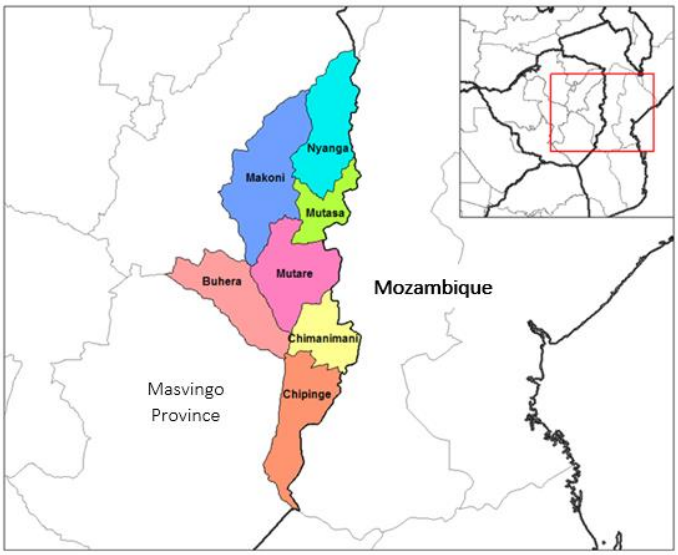
Data collection took place over two months in each community. Where possible, the first month with each was set aside for PAR activities, with the second month spent conducting semi-structured interviews (see research activity schematic in *Figure 4.1,*). Local translators were selected at each site to provide cultural guidance, make arrangements with participants or interviewees, co-facilitate where necessary, and interpret observations. The four sets of PAR activities, lasting one to two days each, were arranged a week apart in order to fit between farming activities on *chisi*, the traditional rest day which ordinarily falls on a Wednesday when working in the fields is prohibited. This also allowed time to translate and transcribe PAR research output. Data were analysed throughout the collection process in order to iteratively and systematically test any emerging insights, with each process designed to surface further information and texture and inform the next layer of activities (Charmaz, 2014). *Table 4.1* in the appendix (*Annex 6*) lays out the methods employed through which different data were collected for analysis.

4.5.1 Chikukwa Ward, Chimanimani District – Manicaland Province

The field research began in the remote administrative ward of Chikukwa, situated in the eastern highlands in the Mozambique border district of Chimanimani, in Manicaland Province (seen in *Map 4.1*). It involved a long-established community-led permaculture initiative, firmly embedded within its community of some 5,000 people since 1991. Being in a highly productive farming region,[48] this community has experienced the expropriation of vast tracts of its land primarily for pine plantation, under both settler and post-colonial states – all of which perpetrated acts of violence - the memory of which continue to shape a strong sense of identity. As these forestry operations have involved the harvesting and clearance of trees in recent years, so 'migrant' farmers have settled from Mozambique and other parts of Zimbabwe, with land-use and access tensions reported between migrants and Chikukwans.[49]As with other areas of Zimbabwe since independence, politically-motivated violence and residual mistrust have permeated all aspects of social and political life. Chikukwa is Shona-speaking (of the Ndau dialect), and has been a ZANU-PF majority constituency since independence. The host organisation, the Chikukwa Ecological Land Use Trust (CELUCT) facilitates a combination agroecologies and conflict transformation that promotes a dialogical approach to manage community change and emerging tensions.

[48] Natural Region I – characterised by specialised farming, with upwards of 1000mm of rainfall per year.
[49]Surfaced and documented as part of the research, forming part of the case study analysis.

Field research in Chikukwa was conducted between October and November 2016, hosted by CELUCT. Due to the amount of activities (visitors and training) taking place at CELUCT it was not always possible to facilitate processes as planned. A further week-long visit was therefore added in July 2017 to complete *Interviews* and the *Action Planning Workshop*. *Focus group discussions* (FGDs) forming part of the participatory action research (PAR) activities focused primarily in the villages of Chitekete, Rujeko, Kubatana, Kwaedza and Munaka in Chikuwa's ward 10, where the majority of its population reside, and the formal resettlement of Hangani, where farmers have been involved in organic certification.



Map 4.1: *Manicaland Provincial Map*

FGD activities were held at CELUCT, attended by between twenty and thirty-eight people who regularly engage in CELUCT activities - over half of whom were 'youths'.[50] These were attended by more women when aggregated across the activities. In addition, fifty-four farmers were surveyed across the seven villages, by a team of seven surveyors (one from each village - four men and three women). Farmers 'informally' settled in Chitsaa, who were not exposed to CELUCT training, formed the random control element for the *Survey*, while the purposive sample involved those engaged in CELUCT activities.[51] Of those surveyed,[52] twenty-three self-identified as organic, permaculture and/or holistic livestock keepers; twenty-three as mixed organic or permaculture combined with conventional inputs (such as fertiliser and hybrid seed) on different sites; and ten as conventional and/or conservation farmers. Of the households surveyed, the average size was six people (twelve of which were female-headed), the average land size was 1.5 hectares, and

[50]Youths defined nationally as being 35 years and below.

[51] The team that volunteered to undertake the survey, one from each village, selected which of their villagers were to be surveyed, based on regular engagement in CELUCT activities and agroecological farming practices. From survey responses, this turned out not to be the case, and is discussed in more detail below, resulting in an approach to classification according to self-identification.

[52] Surveys included 6 tests, a purposive sample of 36 people engaged in CELUCT work, and a random sample of 12 farmers from Chitsaa thought to be 'conventional'.

average age forty-one. In total, thirty of the survey respondents were women and twenty-four were men (of which twenty-two were youths).

Survey Data Feedback (mirroring) where data was shared, discussed and validated, was attended by fifty community members: FGD participants, those surveyed, a village head and the headman. The subsequent action planning workshop on issues arising from the survey, held in July 2017, involved twenty-two people and three CELUCT staff members.

Twenty-eight *semi-structured interviews* were conducted with key informants, who held overlapping roles and identities within the community including but not restricted to farming. Key informants included thirteen farmers (7 women / 6 men), traditional leaders, a donor, an Agritex extension worker (AEW), an official from the Forestry Commission, and CELUCT staff.[53] To get a sense of the challenges faced in other wards involved in CELUCT's wider peace programme, additional group interviews were conducted with four Ward Peace Teams (WaPeTes) consisting of thirteen people.[54]

4.5.2 Mhototi Ward, Mazvihwa, Zvishavane District – Midlands Province

The second research site is in the Mhototi ward of Mazvihwa at the southern-most end of Midlands Province in south-western Zimbabwe (see *Map 4.2*). The research involved a more recent community-based organisation, the Muonde Trust, influenced by innovative farmer activities stretching back to the 1960s, as well as external researchers since the late 1980s. The area is Shona speaking (of the Kalanga dialect), and has remained a majority ZANU-PF constituency since independence, yet divisions have heightened election violence and mistrust since the early 2000s. Muonde's work extends to the forty-three villages in Mhototi ward of some 4000 people,[55] with no clear typological agroecology practice, but rather pursues an action research agenda influenced by visitors over the years. This approach is described as emerging from an *'almost accidental thirty year tradition of tackling complex issues through engaging in our own version of research'* that combines traditional practice and 'indigenous innovations' appropriate to its semi-arid conditions.[56] Here colonial and post-independence land alienation for ranching and mining has played a crucial role in identity formation, with the community involved in the re-occupation of its former lands in 1998, consolidated under Fast Track Land Reform

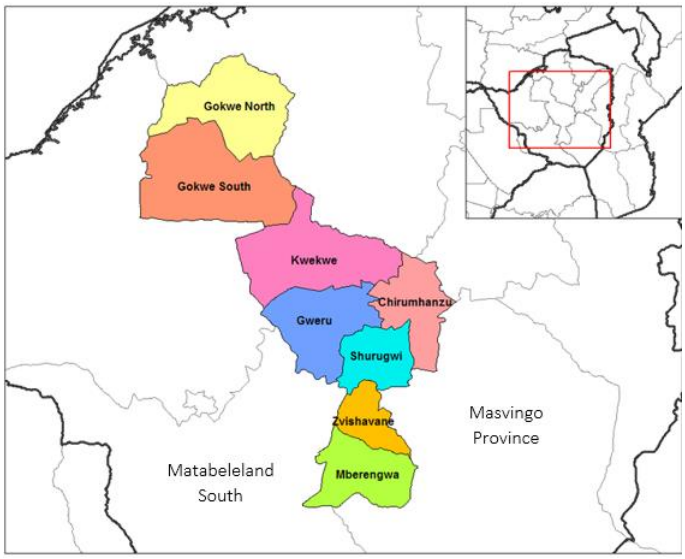
[53]Due to the CELUCT schedule, many interviews were interspersed with PAR activities, with the final survey feedback taking place on the final day of the field research (30.11.16). Having considered survey responses more closely, it was possible to develop a series of 'missing' questions. These additional interviews, with 7 farmers were carried out by Charles Murata in February 2018, as were discussions with the headman and an official from Allied Timbers.

[54]This peace programme is across Chimanimani district facilitated by CELUCT and its sister organisation which works across the district (TSURO) with WAPETEs in all wards. Those selected for interview here were Gudyanga, Shinja, Ngorima and Cashel.

[55] This extends to villages in three Mazvihwa wards (Mutambi, Indaba and Murowa) and the neighbouring district of Mberingwe

[56] Muonde Trust website

(FTLRP). As such the politics of land reform and occupation are an important dynamic in stimulating a more radical challenging of the normative technological approaches ordinarily promoted by Agritex and mainstream NGOs.



Map 4.2: *Midlands Province*

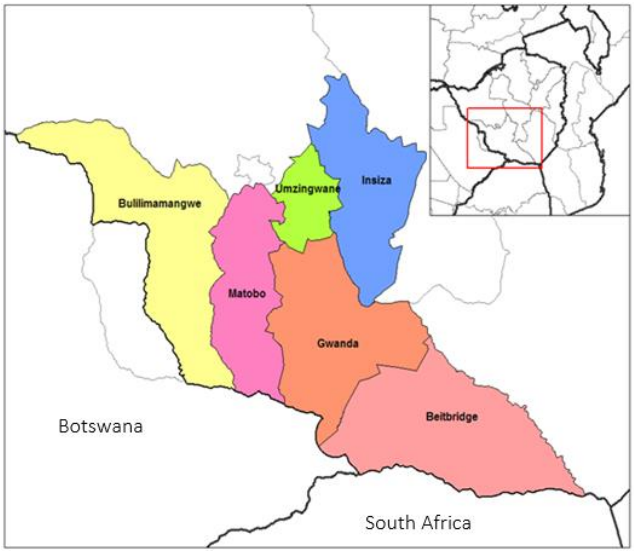
Field research was conducted between February and April 2017, coinciding with the rainy season, and a further week-long visit was added in July 2017 to follow up on interviews and Action Planning Frameworks. Action research activities focused primarily on communal area (CA) farmers drawn from the three clusters (east central and west) in Mhototi ward. Without an office or training centre, *Focus Group Discussions* (FGDs) were held at the Muonde founders homestead, and were attended by between twenty-seven and thirty-four people who regularly engaged in Muonde activities. More women than men attended when aggregated across the activities, and youths formed a third of participants. Resettlement farmers in North Devon, considered to be less exposed to Muonde training, formed the random control element of the *Survey*, while other Muonde farmers formed the purposive sample.[57] Sixty-five farmers were surveyed across the four clusters (including seventeen in North Devon), with a team of six local surveyors (three farmers supported by three Muonde staff - four men and two women). Of those surveyed, forty-eight self-identified as organic, permaculture and/or agroforestry; seven as mixed organic or permaculture combined with conventional inputs (such as fertiliser and pesticides applied on different plots); and ten as conventional and/or conservation farmers.[58] Of those households surveyed, eight were female-headed. The average age of respondents was forty-two, with an average household size of seven, and an average land holding of five hectares. In total, thirty-four of the respondents were women and twenty-one were men (of which twenty were

[57] Many of the control group originated from Mazvihwa, and had in fact been influenced by agroecological activities, disseminated not only through Muonde but also by the Agritex AEW (discussed further in the case study chapter).
[58] Many of those in the conventional category stated a reliance on organic methods during 2016/17 when inputs were unavailable.

youths). *Data Feedback* (mirroring) was attended by seventy-five people (FGD participants, survey respondents, and village heads and the entire Muonde team). The subsequent action planning workshop, on issues arising from data was attended by thirty-two participants and Muonde staff. Eighteen semi-structured interviews were conducted with farmers, village heads, an Agritex officer and Muonde staff/volunteers. Of the fourteen farmer interviews, two of which were conducted as households, the voices of ten women and ten men were incorporated

4.5.3 Dema Ward, Matobo District – Matabeleland South Province

The third research site is in Dema ward, in Matobo district of Matabeleland South province (see *Map 4.3*). In contrast to the earlier sites, this initiative represents a more conventional time-defined 'project' then in its eighth year, focused on the Dema six villages of Halale, Silungudze, Dombashaba, Dewe, Mawusumani, and Njelele where approximately 300 people are engaged in six community gardens and a honey co-operative. The 'organic conservation agriculture' project is an internationally funded collaboration between peacebuilding NGOs from Bulawayo and an agroecology NGO, Fambidzanai (a Harare NGO with a small district office run by a local team).



Map 4.3: *Matabeleland South Province*

Matabeleland South was embroiled in the second stage of the *Gukurahundi* massacres, which continues to cast a long shadow. Furthermore, land disputes with neighbouring Matopos National Park (a UNESCO World Heritage Site) remain ever-present, not only due the historical alienation of land and clearance of its inhabitants, but also to the encroachment of sacred and grazing land vital to its semi-arid livelihoods. As Ndebele speakers, Dema continues be affected by high levels of structural and cultural violence and ongoing intimidation. While being one of the most tightly contested ZANU-PF constituencies in the country, the district council is majority MDC, overseen by political appointees and security services from the centre.

Field research was undertaken between May and July 2017, soon after the heavy rains brought by *La Niña* and Cyclone Dineo in April. The series of *FGDs* in Dema involved between twenty-one and twenty-five people from all six villages in Dema, evenly distributed between men and women, all of whom have been involved in agroecology training with Fambidzanai since project inception. PAR activities were hosted at a local church in Dewa village that lies at the centre of the research area. For reasons to be explored in the Dema case study (*Chapter 5*), no youths were available for PAR activities, but were included in the *Survey* and *Interviews*. The *Survey* included sixty-two farmers (thirty-five women and twenty-seven men - of whom ten were youths).[59] The purposive agroecological sample consisted of forty-two farmers, and a control of twenty farmers randomly selected at the 'irrigation scheme' where farmers had not been involved in Fambidzanai training.[60] Of those surveyed sixteen self-identified as practicing organic/permaculture; eleven as conventional/CF; and thirty-five as mixed (those using organic methods and synthetic inputs when available).[61] The average age of respondent was fifty-one, with an average of seven people and three hectares per household. The survey *Data Feedback Day* was attended by sixty-three people: FGD participants, survey respondents, the ward councillor and three village heads. The *Action Planning Workshop* involved twenty people and the Fambidzanai agriculture officer.[62] The following month twenty *Interviews* were conducted with twenty-two people: seventeen farmers (8 men and 9 women, one as a couple and another father and son)[63], NGO and donor staff, the ward councillor, the district council natural resources officer and the headwoman.[64]

4.6 APPLIED METHODS AND ADAPTED RESEARCH TOOLS

4.6.1 Focus Group Discussions

Focus groups with each community consisted of arts-based tools to map social and physical landscapes in order to explore changing social boundaries and practices; storytelling for narrative enquiry; participatory indicator development; and survey data feedback and action planning workshop. The selection and sequencing of these tools early on in the process had five key purposes: to act as an introduction to particular issues and members of the focus groups for the

[59] The survey figure included five out of the six survey tests undertaken in Dewe village.
[60] Irrigation farmers had been exposed to permaculture training through an earlier project, run by ProAfrica, that establishing the irrigation system some years before.
[61] Of the purposive sample of forty-two assumed agroecological farmers, twenty-five self-identified as mixing their production, seven as organic/permaculture and, somewhat surprisingly, five as being wholly conventional. At the control site (*irrigation scheme*) eight identified as organic/permaculture, eight as mixed, and four as conventional.
[62] Staff from the three peace organisations were largely available for any activities or interviews, citing travel costs and time restrictions. Communications to arrange time in Bulawayo also proved fruitless. One staff member facilitated the peace indicator focus group, with his travel and time paid for through the research funding.
[63] In one case a youth was joined by his farther, and a woman was joined by her husband. These relationships were first assessed by reviewing a number of survey responses on voice and equality in the HH.
[64] Women traditional leaders are unusual in Zimbabwe. Of the five women chiefs (out of 272), three are in Matabeleland South. There are 452 headmen nationwide, few of whom are women. (Chigwata , 2016)

duration of the research; to elicit responses and stimulate discussion between participants in ways that could extend what is already known and understood (by them and myself); to provide an opportunity for different groups of participants to express themselves freely in a non-confrontational manner; to provide more textured data; and to tailor subsequent sessions according to emerging issues and group dynamics. All focus group output was left with the host NGOs for future engagement. More detailed information can be found in the following appendices: 3) indicators; 4) survey questions and data; and 5) selected actions and developed action plans.

Focus Group 1: Mapping Day

a) Landscape Mapping

Landscape mapping aimed to create visual representations of *interests*, through which physical features in their landscape could be explored, depicting areas of social and cultural importance as well as points of ecological interest or concern. In these sessions, participants were asked to work together in their respective villages or areas. Most began with roads and bridges as their primary points of reference, followed closely by village boundaries, rivers and mountains. Schools, churches, clinics, shops, village homesteads, sacred burial grounds and shrines also featured prominently, followed by dams, wetlands, irrigation schemes and community gardens, boreholes and dip tanks and in some cases apiaries. As group discussions unfolded, some began to identify areas of ecological concern, such as the appearance of erosion gullies, and eucalyptus plantations around watershed or springs, and others began to consider actions. Groups presented their maps to each other, providing an opportunity for discussion about why certain features were included, and others omitted. At the end of the session, groups were asked to place their maps together *(Plate 4.1)* to form a contiguous landscape to consider interconnections and downstream impacts, which created some confusion and much debate.

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Plate 4.1: *Dema FGD - conjoining village maps.*

b) Body Mapping

Body maps were used to explore issues of importance to emotional, developmental and physical *needs*. In this case, groups were asked to work as men, women and, where present, youths. Both sessions allowed time to discuss and reflect upon the intersections between each, in order to better understand the relationships, and to explore whether, how and why these might have undergone changes over time. It was also the first opportunity to employ an analytical framework for arts-based methods, based on power analysis to enable critical engagement with the structural drivers of poverty and inequality (VeneKlasen and Miller, 2002). This activity, in theory, could take up a day, interspersed with discussions and other activities, and with a full complement of paints and other art materials (Marnell and Hoosain Khan, 2015). However, with limited time and resources, this activity was planned for two hours. Approaches to map development, and inclusion of specific elements, were markedly different particularly between men and women – with men finding the exploration of feelings challenging, instead tending towards to practical-technical provisioning, and even physiological (relating to body parts and senses) - stimulating interesting discussions during inter-group feedback. In all cases, this process was extremely informative to the following sessions, with issues of patriarchy, polygamy and power beginning to emerge during discussions (*seen in Plate 4.2*).

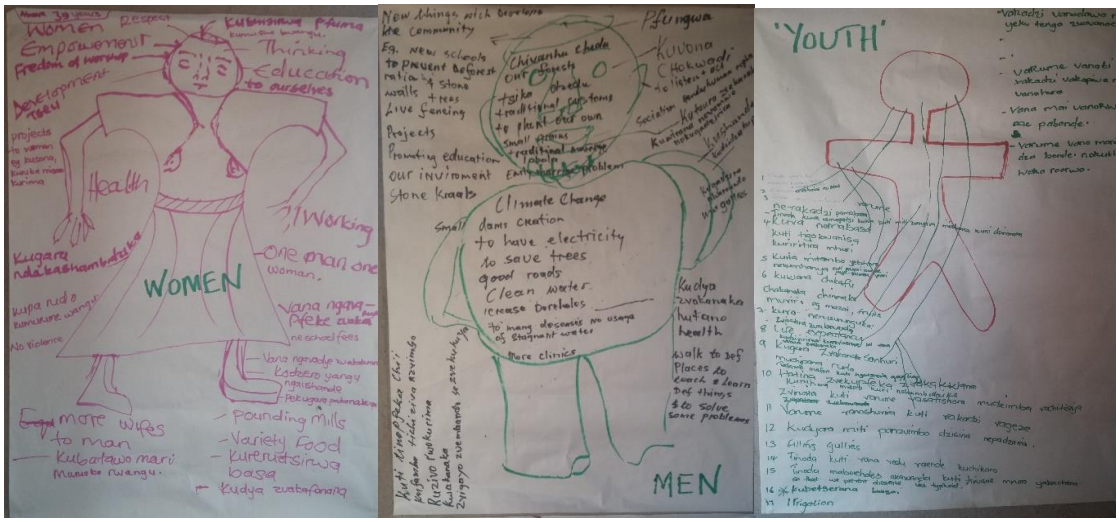

Plate 4.2: *Mhototi body maps (01.02.17)*

c) Timeline Mapping

In the afternoon, this process moved into the collective development of a visual timeline of events to investigate changing response mechanisms to these, as developed by Rogé *et al.* (2014) to facilitate a unified recollection of climate narratives. It was anticipated that this timeline would span from historical memory up until the present day, incorporating drought, pestilence, the introduction of new technologies, social or political events, local disputes and/or violent conflict.

As such, this activity primarily captured perceptions of changes through the lived experience, to encourage groups to share their memories and insights, particularly between the generations, and to begin to organise and discuss these to create meaning, if indeed they had not already. Each community selected the decade they wanted to reach back to, the earliest selected being the 1940s, connected by a rope depicting the passage of time through each decade. In each case, communities chose available materials to rank events – with rocks of varying sizes representing negative events, and collections of foliage to represent positive events.[65]

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Plate 4.3: *Chikukwa FGD capturing their event timeline at the end of the activity (14.10.16)*

As one might expect, these timelines captured events of national significance, although the recollection of dates varied. More localised events were noted which connected the national to the local, such as mass arrests, curfews and school closures during the liberation struggle, and the disappearance of family members in Dema during *Gukurahundi*. Events of significance to farming, such as a plague of locust remembered by its sudden appearance during a wedding reception in Chikukwa, were also prevalent, as were memories of forest fires, cyclones and landslides which shaped the physical environment and the community's response. In Mhototi, not previously thought to have been effected by the events in Matabeleland, war and violence with the Ndebele appeared three times. And, while events leading to economic hardship were consistently highlighted, other than the upcoming elections in 2018, it was only after a final discussion, when I asked, that any of the communities added 'elections' to their timelines. In each case I added a further sheet at the end to suggest 'turning the corner' towards the future. Here participants could propose events that they wanted to see and/or could assert some degree of control over.

[65] The suggestion of a more pictorial and tactile approach to this exercise, using rope to mark the passage of time, with foliage and rocks for ranking events, came from CELUCT facilitator Zeddy Chikukwa and worked wonderfully. This was therefore used throughout the research sites.

Focus Group 2: Participatory Survey Development

a) Indicator Discussion Groups

The second focus group discussion was designed around the development of the community's own survey, and centred on the exploration of intrinsic values and meaning attached to perceptions of *resilience*, *agency* and *peace* - a process which also assisted in moving beyond simple binaries by unpacking these concepts according to the lived experience. The development of bottom-up indicators provides an emic analysis using indigenous or local measurements to overcome the imposition of unilinear concepts and definitions. This approach within PAR is well established in agroecological research (Pulido and Bocco, 2003; Astier *et al.,* 2011; Rogé *et al.,* 2014), and has more recently been applied to better understand difficult to measure concepts such as peace, resulting in the Everyday Peace Indicator (EPI) project (MacGinty, 2013; Firchow and McGinty, 2017).[66] Communication with the facilitating organisation of the EPI pilot in Zimbabwe[67] revealed that the implementation of the survey, by then in its second iteration, surfaced matters specifically related to agriculture and climate change that groups were keen to measure. Designed around an adaptation of the EPI '+' (the '+' indicating an additional action planning process to address issues emerging from the survey) this process therefore sought to further define peace and how it is experienced in relation to resilience and agency. In this way, it has been possible to investigate, for instance, how peace is informed in the everyday by improved resilience that increases the availability and diversity of food, and thus creates fewer household stresses and less dependence on partisan food distribution; or how self-esteem and confidence might increase agency for decision-making capacity in the household, family or community.

This activity involved separating participants into groups of men, women and youths to enable fluid and unconstrained discussion under each thematic area. Groups had an opportunity to rotate around the three themes throughout the day, each of which were facilitated by myself and two colleagues from the host NGO. In each case, and with each group, the concepts of resilience, agency and peace were first defined broadly, so as to guide but not constrain discussions. Resilience was defined as '*our ability to absorb disturbances in the system (such as ecological, social, economic, and political shocks) by developing strategies and capacities for adaptation'*; agency was defined as *'our power to control or shape the events that matter to us in our household, family, village, ward, district, country'*; and peace was defined as *'a state of calm, where constructive dialogue can resolve disputes and prevent violent conflict in ourselves, our households, families, community or country'*. Each group was then tasked with identifying and

[66]https://everydaypeaceindicators.org/research/

[67] The Everyday Peace Indicators project was piloted in Zimbabwe with Centre for Conflict Management and Transformation (CCMT) – communication with EPI project officer, Collen Zvandasara - 26.04.16

ranking ten indicators under each of the research themes, before rotating to the next theme with a different facilitator. The day resulted in a longlist of thirty indicators for each theme, surfacing very different layers of experience. For women at one site, the level of agency in the household was defined, amongst other things, by their ability to make decisions on land-use and crops, as well as the slaughter of livestock of differing asset value with or without permission.

Facilitation often required that a negative was posed as the starting point – allowing, for instance, a process to unfold from when one might have felt power*less*, before returning to indicators through which positive change might be measured. Nonetheless, it is possible to establish either positive or negative perceptions of resilience, agency or peace through the selected indicators and thus to investigate temporal or spatial proximity to violent conflict (Firchow and McGinty, 2017), or to what extent groups perceive themselves to be products of their environment or producers of effects (Bandura, 2000).

From this process, all women noted that it was important for them to have an opportunity to express themselves separately. In Mhototi, however, the young men in the youth group also commented that they had learned a great deal from the young women in their group about their challenges, needs and strengths. For this reason, after separate discussions, all had an opportunity to come together again to present their findings and share with the wider group, stimulating interconnected discussions for co-learning and meaning-making.

b) Indicator Shortlisting and Ranking

The following day, the groups were brought together for a facilitated discussion of their findings, and to agree upon and rank their final shortlist of ten indicators under each theme (see *Annex 3*). Where it was considered that important indicators had been missed (such as productive diversity or seed saving for resilience), these were raised at the end, with an opportunity to create an additional indicator, on the basis that the community might want to track change in this area. In two cases, an indicator was selected which was later considered could expose the groups (and NGOs) to repercussions: the first on forced youth involvement in political intimidation and election violence, and the second on rule of law. In both cases the risks were discussed with the groups for a decision to be reached - in which case replacement indicators for the survey were selected from the longlists.

The line between themes and indicators was sometimes blurred, reflecting the fluid relationship between the themes themselves. In such cases, groups were encouraged to reflect on these inter-connections and to agree on where an indicator belonged. In some cases, selected topics were similar, yet reflected diverse positions, particularly different aspects of 'culture' such as dress codes and *lobola* (or bride wealth/price). These were found: important to preserve (men), a cause

of domestic violence (women), or ripe for re-evaluation (youths). In these cases, a survey question was devised to reflect these positions within the response range. As discussed by Firchow and McGinty (2017), the alignment of more straightforward indicators to create identical questions enables a more direct comparative analysis between sites. However, where response ranges were necessary to reflect varied inter-group positions, it was considered a reasonable trade-off that each survey instead represented the issues that groups were keen to explore. Of greater interest to this particular study has been what, why and how the indicators were arrived at, forming an important qualitative unit of analysis.

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Plate 4.4: Mhototi FGD - collectively ranking their top-ten agency indicators (09.02.17)

Following the process applied in the EPI project to identify trends within and between communities of practice, a series of categories and sub-categories was created qualitatively in order to classify the indicators within each theme. This has been applied in *Chapter 8* to synthesise case study findings. In some cases, this involved cross-categorisation when a single indicator incorporated two concepts or practices. The categories were intended to be neither exhaustive nor normative, but to reflect only those indicators selected by participants, achieved by revisiting FGD transcripts and indicator long-lists. The frequency of these indicators, according to each theme, were then mapped as spider diagrams to consider emerging patterns and divergences. As part of the analysis, it was then possible to investigate how the wider enabling or disabling environment may have informed these in context. In understanding that indicators stemmed from a process where focus group discussants first articulated their indicators around, say power*lessness* in order to formulate indicators for what the alternative, positive condition may look or feel like, for the purpose of the analysis it was then necessary to flip these indicators back around to consider the deficits implied through their selection.

Focus Group 3: Storytelling

Invitations were once again extended for focus groups to participate in an adapted, qualitative, story-based research approach known as Stories of Most Significant Change (MSC) (Davies and Dart, 2005). A number of MSC adaptations have emerged, yet all are overarchingly top-down.[68] In most cases, stories are extracted in written form from 'participants', with decisions on the *most* significant being decided, albeit through a systematic and transparent process, by the NGOs for monitoring, evaluation and donor reporting purposes.

Plate 4.5: *Storytelling domains for selection in Dema (31.06.17)*

In this research a different approach was taken, with stories used as a form of experience and knowledge sharing between the storytellers themselves, while simultaneously allowing me access to the range of experiences. With storytelling focused around any changes (positive and negative) that had taken place since the communities had become involved in agroecological projects or learning, the process was intended to capture the dynamic processes, where the one-off survey (with intrinsic and instrumental values) could not. Storytelling provides more freedom and texture, based on experiential expression which is not enabled through the rigid survey/questionnaire process, whilst also providing a rich source of data for triangulation. While this process was structured according to the pre-defined thematic areas (or in MSC parlance 'domains of change'), the subdomains were clustered according selected indicators.

[68] See Wrigley, 2006.

Participants were asked to share their change experiences with the farmer sitting next to them, and then the sub-domains (see *Plate 4.5,* above) were presented as part of a facilitated process.[69] Storytellers were then asked to identify the sub-domain that most related to their own story, selecting the appropriate card and clustering together to repeat their story to others in their group, before agreeing upon one story that most represented their group. This process was repeated, with the selected story from each sub-domain filtering up to their selection of the most significant story for each of the three domains or themes. All then chose to represent the selected story as a drama. In fact, these were often devised as composite stories, often for dramatic effect but also perhaps to provide a more complete and inclusive representation.

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Plate 4.6: *'Cultural ritual' group in Mhototi share their stories (22.02.17)*

For the purpose of this research, all stories were considered 'significant'. Some were captured on the three audio devices. But where around eight themes were selected, others were captured in written form by a group member or colleague. The intention had been to code stories to analyse the inter-thematic linkages and relationships to consider if increased perceptions of everyday peace were found where there was a prevalence of interlinking, indicating levels of relational cognisance between all three themes. However, many stories were taken away and could not always be recovered, added to which many did not relate to change in the agroecological context. Having considering the value on this activity after the first research site (Chikukwa) with a view to removing it from the following field studies, it was nonetheless decided to retain it given its intrinsic value as a way of participants signifying their own collectively agreed representation of

[69] An additional miscellaneous domain was also provided.

change. For participants, the process reinforced not only *that* change is happening, but *how* it is happening, and encouraged an exploration of the processes that have enabled it, with a facilitated discussion at the end. Despite the analysis of this activity not being possible in the intended way, with more hands-on-deck and more recording devices in future, it could be possible to explore this in more detail, providing an innovative approach that adds value to MSC. Nonetheless, selected stories were used to highlight experiences in each case study.

4.6.2 Survey

From the ranked indicators, audio transcripts and flipcharts, survey questions were developed with up to six related response ranges. For significance value, the wider response range aims to increase the confidence levels, despite the smaller number of survey respondents targeted (Cohen 1992). Any one-off survey can of course only provide a snap-shot of farmers' experiences which, alongside the smaller survey cohort, is therefore considered to be indicative of respondents' abilities to instrumentalise the values identified by their peers during the indicator development *FGDs*.

As central to the PAR approach and ethic, at each site the intention was to build a team of interested individuals for the process of co-learning and -creation to be continued throughout this research, and to enable the survey questions to be revised and undertaken by the farmers themselves on an annual basis to track changes.[70] For this reason, one survey development participant from each village or cluster was identified and invited to become a survey enumerator, and to present the survey data back to the wider community. Basic English was an important requirement to enable communication without the need for constant translation. A day of survey and ethics training was held prior to the survey being undertaken, and survey tests provided a quality check whilst familiarising the survey team with the questions and process.[71] Surveys were produced in the language selected by the survey team, and conducted in Shona and Ndebele.[72]

Purposive samples of agroecological farmers were selected under advice from the host NGO and/or each survey team. As a form of control, the same survey was carried out with conventional farmers in the same ward, agreed upon and directed by agricultural extension officers and/or officials.[73] All respondents were smallholders. In context, a 'conventional' farmer might be one who purchases and uses synthetic inputs, including genetically uniform seed produced in

[70] Future opportunities to engage in this ongoing process would also enable longitudinal research and analysis on change processes and decision-making by farmers and their supporting NGOs.
[71] In all but one case, where key information had been missed, test surveys were incorporated in to the overall data.
[72] The first survey in Chikukwa was printed in Shona, which the team found less comfortable with. In Mhototi and Dema teams requested printing in English. Consent forms and research information used throughout were presented in Ndebele or Shona on one side and English on the other to preserve dignity, as many people selected English as a mark of education and status.
[73] Random sampling was made possible through the identification of a single area, either a resettlement or irrigation scheme where farmers were not engaged in agroecological training.

monocultures, and works competitively to achieve production and market reach. However, in reality, the picture was very much more fluid, with many agroecological farmers producing organically on homesteads while monocropping hybrids with synthetic inputs in their fields; and with farmers thought to be conventional combining compost and fertilisers (when available) and, in some cases, with higher agrobiodiversity than agroecological farmers. This reality proved suitably challenging. It was, nonetheless, possible to disaggregate the data according to different typologies as defined by survey respondents themselves. Due to the question of statistical significance, resulting from respondent numbers and disparities between agroecological, mixed and conventional farmers, within the analysis a 'soft' comparison between typologies are instead used to consider emerging patterns from response differentials in social farming practices and relationships associated with knowledge and systems of reciprocity, aligned with qualitative data.

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Plate 4.7 *Mhototi farmer & survey team member Tendai Majoni presenting data set on agency (01.03.17)*

4.6.3 Returning Data for Action Planning

Once data had been inputted, using Excel, it was returned and co-delivered with the survey team to the wider community (*Plate 4.7*). This took place at a central location with available electricity, often a school. Those invited included people participating the focus group, all survey respondents, and necessarily included NGOs, traditional leaders, ward councillors and district authorities. The intention was to provide a forum for the community to identify where its strengths and weaknesses, and/or obstacles and opportunities lie, in terms of what they wanted to build upon. Data was projected onto a wall in PowerPoint, with graphs representing disaggregated data sets according to: (a) villages/clusters (for peace); (b) men, women and youths (for agency); and (c) farming typologies (for resilience). The translation of data in to graphs was

more challenging to convey in some locations than others. The three themes were presented by members of the survey team,[74] with thirty minutes discussion time opened to the floor between each, which further assisted in creating and understanding of what the data meant in terms of findings. This was also an opportunity for me to present some of the emerging contradictions in order to validate the findings through wider discussion.

At the end of the presentation, participants selected a number of clustered issues emerging from their survey (*Plate 4.7*), and invited to group themselves into those that they felt most passionate about addressing, most able to effect change in relation to, and/or most committed to resolving. Each group then tackled a *cause and effect* tree exercise aimed at fleshing out some of the challenges within each. Due to resource constraints that limited participant numbers, groups were asked to elect one person from each village or area to attend the subsequent action planning workshop, with that person agreeing to report back to their wider groups. The connection between the presenting issues and thematic areas is explored in more detail in the case study chapters and the synthesis chapter that follows them.

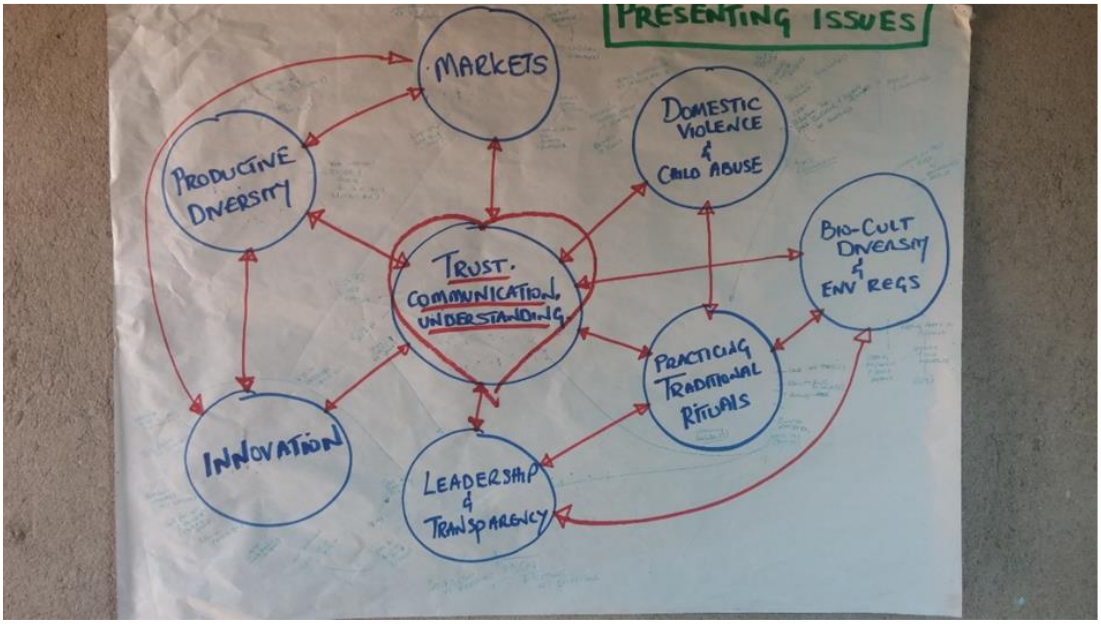

Plate 4.7: *Presenting issues and interconnections in Mhototi (08.03.17)*
(Trust, communication and understanding identified as cross-cutting - at the heart of the other issues).

4.6.3 Action Planning Workshop

For those electing (and elected) to participate in this workshop, a formative interventionist approach was devised around Development Work Research (DWR) (Engeström, 2010; Mukute, 2016). Given the importance of applying a series of methods and strategies that fit with the

[74] Women and youths within the teams were asked if they would present, and were coached by the team to build confidence. Community elders were particularly surprised, with one village head publically announcing that he had 'never thought that a simple woman farmer could make such complicated presentation.'

systemic openness of expansive learning so central to agroecology, DWR has been developed to take account of, and help to explain the emergence of transformative and relational agency (Lotz-Sisitka, 2016; Mukute, 2012). In practice, this involved focussing on between five and seven key issues identified and prioritised during the feedback session. Working groups were then tasked with developing a twelve-month action plan – in framework form - with agreed-upon issue/s they wanted to target, goal/s they wanted to achieve, a series of process indicators through which groups can measure change, and a list of inter-related resource needs.[75] A power map to plot their route through which the sought changes could be negotiated, and a set of agree upon roles and responsibilities were also developed. Groups were encouraged to consider existing structures that could be mutually reinforcing and supportive, such as Victim Friendly Units (VFUs) within the police, and Child Protection Committees (CPCs) in schools. At the end of the day, groups presented their plans to each other, providing an opportunity for inter-group reflection and discussion of interlinking strategies *(Plate 4.8*).

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Plate 4.8: *Dema beekeeper Lungisani Ncube presenting action plan on domestic violence and child abuse (14.06.17)*

A pictorial theory of change might have been selected as the preferred tool. However, the rationale for selecting a framework approach was two-fold: firstly, as this remains the dominant format for the majority of donors, it would provide supporting NGOs with a tangible means through which to elicit funding where resource-needs were indicated; and secondly, I was keen to encourage participants to engage with a format that, while used by those often making decisions on their behalf without their consent, could instead be defined and designed by them.

[75] Many of these indicators may be considered initial framing indicators, and could be further developed with more time to explore, for instance 'how do you know when there is trust in the community – in terms of what is seen, heard, or experienced.' – providing more texture and detail for understanding the change process.

This process simultaneously allowed the NGOs to come to grips with how to engage people in the process of participatory project design and planning, as well as participants themselves being engaged in their own monitoring, evaluation and co-learning around change.

Where goals were somewhat ambitious, such as 'no domestic violence by 2018' or process indicators required more detail to enable iterative planning, these were discussed and alternative framings devised. The resulting action plans (found in the appendix - *Annex 5*) form the basis of ongoing work to be undertaken by self-mobilised village/cluster groups, with a view to meeting quarterly with their wider action group to update one another on progress and/or to discuss adjustments. For this to take place may require the support of the NGO, yet the level at which the groups are able to self-mobilise would form part of an ongoing longitudinal research within which and ongoing engagement with these action networks may be analysed. For the purpose of this more time-constrained study, communication has been maintained with the host NGOs and group members where possible in order to get updates on resulting activities. After the completion of fieldwork at the final site it was possible to revisit the previous two sites for this purpose, with some early insights shared in the discussion chapter. Here, the level of collective efficacy at group level to identify, prioritise and shape events is measured using a more deliberative approach to assess collective efficacy (Bandura, 2000). And while it is understood that collective working may result in a forced consensus at various levels - from the identification of the issues to be addressed, the change effects to be produced, and strategies to be used - this process nonetheless highlights levels power and conformity in group dynamics as an observable feature within any group practice, and is thus of interest to this research. To this end, the confidence of individuals within the groups was documented, and triangulated with data from the survey and subsequent interviews.

4.6.5 Semi-Structured Interviews

Held in month two at each site, interviews lasted between one and two hours, with the selection of interviewees and tailored questions purposive and ongoing according to how the information is unfolding. All interviews were recorded with agreement from respondents. Given the distances walked to and between each interview, between two and three interviews were conducted a day. Interviewees were selected according to their response to three resilience questions in particular that were interpreted to be characteristic of agroecology and, more specifically, to social farming. These were: a) levels of agro-biodiversity (scoring 6-10> species or varieties); b) social farming (sharing inputs, knowledge or resources, or those who work together to share labour); and c) those who had practiced or innovated with different techniques over the past year (such as seed selection and saving, water harvesting and irrigation, value addition, soil fertility, pest and disease control, tree or plant propagation).

The term 'interview' was avoided in order to put people at ease. A conversational approach was taken and, where possible, interviewees select their own meeting point, preferably in a neutral outdoor space. Some interviews took the form of walks with farmers, to capture more textured responses on farming. In exploring whether and how the agroecological learning process has changed the horizons of farmer-practitioners, the question 'How would you describe the person you were then? And who are you now?' was useful in peeling back layers of experiences (Charmaz, 2012:104) and exploring changes in world view. Emphasis was placed on asking interviewees if they consider that the right questions had been asked, if any other issues have occurred to them since the start of the process, and were encouraged to ask me any questions. Guided by a set of key questions forming the backbone of each interview, with initial questions were intended to be general and non-probing to ease interviewees in to the process more descriptively. In this way, no two interviews were the same. The menu of interview questions is included in *Appendix 2*. Interview days were interspersed with transcriptions days in order to capture and follow up any points, or check on translation accuracy. Interviews were conducted with agroecological and 'hybrid' farmers, traditional leaders, elders and a spirit medium, Agritex extension officers, donor and NGO staff, and the DFID governance advisor in Harare. In Chikukwa and Mhototi, the host organisations preferred to not to highlight my role as a researcher, instead identifying me as a volunteer. This constrained the ability to meet with an interview officials. In Chikukwa it was however possible to arm a young Chikukwan development studies student with questions for the headman and forestry commission, as well as additional farmers in Chitsaa. Given the security concerns in Dema, combined with high levels of suspicion, it was necessary to be registered with ZRP and the District Administrator, creating a more open environment for conducting interviews with the ward councillor, the headwoman and the natural resources officer of the Matobo RDC.

On return to the UK, all interview and FGD transcripts were classified, sorted in to nodes and coded systematically using NVIVO 11 to discover thematic patterns and divergences. Mishler (1986) defines three aspects of narrative inquiry that proved useful during the coding and analysis of interview transcripts: a temporal sequence (occurrence patterns), a social dimension (message communication) and a meaning (plot providing unity). With this in mind, the relationships between resilience, agency and peace emerging from interviews was summarised during transcription to assist in surfacing the structure, and the strands to each case study. And finally, the results of this form of analysis were contrasted with observations, and with broader reading to recontextualise statements within a broader framework on return from the field work.

4.7 CHALLENGES OF PARTICIPATORY ACTION RESEARCH

Amongst other emerging issues, and perhaps due to my being a woman, the unfolding PAR process exposed persistently high levels of gender-based violence (GBV) and child sexual abuse (CSA). Cases of rape in marriage were also significant, as experienced by the majority of women attending FGDs, and were considered to be normal. In which case it was ethically important to consistently point out that statutory rape is punishable by law in Zimbabwe, which came as a surprise to all participants. Without exception, 'gender equality' and rights-based discourse repeated by NGOs and government workers is interpreted as empowering women *over* men. This was roundly rejected by the majority of participants, including women of all ages. Furthermore, the implicit threat to men that this represents was cited as a key cause of high levels of GBV, alongside poverty (this is analysed later). The approach during research was therefore to consistently engage with a far less threatening narrative framed around mutual respect and care. However, that the burden of blame was regularly placed at the door of women and even the children, often by women themselves, presented a challenge to my own ability to consistently pose questions to encourage a re-evaluation of these perceptions under PAR. This does however raise serious questions for any agricultural researcher neither prepared nor qualified to respond to high levels of GBV or CSA, particularly within a process that alludes to, albeit participatory, change. Is change management the role of the researcher, or is their role to surface and highlight absented issues through which change management might be facilitated with/by participating groups? While the answer surely lies somewhere towards the latter, this line is not always clear in practice. Furthermore, this raises concerns about shifting power and repercussions which may have been set in motion by many of these discussions, without eliciting or proposing suitable response strategies that do not put participants at risk. With this in mind, while PAR is unapologetically interventionist and, as discussed earlier, calls for some degree of disruption in its questioning of norms, values and behaviours, to what extent does this increase risks when applied to divided societies, and what are the ethical implications for research?

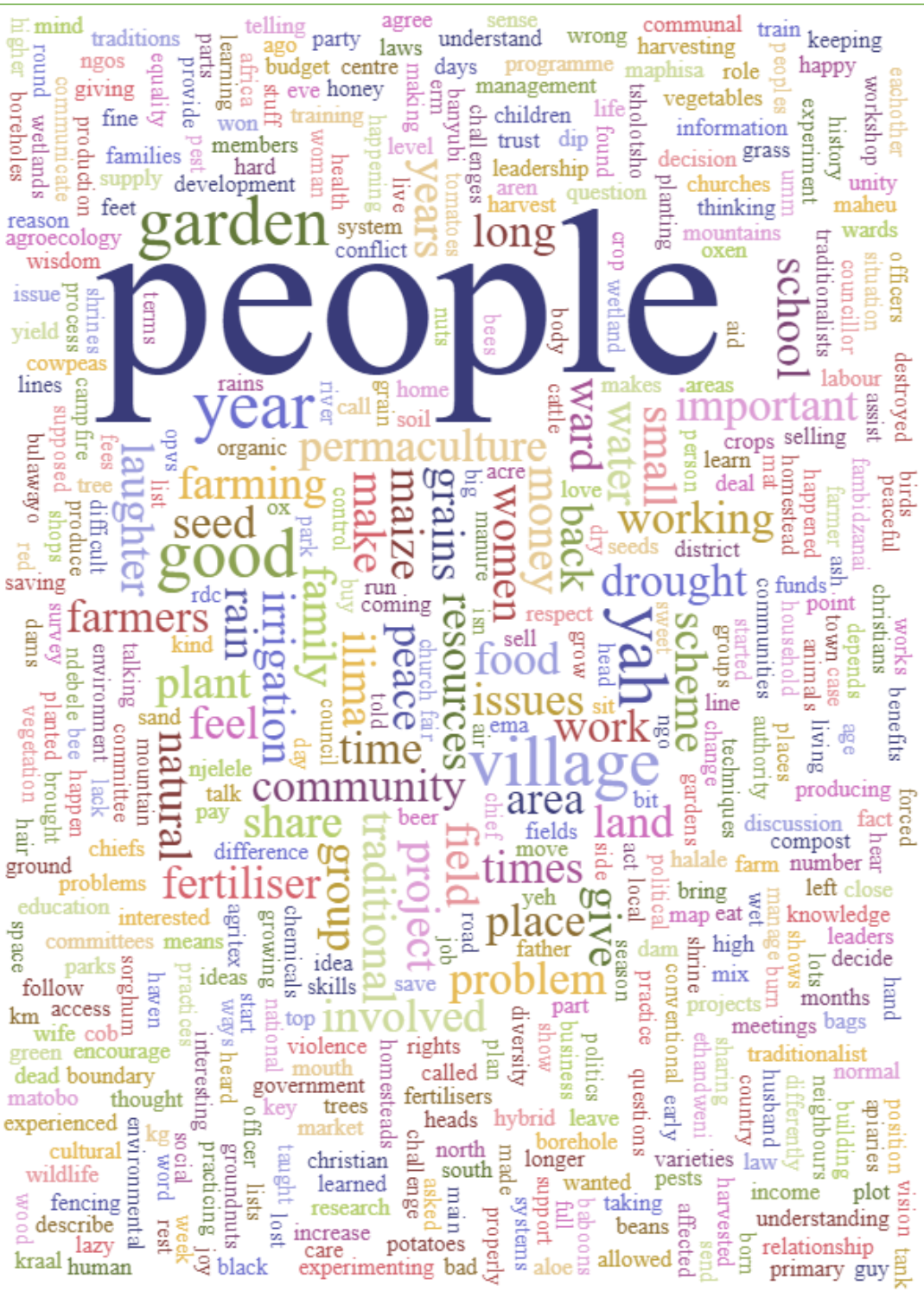
These important questions notwithstanding, it has been possible to analyse the PAR data alongside the rich literature on changing social-ecological dynamics as a result of historical legacies and events, as well as local institutional and environmental pressures, and how they have influenced internal networks ability to shape change in Zimbabwe. The PAR process itself is then considered with regards to the relationships and capacities of participating agroecological farmers as the process unfolded. Of particular interest was any transformational change brought about through the creative reframing of problems and the development of solutions through collaborative concept formation (Mukute *et al.,* 2018) as an indication of transformative and transgressive learning (*Chapter 8*). To explore this in more detail, however, would require

longitudinal research, to establish ongoing group functions, wider engagement, and reflexivity, and thus lies beyond the scope of this study.

4.8 IN SUMMARY

As a complement to the emancipatory ethic of both agroecology and conflict transformation, the selection of the PAR approach, and its application through a selection of adapted methods and tools has been an important methodological design consideration. While top-down approaches provide context for understanding how peoples' lives have been shaped by social, ecological and political events, a bottom-up approach provides an understanding of how people have in turn continued to shape those events through actions taken in the everyday. Any researcher must be acutely aware of setting in motion a chain reaction as a result of their enquiry, but this concern is particularly heightened when facilitating interventionist PAR. For this reason, I chose a reflexive and inductive approach to research, at a human scale, that proved invaluable in surfacing insights for co-learning, creating engaging processes which build confidence in a collective and ongoing research and co-action, and in navigating any unforeseen challenges.

Fundamentally, PAR is process- not outcome-based, and aims to be emancipatory, with a focus on social justice to build consensus for change. As such, I have seen my role as surfacing and thus creating awareness of how participants have continued to shape change which demonstrates the pre-existence of critical agency as a form of bottom-up contextual legitimacy based on local networks and relationships. This process of consolidation and meaning-making aimed to facilitate new ways of looking and seeing the world, and ones place within it. The co-learning that emerged from these processes feeds in to the findings at each site, presented in the following case studies.



Voices from Dema: Word cloud of interview and FGD transcripts

CHAPTER 5

CASE STUDY 1
DEMA WARD, MATOBO
MATEBELELAND SOUTH

5.1 GEOGRAPHY AND ECOLOGY OF DEMA

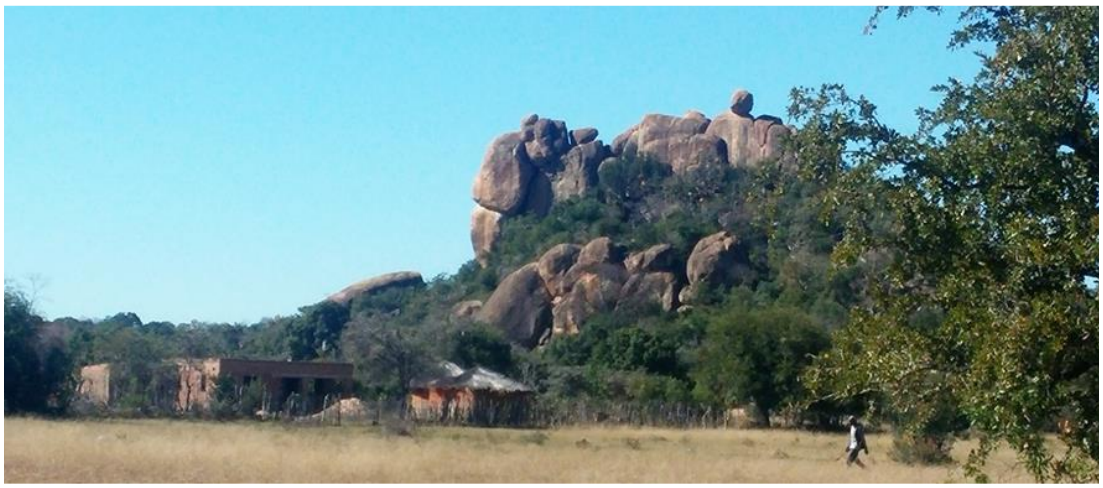


Plate 5.1: *A granite kopje, as seen from the research meeting point at Dewe village.*

Matabeleland South province, in south-western Zimbabwe, borders Botswana and South Africa, and contains six administrative districts (*Map 4.3 in methodology*). Matobo district covers over 7,000 square kilometres, and is made up of 26 administrative wards stretching from Zimbabwe's second city of Bulawayo to the North, to the Zimbabwe-Botswana border in the south, demarcated by the Shashe River. The tar road which transects the Matopos National Park (MNP) also divides east and west Khumalo to the south of the park (see *Map 5.1*), running through Dema ward, from Bulawayo to the north past the Matopos Research Station, and through the previously important mission area of Whitewater. From here it continues down through the former commercial grazing lands of the Mopani belt and the lowland (largely artisanal) mining area, culminating at the bustling 'growth point' of Maphisa to the south, which hosts Matobo's Rural District Council (RDC).[76]

Land in Matobo is made up of 49% to communal areas (CAs), with the remainder for resettlement, grazing and the MNP,[77] and is the third most populous district of Matabeleland South, with a population of 93,723 (2012 census), most densely populated in communal areas (CAs) around the MNP and urban centres such as Kezi and Maphisa. The population decline[78] reflects outward migration to South Africa due to economic hardship that, for political reasons, was more keenly felt in Matabeleland, with significantly higher levels of unemployment[79] and has experienced

[76] Informal miners trade their gold with middlemen in Maphisa, where HIV prevalence is approx. 80% due to miners and prostitution, and migrant labourers returning from South Africa (informal conversation with health professional specialising in HIV in Maphisa hospital).

[77] Resettlement areas are defined as wards 21,22,23,24 and 25, ward 20 as grazing, and the National Park (Matobo RDC, 2017).

[78] Census data between 2002 and 2012 shows a decline of approx. 6,000 people. Corresponding decline in Bulawayo of over 23,000 over the same period indicates that migration from Matobo was not simply rural-urban.

[79] Figures for Matabeleland North and South are higher than other rural provinces. Bulawayo has the highest unemployment of all provinces. Figures do not include the self-employed such as farmers or unpaid family workers.

higher levels of outward migration than other provinces in Zimbabwe.[80] Outward migration from Matobo since the 2000s has been particularly high amongst the unskilled male youth population (<35) who travelled to South Africa in search of often insecure work. Many of those who remain have little interest in farming, with parcels of land available to young households in the CAs becoming smaller and smaller due to a combination of over-population and inheritance pressures, and partisan allocation linked to patronage.[81] Many remaining youth instead pursue artisanal mining which exposes them to dangerous working conditions and violence.[82] Youth vocation skills training programmes have sought to attract youths to alternatives, but these reportedly suffer from low attendance, with youths able to earn some money soon leaving for South Africa.

Matobo District (*Map 4.3*) is transected, east to west, by natural regions (NR) 4 and 5, reaching 1,500m at its highest point in the Matopos Hills to the north, to approximately 1000m in the south. Being in the Hills, Dema ward sits in NR4, which typically receives between 450-650mm of rainfall per annum. Dema is technically suitable for the semi-extensive farming of livestock and drought-resistant grains, such as sorghum, pearl millet and finger millet, although maize still dominates, with relatively low levels of small grains, despite promotion by Agritex and NGOs. With its perennial grasses of low nutrient value, the Hills are considered poor grazing, whereas in the grasslands (semi-arid NR5) to the south, incorporating the Mopani belt and the savannah beyond, grazing is sparse but of a higher value. For this reason, cattle and goats are not a common feature in Dema CA.[83] Furthermore, due to the number of hyena, baboons and birdlife, grain, vegetables and poultry production require constant vigilance and protection.

Dema ward sits on the outer south-west boundary of MNP, within what UNESCO refers to as the Matopos Hills 'Cultural Landscape', approximately one hour south of Bulawayo. Today the park, which covers some 3,000 square kilometres, hosts a wide diversity of flora and fauna, including leopard, giraffe, antelope, hippopotami, and hyena, and has been stocked with white and black rhino since 1960s. MNP was designated as a World Heritage Site in 2003. Due to its distinct geology, weathered granite *kopjes* and monolithic *dwalas*, referred to as 'whale backs' (*Plates 5.1*

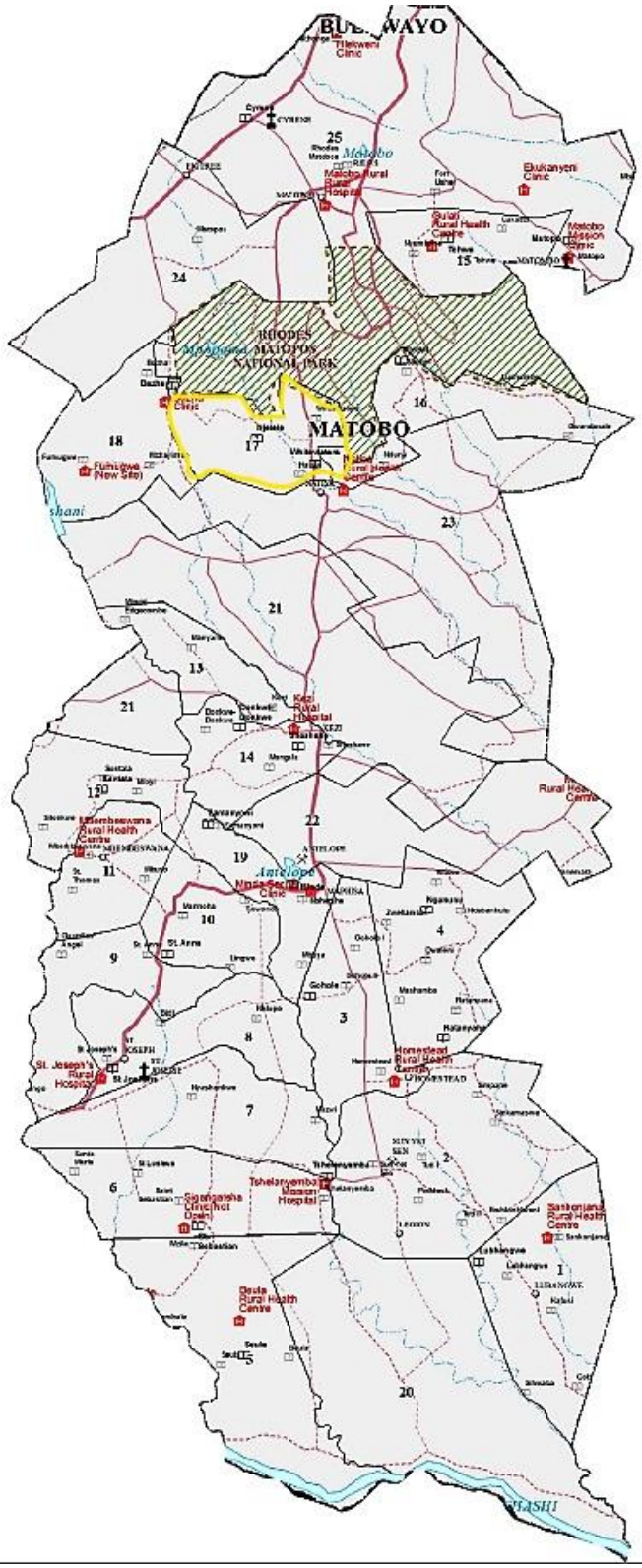
Corresponding infant and maternal mortality, and crude death rates and are highest in Matabeleland South (ZIMSTAT 2012). This disparity is thought to be due to historically lower levels of social and economic investment.

[80] Matabeleland has historical, cultural and linguistic links to South Africa, which were important to nationalist development when, albeit at that time, elite young men were sent to work and study in Johannesburg (Ranger, 1999). Botswana also became a place of refuge during the Liberation War, and for ZAPU militia and 'dissidents' during the 1980s.

[81] Of the economically active, identifying as employed (including unpaid farm workers), 40% are communal farmers (ZIMSAT 2012).

[82] Matabeleland South has 46% of its economically active population (15>) working in agriculture, and by far the highest number of ppl working in mining at 11.3% (ZIMSTAT, 2012)

[83] In the past, people would have defended their crops with guns, but after disarmament the people of the Hills feel they have been left at the mercy of the baboons, instead lighting fires at night attended by children, and using slingshots.


MATOBO
RHODES MATOPOS NATIONAL PARK
Matobo
Antelope
Bukanyeni Clinic
Kezi Rural Hospital
Tshelanyemba Mission Hospital
Desa Rural Health Centre
Sankoniana Rural Health Centre
Homestead Rural Health Centre
St. Joseph's Rural Hospital
Nyasa-Sec Clinic
Fuhlugwe (New Site)
Mbembesvana Rural Health Centre
Rural Health Centre
Tikwani Clinic
Malcho Rural Base Hospital
Rural Rural Health Centre
Malcho Mission Clinic
Clinic
Sigangalsha Clinic (not Open)
Lobhengwe
Gohole
Mashamba
Mamota
St. Anna
Mtshabezi
Kalanyanga
Kalanyanga
Mtshabezi
Mtshabezi
Mtshabezi

and *5.2*), create run-off into narrow, densely vegetated valleys. This ecology was the foundation of successful wetland or *vlei* farming that had taken place for what is thought to be many hundreds of years. During *La Niña* in 2017, this geology also caused heavy flooding and significant crop losses.

5.2 PEOPLE AND PLACE

Previously known as Khumalo West, the area which incorporates the six villages in present-day Dema was named after the Zulu clan that migrated north to form the Ndebele nation. The clearances that took place in Matabeleland South under the BSAC and its successor settler state were more widespread than elsewhere, with the population of the Hills regularly thinned and then repopulated as lands on which they settled were purchased from beneath them. The Mopani belt with its good grazing initially attracted *indunas*, who moved their people away from administrative pressures to the north and immediately south of the Hills. But with competition for grazing, with white land ownership expanding and evictions once again on the horizon, the displaced *indunas* moved their people back up to the Hills that Rhodes and subsequent Native Commissioners had worked so hard to remove them from.[84]

Being forced to move from place to place every few years undermined permanent settlement to build homes, create vegetable gardens or produce arable crops, and frequently brought their cattle in to direct competition with expanding white herds. The combination of taxes, levies and the LA and NLHA acts eventually forced shifting populations on to the newly created Tribal Trust Lands (TTLs) purchased by the Crown from white estate owners, including the TTLs in Khumalo west and east, to prevent widespread disturbances. As Ranger points out, from the perspective of the Native Commissioner, these reserves were less to protect the residents, than to 'provide effective intervention in their lives' through the imposition of destocking and strict arable farming systems in the name of conservation (Ranger, 1999:135). These TTLs came under further population pressure when the last remaining residents were finally evicted from the core of the National Park when it was annexed from the wider Reserve in 1962, which led to a spate of attacks, with park structures and grassland burned, fence cutting and poach grazing. Sporadic incidences of burning and poach grazing continue to this day.[85] Local people have restricted access to the park in June-August to collect grasses for thatching.[86] And those visiting the

[84] Despite the security imperative having long given way to the new conservation drive, the population of the Matopos had risen again to 40,800 by 1934. (Ranger, 1999:134)
[85] Burning is a strategy used to flush game for poaching. Other fires might be started accidentally, when smoking out bees for wild honey collection. Interview with Matobo RCD conservation officer DMA/RDC/M/NRO/08.06.17)
[86] One in every ten bundles cut must be left with the NP for their own buildings.

regionally important shrines are required to present identity papers, fundamentally changing their relationship with one another and their environment. As one elder remembers:

> We use to walk in the dust road, in places in the park. And it was in those early periods … this school, Whitewater was not there. It was in the park there. Then the school got moved there, which made people again lose their way of life. They were moved far down there. Now yet again … the park did not exactly go according to the [boundary] line where it was supposed to go. People were forced to agree that the line was here – they said, 'No! No, the line is not here – the line is here.' And then the park went there, where *they* wanted the line. It's one of those things that caused the Liberation War.[87]

5.2.1 Farmers of the Matopos

Decedents of the San, the Banyubi were settled agriculturalist for over 400 years before the arrival of the Ndebele regiments. Their decedents, still living in the Matopos today, were subjected to the imposition of the Ndebele state, under whose control they were obliged to live. The Banyubi in the Hills intermarried with Ndebele, and whilst retaining their traditions, agricultural practices and Mwali faith, they took up isiNdebele, and adopted the Ndebele identity as a form of political recourse against the threat of eviction by the settler state, rather than their own centuries-long relationship to the land (Ranger, 1999).

Local inhabitants were thought by early European settlers to have no culture or civilisation of their own because, as Ranger points out, they could not comprehend an agriculture that left no trace, no sign of 'civilisation', assuming them to be wasted lands left to nature. In fact early missionaries recorded 'green pastures nestled between the rocks criss-crossed by wandering brooks, fed by perennial fountains irrigating gardens full of ripe maize and indigenous grains' (Ranger, 1999:11). These wetlands, or *vleis,* were in fact carefully monitored social-ecological systems, overseen by the Mwali priests. Despite the destruction of crops during the 1896 fighting in the Matopos Hills and the starvation of Ndebele in the subsequent 1897 season, the following year Banyubi agriculturalists were found to be producing large excesses once again, trading as far as Bulawayo and selling to white traders. Their production involved labour-intensive *vlei* cultivation on ridges with mulch to protect soil moisture and prevent erosion. The labour of young men was controlled by their in-laws instead of paying a bride price, with men often working for many years. Despite the persistence of the European myth that the area needed saving from the natives, far from finding a farming community and its natural resource-base in crisis, reports as

[87] Elder Interview (DMA/ACC/M/019 (28.06.17)) referring to the contested 1962 boundary which has separated villages from their grazing lands.

early as 1912,[88] 1956,[89] 1959[90] and again in 1962 found the unique farming economy of the Matopos to be 'outstandingly successful'.[91] From his extensive research in the Hills, Terrance Ranger paints a detailed picture of farming practice:

> The Matopos *vleis* are dry from May to June; from August to October 'water begins to flow from the rocks'; then in the rainy season they become waterlogged. Under the Mwali rotation, cattle were grazed on the vleis in the three dry months; crops were planted in August – pumpkins, green mealies, vegetables, rice. Dry land, rain-fed cultivation would begin in November for a harvest the next August. After the harvest cattle could move from the *vleis* to graze on cereal stalks in the harvested dry land. During the rainy season, when the *vleis* are waterlogged and the dry lands are under crops, the cattle had to be moved away to summer grazing. It was a system which demanded investment of labour throughout the year, but was sensitive to the needs and capabilities of the people. (Ranger, 1999:25)

Nonetheless, Colonial administrations were later to outlaw *vlei* cultivation, apparently to protect the wetland 'sponges' as the source of water for the white farms to the south of the Matopos in the Mopani belt, and introduced the Zulu system of *lobola*, where bride price was paid in cattle, thus releasing young men for conscription into white farming and mining activities. With the 'peasant option' being highly dependent on the labour of its young men, these changes to 'long-established methods and carefully judged innovation' fundamentally undermined local farming practices and production capacity (Ranger, 1999:45).

The amalgamation of different ethnicities in to one Ndebele identity eroded and eventually ended previous caste distinctions that had existed between them, with new class distinctions beginning to emerge based on chiefly families and cattle ownership. However, with the changes taking place over the twentieth century, many with the introduction of Christianity, new distinctions began to emerge between agricultural modernisers and adherents to Mwali farming traditions; the literate and the illiterate; entrepreneurs and unskilled labourers; between the urbanised proletariat and elite and those who remained in the rural areas to farm, primarily women; and indeed between the generations whose increasingly divergent worlds were fast being transformed. These changes

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[88] A Native Commissioners report (1902) pointed to the annual destruction of thousands of indigenous trees in the Matopos, primarily by its remaining Banyubi and Karanga inhabitants. However, a stock taking report by a neighbouring estate manager to the south of the Hills in 1912, where gold prospectors had wood cutting concessions, made it clear that large tracks were being carved for logging in this area which had little remaining wood. Only faint were tracks visible in the inhabited farming areas to the north with little sign of deforestation.

[89] 1956 Report by Provincial Agriculturalist, Conservation Officer and Soil Conservation Officer found the standard of farming in the Matopos Reserve to be relatively high, with use of manure, crop rotation and Banyubi ridge cultivation. There were 648 market gardens producing for markets in Bulawayo, with an average income from farming of £59. The Provincial Native Commissioner subsequently defended inhabitants right to remain on the basis that their diverse farming, their connection with nature, and the freedom and opportunity that this afforded (Ranger, 1999:180).

[90] This report found that one acre of wetland, one of dryland and a quarter of an acre of orchard averaged £209, and with houses and natural resources in good order, noting that 'contrary to previous opinion we are not dealing with an impoverished group of people.'

[91] 1962 report undertaken by the administration of the Rhodesian Front, found some earnings to be over £1,000 a year (ibid)

in household labour distribution also impacted gender relations, supported by Christian missionaries promoting literacy amongst women, and with women taking on more central roles in both production and decision-making in the absence of men. Growing numbers of educated women became master farmers and entrepreneurs, and were involved in the nationalist movement, organising boycotts and protests, and later as ZIPRA fighters during the Liberation War. As Ranger observed 'Class, generation or gender conflict might well have come to replace linguistic, cultural and 'ethnic' conflict' (Ranger, 1999:149).

5.2.2 Changing Spiritual Landscapes

The vast granite rocks piled seemingly precariously one on top of the other attract impressive lightening and rain storms. These rocks are thought to be stitched onto the land - the needles having created the seams through which the water flows, and from which rivers below are formed. It is widely believed that the pools inside the rocks of the Matopos contain the rain clouds, and are thus identified as the source of all water (Aschwanden, 1989) including by the Shona-speaking peoples. Home to the cult of the High God Mwali, there are a number of important shrines within the Motopos Hills (also known as *Matonjeni*), the most senior of which is the rainmaking shrine of Njelele which lends its name to one of the villages within this research which lies at the foot of this sacred *dwala* a few kilometres south-west of MNP boundary.

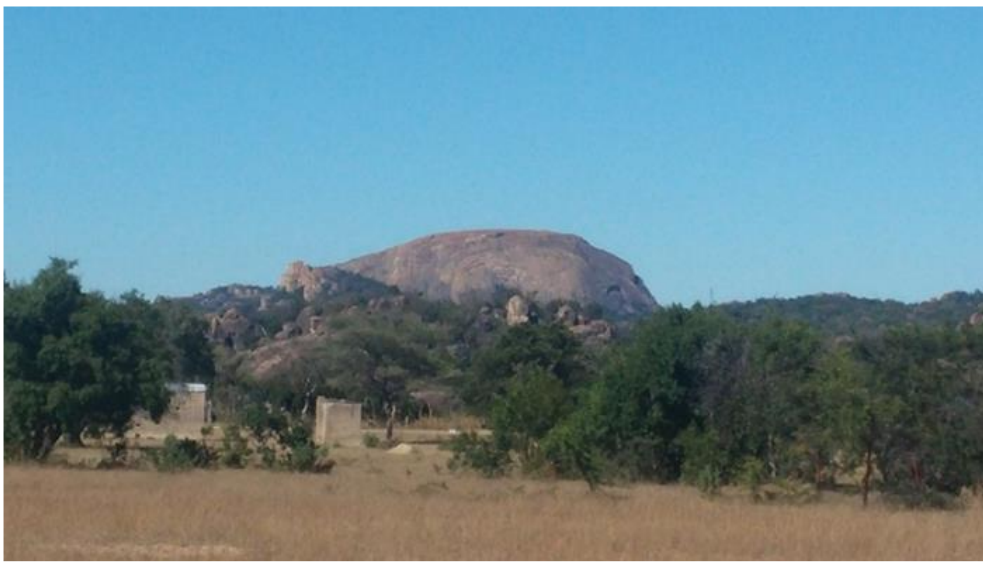

Plate 5.2: *Njelele 'dwala' as seen from the research meeting point in Dewe.*

The interior landscape of the shrines are thought to represent the source of all social and biological life - with perennial pools, streams, trees and rock art, and of course the rocks themselves, from which the Voices emanate. In this way shrines are 'the nucleus of a living and active landscape' (Zvaba, 1988 – in Ranger,1997:22). Mwali adepts wear traditional leopard skins, sweep the shrines with their hands, use stone tools to cut the grass, and are not permitted to farm or trade. As messengers of Mwali, their instructions to followers involve their obligations to,

and relationship with the landscape. The shrines are still visited from far and wide by emissaries from across Zimbabwe, as well as Zambia and South Africa.

During the 1940s, after conquest and constant evictions, followed by pestilence and droughts, the shrines were thought to have become impotent in the face of colonialism. Many believed that God had left Njelele and so the Voice could no longer be heard. This corresponded with the growth of Christianity, particularly through the London Mission Society and Brethren in Christ, that actively confronted pilgrims by constructing mission schools and churches on the trails leading to the most significant shrines. Ranger describes this as 'ideological warfare … about the definition of community, patterns of production and hence about landscape.' (1999:53). While rainmaking ceremonies were still performed at Njelele, fewer people were consulting the Mwali adepts, despite Nkomo donning traditional attire and selecting key shrines as a cultural backdrop for his major speeches. As the nationalist movement grew, driven by Christian progressives and entrepreneurs, the people of the Hills increasingly turned to politics. So complete was this transition, that by the 1960s the Banyubi identity was thought to be made up of different missionary traditions rather than those of the *indunas* or even their Mwali priests (Ranger, 1999:132).

During the war of liberation, as adherence to the shrines by militias dominated, so too the shrines rose again in prominence. Continuing in to the 'dissident' aftermath, both ZANLA and ZIPRA soldiers visited the shrines for blessings, thought to make them invisible to the bullets. [92] The Mwali priests were however not immune to the social change and power struggles taking place around them, interacting with political power thus giving legitimacy to social inequality and division. In accumulating wealth and power of their own, incidents of corruption and desecration were reported, and bitter feuds arose between shrine priests, that undermined their spiritual and moral authority. On majority rule in 1980, the brief cessation of violence saw a return to 'normality' and the return of Christian of missions to the Hills alongside the glorification of Mwali. As Ranger points out, this normality meant that all interests - religious, political and social - sought to vigorously reassert themselves as the new Zimbabwe emerged.

5.2.3 Symbolism, Power and Suspicion

With the deep connection to farming in concert with the wider ecology it is, in one sense, surprising that many agroecological farmers in the study area viewed pilgrims to Hills with suspicion and even animosity, accusing them of being responsible for polluting the environment by *'leaving litter such as clothes and beads, and goats tied to trees.'*[93] Yet when one considers

[92] One priest, at Bembe shrine, indicated that she was not liked because she welcomed ZANU soldiers during the war, and Shona who continue to visit. Interview with Melusi Sibanda and Minya Ncube, 1989, in Ranger, 1999.
[93] Male FGD participants – Survey development (18.05.17)

Christianity's role in confronting traditionalism, and in promoting agricultural modernisation and *progress* linked to the rise nationalism, the concept of traditionalism as a pollutant takes on socio-political significance in what has been a longstanding ideological war, and one which was lost to the Christians long ago. With the exponential increase of independent African churches over the past decades, the new battleground is in fact between churches, jostling for the souls of paying congregations.

This said, pockets of syncretism appear as a pragmatic response that aspires to modernity and double indemnity to assure salvation, while perhaps also seeking to explain the infinite connections, and contradictions.[94] While the majority observe *chisi* as a cultural rest day to show respect for the chief, some expressed resentment at being forced to comply with such un-Christian traditions policed by village heads, saying that they felt forced to appease or participate.[95] This was a recurring theme of the Dema research interaction, pointing to layers of power and experiences of discrimination, often at the hands of traditional leaders.

Furthermore, many pilgrims to Njelele are 'foreigner' from Bulawayo and other districts and provinces, and particularly Shona-speakers from across Zimbabwe. In the context of violence wrought by ZANLA and later government forces, and given that the majority of security personnel that patrol the area today are overarchingly Shona, this adds another dimension to a sense of spiritual dissonance. In Matabeleland, where state security apparatus has been used to violently supress dissent, people are more likely to feel intimidated by, or fearful in the presence of the police or army, compared to other parts of the country. Many people remain extremely wary of strangers, while for others a deep enmity endures. One woman whose family was affected by *Gukurahundi* put it like this when discussing her healing practices: *'The spiritual and healing benefits of Ndebele plantlore are not always available to other cultures, especially the Shona. These are about important elements of knowledge - about healing - social healing, spiritual healing and physical healing. Without forgiveness there can be no healing.'*[96]

In July 2018 mining explosives were detonated within Njelele, its artefacts destroyed or looted, and salt scattered as a final act of desecration. The keeper of the shrine pointed to Christians, saying, *'… there are a lot of men from apostolic sects who are claiming to be praying on Matobo mountains. Our tradition and culture is being destroyed in front of us.'*[97] Seen within weeks of the elections, however, an MDC Alliance spokesperson insinuated political or 'tribal' motivations,

[94] Some Christians, while believing that the rains come from heaven also blame traditionalists for the lack of rains. As one woman noted, *'It is very painful, because these people are causing the rain problems – they come at the wrong part of the season to practice those things at the shrine.'* FGD participant (17.06.17)
[95] FGD (men's group) on agency indicators (17.05.17)
[96] Personal communication (03.05.17)
[97] Shrine keeper, Solifa Ncube (Khulu) quoted in Newsday - https://news.pindula.co.zw/2018/07/03/njelele-shrine-bombed-artefacts-looted-and-destroyed/

saying '*This has been a sacred shrine since time immemorial as a people's party we are not amused by these invasions by foreigners*.'[98] At the time of writing, culpability had not yet been established, yet this disruptive act has surfaced deep Christian-Traditionalist suspicions and very public Shona-Ndebele antagonism.

5.3 POLITICS AND LAND

Land reform in Matabeleland during the 1980-90s took on a very different complexion to other parts of Zimbabwe. Incidents of squatting on European ranches were rare as the livestock economy was thought unsuitable for squatting, unlike the arable lands to the east. Pressure for resettlement came primarily from former mine or farm workers, who made up the relatively small number of squatters. This opened up a division between communal farmers demanding grazing extensions based on historical land claims, and the landless, unemployed and displaced, who the government prioritised for resettlement (Alexander, 1991). Due to the nature of semi-extensive livestock farming, and the population pressures which had dogged the area for over half a century, communal farmers were less enthusiastic about 'resettlement' on new lands, which was in fact an arable resettlement model. They preferred instead to remain in CAs, but with access to this new land as seasonal grazing extensions, in line with the traditional *lakisa* system. In Matobo, this land was primarily in the Mopani belt to the south.[99] Resistance to government resettlement plans were interpreted by the ruling party as subversive tactics, led by ZAPU.[100] Few communal farmers subsequently took up an opportunity to 'resettle', and those tempted came under pressure to hold the line.[101] As bureaucrats failed to revise the centrally-defined land model between 1980-1, there was an overarching sense that the ZANU-dominated government was unresponsive to the needs of Matabeleland. This, alongside South African agitation,[102] and caches of arms found on ZAPU supporters land, reignited open conflict between ZANLA and ZIPRA forces - leading to the breakdown of the capricious post-independence peace. This laid bare the myth of demobilisation, and was followed by the dismissal of ZAPU MPs from government, including Joshua Nkomo and, ultimately, to *Gukurahundi* in 1984.

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[98] Report in Newsday (Nkala, 2018).

[99] Former commercial ranches available for redistribution were abandoned due to drought and the worst of the violence between ZAPU dissidents and the government, later sold to the government under the willing-buyer willing-seller land reform phase (1980-1991). ZAPU's military strategy specifically had not targeted European ranchers during the liberation struggle (Alexander, 1991)

[100] Deep suspicions still exist in Harare. In September 2017, CEO of nationalist NGO promoting the Shona/ZAPU cultural narrative stated that Ndebele are in fact all Shona, and that 'Matabeleland is designed to remove President Robert Mugabe. If you go to Bulawayo, you will find that nine floors on a building house NGOs. The message they get is that Mugabe is not your leader' (Newzimbabwe, 2017).

[101] By 1981 only 2.7% of Matabeleland South (88,000 people) had applied for resettlement (Alexander, 1991).

[102] Former Rhodesian intelligence officers were recruited by apartheid South Africa to form a 'Super-ZAPU' band of dissidents to destabilise the newly independent Zimbabwe by seeding mistrust between ZAPU and ZANU. Intelligence on arms caches are thought to have emerged from these officers. All were ZANU-PF and CIO insiders at that time.

With the 1987 Unity Accord between ZAPU and ZANU leading to the creation of ZANU-PF, land distribution in Matabeleland was seen as a way of further eroding any remaining ZAPU political control by hollowing out its patronage networks. These political (and military) factors prevented local leaders, now with no patronage networks to government, from being able to negotiate a different land deal which would be more suitable to Matabeleland (Alexander, 1991). Resettlement land was withheld by government, preventing farmer's access to grazing. Poach-grazing once again became an important strategy for both resistance and survival. The persistent droughts of the 1980s hit livestock holdings in Matabeleland particularly hard,[103] creating an almost continuous dependence by peasant farmers on government relief and work, thus necessitating new patronage networks between pragmatic local leaders and the ruling party. The organisation of grazing extensions, since referred to as the Tier-3 system, with homesteads in one area, cropping fields in another were subsequently linked to adjacent resettlement land for grazing.

5.3.1 The Enemy Within

Civilians in Matabeleland and Midlands provinces were caught between ZIPRA dissidents and government forces, be they the infamous Fifth Brigade, CIO, South African-backed Super-ZAPU or conventional forces, sometimes disguised as one another. This fomented a sense that the enemy lies within; of suspicion between community members and within families as the conflict embroiled the wider population, often accusing one another of being either 'dissidents' or 'sell-outs'. These suspicions have permeated everyday life, and continue today.

> … we are even afraid to talk about that today. Very much afraid to talk about that. Because we lost a lot of people. Some we don't know where they are buried. Even if it should have happened to me – some people would not know where I would be buried. But I do know where I was taken to – very badly. That's why I became non-political. But it's not even helping me at all.[104]

In Matobo, between 1984-7 tens of thousands of people were interned in camps run by ZANU youth, some tortured and raped for many years. Bhalagwe mine, which lies a few kilometres from Maphisa, is a site where many hundreds of people are thought to have been brought from all over Matabeleland, and whose remains lie unidentified. Cultural leaders, musicians and artists were also targeted.[105] Mining concessions for Bhalagwe mine shafts are more recently being granted by government, to the horror of those in Matabeleland who are called upon to share

[103] Communal farmers were forced to sell their stock to the govt parastatal (174% above usual sales), depriving them of vital inputs such as manure and drought power. Official reports noted that 120,000 communal farmers were affected, causing some 2 million people to require food aid (Alexander, 1991).
[104] Interview - DMA/ACC/M/019 (28.06.17)
[105] So complete was the political and cultural clampdown that the first licence for an Ndebele language/music radio was only issued from Harare in 2015 reigniting concerns that this would lead to a revival of Ndebele nationalist sentiment, and calls for quotas.

painful memories as evidence for the faltering National Peace and Reconciliation Commission (NPRC), then lost in a political and bureaucratic quagmire.

5.3.2 Navigating the Coloured Jackets

Today the politics of Matobo, with its two parliamentary seats representing north and south, are hard fought for and amongst the closest in Zimbabwe. Dema sits in Matobo north where during the violent 2008 elections the MDC-T won with a majority of 368, which was overturned in 2013 by ZANU-PF with a majority of only 81.[106] The council elections of the same year show similar divisions, with 13 MDC-T, 1 MDC-N, and 10 ZANU-PF councillors now representing the 24 peopled wards. This represents levels of complexity and pragmatism on the groups, with traditional leaders keen to direct inputs and drought relief packages from the Department of Welfare via ruling party structures. NGOs report that when this reaches a ZANU-PF ward, then the distribution will be undertaken by the ward councillor. But if the ward councillor is MDC then it will be overseen by WADCOs dominated by traditional leaders, who are thought to be overwhelmingly affiliated to the ruling party.[107]

Leaders making partisan decisions about the distribution of food or land allocations were said to garner wider support by donning the 'coloured jacket' of the ruling party to provide cover and protection from accusations of nepotism and/or petty corruption. In this environment, it is perhaps unsurprising that the VIDCOs and the WADCO are considered politicised and ineffective, and that the one of the peace partners primary project foci is to encourage more civil engagement in decision-making and influencing at this level. While some jostle for power afforded by being on village and ward development committees, many more avoid engaging for fear of attracting adverse attention. Village and ward plans - feeding in to district plans - are supposed to be developed from the bottom up, through layers of representation, yet few people attend the meetings, due to a combination of fear and disenfranchisement. Nonetheless, people must navigate these complex relationships to access entitlements. While this indicates a high level of resilience in managing everyday peace, the disruptive and destructive nature of these relationship are, what one NGO official referred to as like 'walking on an everyday tightrope'.[108]

This pattern is reproduced within project gardens, where frictions and conflicts emerge over relatively minor infractions, these are articulated through political means in order to garner wider

[106] Lovemore Moyo won 8/10 of the populated communal wards which would ordinarily assure victory. Irregularities cited included election agents being refused access to key polling stations, an unusually high number of voters appearing in the otherwise sparsely populated resettlement wards, and a withholding of the voter roll which prevented verification (Vollan, 2013). The challenge was dropped six months later when Moyo's legal team reportedly failed to receive payment by the party (Bulwayo 24 News, January 20, 2014).

[107] A combination of the closeness of these political contests, and the turbulent political history, mean that people were less willing to discuss their politics at this research site than in the other two.

[108] Skype Interview - DMA/NGO/F/BYO/020 (11.01.18)

support. All these community gardens now have trained committees. If there is a dispute that cannot be resolved internally, the matter is sent up to the village-level Conflict Management Committee (CMC), whose members are trained through the project. If issues cannot be resolved by the CMC, then the matter is referred to the headwoman, who has received counselling training, and regularly sees people at her home, and criminal cases will then be referred to the police.[109]

5.4 TECHNOCRATIC CONSERVATION AND TRADE-OFFS

The imposed conservation logic of the past continues to play a strong role today. Apart from MNP governed from Harare,[110] there is a labyrinthine network of government departments whose authority overlaps, and whose laws, by-laws and codes often contradict one another. These include CAMPFIRE which works with and out of the Rural District Council (RDC) offices in Maphisa; Agritex which functions from the government appointed District Authority in Kezi; and the Environmental Management Agency (EMA) which functions from the Matopos Research Station north of MNP to oversee and police all national environmental laws, for which it has little capacity.[111] For Agritex, EMA's continued, if relaxed, prohibition of *vlei* farming presents deep contradictions, with Agritex working with farmers on these *vleis*, using 'modern' farming techniques. This has resulted in an entirely unspoken trade-off between the two bodies, in part explaining why the District Agricultural Extension Officer (DAEO) chooses instead to describe these wetlands as 'community gardens'. As with the other areas within this research, consultation between the RDC and traditional leaders to tailor local environmental regulations has yet to take place in Matobo. During *FGDs* none of the participants, including the ward councillor, was aware of this process or what these regulations might include.[112]

Matobo District is one of the lowest recipients of CAMPFIRE income.[113] What funds remain after administrative costs contribute to development projects undertaken by the RDC and its contractors in combination with village work teams.[114] However, with the big game in Matobo

[109] Interview with headwoman - DMA/HW/F/MSW (21.06.17) The headwoman also navigates a careful path, meeting resistance by village heads both as a woman and as someone incarcerated for two years as a suspected 'dissident' when being a teacher in the 1980s.
[110] By an act of parliament (1975) under the Zimbabwe Parks and Wildlife Management Authority which manages 5 million hectares (15%) of land nationwide.
[111] Agritex has one AEW in every ward, whereas EMA has one desk-bound officer who serves the district, due to lack of resources.
[112] During the research, the Zimbabwe Environmental Law Association was assisting the RDC with defining the laws and processes, but there was little indication at that time of a planned consultation with user groups.
[113] According to income data on CAMFIRE website (CAMPFIRE 2018).
[114] Currently three clinics have been constructed (RDC - WT interview). However, these funds are also used to complete projects begun by the RDC in the district that need subsidising, so may not strictly be VIDCO prioritised, but supported by councillors advising/representing VIDCOs within their ward.

north being confined to MNP, trophy hunters are instead attracted to Matobo South.[115] CAMPFIRE is therefore considered to bring little direct benefit to those in Dema. With funding from central government in decline, the District depends heavily on this revenue from trophy hunting and natural resource exploitation. Income generation from these 'renewable resources' rather than promoting their sustainable utilisation, has therefore become a primary administrative focus.[116]

5.4.1 Contested Boundaries and Benefits

As with CAMPFIRE, fifty percent of the revenue received by Zimparks, and Museums which oversees the archaeological sites, is to be released to the community via the RDC. These funds, however, were not reaching surrounding villages, leading to blame being shifted between different authorities.[117] When visiting points of cultural or spiritual importance within the park, local people must apply with identity papers, and be accompanied by a ranger, despite many people and their descendants having been left without papers after *Gukurahundi*.[118] Frustration at the lack of benefit sharing, including employment opportunities, has resulted in violent incidents involving local people and rangers, habitat destruction and the vandalism of San cave paintings.[119]

By law, it is an offence to kill game that strays on to dryland fields, so a majority of communal farmers in Dema have reverted to wetland production in 'community gardens', that are often fenced with funding from NGOs, and supported by NGO technical staff and Agritex extension workers (AEWs). As one focus group discussant noted, '*the animals here have more rights than we do*'[120] expressing a general sense of frustration at the lack of support for local farmers, and revealing a level of antipathy that people feel towards MNP. The fencing between MNP and the neighbouring communities in Dema, unable to prevent wildlife from escaping and destroying livestock and crops, is instead interpreted as an expression of what or who it keeps out. The existing fenceline sits on a highly contested boundary, affecting Dema that, since 1962, has separated communities from ancestral and grazing land. Responses to a recent initiative by MNP involving the replacement of large parts of the fenceline were mixed. In return for work, groups

[115] The existence of hyena, leopard and passing elephant moving into ward 20 in the far south - the only formally designated 'grazing area' in Motobo, should, according to conservationists, be 'seized' to create a conservancy managed by EMA, with revenue earnings for the RDC. (Interview – District Conservation Officer – 08.06.17).
[116] Revenue for administration is raised from trophy hunters, primarily from America, Italy and Germany, as well as on commercial levies for the exploitation gold, quarry stone and river sand for construction. (Interview – District Environmental Officer – 08.06.17)
[117] Matobo RDC reportedly had not received payment from MNP (District Conservation Officer 08.06.17). However, during a public meeting in 2017, MNP asserted that it disbursed funds to the RDC which has not been transparent (Heks-Eper project officer interview - 11.01.18)
[118] Those without papers are also unable to access services. Figure of those affected were being compiled by one of the peace partners within the programme.
[119] Interview with ward councillor - DMA/WC/F/011 (21/06.17)
[120] Interview with female farmer in Silungudze which neighbours the NP - DMA/AF/F/SLNA/07 (16.06.17)

were offered payment and old fencing was 'donated' to villages to fence community gardens. While partly successful in addressing local concerns about wildlife escaping through damaged sections, some villages were reportedly less enthusiastic, signifying not only long-standing opposition to MNP and the 'shifting' boundary,[121] but also the utility of having easy access for poaching, poach-grazing, as well as grass and firewood collection.[122]

5.4.2 Technocratic Imposition and Dissonance

The Matopos Research Station continues to play a role in crop and livestock research, though the extent to which the results are made available through Agritex is questionable, due to critical capacity and funding shortages. At the time of this research, Command Agriculture was conspicuously absent in Matabeleland South,[123] and Matobo had not received any fertilisers since 2015.[124] Nonetheless, farming advice promoted by Agritex hinges on conservation farming (CF) involving hybrid seeds and micro-dosing with synthetic fertiliser and pesticides, pointing to a distinct lack of coherence with local farming realities. The mainstay of the two-year agricultural diploma is reportedly focused on tractor-based tillage systems and engineering (of which one tractor belonging to a commercial farmer was seen over the duration of the Dema research); using a computer (there was no electricity at the ward 'office' in Natisa); and chemical applications using knapsack sprayers (despite neither sprayers nor chemicals being available).[125] In light of this, Agritex in Dema has only three Farmer Field Schools, no Master Farmer groups, and six (of eleven) functional Garden Clubs. Poor training attendance was interpreted as 'stubborn resistance to fertiliser' or, somewhat ironically, farmers being 'laggards' who suffer from dependency.[126]

Fertiliser distribution, when available and/or politically advantageous, is usually undertaken through patronage networks, rather than Agritex, with little or no consideration paid to soil type or rainfall conditions.[127] For this reason it was thought that only a small proportion retain it for use, while the majority sell it to farmers on irrigation schemes, creating a flurry of economic

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[121] Despite the offer of paid work, many village groups reportedly did not turn up. This might relate to seasonal farming priorities, and even to historical resentment connected to forced work programmes.

[122] The harvesting of thatching grass from within the NP, is permitted once a year. For every ten bundles collected, one must be left for the NP for its own thatching.

[123] Some suggest political reasons, others that a livestock-based Command Ag is being devised for semi-extensive farming regions.

[124] In 2015 Agritex was supplied with 50kg bags of Compound D to be shared between 3 farmers p/bag. Interview with AEW - Interview DMA/AEW/F/09 (19.06.17)

[125] Despite this, the AEW doggedly pursues the CF agenda, borrowing a knapsack sprayer and chemicals from a farmer, doing demonstrations on that farmers land. Otherwise she uses pictures to demonstrate. Interview DMA/AEW/F/09 (19.06.17)

[126] AEW interview (ibid)

[127] Farmers reported being aware that fertiliser not only requires higher rainfall, but also draws moisture from root systems.

activity and a welcome source of income.[128] However, during El Niño (2015/6), Agritex had begun advising farmers and their donors to use OPVs and small grains as part of the drought response, unaware that heavy rains brought by La Niña (2017) would be unsuitable for small grains, thus compounding farmers' losses two years in succession.

With the changes discussed above having taken place over the past century, the complex Banyubi management systems have largely been lost. The wetlands observed during research (May-June) were already extremely dry, despite the flooding in April, and a number of people expressed concerns which indicated poor levels of knowledge about production techniques capable of managing these extremes. In one case, an international NGO had drilled a borehole at the centre of the wetland that supports Dewe village, resulting in severe groundwater depletion. Only one young interviewee, when asked about traditional farming knowledge, mentioned using raised ridges on *vleis*, which he had observed an elder practicing, and it was proving successful.[129] The historical confluences and confusion caused by these waves of technocratic imposition were summed up during an interview with one elder born in 1932:

> … when the white people came here they introduced another way of agriculture you see. Now, the missionaries and the District Commissioners were working together, to see the Africans follow their way of life. Now after that, the people were trying to refuse to follow what they were [told] but they were forced. Because in the early days, when people did the agriculture they did the same [as the Banyubi], but the whites said it was primitive - because they did some contours you see - opposite to the flow of water, and then planted on the contours. When the whites came they said 'this is erosion' … Then it became very hard again for the Banyubi people, but they tried to do it. But then, after that, the war came again - the Liberation War. So people were liberating themselves from what these people were saying. Now from there again it took another time – a very big time for people to understand what they were being led to, you see? … Again, they were telling people very hard to understand things – 'where are those people taking us to? Where are they taking us to?!' And from there again, we were surprised again – *why* are we being taken? But now again [through organic farming], we're getting to be heard again.[130]

5.5 'INSTRUMENTALISING PEACE'

The field research in Dema involved a conventional time-defined agroecology 'project' that has evolved over a number of phases spanning ten years, during which time learning has been captured, and changes incorporated. The agroecological aspects of the programme are implemented by Fambidzanai Permaculture Centre (FPC), meaning to participate or reciprocate together, Zimbabwe's pioneering agroecology NGO based in Harare. FPC's work in Matobo

[128] Discussion with FPC NGO officer.
[129] Interview DMA/AF/F/NJL/04 (12.06.17)
[130] Interview with elder, guardian and guide of a local cultural centre, not involved in the project - DMA/ACC/M/019 (28.06.17)

district focuses, in this instance, on an adaptation that it calls 'organic conservation farming' with approximately 700 communal farmers in two wards. This innovation came about from an earlier project which recognised the enthusiasm with which policy makers have embraced the concept of CF.[131] The wider programme integrates both agroecology and peacebuilding, using livelihoods as an entry-point to complex socio-political challenges within which to 'instrumentalise peace', and is closely supported and funded by the Swiss agency HEKS-Eper, through its Bulawayo office.[132]

Due to the impacts of historical direct and ongoing structural violence, this donor-funded and -defined project has more recently incorporated peace education through its partnership with three Bulawayo NGOs, all of which take a legalistic rights-based approach to peacebuilding. Across the district, the three peace partners, Habakuk Trust, Masakheneni and the Christian Legal Society are deployed to address a number of issues related to access to justice and peace. These are: a resolution to community-National Park boundary disputes, and fair access and benefit sharing; the abolition *in practice* of customary laws that discriminate against women;[133] discriminatory practices which prevent access to education and healthcare for suspected opposition supporters and their families; the lack of documentation for those affected by *Gukurahundi* who lost parents and/or documents and thus have no proof of identity through which subsequent generations can access services;[134] and access to land and justice over illegal evictions.[135] At the local institutional level, Habakuk is also tasked with reinvigorating dysfunctional village and ward development committees, by encouraging more civic engagement in decision-making. Disputes also affect elements of the project itself, from garden disputes between participants, for which peace committees are established and trained; to leadership battles over resource ownership and capture by officials. In such cases the NGOs support a negotiated resolution. The project honey processing centre and resource centre in Dema, for processing vegetables from the gardens, have both attracted such interests.

[131] Organic Conservation Farming, project between GardenAfrica and Fambidzanai (McAllister, 2015.)
[132] A church-based organisation, HEKS-Eper works with local NGOs globally on rural development, humanitarian assistance, advocacy and peacebuilding.
[133] The 2013 constitution abolished laws that discriminate against women, but this is still common in practice.
[134] Numbers affected are still being compiled by CLS, which has raised a petition in Parliament under the Birth and Registration Act.
[135] Ward 19, close to Dema has experienced widespread evictions. The land with a large irrigation infrastructure is run by parastatal Arda (Agricultural and Rural State Development Authority) was expanded for agribusiness development in a deal with petrochemical company Trek. Reported in Newsday (Mlotshwa, 2016).

5.6 RESEARCH PROCESS AND PRESENTATION OF DATA

Farming Typologies

Of the sixty-two people surveyed, all of whom were communal smallholders, sixteen self-identified as organic or permaculture, referred to here as 'organic'; eleven as practicing conventional or conservation farming (CF) referred to here as 'conventional'; and thirty-five as using organic methods with synthetic inputs, referred to here as 'hybrid', using organic methods on home plots or community gardens, and fertiliser for maize cropping. Of survey respondents, seventy-four percent of household income was primarily derived from farming, with other primary sources noted vending and remittances.

Plate 5.3: *key words emerging under each theme during early FGDs in Dema ward*

Twelve follow-up farmer interviews,[136] were selected according to three survey responses on resilience, considered characteristic (within the context of selected Dema indicators) of agroecology and, more specifically, social farming in order to explore the relationships with agency and peace. These were: a) levels of agro-biodiversity (scoring 6-10> species or varieties); b) social farming (sharing resources, including practicing *amalima*); and c) those who had

[136] 14 people (8 men / 6 women), two as a household - In one case a youth was joined by his farther, and a woman was joined by her husband. These relationships were first assessed by reviewing a number of survey responses on voice and equality in the HH.

practiced or innovated with different techniques over the past year. Only one conventional farmer was found to score consistently across these indicators.[137] From *Plate 5.3* it is possible to see the characteristics *FGD* participants attributed to the concepts of resilience, agency and peace as the process unfolded. These are referred to throughout this section.

5.6.1 RESILIENCE

Landscape mapping began with natural and infrastructural features. Those from Njelele village did not indicate the mountain that rises from it. Others noted village boundaries, particularly those neighbouring MNP, and only two villages noted their mountains and wetlands. Only two people during the feedback discussion made the link between soil degradation and loss, deforestation and wider ecosystem concerns to slow run-off to sink reserves in wetlands. In the *event timeline* (reaching back to the 1950s), soon after El Niño and the recent cyclone that destroyed crops and homes, droughts made an appearance (1992/3, 1997/8, 2015/16) as did cyclones (2000, 2017), and the introduction of permaculture and beekeeping.

Dema Resilience Indicators (ranked)

R1) When all people are educated
R2) Employment opportunities are available to everyone
R3) When there is economic stability
R4) People in the community working together
R5) Wetland by-laws enforced
R6) Having markets for our crops
R7) Productive diversity
R8) Wildlife conservation management functioning properly
R9) No careless behaviour (traditionalists) damaging our environment.
R10) Strategies for dealing with extreme weather
R11) Experimentation*

Plate 5.4: *Resilience Indicators – Dema final shortlist (18.04.17)*

The resilience indicator FGDs in Dema selected and agreed on a final shortlist of ranked indicators, shown in *Plate 5.4*, with number one being the most important. Of note in Dema was that macro- and meso-level socio-economic factors were more often discussed as the constraint to resilience than environmental factors.[138] With this in mind, the framing of *environmental regulations*, *wildlife management* and *strategies for extreme weather* as the responsibility of external bodies speaks more to the sense of a lack of agency, and will therefore be addressed in more detail later. Highlighted indicators point to those that tellingly did not appear in either groups' long-lists:

[137] Two KIs were selected at either end of the spectrum: one permaculture farmer with low responses to each, and a conventional farmer with high responses to each. After two attempts (and long days of walking) neither was at home.
[138] This was also reflected in the survey responses on what people *would most like to see as a result of economic stability* (R3) with the majority of respondents (46.8%) indicating currency/money, followed by jobs (33.9%).

wetland management, *productive diversity* and *experimentation*. These were later suggested and discussed before agreement that they should be added.[139]

5.6.1.1 Productive Diversity and Practices

Given the two successive years of disrupted production, food remained a concern for all farmers (P3), although more so for conventional than organic farmers (100% and 75% respectively). Fifty percent of all those surveyed were producing between 6-10 different crop types and varieties, the majority of whom were in the organic and hybrid categories (56% and 51% respectively). However, more conventional than organic farmers indicated producing 11-15 different varieties (35% and 13% respectively) – as seen in *Plate 5.5*. Of the farmers interviewed, however, organic farmers grew a mean average of 12 different crop type and varieties – while the hybrid farmers grew an average of five.

Of the organic farmers with considerably higher diversity, it is possible that, in relying less on external inputs, their approaches to production are necessarily more innovative, with a number found to be intercropping with different species for ground cover, bee forage, and natural pest deterrents. These farmers reported having few concerns about food security and enjoyed a diverse diet, in comparison to hybrid farmers with low agrobiodiversity who reported that they regularly depend upon food aid.

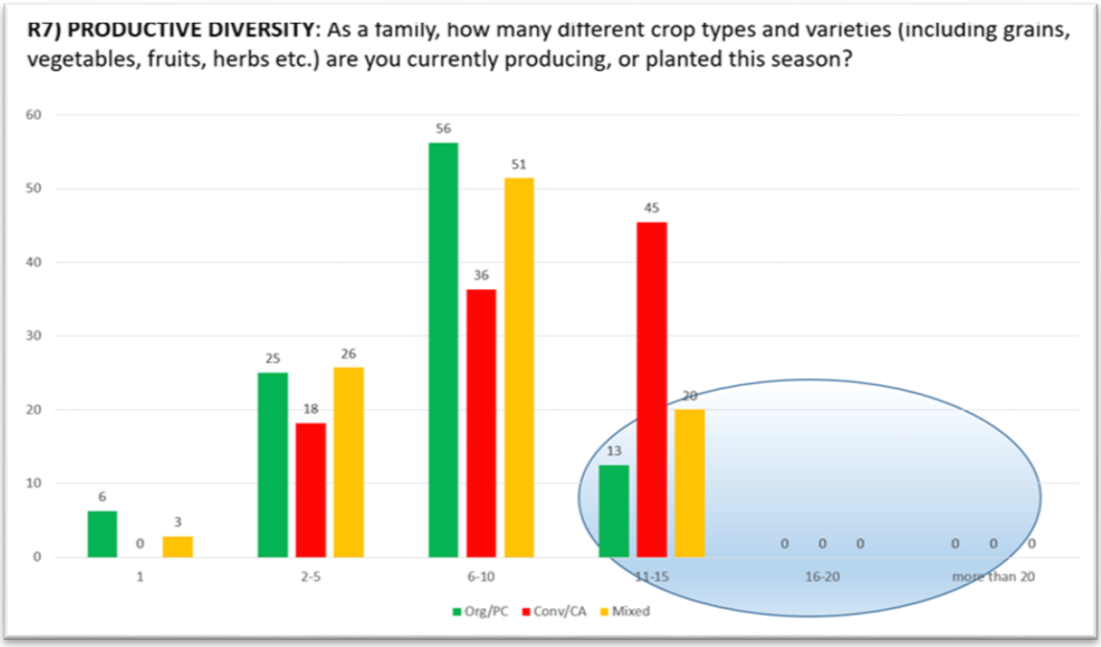

Plate 5.5: *Dema survey responses to productive diversity (R7)*

[139] In the interest of capturing wider information for the community and this research, it was later possible to facilitate discussions around these additions, so as not to interfere with the flow discussions.

Only beekeepers were found to express wider ecosystem concerns, to ensure that their bees had access to chemical free forage, and thus sought to influence the attitudes and practices of their neighbours.[140] Subsequently, those who were keeping bees are also intercropping with more species, and reported higher resilience in the face of pestilence, drought and market fluctuations.

Organic and hybrid farmers interviewed reported using mulch only at project gardens, due to the collective nature of gardens making it easier to collect large amounts of dried material. Of the farmers interviewed, only two mulched on their own land to moderate soil moisture and temperature, intercropping with species of varying heights as a form of living mulch. Similarly, compost was being made at the gardens, due to the availability of organic matter and, one suspects, because this is a measurable project output, as with mulching. Those with animal kraals add organic matter to combine with the manure and to soak up the urine, which is collected for use once a year. Others collect leaves and rock rabbit dropping, or use anthills which they apply directly to the soil.

When asked about the use of 'traditional farming methods' the majority of respondents looked uncomfortable, signifying that these would be understood a backward. As one woman said, *'We don't use traditional ways, we just adapt to these modern styles.'*[141] In context, traditional farming was considered largely to be seed casting with many different mixed types and varieties, making ox-drawn cultivation difficult. Planting in straight rows with a plough was considered central to 'modern' farming.[142] On further questioning, most were using the ash of burned aloe and maize cobs to add to grain for post-harvest management, and were making pest sprays from aloe and tree cactus. Although some farmers self-identifying as organic reported that, on occasion, they use the chemical pesticide *charinda matura* for storing their grain. [143] Those self-identifying as permaculture practitioners found it more difficult to define traditional practices. As one farmer-innovator noted, '*They are the same thing ... it's like Christianity and the traditional. It's mixed.*'[144]

5.6.1.2 Seed Saving and Sharing

Due to food sovereignty discourse having yet to make an impact across Zimbabwe, the conversation more often revolved around technical approaches and food security driven by the dominant productivist paradigm, to which most NGOs are partial.[145] Apart from *ad hoc* seed sharing between households, reportedly during *amalima* or through barter, a local cultural centre

[140] This was thought unlikely to be a simple economic calculation, and seemed more related to the health of the bees themselves Honey sold through their co-operative is not certified or marketed at 'organic'.
[141] Interview - DMA/AF/F/SLNA/07 (16.06.17)
[142] Some had aspirations that suggested that mechanisation was modern, although none had actually experienced this in context of their own farming.
[143] A chemical pesticide, purchased from Bulawayo.
[144] Interview - DMA/AF/M/HLE/08 (16.06.17)
[145] FPC has recently become involved in the Seed Knowledge Initiative in another province (and, critically, under different funding) working on participatory plant breeding, but this has yet to filter in to its wider work.

on the tar road close to MNP hosts an annual seed sharing event.[146] Nonetheless, asked if sharing was important for increasing diversity, one committed organic farmer pointed out the important social function of seed sharing to her, saying *'Long ago in the past, that's how people used to [manage] the situation. Yah. Because at times you won't have money to buy everything, but you have something that someone will not have, and somebody will have something that you don't have. So everyone will exchange, and so you get something from that… Not all of us will have that chance to buy… The most important thing is those relationships.'*[147]

Farmers interviewed reported saving few seed types/varieties, saying that they lacked the skills, particularly for selection. Of the seed that is saved, groundnuts, round nuts and sugar beans predominated, with some saving sorghum and OPV maize. Two farmers reported using cuttings of sweet potato and onion shoots for replanting and exchanging. From the survey, the differences between organic and conventional farmers surveyed were stark, with 69% of farmers identifying as organic saving seed, but none of those identifying as conventional. The Agritex AEW thought that seed saving might be useful for farmers who cannot afford to buy seed, but admitted that she also lacked the skills. One woman, who saves tomato and OPV maize seed, viewed Agritex with suspicion saying, *'The officers don't advise us to do that 'cause at the end of the day, no-one would go and buy seeds. It's not good for business.'*[148]

5.6.1.3 Hybrids and Open Pollinated Varieties

As with fertility, many combine hybrids with open pollinated maize varieties (OPVs) according to water availability at different plots. However, on closer inspection, it was found that much of the received information on the different traits and benefits of OPV and hybrid maize was conflicting. Some reported a preference for hybrid maize because it needed less water than OPVs, while others considered OPVs to be more drought tolerant. Some said that OPVs were higher yielding while other said that they were not. Many however understood that hybrids, while needing more water, also require more space and fertility. While a few planted hybrid maize at the irrigation scheme, others planted them on dryland plots near their homesteads and apply fertiliser. The more experimental organic farmers were using manure and hybrids with a dizzying array of names and numbers, and reported high yields.[149] Given the conditions in Dema, another key

[146] Amagugu Cultural Centre - custodians of culture, hosting events such as traditional face and house paining.
[147] Interview - DMA/AF/F/SLNA/07 (16.06.17)
[148] Ibid
[149] Interview - DMA/AF/M/SLN/017 (28.06.17) - On one of his hectares planted to hybrid maize in the drought year harvested three quarters of a ton, and was expecting two tons in the current year, through careful observation, saying *'I've experimented with 4 of them. That 521, 513 and then 123. Then 418. They are different. 513 is the best. 521 is fast. In term of the size of the cobs and the size of the maize – with a smaller comb - 513 is the best. 513 matures in three and a half months. 521 is three months.'*[149]

consideration was early maturation. These traits are clearly marked on hybrid seed packaging, but most were unaware that many varieties of OPV are also early maturing.

For the hybrid farmers interviewed, who were found to have considerably less diversity, the decision about OPVs or hybrids was academic. Many reported that they do not have access to OPVs due to poor availability and, with less food and income, purchasing seed from Bulawayo is not an option, and so they depend upon welfare assistance, the foundation of which has been hybrid maize distribution. Despite the more recent promotion of small grains by Agritex and NGOs, the uptake remains relatively low. Of those attending the *survey data feedback*, one-third indicated small grain production, and only three of those interviewed. As small grains are now being purchased by the Grain Marketing Board (GMB) this was thought likely to incentivise production.[150] With sorghum increasingly part of the distribution picture there will be more opportunity to save these seed. However, peoples taste preferences still largely favour maize.[151] Furthermore, people reported being deterred from planting small grains because of damage from curia birds, and laborious processing.[152]

Illustrating the value of OPVs, innovative thinking and social farming, when asked why he has a stock of OPVs, one farmer-innovator responded '*So when you do some ilimas you research and find out who has the best OPVs. You know – exchange - you get more seeds.*'[153]

5.6.1.4 Experimentation and Innovation

By observing the movement of water, and concerned that drought-resistant crops would not respond well on his wetland, particularly if the rains were good, the same farmer instead planted his sorghum, cow peas (distributed by FPC) and round nuts on the higher ground, resulting in good yields. Given the low nutrient value of perennial grasses, he was also observing how livestock is attracted to different tree species for fodder, and had begun collecting seed to plant on his land, which he hoped to use to increase his goat rearing.[154]

Other experimental farmers interviewed were learning by consulting older farmers, and trialling different techniques. '*I go around asking them, they teach me, and I take notes. I take those notes [and compare with what I learn] with FPC, then I'll mix together. Then I'll get one point and I'll change it. I take those traditional ways, and experiment on maybe half of my acre, and then I compare.*'[155] In spite of the drought, most organic farmers enjoyed relatively high yields, as

[150] Only one 1.6% of those surveyed in Dema sell to GMB. The majority sell within their villages and community (77.4%), some sell to local shops (27.4%), others trade in Bulawayo and Maphisa markets (13% and 18% respectively).
[151] Three farmers reporting a preference for small grains originated from Tsholotsho (in Matabeleland North) where, despite higher rainfall, small grains have been more widely produced and have long-been part of the diet.
[152] Transcript of survey data feedback discussion with wider community – 07.06.17
[153] Interview - DMA/FI/M/DBV/013 (23.06.17)
[154] Interview - DMA/FI/M/DBV/013 (23.06.17)
[155] Ibid

reported by one of the more experimental farmers on his two hectares, *'Ah, chemicals are killing the soil. But in the last year, with the drought, I got 9-10 bags of maize. And with cowpeas I got 7 buckets. And 1 ton of butternut. And maybe 1 ton of melons. So I see an advantage of permaculture. And for ground nuts I got 2 big bags of groundnuts, processed - about 180 kgs. ...I'm still eating the maize from last year.'*[156]

However, these inquisitive farmers were found to be the exception rather than the rule.[157] Many were happy that they could plan their planting by following calendars provided by NGOs or Agritex. As seen in *Plate 5.6,* organic farmers are primarily *practicing or experimenting* with soil fertility (81%), seed saving (69%) and natural pest management (75%), which are central to FPC training. Only 19% practice water harvesting, 13% value addition, and none are propagating plants or trees (R11). The survey found that more conventional farmers were experimenting with soil fertility and water harvesting, and was later clarified during *data feedback* that those same farmers were referring to synthetic fertiliser.[158]

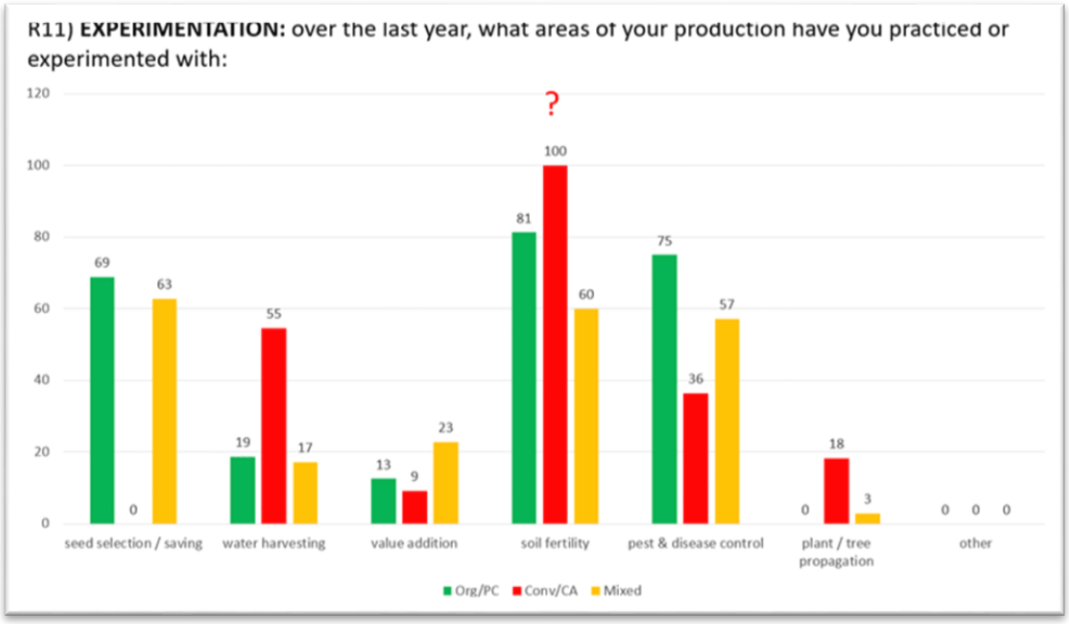

Plate 5.6: *Dema survey responses on experimentation (R11)*

Most of the innovators met in Dema were men (all of whom identified as permaculture practitioners). All enjoyed the social aspects associated with their innovative farming and, furthermore, said that experimentation made them feel more in control – pointing to a strong link between resilience and agency. The absence of organic women with high agrobiodiversity marking themselves out as experimental is most likely not only due to confidence levels (A2), but

[156] Interview - DMA/AF/M/HLE/08 (16.06.17)
[157] During storytelling FGD, no participants selected *innovation and experimentation* to relate a story about change.
[158] The survey data feedback day (07.06.17) was attended by farmers responding to the survey, including many conventional farmers. This was also found to apply to pest and disease control, as well as water harvesting related to the NGO-developed irrigation scheme where half of the conventional farmers are producing and were surveyed.[158]

also to social constraints, including considerable household and on-farm commitments, and are thus less able to move around the community. And while women reported comparable freedom of movement to men (86% and 87% respectively), freedom of association for women was far lower, at 49% (A9). Accusations of witchcraft were not unusual, as found at all research sites, with experimental farmers thought to be in league with dark forces. For those with less power, such as women and youths, being marked out would be a disincentive to experimentation.

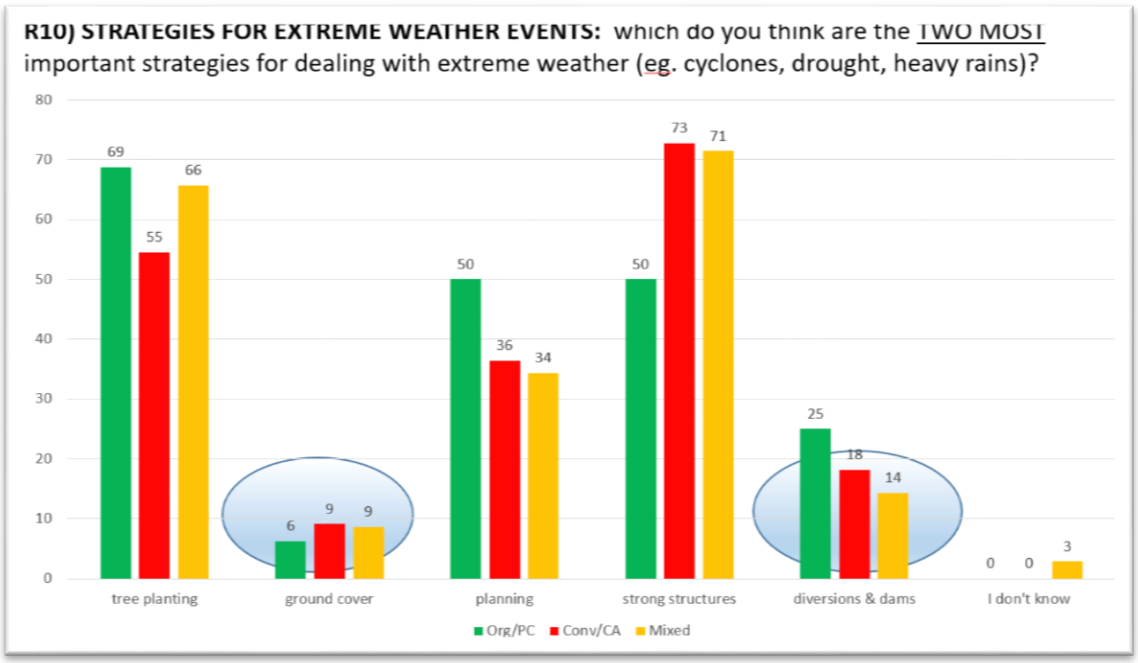

Plate 5.7: Dema survey response on managing extreme weather (R10)

As seen in *Plate 5.6*, the low-level response to propagation was particularly surprising, given that a later question on *managing extreme weather* (*Plate 5.7*) found that 69% of organic farmers (64.5% overall) thought that tree planting would be an effective strategy when asked. Yet the strategies that are readily implementable at community level, such as ground cover, diversion drains and dams received the fewest responses, despite droughts and flooding being of heightened concern.

5.6.2 AGENCY

The agency indicator *FGDs* in Dema selected and agreed on a final shortlist of ranked indicators, shown in *Plate 5.8*, with number one being the most important. In *FGDs*, women's sense of power and powerlessness was articulated primarily around the reproductive sphere, such as voice, communication and respect within the family, fair division of labour and freedom of religious

expression in marriage,[159] also expressing concern about the lack of solidarity between women.[160] Men's on the other hand reflected governance concerns, such as economics, the national park, transparency on land allocations, being forced to adhere to traditional occasions, and highlighted freedom, unity, dignity, vision, and listening as characteristics of agency. Energy was also important for men, which they believed women possessed more of in terms of mobilising others.

The survey indicator on *sharing natural resources* (A6) related both to people's concerns about the wealth generated by a national elite from mineral extraction, and to the contested MNP boundary (A10). The related survey question (A10) asked what people most wanted from the park, if they were consulted. Only 19.4% of respondents indicated *repair of fencing*, suggesting a level of satisfaction with the MNP fencing initiative against wildlife encroachment,[161] but also a resistance to any formalisation of this boundary. Instead, *shared benefits* received the highest response of 67.7%, demonstrating shifting interest and needs.

Dema Agency Indicators (ranked)

A1 More understanding of 'rights'
A2 Having confidence & self-esteem
A3 Working in solidarity to find solutions
A4 Fair and transparent land allocations
A5 Having our voices heard
A6 Sharing of natural resources to overcome greed
A7 To have representatives that represent our needs
A8 Gender equality and equal opportunities between men & women
A9 When freedoms are experienced
A10 Being consulted by the national park on wildlife management

Plate 5.8: *Dema Agency Indicators – final shortlist (18.04.17)*

The link between agency and resilience was again emphasised in the survey question on *conservation management*, with a pattern emerging that demonstrated that organic farmers had a preference for landscape-level responses involving institutions, appearing also in relation to *wetland management*, with the majority of respondents (69.4%) believing that it was the responsibility of different authorities to manage, control and police natural resources (A5). During the *event timeline*, when presented with an opportunity to consider future events over which some control could be asserted, all found this the most difficult task – eventually writing only 'more rain' and 'free and fair elections'.

5.6.2.1 Social Farming and Relational Agency

[159] When married, it is expected that women should change to her husbands church, so that the family is 'united'.
[160] Women said that they felt empowered by seeing women in key roles, such as the councillor and headwoman - FGD on equality under *storytelling (31.04.17)* when group feedback included a drama depicting changing relationships within the household.
[161] Later confirmed during the data feedback day (07.06.17)

From research interactions, unity (*ukubambana*) and systems of reciprocity such as *ilima* were found to be in decline. Yet when considering how the different farmers share their resources (see *Plate 5.9*) as part of their resilience strategy, considerably more agroecological farmers were found to share knowledge and skills (94% and 100% respectively), while few conventional farmers shared these. Low levels of equipment sharing (such as tools and draught animals) were found across all categories, reflecting availability more generally. All categories shared seed.

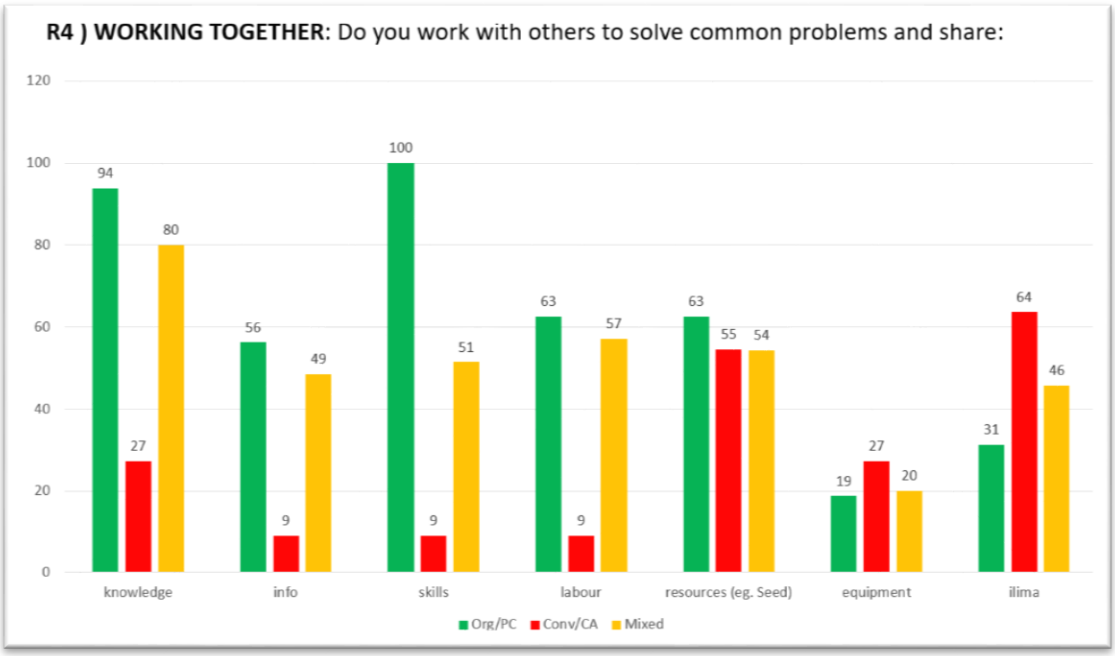

Plate 5.9: *Dema survey responses on working together (R4)*

Amalima are performed when groups travel around to each other's homesteads and fields to carry out work collectively.[162] Ilima in Dema was practiced by 45% of *survey* respondents overall – by more women than men, and by slightly more of those in the conventional category. The practice was also found to vary according to family tradition, and was practiced in some villages more than others. [163] Age and social status also play a part in *ilima* groups*: 'I have thought to ask my neighbours, but the problem here is that they have to check your social status first - who are you? what do you have? - before they will come.'*[164]

Other reasons cited for its decline include its association with traditionalism and beer brewing, deterring Christians from participating. However, it is also usual for *maheu* to be produced (made from maize and served prior to fermentation), and would have traditionally been consumed by

[162] Amalima is the plural of ilima

[163] Half of the farmers surveyed identifying as conventional were in Dewe village, which had the highest tradition of ilima (82%), while the remainder were in the irrigation scheme, which had the lowest ilima (33%). Size of land or commercial assumptions about conventional farmers were not found to influence ilima, with more organic and hybrid farmers selling to formal markets. All surveyed were communal farmers, with organic farmers (on ave) having more land than conventional farmers (5.4 ha / 3.5ha).

[164] Interview - DMA/AF/F/SLN/010 (19.06.17)

the men and women, while men would have stayed on to drink beer and share stories in to the evening. A Christian church has also recently adopted the practice, but it was reported traditionalists were not invited to participate. *'I think we differentiate in a religious way. I mean some people they go to church and some of us are heathens – we are not church goers. So we don't mix. They separate themselves from us. Because when we call them they don't come, but when they call us we come.'*[165] Those who do practice *ilima* all explained that they no longer have the skills or knowledge about how to brew the traditional beer central to the preparation and performance of traditional rituals. *'Yah most of the skills they are lost. Because people used to brew bear – there were old age. Some have died, some forget, some are in churches.'*[166] This also correlates with the decline in small grain production.

The impact of the ban on public meetings that was extended from the Smith era into the 'dissident' period in Matabeleland cannot be ignored.[167] When asked about what had caused the decline of ilima, one elder said that since the Liberation War: '*That's where most of the changes [happened] because when you did ilima you'd call a lot of people to help you. Then these army people came … They would be thinking we were talking politics.'* Today, if public gatherings do not include the 'right people', it may raise suspicions of subversive anti-government activity.[168]

The growth of the capitalist economy were also thought to have played a role. Many said that doing *ilima* was too expensive because it requires the host farmer to buy refreshments.[169] Others said that it was more cost-effective to employ someone to come and do the work – justifying that the cash would benefit someone from the community who needed it. However, protocols *within* groups also play a role, where reciprocity is seen less in the immediate term, but as part of a longer cycle. Despite this, one innovative farmer, however, explained the value of sharing that takes placed during their *amalima*:

> When there's work in your field – [but] you can't afford with your family, then you call ilima. So that people can come and help - they can come with their ideas. That's when you get information … because when we do ilima we buy beer. So when people are wise they start to talk. Even hidden things. [laughter] When he's wise now - when he takes wise water - he starts to share – 'you know my friend, I've got something very precious'… like seed![170]

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[165] Interview - DMA/FI/M/DBV/013 (23.06.17)
[166] Ibid
[167] During the Liberation Struggle, public meetings were banned under the Rhodesian Law and Order Public Maintenance Act, which included suspicion of farmers collecting for *ilima* as being subversive.
[168] Other practices from this period have been absorbed, now assumed to be 'cultural' practices. Such as hanging a red flag outside your house if holding a funeral, and opening your curtains so that activities inside could be monitored. Today, if hosting a funeral and curtains are not open, it is considered to be disrespectful. (NGO officer interview 11.01.18)
[169] In the form of a brand of sorghum beer called *Chibuku* sold in two-litre plastic bottles
[170] Interview - DMA/FI/M/DBV/013 (23.06.17)

When considering the changes that had taken place since he became involved in FPC's agroecology project, the same farmer identified the reintroduction of social farming as being instrumental, saying:

> We used to work on our own – organise ourselves with our farming. But then we started to liaise with other people, like doing ilima, and in some training workshops and field visits. You know, I thought I was doing something of great value. But when I visited the other places, I saw that, no, I am still lacking somehow, somewhere. So I learned a lot of ideas from exchange visits, from field visits, from ilima …. So I think my mind is now broad to an extent that I can even help other people with ideas. When you want to survive in your farming, even when you want to do a planting diversity, you can do ABCD – because now I'm versed. I'm changed completely. Now I can't die of hunger. Because of the skills that I have, and I share … Giving people ideas - getting their ideas. Putting them in to practice.[171]

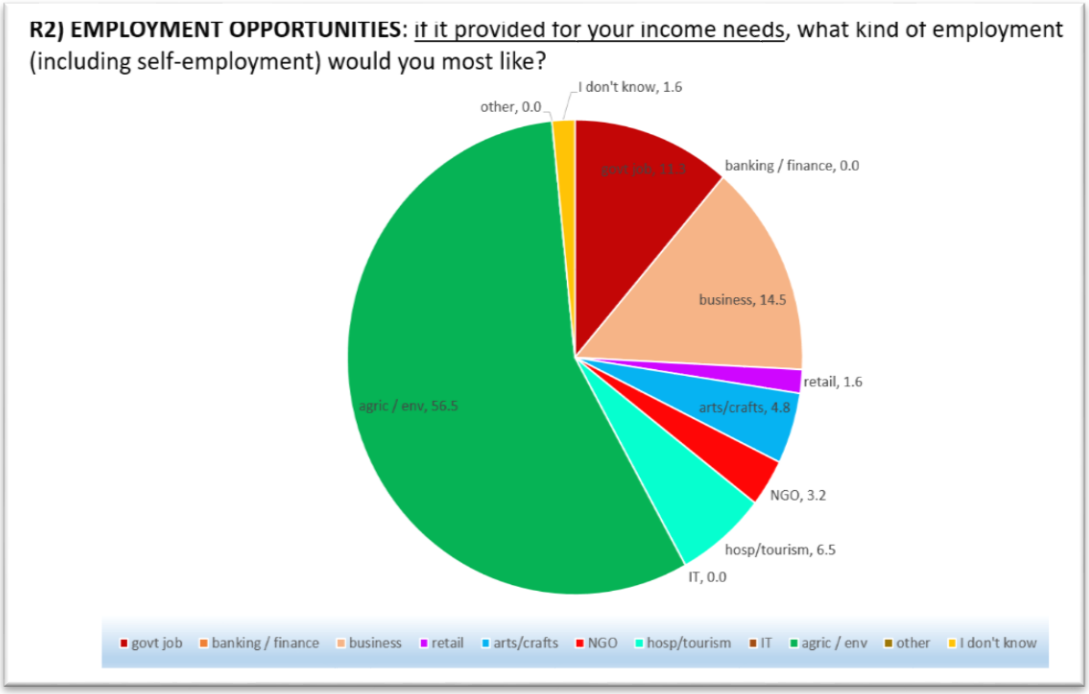


Plate 5.10: Dema survey responses to employment preferences (R2)

5.6.2.3 Confidence and Decision-Making

Despite the disruptions to farming described above, when surveyed, the majority (56.5%) of respondents would choose to work in agriculture/environment as opposed to other occupations, including seven out of the ten youths (*Plate 5.10*). Yet when people referred to *markets*, many did not consider their farm-gate trade as part of that market, despite most deriving the majority of their income by selling within their village or community (R6). Nonetheless, the status and confidence of CA farmers received a boost when relatives who had migrated to Bulawayo, and sent cash remittances home, became increasingly depended food from home as a result of

[171] Ibid

economic hardship in 2007. While this undoubtedly placed a strain on CA farmers, it increased their confidence in self-sufficiency, and their ability to be heard by family members who may once have assumed a higher status. A number of women organic farmers had similar stories. Due to their own productive and profitable farming decisions, their husbands, including one village head, returned to take part in farming activities, freeing them from poorly paid jobs in the city.

> Before I was just doing farming alone, my husband was in Bulawayo, but I had to give him food and money for transport – it was very hard. I kept advising him to do away with the job and come for farming. Other people were saying that I was working alone and that I should do away with that. But I could not. Some customers from Kezi came one weekend. And we were at the garden with my husband. They wanted maize, and I told my husband to help to harvest some ripe maize - and I told them to pay to my husband. And when he saw that, he said, "Why am I wasting my time in Bulawayo when there is money here, and I have cash problems there. Why don't I just come back?" So on Monday that's what he did – he did away with the job. This house is paid for with my own money from the garden … the irrigation plot is in my name. So at first I had my doubts, but now we are working well together.[172]

By not spending money on fertiliser, women reported increased profits from sales to pay for school fees and attend social occasions such as church, did not wait for late distribution of inputs to facilitate timely planting, and felt more confident. Organic farmers indicated higher responses on good relations (P7) between their spouse and family than conventional farmers, concomitant with higher levels of sharing and working together (R4), voice (A5) and solidarity (A3), and more experienced a range of different freedoms (A9).

Survey responses on equality (A8) between men and women reflected largely similar views, with few believing that equality was a threat to men (11% and 17% respectively) and slightly more women indicating that equality was not culturally appropriate (46% and 30% respectively). The majority of respondents were in favour of equal opportunities between men and women in the public sphere.[173] When disaggregated by farming typology, those respondents opposing equality were overarchingly organic and exposed to rights-based training within the project, as opposed to those surveyed in the irrigation scheme. This suggests a link between an adherence to traditional/cultural attitudes, social conservatism and organic farming.

[172] Interview - DMA/AF/F/HLE/016 (26.06.17)

[173] Many interview respondents, despite having indicated that they had an equal marriage, believed that 'equality' meant that women had the upper hand in the home, which was disapproved of. When discussed during data feedback, women said that while they wanted equal opportunities outside the household, within the home a woman should maintain a lower status than her husband.

Of note during the indicator *FGDs* was that the womens' resilience longlist related strongly to agency (or lack thereof), as did the men's peace indicators – suggesting that agency is a driver for both resilience and peace.

5.6.3 PEACE

The intersections between agency and peace were found to be leadership transparency, discrimination and representation, affecting unity and trust; and well as gender, particularly with levels of violence in the household.[174] *Gukurahundi* continues to loom large in people's consciousness, with 'massacres' being the first word written on the *event timeline*.[175] Peace in the home and family were prominent during the *FGDs* on *body mapping*, particularly in relation to trust, communication and respect. For women '*trust and unity starts in the home*' saying that '*without food there is no peace*.' For men, dignity and harmony were connected to peace, recognising that *'if there's no peace there's no harmony. Families are being destroyed because there's no peace.'*[176] No participants selected 'tolerance and respect' during *storytelling*. When asked if this was because it was absent, a participant responded that it might be happening at a slow pace, but that it would take time. These concerns are reflected in the ranking of the peace indicator shortlist (*Plate 5.11*).

Dema Peace indicators (ranked)

- P1 No domestic violence
- P2 Not feeling discriminated against based on gender, politics, tribe or social status
- P3 Being able to afford a good standard of living
- P4 Services improving
- P5 Unemployment decreasing
- P6 No hatred & harassment
- P7 Tolerance & respect of difference
- P8 Good communication at all levels
- P9 *Oppressive laws – presence of rule of law*
- P10 Leadership struggles and wrangles at all levels reduced
- P11 Reduced fear of robberies and violent crime

Plate 5.11: *Ranked Peace Indicators – Dema final shortlist (18.04.17)*

The ninth indicator on the shortlist, *no oppressive laws – presence of rule of law*, suggests a more heightened political awareness than in the other research sites. While this is unsurprising given the acute structural violence affecting Matabeleland, the language may be considered more

[174] When asked about domestic abuse, 54.8% were aware of verbal or physical abuse, 61.3 physical abuse, 45.2% marital rape, and 56.5% were aware of child sexual abuse. More men than women (70% to 54%) indicated awareness of physical abuse.

[175] Also highlighted were curfews and beatings during the liberation struggle and 'dissident' period, as well as disappearances and detentions – perhaps also foregrounded as a result also of the project's peace activities.

[176] As if to reinforce this, during a later women's FGD all said that they were regularly beaten by their husbands, except one who, with a guilty smile, said that she was widowed.

derivative of the peace NGOs rights-based discourse. Nonetheless, this indicator was discussed with FPC and the survey team during testing, when it was agreed this may expose the group to repercussions. With agreement, this indicator was replaced with next one on the long-list (as indicated by P11).

5.6.3.1 Gender and Violence

Levels of domestic violence, while higher than the national statistics,[177] were lower than the other research sites. Although it is important to note that the survey response indicates an *awareness* of abuse, in relation to how the survey question was posed (P1). From *FGD* observations, a notable difference in Dema was that no women spoke up in defence of patriarchy during *FGDs,* and a conversation initiated by the women even questioned the oppressive nature of 'culture'.[178] One participant believed that domestic violence was higher when he was a child, and thought that the reduction was a result of the project, particularly the peacebuilding elements focused on rights and freedoms. In Dema, rights and freedoms *per se* were neither rejected as being a threat, nor considered to be causal to domestic violence during *data feedback*. Instead, the sense of powerlessness and frustration at persistent marginalisation, both national and local, were thought to be two perceptible causes of the lack of everyday peace.

5.6.3.2 Leadership Transparency and Discrimination

Many forms of patronage were found to play out, including bias based on family or totem, church affiliation, status, age or gender. Nonetheless, the majority (69.4%) believed that they were discriminated against on the basis of political affiliation (P2), and 60% felt under threat from political violence (P5) – although considerably fewer organic farmers selected this response option when compared to hybrid and conventional respondents. On the fair and transparent allocation of entitlements (A4), only 17% thought that this was *always* fair.

In contrast to other research sites, party politics has imposed itself as the main event in Dema, and rent-seeking has become a survival strategy for those in power. In this context, any activities which promote change, be they ecological or social, are contesting the present order and embedded interests. Of those surveyed, 50% believed that their local leaders were blocking decisions, 48% that they were factionalised, and 43.5% that they were corrupt (*Plate 5.12)*. This overarching suspicion was found to be undermining community trust and cohesion, a state that

[177] 54.8% in Dema / 32% of women nationally experiencing emotional violence, and 61.3% in Dema / 35% nationally experiencing physical or sexual violence - Zimbabwe Demographic and Health Survey 2015 (ZIMSTAT 2016).
[178] This was quickly justified by men present, particularly a pastor, and a discussion about the differences between tradition and culture – which pointed again to tensions between traditionalism and Christianity.

is now seen as the norm. *'This injustice is a way of life now … people just think it's part of our culture … just like you see the sun rise and set.'*[179]

The common refrain that 'without food there is no peace' is a reality that extends a level of power (or powerlessness) far beyond the reproductive and in to the social and political spheres. As one organic farmer put it when asked about the relationship between food and peace for him: *'When people are hungry, that's when they are misled. Because they won't be having a choice. Just because you don't have bread, I say, "OK I'll give you bread – then do this." Then you do it. But otherwise if you are stable then you can say, no.'*[180]

5.6.3.3 Co-operation and Trust

While the majority of survey respondents (84%) indicated a level of satisfaction with village representation (A7), FGD participants and interviewees raised concerns that village lists to receive welfare was a cause of jealousy, resentment and suspicion. Here a proliferation of lists was useful in dispersing entitlements. Yet, to overcome corruption, NGOs use transparent selection systems, with people required to declare their need publicly so others can approve or contest their claims. Although this does increase the likelihood of receiving something, the process itself was reported to heighten tensions.

The lack of trust was found to effect resilience and agency in three important areas: preventing people from working together, undermining traditional mechanisms for collectively storing and distributing grain, and engaging in decision-making bodies. When discussing the potential of village grain storage, many considered this to be a good idea for drought preparedness in theory but mistrusted leadership motivations, concluding that it was preferable to store it yourself, and donate it to those most in need, rather than depending upon leadership to serve this function. This lack of trust had pervaded everyday farming and trading activities, and was also found to constrain saving and lending for investment in farming.

And while the organic gardens are not without their problems, they serve as meeting points which bring people together, as the ward councillor noted, *'Those people always used to be fighting each other, they didn't want to be near or to group and share some information. People here were not used to talking or sharing information. So the garden brought them together.'*[181] Organic farmers reported higher levels of *tolerance and respect* for difference (P6) as well as *good communication* (P7) and felt less under threat of *conflict* (P5) indicating that they may be better able navigate that everyday tightrope.

[179] Discussion with NGO agricultural officer – 11.05.17.
[180] Interview - DMA/AF/M/SLN/18/28.06.17)
[181] Interview DMA/WC/F/011 (21/06.17)

5.7 IN SUMMARY

While close to an arterial road, Dema is on the political margins - actively marginalised being, as it has been, subjected to acute direct and ongoing structural violence. Reliance on external interventions was a recurring theme, driving dependence and vulnerability. The sense of agency and everyday peace is correspondingly low, given the political capital to be made from the manipulation of this dynamic, severely eroding trust and cohesion, and constraining agentic motive to engage in landscape-level activities. Pressures to conform, found also in a widespread rejection of traditional belief and farming practices, have similarly curtailed creativity and adaptive capacity, which has yet to be embedded within the project approach as part of a more emancipatory agenda. In the midst of this unforgiving environment, agroecological farmers were nonetheless more likely to save seed, more disposed to share their resources, and were more tolerant of difference. Agroecological farmers were also found to enjoy better interpersonal relations, had more voice, felt less under threat from violence and discrimination, and experienced more freedoms. Furthermore, farmer-innovators were highly social and inquisitive, collected and shared ideas and resources, regularly produced a surplus, created opportunities, and were moving beneath the radar to navigate social complexities.

Voices from Mhototi: Word cloud of all interview and FGD transcripts

CHAPTER 6

CASE STUDY 2
MHOTOTI WARD
ZVISHAVANE, MIDLANDS PROVINCE

6.1 GEOGRAPHY AND ECOLOGY OF MHOTOTI

Plate 6.1: *View from Mhototi clay veld across to Gwen'ombe and the Mavondongwe range (2017)*

Mhototi Ward is the northern-most of four wards in the communal land of Mazvihwa, which is nestled in the south-eastern reaches of Zvishavane District in Midlands Province (see Map 4.2), and is separated from Matabeleland South by the mineral rich Great Dyke to the west. Mhototi itself is bounded by the Sabi River to the north which runs in to the Runde River, forming the border between Midlands and Masvingo province to the east. The ward connects two distinct ecological zones: nutrient-poor sandveld hills (*makomo*) characterised by sparse yet diverse Miombo woodland[182] in the north of the ward; and heavy clay soils (*deve*) characterised by more dense mopane woodland[183] to the south (Wilson, 1987). Mhototi (highlighted on *Map 6.1* as ward 16) sits between the Mhototi, Gwavachemai and Chomumbuy mountains, and lies in semi-arid Natural Region (NR)5, characterised by low agricultural potential, and suitable for extensive cattle or game ranching. The low rainfall, with less than 450 mm per annum, drains into the Gwen'ombe and Sabi rivers before meeting the mighty Runde.

Characterised by its early Precambrian geology, the area is rich in mineral deposits and is known for its asbestos mines around Zvishavane town, which have been the primary source of formal employment since extraction began in the early twentieth century; and more recently for its platinum mining, and the diamond mine in Mhototi's neighbouring ward of Murowa. Gold deposits, being the source of a large gold rush in the area during the nineteenth century, have continued to provide a source of alternative income for artisanal miners since economic collapse eroded real wages and farm incomes (Moyo and Yeros, 2005). Clearance of vegetation due to changing land-use patterns has affected rainwater infiltration and soils, yet it was colonial period

[182] Generic term for savanna woodland dominated by trees of the sub-genus *Caesalpinioideae, primarily of Brachystegia*, *Julbernardia* and *Isoberlinia*. Grasses include *Hyparrhenia*, *Andropogon*, *Loudetia* and *Digitaria* (Ryan, 2015).

[183] *Colophospermum mopane* known for its hardwood for building and crafting. Caterpillars of the *Gonimbrasia belina* moth feed on the leaves, and are important source of protein, and income for harvesters (ibid).

logging for power generation for mineral extraction, according to Wilson, that had a lasting impact on woodland structure and species composition (Wilson, 1995:284).

6.2 PEOPLE AND PLACE

Mazvihwa was settled by Karanga between the 1920s and 1950s, as land was alienated in what today is Matabeleland South. As the BSAC and installed chiefs sought to redraw boundaries to assert their authority, so people sought new opportunities. Before settlement, the area was used for seasonal grazing and hunting by the Ndebele (Wilson, 1995). After colonisation, the status of land in Mhototi, neither Crown Land nor native reserve, fluctuated - with parts alienated for freehold African occupation, or leased the grazing to white farmers, resulting in numerous attempts to remove occupants legally identified as squatters.

Converging on largely unpopulated lands, new forms of authority needed to be constructed, often through the division of a chiefly lineage into separate 'houses' (Mukamuri, 1995a). As new roots were established, so traditional rituals such as rain ceremonies (*mitoro* in the Karanga dialect) were crafted to enhance legitimacy of shallower lineages, often with little more than conceptual cultural artefacts. Today, other than during persistent drought when messengers will travel to *Matonjeni* (Matopos Hills), *rusengwe* is made (in grain or financial contributions) for *mitoro* to be held at local sites considered of spiritual value. These range from sacred indigenous woodland (*rambotemwa:* 'refuse to cut'), beneath ancient fruit-bearing trees, or sacred hills thought to be inhabited by the autochthonous spirits, to implore *Mwali* or *Zame* for rains.[184] Here too, small grains play an important role in ritual. But while the processes, preparations and observances are similar to elsewhere, it is thought that spirit mediums linked to the autochthonous spirits of the area, have all but disappeared, to be replaced by mediums of the more recent, shallow lineages (Wilson, 1987). As suggested by Mukamuri (1995a), this is likely to be as a result of the need to accommodate and assert the autonomy and legitimacy of new lineages as a way of forging social cohesion – and yet these sites of ritual observance, including *rambotemwa,* became points of control and contestation between different powerholders.

By the late 1920s, records showed that the areas of Gudo, Mhototi and Gwen'ombe were already densely populated, with substantial riverine communities supplementing their agriculture with hunting and wild harvesting in the Mopane interior (Wilson, 1995). During the incoherent implementation of the NLHA which, despite having no legal basis in Mazvihwa, nonetheless saw periods of destocking enforced from the 1940s. Villages were relocated from riverine or wetland

[184] Spirits, including *mhondoro* (Lion spirits), are sometimes related to the autochthonous spirits associated with the Rozvi people – both of whom are thought to have all but disappeared with the arrival new lineages and land spirits (Mukamuri, 1995a)

areas to the Mopane interior, and grazing management imposed from the 1960s. This relocation was also accompanied by the forced removal of tree and shrub cover for maize cropping which ignored the more complex understanding of the benefits of maintaining a more diverse ecosystem.[185] The loss of upland vegetation combined with the compulsory construction of field contours intended for erosion control resulted in heavy flows of surface runoff capable of breaching contours and *vleis*, resulted in the appearance of deep gullies and river siltation that continues today (Scoones and Cousins, 1989; Grant, 1995; Wilson, 1995). Maintaining trees became of form of quiet resistance to colonial agricultural dictates, within which trees around homesteads could be maintained, providing an important sources of nutrition during drought years, when they were also found fruit more heavily (Wilson, 1990; Mukamuri, 1995a). *Madiro* ('freedom farming' or 'do as we will') was a further expression of resistance to colonial planners, particularly as the Smith regime lost control during the 1970s, often resulting in the further destruction of natural resources (Mukamuri, 1995a). Yet growing popular mobilisation through nationalist-cultural discourse underpinned the call for a return to *traditional* and *cultural* values.

6.2.1 Administration and Authority

Mazvihwa communal area comes under the authority of the Zvishavane-Runde Rural District Council (RDC) which is administered from the district town of Zvishavane, approximately 40 kilometres by tar and graded dirt road from Mhototi (see *Map 6.1*). Reflecting the pattern across much of the country, while the urban council (Zvishavane-Ngezi) has been majority MDC in recent years, Zvishavane-Runde is ZANU-PF and, furthermore, has been a secure ZANU-PF parliamentary seat since independence.[186] Mhototi Ward itself has a population of approximately 4,000 people, consisting of some 834 households divided across forty-three villages, and is served by a ward councillor, and three Agritex AEWs in its 'clusters' (east, west and central), each covering around 10 villages.[187] As elsewhere, inward and outward migration, and movement within Mazvihwa has been an important dynamic affecting change in Mhototi.[188]

Customary authority is under Chief Mazvihwa, a shallow Ngowa lineage of the Hove (fish) totem. Polygamy and resulting lineage proliferation has given rise to succession disputes between five

[185] Including increased animal forage and soil conservation and, through detailed local observation, reduced termite activity and longer-term damage to grassland. It was also recognised that natural depressions, when levelled by ploughing, were subsequently unable to capture and sink rainwater (Wilson, 1995).
[186] Present incumbent, Fred Moyo Gandiwa, has a mining background. Since winning the seat with a large majority in 2013, Moyo experienced a rapid rise through the party, becoming Deputy Minister for Mines until the 2017 presidential transition. President Mnangagwa, also from Zvishavane, has considerable platinum interests in the district.
[187] ZIMSTAT 2012 – Midlands Province http://www.zimstat.co.zw/sites/default/files/img/publications/Census/CensusResults2012/Midlands.pdf
[188] According to longitudinal research undertaken by what is now the Muonde Trust during the period 1998-2014 - 6% of people in Mazvihwa resettled in North Devon, 15% migrated to urban areas or neighbouring countries, and 12% relocated to other resettlement or CAs. Of those relocating within Mazvihwa's CA, 3% resettled from Murowa to a former grazing area in Gudo.

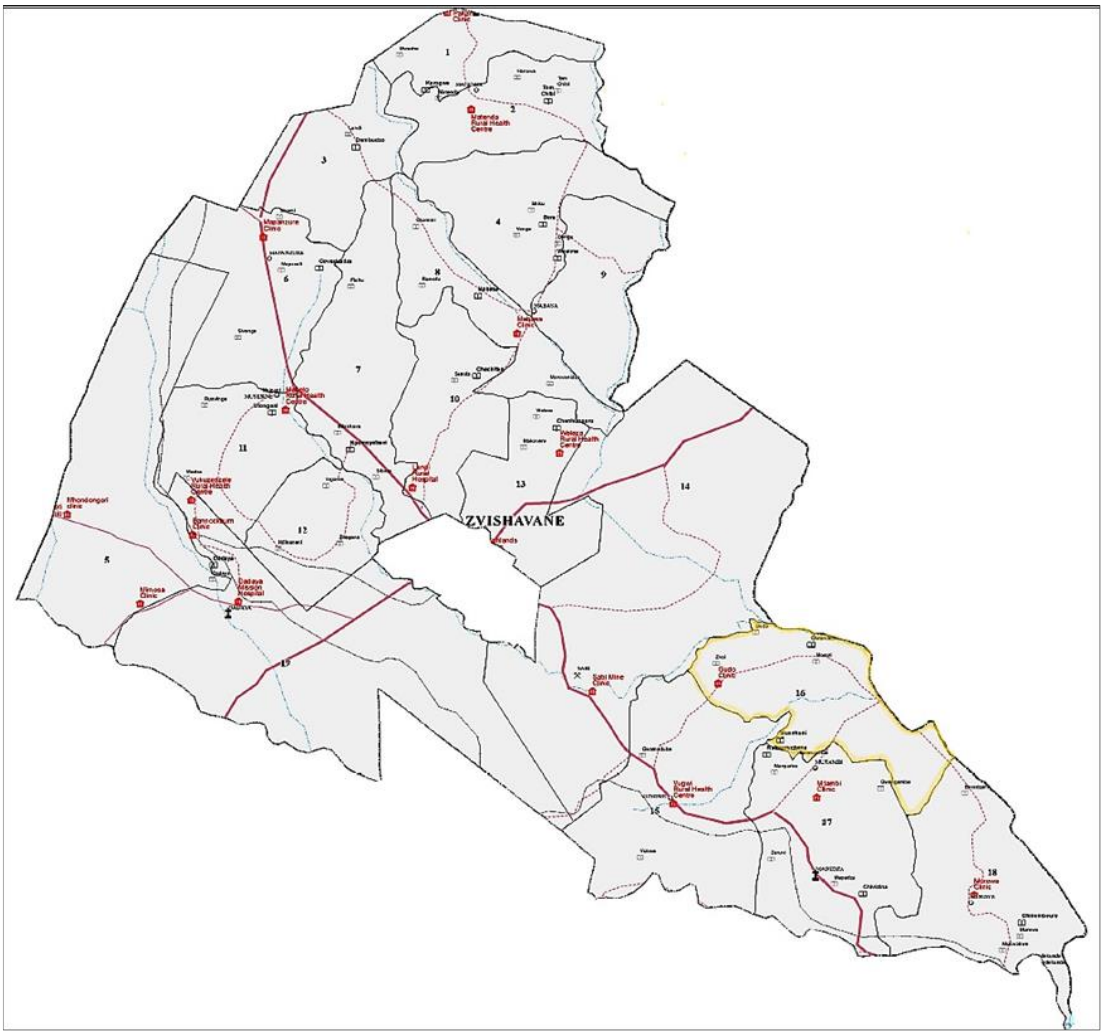
chiefly houses, with the present *acting* Chief holding the post until the dispute could be resolved. With ongoing discussions about the rotation of the chieftaincy around its principle houses, further internal layers have opened up. *'Now everyone in the chief's family feels like a chief'*.[189] The intractability has affected long-term decisions, not least on natural resource decisions and entitlements. The government has the power to dissolve chieftaincies, though this is rare if one remains within tacit clientalist confines. While before independence chiefs acted solely within the boundaries of communal areas (CAs), whether or not they were classified as such, post-independence land reform opened layers of complexity, with competing narratives around earlier boundary claims, lineage divisions, and contestation between chiefs. In recent years, factionalisation between kraal heads and headmen is further complicated by factional alignments within the ruling party itself, all of which has played out at village and ward level. As one responded said, '*So as they compete for this [position] they will not rule impartially, and they will contradict each other. That is the problem [and] why they will not achieve their goals.'*[190]

Each village has a kraal head who chairs the VIDCO with elected members and, while accepted procedures vary from village to village, candidates are often selected from a small inner circle, with VIDCO elections based on a one vote per household basis.[191] Kraal heads oversee the customary regulations established by the chief and headmen that include: urging people to work in their fields to prevent food insecurity; that cattle are kraaled during planting; and that prohibitions on ploughing after the first rains (*chinhemere*) and working in the fields on *chisi* are observed.[192] They also have claims to allocate land, and oversee the annual household collection of *rusengwe,* and for the RDC.[193]

Recipient lists of the most vulnerable are developed by VIDCOs and, in the case of social welfare recipients, final numbers are decided by the ward councillor.[194] Distribution through local party structures is not considered out of the ordinary, seen as aid from the 'party' rather than the state. When asked who, through such a system, would receive the welfare if 100% coverage was not possible, one former ward councillor said, *'So it means that it should be for party members, yes … it might not be fair but it's how it is done.'*[195] Given the tacit acceptance of these structural inequities, accusations of official corruption are instead routinely levelled at individuals, often involving nepotism or theft. In an attempt to limit corruption and/or partisan distribution many

[189] Female focus group participant of the Hove totem – when discussing 'cultural ritual' under storytelling (22.02.17)
[190] Interview - MHT/FI/M/MC/OT (18.03.17)
[191] This excludes the voices of women or youths unless they are household heads.
[192] Interview with village head - MHT/VH/M/MW/AM (14.03.17)
[193] $2 p/a p/HH is collected for the RDC, of which 10% is to be returned for reinvestment in the community as a 'development fee'; and 50 cent *rusengwe* payment for *mitoro*, although many interviewed doubted that this was still taking place.
[194] At the beginning of the 2016/17 season, all villagers received hybrid maize seed from social welfare. No fertiliser was available for distribution during that year (interview with Agritex AEW – 21.03.17).
[195] Interview MHT/VH/M/MW/AM (14.03.17)

NGOs work outside of the village list system, instead calling villagers together to rank and vote on one-another's wealth. With often five or less people in any one village receiving welfare or NGO packages, the stakes are high. As one woman noted *'My wish if the donors are coming they should rather teach skills. Because if they are giving food it creates tension.'*[196]



Map 6.1: *Zvishavane District Map – with Mhototi ward highlighted (source: OCHA)*

6.2.2 Resource Entitlements and Transactions

Kraal heads report allocated CA (communal area) land lying idle which they are unable to redistribute, while others have no access to land, instead farming around their homesteads. And some farmers report being unable to utilise allocated fields due to damaged soil resulting from high levels of synthetic input-use by previous farmers. Others report the commodification of CA land. While, officially, unutilised land must be returned to kraal heads, and payment made only for buildings or other assets on that land, land is rarely, if ever, handed back in this way. If not

[196] Interview MHT/MV/F/MGT/SG (06.03.17). Muonde research assessed the distribution of food aid against needs during drought, finding that that this was no more effectively distributed by NGOs than through government mechanisms.

'sold' it will be retained within the family of the absentee, creating further land pressures. Many are reticent to return land given that, as seen in Chikukwa, it will often be transacted by headmen, described by one Mhototi kraal head as 'stealth payments'.[197]

These changes signify a fluidity, with inward and outward migration, youths returning from South Africa, individualism, asset accumulation and social mobility resulting in new elite family groups emerging in Mhototi that were not as immediately apparent in the other study areas. Within the context of everyday peace, this fluidity, seen alongside contestations between traditional leaders and their authority over people and natural resources, as well a corrosive factionalism, raises questions over social-ecological and economic relations for future generations. As will be explored later, for some the response to this flux should be a tightening of customary rules by drawing on cultural values, while for others it is to extend inclusive decision-making with greater transparency by those in elected positions. These concepts do not always sit comfortably together, yet are part of the complex negotiation taking place in Mhototi, which have profound implications for the changing political and social-ecological landscape and its impact on the sense of cohesion and everyday peace.

6.2.3 Re-Appropriating the Land

As seen elsewhere, the *jambanja* period prior to and during FTLRP was characterised by considerable confusion - with land invasions led by different actors and alliances, from war veterans and local land claimants, local party officials, and contesting chieftaincies. For the people of Mazvihwa the struggle for land focused on two fronts: the four Texas Ranches formerly owned by Union Carbide north of the Sabi River - an area known as North Devon, with farm invasions beginning in 1999; and extended west to Insiza District, in Matabeleland South.[198]

Seeking better farming opportunities on North Devon's nutrient-rich clay soils, resettlement farmers moved from over-populated communal lands, particularly from the sand veldt, where generational sub-divisions were a major factor in resettlement decisions (Mbereko, 2010). After the international fall-out from FTLRP that resulted in scant government resources to aid resettlement, and with international NGOs resolutely refusing involvement in FTLRP schemes, resettlement farmers found themselves in remote areas without promised infrastructure and services.[199] Most arrived with few assets or social networks to depend upon, instead forming

[197] Interview with village head - MHT/VH/M/MW/AM (14.03.17)
[198] The focal point in Insiza was the extensive ranch then owned by De Beers, so large that it straddled many territories, covering 82,251 acres, or 333 square kilometres. Until district and provincial boundary changes in the 1970s, part of these lands were in Mazvihwa, leading the re-emergence of multiple land claims, due to earlier evictions and lineage fragmentation. Ken Wilson, 2015 entry to Muonde Trust website.
[199] It was not until 2013 that North Devon's seven villagised areas were serviced with two boreholes and a primary school. Two pre-existing dams around which vegetable production is tightly managed by garden committees.

informal groups practicing *nhimbe* to share knowledge, skills and labour. As Chigumira points out, this form of social organisation, outside of state and traditional leadership structures 'aims to create strong kinship and lineage ties in light of the diverse ethno-regional backgrounds and identities of the settlers, and in maintaining the 'new' social fabric in the community.' (2017:6). While higher yielding, clay soils are more challenging during the periodic extremes of drought and heavy rains. And though not regretting their move, as one young farmer pointed out *'this land is for cattle, not cropping … it is too heavy and dry. Our season is too short, and every three years it will be drought. When we came here we had so many cattle – maybe 13 – but now there is drought, so some they died, and others we sold for food. Sometimes my father talks about coming here so we can grow poverty.'* With the majority of plots allocated as A1 smallholdings, this land is already coming under pressure from generational sub-divisions.[200] Furthermore, land tenure remains relatively insecure, not least due to the complexity of the enacting the Land Bill, and attendant on ruling party affiliation as political pressures have increasingly been expressed through control over dwindling patronage resources.[201]

Nonetheless, the benefits of resettlement are understood to extend far beyond access to arable land for those who settled, opening up access to non-arable resources such as dams, grazing and hunting, which had a significant impact on those remaining in the adjoining communal area.[202]

6.2.4 Relocation and Dislocation

Lands appropriated by private sector interests mark an inversion of the populist drive to reclaim land, signifying the states need for foreign direct investment. The case of communal farmers from Mhototi's neighbouring ward, Murowa, has increasing resonance today, as Mhototi considers the socio-cultural impact of future imposed development. This involved the discovery of diamonds in Murowa during the 1990s, followed by the negotiated purchase and relocation of 142 households from Murowa to 15,000 hectares on a block of white-owned farms in neighbouring Masvingo, by the government and Rio Tinto.[203] This was to unravel when these farms themselves became a focal point of local competing interests and land invasions in 2000.[204] International capital, and

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[200] On resettlement in North Devon, ten plots were eventually pegged as A2 farms of 500 hectares, with the remainder laid out as 250 A1 farms of six hectares. As defined by the local Lands Office, under the Ministry of Lands, A1 farmers may not keep more than two head of cattle on their six hectares.

[201] *'The ruling party used this land to campaign … they know what they are doing. We have no-where to go, so we dance.'* Interview - MHT/FI/F/ND/015 (21.03.17). These reports follow patterns found elsewhere (Chigumira, 2018)

[202] Communication with Ken Wilson (02.12.17). This was also found during surveys in North Devon, with resettlement farmers expressing concerns about overgrazing, due to CA farmers releasing their cattle in North Devon.

[203] In 2015, under indigenisation, Rio Tinto sold a 78% stake in Murowa Diamonds to RioZim, registered in the British Virgin Islands http://www.miningmx.com/news/diamonds/27318-rio-tinto-defends-zimbabwe-diamond-sale-amid-storm/.

[204] The process risked derailing Rio Tinto's model resettlement and carefully laid CSR strategy, through which it hoped to rebuild its shattered international reputation – building a school, clinic, roads, sinking boreholes and providing cattle, breeding bulls and training (research under taken by Daniel Ndlovu in 2016 (Muonde Trust).

indeed the Murowa settlers, found themselves caught between a government wary of alienating war veterans; competing provincial governors; the CFU representing the six white farm owners; and the subsequent appearance of local and other land invaders, led by a charismatic war veteran, who had long-identified this land as ripe for resettlement.[205] After painstaking negotiations over divisions and allocations, and the end of the Rio Tinto agreement term, with no chiefly authority to defend their interests the Murowa settlers lost their patron as well as much of the land they were promised, leaving them aggrieved and isolated.[206]

Back in Mazvihwa, where people once believed that the Murowa settlers were fortunate to be moving from small sandveld plots to generous clay-rich lands, some now look for other explanations of why the resettlement went awry. This is often articulated as dissatisfaction with negotiations by customary leaders resulting in the lack of promised jobs and infrastructure investment in Mazvihwa[207] but, increasingly, some question the disturbance of the site itself, an ancestral burial ground, despite ancestral remains having been carefully exhumed and reburied according to ritual observance (Shoko, 2006).

6.3 SHAPING ECOLOGICAL CHANGE

No story of change in Mazvihwa can be fully understood without discussing the significance of the life-long work of Zephaniah Phiri-Maseko (1927-2015), known as 'the water harvester'. 'Mr Phiri unlocked the discarded hidden potentials for native Zimbabweans as capable and intelligent farmers, inspiring thousands of local and regional small-scale farmers.'[208] Beginning as a practical strategy to produce food during his incarceration for nationalist tendencies in the 1960s, and continuing on his release, having been black-listed from state work, Mr Phiri focused on working his marginal Murowa smallholding.[209] Through a series of small dams and ponds, later augmented by sand-filled 'Phiri Pits' within contours for increased water infiltration, Mr Phiri demonstrated significant increases in productive diversity and relative yield, and was able to reduce inter-seasonal variability - developing intensively integrated cropping systems. Central to this system were fruit trees to create micro-climates, grasses for soil stabilisation and crafting, intercropped horticultural and cereal crops from small grains to rice, bee keeping and fish ponds, and livestock

[205] Cosmas Gonese was part of the Association of Zimbabwean Traditional Ecologists (AZTREC) comprised of spirit mediums, chiefs, headmen, churches, war veterans and farmers to preserve wetlands and *marambotemwa* (Daneel, 1996). Gonese seemingly out-manoeuvred and negotiated between key stakeholders to secure a settlement (Wilson, unpublished). Today the Shashe Block is the base for ZIMSOFF, which currently heads La Via Campasina, and the Shashe Agroecology School.

[206] Interviews conducted with Murowa-Shashe settlers by Daniel Ndlovu in 2016 (Muonde Trust).

[207] Hundreds of hopefuls attend *mapure*, a 'lottery' of names selected randomly by Murowa Diamonds, a form of quarterly recruitment of unskilled labour. The large trucks use bridges and arterial road that have become increasingly unstable.

[208] Obituary in the Herrald (Gogo, 2015).

[209] For which Phiri later thanked the Smith regime.

fed from a diverse range of residues (Maseko *et al.,* 1988). The learning that evolved, disseminated through his Zvishavane Water Project since 1988, was instrumental in spreading water management techniques across Zimbabwe and beyond.[210] In challenging the state's formal position on water and soil conservation, for which he was arrested three times, Mr Phiri's innovations were subsequently proved to conserve soil and reduce waterlogging, and ultimately overturned Rhodesian hydrological understanding that had persisted for many decades after independence.[211] A form of persuasive resistance to conservation dogma, Mr Phiri's work is now officially recognised and valued, due in large part to awards won in later life, and for whom there is now an eponymous innovation award.[212] His story is not only one of how past injustices might be overcome, rather than reproduced, but of how shaping change through human agency might result in a belief in the collective capacity to become producers of experience and shapers of events, through non-confrontational ecological means.

6.4 CHANGING RESOURCE-USE AND LIVELIHOOD STRATEGIES FOR RESILIENCE

During notional livelihood ranking undertaken as part of Muonde Trust research (1985/6-2010/11), livelihood preferences for cash earnings have changed over time, which may be interpreted as resulting from periods of drought or changing economic conditions. Nonetheless, mixed farming with livestock and arable cropping remains pivotal for manure and crop residue transfers, particularly on the sandveld. There has also been a growing preference for horticultural sales as a means of income since the 1990s. This indicates changing land-use patterns stemming from renewed production at riverine gardens as a result of the relaxation of legislative enforcement since the 1990s (Scoones, 1997) and, increasingly, water harvesting in micro-dams at homesteads. This diversification has been particularly beneficial to women in terms of labour efficiency, as well as for household consumption and income.[213]

Preferences for income activities associated with wild harvesting, woodland products and crafting, and hunting and fishing saw declines in ranking. However, a high number of wild edibles were both readily identified and harvested by women for household consumption. During this

[210] Receiving approx. 10,000 visitors over thirty years: from government departments; research stations, universities; thirty different NGOs; as well as people from 14 African and 9 other countries in Asia, Europe and North and South America; thousands of farmers who came on their own or with local NGOs, and Agritex AEWs (Muonde website).
[211] That *vleis* were sponges to be conserved at all costs, as opposed to being fed by water surfaced through clay bands
[212] National Geographic Society; Howard Buffett Award for Leadership in African Conservation (2006); Ashoka Fellowship Award (1997-2002)
[213] Muonde research - increase in some farm assets over time, such as wheelbarrows, reflect changing land-use and increased horticultural activities. The availability of solar equipment and mobile phones have also been important HH investments.

research it was also noted that urban buyers were purchasing wild vegetables harvested by local women, reflecting changing urban tastes and demographics.[214]

As a result of El Niño in 2015/16, yields in central Mhototi's sandveld were particularly affected, with many households reporting a total harvest of only 5 buckets, resulting in aid dependency.[215] However, despite El Niño, those interviewed with ponds and dams reported yields of 0.75 tons p/ha.[216] According to Muonde research, pearl or bulrush millet (*mapfunde*) was the preferred grain in the 1980s, although this subsequently declined with the promotion of maize packages. More recently, drought response and small grain promotion have seen a rise in preference for sorghum, irrespective of farmer's wealth, now accounting for the biggest portion of land under cultivation. Here, the diversification of GMB in to small grains as well as the emergence and promotion of contract farming has made its mark on land-use patterns. As well as direct sorghum sales to brewers, many now farm cotton, some organically. At a time of declining cotton prices, those who farmed under contract to CotCo reportedly purchased combinations of six fertilisers and pesticides from CotCo. Having given over most of their land to cotton, and with contract prices reportedly not honoured, high levels of aid dependency had resulted.

With declining formal employment and the growth of the informal economy, income from artisanal mining remains an important supplement to farming activities, despite reports of family disruption due to men being away for extended periods.[217] Nonetheless, changing gender roles are likely the result of longer trends such as income diversification, asset accumulation and shifting labour patterns. These changes also give rise to concerns about changing social attitudes, with many citing data on increasing numbers of marriages ending in divorced, more women not remarrying, and younger women never having married.[218]

6.5 COLLABORATION FOR COMMUNITY-GENERATED CHANGE

Muonde refers to the indigenous fig trees of the area, which are indicators of underground water, and thought to accommodate ancestral spirits. As preferred sites for ceremonies and gatherings, they have come to symbolise a meeting point between the spirit world, the community and its ecology.[219] While beginning to function as the Muonde Trust in 2012 (registering in 2014), the organisation has a long history in the community from which it emerged. The genesis of Muonde

[214] Those captured during February-May 2017 were *nyovi* ($12 p/bucket) and *munyemba* ($8 p/bucket)
[215] The average maize yield p/ha in CAs in 2015/16 was 0.24 ton (in 2016/17 was 0.68 tons). Ministry of Agriculture. Second Round Crop and Livestock Assessment Report 2016/2017 Season.
[216] Of which approx. 4ha was reportedly planted to maize and various small grains.
[217] Reports of errant behaviour of husbands or youths, with excessive drinking as well as the appearance of 'small houses' as men take second wives. FGD with women (08.02.17), and later as a wider group with women, men and youths (09.02.17). Also highlighted during women's storytelling group on 'taking action together' (22.02.17)
[218] Muonde Research.
[219] Muonde Trust website.

was the relationship between doctoral researcher Ken Wilson in 1985-9 and his then research assistant Abraham Mawere, an aspiring local teacher and former ZANLA auxiliary (*mujibha*). This research was part of a collaborative programme incorporating a number of UK and local researchers, and involved Zephaniah Phiri - resulting in action research on health outcomes, as well as livestock, water and afforestation - involving the community, researchers and extension staff (Scoones and Cousins, 1989). Such research interaction has been critical in highlighting and giving voice to local knowledge, through which complex systems could be better understood by researchers, institutions and, most importantly, resource-users themselves. The resulting research has documented the dynamic evolution of social-ecological relationships that have been shaped by legacies of past actions, events and institutions over time, upon which this research has been able to draw.[220]

Being a small community-based network, Muonde is grounded in the people who drive, contribute and continue to exchange. An enthusiasm for shared learning as a means of developing practical community-generated responses has, since 1986, been based on data that maps the changing relationships between the people of Mazvihwa and their agroecosystem. This has resulted in the introduction of domestic architecture run by women to promote ventilated kitchens and traditional building technologies for health and hygiene, including the management of plastic waste; OPV seed use and saving; as well as tree planting and woodland management, around which new technology is being harnessed, such as GPS mapping to monitor utilisation (Solera *et al.,* 2016).

A tightly knit team of some twenty-nine people forming a largely local board and active committees, are committed to outreach and, until very recently, served on a voluntary basis. *'aMawere asked if we should continue working without payment. We said that we would continue working as a group, because Muonde is our own thing.'*[221] Muonde today is still led by Abraham Mawere, now a kraal head, mobilising the community in his pursuance of expanding the range and reach of Muonde's work. While serving for two terms as the Mhototi ward councillor, Mawere played an influential role in farm invasions and subsequent resettlement. With many international NGOs not engaged in post-2000 FTLRP areas, organisations like Muonde have provided vital assistance to resettlement farmers. Given the sensitivity to defiance of government conservation instruction, Muonde has navigated a careful path in its promotion of alternatives, enhanced by the latter-day acceptance of Phiri's work.

[220] As part of these action research exchanges, in association with the community and the University of Zimbabwe, many doctorates have been awarded, including: ecology and human health (Wilson, 1990); livestock and human populations (Scoones, 1990); Social Forestry (Mukamuri, 1995); livelihoods and vulnerability (Mashongha, 2009)

[221] Interview with female volunteer - MHT/MV/F/MGT/01 (06.03.17)

Plate 6.2: *Dead-level contour (source: Muonde Trust)*

6.5.1 Water Harvesting and Soil Management

Water harvesting and soil management suitable for this semi-arid region remains the central pillar of Muonde's work in Mazvihwa. And while other exchanges have been more fleeting, they have been just as impactful. A visit in 1995 by US permaculturalist Brad Lancaster, inspired by Phiri, evolved into a series of exchanges over the years; and Brock Doleman who introduced that African invention, the A-frame to Mazvihwa, leading to improvements in contours levelling for more efficient infiltration (see *Plate 6.2*). While being instrumental in catalysing more integrated thinking about water systems and erosion control these visits are not, according to Wilson, the whole story in understanding the changes that have subsequently taken place in Mazvihwa. After years of demonstration and adoption by relatively few farmers, it is not entirely clear why these techniques began to spread rapidly across the community in the 2000s. It is thought that thirty years of action research with external researchers will have played some part in motivating change, alongside the persistence of the Muonde team. However, this period also coincided with the escalation of economic hardship combined with increasingly erratic rainfall, and with institutional acceptance following Mr Phiri's international recognition. For one respondent and Muonde volunteer, the persistent aid dependence and remoteness were influential factors in the search for alternatives.[222]

[222] *'Here in Mhototi we were just given goods by the donors, and each and every year, whether it rained or not, we were just surviving on donor aid, which was not good. For some years we received much rains, but we were not sustained with that water. So we decided to follow the water harvesting techniques, since we were living a life of just being given food, so we chose this way so that we can survive on our own.'* Interview - MHT/MV/F/MKD/010 (13.03.17)

The reintroduction and expansion of small grains has been an increasing part of Muonde's approach, coinciding with efforts by both Agritex and the local MP. As has been a form of wealth generation based on agroecosystem management, systematically supporting more integrated approaches to water harvesting and management which have contributed to the expansion of these and inter-related techniques. Drystone walling (*Plate 6.3*), introduced from the UK, resonates with early Iron Age settlements of the region, as seen at Great Zimbabwe (derived from a Shona term meaning *house of stone*). As another (re)introduced technique, this benefits from readily available rocks and stones in the area and, alongside gully reclamation, is used as a form of erosion control as well as securing homesteads from grazing cattle, while complimenting live fencing to reduce cutting acacia for 'brushwood fencing'.

Plate 6.3: *Dry stone walling in Madzoke Valley (source: Muonde Trust)*

6.6 ROLE OF AGRITEX

The relationship between Muonde and Agritex has led to a mutually supportive approach. While through Muonde and its visitors AEWs have been trained in water harvesting techniques and structures, it is not inconsequential that Agritex AEWs received training in organic farming from Christian Care and Africare within the past decade, equipping them with the more detailed skills. As a result AEWs are subsequently more knowledgeable and able to adapt to local conditions. Critically, to support informed planting decisions, AEWs here also advised farmers, following El Niño, that La Niña would bring heavy rains.

Agritex training was focused around twenty-four riverine group gardens, where (mainly) women cultivate vegetables, and acquire and share skills that are transferred to homestead plots; and active Master Farmer (MF) clubs consisting of men and women. While there is no cost for attaining a MF certificate from Agritex, there is a cost for entering Agritex competitions. MFs

reported assisting those who cannot afford to enter by purchasing eachother's produce.[223] However, MFs are often referred to as a farming elite due to the land and asset requirements.[224] As one innovative farmer building up his assets said, *'Here [Agritex] don't recognise me as a farmer, but Muonde does.'* Open days are held every year, providing opportunities for exchanges with MFs. Currently Muonde does not facilitate its own farmer open days, but many of the MFs are also part of Muonde, enabling the cross-pollination of Muonde approaches through these Agritex occasions.

Conservation farming (CF) techniques predominate in Agritex instruction, often without fertiliser due to lack of availability and affordability. While many use a combination of OPV and hybrids seeds, the MFs surveyed and interviewed as part of this research all self-identified organic producers, as did the AEW. Farmers are reportedly less enthusiastic about CF due to the required adherence to strict preparation procedures and planting calendars.[225] As modern farming in context was defined by respondents as the use of the plough, and planting in straight lines as opposed to broadcasting seed, it was also felt that the zero tillage promoted under CF was 'going backwards'.[226] Other farmers pointed out that undertaking the prescribed preparations before the rains, when the land is dry and harder to work, was more labour-intensive and so they preferred to clear land and plant once the rains had arrived. Others talked of the risk of early germination if the first rain was not followed thereafter by more substantial rains, resonating with tradition that forbids planting after the first small rain. CF is known colloquially as *dhigaufe* (dig and die) – a word-play on the official *dhigaudye* (dig and eat), pointing to a resistance to state-controlled interventions of the past.

[223] Interview - MHT/F/M/MGT/03 (06.03.17)
[224] According to an award winning MF a basic requirement to qualify is five building structures, fruit trees or orchard, pits for waste, a toilet and space to plant five crops in rotation, each on 0.4 ha and above. Master farmer interview - MHT/MF/M/MGT/02 (06.03.17)
[225] Interview with Mhototi AEW - MHT/AEW/F/GD/19 (21.03.17)
[226] Semi-structured interview question on traditional farming techniques asked of all farmers across sites.

6.7 RESEARCH PROCESS AND PRESENTATION OF DATA

Farming Typologies

Of the sixty-five farmers surveyed, forty-eight self-identified as organic, agroforestry or permaculture, referred to here as 'organic'. Reference to agroforestry and permaculture are understood as being influenced by visitors, rather than ongoing training provided through the Muonde network *per se*.[227] Ten farmers were practicing conservation farming (CF) with fertiliser and hybrid seed when available, referred to here as 'conventional'. Only seven farmers were found to be mixing organic and conventional approaches, often at different sites - referred to here as 'hybrid' farmers. Eight of the ten conventional farmers were from North Devon, where small amounts of hybrid seed and fertiliser are provided by the state; and four of the *hybrid* farmers were involved with Muonde, describing targeted applications of fertiliser on waterlogged areas susceptible to nutrient leaching. All respondents were smallholder farmers, for whom only sixty-one percent of household income was primarily derived from farming, with other primary source noted as vending, retail, remittances and gold panning.

Plate 6.4: key words emerging under each research theme during early FGDs in Mhototi

[227] For instance, those identifying with agroforestry were found to have planted some fruit trees within their homesteads.

Farmers selected for interview were identified from survey responses on: levels of innovation, seed saving, and agro-biodiversity, as well as unity, trust and co-operation. These were consistently high in Muguti 2 and Mhike C, upon which many interviews were then centred to explore relationships further.[228]

6.7.1 RESILIENCE

From *Plate 6.4* it is possible to see the integrated understanding of resilience that exists amongst agroecological farmers in Mhototi. Here, terms more often associated with agency also came in to play, such as problem solving and awareness of change, and yet are essential characteristics for resilience. During the body mapping exercise to explore needs (see *Plate 4.2* in methods chapter), while the women's and youth's maps reflected concerns and aspirations associated with the reproductive realm, strongly correlating with agency and peace, the men's was more immediately oriented towards technical and practical 'provisioning'. On closer inspection, these reflected a detailed problem-solving 'to-do' list not found in body maps elsewhere. Landscape maps, on the other hand, did not identify areas of erosion and planned action, concerning themselves instead natural features and infrastructure, and delineating areas for cropping and grazing. When pieced together and asked how this picture differed from 20 years ago, responses included population increases leading to pressure on grazing land, more deforestation, and the appearance of erosion. Positive changes noted were more boreholes, and more (localised) land rehabilitation taking place. When mapping significant historical events reaching back to the 1940s, droughts was the most frequently noted, from 1947, 1959, 1982, 1987 (bringing locusts, also in 1995), 1992 (heralding the cult of Mbuya Juliana) and 1998. [229]

Mhototi Resilience Indicators (ranked)

R1) Rainwater systems for harvesting and dams for irrigation
R2) Good family health
R3) Cultural rituals being maintained.
R4) Ppl co-operating to solve problems.
R5 More planting of diverse crops
R6) Having markets for income.
R7) New innovations to manage drought.
R8) More small grains being planted for drought resistance.
R9) Fewer ppl not planting because of dependence on food hand-outs.
R10) Less confusion about planting times
R11) Seed security improved

Plate 6.5: *Mhototi final shortlist of resilience indicators - selected 09.02.17*

[228] It should be noted that Muguti 2 farmers settled together on former grazing land in Gudo (west) and have larger plots (ave. 5 ha) with strong clay soils, and belong to the Shumba totem. At the opposite end of the ward, in east, Mhike C has a strong cohort of Muonde volunteers, despite having smaller plots (ave. 3 ha) on sandy soils. Plot sizes of survey respondents only, as identified from demographic data, and refer to size of stand (plot around homestead), and arable fields.

[229] El Niño of 2015/16 was not present, although the 'good rains' of 2017 were.

The FGDs in Mhototi selected and agreed on a final shortlist of ranked indicators, shown in *Plate 6.5*, with number one being the most important. From the men's indicators and discussion that contributed to the shortlist a strong theme emerged around adaptive capacity, such as *innovation*, *testing new ideas*, *analysing problems to find solutions*, and *changing our behaviour to suit our situation*. For women, *using and sharing knowledge*, *co-operation*, *perseverance* and *maintaining our culture* were important features of resilience. The youth's list was largely a combination of these themes, but also included *resistance*: to land sales and to forced participation in violent political campaigning (discussed further under agency and peace, below). When the three groups came together to negotiate their shortlist, explicit reference to water harvesting was a notable omission given that this is the primary focus of Muonde and FGD participants. When raised before final ranking,[230] this was added to the list and ranked in first place.

6.7.1.1. Soil and Water Conservation

As already discussed, many of the Muonde farmers involved in FGDs and interviews were also Mater Farmers (MFs) and therefore in possession of assets, denoting a level of wealth and status. However, many were found to have acquired these assets as a result of their enhanced farming systems over time. Within this research snapshot, innovation was therefore found to be a prerequisite to wealth generation, rather than wealth being a prerequisite to ones' capacity to innovate, although this was also recognised in some instances. Furthermore, the majority of farmer-innovators interviewed were organic MFs, integrating the techniques shared by the AEW, augmented by Muonde's work on water and soil management infrastructure.

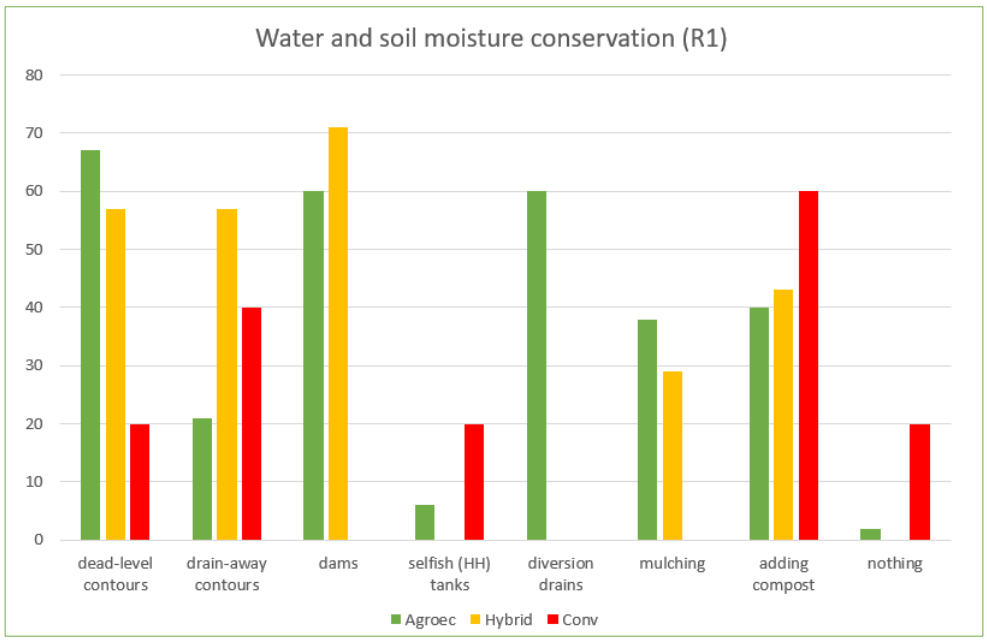

Plate 6.6: *Mhototi survey responses on water and soil moisture conservation (R1)*

[230] By myself at the end of the process so as not to influence the main thrust of discussions.

When surveyed, more organic than conventional farmers had dead-level contours (67% and 20% respectively), while more conventional and hybrid farmers continue to practice the less efficient drain-away contours. Seen in *Plate 6.6,* many organic and hybrid farmers had dams (60% and 71%), while none of those identifying as conventional did. Sixty percent of conventional farmers practicing conservation farming (CF) under Agritex instruction were using making and using compost on dryland crops. The risks associated with diverting time from farming activities to create water harvesting infrastructure will certainly have deterred some from committing to many months of excavating contours and dams. But for those within the Muonde catchment who are now diverting and harnessing water, it is common to hear references to 'foresight'. Even farmers with smaller ponds now have water for up to eleven months of the year in this semi-arid region. One farmer with few assets, proudly showed his hard-worn mattock after eighteen months of digging, saying that he even had enough water to bath whenever he wanted.

Nonetheless, few farmers protect their soil with mulch, due to a stated shortage of organic materials as well as laboriousness. Those who did were often women with plots in riverine gardens (under Agritex training), with the approach transferred to homesteads. On natural soil amendments, while 43% of all respondents make and apply compost, more conventional (60%) than organic or hybrid farmers did (40 and 42%), applied with fertiliser in planting stations as part of CF preparation. MFs were found to be making thermal compost in pits,[231] some with added organic matter within contours. Those with livestock add maize stover and weeds to the kraal floor where it can be integrated to speed up decomposition and contribute to creating a nutrient-rich substrate, before being cleared and returned to the fields. The more vulnerable farmers, without animal or crop residues, are dependent on late seed hand-outs from social welfare, and so resort to Compound D applications for rapid growth, exacerbating the cycle of dependency. Some Muonde hybrid farmers were experimenting with different approaches, particularly where dams have altered their agroecosystem.

> I normally use compost and animal manure right in the field because, one, it keeps the moisture in the soil, so that helps me a lot, because every year I'm going to harvest. And also I'm using the fertiliser in the garden because the land is always wet, because I'm irrigating it. …But I don't use fertiliser for more than 2 years. If I use it for more than 2 years I change, I put manure to restore the soil.[232]

When asked about the observable differences between his own organic crops and his conventional neighbour, another farmer's response was measured but clear on his comparative resilience in the face of extreme climate variability: *'This year, in my opinion, it's hard to compare*

[231] Thermal compost is promoted by AEWs, as was part of their Africare training at River of Life in Harare (now called *Farming Gods Way*).
[232] Interview with Muonde innovator and MF - MHT/FI/M/MC/014 (18.03.17)

because it's a good year. But in bad years, like last year, people who were using fertiliser failed… But those who used organic harvested even though the year was bad.'[233]

While innovations tended to be restricted to those that have been introduced (*Plate 6.7*), the process of adapting these was ongoing, and was found to have increased the adaptive capacity of farmers across the board, with techniques being carried to the resettlement, where farmers have started to build and cultivate from scratch.

6.7.1.2. Opportunities for Diversification

While contours and dams promoted by Muonde may no longer be considered 'innovations' as such, in developing water harvesting infrastructure, farmers are shaping their environment and creating micro-climates that have not only extended the horticultural season, but has also enabled them to experiment with species and varieties not previously grown in the area.[234] Farmers-innovators have been quick to identify and respond to gaps in the market. For one determined Muonde volunteer who buys produce for sale in her shop, '*We want to change our region to another region which is a region that has water throughout the year.'*[235]

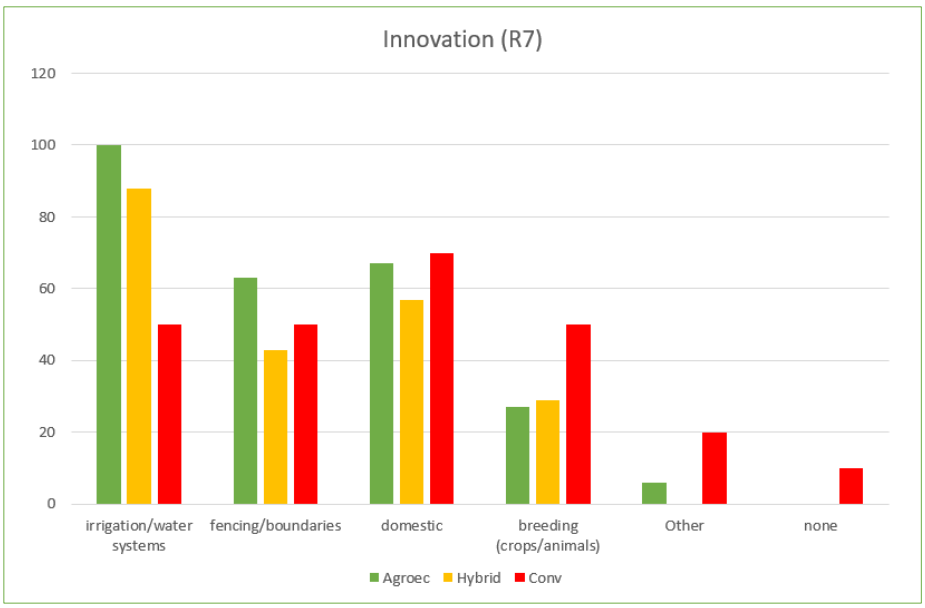

Plate 6.7: *Mhototi survey responses on Innovation (R7)*

One innovative farmer with a high level of agrobiodiversity is producing three varieties of groundnuts in phases, from early to later maturing. He refers to this as being part of his 'disaster recovery plan' to diversify and stabilise his output for market advantage. *'It's like the early maturing has a big advantage 'cause I can sell locally before the market is flooded. But when the*

[233] Interview with Muonde innovator and MF - MHT/FI/M/MGT/04 (09.03.17)
[234] These included tomatoes, mangos and bananas, and grains such as wheat, corn for popping and rice.
[235] Interview with female farmer and Muonde volunteer - MHT/MV/F/MKD/010 (13.03.17)

market is flooded, then I can [afford to] compete'. Adding '*When it comes to my farming - if I fail in my crops, I'll look to my animals, then to my gardens, and then my fruits. When you face challenges you look for solutions.'*[236]

Many with dams and ponds (52% of those surveyed) are also fish farming, primarily for household consumption, and proudly point to the biodiversity that these attract and support. Some organic farmers reported earlier use of fertilisers (on crops such as cotton) but had subsequently reverted to manure due to effects on fish stocks, indicating a heightened awareness of downstream impacts and wider ecosystem concerns. As one farmer pointed out one afternoon as we waded through his pond spotting aquatic species, *'I want to have a complete ecosystem. I see there are some birds, and I don't want my neighbours to shoot them [with slingshots]. And it is quite a silent place, and other animals are coming to drink the water.'*[237]

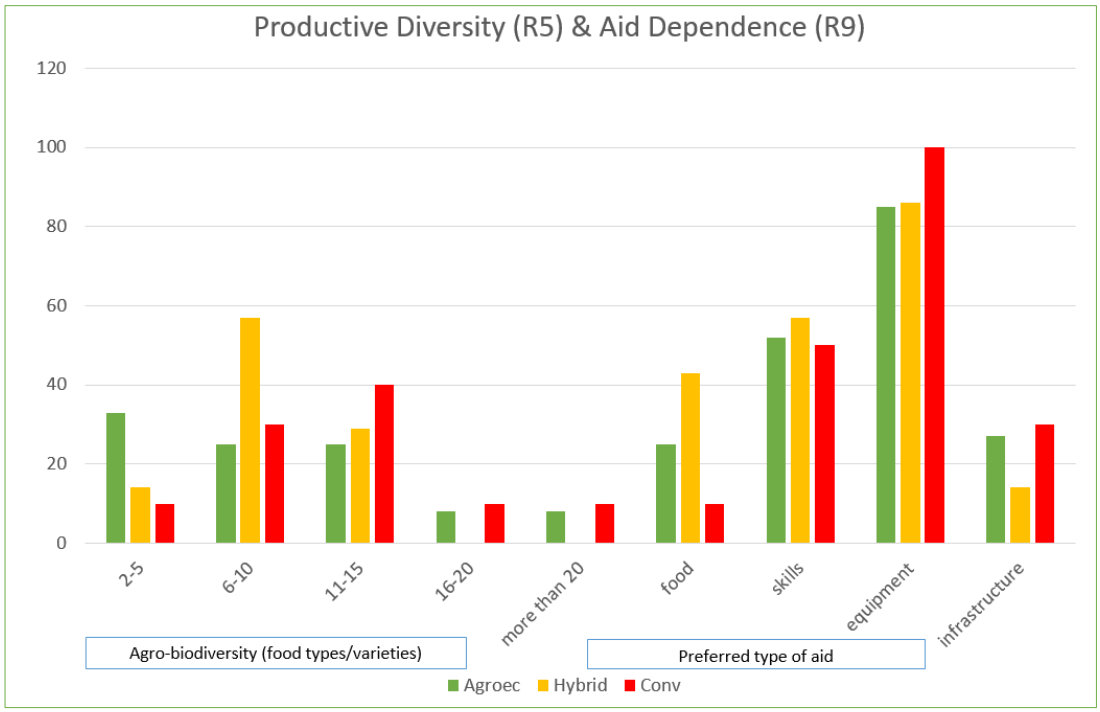

Plate 6.8: *Mhototi survey responses on agrobiodiversity (R5) and aid dependence (R9)*

For others, the picture is more mixed. The higher number of farmers across the range (29%) indicated planting between 6-10 different crop types and varieties. However, more organic farmers (33%) indicated only 2-5, while more conventional farmers (40%) indicated 11-15 (R5).[238] When seen against *donor dependence* (R9) in *Plate 6.8*, there is a correlation between agro-biodiversity and demands for skills and equipment from donors, rather than food aid. This was particularly so for farmers in the more isolated resettlement area. Of the 25% said who would

[236] Interview with Muonde innovator and MF - MHT/FI/M/MC/014 (18.03.17)

[237] Interview with Muonde innovator and MF - MHT/FI/M/MGT/05 (09.03.17)

[238] Resettlement farmers were found to have higher diversity than those in the CA, yet have more concerns about food insecurity and sickness. This is thought to be due not only to the costs, but also distance from shops and clinics.

rather receive food, many were found not to have indicated a lack of food as being an impediment to their *peace of mind* (P8), indicating a level of habituation to food aid dependency. Nonetheless, food shortages and ill health do remain considerable cause for concern, although less so for organic farmers.

Organic farmers with high diversity were using both OPV and hybrid maize, including early maturing varieties within their cropping systems to spread risk. Many different responses emerged as a result of complex calculations, reportedly made on an early prediction of and responsiveness to seasonal rains, and of different soil types within the same piece of land. *'You should always be ahead of your environment [but] you shouldn't be too far ahead, so that if anything goes wrong you can come back and correct, or cope with that environment.'*[239] Other considerations were family needs and labour requirements, taste preferences, and susceptibility to pests and diseases during storage.

Perhaps surprisingly, even MFs were less concerned about standard grain measurements p/hectare, instead considering production in terms of total grain storage and sale.[240] Nonetheless, innovative organic farmers with high diversity reported averaging approximately 3 tons p/ha even during 2015/16. Sorghum (*mapfunde*) was the most widely planted small grain with an average of 96% total coverage (across farming typologies), followed by finger millet (*munga*) at 57%, and pearl/bulrush millet (*rapoko*) at 31% of respondents. The lower preference for pearl millet (especially amongst women and youths) was reportedly due to higher labour demands.[241] Significantly, no-one in Mhototi reported bird damage as a disincentive to small grain production, signalling a level of collective understanding and endeavour that damage would be less concentrated and thus more tolerable the more widely they are planted.

6.7.1.3. Seed, Storage and Pest Management

Despite seed security having been raised during mapping, no reference to seed appeared in group longlists, and was raised later with Muonde given its potential for providing useful resilience data. This can therefore be seen in eleventh-place. As elsewhere in Zimbabwe, the seed sovereignty discourse has yet to be adopted in common parlance or consciousness, with responses still formulated around 'security'.[242] However, it is possible to detect occasional shifts from simple cost calculations to a renewed value and sense of agency in circular farming systems. *'This method is more effective, since I haven't got many expenses. So now I'm not worried, as I know that what*

[239] Interview with Muonde innovator and MF - MHT/FI/M/MC/014 (18.03.17)
[240] The focus of Agritex AEWs has been on pest and disease control, crop spacing and rotation.
[241] Husks which are labour intensive when pounding. Muonde plans to raise funds for a grinding mill suitable for pearl millet, both to generate income and to incentivise an increase in its cultivation.
[242] There are increasingly exceptions to this, partly stimulated ZIMSOFF's role in La Via Campesina, and recent initiatives including PELUM under the SKI initiative with funding from Biowatch and Earthlore.

I harvest this year belongs to me.'[243] Overall, 98% of farmers surveyed in Mhototi were found to save seed.

The majority of survey respondents (59%) were found to save between 4-8 types, and 24% between 9-15 types, using the traditional method of hanging seed heads in the kitchen to be cured by smoking, as well as storing in containers with wood ash. During a discussion at the end of an interview, one elderly man passing by came to share a detailed description of how his parents made dung-sealed baskets. By the end of their discussion, both resolved to experiment with this technique – providing an example of the importance of memory as part of farmer-to-farmer learning. Farmers in Mhototi were found to be at ease with traditional methods of farming, and have integrated complementary approaches, while rejecting others that were considered inappropriate to resource or labour demands, or regressive.

When asked about 'cultural methods', respondents talked enthusiastically about experiments with pest and diseases affecting field crops and grain storage, as well as livestock. Having been advised by a neighbour to purchase a chemical (*Churinda Matura*) for fall army worm, another farmer was amused to find that, *'The Agritex officer told me that if you take fine sand and apply it to the heart, the centre, it will die. I tried it and it worked [laughter]. So I observed that I had wasted my money.'*[244] Others reported no longer using inorganic pesticides due to soil damage, or experiences of respiratory and skin reactions. Many farmers were prepared to use *Churinda Matura* in case of an emergency, but acknowledged that plant-based/organic methods still worked effectively. In grain stores (*dzapi*), which even homesteads with few assets appeared to have, farmers report using chaff from small grains or eucalyptus leaves spread on the floor and layered between grain.

6.7.1.4. Co-operation and Sharing

Unity, working together, co-operation and sharing were prominent themes arising during discussions under both resilience and agency (appearing in both shortlists), with implications for maintaining everyday peace. Here, references to social-ecological relationships are discussed.

From the survey it was possible to see high levels of sharing and co-operation in farming activities irrespective of typology, such as knowledge (97%), information (89%), skills (86%), and labour (89%). Social farming traditions such as *nhimbe* or *humwe,* found to have been eroded elsewhere, were practiced by 95% of those surveyed (R3). Seen in *Plate 6.9 below,* many across the community lamented the loss of cultural ritual that is believed to reinforce connectivity. Many spoke of their weekly *nhimbe* groups of up to twelve women, rotating around each other's plots

[243] Muonde farmer interview - MHT/MF/F/JMH/06 (09.03.17)
[244] Interview - MHT/MF/M/MGT/02 (06.03.17)

for weeding or harvesting, and men's groups pegging and digging contours. There was no automatic rejection of *humwe* as a traditional event at which beer is served (with non-alcoholic *maheu* being prepared instead), and no-one talked about a lack of reciprocity.[245] While it was thought by some that these had been maintained by village heads, and women reported marrying in to long nhimbe traditions, one respondents thought it was more recent, *'I think the introduction of nhimbe has united people, they are always together, laughing together, and sharing stories – to share food. That's brought us together … it didn't happen before.'*[246] Nonetheless, survey data show that those not exposed to Muonde activities have equally high levels of sociability. Having witnessed the impact of disunity in his community, discussed below under peace, one farmer was adamant about the value of working together:

> What I want is people just to work as a team. If you work as a team you can achieve. If someone has a problem, and you share that problem, it will not be a problem as such. Because people have an idea - a solution to solve that problem. But if you work as an individual, you cannot solve that problem. It's what I know. And it's what I'm wishing for … that is my aim in this society. To keep us united.[247]

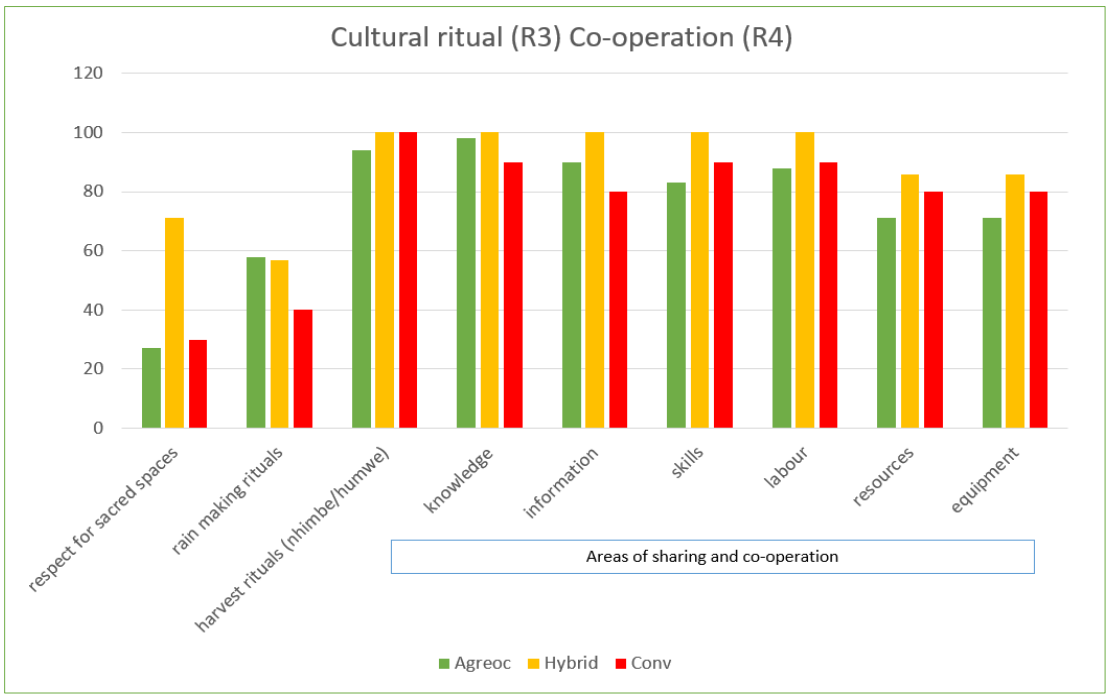

Plate 6.9: *Mhototi responses on cultural ritual (R3) and co-operation (R4)*

When enquiring about why some farmers might not utilise their land or take time with organic methods, it was rare to hear references to 'laziness', a common refrain elsewhere to describe those believed to be less motivated, instead using echoed phrases such as 'aid dependency' and

[245] For Michael Drinkwater this reflects Mazvihwa's remoteness, being on the margins of centralised agricultural support. He pointed to the lack of formal fencing as engendering greater sociability amongst farming communities in the area. (Communication 21.11.17)
[246] Interview with Muonde volunteer - MHT/MV/F/MKD/010 (13.03.17)
[247] Interview - MHT/FI/M/MC/014 (18.03.17)

'lack of foresight', to reflect a concern for the more vulnerable. Within the context social farming and reciprocity, this was significant in demonstrating a pro-social orientation.

6.7.2 AGENCY

During timeline mapping, when considering the future, some related to external events over which no control could be exerted, while most revolved around cultural and environmental restoration, indicating that participants found future considerations less problematic or daunting. Here, we consider the degrees or stages of change, albeit iteratively, observable at different levels of social activity that may be taking place as a result of the confidence engendered by this landscape shaping in Mhototi. And whether or how, with the changing relationships that are imbued in a sense of self- or collective efficacy, different forms of agency are being exerted (or supressed). For this reason, survey data are explored through the selected and agreed shortlist of ranked indicators, shown in *Plate 6.10*, with number one being the most important.

Mhototi Agency Indicators (ranked)

1) Equality between men & women (+/-)
2) Voice – our concerns are listened to
3) Cultural tradition plays a stronger role.
4) When our freedoms can be exercised
5) Ability to make decisions without seeking permission
6) Fair & transparent decisions on land & food distribution
7) Ability to resist decisions that lead to pollution & dislocation
8) Education is sufficient for girls & boys
9) Community is united in working together
10) Traditional leaders fulfilling their duties
11) Less corruption and factionalisation of elected officials

Plate 6.10: *Mhototi final shortlist of agency indicators - selected 09.02.18*

6.7.2.1. Changing Religious Expression

Given the proliferation of independent African churches, and the rise of Pentecostalism,[248] church leadership is of particular significance to agency, forming important centres for the dispersal of political, economic and social influence. This neopatrimonialism and related competition over material and ideological resources is often secured, for historical reasons, through state patronage and, by extension, clientalism to the ruling party (Maxwell, 2005). These relationships were in evidence during interviews with (principle) power-holders and influencers in Mhototi. Responses to the attainment of a range of freedoms (A4), such as life choices including worship

[248] Muonde research conducted in Mazvihwa between 1986-2010 found a steep increase in adherents to new independent African churches, which rose in number from four to seventeen during that same period. This figure excluded Apostolic or Zionist churches which also have considerable followings.

across men, women and youths were high.[249] However, when asked about freedom of expression, responses were notably low. When followed up in interviews, it became clear that this was a restriction imposed by leaders of various churches. As one farmer put it, *'In my religion, we are not allowed to follow the opposition party, so they are saying you have to follow the ruling party always. So I don't vote.'* Another Muonde volunteer and influential farmer in her community explained:

> My church doesn't allow us to be active in politics. That's why we are always under the ruling party, so I don't have freedom to express which party I love the most. I have to follow …. If they say there is a ZANU meeting, I go to the meeting. So I believe that Jesus Christ is the one that has an answer about who is going to be ruling, so that's our belief in our church. …We are being taught not to quarrel or disagree, so we have to follow the ruling party.

Seen over a longer timeframe, however, as people's spirituality has vacillated between periods marked by traditional religion on one hand, and a staunch adherence to Christianity on the other. Through agroecological activities the present interest in bio-cultural erosion, and its protection, may signal a return to a more syncretic blending of traditions. This recalibration is particularly interesting given earlier Muonde research conducted in Mazvihwa (1986 and 2010) on the steep increase in independent African churches that correlated with a marked decline in traditional religious belief (by 50%) and, with it, the reduction in small grains produced for brewing. The present position may be interpreted through the response to the Murowa resettlement, with the disruption of the ancestral burial site becoming a focal point of renewed spiritual significance for those associated with Muonde, many of whom are devout Christians. Increasingly, the loss of this land is being associated with deeper concerns about cultural erosion which many associate with the onset of climate change.

6.7.2.2. Bio-Cultural Protection

The spectre of bio-cultural erosion has led to a renewed interest in the risk of environmental regulations being imposed by the RDC without consultation.[250] Until consultation takes place, and people are engaged in this process, these formal regulations are often confused with customary laws, with which there are considerable overlaps. Nonetheless, only 42% of respondents believed that traditional leaders were adequately overseeing environmental management. Concerns surround their failure to observe *mitoro*, and disregard for *rambotemwa* and other sacred spaces, with only 45% of respondents believing that traditional leaders were performing their duties with

[249] Freedom of movement was found to be lower for women and youths due in part to cultural norms discussed above, and real or perceived security threats (discussed under peace).
[250] The chief was unaware of the process to develop environmental regulations, or the role that traditional authorities are expected to play. Conversation with Chief Mazvihwa (20.02.17)

regards to ritual and tradition (A10). This was a recurring theme in storytelling, connecting the erosion of cultural practices with biodiversity loss and impoverishment.

> Long back our elders went to the hills where there are some graves, where they swept and cleaned. That helped in bringing the rain. So these were the two important things – *mitoro* and the sweeping of graves. If you're always practicing those things, it would help us to have enough food, as well as our domestic animals, and the wild animals. When it is raining it is so beautiful, there are bird species like *mangauzani*. If the white ones come, then it's a bad year. But if the black and white ones come, like this year, then it's a good year. So the chiefs and leaders have got a big job to sit down and tell the community about our culture. When we follow our culture, it will help people to have a good life. … then we will have a good ecosystem in our area - humans, animals and vegetation.[251]

Not insignificantly, these concerns have provided an entry point through which bio-cultural resources might be protected. Practical new tools, such as GPS mapping to document habitats and ancient trees of bio-cultural importance form an important Muonde strategy to contest unwanted development. In this way, opposition might be cautiously navigated on technocratic terms, while avoiding many of the dominant religious and developmentalist dogmas. Against the Murowa backdrop, when asked about the protection of bio-cultural resources from further land sales or development which might pollute the environment (A7 – seen in *Plate 6.11*), a high number of survey respondents (89%) indicated that they had enough will to act. Many felt they had sufficient information and knowledge, as well as support from others (74% and 69% respectively). While only 37% believed that they had the power to change it, organic farmers felt

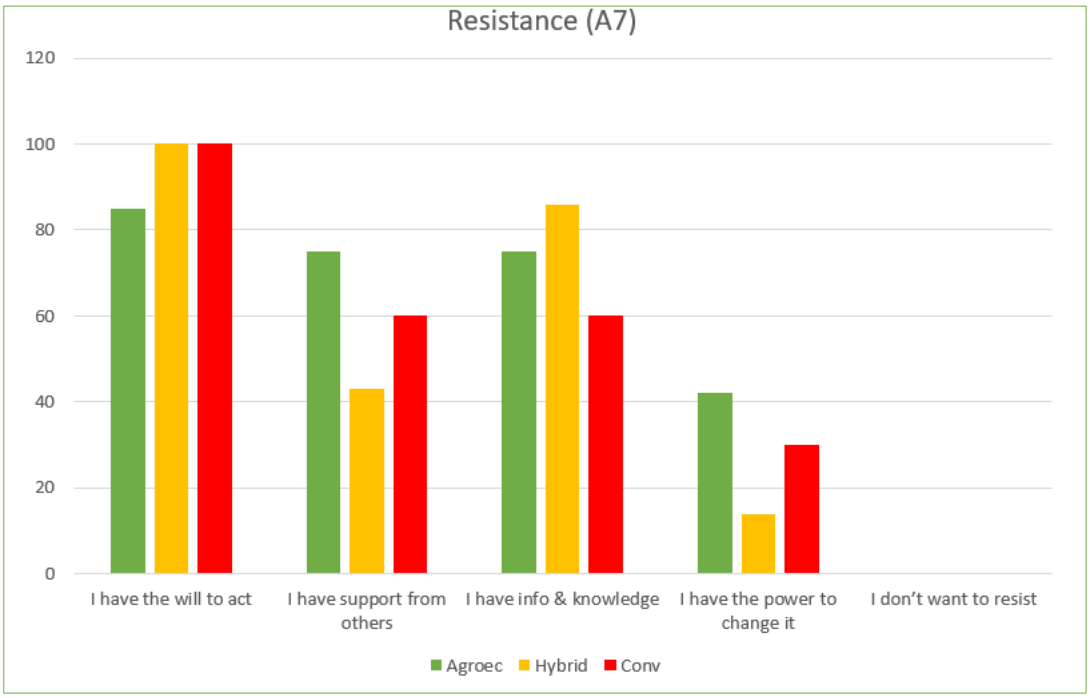

Plate 6.11: *Mhototi survey responses to resisting unwanted development (A7)*

[251] Male storyteller with the cultural ritual group (22.0217)

more empowered, and women and youths felt more optimistic than men (44%, 50% and 29%, respectively).[252] Respondents were unanimous in wanting to resist such changes.

6.7.2.3. Erosion of Trust in Leadership

Concerns about individual enrichment have pervaded all aspects of social life, and are often elided with the factionalisation of traditional leaders, and thus with cultural erosion. As discussed earlier in relation to land and resource distribution, the erosion of trust in leadership centres on nepotism and cronyism associated with churches and/or political affiliation. When asked about decisions by leadership on the distribution of resources, only 25% of respondents (19% of men) thought that there were *always* fair and transparent (A6), and 77% of respondents believed officials to be corrupt (A12), confirmed by widespread reports of welfare resource theft by an elected official. Furthermore, officials were thought to be blocking decisions (71%), factionalised (68%), lacking in consultation (60%), and lacking in vision (50%). Nonetheless, with their faith in the democratic process largely undented, minds were firmly focused on the 2018 council elections when people were keen to have their voices heard.[253]

With such a complex web of entitlement pressures embedded in layers of power, the benefits of autonomy over food production are far reaching, as one Muonde farmer pointed out, *'Myself, I know I always have food in my granary. Instead of adding my name to the list … I don't have to elect a particular party because I'm hungry and need inputs. If I'm in control I can vote for who I want. So it gives you power.'*[254]

6.7.2.4. Changing Gender Relations

With exposure to rights and gender equality via NGOs and the media, the gender equality indicator was unanimously ranked first. Nonetheless, FGDs highlighted sensitivities to the imposition of rights by the state, and the threat to cultural values posed by equality. In a survey question that reflected the divergent perspectives of *focus group* participants (A1) more women (56%) than men and youths (both 45%) believed that gender equality was a threat to men. Overall, 62% believed that equality was not culturally appropriate, yet 60% indicated that gradual change was acceptable (men 58%, women 62%, youths 70%). However, in an almost identical question asked through the frame of cultural tradition (A3) changing gender roles was notably less acceptable to men and youths (39% men, 59% women, 40% youths).

[252] Seen as cluster responses, those who felt most powerless to resist were found closer to Murowa, and in North Devon (resettlement) where state control is closer.
[253] Despite corruption expressed by all those interviewed, during April 2018 primaries to select their candidate, the standing councillor was re-elected to represent ZANU-PF in the July election, and re-elected to post in August 2018.
[254] Interview - MHT/FI/M/MGT/05 (09.03.17)

This was seen in FGDs when wider concerns about bio-cultural erosion soon transitioned to the changing role of women before turning to questions about the reassertion of cultural norms. Through discourse analysis, it is possible to see how responsibility for the maintenance or erosion of tradition is seen ultimately as residing in the decisions and behaviours of women (often by women themselves). With reference to resilience definitions, a question was posed about permitting levels of change to enter the system if it enhanced cultural preservation in the longer term.[255] A resulting survey question was formed around the acceptance of change at different levels of social activity (A3). A median of 35% thought that flexibility around *lobola* was acceptable. On dress codes only 3% of men and 24% of women indicated acceptance of any change. [256] However, given the climatic changes already entering the system, a relaxation of customary planting regulations was agreeable to 68% of respondents (77% of men), with the notable exception of production areas, or *tseu*, traditionally reserved for women.[257] Women's defence of regulated production may therefore be seen as a defence of *tseu* itself, one of the few production spaces many women have traditionally had control over. Of note was that farmers engaged in Muonde activities were found, from survey data at least, to be less socially conservative and more open to equality and change.

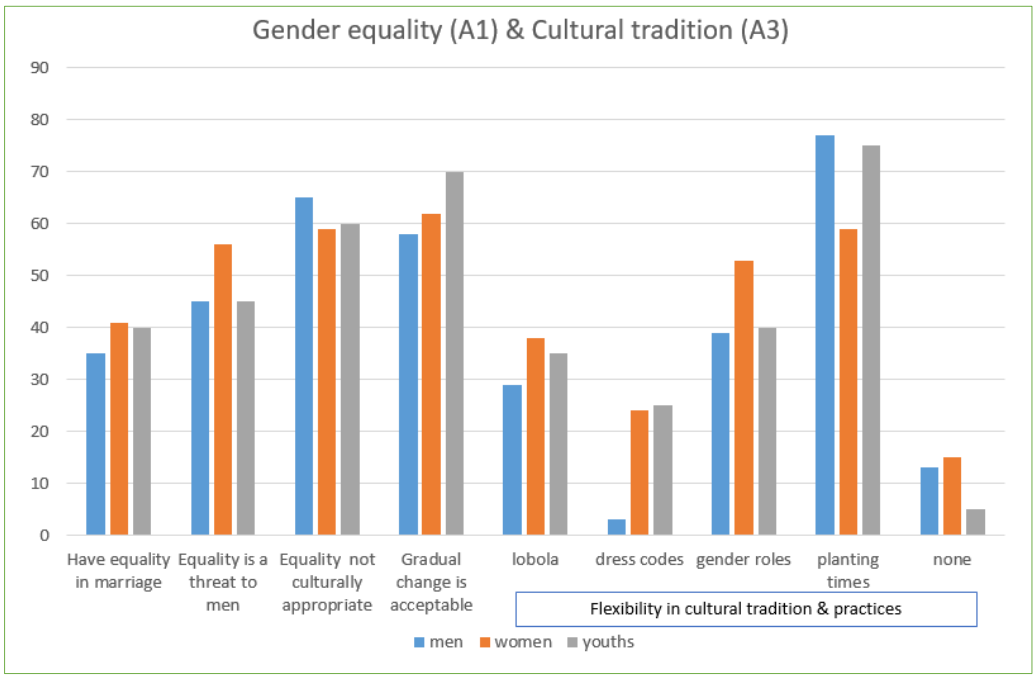

Plate 6.12: *Survey responses on acceptance of gender equality (A1) and changing Cultural Traditions (A3)*

[255] A question also related to articulated concerns about the loss of youth from the area, and from cultural observance.

[256] On these questions, conventional and resettlement farmers were found to be significantly more conservative.

[257] Conventions in *tseu* - land allocated to women by their husbands for household production of groundnuts, round nuts, pigeon pea – were discussed as planting traditions not to be altered. '*If groundnuts are planted first they will cause thunder storms, it will jump to another areas, and it might rain on the other side.*' (Woman storyteller within *cultural ritual* group - 22.0217).

These tensions between how change is perceived may, however, also be seen through the prism of longer-term changes. Having decried their lack of power in the reproductive sphere, the women during their FGD on agency were keen to explore this further through a survey question on decision-making (A5 seen in *Plate 6.13*, below). The results revealed that not only did women have more decision-making capacity than was assumed, on land-use decisions considerably more women (71%) than men (48%) said that they did not need to seek permission. On animal slaughter, 71% of women and only 52% of men could make a decision without asking permission, although on closer inspection the type of animal to be slaughtered was of particular significance.[258] When questioned about cattle, many men were also found to consult with their wives. These findings were particularly powerful for women attending the feedback day, and cause for much excited discussion.

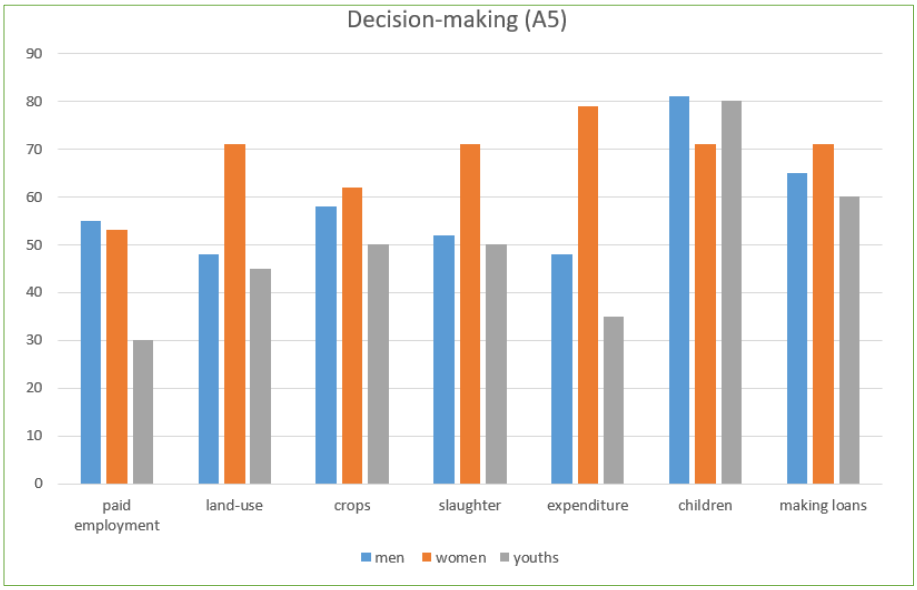

Plate 6.13: *Survey responses on making decisions without seeking permission (A5)*

These changes taking place nonetheless demonstrate the dynamism of contemporary social relations in Mhototi. While change within households is clearly being negotiated, this process is iterative, punctuated by periods of reversal seemingly motivated by wider moral panics, that manifest in a rejection of change – around which the more visible facets of 'culture' have become focal points, such as *lobola* and dress codes. Seen together these changes, while at some level accepted, are not always well understood, leading to inevitable tensions associated with changing social and relational power dynamics that influence whether people feel more or less peaceful.

[258] Many women said that they could slaughter assets of less worth such as a chickens or even a goat without permission.

6.7.3 PEACE

This final section explores experiences of different forms of violence and the strategies employed to maintain everyday peace within and across spheres of social activity. As seen by its ranking in *Plate 6.14*, communication was considered an important tool in managing peaceful relations. Many survey respondents believed that they had *good communication* within their households (92%) and village (75%), but less so in the community (49%). When reflecting on the quality of communication, however, informants referred to appropriate greetings, highly observant of social status and boundaries, rather than making oneself understood. Improved communication, trust and understanding therefore became an important feature of research interactions.

Mhototi Peace Indicators (ranked)

P1 Good communication
P2 Being united
P3 Equitable sharing in the home
P4 No child abuse
P5 Less violence in the home & community
P6 Having trust in eachother
P7 When we feel safety of movement
P8 Having a sense of peace
P9 Feeling respected & cared for
P10 Having a sense of place - belonging

Plate 6.14: *Mhototi final shortlist of peace indicators - selected 09.02.17*

6.7.3.1. Navigating Political Tensions

When considering responses on *freedom of speech* (A4) this was found to be restricted to certain topics, with political references often heavily shrouded in idiom: *'You can't board a bus just because it's idling loudly – you must know where it's going'*.[259] In conflict-affected societies this is a common strategy for navigating everyday peace. Others discussed were attending (or artfully avoiding) ruling party meetings, carrying party membership cards, and wearing campaign T-shirts.

Youths reported feeling under particular pressure to participate in political 'campaigns' – highlighted during the youth FGD, and their indicator on *forced participation in violent campaigns*. When negotiating the final shortlist, this was rejected by men in leadership positions as being too sensitive. This was motivated by memories of the 2008 elections, when gardens of suspected opposition supporters were uprooted and people intimidated to report on others. When asked about why this did not affect his area in west Mhototi, one respondent said: *'Here there are people who follow the opposition, but in our community we are afraid of pointing out each other. We are united yes, but people they are afraid because they heard that people were killing each*

[259] Interview - MHT/FI/M/MC/014 (18.03.17)

other when you point to someone as a sell-out. That makes them afraid of pointing.'[260] Here, a fear of witchcraft and retribution was raised as a deterrent to reporting people – with resonances of the past. Of survey respondents 81.5% were aware of political violence in the community, and only 35% believed they were united (P2) due to the partisan distribution of entitlements.

In the midst of these divisions, some were leading by example. In one area where tensions existed between the existing community and a group of migrants, now Muonde and MF farmers, by sharing skills, ideas and resources over the years, as well as trading with their neighbours, relations have improved.[261] In his village, another farmer makes an annual gesture to promote unity and understanding: *'As a good organic farmer, my crops ripen earlier than anyone else. So I can take 10 cobs of maize and 10 sweet reeds to each and every member of the community... twenty-six households. And that helps to see that we are a community, we have to work as a community, and to share what we have in the community.'*[262]

6.7.3.2. Controlling Public Violence

Many reported feeling a lack of security as a result of turf wars between 'tribes' of *Mabemba boys*, with disturbances erupting around shops where people congregate, particularly in Gudo which is located closer to the area being excavated by informal miners. *'Here in the community there is little peace since we had some alarming events taking place around here. The main reason is those machete guys, Mabemba boys, so we are afraid of sending our children to the shops'*.[263] Survey respondents reported being aware of *public brawling* and *rioting* (81.5% and 92% respectively).[264] According to one former ZRP interviewed, such disturbances have declined since 2012 *'Because we arrest and beat them. And also the government deployed the Black Boots to police and discipline people there which means there was a lot of violence.'*[265] Prohibitions on entering the village business area with an axe or machete have now been imposed and, in addition to his own police, the chief had recently established a youth vigilante group tasked with 'disciplinary action'. Yet as one youth pointed out when discussing resilience, '*Tatindivara ne utunga miriri hwatihwo'* (we've been beaten so much that we no longer feel the pain). To which his female co-discussant responded, *'Even at home, our husbands have the same character as those leaders. But we've got nowhere else to go.'*[266]

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[260] Interview - MHT/FI/M/MGT/04 (09.03.17)
[261] Families of the Shumba (Lion) totem from Mokomo settled under the headman on former grazing land in Gudo (Muguti 2) (interview MHT/FI/M/MGT/05 (09.03.17)
[262] Interview - MHT/FI/M/MC/014 (18.03.17)
[263] Interview - MHT/F/M/MGT/03 (06.03.17)
[264] Incidents of public disturbances were higher close to shops (Gudo) and in North Devon where informal mining is prevalent.
[265] Interview -MHT/MF/M/MGT/02 (06.03.17)
[266] Transcript of FGD by youth on resilience (08.02.17)

6.7.3.3. Domestic Violence

The prevalence of domestic violence began to emerge during the women's body mapping and FGD on agency, leading to vibrant discussions. It should be noted that the women participating in FGDs were more immediately involved in Muonde activities and, as such, have gained relative power and status within their communities. All asserted that they have equality, decision-making powers over farming and household activities, and thus have peace within their marriages. However, all but one of these women reported being subjected to marital rape, which for many was considered '*part of our custom*'.[267] Changing attitudes, however, were articulated by a male FGD participant, '*This forced sex is what has made us grow – we are all here because of forced sex. Gender equality is a new thing for us, that's when I realised that a wife is also a person. It needs time, as well as learning'.*[268]

Of survey respondents 81.5% were aware of domestic violence in their community - more men (90%) than women and youths (74% and 75%). Awareness of child abuse was higher, including violence in the home (92%), sexual abuse (85%), and early marriage (94%). While these figures indicate high levels of violence and abuse, they also demonstrate awareness. Many referred to the radio as an important sources of information, yet the extreme cases reported in the media also contribute to the sense of moral panic.[269] During data feedback, many men reported feeling threatened by changing gender relations, as well as anger at state-imposed rights (for women and children), and thought that poverty and frustration were causal to violence within the home (and community). During the womens FGD, *lobola* was said to be a cause of considerable tensions and even conflict between and within households, and yet was also discussed as a source of self-esteem and power for a woman once payments are complete.

Culturally sanctioned domestic violence is regularly reinforced through churches doctrine. *Chitatu* – a gathering where women discuss issues together - and traditional processes where 'aunties' prepare and advise young women entering in to marriage how to keep a tacit peace. To one elderly women, it was not clear if domestic violence and abuse were now more prevalent, or more visible (or indeed both). She believed that traditional mechanisms were missing, while also recognising that traditional ways of addressing child abuse were no longer appropriate:

> Yes, perhaps twenty years ago if you were abused you may have kept quiet, but now, while it will still be difficult to talk about it, it may be that we're hearing about it more – maybe it's always been there. Long back when an under-aged girl comes and she's pregnant, that girl would be taken and given to an old man. Because it was seen that she was misbehaving'.

[267] Interview with wife of Muonde farmer - MHT/MF/F/MC/013 (18.03.17)
[268] Transcript of final indicator FGD with men, women and youths discussing their shortlists (09.02.17).
[269] The undercurrent of stories are often on women in 'modern marriages' (where rights and equality are permitted or assumed) who disrespect their husbands.

While Zimbabwean law protects women under the 2013 constitution, official reports of domestic violence and child abuse are relatively rare, with police treating reports as a private matter. The power of women to act in the domestic or public sphere is severely constrained by social pressures. Asked about the reporting of domestic violence to the police, one young women said: '*ah, it is not. To marry each other is not to persecute each other, but to have a good relationship with good communication. So if I report my husband and he was [prosecuted], what would happen to the children? I am unable to work with the children alone. It would be hard for me. So it's not a good thing to do.*[270]

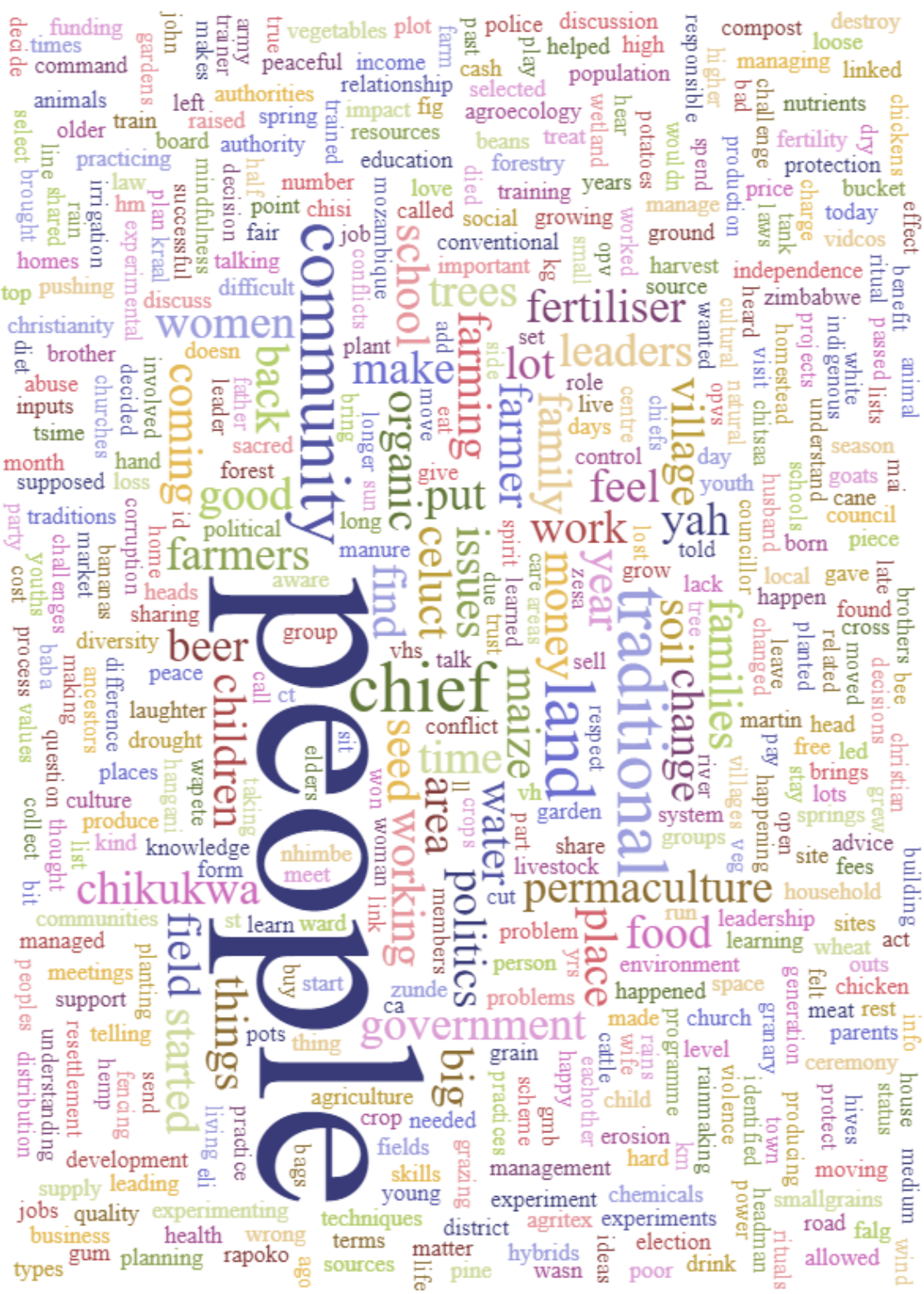
6.8 IN SUMMARY

The exposure to action research over the past 30 years between researchers and the Muonde community has shaped a responsiveness to change through shared learning, within which the Muonde community feels invested and united. This continues to inform strategies through which ongoing change is being negotiated across Mhototi. The integration of more plural approaches through engagement with, and acceptance by Agritex, and the resettlement of people taking these approaches with them, has increased Muonde coverage and reduced the differences between the performance of agroecological and conventional farmers. A renewed confidence in farming, found in the reforging of social-ecological relationships was bringing, albeit sometimes difficult, social change and new livelihood opportunities. The uptake of landscape-level changes has created a sense of common endeavour, and has significantly improved adaptive capacity of practicing farmers who have subsequently been able to extend their growing season, increase agrobiodiversity and reduce inter-seasonal variability for improved resilience and opportunity. There was a pride in idea of innovation, and enthusiasm for integrating traditional farming practices and spirituality. Despite layers of patronage and socialised constraints, and the contextual demands of maintaining everyday peace, Muonde farmers were found to be more open to change, using their practices to bridge social and political divides, and have substantially increased their social standing and a sense of efficacy to effect change. When asked how his life has changed since taking up agroecological farming, one farmer responded: *'At first I was just a person that was living with others - without any value. But now I am respected. They call me 'va' meaning sir*.' Asked if he now wanted to go in search of employment in town or to Murowa Diamonds, he laughed, *'Why? I've got a job here. I'm working! … I'm sharing ideas with other farmers, saying let's focus on the land. And that would result in reducing violence, since every farmer would be promoting development. When someone is improving [the] environment there is peace.'*[271]

[270] Interview - MHT/MF/F/MC/013 (18.03.17)
[271] Interview MHT/FI/M/MGT/05 (09.03.17)

CHAPTER 7

CASE STUDY 3
CHIKUKWA WARD
CHIMANIMANI, MANICALAND PROVINCE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discussion
compost
destroy
loose
managing
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farm
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party
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youths
challenges
bananas
market
corruption
home
heads
sharing
diversity
beer
peace
laughter
drought
places
culture
produce
kind
knowledge
form
chikukwa
communities
managed
meetings

7.1 GEOGRAPHY AND ECOLOGY OF CHIKUKWA

Plate 7.1: *Looking West towards Chikukwa - as seen from the Zimbabwe-Mozambique border in 2017*

The remote enclave of Chikukwa marks the end of the road before the mountains rise steeply towards the Mozambique border. It is reached by a mountainous and ungraded dirt road, approx. 25 kilometres from the nearest town, the administrative district town of Chimanimani, one of seven districts in Manicaland Province (as seen in *Map 4.3* in the methodology chapter).

While Chimanimani district contains all five natural regions (NR) from specialised to extensive farming, Chikukwa sits within NRI – characterised by specialised and diversified farming, typically receiving upwards of 1000mm of rainfall per annum. The Eastern Highlands are characterised by their orthoferralitic quartzite-derived soils which have relatively high organic and clay content, yet are prone to leaching due to high rainfall (Nyamapfene, 1991; Timberlake *et al.,* 2016). Chikukwa's altitude and conditions, which rarely fall below 3 degrees Celsius, are ideal for a range of crops, from coffee and tree crops (fruit and nuts), to vegetables and cereals. Seasonal rain-fed agriculture focuses largely on maize production on the wetlands alongside the Musapa River. Numerous springs in the hillsides above the villages have supported home-based garden production, though not all of these are currently functioning, as will be discussed shortly.

The area forms part of the Eastern Zimbabwe *montane forest-grassland mosaic eco-region*, which is an Afro-montane Centre of Endemism. The area east and west of the border is marked by the Chimanimani Trans-Frontier Conservation Area (TFCA), covering an area close to 2,500 square kilometres, of which the 172 square kilometres on the Zimbabwean side contains the park's dryer edge – stretching from Chikukwa at its northern-most point, down to Rusitu (Timberlake, *et al.,* 2016). The Chimanimani National Park was created in 1949 by an act of parliament and was joined to incorporate land in Mozambique under an intergovernmental Transfrontier Conservation Agreement in 2001 (SADC, 2017). The creation of the park led to the removal of many Chikukwans

from the Mozambique side (seen in *Plate 7.3*), who migrated to Zimbabwe – a pattern that had begun during the Mozambican civil war (1977-1992).[272]

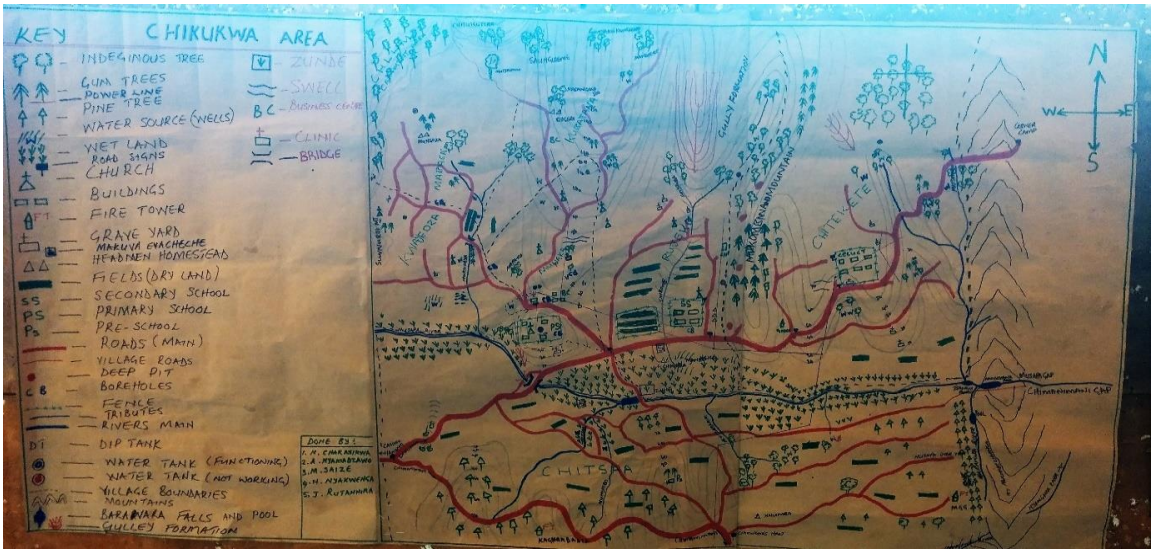


Plate 7.2: *Chikukwa Map created by participants during mapping exercise at CELUCT (14.10.16). Some of the participants returned the following day to complete this map of their own volition to understand more.*

As seen in *Plate 7.2*, the six Chikukwa villages in ward 10 are nestled between the peaks of the national park to the east, and Forestry Commission (FC) land to the south, separated by the Musapa River and its narrow strip of wetland which flows through the Chimanimani Gap and into Mozambique to the east. Across the Musapa, as the terrain climbs again, the villages of Chitsaa fan out across the hillside. As the road climbs to the west and forks, it passes Jantia and up on to the fertile plain of Hangani (ward 11 - not featured on the map), where root vegetables such as potatoes are currently proving successful.

Chikukwa consists of two administrative wards. The majority of Chikukwans today live in the smaller ward 10, half of which lies in the Chimanimani National Park. The considerably larger ward 11 has been designated as forestry plantation since early white settlement in the late 1800s (seen in *Map 7.1*). Through a series of post-independence occupations and negotiations, Chikukwans have wrestled back control over part of the contested forestry land. Yet as forest has been harvested and cleared in recent years, so 'migrant' farmers have come to settle from Mozambique and other parts of Zimbabwe, resulting in emerging land-use and access tensions between migrants and Chikukwans[273].

[272] Those villages that remain are supported by the Chikukwa community on the Zimbabwean side, which raised funds for a primary school. People also traverse the border area to attend the clinic and secondary school in Chikukwa.
[273] Emerging and reported as part of the research, and which forms part of the case study analysis.

7.2 PEOPLE AND PLACE

The dispersed polities that emerged in the Eastern Highlands were shaped by the Gaza Nguni people who migrated from Kwa Zulu Natal in the mid-eighteenth century, and who named the pre-existing peoples they subordinated 'Ndau'. As the Gaza were defeated by the Portuguese, Ndau territory was divided under the Anglo-Portuguese Treaty in 1891 (Alexander, 2006). As such the existing clan shares the same Ndau dialect and a royal family with a deep lineage, headed by Chief Chikukwa. Seen in its more complete form, prior to the establishment of the border, the Chikukwa community extends into present-day Mozambique – where there are a further eight villages - forming a transnational community which regularly crosses the porous border for ceremonial gatherings, rituals and meetings.[274]

Plate 7.3: *Looking East over Chimanimani Transfrontier Park, as seen from the Zimbabwe-Mozambique border in 2017 (back-to-back view of Plate 7.1)*

The British and Portuguese rule on either side of the border left quite different imprints on the social worlds they administered. In stark contrast to the *laissez faire* approach of the Portuguese, the detailed surveying and mapping under the British colonial system led to a territorialisation that shaped a highly politicised understanding of boundaries, prior to which a chief's territory was understood in terms of sacred forests, rivers and springs and all who resided there.

Control of labour in these once sparsely populated areas was of prime importance: firstly, to the customary elite establishing new polities through their acquisition of wives and bonded sons-in-law, and in their conscription of men in to regiments to conduct raids through which they

[274] Clan elders and the spirit medium still visit a shrine in Mozambique called *Tomhati* to communicate with the ancestors to ask the High God, Mwari for rain or protection against threats. Emissaries only travel to Njelele in cases of extreme and extended periods of drought.

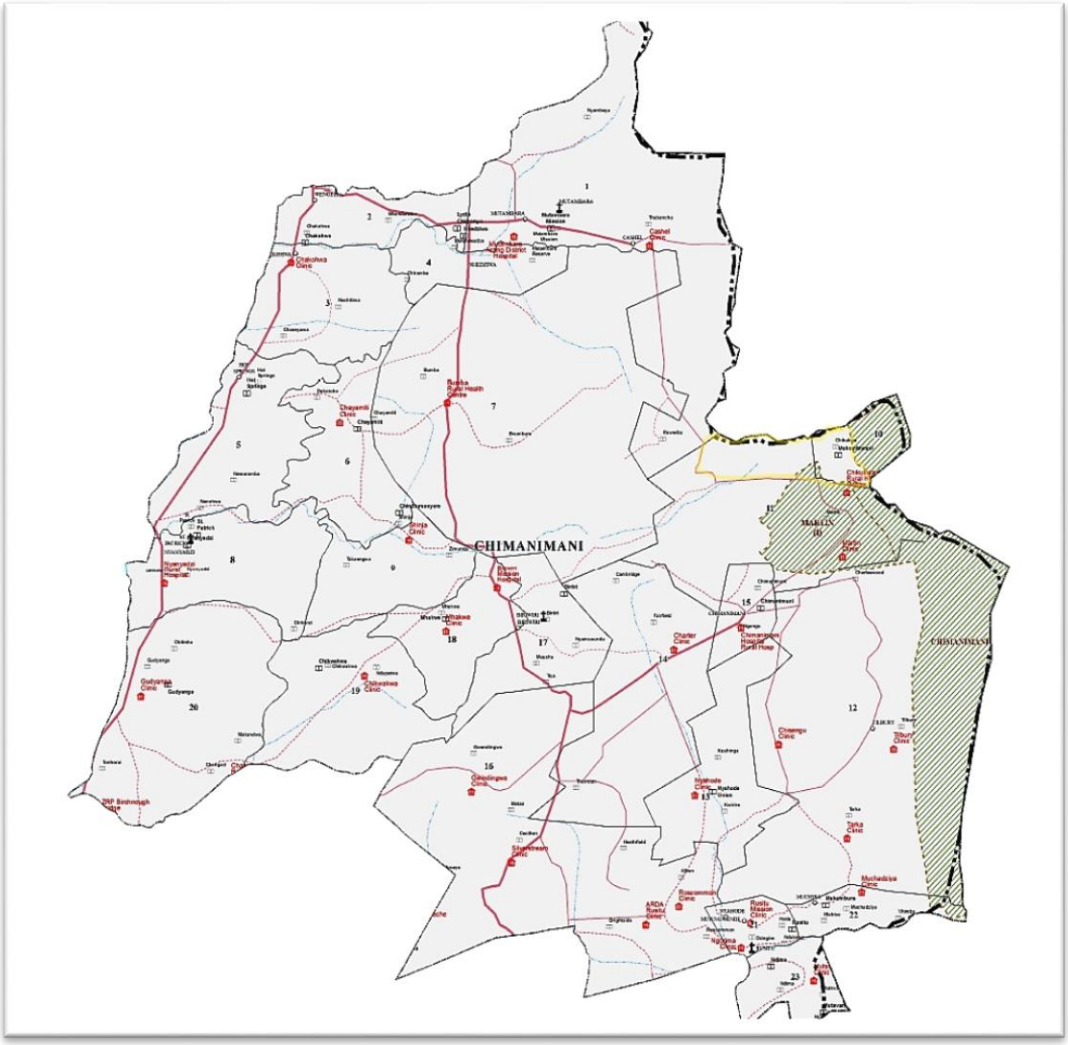
acquired more 'people-wealth' (Guyer, 1993, Guyer and Belinga, 1995); secondly, to the Portuguese slavers who trafficked people, trading them to the coast;[275] and thirdly, to the white settlers, who depended on indentured labour to expand their farming and forestry enterprises. Thus, what Hughes describes as '*ambulatory enslavement* to indicate the customary coproduction of mobility and servitude', gave way to a new political economy defined by the territorialisation and property ownership delimited by fencing under colonialism (2006:7). In the 1940s, Native Commissioners complained that adult labour was insufficient to carry out its development programmes, such as conservation works, road or dam building. Not only could these young men receive better wages as migrant labourers in South Africa, but they were also fleeing the harsh conditions and forced labour imposed on them by the rapidly growing forestry industry (Alexander, 2006:36). Nonetheless, while some fled these different forms of enslavement, missionaries and administrators represented new patrons, just as settlers with their towns and mines provided market opportunities. As youths and women navigated this new socio-economic landscape, so chiefly authority was challenged (Ibid). And as people wealth and tributes declined, so chiefly interests, power and wealth were increasingly exercised over land itself, which signified a new mode of domination. Chiefs finding themselves without land found their authority severely compromised.

7.2.1 History of Forestry and Contestation

While contestation and counter-mapping continued after independence, as the weak sought to protect themselves against ongoing encroachment of national park boundaries to the south (Hughes, 2006), parkland annexed in Chikukwa was on higher quartzite rock, unsuitable for farming and, furthermore, provided ease of movement. Chikukwa's battle to restore its territory instead focused on its relationship with timber companies and the Forestry Commission (FC). Today, plantations cover approximately two-thirds of Chikukwa's ward 11, known as Martin Forest[276] spanning 6,000 hectares which, along with other forestry in Chimanimani district, represents the heart of Zimbabwe's *forestry belt*. Martin forest was gazetted for purchase in 1945 under the Forestry Act, bringing it under the jurisdiction of the Rhodesian FC which, since 1954, has been managed by beleaguered parastatal Allied Timbers.[277] Along with two further forests in Chimanimani, Allied has 11,600 hectares of softwood plantations.[278] Furthermore, since 1979,

[275] One reason given by a respondent as to why humwe or nhimbe were no longer practiced, was that many men gathered together historically provided a target for slavers: TC/M/CHTK/ZC (14.07.17)
[276] On maps (see Map 7.1 below) the commercial forestry land of Martin (1) is designated as a 'protected conservation area'.
[277] Allied holds 60% of all forest land in Zimbabwe. Its operations involve plantations, harvesting, processing, marketing and selling of pine, gum and other products (FAOLEX, 2002). Since 2000 its commercial interests have been separated from its regulatory functions (Sibanda, 2017).
[278] Allied Timbers Chimanimani forests consist of three estates, namely Tarka, Chisengu and Martin, and owns 60% of forestry across Zimbabwe (Allied Timbers website)

multinational-owned Border Timbers has expanded its plantations in the district to 47,886 hectares.[279]



Map 7.1: Chimanimani District – highlighting Chikukwa research area (source: OCHA)

Chikukwa's story of land alienation began when the Portuguese encouraged Afrikaners from the Orange Free State to make the long trek to take up land for farming along its western flank. These Boer Trekkers arrived in 1893-1894, notably with the Martin, Styen and Kruger-Bekker Treks (Alexander, 2006; Hughes, 2006). On the demarcation of the international border in 1898 by the British and Portuguese, and finding themselves unable to meet the conditions for adequate farm production and investment imposed on them by the Portuguese, the Boer Trekkers instead settled in the Chimanimani area. Renowned for their poor treatment of those they encountered and coerced in to labour, they were derided by British administrators and missionaries for their brutality, lack of investment and poor living conditions (Alexander, 2006). Nonetheless, their

[279] Initially as subsidiary of Ango-American, Border's parent company is Rift Valley Holdings, a Mauritius registered company owned by the Von Pezold and Hoegh families, controls 400,000 ha of farmland across Africa (UNGA and GRAIN, 2015).

occupation and alienation of land was so rapacious that the alarmed BSAC administrator began to draw up plans for native reserves as early as 1885-86 (Hughes, 2006).

One Trekker, M.J. Martin[280] set up home in Chikukwa, marking his territory as Dunblane Farm that ran from the village of Rujeko up to the chief's seat in Chitikete, and earning his name *harati,* meaning cruel man.[281] This area was demarcated as Martin 1 (present day ward 10), while across the Musapa River from Jantia was at that time Martin 2 (ward 11).[282] Martin trialled different livestock in Martin 1 from where, in 1941, sixty families including Chief Chikukwa were relocated, to a village called Dindi in Martin 2.[283] From Dindi, the chief tirelessly petitioned the Governor in an ultimately effective and non-confrontational resistance to official plans to permanently move his people to Muwushu Reserve in the lowveld, threatening instead to relocate his people to Mozambique (Alexander, 2006). According to historical memory, subsequent livestock failures led Martin to redirect his attention to pine forestry.[284] As the plantation expanded across Martin 2, under Martin's son Jan, Martin 1 was found to be less successful for forestry. The chief was recalled and his people resettled on farmland acquired from Martin by the government as a temporary measure (Alexander, 2006). To maintain his land claim, the chief entered in to a labour supply agreement.[285] At this point, assurances were sought by the chief that, after 20-30 years, upon harvesting the trees, Martin forest would revert to his jurisdiction.[286] Over subsequent decades, Chikukwans reported new trees being systematically replanted.

It was not until 1975 that Chikukwa's ward 10 was granted communal or Tribal Trust Land (TTL) status, through which the new Chief Taedzwa Chikukwa could secure his tenurial rights, and assert his authority. This long negotiation by the chief had begun in the early 1960s as the newly elected Rhodesian Front (RF) sought to create more 'functional communities' by reinforcing tribal identification and authority to stem growing nationalist agitation. As Alexander points out:

> The very complexity of succession procedures, as they are manipulated by elders and codified by administrators, made them fertile ground for dispute. The seemingly arcane debates over custom were not, however, simply the mumblings of elders left behind by

[280] Local people remember M.J Martin as being German and his wife being Dutch. Many of the Trekkers of the time identified with their ancestral homelands. The infamously brutal Thomas Moodie, who led the Kurger-Bekker Trek, and founded Chimanimani (then Melsetter) identified as Scottish, naming it after his ancestral home in Orkney.
[281] Interview with elder and headman VH/M/CHTK/PC (02.02.18) and in reference to his son, J.L Martin (1875-1938)
[282] Martin 1 is 600 hectares, and Martin 2 is 4,400 hectares (Allied Timbers – Interview 06.02.18)
[283] Interviews with elder and headman (02.02.18) and chief's CELUCT representative (25.11.16)
[284] Local people believe that the pestilence and diseases that led to Martin's failure were sent by the ancestors as retribution for the alienation of their land.
[285] The agreement committed villagers to one week p/month. Interview with headman (02.02.18). And Alexander (2006:37).
[286] Interview with chief's representative (25.11.16). Yet it is unclear under what authority Martin could have struck such an agreement with the chief. On this, Jocelyn Alexander rather points to letters between the DNC and the NC in Melsetter (Chimanimani), and the CNC and the Forest Conservator in 1945 (2006:37).

> history: custom provided an arena in which a host of other questions, from conservation policy to nationalist allegiance, were contested (2006:95)

Between the 1960s and 1970s Chimanimani had become a hotbed of ZANLA guerrilla activity and, keen to obtain the allegiance of Chief Chikukwa, the RF acquiesced to the chief's demands, granting TTL status over ward 10 (Alexander, 2006).[287] However, such a concession at that time will have cost little, as timber operations had come to a halt with the onset of the war (Ibid). For Chikukwans, navigating a careful path between the embattled government and their own tacit support for the ZANLA guerrillas passing through, this timely negotiation is likely to have led to a relatively peaceful war.

7.2.2 Resistance and Resettlement

Independence once again raised hopes that sections of Martin forest would be returned. Yet for the government, Martin represented considerable and much-needed revenue. Furthermore, white farmland from Jantia up to Hangani (ward 11), purchased by the government under the 'willing-buyer, willing-seller' phase of land reform was purchased by Border Timbers. For Chikukwans, the struggle to resettle its land therefore took place on these two fronts: firstly to resettle long-alienated land, and secondly to prevent any further sales. It was successful on one of these fronts.

Headed by the then Chief Zveushe Chikukwa soon after independence, this struggle began with a movement over the Musapa river to retake the village of Chitsaa (in Martin 2), which resulted in the government evicting the 'squatters' and burning their homes in 1986. In 1988, led by the son of the Chief, a group of up to 40 people resettled in Hangani where Border Timbers had already embarked on planting, leading to frequent confrontations.[288] By the time of Fast Track Land Reform (FTLRP) in 2000, the government capitulated, eventually designating Hangani and Jantia as resettlement.[289] With this claim settled, the focus returned to the question of Chitsaa and its settlement.

At the time of this research, clashes between settlers and the FC over the contested land of Chitsaa continue with incidences of burning, clearance and informal settlement.[290] From *Plates 7.1 and 7.4* (taken two years apart), it is possible to see the rate at which the plantation is being removed. The area of Martin Forest currently being 'illegally occupied' totals 920 hectares, which

[287] Prior to this designation all settlement in Chikukwa had been earmarked for further forestry expansion, and all housing considered temporary. (Interview with the Chief's representative CHK/CS-TL/M/KC (29.11.16).
[288] Interview with Chikukwa Clan spirit medium (22.10.16)
[289] Hangani resettlement was pegged as A1 smallholdings of six hectares.
[290] Others interviewed have reported that disgruntled employees of Allied have set fire to areas as they have left, having been made redundant, (reported in Financial Gazette by Masvingise, 2016).

includes Chitsaa.[291] Allied has reported this to government in the expectation that evictions will take place. The question of political expedience hangs over the lack of response from the police (ZRP), which was, at that time, closely aligned with ZANU-PF. Yet this also points to the complexity over historical claims, ownership and overlapping authority.

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Plate 7.4: Chikukwa ward 10 in the foreground, seen against Martin Forest in the distance, taken in 2015 (Terry Leahy)

For Chikukwa, this leaves a critical question unanswered on the implementation of environmental regulations affecting the water catchment and inter-related issues, and whether these can formally incorporate Chitsaa. While CELUCT is providing its *good offices* to support this process, and to encourage wider community consultation to find a balance between different user needs and interests, it is unable to work in Chitsaa directly due to the lack of clarity over its status.[292] While Chitsaa residents recognise Chief Chikukwa as the authority over the land they inhabit, neither this nor their status is recognised by the state, leaving them without recourse to constitutional law, or access to services.[293] The plight of the sixty-eight (largely migrant) households settled in Chitsaa, and how they are viewed by ward 10 farmers, highlights emerging tensions over land and land-use practices. With the data capture during this study, this is the subject of further research.

[291] Interview with Allied Timbers (CHM/AT/M/MS (06.02.18) – undertaken by Charles Murata for this research.
[292] As a result of this research CELUCT has, however, recognised the need to provide more information for ward 10 farmers, and to create an opportunities for facilitated dialogue between Chitsaa and ward 10 farmers.
[293] The 2013 constitution moderates any excesses related to customary law, including the amendment of customary laws that discriminate against women. The majority of HHs in Chitsaa were found to be female headed.

7.2.4 Labour, Migration and Land

Since the 1950s and again since independence population pressures in ward 10 have continued, thought to have risen to over 100 families in each of the six villages.[294] Prior to this, the logging industry, with its local saw mills required considerable levels of skilled and unskilled labour attracted from across Zimbabwe as well as from Chikukwa. Reliant on wages from the industry, it is thought that many people were no longer farming the land around Chikukwa, yet demand for fuel wood was increasing. The more recent influxes since the 1990s, have been generated by a combination of economic hardship, and the land occupations in Hangani, that affected the local forestry industry and resulting in layoffs. Many of those employed and who had resided temporarily in Chikukwa found themselves stranded, unable to return home. Others who had been farm workers in Hangani were later able to claim resettlement land there. Approximately 75 percent of resettlement farmers in Hangani are from Chikukwa, while others are from Chipinge, Buhera, Harare and even Bulawayo, bringing with them different cultural traditions and observances. Further migratory flows resulted after national de-industrialisation after 2003, and again after the politically-motivated urban clearances of 2005,[295] with many people returning to Chikukwa to reclaim land previously allocated to their fathers or forefathers, leading to significant upheavals amongst those already long-settled - some of whom were relocated to Chitsaa. Others migrating to Chitsaa were Chikukwans from Mozambique who arrived after the designation of the TFCA after 2001, while others still were from lower lying areas of Zimbabwe, such as Chipinge and Masvingo. This period is viewed as one of significant social-ecological disruption in Chikukwa, with one resident recalling:

> In 1991, before the other pressures, they had already started misbehaving … they cut down trees in sacred spaces and even around springs. There was an old *mbuya* [grandmother] – there were springs, and she was looking after them [as the keeper]. But it was because of the clearing in water catchment areas, and due to lack of knowledge. Here at the centre, people were just cutting trees for farming in this terrain. And if you can imagine – it was bare. There was much less water here. The history and links were lost as people died – and the new owners didn't have that understanding. It was not just new people coming in. Some were not respecting the elders. Then [in the 2000s] they took advantage when the chief passed away – some took other peoples' fields, and cut down trees, and even destroyed the contour ridges …They didn't value it.[296]

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[294] 25 families are thought to have lived in ward 10 in 1956 (interview with traditional leader) before being reunited with the chief and the 60 families residing in Ndindi. In 2012 there were 2,705 people in ward 10, and 1,576 people in ward 11, with an average HH size of 6. Zimstat 2012 Census. Census/CensusResults2012/Manicaland.pdf (accessed 16.02.18)

[295] Referred to colloquially as the 'tsunami' due to its wider social impacts - Operation Murambatsvina ('to clean out the filth') is thought to have directed affected 700,000 people evicted, and 2.4 million people nationally affected by the resulting rural migration (Potts, 2006).

[296] Interview CS/F/RJK/PS (29.11.16)

What was being described here began in the post-independence period characterised by the capacious liquidation of natural assets, when *freedom farming* became commonplace as an expression of popular resistance to customary and state control (Mukamuri, 1995a). Migration undoubtedly led to changing cultural norms governing social-ecological practice. But so too has the loss of farming knowledge as a result of earlier (semi-)prolitarianisation beginning with colonial interventions through to the present day. Alongside the promotion of continuous maize production, these have combined to fundamentally alter social-ecological relationships and, with it, the land-use practices that continue to shape change in Chikukwa.[297]

7.3 COMMUNITY-GENERATED CHANGE

What was to become the Chikukwa Ecological Land Use Community Trust (CELUCT) emerged in 1991 when a small group of people in the community noticed that their village spring was drying up. Formed as the *Nyuchi* or Strong Bees, this group of 24 pioneers was comprised of local women and young men, as well as two teachers, Eli and Uli Westermann, who had arrived from Germany in the 1980s. The group would meet to discuss and plan their actions, working side-by-side to replant the elevated water catchment with indigenous trees, and to create awareness of the need to protect these areas (*Plate 7.5*). Springs and pools hold special significance, as sacred places in which water spirits and mermaids reside and, if disturbed, will abandon the spring and the water will stop flowing. According to custom, it is forbidden to wash black pots (used for cooking) or to use soap when washing in the springs, linking deeply-held spiritual beliefs with practical water quality considerations for downstream users. This re-linking of the cultural, spiritual and ecological from the outset ensured the Bees had the support of the Chief. As time progressed, and results could be seen, the group grew. Food would be prepared for work days, and workshops were convened.[298]

As elsewhere, the drought and floods that followed in 1992 had a devastating effect in Chikukwa, yet also served as a catalyst for change, with more people joining the Bees voluntary workforce. With some financial support, training and exchanges further afield were soon underway.[299] Village Permaculture Clubs established schools (*permachikoro*) in each of the villages as a way of bringing people together once a month to address their concerns and work together to find solutions. Much of what took place in Chikukwa travelled from household to household, farmer

[297] As a result of these population and resource-use pressures, the steeply deforested slopes were increasingly unable to retain their soils and nutrients, and the lack of infiltration resulted in poor groundwater storage and erosion, with large gullies beginning to open up and channelling fast-flowing water and landslides down towards homesteads and villages, and resulting in consistently poor harvests.

[298] In consultation with John Wilson, who the Westermann's knew from his earlier time as a teacher in Chimanimani, John had been inspired by the work of permaculture founder, Bill Mollison, who he invited to Harare to train the first group in Zimbabwe at what is now Fambidzanai Permaculture Centre in 1987.

[299] Farmers also visited water harvester, Zephania Phiri, in Mazvihwa in 1993 (discussed in the previous chapter)

to farmer, with many evolving their home plots with orchards, according to rainwater catchment, and with skills shared and adapted. In this way, sapiential knowledge was blended with permaculture learning.[300]

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Plate 7.5: Chikukwa in the early 1990s (CELUCT archive)

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Plate 7.6: Chikukwa in 2010 (photo by Terry Leahy)

As small amounts of funds came in, the Bees were able to support projects, the first of which was the basic materials to construct covered tanks above each village, fed by springs, thus providing villages with water points. Indigenous trees and woodlots were planted, with seed collected from different areas, and gullies filled with stones and planted with wattle. Chikukwa's terraces took shape from contoured swales with raised bunds planted with vetiver grass, collected and

[300] That CELUCT describes today as 'survival skills based on an intrinsic understanding of nature'. Discussion with Eli Westermann (24.11.16)

transported from Chipinge to the south. Bananas, previously thought impossible to grow in Chikukwa were also brought from Rusitu, and are now a major crop for consumption and trade. As the terracing reduced soil and fertility loss, improved yields were quickly apparent; and the introduction of trees led to increased availability of diverse foods. These extensive earthworks can still be seen on Google Earth, and represent the collective motivation of the Chikukwa community to physically reshape their landscape. Furthermore, with funds earned training other NGOs, Chikukwa, previously considered a poor ward with alcohol dependency, was the first to be electrified in the area, a point of considerable local pride.[301]

With a small grant from a German NGO,[302] and a one hectare plot from the Chief, the Bees registered as CELUCT, creating a modest training centre and pre-school on the steep site (1995-6). Since then, the organisation has developed its *sustainable agriculture* programme with village Permaculture Club Committees (PCCs) that run village gardens and nurseries, with approximately 100 participating households in each village. Other projects are seed multiplication and storage, holistic land and livestock management (HLLM), and *Tsime* (meaning 'source of knowledge') which supports farmer knowledge, experimentation and exchange. This road to professionalisation, however, is rarely smooth, with community organisations often pulled in two directions – caught between the demands of its own community and donors. To navigate this CELUCT has invested in local people to run the centre, training up new staff from within the community where possible. Community members are paid to facilitate training and provide catering. Land management and security are arranged on a rotational basis to provide equal income opportunities to villages, as agreed by their elected PCCs.

7.3.1 Peace Work

As new people arrived, bringing different traditions and loyalties which tested the Bee's original vision, they responded with social programmes that co-evolved to promote cohesion as well as social-ecological connections: women's groups came together to discuss acceptance of those affected by HIV, to establish savings and lending schemes, and to speak out about domestic violence using cultural idioms.[303] Engaging with social farming approaches also exposed a range of conflicts: rainwater diversion affecting households downstream; burning; straying cattle damaging crops; and village boundary disputes. CELUCT's *peace programme* emerged in 2006 and centred on a form of 'conflict transformation' that is part of its 'healing' outreach, training forty village peace trainers. This programme borrows heavily from cultural practice, and is integral

[301] Today the local shopping area, the clinic and schools all have electricity, as well as around fifty households.
[302] Weltfriedensdienst (WFD) remains an important CELUCT donor.
[303] Interview - CS/F/RJK/PS (29.11.16).

to its Building Constructive Community Relations (BCCR) approach.[304] Expanded as a collaborative district-wide initiative, focal people are elected and trained as trainers to transform conflicts using a dialogical approach: [305] in 102 schools to address rights of access, and child protection which includes child-led committees; and twelve Ward Peace Teams (WaPeTes), initiated at the request of WADCOs and other stakeholders that cut across political and traditional fora. The WaPeTes are elected through a transparent process, and include a range of stakeholders (ward councillors, traditional leaders, Agritex AEWs, people with disabilities, youth, women's and church representatives) to identify points of tension and develop strategies. These issues often mirror macro-political patterns, playing out at the mezo- and micro-scales, and have involved leadership disputes, political conflicts, elite resource capture, boundary and natural resource disputes, unequal access to services, politically mobilised youth violence, domestic violence and child abuse.[306] Biannual meetings are convened at CELUCT where the WaPeTes share their progress and/or challenges, and to plan ongoing actions including income generating projects and events that bring people together. Pertinent to this research is that, while it is clear from interviews that many of these issues exist in Chikukwa, the WaPeTe programme was only recently initiated there.[307]

7.3.2 Changing Cultural Values – Indigenous Knowledge Systems

In a bid to link its peace and sustainable agriculture programmes, CELUCT's more recent Indigenous Knowledge Systems (IKS) initiative is a response to the erosion of knowledge, landscape and trust, including declining trust in traditional leadership. IKS aims to re-engage the community in the preservation of its bio-cultural diversity, through an ongoing exploration that accepts the dynamic nature of traditions and practices, and the power inequities that can be engendered therein, to begin a conversation about the changes people want. The initiative will map sacred places alongside keystone species, and promote learning about indigenous plantlore, ritual and healing practices. This includes elements of mindfulness blended with cultural practice. In times of change and uncertainty, IKS attempts to bridge the Christian-Traditionalist divide to improve understanding, and to restore community cohesion in the face of more recent threats.[308]

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[304] With resources based on the three circles of knowledge developed collaboratively with Jane Fischer and CELUCT (See Westermann, 2008; and CELUCT 2017).

[305] These programmes are funded by WFD and SDC and facilitated in collaboration with TSURO, its sister organisation based in Chimanimani which was developed by CELUCT pioneers in 2002 to extend principles and practices across the district, without compromising the value and work of CELUCT as a Chikukwa community-owned organisation.

[306] Elder-youth tensions also exist due to increasing levels of gold panning, sex work and substance abuse related to lack of youth opportunity.

[307] At the time of field research, the Chikukwa WaPeTe was still in its planning stage, and so a sense of their work could not be stablished. The need for it, however, was captured here from FGDs and interviews.

[308]Public meeting (June 2017) in Chikukwa to announce diamond prospecting by parastatal ZDC which, if successful could renew the threat of eviction. The political sensitivity of this unfolding issue has resulted in it being reduced to a footnote, at the request of CELUCT.

7.4 RESEARCH PROCESS AND PRESENTATION OF DATA

Farming Typologies

Further to participants and respondents already discussed in the earlier methodology chapter, it is first necessary to briefly describe the types of farming found in Chikukwa. Some permaculture innovators with high levels of biodiversity in mixed systems with small livestock in food forests, were combining organic and inorganic inputs on different sites. Conventional crops (hybrid maize with applied fertiliser) are sold to the Grain Marketing Board (GMB), while organic produce is for household consumption, or is sold or traded within the community. This pattern can also be seen from the community *Survey*, with 9% of farmers self-identifying as organic using some form of inorganic inputs, whilst 10% of those self-identifying as conventional were in fact using some form of organic inputs (on the same or different plots) (see R7). Furthermore, for many, this picture is likely to change from season-to-season depending on weather patterns and the availability of inputs. Notwithstanding, the typologies identified in Chikukwa were: a) organic (traditional or certified), permaculture, and/or holistic land and livestock management (HLLM), referred to here as 'organic'; b) farmers using organic and inorganic methods on different sites, referred to here as 'hybrid' approaches: c) inorganic or conservation farmers using synthetic inputs, referred to here as 'conventional'.

Diagram 7.1: *key words emerging under each theme during formative FGDs in Chikukwa*

All survey respondents were smallholder farmers, with an average of 1.4 hectares (the lowest of the research sites). Eighty-seven percent of respondent's household income was primarily derived from farming, with other primary (off-farm) sources noted as vending, and only one noting remittances.

7.4.1 RESILIENCE

The FGDs in Chikukwa selected and agreed on a final shortlist of ranked indicators, shown in *Plate 7.8*, with number one being the most important. From *Diagram 7.1*, which illustrates early themes emerging under each concept, it is possible to see that FGDs identified a range of interconnected social and ecological issues pertaining to their resilience. When discussing map markers during the first landscape *Mapping* activity, discussions quickly turned to collective action such as gullies to be filled, and village springs needing restoration (*see also Plate 7.2*), demonstrating a level of responsiveness. The desecration and/or clearance of sacred spaces was an important aspect of agroecological farmers understanding of their bio-cultural resilience, not least to ensure that water sources continued to flow. During the later survey, more organic and hybrid farmers were found to have concerns about *respect for sacred spaces* than their conventional counterparts (70% and 52% respectively) indicating stronger links to traditional practice (see R2).[309]

Chikukwa Resilience Indicators (ranked)

R1 Traditional authorities enforcing env regulations
R2 Respect for sacred places
R3 More year-round functioning springs
R4 More demonstration gardens for learning, info, sharing
R5 Our family is healthy
R6 More seed varieties saved
R7 More grain being stored
R8 Soil fertility is better managed
R9 Manage crop pests & diseases
R10 Better networking for market linkages
R11 More crop types & varieties planted*
R12 Having enough food to eat

Plate 7.7: *Chikukwa final shortlist of resilience indicators, developed by 26 participants, ranking in order of importance (03.10.16)*

7.4.1.1 Deference and Dissent

From the ranked survey indicators (*Plate 7.7*), it is clear that participants placed a significant emphasis on the role of the traditional authorities to regulate natural resource-use and enforce management practices. This includes burning (veldt fires), which is permitted on two afternoons per week, streambank cultivation (enforced by EMA), livestock management, and tree cutting.

[309] All reference to numbered survey response referred to in this case study chapter can be found in *Annex 5.3*

While the majority outwardly defer to their traditional leaders, many complained privately that their leaders are failing to address critical environmental problems, are corrupt, or partisan in their decision-making. One farmer said of his process in accessing land in Chitsaa:[310]

> I was given 3 ha of land – and the headman was corrupt. He wanted a chicken, $50 and a goat. I paid all his demands. I managed. Then he sold [1 ha of] that land to another person. And I remained with 2 ha. And the 2ha was also said to be near to the river. So the environment management team [EMA] said I could not cultivate there. And so I remained with only 1ha. But there was a sacred tree. I was told not to cut down the tree until after there was a ceremony, then I could cut it.[311]

Soon after preparing his land, he found that he had been omitted from his village list to receive farming inputs: *'I was not allowed to be given seed which is given to people by the government – saying that I was from the opposition – so I was left off the list.'* This story, one that was selected by the group during storytelling to be dramatised for the village heads as part of the PAR process, did have a happy ending. The farmer was instead introduced to open pollinated seeds (OPVs) by one of the CELUCT pioneers who shared her seed. Our storyteller went on to produce bumper harvests, year-on-year, and is now a staunch advocate for the benefits of OPVs and the independence they enable.[312]

7.4.1.2 Productive Diversity

When surveyed on productive diversity[313] in the form of different crop types and varieties produced during that season, the largest number of all farmers (37%) fell in to the category of growing 2-5 types and varieties, with 70% of conventional farmers falling in to the 6-10 category. Yet, when considering the upper four categories (spanning from 11 to more than 25 crops) 52% were organic farmers, 34% were hybrid farmers and none were conventional (*Plate 7.8, below*). Nonetheless, the relatively low responses of those identifying as permaculture, agroforestry or organic challenged self-perceptions, and was such cause for concern that *improving agrobiodiversity* was selected as one of the actions (discussed in *Chapter 9*).

Accepting that biodiversity may be a better indicator of ecological resilience than it is a proxy for social resilience *per se*, it was possible to explore food availability and health through R5 and R12. Of the food consumed in the household, the majority of those surveyed (35%) depended upon shop-purchased goods to the tune of 1-3 items per week – fairly equally between all farming typologies. However, perhaps most starkly, 26% of organic and hybrid farmers responded that

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[310] Land allocations should not be paid for in a transactional way, but are granted on the basis of availability and need. A tribute, such as a chicken, would ordinarily be paid to the traditional leader when visiting to request land.
[311] Interview CHK/FI/M/RJK/AM (01.07.17)
[312] Our storyteller produced 1.5 tons p/ha during the 2015/16 El Niño season (27 x 50kg bags of maize) – when the average yield p/ton was 0.43 in the province (USDA, 2016).
[313] This indicator was not originally selected, but was added in consultation with the survey team in order to assist with the wider analysis.

they could not afford to purchase items from the shops, while 60% of all conventional farmers responded in this way. And when asked about how many times respondents visited the clinic over the past twelve months, the majority of all respondents (41%) fell within the 1-3 visits. Aggregated across the upper scales (from 4-6, and 7-10 visits), responses decline for organic farmers (22%), increasing for conventional farmers, at 50%.

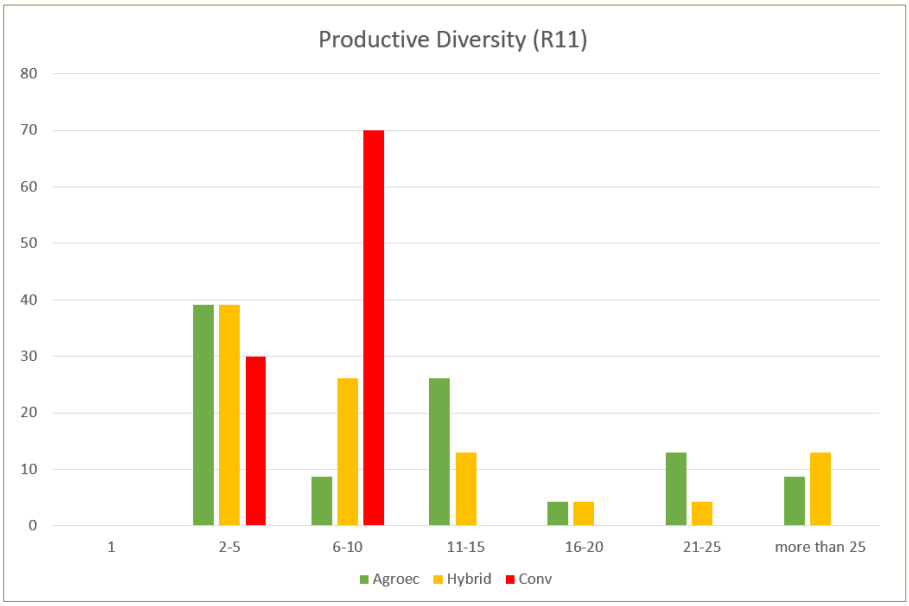

Plate 7.8: *Chikukwa survey responses to productive diversity (R11)*

7.4.1.3 Commanding Agriculture

An important asset to CELUCT's work has been its relationship with local Agritex AEWs, one of whom is a long-term adherent to permaculture on his home plot, but uses conventional practices on his resettlement land. He believes that this ensures a more nuanced approach when supporting local farmers working in different contexts, particularly given nutrient leaching in Chikukwa soils, and expands the range of available technologies and inputs.

Hybrid and conventional farmers are either part of the centrally planned and tightly regulated Command Agriculture programme, or regular distribution of seed and fertiliser that takes place from November (see *Plate 7.9,* below). In both cases, farmers sell their hybrid maize to the GMB, which has a strong presence in the district.[314] Being qualified to receive inputs through the Command structure is thought to be aligned with party affiliation, due to decisions being

[314] In 2016 farmers selling to GMB would receive $400 p/ton, Under the 2017 Command programme, they receive a loan of $450 in inputs (seed, fertiliser, compound D, herbicide) and an allowance for tractor fuel, for which they must return 1 ton of maize (interviews with farmers and AEW). This high price p/ton (compared with South Africa at $155 p/ton) has raised concerns about the impact on consumer prices, and has implications for GMB which has severe liquidity constraints – resulting in late payments to farmers. GoZ maintains that this incentivises production and reduces imports, though no data is available on total yield rates of loan repayment (USDA, 2018).

controlled by ward councillors and village committees (VIDCOs) in the same way as the lists for welfare distribution.

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Plate 7.9: *Women queuing for farming inputs on distribution day in Chikukwa's business centre (16.11.16)*

From the survey, 37% of households have no grain storage, equating to between 50-60% of people in four (of the seven) villages, thus increasing their vulnerability to a range of shocks and pressures (R6), and will be further discussed under agency. Despite CELUCT's more recent emphasis on food sovereignty, and farmers reporting higher OPVs yields, for those receiving inputs the GMB outlet provides much-needed bulk cash for school fees or larger farm investments, such as fencing. However, distribution and payments are often late, resulting in delayed planting and untimely reinvestment. Furthermore, the Command strategy, overseen by the army to ensure repayment, is seen as intimidatory, as one recipient jovially pointed out:

> I'd like to say it's good, but it's not. They supplied late. They give us the inputs – you might take some bags of compound D – 8 bags per hectare, 6 bags of ammonium nitrate. What you need they supply ... then [after harvest] I supply one tonnage – and they deduct the cost of the inputs. The word is command – you cannot control it – but you are COMMANDED. Otherwise I might fail and they can come and chop me. … so people are just afraid.[315]

Given the conditions of these loans, and the many variables that farmers face in any season, on being asked why so many had signed up for Command, one official laughed, *'…most farmers believe that it's a campaigning strategy, so they think that they may not have to pay. Some of them didn't even plant.'*[316]

Given the dominance of the productivist paradigm across Zimbabwe, it is unsurprising that many farmers aspire to being 'modern', as projected through their farming choices. However, a number of informants reported that organic farmers on their village input lists accept fertiliser and, rather

[315] Interview - CHK/FI/M/KBT/JN (01.07.18)
[316] Interview - CHK/AEW/M/MS (12.07.17)

than using it, put it in a clear plastic bag and leave it by their gate, as a sign of status.[317] According to others, being on a village list is a signifier of political alignment or acceptance from the village elite who sit on the VIDCOs (outwardly associated with the ruling party). And so, being seen not to accept fertiliser might be considered unwise.

Nonetheless, the work of CELUCT has increased the status of agroecological farming, in the various forms in which it is practiced by the breadth of social strata and across political affiliations. OPVs are widely used and promoted, and the benefits are well understood by those working with CELUCT.[318] Despite GMB now buying small grains, it was notable that no-one interviewed in Chikukwa reported selling their OPVs via this route.

7.4.1.4 Seed Saving and Sharing

Within Shona-speaking cultures, it is said that the role of seed guardians is the realm of post-menopausal women or, as one group referred to them, 'over-layers'! One such seed guardian currently produces and stores twenty-five different seed types and varieties.[319] There are up to thirty people in Chikukwa trained to select and store seed, and who regularly share and trade with others to expand their resource-base (not all of whom are women). As part of the Seed Knowledge Initiative (SKI) programme,[320] CELUCT hosted a seed fair in 2017 which drew in farmers from across the country, all of whom brought their seed to trade. Advocating seed laws that promote food sovereignty, the programme actively promotes a social justice agenda that includes participatory plant breeding to diversify, protect and increase availability, and to optimise adaptive capacity and resilience. According to one respondent: *'there is no difference between a farmer and the seed – we are all constantly adapting to change.'*[321] Beyond the technical skills, this has awakened a drive amongst participating farmers to protect and enjoy their seed. Asked about why this was important to her, one respondent said, *'It's an environmental choice, yes, but it's also about independence. I can say that I'm grown up now, even in terms of my senses.'*[322] Another seed farmer shared how and why he diversifies his seed:

> When planning my OPVs, I do it earlier, I've started preparing my land now so that they don't cross pollinate with the hybrids. I select my seed when they are still in the field. I study them from germination up to the flowering stage. I select them through looking. When they germinate I see the healthy ones. Disease tolerance, and healthy looking,

[317] Both as a demonstration of their modernity and tacit political support.
[318] Critically, OPVs, particularly *rapoko* are reported to utilise soil nutrients more efficiently, but require a longer season and so planting in October before the rains requires irrigation.
[319] Including nine of cowpea, six of OPV maize, twelve of groundnuts and three of sorghum (interview - CHK/SG/F/CHTK/MS (01.07/17)
[320] SKI promotes farmer knowledge and rights to produce and trade their seed, supported by Biowatch SA, the Earthlore Foundation and the University of Cape Town. In Zimbabwe, partner NGOs include CELUCT, Fambidzanai, ZIMSOFF, PELUM, and Practical Action. SKI is funded by the Swiss Development Cooperation (SDC).
[321] Interview - CHK/CT/F/SM (31.10.16)
[322] Interview - FI/F/CHTK/GC (01.07.17)

> drought tolerance. And I would taste the food. The food is good, especially *madura gudo*, it's also a herb inside our stomach – if you eat it, it prevents diarrhoea. We call it *matura gudo* – because the baboons don't like it. *Gudo* is baboon, *madura* is 'staying away'. The maize is red – and they fear that it's chili – and they don't like it. So they run away. So I plant that one and I ENJOY IT. … OPVs need someone with the seed in their heart. … My OPV is the original one – I inherited from my father and mother. The seed takes more time to cook. If I give you a bucket of hybrid and OPVs, the hybrid will finish faster. The OPV takes longer to eat. The mealie meal is more filling from the OPV – and more nutritious. The gene plasm in the OPV maize is still inside – so it takes longer to use.[323]

Beyond seed guardians commitment to seed sovereignty, the majority (61%) of survey respondents indicated that they saved between 4-8 different seed (evenly between the typologies), 9% save between 9-15 different seed, and only two farmers (both in the organic category) save between 16-20 seed types (R4). Substantially more farmers in Chitsaa were found to be saving 4-8 seed types (83%). And overall, 96% of respondents were found to save seed. This is thought in part to be due to remoteness and thus necessity.

7.4.1.5 Innovation and Experimentation

Innovation and experimentation was not an indicator that emerged during the focus groups on resilience, and so it was not possible to capture quantitative data on whether others, who might not be directly involved in *Tsime*, have adopted (or are adapting) different techniques. Across the reshaped landscape it was, however, possible to see households that have developed food forests on often less than 0.5 hectares to maximise the land's potential for year-round production. Of course, not everyone will be an innovator. As one pioneer Bee summed it up: '*There are people who catch things first, and then influence other people. And there are those who say OK I will follow. And others are just watching. They've been watching since 1991 – and they are still watching.'* [324]

Much of the experimentation is encouraged by CELUCT. The emergence and evolution of CELUCT itself, from a group of people in to an organisation, has been both a catalyst and inspiration for experimentation and change far beyond the confines of Chikukwa, through which others have been encouraged, supported and trained to be facilitators of change – be it as producers, seed guardians or peacebuilders. The *Tsime* project trains *source farmers,* each with its own *farmer action learning group* (FALG). [325] Over half of the source farmers were women, as were a third of FALG members. There are two source farmers in Chikukwa. An external expert has assisted source

[323] Interview - CHK/FI/M/KBT/JN (01.07.18)
[324] Interview - CHK/CS/F/RJK/PS (29.11.16)
[325] A district-wide programme with a consortium of local NGOs from 2014-2017. Find Your Feet (FYF), funded by DFID, and implemented by CELUCT, TSURO (Towards Sustainable Use of Resources Organisation), African Farmers Organic Research and Training (AfFOResT), and Zimbabwe Organic Producers and Promoters Association (ZOPPA).

farmers to undertake and document experiments with controls, and the FALGs decide on what techniques they experiment with, according to their conditions and issues they want to address.[326] Groups have been trialling different manures and vermicompost for soil fertility and *striga* control, as well as mole trapping. The project involved a total of thirty farmer-led trials, with results shared during open days.

As important as such NGO projects are, an indicator of success might be seen in the continued drive to work together and continue to adapt ideas them over time. The spirit of innovation sits uncomfortably with the strictures of short-term, results-driven donor funding and related targets. Nonetheless, the farmer-led research and co-learning that took place may have built confidence and stimulated many farmers to trial new ideas of their own. This was confirmed by observations of ongoing FALG member activities at their own plots over the course of the research.

7.4.2 AGENCY

The FGDs in Chikukwa selected and agreed on a final shortlist of twelve agency indicators, as shown in *Plate 7.10*, and were ranked - with number one being the most important. Data emerging from the agency indicators were considered primarily on the basis of gender and age in order to analyse participation, voice, self-esteem and confidence to negotiate and/or influence decision-making at various levels and through different means. Despite agency being a difficult concept to unpack, the FGDs in Chikukwa contributed a series of useful questions through which these could be explored. In developing their agency indicators, equality was discussed within

Chikukwa Agency Indicators (ranked)

A1) Respect – for ourselves & for each other
A2) Having access to information, knowledge & education
A3) Being united - working together to achieve common goals
A4) Better leadership & transparency on aid distribution
A5) More supportive traditional leadership
A6) Fair elections & appropriate representation
A7) Ability to participate in community gardens & activities as an equal
A8) Ability to influence decision-making (our voice)
A9) Women's access to land for production & expenditure decisions
A10) Capacity to negotiate fair market prices
A11) Having the power to say no to thing I don't want to do
A12) Having awareness about rights

Plate 7.10: Chikukwa final shortlist of agency indicators, developed by 26 participants and ranked in order of importance (03.10.16)

[326] *Striga* suppressant trials included leguminous species - sun hemp, cowpeas, pigeon peas intercropped with sorghum and maize. Farmer Trials Report (2017) by Henry Nyapokoto; external end-project report, Damika Carr for to Find Your Feet.

long-lists. However, when discussed together, a group of older women vehemently opposed it as contravening cultural values, saying that before long women would be wearing trousers.[327]

7.4.2.1 Social Farming, Unity and Trust

Given the process described by the early Bees as they came together to re-shape their landscape, it was somewhat surprising to find that no-one interviewed in Chikukwa today practices *nhimbe* or *humwe*, other than a select few in Chitsaa with immediate family. All interview respondents considered it time-wasting and expensive, with some saying that others were unwilling to give their time for free. One respondent also pointed to the rise of individualism based on financial transactions:

> We use to work together in good faith. You may have worked together on an area, then the person says this is my land and I gave it to you, and now you have to pay me or weed my field. There are some people like that – some have a vast area – but then they say I gave it to you – so they use you for labour. The chief was giving it for free – but now those people with vast areas are [transacting] with it, and others are selling it. They are not allowed to do it – but they do it secretly. The chief might only know about it when there's a conflict.[328]

Also under the rubric of social farming is the role, and politics, that surrounds the chief's field, or *zunde raMambo*. There were previously two *zundes* in Chikukwa, at which the community would traditionally gather to plant, weed and harvest. Grain would be stored at the chief's granary, to be distributed to the most vulnerable. One *zunde*, close to the wetland, has since been 'donated' to vulnerable households for vegetable production, enabling them to produce for themselves. The other is managed by school children, overseen by VIDCOs, which mobilises villagers during harvesting. FGDs and interviews reveal a high level of mistrust, and unwillingness to participate at the *zunde*, with many believing that more grain is stored than is distributed, and many suspect that it is sold.[329] Despite the absence of *nhimbe* and low levels of participation at the *zunde*, survey responses to being united and working together were generally high for all groups, irrespective of age, gender or farming typology (A3).

VIDCOs decide who, in their village, is most vulnerable and should therefore be at the top of its 'list', as already seen from our storyteller. These lists are drawn up by VIDCOs often without proper consultation (processes vary from village-to-village). This lack of transparency has led to the suspicion that decisions are made which prioritise on the basis of family, church or political

[327] Not *the* trousers, but in terms of dress, although the parallels between, and resistance to, women wearing *the* trousers might also be made.

[328] Interview - CHK/CS/F/RJK/PS (29.11.16)

[329] If the zunde (approx. 2 ha) yields 1 ton of maize, when divided up between 6 villages, this would equate to only 8x20kg buckets of maize to be distributed (interview with VIDCO chairperson – 01.07.17). It was noted that Chitsaa was not included in this calculation.

affiliation. When asked about whether decisions by leadership on the distribution of entitlements were fair and transparent (A4), the majority of those surveyed (70%) believed that they were only *sometimes* fair. However, more conventional farmers (30%) than other groups considered that they were *never* fair. As previously noted, this group had lower food availability and productive diversity across the higher scales, and is therefore likely to be more dependent on food distribution, and thus more subject to the whims of power-holders. As seen in *Plate 7.10*, less trusting of leadership (A5), hybrid and conventional farmers were more likely to have grain stores at household level (R7), and less likely to work in a united way to achieve common goals (A3).

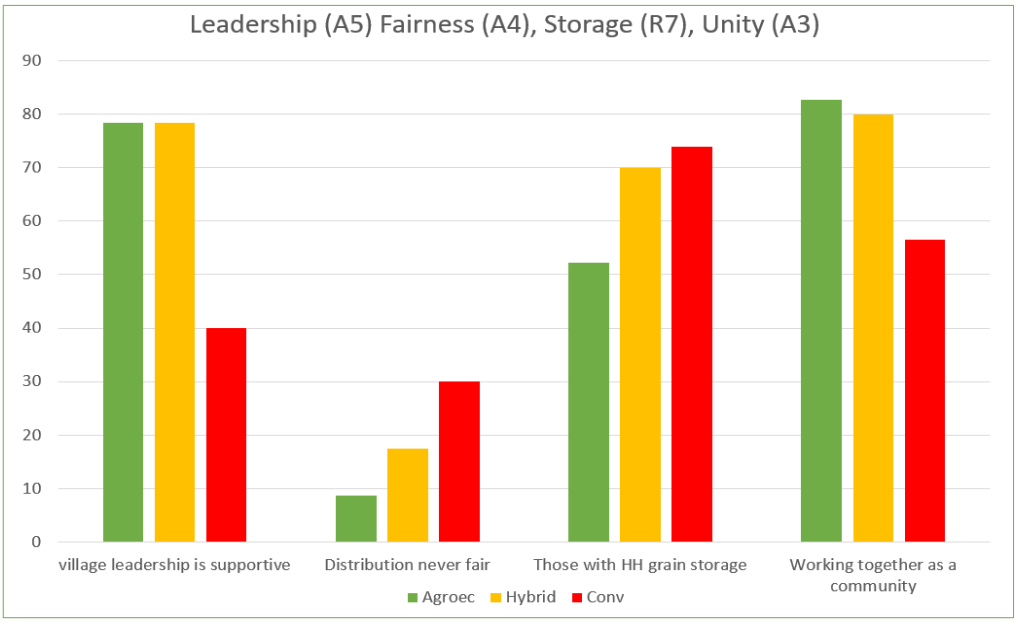

Plate 7.10: *Chikukwa responses on leadership (A5), fairness (A4), grain storage (R7) and unity (A3)*

The sense that corruption is endemic creates widespread suspicion at every level, and effects farmers' willingness to work together, particularly conventional farmers. From his interaction with a group of conventional, the Agritex AEW noted:

> So suspicion in is very high. Yesterday we were talking about forming these groups – I was trying to tell them about avoiding mistrust - so that they can form groups for bargaining purposes. Having a rep will benefit you. The farmer that is selling their potatoes in Chipinge can tell you that prices have gone up so we need to produce more. And they will give you information on what is happening. But they don't trust each other on transactions, saying 'did you sell at that price – or did you get that price?' So you try. But – eish – we'll see.[330]

This corresponds with the survey responses under peace (P6) where more conventional and hybrid farmers (20% and 22% respectively) indicated that they found trust difficult (seen in *Plate 7.14* under peace, below).

[330] Interview - CHK/AEW/M/MS (12.07.17)

7.4.2.2 The 'Dirty Game'

As noted elsewhere, politics tends to be used to cloak decisions and, as such, both masks and heightens other tensions - playing out at village and ward level, associated with the distribution of land and welfare. Nonetheless, the patronage stakes remain high, affecting how and who one works with. This connects social and political agency. One official, when asked about why people no longer feel able to work together, pointed to how vehemently people hold their political positions and how polarising these experiences can be in everyday life, saying:

> People aren't working together because it's political. Let's talk about if you want to work with someone - but if that someone is affiliated with another party – you see? [laughter] … it's very difficult to come to terms with working together when we have not come to the point where we can agree to disagree – that we can talk – and have different opinions about a political party, and I can make my point, and we can all still say, 'ah, I love my party'.[331]

Nonetheless, one VIDCO member, himself a permaculture demonstrator and seed guardian, was keenly aware of the political tensions, saying, when asked about whether some VIDCOs make partisan decisions that exclude people:

> 'Ah they might be, but politics is a dirty game. When we rely on politics, politics doesn't bring development. It's about the potential of how you breed your seed – how you share it with the people. You might be someone who is just talking without implementing something on the ground. People might say he's good because of what he's saying, but [is he] doing good? … No-one wants to loose. But what there is, is about gaining potential to do something. So if we want something more developmental – we need to put politics out. Because what we need is peace. So in politics, I think you need to be upstanding.[332]

Accepting that survey respondents are likely to be cautious when responding to questions on political agency – on representation (A6), between 61% and 70% believed that elections were fair and felt appropriately represented – with higher responses at village level, and declining towards the district level (reflecting the increasing distance of power-holders). However, only 40% of conventional respondents believed that their village leadership was supportive (A5), putting more store in being heard by their ward, district and national leadership.

7.4.2.3 Social Agency

During the women's FGD on agency, the ten women decided that they would feel more in control if they had access to land, over which they could make decisions such as planting and farming systems, and able to share produce with family members or neighbours without having to consult the household head. The resulting question (A9) therefore first sought to find out how much

[331] The same official also pointed to the role of churches in undermining social farming and related traditions. Interview - CHK/AEW/M/MS (12.07.17)
[332] Interview - CHK/FI/M/KBT/JN (01.07.17)

control women currently had over different plots of land. On feedback, the community was surprised to find that more women than men surveyed had: a plot on their homestead, a portion of a field, and their own field. More women had plots in irrigated community gardens, and therefore felt more able to participate in these and other community activities (A7). In addition, more women than men reported that they make all decisions on the homestead and the fields. At different levels of decision making (A8) in the home, family, village, and ward, however, men and youths felt more able to influence, but only marginally more than women.

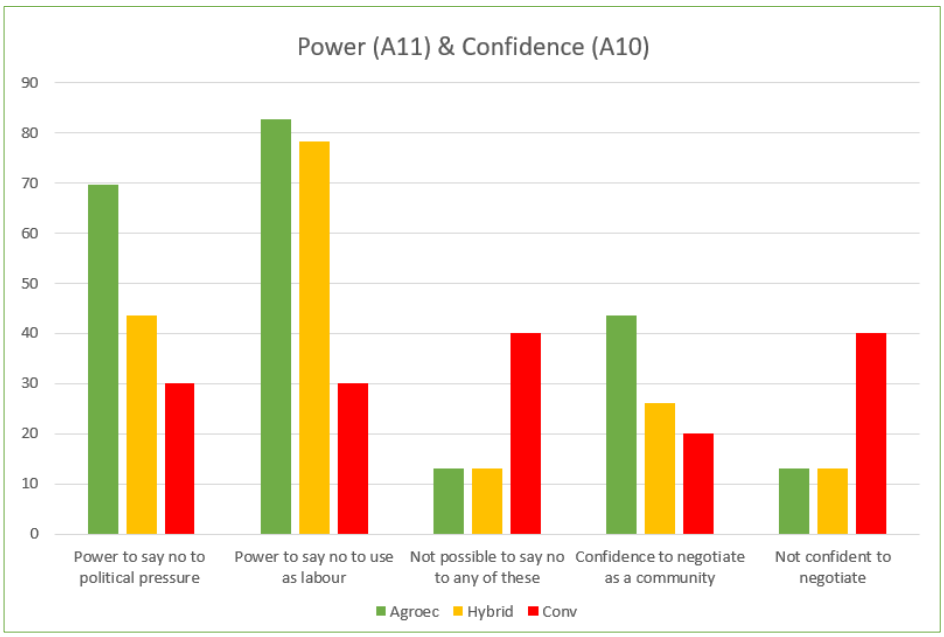

Plate 7.11: *Chikukwa survey responses on power to resist (A11) and confidence to negotiate (A10)*

When key indicators that are characteristic of social agency (A7-11) were considered together, conventional farmers were found to have less confidence and power to resist (see A10-11 seen in Plate 7.11), and were less able to participate in community activities, influence decisions at community level, or make decisions related to household or farming (*Plate 7.12*).

One reason for the differential in confidence may be found in the response of the AEW, when asked directly about the differences he observed between farmers in Chikukwa:

> When we are looking at the organic [farmers], they are more on the ground. They feel like they are more accommodated by each other. They share their ideas. They come together. There is that unity of purpose. When it comes to these competitions, it's conventional [farmers] that thrive there. But with the organic farmers, it's like a community – they come together. That is my observation – they work together so they tend to be closer. They depend upon each other to build their assets. …The conventional farmers don't do that.'[333]

[333] Agritex interview (12.07.17)

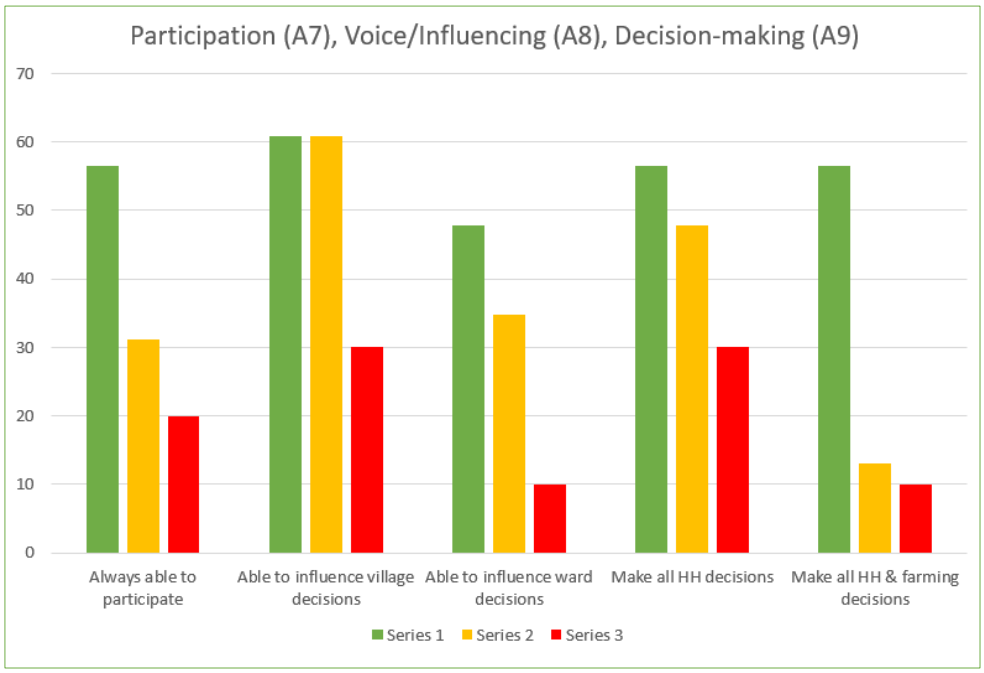

Plate 7.12: *Chikukwa survey responses on participation (7), voice (A8) and decision-making (A9)*

The differences between this and the earlier statement regarding his frustrations at the lack of group cohesion and trust within his own conventional farming groups, are stark. Conversely, however, it is also acknowledged here that CELUCT and its networks are now firmly embedded within the community and its structures, and are likely therefore likely to have more access to decision-makers. While this points to considerable success in terms of local integration of CELUCT's brand of permaculture, it also highlights a note of caution regarding inclusiveness.

7.4.3 PEACE

The FGDs in Chikukwa selected and agreed on ten peace indicators, as shown in *Plate 7.13* below, and were ranked with number one being the most important. These demonstrate that, while some aspects of everyday life in Chikukwa point to a sense of negative peace in the form of external threats, such as police harassment linked to corruption, or disturbances largely associated with election periods, most of those selected relate to the local-relational and reproductive realms. However, these might equally be viewed as concomitant with, and reproducing, external threat dynamics including economic hardship, social inequality, political injustice and violence. Words like *trust* and *love* were more common among women FGD participants, while among men *respect* and *unity* were more commonly recorded. When discussing their indicators in groups, elements of compliance in order to maintain the peace were also present, such as it being important to *'know what to say and what not to say'* (young woman), and *'Respect breeds peace, if one disrespects the status quo then peace is not accomplished'* (man).

Chikukwa Peace Indicators (ranked)

1) Managed livestock.
2) Good communication - mindfulness.
3) Less domestic violence.
4) Better safety of movement at night.
5) Peace of mind from witchcraft and/or jealousy.
6) Trust in each other.
7) Tolerance of different belief systems.
8) Freedom from police harassment & corruption.
9) Not being forced to attend political events & rallies.
10) Village heads performing their role as mediators.

Plate 7.13: Chikukwa final shortlist of peace indicators, selected and ranked by 26 participants (03.10.16)

7.4.3 1 Landscape Conflicts

As already discussed, boundary and natural resource management matters have, and will continue to arise, and are already an important aspect of CELUCT's conflict transformation work. However, even though it was ranked highly, roaming cattle is perhaps the least recognised area (by donors) where peace and sustainable agriculture work could converge.[334] Many fields and gardens in Chikukwa are unfenced, due to expense, so strategies relating to roaming livestock were considered as restoring everyday peace.[335] At the time of this research, under its Holistic Land and Livestock Management (HLLM) scheme, Chikukwa had thirty-three stock owning households with 182 head under a collectively agreed/managed herding rota. One widowed stockowner with five dependents said that she was previously stressed by bad relations with her neighbours and that, within the scheme she now 'felt free'. The benefits she articulated make a distinct agency-peace connection, saying: *'Before the programme I saw myself as a poor person. Very primitive. People were talking badly about me, because I wasn't able to manage my livestock, and it was damaging their crops. But currently I'm now having confidence in myself – I'm now somebody. People even now come to me for advice.'*[336]

HLLM has encouraged the group to observe and mimic natural grassland patterns – with seasonal grazing rotations, clearing invasive species and laying down *resting grasses* to stimulate new growth. From this, the group has noted the emergence of new grass species, raised water levels,

[334] Evidenced by CELUCT peace donors being unwilling to extend their funding to agriculture, resulting in the two programmes being separated in to silos.
[335] There are 142 households registered with the Departments of Livestock and Veterinary Services, for which each pays a $5 stockowner card – under which there are 1,300 head of cattle. Many more are therefore likely to be unregistered.
[336] Interview - CHK/HLLM//F/KWY/CM (17.10.16)

reduction in gully size/formation, improved forage quality and livestock reproduction (with benefits of draught power), and better quality and quantity of milk and meat – all of which improves animal-human nutrition and income.[337] They have also grown in confidence to engage with the Livestock and Veterinary Services – gaining access to breeding bulls and improving awareness on disease identification, for which many apply ethno-veterinary knowledge, and have been able to collectively invest in vaccines where necessary. Furthermore, whereas many used to beat their livestock, low-stress handing has also been important, 'improving trust' between stock and owner. The group now monitors and documents environmental changes, proactively removing fire and other hazards such as traps and plastics; major causes of livestock fatalities.

As livestock are a primary household asset, social trust is an important aspect of the scheme. For those in HLLM, trust has been built up over time. Collective herding has also transformed family relationships and income. Now able to work together on gardens, cropping or other small livestock initiatives at home, one farmer said, *'Now I can behave like a father, having time to give to my family.'*[338] This contrasts with the wider lack of trust found in A1, where the majority continue to rely on family herding (59%). While organic farmers are more disposed to trusting (P6) they tend to opt for zero-grazing.[339]

7.4.3.2 Exclusion and Mistrust

The importance of gardens was manifest in the power wielded by some PCCs who evidently play a gatekeeping role, defining rules of/and access. This also highlighted the divide between youths and elders in the wider community. Despite more youths being actively involved in CELUCT activities,[340] the mistrust in Chikukwa of its own youth population was clearly articulated throughout, but particularly within the women's focus group. At one level, represents a generalised judgement of all below the age of thirty-five; it also indicated anxiety and mistrust, given the role that some have played at the behest of political agents. According to one village official who is also an innovative farmer:

> Youths are being used, because there are shortages. The problem is poverty – they've gone to school, but the jobs aren't there. They are the most fast people, very energetic – one. Two – youths are still the people who don't have anything. Here the youth are being given some projects … they're given ten [dollars] they get from the government - or the party. By not being occupied somewhere, someone might come with a truck and say 'I've got 10

[337] 'Impaction' in temporary kraals takes place at each stockowners field, where all stock is kraaled overnight for one week in rotation, leading to significant yield increases. This form of intensive process is also known, elsewhere, as 'mob stocking'.
[338] Interview - CHK/HLLM/F/KWY/OM (17.10.16)
[339] In animal welfare terms zero-grazing is contentious – depriving stock of movement and forage for long periods. For family herders, during the dry season, stockowner or youth will often spend long days grazing livestock in the hills, with little time for their families or education.
[340] Twenty-two youths were involved in FGDs, and ten youths are volunteers with Birdlife International – identifying species, noting sightings, and monitoring habitats - meeting monthly to enthusiastically share their findings.

bags of rice – I need you to stand for my name'. They just flock there, and at the end of the day it's chaos. And these are the spies. So they spy on us - they might say 'he didn't attend this meeting – why?' But if I say, 'ah my friend I've got money today – come I need you to make 20 [bee] hives - this mountain would be full of hives – and at the end of the day, cash as well. Then they would be working, and they wouldn't be forced.[341]

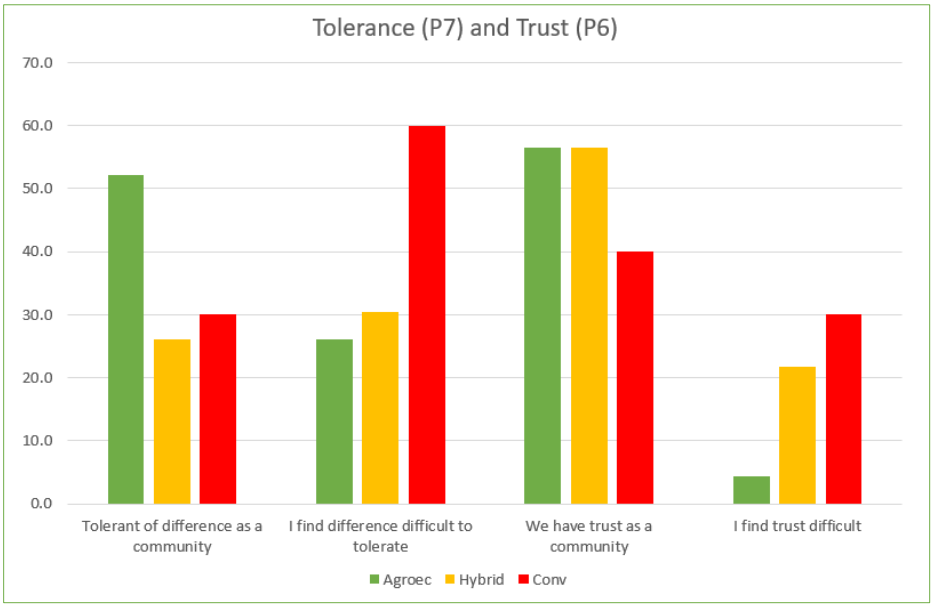

Plate 7.14: *Chikukwa survey responses on tolerance (P7) and trust (P6)*

This therefore illustrates a joining between the resilience created by the potential of community spaces; the agency exercised by the powerholders in excluding others from access to entitlements; and the lack of peace that this exclusion creates in the form of mistrust. And of course, it also highlights the vision of an innovative farmer, able to consider agroecological opportunities for positive change. As seen from survey responses in *Plate 7.14* above, 57% of organic farmers believed they had trust in eachother as a community, whereas 30% of conventional farmers found it difficult to trust, compared with only 4% of organic farmers.

7.4.3.3 Domestic Violence

During storytelling,[342] the majority of women gravitated towards the *agency* domain, in particular *self-esteem*, where many moving stories told of different levels of abuse as children within the family - often having been orphaned and used as child labour. The stories speak of restored self-esteem and respect, by the opportunity to connect with other women at Women's Social Clubs, food processing events, *Permachikoro* or becoming 'conflict transformers' and *Tsime* farmers,[343] As a result, it is likely that these groups are more alert to the signs of domestic violence. This was evident from survey responses (*Plate 7.15*) on *awareness of domestic violence* in their villages.

[341] Interview - CHK/FI/M/KBT/JN (01.07.17)
[342] During storytelling 6/12 themes were selected (identified from previous sessions): unity of purpose, access to information, influencing decisions, taking collective action, voice, and respect and self-esteem.
[343] Groups facilitated as a result of activities at village-level, initiated by CELUCT.

Overall, only 20% were not aware of any abuse, with the majority (43%) identifying between 3-5 cases. Given that most organic and hybrid farmers are engaged with CELUCT at some level, it is notable that 50% of conventional farmers were unaware of any domestic violence. This is not to suggest that conventional farmers *per se* are less conscious, but that may not have been exposed to the same awareness.

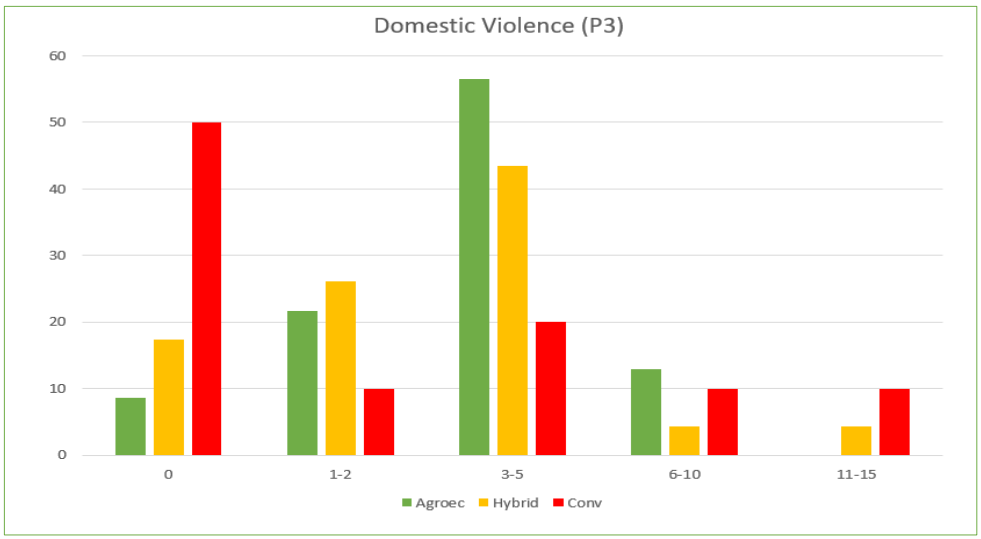

Plate 7.15: *Chikukwa survey responses on awareness of domestic violence (P3)*

The following indicator responses explain some of the more immediate dynamics associated with domestic violence. Of responses under *respect* (A1), all groups indicated high levels of self-respect, respect (from others and within the community), but these decline sharply in relation to respect as a family, with men feeling the least respected. When asked about *good communication* (P2), lower responses were found in the household, particularly by women and youths. Women also felt less supported by their in-laws, which caused family tensions.[344] Women, however, indicated higher *trust in community* than men, signifying the importance of networks outside of the home and family.

7.4.3.4 Tolerance and Peace of Mind

It is said by Chikukwans that they are more tolerant of incomers, and have therefore been more able to absorb its migrant communities. Whereas elsewhere traditional leadership divisions and questions over legitimacy have fomented divisions,[345] traditional leaders in Chikukwa have historically negotiated its changes, as we have seen, despite the relatively low-level pressures that currently exist.[346] During FGDs, the issue of tolerance was more keenly related to Christian-Traditionalist tensions. The resulting survey question on *tolerance of different beliefs* (P7) found

[344] Confirmed during the women's FGD on peace (02.10.16)
[345] Interviews with WaPeTes in other wards.
[346] Its remoteness reduces exposure to the heat of political centre and, within Chimanimani East constituency, Chikukwa has always been secure ZANU territory, although any changes would undoubtedly heighten pressures.

that 52% of organic farmers believed that the community was tolerant, while 60% of conventional farmers found any difference *difficult to tolerate* (*Plate 7.14,* above). Organic and hybrid farmers, however, were more susceptible to fear from jealousy and witchcraft than conventional farmers.

In recognition of tensions on many levels, CELUCT staff began engaging in mindfulness, developing their own cultural blend. Having experienced personal/familial benefits, they began introducing it in their villages and now have growing mindfulness groups. Furthermore, it has been integrated into conflict transformation training with WaPeTes. When asking how interviewees lives had changed since become involved in with CELUCT, many talked about how improved resilience had contributed to confidence and independence. Yet it was surprising how many men talked of having once been violent. The value of this work, and the shift in consciousness it has prompted, was articulated by two traditional leaders:

> 'If there was some food aid – out of 20 bags I'd grab five – I could take it 'cause I'm the leader. I didn't know that there is a sense of greed in us that you might not notice - you just think it's your right. The mind is the most dangerous weapon. You can make yourself to be happy or to be sad. So by joining mindfulness and training myself – I can now understand my mind. I'm very different. I was such an angry person – when I mixed with other people – if they stepped on my feet by mistake I would not tolerate that, even if they said sorry. … I used to even beat my children. That stick that I beat my child with, what kind of pain was I causing my child? If I think about that now I'll be having pain inside me all day.'[347]
>
> I was a very hard man. Since I'm a traditional leader people must respect me. I'm now soft [laughter]. I thought people should not play with me – as I'm a big traditional man. I'm second to the chief! People were afraid of me. They'd ask permission to see me – but I'd just say 'who are *you*? What do you want?' But here I learned that everyone is the same – everyone should be respected. And by so doing, I now manage to talk to everybody. And it was easier to tell people 'hey, what are you doing – that is not good'. But before that was not my aim – before I thought that people should respect me. But now I know that they were afraid of me. Now I am a better leader. Everyone wants to speak to me, to be with me! (Headman)[348]

One WaPeTe is a ZANU-PF ward councillor reaching the end of his fixed term. After training in conflict transformation he is now planning his succession with cross-party consultations to ensure that, whatever the election outcome, the WADCO, VIDCO's and WaPeTe can continue their work without political upheaval causing conflict or creating gaps in delivery. When asked the same question, he said, *'I was a bully – a black belt in karate. I was so quick to temper, and didn't want to be underrated. But now I'm engaged and friendly - and am able to focus on my peace work.'*

[347] Interview - CHK/CS-TL/M/KC (29.11.16)
[348] Interview - CASH/HM/M/SC (26.10.16)

7.6 IN SUMMARY

As people quietly contest the corruption and poor governance within their traditional and elected local leadership, and the inequity that results, there is a thirst for change. Any such changes, seen by many traditionalists as a conveyance of weakness leading to the inexorable erosion of traditional ways, often meet with resistance. This sets up an interesting dilemma that goes beyond the Christian-Traditionalist, elder-youth, Chikukwan-migrant, organic-conventional or even party-political binaries ordinarily articulated, and reaches to the heart of deeply-held concerns about the loss of cultural values. As we have seen, this unease is far from unique to Chikukwa. The social-ecological framing, however, provides a space where these sensitive matters are discussed more openly, particularly as they are mediated through different village structures initiated by CELUCT using its culturally embedded dialogical approach, with a focus on trust-building and transforming relationships. Creative approaches by CELUCT that have evolved from its agroecological work, have united its community networks around landscape-level changes that link directly to livelihood improvements, and encourage greater awareness of, and responsiveness to, wider environmental impacts and changes. Without this carefully navigated path, it is debateable whether these tensions would have been surfaced, a process that one pioneer likened to 'peeling an onion' to reveal the layers beneath. With wider acceptance and embeddedness in community structures, agroecological farmers are more able to envisage and shape change, have more confidence, and are more engaged in influencing and decision-making. This points to the successes of CELUCT and its village networks, but also to the need to broaden out these benefits to incorporate other farmers, including those from Chitsaa.

CHAPTER 8

SYNTHESISING FINDINGS

8.1 INTRODUCTION

In this chapter we begin by returning to the thematic indicators selected by each agroecological community of practice under resilience, agency and peace. These indicators are synthesised through a series of categories as a framing mechanism to facilitate further discussion and analysis of emerging patterns. As discussed in the methodology chapter, the process applied here borrows from the Everyday Peace Indicators (EPI) project to identify trends within and between communities of practice by qualitatively developing a series of categories and sub-categories in order to classify the indicators selected under each theme. As such, they allow us to begin exploring and comparing priorities in terms of how participating agroecological farmers believed that greater resilience, agency or peace could be realised. It is then possible to investigate how the wider enabling or disabling environment may have informed these priorities and patterns in context. The frequency of these indicators is then mapped as spider diagrams to consider emerging patterns or divergences under each thematic area. Before going on to consider these, it is necessary to remind the reader that these indicators, while expressly posed as positives, often reflected deficits. These nuances will be discussed in more detail in the analysis below.

8.2 RESILIENCE PATTERNS

The categories created under the resilience theme can be found in *Table 8.1* (below) as: *practical and/or technical* considerations to which agroecology learning and techniques are applied; *social farming* incorporating systems of reciprocity and spiritual practice; *innovations and adaptions* which relate to farmer experimentation and co-learning; and *off-farm* associated the wider socio-political and/or landscape considerations.

The patterns that emerged from classification in *Diagram 8.1* (below) demonstrate a divergence of resilience thinking and priorities between the agroecological groups in each study area. In Mhototi, indicators associated with drought management and food availability sub-categories are particularly prominent. In Chikukwa, indicators overarchingly favoured the sub-categories associated with food availability. In both cases, *technical/practical* considerations predominate. In Dema, resilience was not framed in response to their relationship with the environment, but was instead focussed on essentially off-farm concerns over which external actors and/or service providers play a defining role.

Practical / Technical	Social Farming	Innovations / adaptations	Off-farm
Drought management • More year-round functioning springs (C). • Rainwater harvesting and dams for irrigation (M) • More small grains are being planted to manage drought resistance (M) • Less confusion about planting times (M) **Pests and Diseases** Pests and diseases are managed (C) **Food Availability** • When grain is being stored (C) • Seed security is improved (M) • More crop types and varieties are planted (C) • More planting of diverse crops (M) • Better family health and food availability (C) • Good family health (M)	**Cosmology** • There is respect for sacred spaces (C) • Cultural rituals are maintained (M) **Reciprocity** • People are working together to solve problems (M) • More gardens for learning, information and sharing knowledge (C) • People in the community working together (D) **Seed Sovereignty** More seeds varieties are being saved (C) **Networking** Better networking for market linkages (C)	Experimentation (D) New innovations being developed to manage drought (M) Strategies for maintaining soil fertility (C)	**Agroecosystem** • Wetland by-laws are enforced (D) • Traditional authorities enforcing environmental regulations (C) • Wildlife conservation management working properly (D) • No careless behaviour (traditionalists) damaging our environment (D) • Strategies for dealing with extreme weather (D) **Goods and Services** • Employment opportunities are available to everyone (D) • When there is economic stability (D) • When all people are educated (D) • Having markets for our crops (D) • Having markets for income (M) • Fewer people not planting because of dependence on hand-outs (M)

Table 8.1: Resilience Categories and Indicator Classification
(M = Mhototi, C = Chikukwa, D = Dema)

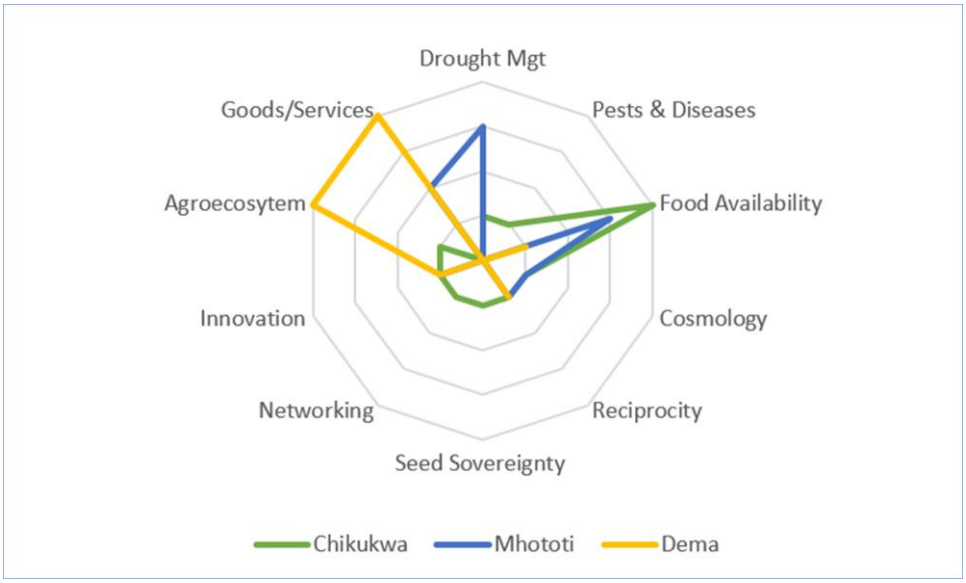

Diagram 8.1: *Resilience Indicator Frequencies*

8.2.1 Practical and/or Technical Resilience Category

Practical responses were seen as those that are part of a wider established technological framework of activities, and were often articulated in relation to basic needs, such as water, food and health. These include the sub-categories of *drought management* identified as strategies important within each area of practice; *pest and disease management* such as companion planting or natural solutions; and *food availability* when specifically related to output. This can be seen where productive diversity was discussed in relation to food availability rather than in terms of more resilient production systems, and where seed was discussed as part of food 'security' as opposed to sovereignty.

Practical/technical considerations, as with innovations and adaptations, can be seen to reflect priorities in the different agroecological zones. For instance, strategies in Mhototi are more responsive to drought conditions, while in Chikukwa (with its high rainfall and steep gradient) soil and nutrient leaching was a focus. Despite being in one of the drier agroecological zones, comparative with Mhototi, drought management did not feature in Dema. For Chikukwa and Mhototi food availability were important indicators of resilience. Only one such indicator (productive diversity) was selected by Dema, having initially been omitted.

8.2.2 Social Farming Resilience Category

Social farming refers to beliefs and/or practices that reflect more complex social-ecological relationships and cosmologies. This includes the cosmological foundations of traditional farming, such as respect for sacred spaces inhabited by ancestral spirits; and observance of rituals associated with farming traditions. Cultural dimensions of social farming incorporate traditions of

reciprocity such as collectively organised and shared labour (*ilima* or *humwe*) and, more broadly, as resource sharing. While the interlinking of cultural and spiritual traditions are intrinsic to traditionalists, this is not always the case for non-traditionalists, and so these were sub-defined here. Networking was also included in this category. Here the four central characteristics of social capital identified by Pretty and Ward are useful: *relations of trust*; *reciprocity and exchange*; *common rules*, *norms and sanctions*; and *connectedness, networks and groups* (2001:211).

Those harnessing traditional connections are more inclined to refer to seed saving as intrinsic to culture, viewing these activities as part of sovereignty. More seed saving was taking place where traditional culture and spirituality were embraced or accepted as part of a syncretic blending of belief. Conversely seed saving was lower where there was a rejection of traditional practice and belief, and vulnerability and mistrust were found to be most acute, as in Dema, where spiritual farming connections were largely lost, and traditional farming viewed unfavourably.

Systems of reciprocity appeared in all three sites. Despite disincentives in Dema, *ilima* was practiced by just under half of all farmers, with other forms of sharing being practiced by many more agroecological farmers. *Humwe* and resource sharing was also found to be central to Mhototi's farming ethic and practice. And, despite the absence of *humwe* in Chikukwa, knowledge sharing appeared to be significant to identity and social capital, generated through agroecological practice. Nonetheless, two different forms of reciprocity were found to be at play: direct exchanges of approximate value, and a more diffuse approach within which ongoing exchange may not be immediately reciprocated yet over time is balanced. These functions in Chikukwa and Dema were carefully measured and gauged, for fear that the costs of these demands would ultimately prove detrimental to already scant resources.

8.2.3 Innovations and/or Adaptations – Resilience Category

The capacity of people to adapt and innovate in the face of uncertainties become a critical capacity for managing complexity, referencing a growing confidence to shape change. In each study area an innovation indicator was selected. However, it is perhaps more useful to consider whether farmers were experimenting or continuing to adapt to externally introduced innovations as transferred technologies, often through model farmers or top-down training approaches. All found innovation difficult to articulate beyond explicit learning, even where they were adapting.

Systemic shocks were also noted as having played an important role in stimulating responsiveness to change and wider adoption in both Chikukwa and Mhototi. These responses have resulted in people working collectively to shape their landscapes, creating microclimates within which to create new opportunities. Despite numerous shocks over many decades in Dema, and the recent El Niño and cyclone events, having initially been omitted, the indicator on experimentation

suggested that the community felt at a loss in terms of how to respond. The later indicator on *strategies for extreme weather* was developed for the express purpose of exploring possibilities within the focus group itself as part of the PAR process.[349]

8.2.4 Off-farm – Resilience Category

The off-farm category incorporates aspects of farming associated with the wider environment that could enable or constrain resilience. As such, indicators under the *agroecosystem* sub-category were articulated around the need for more enforcement of regulations and by-laws governing resource use and management. And indicators under *goods and services* highlighted conditions created by the lack of state provision or dysfunctionality, over which people felt largely powerless.[350] Somewhat strikingly, the majority of Dema's resilience priorities fell in to these two sub-categories, discussed below.

8.3 AGENCY PATTERNS

Turning to agency, the same formula for categorising and classifying the indicators was used, this time under three categorical themes, as shown in *Table 8.2* (below). These were framed around Karlberg's (2005) methodology that centralises *power in* to explore its 'transformative capacity' either through self- or collective efficacy – emphasising connections and relationships - and recognises the *power over* at play at different levels of the analysis - as habitualised and constraining. Categories were developed to support indicators within which *unequal power* was recognised, discussed here as *social* or *institutional* forms of agency; those recognising forms of *alternative power* (explicitly or implicitly) seen here as *values* and *collective* efficacy to shape change; and *external sources of power*, such as those represented by legal frameworks, whose agency was expressed as potentially enabling. In some cases indicators were cross-classified to reflect the language used during discussions.

[349] This facilitation was part of the PAR when the indicator was selected, with participants asked to suggest ideas for the survey response range. The two proposed during the FGD were stronger (building) structures and better planning by authorities. Natural resources strategies were later suggested by me for discussion and addition by the group.

[350] There were two exceptions – each with quite different motivations and implications. In Dema some participants felt that they needed to take action to forcibly prevent traditionalist performing rituals and polluting their environment. Whereas in Mhototi there was a drive to engage more farmers to reduce donor dependency.

RECOGNITION OF UNEQUAL POWER		RECOGNITION OF ALTERNATIVE POWER		EXTERNAL POWER
Social/reproductive	Institutional	Values	Collective	Legal Frameworks
Using power *within* & *to* (self-efficacy)	Identification of power *over*	Expressed as power *with* (collective efficacy)	Collective efficacy to shape desired changes.	(Recognition of enabling potential)
<u>Self-worth</u> (*within*) • Having confidence& self-esteem (D) • Having respect for ourselves and eachother (M) • Having access to education (C) <u>Inter-personal</u> *(to)* • Power to say 'no' to things I don't want to do (*reproductive*) (C) • Ability to make decisions without seeking permission (M) • Women's access to land for production & expenditure decisions (C) • Having respect for each other (C)	<u>Transparency</u> • Less corruption of elected officials (M) • Better leadership & transparency of aid distribution (C) • Fair & transparent decisions on land of food distribution (M) • Fair & transparent land allocations (D) <u>Representation</u> • Fair elections & appropriate representation (C) • Less factionalisation of elected officials (M) • Having more supportive traditional leadership (C) • Traditional leaders are fulfilling their duties (M) • To have representatives who represent our needs (D)	<u>Solidarity</u> • Being united to achieve common goals (C) • Working in solidarity to find solutions (D) • Community is united and working together (M) <u>Traditions</u> • Cultural tradition plays a stronger role (M)	<u>Voice</u> • Our concerns are listened to (M) • Having our voices heard (D) • Ability to influence decision-making (C) • Education is sufficient for girls & boys (M) • Being consulted by National Park on wildlife management (D) <u>Access</u> • Having access to information & knowledge (C) • Being able to participate in activities as an equal (C) • Sharing of natural resources to overcome greed (D) • Women's access to land for production & expenditure decisions (C) <u>Resistance</u> • Capacity to negotiate fair market prices (C) • Being able to resist 'development' decisions that lead to pollution/dislocation (M) • Having the power to say 'no' (*societal*) (C)	<u>Rights</u> • Having more awareness of rights (C) • Equality between men & women (M) • Having more understanding of rights (D) • Gender equality & equal opportunities for men & women (D) <u>Freedoms</u> • Our freedoms can be exercised (M) • When freedoms are experienced (D)

The patterns that emerge during classification in *Diagram 8.2* (below) demonstrate widely divergent experiences and priorities in each study area. In Dema, indicators prioritised rights and being heard by different bodies. In Mhototi indicators were more dispersed, with a focus on the need to improve voice, transparency and representation. Whereas, in Chikukwa, interpersonal relationships were prioritised, intersecting with improving access to resources.

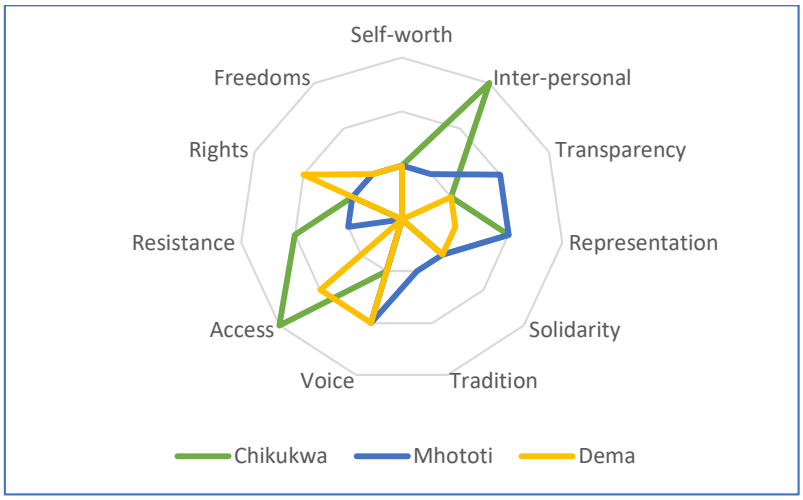

Diagram 8.2: Agency indicator frequencies

8.3.1 Social-Reproductive Agency

The social-reproductive category deals with indicators that expressed a desire for more self-efficacy within the household or family, such as an inner sense of *self-worth* relating to confidence, self-esteem, and self-respect – to which *education* was closely related[351] - and was of equal import in all study areas. And the *inter-personal* such as the power to say no, having respect for one another, and the ability to make decisions without seeking permission. The majority of these indicators were selected by women and youths, reflecting the reproduction of power and dependency across spheres and structures. While a sense of self-worth was indicated across sites, this was amplified in Chikukwa, in part due to the space provided by CELUCT which recognised the need to focus on improving inter-personal relations within its BCCR programme.[352] In both Chikukwa and Mhototi, power at this level was seen through the lens of decision-making and relationships within the household, where women were found to have made gains. In Chikukwa there was a direct correlation between exposure to CELUCT activities and women's decision-making powers. This of course raises the prospect of contestation over changing gender roles, and the defence of 'culture' from attack or erosion, seen through the perpetuation of social norms and practices which promote the needs and interests of some at the expense of others. In Dema, while similar power dynamics were expressed by women during *FGDs*, here participants

[351] From Chikukwa women's long-list: 'when *we can read and write more than our husbands*'
[352] Building Constructive Community Relations

were more inclined to identify formal rather than discursive mechanisms as the means through which to overcome unequal power in the domestic and social spheres.

8.3.2 Institutional Agency

The institutional category refers to perceptions of vested interests by elected officials and traditional leaders. This is divided into two sub-categories. *Transparency* was linked to issues of corruption and fairness, articulated alongside a desire for greater transparency in decision-making, particularly with reference to resource access and distribution. *Representation* deals with elections and factionalisation with related failures to fulfil duties and/or adequately represent peoples' interests. As social differentiation increases, a sense is created that many are being left behind. This related to access to land and resources, food aid and development assistance, and indeed to the decision-making process itself, being captured by an amorphous national and local elite. In Mhototi and Chikukwa, these indicators were not found to represent a resistance to hegemonic power *per se* – which was largely accepted as part of the social infrastructure - but in opposition to its uneven use, and disgruntlement at their exclusion from its benefits. Many of those involved in CELUCT and Muonde are embedded within different local power structures – as village heads or committee members, ruling party members, and/or have served as elected councillors. On one hand, this might be expected to result in opposition to change, but was rather found to create opportunities for open discussion on solutions when these were surfaced during the PAR process (discussed below). In Dema, while these same conditions were recognised, a safe space through which to contest them did not exist.[353]

8.3.3 Values of Agency

Under sources of alternative power are indicators that reflect collective efficacy formed around shared beliefs and the desire to shape change (Bandura, 2000). Identified in each study site was *solidarity* framed around common goals, discussed as uniting behind land-use practices or natural resource protection. This has implications for functionality in building relationships and obligations around a defined purpose - the achievement of which in turn further strengthens solidarity (Mukute *et al.,* 2018). Cultural *tradition* was particularly important to Mhototi where, as we have seen, it has enjoyed a revival in more recent years. Here, the rehabilitation of cultural practices and ritual was suggested, including rainmaking and family courts for dispute resolution.[354] Even in Dema, where the use of 'culture' was highly selective, cultural values were discussed in ways that reflected the desire to both enable and constrain changes considered to be desirable or undesirable. This was found to be deployed in highly nuanced and gendered ways,

[353] The ward councillor involved with the project had limited power as an MDC member, and trod a careful line.
[354] *Dare* was considered, by FGDs in Mhototi, as a possible way of reducing frustrations leading to child abuse, where youths could be sat down and coached by elders. This was added to their action plan on 'tradition rituals and practices'.

within which vested interests perpetuate a sense of inequality and exclusion, often expressed in interviews.

8.3.4 Agency for Collective Action

This category is defined by indicators that expressed more formal demands to be heard by projecting a collective *voice*, and to gain *access* to a range of resources and fora through which interests may be better served. While these referenced clear frustration, they also expressed a sense of collective desire to effect change. Indicators under *resistance* opened up discussions on strategies for collectively tackling issues of concern, such as unwanted development that threatens human dislocation, pollution and destruction of natural resources; unequal relations between producers and buyers; and having the power to say 'no' – ranging from being used as labour through to political coercion during elections. While the call for voices to be heard was a common indicator across all sites, three Chikukwa indicators related to access constrained by local gate-keepers of information, land and participation. Furthermore, two of the resistance indicators arose in Chikukwa, and the other arose in Mhototi. While revealing frustration, this also suggests (relatively) more confidence simply in articulation if not actual deeds. That these were majority ZANU-PF constituencies is not insignificant, particularly as in Dema no form of resistance featured in the indicators or any of the research interactions. Nonetheless, any expressions of resistance were carefully framed around acting within existing spaces. Of course there are both historical and contemporary examples of spaces being taken, seen during the run-up to and drive behind FTLRP itself, as experienced in Mhototi and Chikukwa. However, in Dema any such tendencies are kept in very tight check, and proxy agency devolved to urban NGOs with capacity to apply legal instruments.

8.3.5 Legal Frameworks for Agency

This category refers to legal frameworks enshrined in the 2013 constitution, such as *rights* and *freedoms*, yet which are rarely enforced or experienced in the everyday. Rights were common indicators across all sites, notably appearing twice in Dema, where discrimination is most acute. Here, recourse to formal rights and freedoms was understood as affording a level protection, given its perceived location outside of the party-state. Elsewhere, however, these were viewed with suspicion – imposed for the express purpose of eroding cultural and customary power – revealing an elision between power *over* and power *with* that is complex and highly politicised.

		SECURITY	
HOUSEHOLD & FAMILY	COMMUNITY	LOCAL INSTITUTIONS	STRUCTURAL
Equitability • Equitable sharing in the home (M) • Feeling respected & cared for (M) **Domestic Violence** • No domestic violence & abuse (D) • Less domestic violence (C) • No violence in the home (M) • No child abuse (M) **Stresses** • Being able to afford a good standard of living (D) • Unemployment decreasing (D) • Failing services (D) • Having a sense of peace (M)	**Communication** • Village heads performing their role as mediators (C) • Good Communication (M) • Communication & mindfulness (C) • Good communications at all levels (D) **Trust** • Being united (M) • Having Trust in each other (M) • Trusting each other (C) • Having a sense of place – belonging (M) **Relational Pressures** • Managed livestock reduces conflict (C) • Peace of mind from witchcraft & jealousy (C)	**Leadership** • Leadership struggles and wrangles at any level reduced (D) • No hatred or harassment (D) **Discrimination** • Tolerance & respect of difference (D) • Tolerance of different belief systems (C) • Not feeling discriminated against (D) **Crime** • Reduced fear of robberies & violent crime (D) • Safety of movement (M) • Better safety of movement at night (C) • No violence in the community (M)	**State** • No oppressive laws – presence of rule of law (D) • Freedom from police harassment & corruption (C) **Party Political** • Not being forced to attend political rallies and events (C) • Not being forced to participate in violent campaigns (M)

Table 8.3: Everyday Peace Indicator Categories and Classification

8.4 EVERYDAY PEACE

In now turning to peace, many of the categories proposed in the EPI codebook have already appeared under both resilience and agency, disaggregated within this research to explore each in more detail.[355] As seen in *Table 8.3* (below), new categories were created to reflect the different spheres of social activity within which more peaceful relations were articulated as being desirable, such as the household and family, and within the community. S*ecurity* concerns are divided in to *local institutional* and *structural* reflecting the origins of insecurity. From *Diagram 8.3* (below) frequency patterns, such as economic stresses causing a lack of peace in the family, as well as leadership pressures linked to discrimination in Dema. Trust and crime in the community were prominent in Mhototi, as was equity and domestic violence. In Chikukwa, indicators highlighted inter-related communication and relational pressures often related to natural resources and community perceptions.

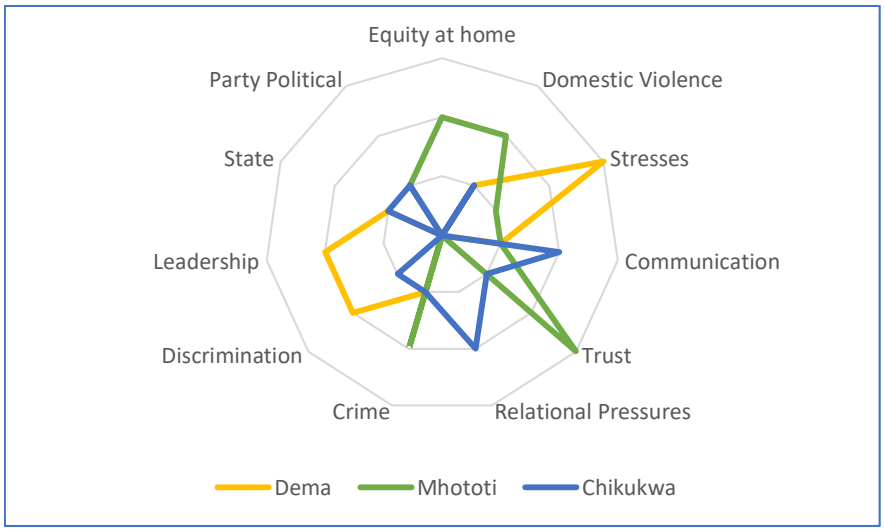

Diagram 8.3: *Everyday Peace Indicator Frequencies*

8.4.1 Peace in the Household and Family

Indicators on *equitability* in the home relating to care and reciprocity were exclusively selected by women, and linked to the division of labour. *Domestic violence* and abuse in the home were aligned with, but clearly separated from, *stresses*, often selected by men. These indicators of stress were identified by Dema participants as economic drivers contributing, or even causal to domestic violence (also arising in Mhototi during the feedback discussion). While survey questions on domestic violence varied from site to site, responses were found to be higher in Mhototi and Chikukwa than in Dema, where stresses are arguably higher. Importantly for this

[355]Everyday Peace Indicator categories included food and agriculture, health, infrastructure, freedoms and rights – all of which have been applied under resilience and agency. EPI codebook https://everydaypeaceindicators.org/research/

study, was that an awareness of different forms of violence and abuse was higher amongst agroecological participants exposed to the host NGOs in Chikukwa and (to a lesser extent) in Dema. The availability of food was critically linked to peace during all interactions. Here the obvious problematic in separating domestic violence from the latter security and crime category is acknowledged. This will be explored in the *discussion* when considering conditions of peace and violence in societies affected by a culture of authoritarianism.

8.4.2 Peace in the Community

Communication was important across all three sites for managing community relations, specifically with regards to observing rules associated with status through conventions and formalities. While these are essential in maintaining everyday civility, they often conceal deeper tensions, as explored in Chikukwa through discursive approaches. Despite vested interests and corruption having undoubtedly eroded trust in all three communities, an indicator on *trust* was conspicuously absent in Dema, where mistrust instead emerged as a strong theme linked to pervasive security concerns. Closely linked to *solidarity*, the importance of trust to the formation of a common purpose and goals was particularly recognised in Mhototi, where it was articulated as forging a sense of belonging within the community. *Relational pressures* within the community were highlighted in Chikukwa, which selected both indicators within this sub-category. Livestock related conflicts were ranked as the primary source of interpersonal conflict, to which agroecological responses were being developed. Fear of witchcraft, while appearing only in Chikukwa's indicators, arose in research interactions across all sites, particularly prevalent with agroecology innovators due to suspicions that their non-conformist approaches marked them out as being in league with dark forces.

8.4.3 Local Institutional Pressures on Peace

While criminal activity takes place within each community, crime could also be classified as structural, given its relationship to structural violence. However, as discussed by participants, crime was seen as the result of local leadership failures, and was a common indicator across the three sites, ranging from petty crime such as robberies, to violent crime and public disturbances. In Mhototi there were two such indicators, expressing anxiety about safety of movement within and outside of their own community areas. Indicators expressing concerns relating to the partisan distribution of entitlements, under *discrimination,* also referenced a deficit of tolerance, noted as religious, political, linguistic and cultural, and were prevalent in Dema, where traditional practice and religion was viewed as deviant and even threatening. In Chikukwa, intolerance of different religious beliefs was noted by traditionalists, and was found to be higher amongst conventional farmers who admitted to finding any difference difficult to tolerate. No such indicator appeared in Mhototi, where most involved in focus groups adhered to a range of Christian traditions, yet

have increasingly accepted a level of syncretism associated with their growing agroecological practices and connections.

Indicators associated with *leadership* notably appeared under agency in Chikukwa and Mhototi where proximity to decision-makers resulted in dissatisfactions being openly discussed and actions considered. In Dema, leadership indicators were notable in their appearance under peace and security. Tensions between community leaders, found throughout, draw upon structural dimensions of power, playing out as localised contests between traditional leaders, exacerbated by political factionalisation. Such tensions in Dema, however, left people feeling exposed to the threat of political violence within the community as they are pulled between complex and highly sedimented loyalties.

8.4.4 Structural Challenges to Peace

Here, the role of the state and the ruling party are presented as distinct sub-categories within the wider structure, despite references to the highly integrated nature of the *party-state*, as expressed by supporters and opponents alike. Nonetheless, this division allows for the possibility that the central party-state may not always be responsible for the actions taken by local party officials, despite the structural violence associated with the partisan distribution of entitlements being widely acknowledged. At the level of formal *state security* apparatus, the police were a less political target of frustrations, particularly as ZRP budgets were being met through fines, causing widespread resentment throughout Zimbabwe.[356] Despite its earlier stated reliance on legal frameworks and mechanisms for protection, Dema's assertion of 'oppressive laws' demonstrates a level of confusion, and perhaps also a degree of appropriation of peace NGO language.[357] This was not explored further, due to fears that other participants might report on the discussions. This perhaps explains the desire for freedoms associated with the rule of law, yet these same pervasive security concerns were no more present in Dema than in Mhototi and Chikukwa.

That a *party political* indicator was enthusiastically agreed by all in Chikukwa suggests a higher level of openness and confidence, the primary concern being the payment and deployment of local youth for voter intimidation, causing mistrust and damaging elder-youth relations. In Mhototi, while discussed openly during *FGDs*, the related indicator was vetoed as being too sensitive, thought due to the proximity of some in the *FGD* to the 2008 election violence. Yet here it was clear that many people feel under considerable pressure to attend party meetings. At stake for local leaders are not only the patronage benefits to themselves, but also to their communities,

[356] Despite ZRP being widely understood as having been the primary apparatus of President Mugabe at that time, and the military being more aligned with Vice President Mnangagwa – as confirmed in the later internal party (non)coup in 2017.

[357] It was not clear how 'rule of law' and 'oppressive laws' were interpreted and experienced in the everyday. As with all indicators, more time would ideally have been spent exploring these in the development or more nuanced indicators.

whose entitlements depend upon them being on the winning side. Despite divergent views and feelings of discrimination expressed quietly in interview, across study areas, all believed that shared social farming provided a tangible everyday mechanism for overcoming even the most entrenched differences.

8.5 IN SUMMARY

In considering the divergent patterns between the priorities and concerns of each participating community of practice, it is possible to see how degrees of coercion have created constraints on agency which has, in turn, affected resilience thinking and adaptive capacity. This was demonstrated most starkly in Dema, where leadership struggles were viewed alongside threats of violence as opposed to areas over which collective agency could be exerted. Despite acknowledged stresses, the resilience indicators one might expect to find in a drought-prone region, such as food, seed and drought management, did not appear as priorities. Instead, high levels of dependence on, and frustration with, external institutions were apparent. While in Chikukwa and Mhototi, the strategies employed are primarily technical, these have engendered an ethic of collective endeavour, with a space emerging within which to voice inter-related concerns, including those associated with the lack of leadership and transparency. In both cases, many of the attendant resilience and peace concerns are directed inwardly, related to a need to improve productivity and drought-responsiveness, as well as transparency, interpersonal relations and trust. A number of variables feed into these differences, which will now be explored in the following discussion.

CHAPTER 9

DISCUSSION: THE ADAPTIVE DANCE

9.1 INTRODUCTION

The findings of this study show that the pervasive culture of coercion and control in response to perceived or actual threat provides a lens through which questions of transformative action, or lack thereof, should be viewed. As such, power and agency are explicit variables in exploring how people co-act in/with their environment and what the barriers to co-action might be. A political ecology lens has helped to explain how power shapes production, validation of knowledge/s and action as doing. In recognising the *power as dominance* at play in mapping the nuanced performance and alignments of agroecological practices in different situations and contexts, this study has critically questioned supposedly bottom-up processes of agroecology and how this intersected with a community's ability to think, do and act differently. In doing so, it has investigated any latent or explicit tendencies within a community for reproducing structures of power, control and domination. These findings show that cultures of coercion and control that are so entrenched and internalised constitute a real risk to transformative initiatives, unless these are consciously surfaced and addressed in diverse processes of negotiated co-action. In identifying the barriers to change, participatory action research has significant potential to translate into transformative processes. External triggers or shocks can mobilise wider acceptance of alternative strategies and, while important, these alone were not found to be sufficient for transformation, and may in fact result in moral panics that further embed existing power dynamics. In the most extreme cases, where knowledge erosion and agency are correspondingly low, so coercive control and a sense of being unable to self-mobilise are most marked. This research proposes that critically inverting this process - recapturing and re-membering knowledge as part of a conscious process of democratisation - has significant implications for generating both agency and peace formation.

9.2 CULTURE OF CONTROL

The nationalism that drove the liberation struggle, and the muscular and culturally exclusory narrative that followed into independence put an end to any hopes of pluralism, marking the continuance of intolerance, violence and authoritarianism that has its roots in colonialism (Nhdlovu-Gatsheni, 2009). With dashed hopes and the erosion of legitimacy since structural adjustment, and the rise of political opposition after 2000, the party-state has become progressively more dependent upon overt mechanisms of control. And with declining state resources and increasing land hunger and frustration, land reform took on new lease of life by popular demand, reshaping the social, economic and political landscape. Contingent on these emerging threats, the use of coercion has been exercised through an increasingly politicised

bureaucratic and security apparatus, and infused with a highly charged popular discourse grounded in cultural nationalism which pervades everyday experiences.

Land and culture have long-been at the centre of emancipatory struggles for recognition and definition - and are likely to be so again. A growing and highly acquisitive bourgeoisie and an increasingly kleptocratic political elite have proceeded to capture and accumulate substantial natural resource wealth, with the liquidation of natural assets and capital flight on a tremendous scale. Nonetheless, and with all its anomalies, the 2018 elections achieved two important things. Firstly, it demonstrated that ZANU-PF continues to enjoy overwhelming support in the rural areas, in no small part due to its considerable powers of patronage. Secondly, it declared Zimbabwe under new management and open for business. Given that the land rush had previously passed it by due to a failing economy, hyperinflation, and uncertainty about land security, this is an attempt to make Zimbabwe an attractive destination for international capital for the first time in many decades. As such, the door is likely to be thrown wide open. Within their campaign pledges, both major parties courted international investors, with few new ideas offered to reinvigorate the ailing rural economy (Scoones, 2018b). With the prioritisation of international investment centred on extractive industries for economic recovery, President Mnangagwa will need to bear down heavily on any rural dissent. This will test even the most consolidated network, as will any factional threats to existing patronage networks that would invariably create extreme levels of disruption and insecurity.

9.3 CONSTRAINTS TO AGENCY IN CONDITIONS OF PREVAILING NEGATIVE PEACE

Where habituated experience represents a disincentive to change, creating an acceptance of resulting poverty and power asymmetries, so the productivist paradigm has encouraged individualism and competition in an atmosphere already permeated with disarticulation and mistrust. It is within this structural context of unequal resource distribution and marginalisation that technical development strategies have continued to be imposed on rural communities, giving rise to tensions driven by growing social differentiation as well as cultural, religious and political cleavages. Cultural and structural violence remains in evidence in the unmet or withholding of basic human needs, such as welfare, freedoms and even identity (Burton, 1990a). With reference to Gramsci, this is the 'cultural dynamic by which a group claims and sustains a leading position in social life', that is 'culturally exalted' by others (Connell 2005:38), through which patronage benefits are conferred upon some at the expense of others. While this condition opens itself to challenges and change, the peripheral stresses and tension that this creates are revealed in low-level acts of violence and criminality, and direct violence deployed where threats to power centres are perceived.

For agroecological farmers across study sites, the values embedded within culture were viewed as a function of non-monetary social relations concomitant with social capital, and incorporate an element of social protection against structures of domination, yet also serve as a function of the relationship between members of the household, civil society and social networks (Blaikie *et al.,* 2004:97). While the deployment of culture was expressed as a form of collective empowerment, it was clear that culture also functions in ways that make power less visible – influencing beliefs, social acceptance and how people think about their own place in the world (and indeed their sense of self-worth) that defines access and participation. Here is it worth noting two of the long-list indicators that appeared under peace in Mhototi: '*socialisation'* and '*knowing your place*' were later revised as '*having a sense of place'*. Yet the origins suggest a form of socialised consent that can deter the questioning and re-visioning of relationships. While the implicit contradictions in navigating a path towards a respect for traditional values that reforge social-ecological relationship without reproducing power asymmetries are far from clear in these remote and deeply socially conservative areas. Nonetheless, these difficult conversations were taking place in Chikukwa, and during PAR in Mhototi, yet were closed down by a pastor when the women's group in Dema openly asked 'what is the value of culture?'[358]

Strategies for maintaining everyday peace were found to include avoiding political meetings or confrontation, not reporting acts of violence, pretending to belong to a certain political party and, in extreme cases, participating in acts of violence as a form of placation. And while Tarusarira and Manyena (2016) rightly point to these responses as forms of individual and collective agency in an environment of negative peace, amongst agroecology practitioners, relationships based on sharing, trust and empathy were being built as alternative strategies to forge a positive peace. Nonetheless, forms of socialised consent, and fear, are very real for those experiencing them, indicating a persistent state of negative peace – where society itself is viewed with suspicion if deviation from any norm is suspected by those controlling the narrative. Furthermore, such forms of coercive control were found to have been reproduced across different layers within each case study, evident in high levels of domestic violence. This points to a wider culture of violence, driven by anxiety and frustration, and exacerbated by what may alternatively be viewed as a *culture of authoritarianism* and its contingent agency deficit.

9.3.1 Moral Panics and Violence

Domestic violence is instructive, in that it may be viewed as concomitant with, and reproducing, external threat dynamics including economic hardship, social inequality and injustice. Yet this does not capture the cycles, or indeed normalisation of everyday violence as a mechanism

[358] Day two of indicator development – during feedback and negotiation of final indicators to be included (18.05.17)

through which to suppress change – be it at the domestic or societal levels of human interaction. To explore this further it is necessary to briefly turn to the rich and contested literature on post-conflict violence against women from different disciplines and traditions. In her evaluation of post-conflict environments, Donna Pankhurst (2007) notes related literature has a tendency towards the tautological in its functionalist conceptualisation of patriarchy. As such she notes that much of this literature casts women only as victims, or ranges from cycles and pathologies of violence following conflict, to cultural violence that underpins uneven social relations. At the heart of this school of thought, a culture of violence and its reproduction may be found in the highly masculinised colonial, liberation and post-independence nationalist narratives that have tended to celebrate the 'hetero-nationalist masculinity' particularly of those with liberation credentials (Hague, 1997:55), promoted by leadership and often perpetuated by women through socialised consent. Following the hyper-masculinity argument associated with hetero-nationalist narrative, from which Matabeleland has been excluded (Ndlovu-Gatsheni, 2009), it is interesting to look again at the data from the three sites.[359] Yet this perspective, in and of itself, fails to explain why some men are less susceptible to reproducing structures of dominance than others despite similar cultural pressures and experiences.

What may be clearer is the link between structural violence and economic stresses. Here violence against women predominates in situations of poverty, particularly where women appear to enjoy increasing rights and economic independence. Women are better able to engage in and prosper within an informal economy, while men are 'unemployed' with an increasing sense of demoralisation (Segal, 1990:257). This is attendant with social change over time and space, within which frustrations mount at, for instance, the slow resolution of land reform, increasing wealth disparity, accelerated economic hardship and being unable to provide for the family. This can be seen in the correlation between the rapid rise in domestic violence and structural adjustment in Zimbabwe in the 1990s.[360] Here Whitehead and Barret's 'crisis of masculinity' points to wider 'moral panics' associated with social change and 'destabilisation'– resulting in calls to defend the moral fabric of nation and culture (2005:7). In this way, culture and change may be perceived as antithetical, however incongruent this is with the constantly shifting realities and roles associated with process taking place over a far wider timescape (Sideris, 2001). These changing dynamics were evident in Mhototi and Chikukwa, where women surveyed were found to have increasing access to productive resources and decision-making, and where changing land-use practices have resulted in more horticultural production and thus access to income by women. And, as seen in

[359] Domestic violence was found to be considerably higher in Chikukwa (80%) and Mhototi (86%) than in Dema (54%).
[360] The 1995 report by Women in Law and Development in Africa found that 'one in three Zimbabwean females were physically assaulted, one in two psychologically abused, and one in three sexually abused, with domestic violence accounting for more than 60 percent of the murder cases that go through the courts' (Green, 1999 – in Osirim, 2003).

Dema, when men had returned from Bulawayo to farm due to the collapse of the formal economy. Despite men having remained primary decision-makers, their return invariably led to household tensions and realignments, particularly where women had been successfully farming in their absence.

Anxiety about the changing role of women was found to be amplified by the imposition of constitutional mechanisms that undercut customary control, and where embedded social norms, vested interests, and socialised consent were found to prevent systemic change through bureaucratic structures (Naryayan, 1999). This was discussed by community power holders (men and women) in functional and symbolic terms as a loss of power, and cultural emasculation.[361] This can be seen from women's accounts in Mhototi and Chikukwa, where divorce is deeply stigmatised and the number of unmarried, independent women was increasing, adding to the sense of moral panic.[362]

On rape, Turshen (2001) presents a thesis associated with surrendering assets such as property or labour, particularly where women are less autonomous under customary codes. In Zimbabwe, where these rights are asserted, yet with weak state enforcement, rape might also be used within marriage to force the surrender of these rights, and with it, any sense of power or autonomy.[363] Nonetheless, as agroecological networks diversify from their initial focus to incorporate a range of inter-related issues, these experiences were being shared and the contradictions between rights and culture discussed.

9.4 DISRUPTION, CHANGE AND CONTINUITY

Periods of extreme stress or shock accelerate and intensify feelings of nostalgia for an imagined ideal of traditional values, when the world was altogether simpler and everyone 'knew their place'. The underlying desire is a hankering for being at peace, yet the threats attendant in nostalgia depend entirely upon who defines which version of the past should inform the future. Here, the dialectical relationship between tradition, culture and power is seen in constant interplay, within which the construction of the social imaginary provides both a sense of continuity in the face of upheaval, and reinforces hegemonic power. Yet periods of shock are disruptive precisely because they represent opportunities for change, leading to periods of questioning and renewal, within which the natural equilibrium may be so undermined as to make

[361] Sensitivities to emasculation may be acutely related to the sense of being unable to protect assets, such as land and livestock, as well as women (Enloe, 2000; 2004) during colonialization through to the Liberation War, particularly when, in the latter stages, militias were younger and less disciplined, heightening levels of civilian-militia violence.
[362]Osirim (2003) points to the considerable risks to women considered to assert their independence, with incidences of rape documented since the colonial era, through to the Liberation War and during more recent election violence.
[363]Zimbabwe case study documenting women's rights campaign to protect widow's inheritance (VeneKlasen & Miller, 2002).

a return to the previous *doxic state* untenable. 'Disasters, be they sudden or gradual, can provide insights into politics and society because they reveal systemic inequities and power relationships, not only in the ways vulnerability to hazard and risk are produced … but in the ways communities, classes and groups organize to replace state and market functions with alternative logic and social organization' (Holt-Gimenez and Shattuck, 2011:114). For Bourdieu (2001), this re-evaluation is more likely to take place at the periphery, as relative 'margins of freedom' than at the centre of regulated social structure and, in this way, may define the local structures that emerge. Here, Foucault's epochal structural change also comes to mind – with external ecological, economic and political shocks creating space for changes within complex dynamic systems.

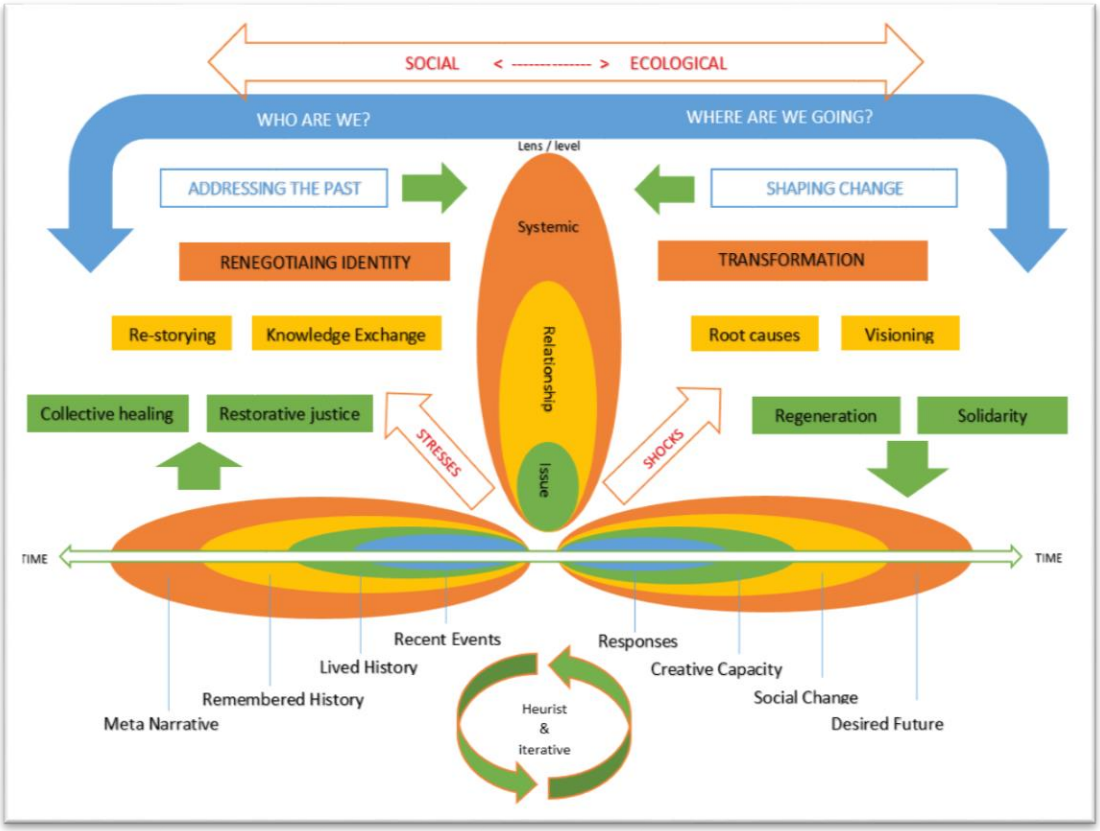

Figure 9.1: *Adaptation of Lederach's butterfly schema (2005:144)*
Conjoining agroecology (right) as a transformative tool for sustainable peace (left)

The potential of these periods of change to stimulate a creative re-visioning towards transformation in these contested spaces is depicted in *Figure 9.1.* Seen together with the protraction of 'crises' in Zimbabwe, a series of mounting stresses punctuated by shocks has led to a search for new meaning and ways of *being* in these margins – leading to renewed agency that has stimulated responsiveness and change, freeing people to experiment and take risks, and to imagine alternative pathways. Yet just as the combination of stresses and shocks represent powerful stimuli for change, so this change is likely to produce an atmosphere of moral panic. Within the context of this study, the key for agroecological communities is to learn to engage

confidently and creatively in ways that draw upon past knowledge without entrenching repressive social relations that may otherwise have an interest in stemming transformative change.

In Chikukwa and Mhototi people drew on their own experiences and traditions in response to cumulative stresses and sudden shock - described in Mhototi as worsening economic hardship and drought, and in Chikukwa as social change and flooding that brought landslides. While small groups of people in each responded to worsening crises, in both cases it was the shocks that provided the catalyst for wider change. These encounters at the interface have both dynamic and emergent properties through which perceptions, interests, relationships and goals are shaped. Yet the concern here is how structure is conceived, therefore changing the level of the encounter and what structures it shapes (Drinkwater, 1992). The condition of Dema proves instructive - where cumulative stresses have been punctuated by shocks with such increasing regularity and severity, there is a sense of numbing, suggesting that shock alone is not a sufficient stimuli for change, and that resilience is itself a function of historical factors and the broader sets of power relations they reproduce. This suggests that more extreme levels of coercion and socialised consent may render responsiveness untenable – combining to form an impenetrable crust of resilience *to* change, buffered by external bodies that may unwittingly contribute to an habituated condition of control-dependency.

Returning to the research questions, particularly the *first sub-question*,[364] the way in which practicing agroecological communities defined and experienced resilience and agency was highly dependent upon levels of power exertion, factionalisation and threats of violence. The more cohesive networks were able to develop different strategies to alleviate these external threats. However, the relationship between resilience, agency and peace is far from static or clear-cut. What is clearer is that an absence of peace significantly undermines agentic motivation, and thus resilience; and that increases in agency underpins resilience which creates conditions for more peaceful relations. This study therefore found agency to be the vital link that connects more resilient communities with peaceful relations.

Resilience is contingent upon, and relative to, the power that may enable or constrain agency to act within and upon ones environment, not least in the face of poorly formulated regulations with little or no consultation. While on one hand an emphasis on under-resourced and -capacitated formal bodies with divergent and often vested interests represents an externalisation; on the other it signals a determination to hold authorities to account. Yet within a context of systematic marginalisation and dependence on the party-state, such overt calls carry significant risk,

[364] Research sub-question a) *How do practicing communities define and experience resilience and agency, and in what way does this impact on how they articulate and experience everyday peace?*

particularly for those perceived to be in opposition to the state, and thus to representation of nation. Of course, it may not be possible or desirable to persist or adapt - key facets of resilience – particularly in situations where levels of destabilisation have crossed a critical threshold beyond which a system cannot self-organise around a different trajectory (Folke *et al,* 2010; Tarusarira and Manyena, 2016). Yet were this the case, under the resilience-transformation thesis, the system would necessarily shift to one of fundamental transformation. However, underpinning this condition of pathological resistance to change is a carefully crafted marginalisation through internal division through which the status quo is maintained. Combined with the historical elimination of any cultural farming past, resulting conditions have conspired to leave people exposed and vulnerable to less desirable forces of change. And where culture and spiritual connections have been systematically eroded, so confidence, trust and unity were found to have been severely compromised, leaving little to draw upon when imagining the future.

9.5 SOCIAL FARMING AND TRUST

Within this research, a clear link has emerged between social farming practices that promote reciprocity and trust - an essential building block, or lubricator of co-operation for labour sharing and collective action to manage natural resources (Ostrom, 1990; Pretty and Ward, 2001). Irrespective of traditional religious observance which varied temporally and spatially between study sites, the ethic of sharing and co-operation was found to be central to all agroecological farmers. While this was the result of more labour-intensive farming practices, the process was found to stimulate relations based on reciprocity and trust. Whereas conventional farmers were found to be more competitive and suspicious, finding it more difficult to trust others - denoting different 'cultures' determining divergent social expression in capacities for co-operation and competition (Karlberg, 2005:14).

Here, the level of state penetration and its attendant 'modernisation' in different areas is thought to have been important not only in defining the level and type of inputs accessed and used, but also in the division of individual plots with fencing, creating more individualised approaches to farming.[365] This penetration was far less pronounced at the geographic margins of state delivery, as was exposure to mistrusted middlemen and traders of commercial inputs, where farmers instead developed networks for sharing and barter trade based on trust. And it is at these margins, through processes of knowledge and resource sharing, that agroecological communities have emerged, in part as a result of necessity in response to relative isolation.

A direct correlation was found between social trust and civic engagement (Putnam, 2001) which, as we have seen, was low in Dema. Despite this, fewer agroecological farmers experienced

[365] Discussion with Michael Drinkwater (21.11.17)

discrimination or threats of violence, focusing instead on farming, while skilfully avoiding becoming embroiled in community meetings - as was found across sites. Nonetheless, in Chikukwa, some farmer-innovators had attained sufficient confidence, standing for VIDCO elections, and were avowedly promoting more equitability and transparency. And in Mhototi, many Muonde farmers were already engaged in decision-making, either as village heads or within VIDCO structures.

While social farming traditions such as *humwe*, *nhimbe* or *ilima* proved central to the collective vision of most agroecology practitioners, its application was found to vary between sites. These differences, thought to be embedded in 'culture', may in fact be found in more historical explanations related to agrarian change. While labour provision at the chief's field was demanded of the subaltern around lineage-controlled settlements, collective labour sharing was a result of the expansion of settlements into dryland production (with the introduction of the plough) for which new networks of labour-sharing (and purchase) were required (Scoones, 1997a). This expansion did not take the same form in Chikukwa, due in part to being in an area of high rainfall and smaller plots of land constrained by the terrain. Here, also, the chief's field continues to hold more significance due to the deep lineage and relative power and position that this chieftaincy still enjoys. In the case of shallow or weakened lineages, such as those in Mhototi and Dema, tribute labour or goods has less traction or has long withered from memory, and may explain why these more dispersed dryland farming communities were still found to rely on *humwe* or *ilima*.

Closely linked to solidarity, the importance of trust to the formation of a common purpose and goals was particularly recognised in Mhototi, where it was articulated as forging a sense of belonging within the community, irrespective of vertical cleavages and attendant stresses, and where agroecological farmers used sharing and empathy to cut through tensions. While the relationship between social and financial capital has not always been clear, during this research it was found that the poorest agroecological farmers cultivated their social connections for reciprocity with considerable benefits (for resource sharing and trade), and were in the process of building their assets. In these cases, the social standing and participation of farmers was increasing.[366]

9.6 KNOWLEDGE, CREATIVITY AND CHANGE

Social farming is also a critical ingredient for co-learning and innovation. Yet within the marginalisation thesis, a loss of confidence is explained as people losing 'trust their own methods for self-protection' (Blaikie *et al.*, 2004:53). So how this might be reversed? Where action-oriented learning was taking place, the social-ecological disturbances that entered the system

[366] No wealth ranking exercise was undertaken instead being gauged through observation and interview responses.

were being addressed to increase responsiveness and buffering capacity (Folke, Berkes and Colding, 2000:416). Where this has not taken place, as exemplified within the Dema study, systems were more vulnerable to predation and crisis. In the context of severely eroded knowledge and agency resulting from past technocratic interventions, value can nonetheless be found in supporting methodological processes to promote more systemic thinking (Midgley and Lindhult, 2017:19). Furthermore, as proposed by Olsson *et al.,* (2006) in directing social–ecological transformation, it is conceivable that such a phased trajectory has the potential to pave the way towards: (a) preparing for change; (b) navigating transition; and (c) building resilience of the preferred state. Here the boundary concept within *systemic innovation* is important because its very recognition opens the process of questioning; without which an imperviousness to new innovations may be created, simultaneously enabling and constraining activity (Välikangas and Gibbert: 2005). For this reason, pathways to adoption and ongoing adaptation are also useful to consider given the inevitable hybridity of unfolding processes, particularly in the promotion and (re)introduction of indigenous technologies by external agents who seek to build confidence in these technologies. Both the risk of entrenchment in previous innovative stages, and the beginnings of this transition could be seen in Mhototi and Chikukwa where, in the former, model farmer approaches were primary, added to which in the latter, attempts at more methodological process were being developed for systemic deepening as well as encouraging exploration and questioning.

A fear of witchcraft arose in research interactions across all three sites, and was prevalent in discussions with agroecology innovators due to suspicions that their non-conformist approaches (and successes), marking them out as being in league with dark forces. This signals the pressure that has permeated across social layers to enforce conformity to a centrist national agenda deeply unsettled by pluralism. Nonetheless, in all study areas, a clutch of innovators was found to be experimenting. All were agroecological practitioners with more fluid approaches to farming. By nature, all were highly energetic, social and inquisitive; collectors and sharers of ideas and resources; confidently linking the past to the present with reference to techniques and belief systems; often politically agnostic; and deftly moving beneath the radar to navigate socio-political complexities – always with humour and a wry smile. While any detailed exploration of the psychology of innovators lies beyond the scope of this study, this prompts a question about what, in an environment that remains overarchingly hostile towards indigenous innovation, are the characteristics of these innovators swimming against a strong and, in some cases, heavily coercive tide? When asked about what it was that made them different from other farmers, all responded that they were 'just born like that'. Rather than agroecology having directed their worldview, it is entirely possible that this worldview, which embraces plurality and complexity with relative ease, makes agroecology a far less daunting prospect, in the face of simplistic technocratic dogma

which consistently fails their neighbours. In turn, the social world embedded in their collective agroecological practice has opened up opportunities for shared learning, experimentation and innovation.

9.7 SHAPING NETWORKS FOR CHANGE

As contemporary pressures over resources continue, driven by land grabs, with echoes of historical land acquisition in the name of 'economic development', or green grabbing for conservation, established agroecological communities, with semblances of relative agency, are cautiously negotiating strategies and documenting their 'emergent ecologies' to increase legibility for alliance formation through which to make a pragmatic case for protection (Rocheleau, 2015).

Two network facets are of particular significance here. Firstly, the extent to which these farmer-networks are formed internally - rooted in local culture, values and norms to rebuild social-ecological relationships, drawing upon and re-storying the past. Here, the capacity to build organisations that inspire loyalty and bind people together is described as *integrative power* through which legitimacy is developed (Boulding, 1990:25). In connecting self and collective efficacy to define and shape change, it 'embodies cooperation and reciprocity, friendship and collective identity, the growth of a sense of community, the ability to create and pursue constructive images of the future together, and the belief that one's own welfare is increased through an increase in the welfare of others' (Karlberg 2005). And secondly, how these farmer-networks build alliances across different bodies to mobilise resources in accordance with the institutional arrangement most suitable or available to them. When viewed as *chains of explanation* it is possible to consider these not only as the targets of change, but also as the actual or perceived sources of dispossession (Blaikie and Brookfield, 1987).

9.7.1. Network Formation for Integrative Power

Engagement of formal urban-based NGOs is far less pronounced on the geographical margins, such as Chikukwa and Mhototi. While CELUCT and Muonde were established by groups questioning and framing solutions around knowledge-centred agroecological approaches, they have since enrolled others within the wider geographic community, creating a web of village or cluster networks feeding back to a hub. Both operate on the basis of providing a more enabling environment within which the mobilisation of others is supported. In each case, it is possible to see *tokens* of social capital generated through involvement in ongoing activities at different scales that reinforce and strengthen belonging to and association with the network. In both cases, relational agency found in convincing and enrolling others from the bottom-up is central to Callon's *translation of power* (1984), and yet key actors remain *obligatory points of passage*

through which information is filtered before being defined as having meaning, or indeed legitimised (Garson, 2008). As such, these actors might be considered as indispensable to the network. However, given the momentum and confidence generated over long periods with little or no external funding for agroecological activities, were the upper layers of their organisational structures no longer operational, it is thought likely that the localised and low-level activities would continue.[367]

As a more established organisation, a relational evolution can be seen in how CELUCT has gone on to expand beyond its initial single-issue focus, propagating further inter-related actor-networks, emerging from its early agroecological experiences, as seen through the functional adaptation of its peace programme. This is made up of networks drawn from a range of different local actors who identify and plan associated change.[368] Having accumulated social capital in Chikukwa, some pioneers and farmer-mobilisers have stepped in to local development committee roles - fora where many other actors and interests are negotiated according to interlinking institutional networks, such as customary, party and church, which further involves the complex interplay of interests. In both cases, internal stages of relationship transition demonstrate a continuous *state of becoming* within which lies the risk of instability (Garson, 2008). This was visible when social change and pressures (internal and external, human and non-human) both threatened and reinforced the CELUCT network, resulting in periods of questioning, discussion and reframing. As in Mhototi, the process of re-storying has long-been underway in Chikukwa, fluctuating with emerging threats, and stimulating renewed attempts to widen inclusion in, and reinforce a collective consciousness around a common bio-cultural vision.

The profile of Matabeleland as an area affected by more extreme direct violence, on the other hand, attracts international funding - the lifeblood of more professionalised urban-based NGOs - feeding into a very different operational dynamic. Here, farmer-networks were established in 2011 as part of this time-defined project, with structured delivery by external NGOs. As with normative development modalities, changing the behaviour of individuals has been a pre-occupation of NGOs, often failing to make the link between enhancing social capital for natural capital gains (Pretty and Ward, 2001). Other than the bee keeping group, which conjoins people from different villages for training and processing, activities were localised around village gardens where training takes place and committees are established.[369] Between funded phases (April

[367] This is particularly so with agroecological activities due to relatively low-levels of funding, and may be less so with CELUCT's district-wide peace programme which depends on higher levels of funding, staff and travel to sustain activities.
[368] Locally elected Ward Peace Teams are made up of councillors, village heads, headmen, church leaders, teachers, Agritex officers, and womens, youths and disability representatives.
[369]This resulted in many PAR participants never having met before.

2017 to July 2018) all formal NGO activities ceased. No locally originating farmer organisations were found to exist in the district, suggesting the risk of exposure by local organisers to coercion.

9.7.2 Network Alliance Building

Access to common pool resources, such as forest, grazing land, or water sources, are highly localised and complex – often dependent upon invisible power and vested interests intricately bound to cultural power. Yet, in an environment driven by a purposive rationale, where natural resources are viewed as material assets within the technical agenda, the cultural and spiritual value of forests, wildlife, springs or rivers are, at best, considered part of the irrational superstition of traditionalists. As such, they are also understood as highly symbolic centres of power and identity, through which customary leaders derive their legitimacy and authority, and are thus potential points of contestation between agencies of the state and customary authorities which can also represent generating moments of change (Moore, 1996). Mhototi and Chikukwa were seen to formulate different strategies in response to these local structural dynamics that reflect historical experiences and relationships, as well as the careful consideration of where localised centres of power might be most effectively engaged.

When considering the *second research sub-question*,[370] where it was taking place, the process of co-enquiry had enabled the questioning and reframing of social-ecological relationships in order to define mechanisms and strategies. This was seen in Mhototi, where a renewed interest in traditional beliefs and practices was being synthesised with Christianity in ways that reconnect people to eachother and their environment, and was indirectly found to be encouraging acceptance of different belief systems. Furthermore, new identities that transcended vertical cleavages were forming around collective endeavour for environmental restoration and protection, providing new frames of reference for social activity and sociability.

Framed around a common set of meanings and definitions aligned around the semiotics of cultural practice – traditional leaders are themselves an historically important actor-network around which each organisation and its networks are able to articulate and navigate change. While competing definitions of authenticity vie for position, these are not mutually exclusive, each lending themselves to shifting alliances of convenience or co-action, as found in different case study sites. Across all sites, each organisation necessarily engages with their respective Rural District Council which defines district development plans and monitors implementation through which the activities of NGOs are formally sanctioned.[371] For CELUCT, however, the chief proved

[370] Research sub-question b) *To what extent has co-enquiry taken place in the context of critically reframing social-ecological relationships, and how are these understood, articulated and negotiated?*

[371] This adds another layer to the adaptive dance, particularly if rights and peacebuilding are seen as disruptive and/or low priority. In which case these approaches are embedded within 'livelihoods' programmes, which are more

pivotal in providing both land and legitimacy, with strong connections with traditional leaders continuing to play an important role. And in Mhototi village heads were integral to the Muonde activity networks, as were local party structures. These mechanisms embedded in structural and cultural power may produce stable and predictable effects, yet remain vulnerable and fragile constructs in the face of social change. In Mhototi, as evidenced through the PAR process, village heads were found to be highly sensitive to this dynamic, responding quickly to corruption concerns found to be undermining their legitimacy and causing widespread disaffection (discussed below). Within the more progressed Chikukwa network, disruptions or malfunctions in these mechanisms have resulted in reviews and revisions in order to improve responsiveness, particularly where those in a position of power were perceived to have acted in self-interested or acquisitive ways that disadvantage the wider network and undermine unity.

Here the concept of *inscription* can be applied to explain how these heterogeneous actors, one more powerful than the other, work co-operatively to generate unifying effects woven together to form a common narrative (Bueger and Stockbruegger, 2016). Furthermore, just as the structural and cultural power of traditional authorities on one hand, and local party leaders on the other, draw in social goods through the maintenance of patronage networks, so these power relationship works in both directions. As often the only NGOs representing farmer-networks in these margins, funding for activities and personnel is drawn in, with benefits across the wider actor-network and the local economy – bringing relative status and recognition. Different forms of power and capital can be seen in these relationships which, for now at least, represent a series of calculated checks and balances. However, the existing structural power and dominance of customary authorities and the party-state, and the many layers of complexity therein, requires all the skills of the adaptive dance for networks to retain their own vision and authenticity.

In Dema, power is directed from the structural centre which, as the cause of their disempowerment and systematic demoralisation, has become the focus of change. Furthermore, the consistent weakening of, and resulting mistrust in, customary structures in Matabeleland has implications for natural resource management, which has effectively been de-localised, resulting in agency being exerted through sporadic individual acts of destruction as quiet acts of resistance. Project networking had taken place between local institutional bodies (ICRISAT and Livestock Services) and partners, yet with little integration of delivery components.[372] Under 'conflict sensitivity' an FPC project report highlighted the challenge of aligning the different local power structures, noting that 'Power relations between community development structures at village

readily sanctioned. Monitoring increases around election periods, when NGOs reported being called to meetings hosted by their RDCs, attended by Central Intelligence officers.

[372] By the time of research, at the end of six years of a two-staged delivery timeframe, no combined framework showing the delivery outputs or projected outcome of all partners combined, or how these contributed to the overall programme goals, has ever been shared – suggesting that project 'partners', as well as the farmers, were flying blind.

level and the group structures established through the programme have been an area of caution through the project. …We have noted that the project structures have become very active in their operations which is positive, but this has however exposed them to manipulation by different stakeholders' (Mudokwani, 2015:14). When one considers the acutely dependent and constrained atmosphere in Dema, the examples of agroecological innovators producing effects and creating networks of reciprocity seem all the more remarkable.

Being interested, as this research is, in whether agroecological farming communities conceive of themselves as producers of effects and shapers of change (Bandura, 2000), it is useful to consider these points of activity as local *niches* or *germcells* that 'combine critical social and/or historical-material processes with values, dispositions, cognition and individual and collective agency capabilities to lead expansion, change and transformation.' (Lotz-Sisitka *et al.,* 2015:77). As such, the activities taking place constitute the formation of farmer and community-led organisations forging network relationships through which to negotiate resource-use agreements and protect their biocultural diversity, using whatever political, legal or customary instruments are available to them (Berkes and Folke, 2000).

9.8 THE CULTURINGS OF TRANSFORMATION

According to Temper *et al.,* (2018) social transformations only occur when the power of agency impacts on institutions and the world of ideas, and so must impact simultaneously on people (networks), institutions (structures) and culture to influence change at the different levels of domination. This way of systematically 'evaluating' the process of transformation is likely to overlook lower levels and gradients of change taking place within an activity or system. In not assigning the power of agency to nature, it also ignores the role of external shocks to the system that provide entry points that can be utilised to transform an activity network, alongside the lack of state resources to fully promote and service prescribed models that results in technicians turning to more plural approaches. This was found to fundamentally alter the relationship between people and their immediate structures, opening up opportunities for greater mutuality and responsiveness. Furthermore, alternative views recognise the emergent properties of co-management of self-organised processes for problem-solving that are altogether more horizontal in structure (Olsson *et al.,* 2004).

This brings us to the final *research sub-question* related to creative change strategies and collective action.[373] Agroecological co-learning processes were found to have been pivotal to

[373] Research sub-question c) *What has been the impact of these processes in terms of how communities of practice have developed creative change strategies, and how have these manifested in collective action?*

CELUCT's long-term evolution and expansion beyond its initial focus – reaching into different aspects of community life in recognition of change taking place and its associated tensions. This learning was fundamental in informing and shaping the structure and participatory ethic and of its more recent peace programme. Power and access to resources are also consciously acknowledged in an attempt to influence implementation strategies associated with the environmental regulations by facilitating a consultation process between leaders and resource users in Chikukwa. This was also underway in Mhototi to protect *rambotemwa* from development by engaging with the District Authorities, and is becoming an increasingly powerful narrative, around which the Muonde networks are united.

What is taking place might not be considered radical or transformative, as understood in strictly counter-hegemonic terms (Tilzey, 2016). Yet perhaps because key actors in Chikukwa and Mhototi have been involved in making radical redistributive demands for natural resource access in the recent past, these were often carefully framed, and attendant upon highly nuanced local political accommodations in working towards more access to decision-making. These processes, according to Holt-Gimenez and Shattuck, may rather be seen as *progressive*, in that they seek alternatives that nonetheless remain 'largely within the economic and political frameworks' afforded to them, and are therefore unlikely to bring about any substantive change (2011:115). It is argued here that what is progressive, radical or transformative must be viewed within the context of the prevailing power dynamics and divergent interests – as part of a *double-movement* - particularly where civic space is severely constrained and, where it does exist, is highly contested (Ibid).

What is taking place at these margins may seem insignificant in its informal origins and scale. Yet cultural power, used in abstract or invisible forms to construct and instrumentalise knowledge in society, first requires a level of contestation by raising awareness and strengthening identity around alternative visions. Where the space exists (or is being edged open), this is taking place through the revitalisation of local knowledge and re-storying, through which future visions can be surfaced and crafted. These are small acts, not of protest, but of action forged through shared practice. This is what Bayat (2010) refers to as *non-movements*, which are perhaps deliberately non-ideological. Of course agroecology at its most transformative and performative, is deeply ideological. Community identity connected to food justice may be perceived as structurally-combative and thus becomes a political project (Holt-Gimenez and Shattuck, 2011) that challenges the productivist vision of the state. Given the conditions within which NGOs are permitted to operate in Zimbabwe,[374] this non-political stance may be seen as a pragmatic conflict avoidance strategy, yet also reveals their internalisation of the technocratic and productivist

[374] Defined as the assisted delivery of district development plans.

orientation. When applied in its purely technical form and proclaimed as *sustainability*, agroecology risks being stripped of its emancipatory meaning that drives towards plurality, responsiveness and care (Stirling, 2014).

Yet all the while, as these networks mature, ideas are being shared, and new network mycelia form and join together as fluid processes without fully knowing where they will lead. As one pathway closes, another opens as power shifts. In the context of a strong control-oriented state, albeit with weakened institutions (Alexander and McGregor, 2013), might this in itself be considered radical? For Stirling, transformations away from the technocratic monolith might be found in a 'bottom-up 'culturing' of plural ways of knowing and doing, and in the 'mutualities of caring' (2014:21). Here this care is found in *responsiveness*, as distinct from *control*, and is contingent with efficacy, in which case incumbent rigid structures can in fact become important pivots for reflexive social action. The point here is that what results from these dynamic processes may not immediately represent control or care, be progressive or radical – but was altogether more messy and unpredictable. Seen as 'dynamic processes of progressive transformation', this process may alternatively be described as 'radical culturing of social change' which is plural, iterative and gradual (Stirling, 2014:21).

9.9 CHANGE THROUGH THE PARTICIPATORY ACTION RESEARCH PROCESS (PAR)

Having considered the changing social-ecological dynamics as a result of historical legacies and events, as well as local institutional and environmental pressures, and how they have influenced change, we now turn to the PAR process itself to consider the relationships and capacities of participating agroecological farmers as the process unfolded. Of interest is whether any transformational change was brought about through the surfacing of contradictions, creative reframing of problems and the development of solutions through collaborative concept formation (Mukute *et al.,* 2018). Here several outputs suggest that transformative and transgressive learning took place – including the reconceptualisation of key objects, the expansion of tools and rules, and the redefinition of relationships. The model solutions found in the appended action plans (*Annex 5*)[375] were developed by participants in response to the problems identified during data feedback demonstrating the emergence of transformative thinking. To explore this in more detail would require longitudinal research, to establish ongoing group functions, engagement, and reflexivity to changes.

A brief background on exposure to participatory practices is first required. In Mhototi, its history of action research has tended to be driven by external researchers using surveys and interviews, with results fed back to the community. More qualitative and engaged participatory approaches

[375] Detail contained in actual plans (activities, process indicators and resources) not included in the appended plans.

where the community developed their own lines of enquiry and responses were therefore unusual. In Dema, no action research or participatory approaches had been applied.[376] And in Chikukwa, action research is unusual, although participatory approaches of engagement, such as mapping and the participatory identification of problems and solution-building approaches had more recently been introduced.

The PAR process surfaced a number of objects of concern that groups were keen to explore and which, in all cases, resulted in some brave survey questions. In some instances relative power holders were found to shape the consensus, using points of conflict or tension as a starting point to establish explicit, value-based boundaries around which discussions surfaced disagreements. Despite the seriousness of these discussions, the use of humour emerged as an indispensable PAR tool for all involved, highlighting an important mechanism for maintaining everyday civility and peace. Women were actively engaged and vocal throughout, even in Dema where many focus group discussants had not met before. Given that focus group discussions informed the development of each survey, the presentation or return of each community's own data was of singular importance in shifting perceptions of how each community, and in some cases individuals, reflected on the issues that emerged. These have subsequently played out at different levels – at individual, household and community levels.

9.9.1 Dema: Selected Actions for Planning

In Dema five issues of concern were selected for further exploration and action planning by the wider community having been presented with and discussed the results of their survey (seen in *Figure 9.2*).[377] Two of these reflected resilience concerns related to low productive diversity, and a lack of experimentation or innovation; one agency concern highlighting leadership struggles; and two peace concerns on discrimination and violence, and domestic violence and child abuse. When sorting and coding transcriptions of all research interactions, issues affecting low levels of resilience overarchingly referenced leadership struggles, as did issues affecting peace.

As the first participatory process having taken place in Dema, a series of inter-related issues were surfaced, and interesting ideas generated (see *Annex 5.1*).[378] One Dema participant wanted political parties to come together at a single gathering and state their cases in full view.[379] The action plans resulting from the workshop were welcomed by FPC and the donor, who reported

[376] Villages were consulted on ward development plans during a workshop, facilitated by project NGO Masakhaneni.
[377] Attended by 63 people: communal farmers (conventional and agroecological), the ward councillor, three village heads and the FPC agricultural officer.
[378] Attended by only 17 people (9 men / 8 women) due to mistaken double-booking with ward development plan consultation – including a village head.
[379] Storytelling FGD - group feedback in relation to a question on why no stories on discrimination and violence, and tolerance and respect had been chosen. This was then fed in to the action plan for the action group on 'discrimination and violence'.

that they were keen to share these with the VIDCOs in order that activities could be fed in to ward development plans. No independent actions were reported in the interim period. At the time of writing, the project funding had only just been recommenced. However, due to these interactions and concerns emerging from this PAR, FPC had factored participatory planning for watershed management into the upcoming phase in Dema. I am therefore hopeful that this holds potential

Figure 9.2: *Issues Identified for action planning in Dema during data feedback (07.06.17)*

for future efficacy formation.

9.9.2 Mhototi: Selected Actions for Planning

In Mhototi seven actions were selected by the community as a result of their survey.[380] As seen in *Figure 9.3* below, the issues selected for further exploration and planning reflected three resilience and three agency concerns, and one relating to peace. When sorting and coding transcriptions and plans, issues with the potential to contribute to resilience were the need for more productive and market diversity driven by new innovations beyond what had been introduced (particularly around seed, livestock and value addition), and included calls for more engagement in biocultural protection and traditional practices. In creating a more peaceful environment, the protection of bio-cultural resources, broader engagement with traditional

[380] Attended by 63 people: FGD participants, communal farmers (conventional and agroecological), the ward councillor and three village heads.

rituals and practices linked to greater transparency of leadership. Addressing the levels of domestic violence and child abuse were also of importance.

Changes resulting from FGDs and feedback in Mhototi were more immediately apparent at different levels of social interaction, demonstrating the power of PAR.[381] The presentation of evidence that women were increasingly capacitated in terms of farming decisions led to much excited discussion. It transpired in a later interview that when one couple returned home, the husband apologised for 'oppressing' his wife and they sat down to discuss areas over which she wanted decision-making powers. An understanding of how other households were sharing decision-making and responsibilities, they said, had transformed their relationship.[382]

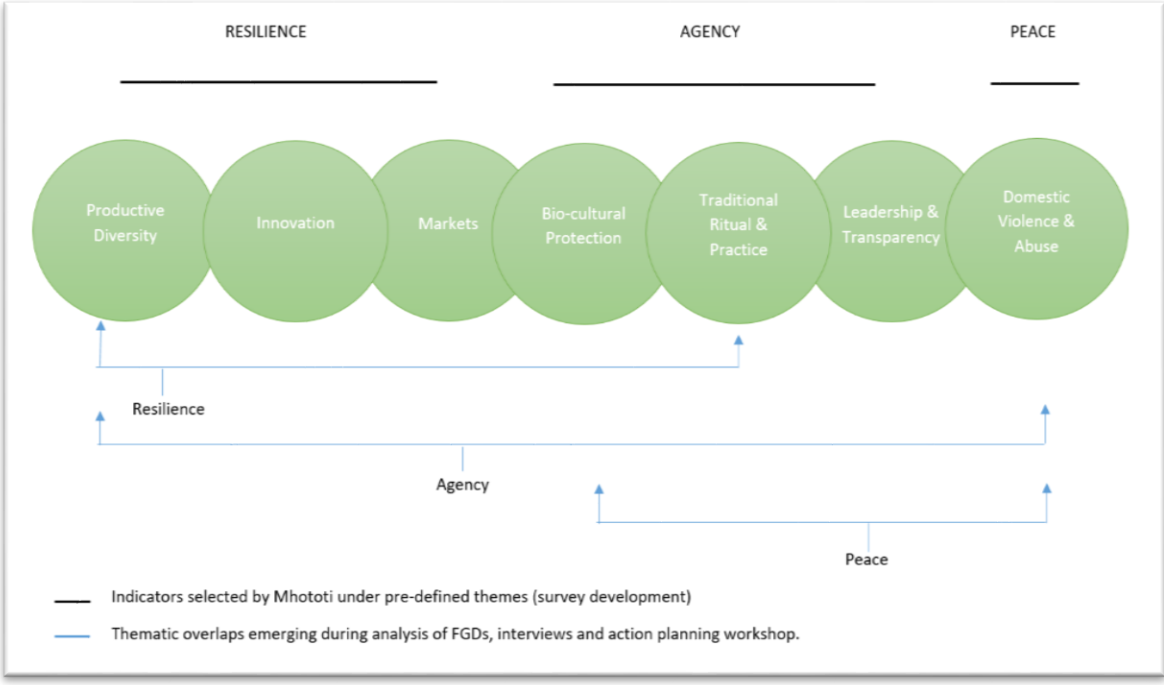

Figure 9.3: Issues Identified for action planning in Mhototi during data feedback (01.03.17)

Soon after data feedback to the community, and the formation of the action planning group on leadership and transparency by four progressive kraal heads, one later reported that within six weeks all forty-three kraal heads were mobilised to visit the chief, leading to the councillor's committee being dissolved, and a new committee democratically elected. Furthermore, 'corruption watch' teams were formed in each cluster.[383] Accordingly, confidence in leadership was reportedly being 'restored', as was the confidence of the kraal heads themselves to implement positive changes less dependent on punitive measures. The village head reported

[381]Attended by 73 people: FGD participants, surveyed communal farmers (agroecological and conventional), village heads and the entire Muonde team. The ward councillor attended lunch, but not the feedback.
[382] Discussion with couple, prior to interview - MHT/AF/F/JMH/06 (9.03.17)
[383]Interview - MHT/VH/M/MHKC/19 (04.07.17) undertaken during return visit at the end the research.

being excited at the prospect of forging ahead with the other tasks in their action plan (*Annex 5.2*).

And by stimulating discussion around different forms of violence which impede everyday peace, during the data feedback day, it was somewhat surprising, and inspiring, that a group of motivated younger men stepped forward to form an action plan to tackle domestic violence and child abuse. This included the development of a series of interlinking strategies to question norms and practices through drama, while engaging different actors (including police and schools). No women elected to be part of this group.[384]

9.9.3 Chikukwa: Selected Actions for Planning

In Chikukwa five actions were selected by the community as a result of their survey.[385] In *Figure 9.4*, the issues selected for further exploration and planning reflected one resilience and two agency concerns, and two relating to peace. When sorting and coding transcriptions and plans, relatively low levels of productive diversity were cause for concern, intersecting with participation and leadership and transparency that was considered causal to land-use and erosion challenges. In creating a more peaceful environment, resolving to improve transparency of leadership were thought to improve security and trust. Due to work undertaken by CELUCT, domestic violence

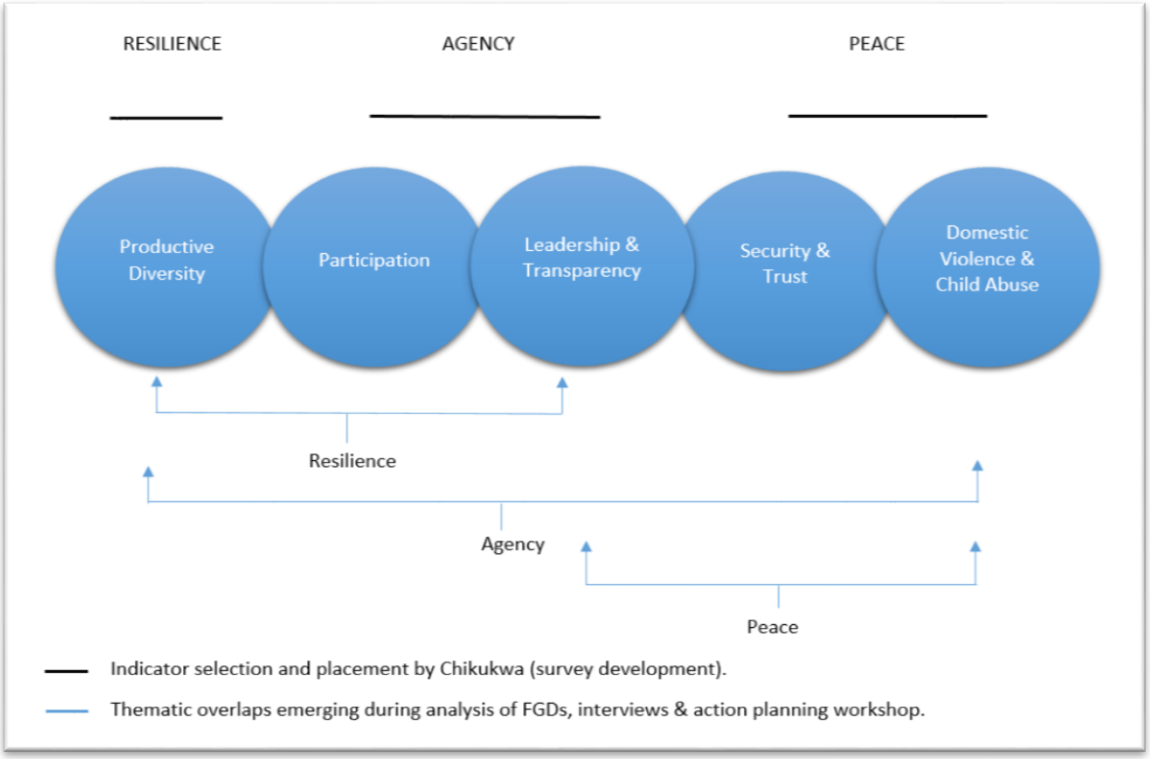

Figure 9.4: *Issues Identified for action planning in Chikukwa during data feedback (17.06.17)*

[384] Women gravitated to a group on 'trust and understanding' - later mainstreamed across all groups. Women were asked if they would like to move in to the group on domestic violence to ensure a balanced perspective. Two women joined.

[385] Attended by 50 people: communal farmers (conventional and agroecological), a village head and two CELUCT staff.

and child abuse was less of a surprise, although the scale was alarming and highlighted for action (see *Annex 5.3*).

Productive diversity, being an important social-ecological resilience strategy, was cited as enabling decision-making, particularly in the run-up to elections – with a number of feedback attendees stating that, with full grain stores, they could vote for whomever they wanted. Furthermore, it was common to hear that 'without food there is no peace', a reality that extends far beyond the household. Following data feedback, a number of farmers later reported that this had spurred them to increase their productive diversity. Furthermore, as the survey revealed that some of its own permaculture producers were found to have relatively low diversity, in comparison to some Chitsaa migrants, this stimulated considerable discussion about their identity as a 'permaculture community'.

Two issues arose that created lively discussions during feedback, and resulted in immediate actions driven by CELUCT. The first resulted when the research surfaced growing tensions between migrants and the longer standing residents due, in part, to an apparent disconnect between the practices of agroecological farmers who then accused the migrants' of being responsible for erosion. This led to CELUCT undertaking further research to develop inclusive mechanisms for agroecological skills sharing to both reduce land degradation and promote understanding. In the second case, a lack of participation in community activities was identified as being the result of a gradual breakdown of trust between the CELUCT and its own community taking place over a number of years. Increasingly focussed on donor demands for essential income, some in the community had felt that the original vision and agreed ways of working were being lost. The emergence of these issues through the PAR process led to an honest and open exploration of the situation between the CELUCT and the community. The resulting plans identified a number of realistic demands and strategies, all of which were agreeable and achievable. While these challenges undoubtedly go deeper than those activities identified here, these may nonetheless be seen as staging posts, and signify CELUCT's responsiveness.

Beyond these immediate responses, which nonetheless signalled substantial motivation and energy, it was unclear whether the organisations had since utilised the resulting frameworks as part of their work, due in part to different institutional dynamics and pressures. What was clear, however, was that the more embedded NGOs were able to respond quickly to emerging challenges, and their community networks were used to acting without sanction, or funding from donors. In all cases, these action plans would require support given the complexity and inter-connectedness of the challenges raised and solutions sought. Nonetheless, the detailed plans demonstrate a determination to tackle the challenges that their own questions raised through the PAR process.

9.10 SUMMARY OF RESEARCH FINDINGS

What is apparent from the data is the impact of agroecological farming on social relations – irrespective of the considerable variances in structural environment, agroecological modes of engagement and stages of network evolution. Through soft comparisons between agroecological and conventional farmers, it is also possible to see how the different approaches have both formed and been informed by divergent world views, affecting whether people believe themselves to be products of their environment, or able to shape change. Amongst agroecological farmers, for whom farming systems based on reciprocity are at the core of their everyday practice, associational agency generated through shared meaning and collective endeavour was creating a virtuous circle of solidarity and trust. Consequently, agroecological farmers were less likely to feel under threat of violence or intimidation, and were substantially more tolerant of difference. Furthermore, increased opportunities for sharing resources such as seed and knowledge had considerably increased resilience in the face of stresses and shocks. Acts of kindness were not, however, restricted to fellow agroecological farmers, with stories of empathy and sharing uniting people across divides.

In stark contrast, competitive modes of farming promoted through productivist and individualised 'conventional' farming approaches had contributed to a sense of mistrust. This was particularly pronounced amongst conventional farmers, resulting in an unwillingness to work and share with others, affecting their social capital, bargaining capacity and asset accumulation. This group tended to have more acute concerns about food security and income. Farmers found to have lower diversity and yields were more dependent on welfare and shop-purchased food and farming inputs, exposing them to price fluctuations, mistrusted middlemen and/or or inequitable distribution based on patronage relations – resulting in higher levels of mistrust, and suspicion of those within their own community.

Where innovation is championed, albeit in the form of adoption of prior innovations, the permission and freedom to experiment in highly restrictive technocratic environments can be an immensely freeing proposition. In cases where these spaces were being opened, community confidence in defining and shaping change was found to be considerably higher. Furthermore, this research found that adaptive capacity was less about innovations *per se*, which were read here as signifiers of adaptive capacity, and more about a spirit of experimentation that drives and produces the energy for change. The perceptions and experiences of farmer-innovators within this study have proven particularly illuminating. These innovators, all of whom were found to be agroecological farmers that embraced complexity, produced substantially higher agrobiodiversity and grain yields, which they then associated with enabling greater autonomy from patronage pressures. Across the study, this group was found to be socially active and highly inquisitive in

their information and seed sharing; were confident and able to link the past to the present with reference to techniques and belief systems; and were often politically agnostic - swimming against a strong technocratic and, in some cases, coercive tide. Here, whether innovations were new ideas or adaptations of something that had come before was found to be of less import than the process itself, with innovation seen as a signifier of adaptive capacity – linking resilience and agency in practice, and promoting a sense of being able to shape change, and of being more *at peace* with one's surroundings.

From this discussion, it is possible to see how the different historical and political factors, and the power dimension that are reproduced therein, have shaped widely divergent conditions that have enabled or constrained associational life and related network responses. And yet in each case, responses framed around common agroecological endeavour have or are emerging, either through networks capable of opening contested spaces for non-confrontational direct action, or through external proxies in an environment otherwise hostile to deviations or challenges to accepted farming practice or social norms. Indeed where some of the objects emerged in to the open for the first time during PAR, introducing the concepts of mutualities of *care* and *reciprocity* proved helpful in within *FGDs,* cutting through often deeply ossified layers of cultural and religious code, opening up new ways of seeing relationships and responsibilities. These experiences and processes have resuscitated and fostered social farming practices and have been found here to engender solidarity, reciprocity, trust and tolerance. The implications, and what this tells us about edging spaces ever wider to incorporate social justice as intrinsic to everyday peace, will now be explored in conclusion.

CHAPTER 10

CONCLUSION
FROM CULTURES OF CONTROL TO CULTURES OF CARE

10. CONCLUSION

This research has explored the value of rebuilding social-ecological relationships as a foundation for farming networks based on systems of reciprocity and trust that may indicate, and further stimulate, *mutualities of caring* in everyday interactions. For this study, it has been possible to draw upon the experiences of three very different agroecological communities, to see how their divergent realities have been influenced as much by historical events and their legacies, as by institutional and environmental changes at different spatial and temporal scales. The insights that have emerged can be summarised into four themes:

1) Open-ended community-led co-learning, when combined with plural knowledge sources, enhances responsiveness to complexity and social change;
2) Re-membering knowledge holds considerable potential for co-generating constructive images of a future together;
3) Landscape-level activities are foundational to creating a sense of common endeavour through which to generate alternative identities that transcends horizontal divisions;
4) Processes need to consciously acknowledge, explore and draw upon different forms of power for equitability, as a basis for a just and sustainable peace.

This study and its findings are of particular significance to fragile or violent environments where post-colonial state-building has involved periods of political consolidation and social upheaval, further complicated by structural adjustment. Many such emerging states have resorted to a nationalist rhetoric, constructing a mirage of legitimacy based on an imagined, and highly masculinised, highly masculinised national character defined by combat, defence and struggle. This is an environment within which the strong man's narrative thrives, characterised by political coercion, patronage and predation where 'tyrannical regimes [have] frequently manipulated populations by creating isolation, separating people from each other, crushing their capacity for critical thinking, and reducing their power to resist…' (Scoones *et al.,* 2017:3). With authoritarian populism on the rise to counter legitimate opposition, and many rural communities likely to find themselves further marginalised by resulting exclusory policies and rhetoric, this research has begun the process of investigating tangible connections between agroecology and peacebuilding through an exploration of alternative sources of power and identity situated in everyday rural farming realities.

For many, this is a history built on disarticulated accumulation promoted by the centre, and disastrous interventions imposed upon the periphery that consistently fail to consider social-ecological relations as complex dynamic systems moderated by social norms and practices. Here too, social control plays its part in defining the rules over which social relations are closely bound

– variously defended, contested and resisted, and often in combination. Herein lies the political ecology problematic where social control is often wielded by local powerholders influenced by wider economic forces, promoting extractive tendencies for individual gain. Donald Moore (1996) most effectively deals with these tensions in acknowledging that, through this highly sedimented cultural-capital production of landscape, meaning continues to inform strident negotiation of land access and resource-use. As suggested by Stirling (2014), however, these controls remain important in managing common property resources, but may be combined more effectively by engendering a culture of responsiveness and care.

An overarching aim of this study, as it has progressed, has been to consider under what conditions agroecology practitioners and their networks draw upon and engage different ontologies; and whether this process facilitates a space within which the equitable management of common pool resources based on responsiveness can be envisaged and promoted by exploring alternative pathways that exist 'if conditions allow for negotiations and iterative observations of outcomes' (Robbins, 2012:53). Also important has been to investigate to what extent these processes of learning and engagement can build confidence and experience to reach across and engage with inter-related spheres where power asymmetries may otherwise constrain peoples' imaginations and abilities to shape change. Here it is also important to acknowledge that emerging networks, within which an emancipatory ethic is not embedded, may be just as likely to reproduce dominant power structures.

10.1 RESEARCH LIMITATIONS AND CONTRIBUTIONS

Before going further, some caveats are necessary. This research has been designed around a comparative analysis between three different communities and their sites of agroecological practice. Even though within one country, this has necessarily limited the time spent in each, providing only a snapshot of experiences within the timeframe of a year's doctoral fieldwork. This concentrated the time which would otherwise have allowed each participatory activity the space to breath, with implications for the participating communities' own exploration of how activities generated through the PAR process would play out and evolve. Nonetheless, contact has been retained and updates received, with a view to returning to follow up should the opportunity arise.

While the research methodology has been designed primarily around the generation of qualitative data, the quantitative data has nonetheless provided an opportunity for soft comparisons between agroecological, hybrid and conventional farmers. The sample sizes were small relative to the population of each ward, though this was mitigated to some extent by applying a wider response range in the survey, thus increasing significance value and confidence levels. However, this calls for a level of circumspection in claiming any statistical significance. As discussed within

the case studies, the farmers and their typologies are far from clear, with farmers applying different methods and inputs according to their availability. Nonetheless, as this research was interested in the social and relational aspects associated with different typologies, it therefore set out to evaluate differential approaches and attitudes. These caveats notwithstanding, the quantitative data have proved useful in surfacing a level of divergence between these broadly framed typologies, which strongly suggests the benefit of further research.

This study brings peacebuilding and agroecology scholarship and praxis together for the first time by introducing and demonstrating the connections between the transformative strands of agroecology and peacebuilding. As such, it has tended toward breadth rather than depth, while also seeking a balance between the applied and theoretical research. Here, the adaptation of different applied participatory tools proved successful in creating a more engaged and engaging process, while inductively surfacing matters of concern and action. The adaptation of the everyday peace indicators was initially intended to surface additional layers. The divergent patterns that emerged, however, served to confirm data from interviews and observations, and deepen the analysis when laid alongside the study's political ecology underpinnings.

In returning and responding to the research question on how *emerging agroecological learning processes may have contributed to the resilience and agency of practicing communities, and how these might inform conflict transformation in the context of everyday peace,* this study emphasises the benefits of going beyond technical components of sustainable farming to consciously open spaces within which a range of different soft skills can be practiced in the furtherance of peaceful relationships grounded in understanding, equity and care. It highlights facets of social capital generated through collective meaning making, action and responsibility, rather than outsourcing these to the state or market which can undermine adaptation and reinforce a sense of alienation and inertia. This has implications for how agroecology practitioners, and beyond, create more engaged and engaging encounters that promote a re-membering and re-storying of the past - to expand and blend knowledges, spheres of activity and horizons for imagining and shaping a collective future. In demonstrating the tangible alignment between knowledge-intensive and creative approaches found in transformative agroecology and peacebuilding in practice, this research hopes to stimulate further research capable of building on, and exploring each of these characteristics in more detail, through different disciplinary lenses, and in a variety of contexts where negative peace simmers in so-called post-conflict or violent environments.

The study informs theoretical approaches to political ecology by demonstrating the complex and dynamic forces impacting upon social-ecological relationships at the margins, showing how diffuse power variously enables and constrains access to entitlements and influences behavior. This condition arises from the forces of political and economic power brought to bear by the state

and its donors; and emerges from cultural power embedded within the community, rooted in patterns of original accumulation, and compounded by complex patronage networks leading back to a coercive centre. These layers clearly interact to create both tensions and opportunities at different levels of the analysis – demonstrating the intersection at scale between wider social, political, economic and ecological change that produces conditions of violence and opportunities for transformation. What emerges from this study based in Zimbabwe has significant potential for wider application.

At a time when the UK government has redoubled its commitment to tie its aid budget to UK trade and industry, we can expect more neoliberal and technocratic solutions with all the detrimental impacts of input-intensive technological lock-in that this implies. In this environment, more research and support for bottom-up, people-centred approaches that reforge social-ecological relationships in rural communities exposed to violence are more important than ever, if we are to demonstrate a commitment to sustainable peace through social justice.

Given the thrust of this study - that peace formation is contingent upon bottom-up, open-ended, people-centred and wholly non-linear processes - it seems somewhat incongruous for me to propose that a reader should take away generic learnings or recommendations. Perhaps it is more fitting, therefore, to consider what insights I myself might have benefited from ten or more years ago, when considering the design of agroecological 'interventions' in fragile or violent environments. Based on a broad framing of spaces within which participants are able to cultivate social-ecological relationships at the margins, the insights would include the following:

- Bottom-up processes that foster an understanding of plural approaches based on questioning, co-learning and experimentation through open-ended processes are foundational to responsiveness in the face of complexity. These create an acceptance of change capable of moderating moral panics that may otherwise perpetuate power asymmetries and violence.
- Where practices have been lost and knowledge subordinated, participatory action research provides an opportunity to root activities in place and culture - re-membering rich ecologies of knowledge to co-create constructive images of a future together.
- Where relationships have been weakened and trust eroded, landscape-level activities have considerable potential to generate a sense of solidarity built around common endeavour, and a confidence in collective action to shape change.
- Network formation may be more grounded in social justice by surfacing everyday experiences of inequality and violence in ways that enable an exploration of existing power dynamics, and formulate alternative conceptions of power for co-action in real time.

- Active citizenship can be encouraged by practicing meaningful democratic participation in decision-making that values different forms of knowledge and experience, to be carried through layers of social interaction to foster shared understanding as the basis upon which alliances can be shaped for wider acceptance and institutional leverage.

The reason that these points are highlighted is now expanded for further clarification and detail.

10.2 SHAPING KNOWLEDGE RECOVERY FOR EVERYDAY PEACE

Within this study, resilience was found to be a function of historical factors and the broader sets of power relations they reproduce, as opposed to being solely driven by resource scarcity. Taking place over a century of colonial domination and compounded by its enduring productivist dogma, indigenous knowledge has been eroded at an alarming pace and, in many places, lost all together. The recognition of this rapid loss in Zimbabwe and elsewhere is the motivation behind the creation of national and regional networks to identify, document, celebrate and encourage indigenous innovation in farming.

Re-membering Knowledge for Peace

Viewed through a peacebuilding lens, the story of indigenous knowledge loss and its recovery were seen in parallel with the critical loss of agency and, along with it, resilience - leaving people precariously exposed to the less desirable forces of change. Where structural violence and knowledge erosion were found most acutely in combination, there were correspondingly low levels of adaptive capacity, a high dependence on external assistance and increased vulnerability to manipulation and stress. Furthermore, the effects of cultural power exerted through dominance over discursive practices, narratives and knowledge were particularly pronounced where the structural bias and power asymmetries were found in the denouncement of traditional practice and belief. This research therefore proposes that knowledge recovery, as a conscious process of *re-membering* disaggregated and subordinated subjectivities, and who defines it, has profound implications for everyday peace. As such, it holds the potential to be restorative in the face of historical political and epistemic injustices, and opens a space within which more recent injustices and violence may be addressed.

Restoring eroded knowledge, recovering lost resources and rebuilding bonds between people and their landscapes through ritual practice is of course an intensely political endeavour, embedded in layers of culture and interests. Despite the dynamism of social-ecological practices driven by socio-cultural and -political pragmatism, fears and perceptions about cultural change, erosion and even loss were punctuated by drought and pestilence, and had produced intervals of introspection and cultural resuscitation - acting as important points of reflection and re-

evaluation. And like all such discussions, these hinge upon, and are driven by, different interests jostling for position: not least traditional leaders in their attempt to retain authority over land and people in a shifting socio-political landscape; the emergence of new cults and churches that represent a fervent adherence to, or outright rejection of, associated traditional leadership with monopolistic and exploitative conservation strategies; and indeed the state itself which may vacillate between agricultural 'modernisation' and the promotion of localised resilience grounded in claims of cultural 'authenticity'. As such, social-ecological relationships, and the language that surrounds them, becomes inherently political, if indeed it were not always so, through which complex interactions of compliance and resistance are often expressed concurrently in the form of seemingly benign yet highly charged idioms (Moore, 2000). The role and nature of nostalgia is problematic, particularly as neotraditionalism is called upon to support different narratives, depending upon in whose interests they are conjured.

From the outside it is seductive to conceive these remote *margins of freedom* as enabling more space for negotiated change, owing to their being far from the gaze of the structural centre. Yet where land and natural resources have long been points of contestation through which symbolic local struggles are expressed and legitimised through an institutionalised web of patronage relations, these often lead back to the centre. The degrees of constraint on civic space at these margins may therefore be highly dependent on the extent to which their populations are seen as oppositional to the national project, and where power asymmetries are maintained and manipulated by local powerholders who closely guard against challenges to the status quo for their own narrow interests. A history of contestation and habituated violence - structural and symbolic power asserted through land, culture, politics, and religion – intersect with, and are expressed through class, gender and generation. Here it should also be acknowledged that cultural beliefs and practices so central to agroecology are often embedded within these less visible structures of domination, drawing upon dominant and/or shared ideologies for their legitimacy and power, and may themselves be seen as root causes of vulnerability (Blaikie *et al.,* 2004). This is particularly so for isolated rural communities which, even if agroecological, are inherently socially conservative and thus partial to the forces of social control that produce moral panics.

10.3 PRODUCING EFFECTS TO SHAPE CHANGE

In considering how agroecology, as praxis, can unite people in creative and inherently social farming acts, so this research has found gradual transformations away from the habituated culture of control, towards responsiveness through the culturing of plural ways of *knowing and doing* and, ultimately, driving toward *mutualities of care* (Stirling, 2014). Given the variables contingent in different agroecosystems, stages of conscientisation, collective engagement or

network development, and given that change will continue to shape people's relationship with each other and their environment, how might agroecological initiatives, groups and communities formulate situated responses in ways that more fully engage with the need to engender greater fairness and equity as a foundation for everyday peace?

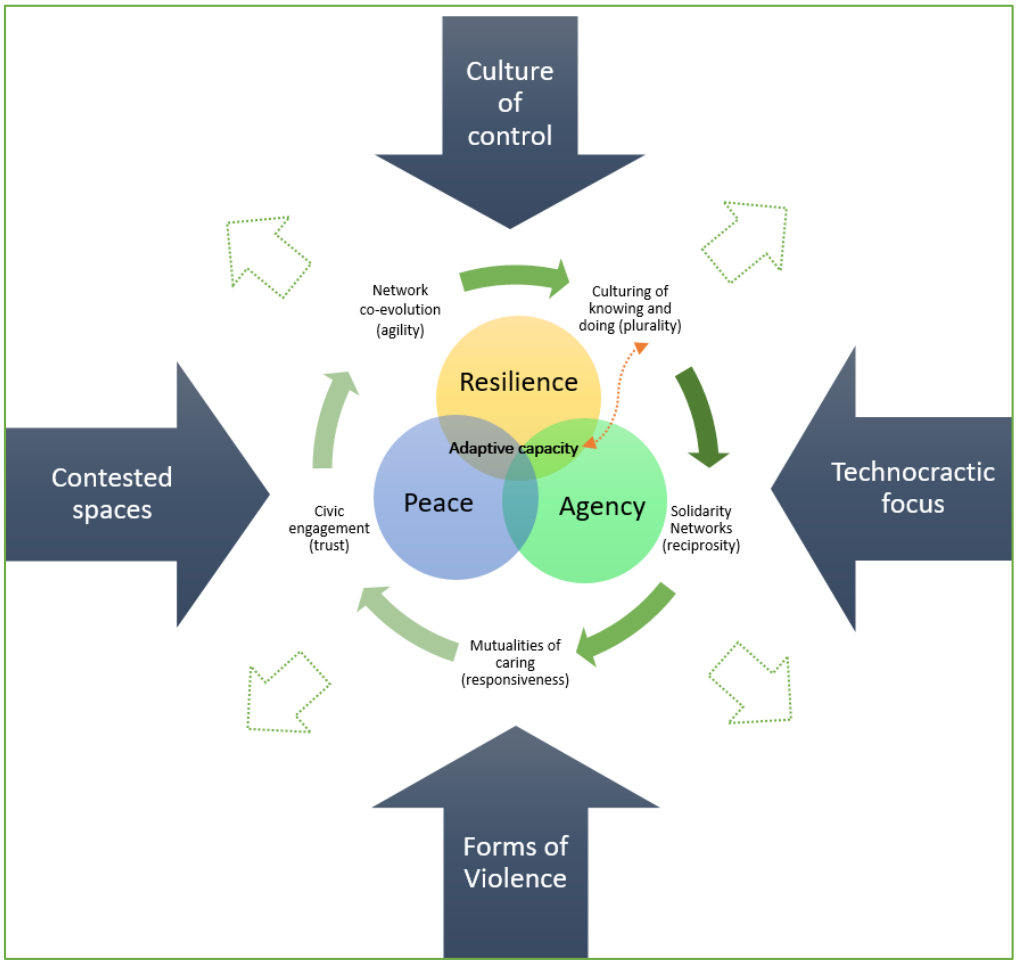

Figure 10.1: The culturing of agroecology as peacebuilding in violent environments

The beginning of this thinking can be seen in *Figure 10.1*, exploring how agroecological networks may engage with and function more effectively to navigate oppressive structural dynamics in complex and fragile environments. As the emancipatory tissue linking resilience, agency and peace, the fostering of adaptive capacity at the centre is inscribed through co-learning processes that builds confidence to act within and upon ones social-ecological landscape. It is argued here that, if this emancipatory process is lacking, entry to the ensuing process that builds efficacy would be unlikely. Forming a ring are a series of interlinked non-linear processes imbued with social values, creating a space within which experiences of resilience, agency and peace may be shaped in the everyday. These ensuing processes or stages are discussed as: *culturings of knowing and doing* in ways that embrace complexity and plurality; *solidarity networks* that encourage reciprocity; *mutualities of caring* that engender responsiveness; *civic engagement* that forges

trust; and *network co-evolution* that fosters agility. Linking resilience, agency and peace is the adaptive capacity that is inscribed through co-learning processes and practice that builds confidence to act within and upon ones social-ecological landscape. On the outer edges are the internal and external institutional pressures that shape, and may equally be shaped by this space and the actions that take place within it. One can view the ring as insulating practitioners from the outer pressures which, in context, could represent a level of transgression, while transforming how the system functions within. Yet as these internal processes are strengthened, they may equally begin to push outwards, conjoining with others in a mycelia of networks for wider coherence. To avoid directly confronting the source of those pressures, and by locating opportunities to create new and inclusive spaces, cultures and knowledges, the asymmetric conditions within which violence thrives and is perpetuated may be incrementally transformed in ways that are non-threatening.

Of course, within this conceptualisation, these processes should be understood as multiple and non-binary in terms of how 'successful' change is defined and qualified, and imprecise and non-linear in how it is achieved or arrived at (Uphoff, 2005). However, perhaps most importantly, is that these changes are defined and measured by the networks of practitioners themselves.

10.3.1 Culturings of Knowing and Doing: embracing complexity and plurality

Increasing skills and knowledge at the level of each individual plays an important role in fostering self-efficacy for resilience. While it has been argued here that agroecology is far more than the sum of its technical parts, even at its most functional, resilience, agency and peace were found to be in dynamic interplay. If in the home there is '*no peace without food*', then its availability is not insignificant in creating '*a sense of peace*' and calm by reducing conflicts in the household and family. It is also seen as essential in avoiding coercion and predation - being free to think for oneself and '*make choices of the heart*'. These important steps towards functional resilience may be seen as the beginnings of culturing, but should by-no-means end there.

Making Sense of a Complex World

Farmers engaging in these essentially bottom-up, creative processes, all of whom were agroecological, were found to be more plural in their approaches to farming practice, and more comfortable in their exploration of complexity. Of particular interest was their increasing capacity for experimentation, and of sense-making, viewing themselves as capable of producing effects (and thus change), and in the questioning and repositioning of attitudes, values and norms. Here, social-ecological resilience was also found to resonate with peace, in that resilience was higher where traditional practices and beliefs were openly discussed, tolerated and/or accepted (even tentatively), as was social trust and tolerance of difference.

Through the research, it was possible to see that a singular focus on technical *sustainability*, particularly at the level of the individual, risks diverting attention from what is essentially a more plural and emancipatory agenda that drives towards collective responsiveness and care, otherwise found in collaborative questioning and creative problem-solving that promotes co-learning and sharing. This process of consolidation and meaning-making facilitates new ways of looking at and seeing the world, and one's place within it. The potentialities therein lie in a re-membering and questioning that disrupts habitus and results in new possibilities being imagined.

Conversely, where culture and spiritual connections had been systematically eroded, so confidence, trust, unity and indeed resilience were found to have been severely compromised, leaving little to draw upon and exposing people to the forces of patronage and predation. Where it was taking place, the recapturing and repurposing of lost or eroded knowledge was stimulating new ways of thinking, doing and responding to social-ecological change. This further opens up the possibility that, in building confidence to re-story a past with which to re-imagine and shape a more plural future, effective strategies may be explored to reduce moral panics and their ensuing backlashes.

Where these tensions and contradictions, while highly sensitive, were being more tentatively acknowledged and discussed either as a result of network activities or indeed the PAR itself, levels of agency were emerging at different levels of social interaction. Here, agroecological practitioners were found to be critically engaged, exploring constraints to agentic motive and action. Alongside plural knowledge sources, this growing collective efficacy opens opportunities for exchanges that underpin the dynamic process of exploration and knowledge co-generation, in an entirely heurist and iterative performance capable of reinvigorating the embrace of social-ecological complexity and thus plurality.

10.3.2 Solidarity Networks: encouraging reciprocity

Collective human activity undoubtedly increases people's capacity to shape change in response to natural shocks and socio-economic pressures – both to sculpt that landscape against soil erosion, and irrigation infrastructure to manage drought and expand production. Due to the complex nature of social-ecological relationships, as we have seen, agroecological activities necessarily require collectives of people, rebuilding trust and systems of reciprocity as a way of managing their shared resources. This power of collective questioning and practice was found to have been foundational to these interactions, generating confidence and trust in co-action. Conversely, where this confidence was lacking, due in part to the structural conditions that render the space for questioning non-existent, NGOs and networks may otherwise have facilitated creative spaces for experimentation and co-learning within which emergent properties could be united and a sense of collective-efficacy otherwise nurtured.

Collective Efficacy and Creative Change

When these research findings are viewed against Bandura's efficacy thesis (2000), it would seem that where creative spaces for exploration and experimentation had been created, there was a clearer sense of being able to collectively identify goals, and perseverance to shape change. And yet where this was lacking, people consistently expressed feelings of being products of, or prisoners to their socio-political and natural environment, and were more prone to pessimism and erratic decision-making, thus effecting resilience.

Values of reciprocity, viewed as non-monetary social relations shaped by rules and norms, were closely linked to levels of social trust. Where systems of reciprocity were low, concerns were raised that others might not be immediately contributing or reciprocating, and thus the equilibrium strategy was found to result in the maximisation of short-term self-interested outcomes despite the efficiency benefits afforded by collective working and co-operation, further impacting upon resilience.

The value of networks for collective efficacy was particularly demonstrated by innovators, whose experiences communicated a more nuanced story about life on these margins - challenging social conformity simply by experimenting, sharing and acting together in contravention of constructed social and technical norms as they negotiated change on their own terms, albeit within strict socio-political confines.

Solidarity and Trust

Closely linked to solidarity, the importance of trust to the formation of a common endeavour was found to be highly prized in agroecological communities, increasing a sense of belonging despite differences. This solidarity, created around agroecological farming systems, was found to cut across vertical cleavages of culture, language, religion or party politics, framed instead around uniting behind land-use practices or natural resource protection. This unity of purpose was found to have implications for building relationships and obligations - activities around the achievement of which were found to further strengthen solidarity.

These characteristics were found more prominently where landscape activities had created a wider sense of collective endeavour, even where landscape-level considerations were not explicit in NGO planning. Working at landscape levels was found to connect people beyond village boundaries - broadening out the focus from immediate needs by working together to problem-solve, and bringing interconnections and complexity more clearly in to view. For NGOs and their donors, the strategy is often to *instrumentalise* resilience, and indeed peace, by resolving individual needs first, thus will follow wider outcomes through pre-defined, externally imposed pathways. Yet peacebuilding and transformation, by nature, require people working collectively

in the process of meaning-making to tackle needs in ways that build confidence and trust (Lederach, 1997). In the same way, building resilience that links people and landscapes contributes to more durable and equitable outcomes and, in so doing, builds confidence in collective efficacy to shape substantive change.

In this way, agroecological organisations can serve as a counterpoint between the top-down homogenising technocracy, and the exclusionary tendencies of the customary. This becomes particularly important as new threats appear on the horizon, for which re-engaging the community in the preservation of its bio-cultural diversity, through an ongoing exploration that accepts the dynamic nature of traditions and practices capable of bridging divides and restoring community cohesion by locating alternative sources of power and identity.

9.3.3 Mutualities of Caring: engendering responsiveness

Cultivating collective capacity for problem-solving is particularly important for co-managing change in complex adaptive systems. Building confidence to experiment and innovate, and pool ideas, knowledge and diverse experiences for greater reflexivity for identifying and tackling new or emerging problems, increases social capacity for managing complexity. This fostering is foundational to responsiveness to natural resource challenges, and can be effectively expanded beyond immediate issues to address tensions that are surfaced as a result of initial points of investigation. Engendering an environment of responsiveness and care, particularly through dialogical approaches, was found to be effective in reforging relationships that connect social and ecological spaces. This opening went beyond individual entitlements or status, to a frame of reference rooted on fairness, equity and care. As seen in its more advanced stages, attitudes, livelihoods and world views were being transformed by the emergence of new horizons. And, as catalysts for social-ecological change, agroecological networks were accumulating social benefits (for both men and women) and vice versa. This was stimulating the beginnings of a reframing of 'livelihoods' not simply as a means of economic gain, but increasingly in pursuit of the 'good life' with and for one another – in recognition of the need to incorporate social-ecological values and practices. As social inequality and power asymmetries are at the heart of conflict dynamics and everyday social tensions, then this repositioning is a critical first step in building resilience against disruption, and agency through which peace may be cultivated and sustained. In this way, creating and pursuing constructive images of a future together, has the potential to forge a belief that one's own welfare is increased through the increased welfare of others and, indeed, of one's environment (Karlberg, 2005).

Approaches that engage with sovereignty discourse to promote social justice, that go beyond technical solutions for cost-efficiencies, are essential in the move towards identifying and developing strategies that respond to the inequities that cause tension and vulnerability. In so

doing, they are capable of promoting more endogenous narratives that reframe rights and freedoms in ways that open spaces for discussion around the need for greater responsiveness, mutuality and care.

9.3.4 Civic Engagement: forging trust

In contrast to agroecological farmers, conventional farmers tended not to depend on fellow farmers for shared resources or skills, and were found to be less socially engaged, trusting or tolerant of difference. Sourcing seed or other inputs from outside of the community exposed them to mistrusted middlemen and/or distribution practices.

A direct correlation between social trust and civic engagement was found to be in a dynamic interplay, variously reinforcing or undermining relational agency and associational life. Where spaces were acutely constrained, agroecological innovators were found to value their peace, preferring to form their own networks and intentionally moving beneath the radar. As such, they are unlikely transformers of structures. The disadvantage of this conflict avoidance, albeit understandable, was that those who might otherwise be considered critical thinkers and peacemakers in their communities were deterred from participating in decision-making fora, for fear of being drawn in to precarious situations. Such meetings therefore tended to suffer from low attendance, and are thus more likely to attract those with relative power and vested interests, thereby disadvantaging those who have an interest in more equitable decision-making and power distribution. For some, this might be justified as a resistance to co-option, as proposed under the progressive/radical binary of social change (Holt-Gimenez and Shattuck, 2011), a stance critiqued by Stirling, for whom sustainability and democratic struggle are mutually conditioning (2014). However, for those working as farmer-motivators, occasional trainers or demonstrators – some had grown in confidence to take on positions of authority, promoting greater equitability, transparency and trust - positive attitudes that could be said to be having transformative effects in stages and gradients.

9.3.5 Network Co-Evolution: fostering agility

Serving as a function of the relationship between members of the household, civil society and social networks (Blaikie *et al.,* 2004:97), widening networks of solidarity were also found to incorporate an element of social protection against internal and external structures of domination. Yet who has the power to denounce or champion indigenous innovation in the face of social and political pressure? To different degrees, external influences have contributed to returned knowledge to strengthen adaptive capacity and inform issue diversification, and have added weight to broadening acceptance of plurality. As this takes place, people within these networks are developing specialised skills and responses for adaptive co-management strategies at different scales (Folke and Berkes, 2004; Olsson *et al.,* 2004). Creating opportunities for shared

knowledge, skills and resources that cut across cleavages of power and division provide important points of contact that function outside of existing centres of power, while interacting with them in a tentatively negotiated and highly performative 'adaptive dance' (Olsson *et al.,* 2004:87).

These network allegiances between agroecological farmer organisations and localised layers of authority play an important role. Where these spaces existed, albethey contested, these relationships were often carefully nurtured, beneath which adaptive capacity was being explored, and landscapes shaped – and were being negotiated with a degree of caution and agility. Here it is possible to see that, as networks effectively utilised the space available, so they may open up margins of relative freedom – acting within their bonded networks to build outward alliances with different layers of power and authority, thus growing the space to further accumulate social capital, in search of positive environmental outcomes (Pretty and Ward, 2001; Adger, 2003).

Where agroecological networks are comparatively new, and/or NGOs have yet to engage with heuristic processes that build confidence in change or mobilise people around a set of cohesive aims, the control-dependency narrative remains central to the legacy of violence and reproduction of power. While this may, to a large extent, be indicative of the absence of any space within which people can work collectively to shape change, the role of the NGO is not to manage change, but to facilitate a creative space within which experimentation and co-learning can take place, and where change can be shaped in all its untidiness. In this way NGOs and their donors, while talking about the need for 'behaviour change', must themselves break free of path dependence that locks them and their 'beneficiaries' in to pre-defined technical modes of knowledge dependency, albeit in the name of sustainability.

Negotiating Change

The more mindful and advanced networks that had begun to diversify beyond a technical farming focus by identifying and negotiating these power dynamics, had opened spaces that were facilitating community engagement over issues associated with inequitable access to resources and gender-based violence. This was found to have been achieved by innovatively building on an existing agroecological body of experience, practice and ethic to develop cultural approaches to dialogue, fostering more peaceful relationships while also adapting these to different scales across collaborative NGO networks, with tentatively vertical engagement with different authorities.

The younger networks, while beginning to expand activities, may still be in a largely technical phase which has nonetheless achieved wider acceptance and application through agricultural extension and related authorities, but have yet to consciously engage with issues of equity and justice despite (and perhaps because of) the patronage they enjoy. This dominant technical mode may obscure deeper issues, and lead to the reproduction of existing inequitable power dynamics.

9.4 RADICAL CULTURINGS OF SOCIAL CHANGE?

In conclusion, a link may be drawn with peace formation, as a form of bottom-up contextual legitimacy based on local networks and relationships (Richmond, 2011). Agroecological networks demonstrate the potential to provide social and political bridging functions under the guise of 'livelihoods' to facilitate local mediation that transcends conflict boundaries and tensions, and to indirectly address issues otherwise considered too sensitive to broach.

Here it is proposed that, in fragile and/or violent environments, agroecology may represent a relatively non-confrontational opening, creating a space for interpretation and therefore contestation as 'the basis of the autonomy of struggles over the sense of the social world, its meaning and orientation, its present and its future, one of the major stakes in symbolic struggles.' (Bourdieu, 2000:235). This testing of the limits, for Bourdieu is 'The symbolic transgression of a social frontier has a liberatory effect in its own right because it enacts the unthinkable.' (2000:236), and is the basis for proposing a transformative shift in reintroducing critical thought towards emancipatory action.

As these networks mature, ideas are being shared, and fluid processes are emerging without fully knowing where they will lead, a 'bottom-up culturing of reflexive social action' that expresses plurality in the face of rigid and often coercive structures can be seen emerging. Within these networks and their dynamic processes can be found both elements of control and care, containing features of progressive transformation which, as proposed by Stirling, might rather represent 'radical culturing of social change' in all its unpredictability (Stirling, 2014:21).

What is clear from this study is that agroecological organisations can more effectively generate confidence by exposing their networks to plural ways of thinking and acting to increase responsiveness based on a better understanding of past-present-future relationships rooted on place and culture, rather than generic technical 'sustainable farming' approaches. Agroecology is intensely, if not always explicitly, political in its challenge of advanced capitalism; ranging from its technical resource-conserving and regenerative practices at one end which have been captured and absorbed into the technocratic sustainability discourse, to its more radical counter-hegemonic movements at the other. In contrast to promoting individualised change behaviour in the pursuance of a narrow conceptualisation of technical resilience that more often strips agroecology of its emancipatory meaning, landscape-level activities were found to be the most effective at creating a sense of collective endeavour and achievement. Where these were taking place, agroecological farmers were forming tight bonds of solidarity and trust, more able to envisage a future shaped by collective action and changing horizons, with transformative effects on relationships between people and their landscapes.

From a combination of qualitative and quantitative data captured during this research, it was clear that agroecological farmers experienced considerably higher levels of resilience, agency and peace in combination, even where peacebuilding was not an explicit activity.

A willingness to resist unwelcome 'economic development' was found to be more present where past experiences, practices and knowledge was being recovered, documented and valued. Of course this process is just as capable of reinforcing path dependence as it is to disrupt it. A drive to stimulate change, rather than an outright rejection of it, can provide opportunities for reflection that prompt a questioning of received wisdom of developmentalist norms. These contradictions and tension remain very present in socially conservative farming communities. Yet, agroecological networks can engender cultures of responsiveness and care that allow disturbances to enter the system, while opening up discursive spaces where these conversations can take place, and moral panics and reflexive backlashes to change can be moderated.

As such, farmers within these agroecological networks were united by acts of reciprocity, more co-operative and trusting of one another, and more tolerant of difference. A powerful pro-social orientation was evident in acts of kindness and expressions of concern and empathy shown to others outside of their agroecological networks, with the express purpose of bridging intra-communal divisions. Seen as mutualities of caring, these are all important characteristics of civility in an attempt to create positive experiences that contribute to a more peaceful society. This suggests that rather than social capital facilitating collective action, in fact collective action generates important characteristics of social capital.

This was particularly prominent where agroecology was being applied in its open-ended form, with all the transformative potential that this implies, creating spaces within which relationships, with one another and with nature, are being explored, questioned and fostered as a process of exchange and co-learning. While options to alter the rules of this structural game are clearly limited, choices to act within that frame are not. In this case, it is the very process of pushing against those limits that 'open up the flourishing of possibility' for alternative futures, as a process of generative relational change (Gordon, 2015). Whether it follows that agroecological communities of practice are 'islands of calm and civility' (MacGinty, 2014:12) is far from clear given the forces of control that continue to impinge upon everyday experiences. The main challenge comes back to how we define *community*. No community is a monolithic entity wholly united behind collective action, consisting instead of many identities and interests that pull in many directions at once. Nor are the agroecological communities of practice, specifically identified here as a sub-set of the wider geographic community, isolated from these tensions, or untouched by the layers of power that drive them. Indeed, these networks were themselves

infused with this culture of control, and made up of diverse interests, class and social status, religions and political affiliations, and yet were united in a commonly defined purpose at varying scales and ambition, and in different spheres of social activity.

As the dust settles on periods of political upheaval and its reverberations, the question for agroecological NGOs and their networks is two-fold: how to protect bio-cultural resources from commercial acquisition by reinvigorated political structures that are often deeply entwined with, and dependent upon international capital; and, if the neoliberal project is considered too high a price to pay for land, leading to a loss of popular rural support, then how to manage the forces that will seek to co-opt and divert any emancipatory drive for its own narrow ends. Engendering greater responsiveness and care in rapidly changing socio-political environments, with their shifting centres of power, goes far beyond the resilience of agroecosystems, and so the power to imagine and co-create an alternative future becomes more important than ever. As expressed by one farmer-innovator during storytelling, *'Some people are blessed with dreaming. They can dream dreams that can help the whole nation.'*

As if prescient of the connections between agroecology and peacebuilding introduced here, as well as the relationships between people and their landscapes, and indeed participatory action research as praxis, for John Paul Lederach the depth of these culturings of transformation is not only found in the need to embed them in everyday realities, but in the unfolding nature of process itself.

> My efforts at peacebuilding and conciliation have led me to the metaphor of cultivator more than harvesters, towards nourishment of the soil and plant more than picking the fruit. The images that accompany this metaphor suggest an organic connection to context, the building of relationships, and a commitment to process over time. … The cultivation metaphor suggests that a deep respect for and connection to the context is critical for sustaining a change process that is moving from deadly expressions of conflict to increased justice and peace in relationships. The context … like the soil, is the people, commonly shared geographies but often sharply different views of history, rights and responsibilities, and the formation of perception and understanding based on cultural meaning structures. Cultivation is recognizing that ultimately the change process must be taken up, embraced and sustained by people in these contexts. The cultivator, as a connected but outside element in the system, approaches the soil with a great deal of respect, the suspension of quick judgment in favour of wisdom of adaptation, and an orientation toward supporting the change process through highs and lows, ebbs and flows of violence and thawing of tensions, whether or not the situation seems ripe. The cultivator gives attention to the wellbeing of the eco-system not just the quick production of a given fruit (Lederach, 2008:41).

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APPENDIX

ANNEX 1: ETHICS APPROVAL CERTIFICATES (2016 & 2017)

Coventry University

Certificate of Ethical Approval

Applicant:

Georgina McAllister

Project Title:

Cultivating Resilience at the Conflict Margins: Agroecology as a Tool for Everyday Peace Formation

This is to certify that the above named applicant has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Medium Risk

Date of approval:

16 June 2016

Project Reference Number:

P41819

Certificate of Ethical Approval

Applicant:

Georgina McAllister

Project Title:

Cultivating Resilience at the Conflict Margins: Agroecology as a Tool for Everyday Peace Formation

This is to certify that the above named applicant has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Medium Risk

Date of approval:

04 February 2017

Project Reference Number:

P50639

ANNEX 2: Semi-structures Interview Questions (menu)

1. NGOs

- *peace or agroecology managers*

Drawing on your situation/conflict analysis, what key drivers of conflict and fragility have you sought to address through this initiative and how?

What changes have your ascertained in attitudes, behaviours, relationships? Are there any secondary negative effects?

How has the situation changed over time and what, if any, has been the contribution of the initiative to those changes?

What impacts have the interventions had on specific indicators of well-being, such as health, status or poverty levels, addressed by the intervention? What are the impacts on long-term development trajectories?

What factors can contribute to peace and stability in this area? What existing factors bring people together and can be built upon or reinforced?

What do you think are the most important drivers of change in this community? Which factors have the greatest influence on the situation.

Could you describe what you mean by learning and participation? In your view, how do you consider that farmers learn best?

Who are the stakeholders in this initiative? Who selects farmers for involvement? Who sets the priorities, targets? (farmer decision-making)

Can you describe an adaptation strategies or any innovations you have seen where farmers have adapted techniques learned through the initiative or from other places/exchanges?

What are the barriers to change, particularly in terms of long-term achievements?

- *Agroecology field officers*

When you consider participating farmers – are they stakeholders or beneficiaries? How do you think the farmers view themselves?

Are you a trainer or a facilitator? – describe each as you understand it.

How would you describe the things that matter the most to participating farmers?

Who identifies resource and/or production priorities and makes choices for change strategies?

Do participating farmers trial and test ideas and measure the results? Examples.

Are there any innovative practices emerging from learning – examples of adaptation in context?

Are farmers active outside of planned project time to plan and/or organise?

What is the yield and diversity attained by farmers within your area? (project data)

Is there engagement with other comms using common resources? What experiences have resulted?

Intra-community structures / effective & responsive leadership / consultative / inclusive in priority and strategy setting?

What mechanisms are used to resolve emerging disputes over natural resources etc? (Inter/intra-communal or intra-ethnic networks of trust and reciprocity? Pre-existing local-level conflict-handling mechanisms? How have these been integrated? And is this seen as a good/positive thing (conservative elite)?

Are there agreed mechanisms to accept new people in to the community / resource-users?

Are natural resources viewed as points of conflict or for bringing people together?

Creating inclusive structures for community problem solving can improve communication, respect, and productive interactions among subgroups in the community, and improve the access of disenfranchised groups to decision making.

2. Officials

- *Bureaucrats (govt agencies)*

What conflicts or disputes have been experienced in the locale? (direct, structural, cultural)

What are some of the constraints to resolution and opportunity as you see them?

What are some of the solutions to these for local resource-users for instance? Examples of these?

What are the in/formal mechanisms that farmers might use / have used to access decision-making processes to facilitate change?

What are the most important needs and interests you think participating farmers will identify as being the most important?

If a dispute emerges (NRM for instance) what would be the traditional mechanism for resolution?

What is the standard measurement for 'success' and/or resilience as you understand it?

What is the yield and diversity attained by farmers within your constituency?

Have you noticed any differences in the tactics (production, resource-use, access to decision makers) that may be used by agroec and conventional farmers?

When considering the national peace and reconciliation commission process in Zimbabwe, what are the key concerns you consider most pertinent to this community?

- *Councillors*

So that I don't make any assumptions, could you describe the role you play within the community?

Can you describe the range of challenges faced at community level?

What mechanisms are available to community to access decision makings, or to manage or resolve disputes, for instance, disputes over natural resources? (example?)

What changes (positive/negative) have been experienced by participants involved in the project?

In your view, are the participating groups able to organise, prioritise and reach collective decisions on issues of importance to them? Examples?

Do other farmers, for instance those working with Agritex, work together to collectively to address challenges and manage their natural resources?

Have you noticed any differences in the tactics (production, resource-use, access to decision makers) that may be used by agroec and conventional farmers in this area?

Are there any examples that you are aware of where project participants have subsequently become involved in decision making outside of the project? (such as on ward committees or other bodies)

When considering formal processes such as the National Peace & Reconciliation Commission, what are the key concerns you consider most pertinent to this community? Do you think that it will benefit yours and other communities, and how do you see your community contributing to the process?

3. Traditional Leaders

So that I don't make any assumptions, could you describe the role you play within the community?

Could you begin by telling me about Ilima as a traditional practice for farmer organisation?

Do you think Ilima has a place in the present day?

Are there any other traditional practices that are used by the community to manage or resolve disputes, for instance, disputes over natural resources?

Can you describe the range of challenges faced at community level?

What positive changes have been achieved by participants involved in the project? Any negative?

In your view, are the participating groups able to organise, prioritise and reach decisions on issues of importance to them?

Do other farmers, for instance those working with Agritex, work together to collectively address challenges and manage their natural resources?

Are there any examples that you are aware of where project participants have become involved in decision making outside of the project? (such as ward committees)

Would you mind telling me about the National Peace & Reconciliation process?

Do you think that it will benefit your and other communities, and how do you see your community contributing constructively to the process?

4. Farmers

How long have you been involved in this project? And what do you hope to achieve?

What is your position in the garden/honey group, and are you in involved in any other committees?

Would you be able to explain your own situation before you were involved in the project?

How would describe the person you were then? And who are you now?

How would you describe the dynamics/relationships within your ie garden/honey production group? (trust, cohesion)

Could you describe for me what some of the challenges you face as a group, and as a person within the group?

Do you take decisions together? Who makes decisions in the group?

What are some examples of the issues you've tackled?

Have you retained any traditional farming practices, and merged this with what you have learned through the project? Can you share any examples of these?

Has anything you learned not worked effectively for you? What was it? Who did you feel was responsible? What did you do about it?

Do challenges ever arise within your group? (examples?) How did you tackle them? What was the outcome of the process?

Have you experienced any disputes or conflicts over particular issues? What were these? What was the response? How did it make you feel?

With what you know now, what advice would you give others?

What techniques and practices that you learned through the project have been most valuable?

Ending questions.

ENDING QUESTIONS FOR ALL INTERVIEWS

Is there something that you might not have thought about before this interview that might have occurred to you now?

Is there something more you think would be useful to for me to know to improve my understanding?

Is there anything you would like to ask me?

ANNEX 3: Ranked Indicators

RESILIENCE

#	DEMA	MHOTOTI	CHIKUKWA
R1	When all people are educated	Rainwater systems for harvesting & dams	Traditional authorities enforcing env regulations
R2	Employment opportunities are available to everyone	Good family health	Respect for sacred places
R3	When there is economic stability	Culture rituals being maintained	More year-round functioning springs
R4	People in the community are working together	People co-operating to solve problems	More demonstration gardens for learning, info, sharing
R5	Wetland by-laws enforced	More planting of diverse crops	Our families are healthy
R6	Having markets for our crops	Having markets for income	More seed varieties saved
R7	Productive diversity	New innovations to manage drought	More grain being stored
R8	Wildlife conservation management functioning properly	More small grains planted for drought resistance	Soil fertility is better managed
R9	No careless behaviour (traditionalists) damaging our environment	Less dependence on food hand-outs	Manage crop pests & diseases
R10	Strategies for dealing with extreme weather	Less confusion about planting times	Better networking for market linkages
R11	Experimentation*	Seed security improved*	More crop types & varieties planted*
R12			Having enough food to eat

AGENCY

#	DEMA	MHOTOTI	CHIKUKWA
A1	More understanding of rights	Equality between men & women (+/-)	Respect for ourselves & eachother
A2	Having confidence & self-esteem	Our concerns are listened to	Having access to info, knowledge & education
A3	Working in solidarity to find solutions	Cultural tradition plays a stronger role	Being united – working together to achieve common goals
A4	Fair & transparent land allocations	When our freedoms can be exercised	Better leadership & transparency on aid distribution
A5	Having our voices heard	Ability to make decisions without seeking permission	More supportive traditional leadership
A6	Sharing of natural resources to overcome greed	Fair & transparent decision on land and food distr.	Fair elections & appropriate representation
A7	Having representation for our needs	Ability to resist decisions leading to pollution & dislocation	Ability to participate in comm gardens & activities as an equal
A8	Gender equality & equal opportunities	Education is sufficient for girls & boys	Ability to influence decision-making (our voice)
A9	When freedoms are experienced	Community is united & working together	Women's access to land for production & expenditure decisions
A10	Being consulted by the national part on wildlife	Traditional leaders fulfilling their duties	Capacity to negotiate fair market prices
A11	management	Less corruption & factionalisation of elected officials	Having the power to say no to things I don't want to do
A12			Having awareness about rights

PEACE

#	DEMA	MHOTOTI	CHIKUKWA
P1	No domestic violence	Having good communication	Managed livestock
P2	Not feeling discriminated against (gender, politics, tribe or status)	Being united	Good communication – mindfulness
P3	Being able to afford a good standards of living	Equitable sharing in the home	Less domestic violence
P4	Services improving	No child abuse	Better safety of movement a night
P5	Unemployment decreasing	Less violence in the home & community	Peace of mind from witchcraft &/or jealousy
P6	No hatred or harassment	Having trust in eachother	Having trust in eachother
P7	Tolerance & respect of difference	When we feel safety of movement	Tolerance of different belief systems
P8	Good communication at all levels	Having a sense of peace	Freedom from police harassment & corruption
P9	Oppressive laws – presence of rule of law**	Feeling respected & cared for	Not being forced to attend political events or rallies
P10	Leadership struggles & wrangles at all levels reduced	Having a sense of place - belonging	Village head performing their role as mediators
P11	Reduced fear of robberies & violent crime		

Annex 4.1: Dema Survey (May 2017)

#	DEMA COMMUNITY SURVEY		TOTAL 62												16 ppl	35 ppl	11 ppl
#	QUESTION	opt	response range	responses		men	wome	Dewe	Halal	Silun	Domb	Mawu	Njelel	Irrig	Agroe	Hybr	Conv
RESILIECE			#	%		27	35	%	%	%	%	%	%	%	%	%	%
R1	EDUCATION: Do you think that access to education/learning opportunities is currently sufficient for: *(tick multiple)*					%	%										
	a	men	23	**37.1**		52	26	18	100	0	57	0	0	55	81	29	0
	b	women	39	**62.9**		67	60	55	100	0	57	100	100	55	81	69	18
	c	boys	50	**80.6**		81	80	73	100	100	43	17	100	100	100	66	100
	d	girls	51	**82.3**		81	83	82	83	100	57	50	83	95	88	77	91
R2	EMPLOYMENT OPPORTUNITIES: if it provided for your income needs, what kind of employment (including self-employment) would you most like? *(tick 1 only)*																
	a	govt job	7	**11.3**		7	14	18	0	0	43	0	17	5	0	14	18
	b	banking / finance	0	**0.0**		0	0	0	0	0	0	0	0	0	0	0	0
	c	business	9	**14.5**		19	11	0	33	33	29	0	0	15	19	17	0
	d	retail	1	**1.6**		4	0	9	0	0	0	0	0	0	0	3	0
	e	arts/crafts	3	**4.8**		0	9	9	0	33	0	0	0	0	6	3	9
	f	NGO	2	**3.2**		0	6	0	17	0	0	0	0	5	13	0	0
	g	hosp/tourism	4	**6.5**		15	0	0	0	0	29	0	0	10	0	9	9
	h	IT	0	**0.0**		0	0	0	0	0	0	0	0	0	0	0	0
	i	agric / env	35	**56.5**		56	57	55	50	33	0	100	83	65	63	54	55
	j	other	0	**0.0**		0	0	0	0	0	0	0	0	0	0	0	0
	k	I don't know	1	**1.6**		0	3	9	0	0	0	0	0	0	0	0	9
R3	ECONOMIC STABILITY: Name 4 things that you would most like to happen as a result of improved economic stability in the country: *(pls write in English if possible)*																
		healthcare	15	**24.2**		19	29	27	17	50	14	33	67	5	6	40	0
		electricity	8	**12.9**		19	9	18	0	17	0	0	33	15	6	11	27
		schools/ed	19	**30.6**		41	23	27	17	33	29	50	50	25	19	34	36
		jobs	21	**33.9**		41	29	9	17	83	43	17	17	45	13	43	36
		money/currency	29	**46.8**		37	54	55	33	33	71	83	0	45	38	60	18
		roads/trans	13	**21.0**		26	17	9	67	33	0	0	17	25	56	3	27
		income	2	**3.2**		0	6	18	0	0	0	0	0	0	0	3	9

		food	16	**25.8**	22	29	36	50	0	57	33	0	15	31	23	27
		comms/network	19	**30.6**	33	29	9	0	50	43	0	100	30	31	31	27
		irrigation/water	13	**21.0**	30	14	0	33	17	14	0	50	30	44	17	0
		markets	5	**8.1**	11	6	0	33	0	0	0	0	15	19	3	9
		land	1	**1.6**	0	3	0	17	0	0	0	0	0	6	0	0
		hh	2	**3.2**	4	3	0	17	0	0	0	0	5	13	0	0
		livestock	11	**17.7**	22	14	9	83	17	29	0	0	10	44	11	0
		peace	2	**3.2**	0	6	0	0	0	0	17	0	5	6	3	0
		other	4	**6.5**	4	9	0	0	0	29	17	0	5	6	9	0
R4	WORKING TOGETHER: Do you work with others to solve common problems and share: *(multiple)*															
	a	knowledge	46	**74.2**	93	60	64	100	33	100	33	100	80	94	80	27
	b	info	27	**43.5**	44	43	9	100	17	57	50	67	40	56	49	9
	c	skills	35	**56.5**	67	49	18	100	67	29	17	83	75	100	51	9
	d	labour	31	**50.0**	67	37	18	50	17	43	67	100	60	63	57	9
	e	resources	35	**56.5**	59	54	36	50	50	43	50	83	70	63	54	55
	f	equip	13	**21.0**	26	17	0	0	33	43	0	50	25	19	20	27
	g	*ilima*	28	**45.2**	33	54	82	0	67	43	33	67	30	31	46	64
R5	WETLAND MANAGEMENT: In our area, do you think that there should be more focus on: *(multiple)*															
	a	by-laws & implementation	43	**69.4**	74	66	45	100	17	100	83	100	65	81	77	27
	b	contours & grounwater	38	**61.3**	74	51	64	100	83	57	17	50	60	81	49	73
	c	diversions & dams	37	**59.7**	59	60	18	83	83	71	50	67	65	75	60	36
	d	HH harvesting	24	**38.7**	37	40	73	33	33	43	17	33	30	31	40	45
R6	MARKETS: (if you sell your produce) – when you consider the cost of transport and potential for spoiling, where are your most profitable markets: *(multiple)*															
	a	village	48	**77.4**	85	71	100	67	100	43	67	100	70	69	77	91
	b	community	48	**77.4**	81	74	73	100	100	29	100	83	75	69	80	82
	c	local shops	17	**27.4**	41	17	18	67	33	29	0	33	25	56	23	0
	d	Bulawayo	8	**12.9**	11	14	9	0	0	14	0	0	30	19	11	9
	e	Maphisa	11	**17.7**	19	17	9	0	0	71	0	0	25	13	26	0
	f	GMB	1	**1.6**	0	3	0	0	0	0	0	0	5	6	0	0
	g	we don't sell	0	**0.0**	0	0	0	0	0	0	0	0	0	0	0	0

R7	PRODUCTIVE DIVERSITY: As a family, how many different crop types and varieties (including grains, vegetables, fruits, herbs etc.) are you currently producing, or planted last season? *(circle 1)*																
	a	1	2	**3.2**	4	3	0	17	0	0	17	0	0	6	3	0
	b	2-5	15	**24.2**	22	26	27	33	0	29	83	0	15	25	26	18
	c	6-10	31	**50.0**	59	43	45	33	17	71	0	100	60	56	51	36
	d	11-15	14	**22.6**	15	29	27	17	83	0	0	0	25	13	20	45
	e	16-20	0	**0.0**	0	0	0	0	0	0	0	0	0	0	0	0
	f	more than 20	0	**0.0**	0	0	0	0	0	0	0	0	0	0	0	0
R8	CONSERVATION MANAGEMENT: In your opinion, is our ward level conservation (through CAMPFIRE) successfully managing: *(tick multiple)*																
	a	trees	43	**69.4**	67	71	100	67	50	57	83	100	50	50	80	64
	b	land	20	**32.3**	37	29	27	50	17	0	33	83	30	44	37	0
	c	water resources	16	**25.8**	22	29	27	50	33	29	17	17	20	31	20	36
	d	grassland	32	**51.6**	52	51	55	67	0	29	83	83	50	56	54	36
	e	wildlife	22	**35.5**	37	34	36	33	50	29	0	100	25	38	37	27
	f	none of these	7	**11.3**	11	11	0	0	17	14	0	0	25	19	6	18
	g	I don't know	1	**1.6**	4	0	0	0	0	14	0	0	0	0	3	0
R9	ENVIRONMENTAL DAMAGE: who do you think is responsible for the most environmental damage – (eg. waste & water pollution) to our environment? *(tick 1 only)*																
	a	traditionalists in ward	3	**4.8**	4	6	0	0	0	0	0	0	15	6	3	9
	b	visitors fm town	7	**11.3**	11	11	9	0	83	0	0	0	5	19	6	18
	c	visitors fm country	4	**6.5**	4	9	9	17	0	0	0	0	10	19	0	9
	d	all of us	48	**77.4**	81	74	82	83	17	100	100	100	70	56	91	64
R10	STRATEGIES FOR EXTREME WEATHER EVENTS: which do you think are the **two** MOST important strategies for dealing with extreme weather (eg. cyclones, drought, heavy rains): (2 *only)*																
	a	tree planting	40	**64.5**	59	69	73	100	17	43	83	100	55	69	66	55
	b	ground cover	5	**8.1**	7	9	18	0	0	0	33	0	5	6	9	9
	c	planning	24	**38.7**	37	40	18	67	67	57	17	0	45	50	34	36
	d	strong structures	41	**66.1**	70	63	64	17	83	100	17	100	70	50	71	73
	e	diversions & dams	11	**17.7**	19	17	18	0	33	14	17	0	25	25	14	18
	f	I don't know	1	**1.6**	0	3	0	0	0	0	17	0	0	0	3	0

R11	EXPERIMENTATION: over the last year, what areas of your production have you practiced or experimented with: *(tick multiple)*																
a	seed selection & saving	33	**53.2**	52	54	0	67	33	100	50	100	55	69	63	0
b	water harvesting	15	**24.2**	19	29	9	0	83	0	50	0	30	19	17	55
c	value addition	11	**17.7**	11	23	0	0	0	57	0	0	35	13	23	9
d	soil fertility	45	**72.6**	81	66	82	83	83	43	17	50	95	81	60	100
e	pest & disease control	36	**58.1**	67	51	73	67	50	14	33	100	60	75	57	36
f	tree/plant propagation	3	**4.8**	7	3	0	0	0	0	0	0	15	0	3	18
g	other	0	**0.0**	0	0	0	0	0	0	0	0	0	0	0	0
AGENCY															
A1	RIGHTS Do you feel you have adequate awareness about your own and others rights: *(multiple)*												Ae	Hyb	con
a	child rights	53	**85.5**	81	89	73	67	100	86	100	100	85	81	89	82
b	womens rights	52	**83.9**	74	91	73	83	83	100	83	100	80	88	86	73
c	disability rights	40	**64.5**	67	63	64	67	67	43	50	100	65	63	66	64
d	I don't know	2	**3.2**	7	0	0	0	0	0	0	0	10	0	3	9
A2	CONFIDENCE & SELF-ESTEEM: Do you feel that your confidence and self-esteem is supported in any of the following areas: *(multiple)*														
a	at home	49	**79.0**	70	86	64	50	83	86	50	100	95	75	77	91
b	by family	50	**80.6**	81	80	91	100	83	71	0	100	90	94	71	91
c	village meetings	38	**61.3**	59	63	55	33	33	86	67	100	60	69	66	36
d	community meetings	27	**43.5**	59	31	27	33	50	43	17	100	45	38	51	27
e	district meetings	13	**21.0**	26	17	9	0	0	14	0	100	25	13	26	18
f	none of these	0	**0.0**	0	0	0	0	0	0	0	0	0	0	0	0
A3	SOLIDARITY: Are you united and working together to achieve common goals as: *(tick multiple)*														
a	as a couple	34	**54.8**	63	49	27	50	83	57	0	100	65	75	54	27
b	as a family	54	**87.1**	93	83	91	100	67	100	67	100	85	100	86	73
c	as a village	43	**69.4**	70	69	82	83	67	100	17	100	55	63	69	82
d	as a community	28	**45.2**	56	37	18	50	17	14	83	100	50	38	57	18
e	as women	22	**35.5**	15	51	27	67	17	43	33	83	20	31	34	45
f	as a country	10	**16.1**	22	11	9	0	17	14	0	83	10	13	23	0

A4	FAIR & TRANSPARENT ALLOCATIONS: In your own opinion, are the decisions by leadership on the distribution of resources (such as inputs & land) fair and transparent? *(tick1 only)*																
	a	always	11	**17.7**	22	14	9	17	83	14	33	17	0	13	20	18
	b	sometimes	41	**66.1**	63	69	91	83	17	57	50	67	70	75	63	64
	c	never	9	**14.5**	15	14	0	0	0	29	17	0	30	13	14	18
	d	I don't know	1	**1.6**	0	3	0	0	0	0	0	17	0	0	3	0
A5	VOICE: Do you think that your opinions & concerns are listened to & taken in to account by any of the following: *(tick multiple)*																
	a	your spouse	35	**56.5**	63	51	9	50	83	57	33	100	70	75	60	18
	b	your family	38	**61.3**	74	51	36	33	50	100	0	100	80	75	60	45
	c	the youth	24	**38.7**	44	34	64	33	17	14	0	50	50	38	34	55
	d	village head	32	**51.6**	59	46	73	50	50	57	50	50	40	44	57	45
	e	councillor	19	**30.6**	41	23	18	33	33	29	33	50	30	31	34	18
	f	chief	9	**14.5**	22	9	9	0	33	0	0	33	20	19	14	9
	g	MP	2	**3.2**	7	0	0	0	0	0	0	17	5	6	3	0
	h	National Park	7	**11.3**	11	11	9	17	17	14	0	17	10	13	9	18
	i	none of these	2	**3.2**	4	3	0	17	0	0	17	0	0	6	3	0
A6	SHARING NATURAL RESOURCES: Are you are united and working together to manage and share your resource benefits as a: *(tick multiple)*																
	a	household	44	**71.0**	74	69	55	50	83	86	17	100	85	75	71	64
	b	family	52	**83.9**	89	80	82	100	67	100	50	100	85	94	83	73
	c	village	47	**75.8**	89	66	82	33	100	100	83	100	60	63	83	73
	d	ward	22	**35.5**	48	26	18	33	17	57	17	100	30	50	37	9
	e	district	12	**19.4**	26	14	9	0	17	14	0	100	15	19	26	0
	f	country	10	**16.1**	22	11	9	0	0	14	0	100	10	13	23	0
A7	REPRESENATION: Do you feel that your needs are appropriately represented at: *(tick multiple)*																
	a	village level	52	**83.9**	81	86	91	50	100	100	50	100	85	75	86	91
	b	ward level	44	**71.0**	74	69	82	17	100	86	50	100	65	56	80	64
	c	district level	14	**22.6**	30	17	18	17	17	0	0	100	20	31	26	0
	d	national level	10	**16.1**	22	11	9	0	0	0	0	100	15	13	23	0
	e	none of these	6	**9.7**	7	11	0	50	0	0	33	0	5	19	9	0
	f	I don't know	4	**6.5**	7	6	0	0	0	0	33	0	10	0	9	9

A8	EQUALITY: If we understand gender equality as creating a balanced partnership between men and women, do you consider that: *(tick multiple)*																
a	have equality in marriage	34	**54.8**	59	51	27	50	83	0	67	100	65	63	57	36
b	equality a threat to men	9	**14.5**	11	17	18	67	0	0	0	0	15	50	0	9
c	not culturally appropriate	24	**38.7**	30	46	27	100	33	29	0	83	30	75	26	27
d	gradual change OK	23	**37.1**	41	34	27	33	33	71	17	17	45	38	34	45
e	equal opportunities	50	**80.6**	89	74	82	50	50	100	83	83	90	69	91	64
A9	FREEDOMS: Do you feel that you have any of the following freedoms: *(tick multiple)*														
a	speech	36	**58.1**	52	63	36	67	67	100	17	100	50	75	54	45
b	choice	58	**93.5**	93	94	91	100	67	100	83	100	100	100	91	91
c	movement	54	**87.1**	89	86	91	100	50	100	83	100	85	100	89	64
d	expression	35	**56.5**	48	63	27	83	33	43	50	83	70	69	57	36
e	association	34	**54.8**	63	49	27	100	17	100	17	67	60	94	49	18
f	participation	41	**66.1**	67	66	27	100	50	86	83	100	60	75	74	27
A10	NATIONAL PARK: If you were consulted by the NP, what would you MOST like as a result: *(1 only)*			m	w								Ae	hyb	con
a	repair fencing	12	**19.4**	22	17	18	0	0	14	67	0	25	19	26	0
b	continuity of manage	7	**11.3**	7	14	9	0	33	29	0	0	10	19	6	18
c	pest & disease control	1	**1.6**	0	3	9	0	0	0	0	0	0	0	0	9
d	shared benefits	42	**67.7**	70	66	64	100	67	57	33	100	65	63	69	73
PEACE															
P1	DOMESTIC VIOLENCE: within your family or community, are you aware of the following types of domestic violence: *(tick multiple)*														
a	verbal & psych	34	**54.8**	56	54	27	100	50	100	0	17	70	88	43	45
b	physical	38	**61.3**	70	54	55	100	67	86	50	33	55	75	66	27
c	marital rape	28	**45.2**	37	51	45	67	17	14	50	100	40	44	49	36
d	child sex abuse	35	**56.5**	56	57	36	33	83	43	33	100	65	38	63	64
e	I don't know	2	**3.2**	7	0	9	0	0	0	0	0	5	6	0	9

P2	**DESCRIMINATION:** Have you ever been subjected to discrimination on the basis of any of the following: *(tick multiple)*																
	a	gender	12	**19.4**	4	31	9	33	0	14	33	17	25	19	20	18
	b	ethnicity/tribe	11	**17.7**	26	11	9	17	0	0	17	33	30	25	17	9
	c	social status	21	**33.9**	30	37	55	33	17	57	17	17	30	19	31	64
	d	politics	43	**69.4**	70	69	91	83	50	86	67	83	50	50	74	82
	e	none of these	10	**16.1**	19	14	9	17	50	0	0	0	25	38	9	9
	f	I don't know	0	**0.0**	0	0	0	0	0	0	0	0	0	0	0	0
P3	**STANDARD OF LIVING:** which of the following do you regularly struggle to provide for your family: *(tick multiple)*															
	a	food	50	**80.6**	85	77	100	67	50	71	83	100	80	75	77	100
	b	school fees	57	**91.9**	93	91	91	100	83	100	83	100	90	100	97	64
	c	shelter	21	**33.9**	41	29	18	0	0	29	33	100	45	19	43	27
	d	water	29	**46.8**	59	37	27	17	100	43	0	100	50	38	51	45
	e	none of these	0	**0.0**	0	0	0	0	0	0	0	0	0	0	0	0
P4	**SERVICES:** which of the following services do you feel sufficiently serviced by: *(tick multiple)*															
	a	healthcare	36	**58.1**	63	54	64	0	100	43	33	83	65	38	63	73
	b	education	38	**61.3**	63	60	55	0	100	86	0	100	70	44	69	64
	c	roads	25	**40.3**	44	37	18	0	17	100	17	100	40	19	54	27
	d	cell phone network	13	**21.0**	11	29	0	50	0	29	50	17	20	25	20	18
	e	water	27	**43.5**	44	43	27	17	17	29	100	100	40	38	49	36
	f	electricity	3	**4.8**	7	3	9	0	17	14	0	0	0	6	6	0
	g	none of these	5	**8.1**	15	3	9	33	0	0	0	0	10	25	3	0
P5	**CONFLICT:** Do you ever feel under threat from any of the following: *(tick multiple)*				m	w								ae	hyb	con
	a	hatred	26	**41.9**	41	43	36	67	0	86	33	17	45	44	46	27
	b	harassment	16	**25.8**	37	17	45	17	17	14	33	0	30	19	23	45
	c	political violence	37	**59.7**	63	57	73	33	100	71	33	100	40	38	66	73
	d	death	19	**30.6**	33	29	18	0	83	14	0	67	35	19	37	27
	e	none	3	**4.8**	4	6	0	0	0	0	17	0	10	13	3	0

P6	TOLERANCE & REPECT: Do you respect and/or tolerate the following differences in other people: *(multiple)*				0												
	a	political opinions	34	**54.8**	52	57	55	83	33	57	17	100	50	69	54	36
	b	religious	49	**79.0**	74	83	55	100	83	71	67	100	85	94	71	82
	c	cultural	52	**83.9**	89	80	64	100	100	100	67	100	80	100	89	45
	d	language	38	**61.3**	70	54	55	100	83	57	17	67	60	94	51	45
P7	GOOD COMMNICATION: Do you think you have good communication (and relate well to each- other) in your: *(tick multiple)*															
	a	HH	46	**74.2**	78	71	45	33	100	86	67	100	85	75	80	55
	b	family	55	**88.7**	85	91	91	83	67	100	100	100	85	94	91	73
	c	village	49	**79.0**	85	74	82	100	67	71	50	100	80	100	71	73
	d	community	38	**61.3**	74	51	55	100	50	29	67	100	55	75	66	27
	e	as a country	8	**12.9**	22	6	0	50	0	0	0	33	15	31	9	0
P8	LOCAL LEADERSHIP: In your experience, is our local leadership: *(tick multiple)*															
	a	factionalised	30	**48.4**	52	46	73	67	17	71	33	0	50	63	40	55
	b	blocking decisions	31	**50.0**	56	46	27	100	0	43	67	67	55	69	51	18
	c	corrupt	27	**43.5**	44	43	45	67	0	0	50	100	45	56	40	36
	d	lacking consultation	14	**22.6**	26	20	9	67	17	14	0	0	35	50	9	27
	e	lacking vision	36	**58.1**	67	51	27	83	0	100	17	100	70	63	66	27
	f	I don't know	7	**11.3**	7	14	9	0	83	0	0	0	5	6	11	18
	g	none of these	0	**0.0**	0	0	0	0	0	0	0	0	0	0	0	0
P9	CRIMINAL ACTIVITY: Do you fear violent crime and robberies: *(multiple)*															
	a	never	2	**3.2**	0	6	0	0	0	0	33	0	0	0	6	0
	b	sometimes	37	**59.7**	67	54	55	0	83	57	50	100	65	38	69	64
	c	regularly	5	**8.1**	7	9	27	0	0	0	17	0	5	0	11	9
	d	all the time	16	**25.8**	19	31	9	100	17	29	0	0	30	56	11	27

ANNEX 4.2: Mhototi Survey (February 2017)

#	Q	opt	response range		TOTAL 65	men	women	youth	Central	East	West	Resetl	Agroe	Hybr	Conv
RESILIENCE															
R1	WATER HARVESTING: How many water harvesting & conservation techniques do you practice?			#	%				%	%	%	%			
		a	dead-level contours	38	**58.5**	45	71	60	50	93	93	12	67	57	20
		b	drain-away contours	18	**27.7**	39	18	20	45	7	7	41	21	57	40
		c	dams	34	**52.3**	52	53	45	65	43	64	35	60	71	0
		d	selfish tanks	5	**7.7**	3	12	0	5	14	0	12	6	0	20
		e	diversion drains	29	**44.6**	26	62	25	40	36	93	18	60	0	0
		f	mulching	20	**30.8**	29	32	15	40	57	21	6	38	29	0
		g	adding compost	28	**43.1**	42	44	15	40	79	29	29	40	43	60
		h	nothing	3	**4.6**	10	0	15	5	0	0	12	2	0	20
		i	other	8	**12.3**	16	9	5	0	29	7	18	8	43	10
R2	HEALTH: Apart for any inherited medical conditions, how many times have you visited the doctor in the last year? *(circle 1 only)*														
		a	0	16	**24.6**	29	21	20	40	36	14	6	23	57	10
		b	1-3	30	**46.2**	45	47	50	35	43	50	59	44	14	80
		c	4-6	12	**18.5**	13	24	25	10	7	36	24	25	0	0
		d	7-10	4	**6.2**	6	6	5	5	14	0	6	4	29	0
		e	more than 10	3	**4.6**	6	3	0	10	0	0	6	4	0	10
		f	don't have enough $	0	**0.0**	0	0	0	0	0	0	0	0	0	0
R3	CULTURAL RITUAL: As a community, do you think the following cultural traditions are being maintained? *(tick multiple)*														
		a	respect for sacred spaces	21	**32.3**	39	26	50	30	36	29	35	27	71	30
		b	rain making rituals	36	**55.4**	55	56	65	40	86	57	47	58	57	40
		c	harvest rituals (nhimbe/humwe)	62	**95.4**	97	94	100	100	93	93	94	94	100	100
		d	other	2	**3.1**	3	3	5	0	0	7	6	4	0	0
		e	none		**0.0**										

R4	CO-OPERATION: Do you work with others to solve common problems and share:													
a	knowledge	63	**96.9**	100	94	100	100	100	93	94	98	100	90
b	information	58	**89.2**	94	85	80	75	100	93	94	90	100	80
c	skills	56	**86.2**	94	79	85	70	100	86	94	83	100	90
d	labour	58	**89.2**	97	82	85	85	100	86	88	88	100	90
e	resources	48	**73.8**	74	74	70	40	100	86	82	71	86	80
f	equipment	48	**73.8**	77	71	80	50	100	64	88	71	86	80
R5	PRODUCTIVE DIVERSITY: As a family, how many different crops types and varieties (including grains, vegetables, trees/fruits etc.) are you currently producing, or will plant this season?												
a	1	0	**0.0**	0	0	0	0	0	0	0	0	0	0
b	2-5	18	**27.7**	26	29	45	30	14	36	29	33	14	10
c	6-10	19	**29.2**	29	29	30	30	64	7	18	25	57	30
d	11-15	18	**27.7**	32	24	15	30	21	21	35	25	29	40
e	16-20	5	**7.7**	13	3	5	5	0	14	12	8	0	10
f	more than 20	5	**7.7**	0	15	5	5	0	21	6	8	0	10
R6	MARKETS: (if you trade your produce) – when you consider the cost of transport and potential for spoiling, where are your most profitable markets: *(tick 1 only)*												
a	village	18	**27.7**	23	32	35	50	29	29	0	31	29	10
b	community	22	**33.8**	23	44	35	15	29	71	29	35	57	10
c	local shops	3	**4.6**	3	6	5	5	7	0	6	6	0	0
d	town	17	**26.2**	29	24	20	5	29	14	59	21	14	60
e	Gweru	8	**12.3**	19	6	20	35	0	0	6	13	0	20
f	Masvingo	0	**0.0**	0	0	0	0	0	0	0	0	0	0
g	not trading	2	**3.1**	3	3	0	0	7	7	0	4	0	0
R7	INNOVATION: What have you tested/experimented with at your homestead or on your land? (pls explain below)												
a	irrigation/water systems	54	**83.1**	81	85	80	85	100	100	53	100	88	50
b	fencing/boundaries	38	**58.5**	58	59	55	45	86	50	59	63	43	50
c	domestic	43	**66.2**	58	74	55	40	79	100	59	67	57	70
d	breeding (crops/animals)	20	**30.8**	39	24	35	15	7	57	47	27	29	50
e	Other	5	**7.7**	10	6	5	10	0	0	18	6	0	20
g	none	1	**1.5**	0	3	0	0	0	0	6	0	0	10

R8	**SMALL GRAINS:** How many types small grains are you producing this year? (tick multiple)													
a	none	2	**3.1**	3	3	0	0	14	0	0	4	0	0
b	sorghum/mapfunde	61	**93.8**	87	100	90	90	93	100	94	94	100	90
c	finger millet/munga	37	**56.9**	61	53	55	40	79	29	82	52	86	60
d	pearl millet/rapoko	20	**30.8**	35	26	25	15	36	50	29	31	43	20
R9	**DONOR DEPENDENCY:** If you were asked by donors, which support would you prefer? (tick 2 only)												
a	food	16	**24.6**	16	32	15	45	7	21	18	25	43	10
b	skills	34	**52.3**	65	41	40	50	64	50	47	52	57	50
c	equipment	57	**87.7**	90	85	90	70	93	93	100	85	86	100
d	infrastructure	17	**26.2**	23	29	40	15	29	36	29	27	14	30
R10	**PLANTING TIMES:** How do you currently decide on when to plant? (tick 1 only)												
a	do what I've always done	11	**16.9**	10	24	5	10	7	29	24	19	14	10
b	do as instructed by other who know best	1	**1.5**	3	0	5	0	0	0	6	2	0	0
c	observe natural patterns & changes	36	**55.4**	68	44	65	75	43	29	65	48	71	80
d	seek metereological info	19	**29.2**	19	38	25	15	50	57	6	35	14	10
R11	**SEED SECURITY:** How many different types of seeds do you save and re-sow each season? (circle1)												
a	0	1	**1.5**	3	0	5	5	0	0	0	2	0	0
b	1-3	9	**13.8**	6	21	15	15	7	14	18	17	14	0
c	4-8	38	**58.5**	61	56	65	70	71	43	47	56	57	70
d	9-15	16	**24.6**	29	21	15	5	21	43	35	23	29	30
e	16-20	1	**1.5**	0	3	0	5	0	0	0	2	0	0
AGENCY													
A1	**EQUALITY:** If we understand gender equality as creating a balanced partnership between men and women, do you consider that: *(tick multiple)*												
a	you have equality in your marriage	25	**38.5**	35	41	40	25	79	43	18	40	43	30
b	equality is a threat to men	33	**50.8**	45	56	45	40	29	71	65	52	43	50
c	equality is not culturally appropriate	40	**61.5**	65	59	60	60	57	64	65	63	57	60
d	gradual change is acceptable	39	**60.0**	58	62	70	60	50	64	65	63	57	50

A2	VOICE: Do you think that your opinions & concerns are listened to & taken in to account by the following: *(tick multiple)*													
a	spouse	52	**80.0**	90	71	85	75	79	93	76	81	86	70
b	family	55	**84.6**	90	79	80	85	93	71	88	83	100	80
c	kraal head	48	**73.8**	71	76	60	75	93	64	65	79	86	40
d	councillor	31	**47.7**	55	41	35	60	57	29	41	48	71	30
e	chief	35	**53.8**	61	47	35	60	57	43	53	58	57	30
f	MP	13	**20.0**	35	6	15	10	29	7	35	17	43	20
g	none of these	0	**0.0**	0	0	0	0	0	0	0	0	0	0
A3	CUTURAL TRADITION: In order to safeguard our cultural traditions in to the future, do you think there should be some flexibility in the following practices: *(tick multiple)*												
a	lobola	22	**`33.8**	29	38	35	40	14	50	29	40	43	0
b	dress codes	9	**13.8**	3	24	25	5	14	36	6	19	0	0
c	gender roles	30	**46.2**	39	53	40	20	100	50	29	46	57	40
d	planting times	44	**67.7**	77	59	75	55	100	64	59	65	100	60
e	none	9	**13.8**	13	15	5	30	0	0	18	13	0	30
A4	FREEDOMS: Do you feel that you have any of the following: *(tick multiple)*												
a	speech	55	**84.6**	90	79	75	85	93	79	82	81	100	90
b	life choices	54	**83.1**	94	74	75	65	100	79	94	77	100	100
c	movement	44	**67.7**	77	59	55	40	93	79	71	65	71	80
d	worship	57	**87.7**	90	85	75	85	93	86	88	90	86	80
e	expression (eg. political)	20	**30.8**	23	38	25	20	7	86	18	38	14	10
f	none	1	**1.5**	0	3	5	0	0	7	0	2	0	0
A5	DECISION-MAKING: Are you able to make the following decisions without seeking permission: (tick multiple)												
a	paid employment	35	**53.8**	55	53	30	25	86	50	65	50	43	80
b	land-use	39	**60.0**	48	71	45	40	93	64	53	60	57	60
c	crops	39	**60.0**	58	62	50	50	100	36	59	54	71	80
d	slaughter	40	**61.5**	52	71	50	45	100	79	35	58	57	80
e	expenditure	42	**64.6**	48	79	35	55	86	79	47	67	71	50
f	children	49	**75.4**	81	71	80	85	93	50	71	73	86	80
g	making loans	44	**67.7**	65	71	60	45	86	86	65	67	57	80

A6	LEADERSHIP: In your own opinion, are the decisions by leadership on the distribution of resources (such as inputs & land) fair and transparent? *(tick1 only)*													
	a always	16	**24.6**	19	29	30	15	21	43	24	31	14	0
	b sometimes	28	**43.1**	48	38	45	45	50	29	47	38	71	50
	c never	19	**29.2**	29	29	25	35	29	29	24	27	14	50
	d I don't know	2	**3.1**	3	3	0	5	0	0	6	4	0	0
A7	RESISTANCE: When it comes to protecting our bio-cultural resources from land sales & pollution (eg. mining or other 'development'), do **you** consider that **you** have enough: *(tick multiple)*												
	a will to act	58	**89.2**	90	88	85	80	100	86	94	85	100	100
	b support from others	45	**69.2**	55	82	35	45	79	100	65	75	43	60
	c info & knowledge	48	**73.8**	74	74	65	50	93	93	71	75	86	60
	d power to change it	24	**36.9**	29	44	50	35	14	71	29	42	14	30
	e don't want to resist	0	**0.0**	0	0	0	0	0	0	0	0	0	0
	f I don't know	1	**1.5**	3	0	0	5	0	0	0	2	0	0
A8	EDUCATION: In order to fully contribute to our wider society, do you think that education is currently sufficient for: (tick multiple)												
	a men	62	**95.4**	97	94	95	95	93	100	94	96	100	90
	b women	61	**93.8**	100	88	85	90	93	100	94	96	100	80
	c boys	63	**96.9**	97	97	95	90	100	100	100	98	100	90
	d girls	64	**98.5**	100	97	95	95	100	100	100	100	100	90
A9	UNITY: Are you united and working together to achieve common goals as a: *(tick multiple)*												
	a HH	61	**93.8**	94	94	90	90	100	93	94	92	100	100
	b family	44	**67.7**	74	62	60	70	86	43	71	65	100	60
	c village	50	**76.9**	77	76	75	90	93	57	65	81	100	40
	d community	34	**52.3**	61	44	50	55	64	43	47	50	86	40
	e none	0	**0.0**	0	0	0	0	0	0	0	0	0	0
A10	CUSTOMARY AUTHORITY: Do you consider that our traditional leadership is effectively doing its duty in the following:												
	a env regs	27	**41.5**	35	47	55	50	36	43	35	46	29	30
	b land management	37	**56.9**	61	53	70	55	57	50	65	60	57	40
	c ritual & tradition	29	**44.6**	55	35	45	50	57	14	53	42	57	50
	d none	17	**26.2**	26	26	15	25	21	43	18	25	29	30
	e I don't know	1	**1.5**	0	3	0	0	0	0	6	0	0	10

A11	ENVIRONMENTAL REGULATIONS: Can you name 4 environmental regulations that our traditional authorities are tasked by central government to enforce? *(pls complete as many as possible)*													
1	grazing	29	**44.6**	55	35	40	70	71	7	24	44	86	20
2	trees	35	**53.8**	61	47	40	40	64	57	59	52	57	60
3	SB cult	12	**18.5**	16	21	20	5	0	43	29	17	0	40
4	fire	22	**33.8**	26	41	40	0	0	79	65	35	0	50
0	none	4	**6.2**	3	9	15	10	0	7	6	4	0	20
A12	OFFICIALS: In your experience, are officials (eg. Local councillors): *(tick multiple)*												
a	corrupt	50	**76.9**	68	85	80	70	100	93	53	79	71	70
b	blocking decisions	46	**70.8**	55	85	70	50	86	100	59	75	57	60
c	factionalised	44	**67.7**	65	71	70	55	93	79	53	69	86	50
d	lack consultation	39	**60.0**	61	59	50	55	93	57	41	63	57	50
e	lack vision	32	**49.2**	45	53	40	40	79	57	29	50	43	50
f	I don't know	4	**6.2**	6	6	0	10	0	0	12	2	14	20
g	none	2	**3.1**	6	0	0	0	0	0	12	2	0	10
PEACE													
P1	GOOD COMMNICATION: Do you think you have good communication (are able to understand each- other) in your: *(tick multiple)*												
a	HH	60	**92.3**	90	94	85	85	100	86	100	92	86	100
b	family	48	**73.8**	77	71	70	65	93	71	71	75	100	50
c	village	47	**72.3**	74	71	65	90	93	43	59	79	100	20
d	community	32	**49.2**	55	44	35	30	57	57	59	48	71	40
e	country	8	**12.3**	19	6	10	15	21	7	6	10	43	0
f	none	1	**1.5**	0	3	5	0	0	7	0	2	0	0
P2	UNITY: Are you are united and working together to manage your resources as a: *(tick multiple)*												
a	HH	60	**92.3**	94	91	85	85	100	93	94	90	100	100
d	family	44	**67.7**	77	59	60	60	93	50	71	69	100	40
c	village	49	**75.4**	77	74	70	85	79	64	71	81	86	40
d	community	23	**35.4**	52	21	40	30	29	14	65	35	43	30
e	country	2	**3.1**	6	0	0	5	0	0	6	4	0	0

P3	**EQUITY:** Is there equitable sharing of food in your household? *(tick 1 only)*													
a	always	57	**87.7**	84	91	75	90	100	86	76	88	100	80
b	sometimes	7	**10.8**	13	9	20	5	0	14	24	10	0	20
c	never	0	**0.0**	0	0	0	0	0	0	0	0	0	0
d	I don't know	1	**1.5**	3	0	5	5	0	0	0	2	0	0
P4	**CHILD ABUSE:** In your community, are you aware of the following types of child abuse *(multiple)*												
a	not attending school	59	**90.8**	97	85	90	85	100	93	88	90	100	90
b	violence in the home	60	**92.3**	94	91	90	80	100	93	100	92	86	100
c	sexual abuse	55	**84.6**	94	76	80	90	93	71	82	83	100	80
d	early marriage	61	**93.8**	94	94	95	95	100	86	94	94	100	90
P5	**VIOLENCE:** In your family or community, are you aware of any of the following acts of violence: *(multiple)*												
a	domestic	53	**81.5**	90	74	75	85	100	57	82	77	100	90
b	public brawling	53	**81.5**	90	74	85	65	100	64	100	77	86	100
c	rioting	60	**92.3**	94	91	90	80	100	93	100	92	86	100
d	political	36	**55.4**	55	56	55	40	86	50	53	54	57	60
P6	**TRUST:** Do you have trust in each other: *(tick multiple)*												
a	a couple	52	**80.0**	97	65	75	70	79	93	82	81	86	70
b	a HH	53	**81.5**	81	82	70	55	100	93	88	83	57	90
c	a family	46	**70.8**	74	68	70	75	86	43	76	75	86	40
d	a community	20	**30.8**	32	29	20	10	50	36	35	33	43	10
e	no, find trust difficult	2	**3.1**	0	6	10	5	0	7	0	4	0	0
P7	**SAFTEY OF MOVEMENT:** Do you feel that you have safety of movement in the following *(tick multiple)*												
a	within community	56	**86.2**	90	82	85	60	100	93	100	83	100	90
b	outside community	25	**38.5**	39	38	30	20	50	43	47	35	57	40
c	in town	28	**43.1**	42	44	35	25	79	43	35	44	71	20
d	country	21	**32.3**	48	18	25	35	43	21	29	27	86	20
e	crossing to SA	7	**10.8**	10	12	10	10	14	14	6	13	14	0
f	in SA	4	**6.2**	3	9	15	10	0	7	6	8	0	0
g	none	6	**9.2**	6	12	5	30	0	0	0	10	0	10

P8	SENSE OF PEACE: Do you regularly experience distress about any of the following *(multiple)*													
a	persecution	20	**30.8**	29	32	25	10	57	43	24	27	29	50
b	errant children	32	**49.2**	39	59	45	30	57	50	65	48	43	60
c	errant spouse	12	**18.5**	10	26	25	0	29	29	24	19	0	30
d	witchcraft	32	**49.2**	42	56	50	50	50	43	53	44	43	80
e	sickness	52	**80.0**	84	76	70	70	79	86	88	79	71	90
f	food shortages	39	**60.0**	61	59	65	60	57	43	76	56	71	70
g	none	1	**1.5**	3	0	5	0	0	0	6	2	0	0
P9	RESPECT: Within your relationship or marriage, do you feel: *(tick multiple)*												
a	respected	60	**92.3**	100	85	100	95	93	93	88	92	100	90
b	cared for	50	**76.9**	87	68	80	70	93	93	59	77	86	70
c	loved	57	**87.7**	97	79	90	80	93	100	82	88	100	80
d	satisfied	49	**75.4**	81	71	80	70	79	86	71	79	71	60
e	none	4	**6.2**	0	12	0	5	7	0	12	6	0	10
P10	*SENSE OF PLACE: In your community, do you feel that you: (tick multiple)*												
a	are secure here	41	**63.1**	55	71	65	30	100	79	59	65	57	60
b	belong here	50	**76.9**	77	76	65	60	100	79	76	77	57	90
c	have a future here	50	**76.9**	84	71	70	70	100	71	71	77	86	70
d	have a sense of responsibility (eg. over environmental protection)	51	**78.5**	90	68	75	80	100	79	59	77	100	70
e	none of these	1	**1.5**	0	3	0	0	0	7	0	2	0	0

ANNEX 4.3: Chikukwa Survey (November 2016)

#	QUESTION	opt	response range	TOTAL	%	men	women	youth	Hangani	Kwyedza	Kubatana	Munaka	Rujeko	Chitikete	Chitsaa	Agroec	Hybrid	Conv
RESILIECE				54	**54.0**	**24**	**30**	***22***	**5**	**6**	**6**	**8**	**9**	**8**	**12**	23	23	10
R1	**REGULATIONS:** Do you think that your traditional authorities are effectively enforcing the following environmental regulations: *(tick multiple)*																	
		a	fire	47	**87.0**	**87.5**	**86.7**	***90.9***	80	67	100	88	78	88	100	**87.0**	**87.0**	**90**
		b	stream bank cultivation	40	**74.1**	**70.8**	**76.7**	***77.3***	80	17	100	75	78	88	75	**78.3**	**73.9**	**70**
		c	livestock	41	**75.9**	**79.2**	**73.3**	***81.8***	80	33	100	75	78	88	75	**82.6**	**82.6**	**50**
		d	tree cutting	42	**77.8**	**70.8**	**83.3**	***86.4***	80	50	100	75	78	75	83	**73.9**	**82.6**	**80**
		e	none of these	5	**9.3**	**12.5**	**6.7**	***4.5***	20	33	0	0	11	13	0	**8.7**	**8.7**	**10**
R2	**SACRED PLACES:** In your village, do you think that people have respect for sacred spaces? *(multiple)*																**0.0**	**0**
		a	always	30	**55.6**	**37.5**	**70.0**	***50.0***	20	33	100	63	78	13	67	**52.2**	**52.2**	**70**
		b	sometimes	19	**35.2**	**41.7**	**30.0**	***45.5***	60	50	0	38	22	63	25	**43.5**	**34.8**	**20**
		c	never	3	**5.6**	**12.5**	**0.0**	***0.0***	20	17	0	0	0	13	0	**4.3**	**8.7**	**0**
		d	I don't know	2	**3.7**	**8.3**	**0.0**	***4.5***	0	0	0	0	0	13	8	**0.0**	**4.3**	**10**
R3	**WATER:** What is the situation with the spring/s that supply your village? *(tick 1 only)*																	
		a	spring/s fully functioning	37	**68.5**	**66.7**	**70.0**	***63.6***	20	17	67	50	89	88	100	**56.5**	**73.9**	**70**
		b	spring/s are now seasonal	12	**22.2**	**20.8**	**23.3**	***31.8***	60	50	0	50	11	13	0	**34.8**	**13.0**	**30**
		c	spring/s have dried up	4	**7.4**	**12.5**	**3.3**	***4.5***	20	33	17	0	0	0	0	**8.7**	**8.7**	**0**
		d	we don't have a spring	1	**1.9**	**0.0**	**3.3**	***0.0***	0	0	17	0	0	0	0	**0.0**	**4.3**	**0**
R4	**LEARNING:** How many active demonstration gardens & other community spaces are there in your village for sharing knowledge, skills and resources? *(tick 1)*																	
		a	0	8	**14.8**	**12.5**	**16.7**	***22.7***	20	0	0	25	0	13	33	**13.0**	**13.0**	**20**
		b	1	24	**44.4**	**50.0**	**40.0**	***40.9***	20	0	0	75	11	38	58	**30.4**	**26.1**	**50**
		c	2	10	**18.5**	**16.7**	**20.0**	***13.6***	60	0	0	0	33	0	0	**26.1**	**4.3**	**0**
		d	3	3	**5.6**	**8.3**	**3.3**	***9.1***	0	17	33	0	22	50	8	**13.0**	**30.4**	**10**
		e	4	5	**9.3**	**8.3**	**10.0**	***9.1***	0	17	17	0	11	0	0	**8.7**	**0.0**	**10**
		f	5	4	**7.4**	**4.2**	**10.0**	***4.5***	0	33	50	0	0	0	0	**8.7**	**8.7**	**10**

R5	**HEALTH:** In relation to your family health, how many times have you visited the clinic over the past twelve months? *(tick1 only)*																	
a	0	15	**27.8**	**33.3**	**23.3**	***18.2***	0	17	50	50	56	13	8	**34.8**	**30.4**	**20**
b	1-3	22	**40.7**	**45.8**	**36.7**	***50.0***	40	33	33	50	44	63	25	**43.5**	**39.1**	**30**
c	4-6	14	**25.9**	**16.7**	**33.3**	***22.7***	40	33	17	0	0	13	67	**17.4**	**26.1**	**40**
d	7-10	1	**1.9**	**0.0**	**3.3**	***4.5***	0	17	0	0	0	0	0	**0.0**	**0.0**	**10**
e	more than 10	2	**3.7**	**4.2**	**3.3**	***4.5***	20	0	0	0	0	13	0	**4.3**	**4.3**	**0**
R6	**SEED:** How many different types of seeds do you save and re-sow each season?*(circle1 only)*																	
a	0	1	**1.9**	**4.2**	**0.0**	***4.5***	0	0	0	13	0	0	0	**0.0**	**4.3**	**0**
b	1-3	12	**22.2**	**33.3**	**13.3**	***36.4***	0	33	33	13	22	38	17	**21.7**	**17.4**	**30**
c	4-8	33	**61.1**	**58.3**	**63.3**	***50.0***	60	17	67	63	56	63	83	**65.2**	**56.5**	**60**
d	9-15	5	**9.3**	**0.0**	**16.7**	***4.5***	20	17	0	13	22	0	0	**17.4**	**4.3**	**10**
e	16-20	2	**3.7**	**4.2**	**3.3**	***0.0***	0	33	0	0	0	0	0	**8.7**	**0.0**	**0**
f	more than 20	0	**0.0**	**0.0**	**0.0**	***0.0***	0	0	0	0	0	0	0	**0.0**	**0.0**	**0**
R7	**STORAGE:** Do you have a grain store in your: *(multiple)*																	
a	household	34	**63.0**	**62.5**	**63.3**	***59.1***	40	83	50	50	78	100	42	**52.2**	**70.0**	**73.9**
b	village	0	**0.0**	**0.0**	**0.0**	***0.0***	0	0	0	0	0	0	0	**0.0**	**0.0**	**0**
c	ward	0	**0.0**	**0.0**	**0.0**	***0.0***	0	0	0	0	0	0	0	**0.0**	**0.0**	**0**
d	none	20	**37.0**	**37.5**	**36.7**	***40.9***	60	17	50	50	22	0	58	**47.8**	**26.1**	**30**
R8	**SOIL:** What kind of methods do you use to improve soil fertility? *(multiple)*																	
a	organic	40	**74.1**	**66.7**	**80.0**	***72.7***	100	50	100	63	89	100	42	**95.7**	**87.0**	**10**
b	inorganic	18	**33.3**	**29.2**	**36.7**	***27.3***	0	17	83	13	11	50	50	**8.7**	**52.2**	**40**
c	mixed on the same plot	7	**13.0**	**12.5**	**13.3**	***13.6***	0	50	0	13	22	13	0	**0.0**	**17.4**	**30**
d	mixed but on different plots	27	**50.0**	**50.0**	**50.0**	***40.9***	0	50	100	50	56	63	33	**8.7**	**91.3**	**30**
e	nothing	2	**3.7**	**8.3**	**0.0**	***0.0***	0	0	0	13	0	0	8	**4.3**	**0.0**	**0**
R9	**PESTS & DISEASES:** On your family plot, are pests and diseases a: *(tick 1 only)*																	
a	a constant problem	10	**18.5**	**16.7**	**20.0**	***18.2***	20	17	33	0	0	0	50	**13.0**	**13.0**	**40**
b	sometimes a problem	8	**14.8**	**16.7**	**13.3**	***13.6***	20	0	17	25	0	38	8	**13.0**	**21.7**	**0**
c	manageable	23	**42.6**	**45.8**	**40.0**	***54.5***	40	17	33	38	67	50	42	**56.5**	**39.1**	**30**
d	not often a problem	13	**24.1**	**20.8**	**26.7**	***13.6***	20	67	17	38	33	13	0	**17.4**	**26.1**	**30**

R10	**NETWORKS**: In your community do you have collective networking for market linkages? *(tick1 only)*																	
	a	always	7	13.0	12.5	13.3	*18.2*	0	17	33	13	22	13	0	8.7	13.0	20
	b	sometimes	20	37.0	41.7	33.3	*36.4*	60	67	50	13	44	38	17	30.4	43.5	40
	c	never	21	38.9	33.3	43.3	*31.8*	40	0	17	75	11	38	67	47.8	39.1	20
	d	I don't know	7	13.0	12.5	13.3	*13.6*	0	17	0	0	33	13	17	13.0	8.7	20
R11	**CROP DIVERSITY:** As a family how many different crop types & varieties (incl cereals, hort, trees/fruits etc.) are you currently producing, or will plant this season? (circle1 only)																	
	a	1	0	0.0	0.0	0.0	*0.0*	0	0	0	0	0	0	0	0.0	0.0	0
	b	2-5	20	37.0	45.8	30.0	*54.5*	40	33	67	38	11	25	50	39.1	39.1	30
	c	6-10	15	27.8	29.2	26.7	*22.7*	0	33	0	38	11	50	42	8.7	26.1	70
	d	11-15	8	14.8	8.3	20.0	*18.2*	60	0	17	13	22	13	0	26.1	13.0	0
	e	16-20	3	5.6	8.3	3.3	*0.0*	0	17	17	0	0	0	8	4.3	4.3	0
	f	21-25	3	5.6	0.0	10.0	*0.0*	0	0	0	13	11	13	0	13.0	4.3	0
	g	more than 25	5	9.3	8.3	10.0	*4.5*	0	17	0	0	44	0	0	8.7	13.0	0
R12	**ECONOMIC:** Of the food consumed in your household, how many items are purchased from shops each week? (circle 1 only)																	
	a	0	4	7.4	8.3	6.7	*0.0*	20	0	0	0	33	0	0	13.0	4.3	0
	b	1-3	19	35.2	33.3	36.7	*40.9*	80	33	33	25	22	25	42	43.5	30.4	40
	c	4-7	10	18.5	20.8	16.7	*22.7*	0	0	50	13	33	25	8	17.4	21.7	0
	d	8-10	3	5.6	4.2	6.7	*0.0*	0	0	17	13	11	0	0	0.0	13.0	0
	e	more than 10	1	1.9	4.2	0.0	*0.0*	0	0	0	0	0	13	0	0.0	4.3	0
	f	can't afford to buy more	17	31.5	29.2	33.3	*36.4*	0	67	0	50	0	38	50	26.1	26.1	60
AGENCY																		
A1	**RESEPCT:** On respect - do you feel that you have: *(tick multiple)*																	
	a	self-respect	50	92.6	87.5	96.7	*90.9*	100	67	100	75	100	100	100	95.7	95.7	80
	b	are respected by others	48	88.9	87.5	90.0	*81.8*	100	67	100	88	100	100	75	95.7	91.3	70
	c	have respect within family	18	33.3	29.2	36.7	*40.9*	100	17	17	0	33	75	17	39.1	43.5	10
	d	respect eachother as comm	51	94.4	95.8	93.3	*90.9*	100	83	100	100	100	100	83	95.7	91.3	100
	e	none of these	0	0.0	0.0	0.0	*0.0*	0	0	0	0	0	0	0	0.0	0.0	0
A2	**DECISION-MAKING:** When making decisions (such as on markets or production) do you feel that you have sufficient: (tick multiple)																	
	a	information	36	66.7	70.8	63.3	*72.7*	100	100	17	88	56	88	42	69.6	60.9	80
	b	knowledge	43	79.6	83.3	76.7	*81.8*	100	100	100	88	44	88	67	82.6	69.6	90
	c	education	43	79.6	91.7	70.0	*81.8*	100	100	100	75	89	75	50	91.3	73.9	80
	d	none of these	4	7.4	8.3	6.7	*9.1*	0	17	0	0	0	13	17	0.0	13.0	10

A3	**UNITY:** Are you united and working together to achieve common goals as a: *(tick multiple)*																**0.0**	**0**
	a	household	51	**94.4**	**87.5**	**100.0**	***95.5***	100	83	100	88	100	100	92	**91.3**	**95.7**	**100**
	b	family	50	**92.6**	**91.7**	**93.3**	***95.5***	100	83	100	75	100	88	100	**82.6**	**95.7**	**100**
	c	community	38	**70.4**	**70.8**	**70.0**	***77.3***	100	50	67	75	89	38	75	**82.6**	**80.0**	**56.5**
	d	none	2	**3.7**	**4.2**	**3.3**	***9.1***	0	0	0	13	0	13	0	**4.3**	**0.0**	**10**
A4	**FAIRNESS & TRANSPARENCY:** Are decisions by leadership on the distribution of aid to OVCs, the poor and the disabled(eg. community generated grain) fair and transparent? *(tick 1 only)*																
	a	I don't know	3	**5.6**	**4.2**	**6.7**	***4.5***	0	0	0	13	22	0	0	**4.3**	**8.7**	**0**
	b	always	4	**7.4**	**12.5**	**3.3**	***13.6***	40	0	17	0	0	0	8	**17.4**	**0.0**	**10**
	c	sometimes	38	**70.4**	**70.8**	**70.0**	***59.1***	60	83	67	88	78	75	50	**69.6**	**73.9**	**60**
	d	never	9	**16.7**	**12.5**	**20.0**	***22.7***	0	17	17	0	0	25	42	**8.7**	**17.4**	**30**
A5	**LEADERSHIP:** Do you think that your local leadership is supportive of the communities' needs at the following levels: *(multiple)*																
	a	village	38	**70.4**	**66.7**	**73.3**	***59.1***	40	0	100	88	100	50	83	**78.3**	**78.3**	**40**
	b	ward	37	**68.5**	**58.3**	**76.7**	***72.7***	40	67	100	63	100	38	67	**73.9**	**65.2**	**70**
	c	district	33	**61.1**	**62.5**	**60.0**	***54.5***	40	50	100	88	89	38	33	**69.6**	**60.9**	**50**
	d	I don't know	3	**5.6**	**4.2**	**6.7**	***4.5***	0	0	0	13	0	25	0	**4.3**	**8.7**	**0**
	e	not supportive	5	**9.3**	**12.5**	**6.7**	***4.5***	40	33	0	0	0	13	0	**8.7**	**8.7**	**10**
A6	**REPRESENTATION:** Do you feel that elections are fair and that you are appropriately represented at: *(tick multiple)*																
	a	village level	35	**64.8**	**62.5**	**66.7**	***72.7***	100	33	100	63	67	38	67	**60.9**	**69.6**	**70**
	b	ward level	33	**61.1**	**66.7**	**56.7**	***59.1***	80	33	100	75	67	38	50	**47.8**	**73.9**	**60**
	c	district level	31	**57.4**	**54.2**	**60.0**	***63.6***	80	33	100	75	67	13	50	**56.5**	**60.9**	**60**
	d	national level	20	**37.0**	**41.7**	**33.3**	***50.0***	0	50	100	25	56	13	25	**26.1**	**43.5**	**50**
	e	none of these	8	**14.8**	**12.5**	**16.7**	***13.6***	0	50	0	0	22	38	0	**8.7**	**21.7**	**10**
	f	I don't know	6	**11.1**	**8.3**	**13.3**	***4.5***	0	0	0	13	11	13	25	**21.7**	**0.0**	**10**
A7	**PARTICIPATION:** Are you able to participate in community gardens & other community activities as an equal? *(tick1 only)*																
	a	always	22	**40.7**	**29.2**	**50.0**	***31.8***	0	33	33	25	89	75	17	**56.5**	**31.1**	**20**
	b	sometimes	18	**33.3**	**50.0**	**20.0**	***40.9***	60	67	67	13	11	25	25	**34.8**	**30.4**	**40**
	c	never	3	**5.6**	**0.0**	**10.0**	***4.5***	40	0	0	13	0	0	0	**13.0**	**0.0**	**0**
	d	no community gardens	11	**20.4**	**20.8**	**20.0**	***22.7***	0	0	0	50	0	0	58	**13.0**	**13.0**	**40**
A8	**VOICE/influencing:** Do you feel able to influence decision-making in your: *(tick multiple)*																
	a	household	51	**94.4**	**95.8**	**93.3**	***90.9***	100	83	100	100	89	100	92	**91.3**	**95.7**	**100**
	b	family	48	**88.9**	**95.8**	**83.3**	***90.9***	100	67	100	75	89	100	92	**78.3**	**95.7**	**90**
	c	village	28	**51.9**	**58.3**	**46.7**	***50.0***	100	17	67	63	78	38	25	**60.9**	**60.9**	**30**
	d	ward	17	**31.5**	**37.5**	**26.7**	***22.7***	60	17	33	50	67	13	0	**47.8**	**34.8**	**10**

	e	none	2	3.7	4.2	3.3	*9.1*	0	17	0	0	0	0	8	8.7	0.0	0
A9	**DECISION-MAKING**: Do you have access to your own plot to make decisions on production & income expenditure on any of the following: *(tick multiple)*																
	a	plot within homestead	48	88.9	87.5	90.0	*81.8*	100	83	100	75	100	100	75	95.7	91.3	70
	b	portion of field	23	42.6	37.5	46.7	*45.5*	60	33	100	13	56	63	17	39.1	56.5	20
	c	your own field	33	61.1	58.3	63.3	*63.6*	40	67	100	38	67	63	50	52.2	65.2	70
	d	plot in community garden	12	22.2	20.8	23.3	*27.3*	80	17	17	13	56	0	8	47.8	17.4	0
	e	all decisions on HH	25	46.3	50.0	43.3	*50.0*	60	67	83	0	44	38	33	56.5	47.8	30
	f	all decisions on HH & fields	16	29.6	25.0	33.3	*22.7*	0	33	0	13	56	75	17	56.5	13.0	10
	g	none of these	1	1.9	0.0	3.3	*4.5*	0	0	0	13	0	0	0	0.0	4.3	0
A10	**CONFIDENCE:** Do you feel confident to negotiate fair market prices as: *(tick multiple)*																
	a	an individual	32	59.3	66.7	53.3	*59.1*	60	0	100	63	67	50	67	78.3	52.2	40
	b	a HH	38	70.4	83.3	60.0	*59.1*	60	17	83	100	67	88	67	82.6	73.9	40
	c	a family	38	70.4	91.7	53.3	*68.2*	60	50	83	75	67	88	67	69.6	78.3	50
	d	a community	16	29.6	41.7	20.0	*36.4*	40	33	17	38	56	13	17	43.5	26.1	20
	e	not confident	10	18.5	4.2	30.0	*22.7*	40	33	0	0	22	13	25	13.0	13.0	40
A11	**POWER:** Do you have the power to say no to things you don't want to do – such as: *(tick multiple)*																
	a	sex in marriage	36	66.7	75.0	60.0	*50.0*	80	50	100	75	89	63	33	78.3	73.9	30
	b	political pressure	27	50.0	54.2	46.7	*45.5*	20	0	100	50	78	75	25	69.6	43.5	30
	c	use as labour	37	68.5	70.8	66.7	*72.7*	60	67	100	75	89	88	25	82.6	78.3	30
	e	not possible to say no to any of these	10	18.5	16.7	20.0	*22.7*	20	17	0	25	0	13	42	13.0	13.0	40
A12	**RIGHTS:** Do you feel you have adequate awareness your own and others rights: *(tick multiple)*																
	a	childs	43	79.6	79.2	80.0	*81.8*	100	83	100	50	78	63	92	87.0	73.9	80
	b	womens	42	77.8	75.0	80.0	*77.3*	100	67	83	63	78	75	83	87.0	73.9	70
	c	disability	39	72.2	79.2	66.7	*72.7*	100	83	83	50	67	63	75	87.0	60.9	70
	d	freedom of speech	35	64.8	62.5	66.7	*59.1*	80	67	100	50	78	50	50	78.3	65.2	50
	e	I don't know	6	11.1	16.7	6.7	*9.1*	0	17	0	38	0	13	8	4.3	13.0	20
PEACE																	
P1	**LIVESTOCK:** How do you manage livestock related conflicts with neighbours? *(tick 1 only)*																
	a	penning/zero grazing	6	11.1	8.3	13.3	*13.6*	0	0	33	0	11	13	17	21.7	8.7	0
	b	family member herding	32	59.3	58.3	60.0	*77.3*	80	100	17	38	67	75	50	47.8	56.5	80
	c	communal herding	3	5.6	8.3	3.3	*4.5*	20	0	0	0	11	13	0	8.7	8.7	0
	d	livestock roam unattended	6	11.1	12.5	10.0	*0.0*	0	0	67	13	0	0	8	8.7	13.0	10
	e	don't have livestock	7	13.0	16.7	10.0	*9.1*	0	0	0	38	11	0	25	8.7	13.0	10

P2	**COMMUNICATION:** Are you able to communicate in a mindful and respectful way *(tick 1 only)*																	
a	as a couple	40	74.1	79.2	70.0	*68.2*	100	100	83	63	78	50	67	87.0	65.2	60
d	as a HH	49	90.7	91.7	90.0	*86.4*	100	100	100	88	89	75	92	91.3	91.3	90
c	as a family	47	87.0	91.7	83.3	*86.4*	100	100	100	63	89	75	92	78.3	91.3	90
d	as neighbours	45	83.3	79.2	86.7	*77.3*	100	83	100	88	89	63	75	91.3	82.6	70
e	as a community	36	66.7	66.7	66.7	*63.6*	80	100	67	63	78	38	58	82.6	47.8	80
f	find it difficult to communicate	1	1.9	0.0	3.3	*4.5*	0	0	0	0	0	0	8	4.3	0.0	0
P3	**DOMESTIC VIOLENCE:** How many current cases of domestic violence are you aware of in your community? *(circle 1 only)*															
a	0	11	20.4	16.7	23.3	*22.7*	0	33	50	0	22	13	25	8.7	17.4	50
b	1-2	13	24.1	25.0	23.3	*27.3*	0	17	0	13	33	50	33	21.7	26.1	10
c	3-5	23	42.6	41.7	43.3	*36.4*	60	17	50	63	33	38	42	56.5	43.5	20
d	6-10	4	7.4	8.3	6.7	*9.1*	40	33	0	0	0	0	0	13.0	4.3	10
e	11-15	2	3.7	4.2	3.3	*4.5*	0	0	0	13	11	0	0	0.0	4.3	10
f	more than 15	1	1.9	4.2	0.0	*0.0*	0	0	0	13	0	0	0	0.0	4.3	0
P4	**FREEDOM OF MOVEMENT:** Do you feel comfortable and free to move around your village and ward:*(tick multiple)*															
a	at night as an individual	39	72.2	87.5	60.0	*72.7*	100	67	83	50	89	75	58	73.9	78.3	60
b	as a family visiting friends	52	96.3	95.8	96.7	*95.5*	100	100	100	100	100	100	83	91.3	100.0	100
c	for people from outside to visit	46	85.2	91.7	80.0	*81.8*	100	67	67	100	100	75	83	78.3	87.0	100
d	us/our children for recreation	32	59.3	62.5	56.7	*63.6*	100	83	0	75	44	50	67	56.5	47.8	90
e	don't feel free to move around	2	3.7	4.2	3.3	*4.5*	0	0	0	0	0	0	17	8.7	0.0	0
P5	**PEACE OF MIND:** Do you feel you have peace of mind from the following: *(mulitple)*															
a	witchcraft	17	31.5	29.2	33.3	*27.3*	0	0	67	0	67	25	42	39.1	34.8	10
b	jealousy	16	29.6	37.5	23.3	*27.3*	0	0	67	13	56	25	33	39.1	30.4	0
c	neither	35	64.8	62.5	66.7	*72.7*	100	100	33	88	33	75	50	56.5	65.2	90
P6	**TRUST:** Do you have trust in eachother as: *(tick multiple)*															
a	a couple	36	66.7	66.7	66.7	*72.7*	100	50	67	75	78	38	67	82.6	52.2	60
b	a HH	48	88.9	79.2	96.7	*90.9*	100	50	100	100	100	88	83	91.3	91.3	80
c	a family	44	81.5	79.2	83.3	*90.9*	100	50	100	75	89	88	75	78.3	87.0	70
d	a community	27	50.0	41.7	63.3	*63.6*	60	33	50	50	78	38	56	56.5	56.5	30
e	no, find trust difficult	10	18.5	20.8	10.0	*13.6*	0	50	17	1	11	25	8	4.3	21.7	40

P7	**TOLERANCE:** Are you tolerant of people with different beliefs (other Christian sects, traditional, other): *(tick multiple)*																	
	a	as an individual	36	66.7	66.7	66.7	*50.0*	60	0	100	88	67	88	58	65.2	73.9	40
	b	as a HH	30	55.6	58.3	53.3	*40.9*	80	0	67	75	56	50	58	69.6	43.5	40
	c	as a family	26	48.1	54.2	43.3	*45.5*	60	0	67	50	44	50	58	56.5	39.1	30
	d	as a community	21	38.9	45.8	33.3	*31.8*	60	0	83	50	33	25	33	52.2	26.1	30
	e	no, find it difficult to tolerate	17	31.5	33.3	30.0	*45.5*	20	100	0	25	33	13	33	26.1	30.4	60
P8	**HARASSMENT:** Are people in your community free from police harassment and corruption to market and trade their goods? *(tick 1 only)*																	
	a	I don't know	12	22.2	16.7	26.7	*18.2*	20	17	17	13	33	13	33	17.4	17.4	40
	b	always	3	5.6	12.5	0.0	*0.0*	20	0	0	13	11	0	0	8.7	4.3	0
	c	sometimes	27	50.0	58.3	43.3	*54.5*	100	50	67	75	33	50	17	65.2	47.8	30
	d	never	13	24.1	25.0	23.3	*22.7*	20	33	0	0	22	38	42	17.4	26.1	30
P9	**COERCION:** Do you or your community youth feel forced to attend political events or rallies? *(tick 1 only)*																	
	a	I don't know	4	7.4	0.0	13.3	*0.0*	0	0	17	0	22	0	8	0.0	17.4	0
	b	always	17	31.5	37.5	26.7	*27.3*	40	83	17	25	44	13	17	39.1	26.1	30
	c	sometimes	17	31.5	33.3	30.0	*36.4*	40	17	33	50	11	63	17	30.4	43.5	10
	d	never	16	29.6	29.2	30.0	*36.4*	20	0	33	25	22	25	58	30.4	13.0	60
P10	**MEDIATION:** Do your village heads perform their role as community mediators when there are: *(multiple)*																	
	a	disputes - possessions/assets	46	85.2	83.3	86.7	*86.4*	100	33	100	88	78	88	100	82.6	87.0	80
	b	cases of domestic violence	47	87.0	87.5	86.7	*86.4*	100	33	100	100	100	75	92	95.7	87.0	70
	c	conflicts - village boundaries	48	88.9	83.3	93.3	*95.5*	100	50	100	88	89	88	100	91.3	82.6	90
	d	other community conflicts	44	81.5	79.2	83.3	*86.4*	100	33	83	88	78	88	92	87.0	78.3	70
	e	they do not provide mediation	4	7.4	12.5	3.3	*4.5*	0	50	0	0	0	13	0	4.3	4.3	10

ANNEX 5.1: Dema Action Plan (Model solutions developed by 19 people – 10.05.17)

Action Group: Resilience	Problem / Contradiction	Model solution(s) developed by working groups
1) Productive diversity	Between the low level of productive diversity and a lack of seed saving through which to expand diversity and thus resilience.	• Increase seed multiplication and storage skills – through more training and farmer-to-farmer sharing. • To initiate seed sharing fairs at village and ward level. • Increased awareness of and access to nutritious foods through village mobilisers.
2) Innovation & Experimentation	Between the available means of organic production and the needs of organic production in a changing climate	• Village-based soil management experiments for fertility and moisture retention. • Identify village location and establish a water catchment example using community knowledge and skills, and share through farmer field days. • Conduct experiments with value addition to reduce seasonal waste and connect with local markets. • Consult villagers on crop pests and diseases challenges/solutions to develop experimental pest management plots.
Action Group: Agency	**Problem / Contradiction**	**Model solution(s) developed by working groups**
3) Leadership & Transparency	Between cognitive and social justice, and a reticence to engage in decision-making for change.	• Enhanced communication between village leadership and community members through inclusive VIDCO meetings. • Well-advertised call for new, more representative VIDCO candidates for election, with an open election process. • Open meeting to redraw village beneficiary lists, with fully transparent decision-making.
Action Group: Peace	**Problem / Contradiction**	**Model solution(s) developed by working groups**
4) Discrimination & Violence	Between the self-interests of individuals and those of a different political or religious persuasion, or gender.	• Increased respect and acceptance of political different, through training on rights & freedoms, with an open village forum for inter-party campaigning for exchange and debate on policies. • Inter-church & church-shrine open days, meetings and sharing. • More training & support on gender discrimination and its impacts, with HH gender-swap day (WWD 2018)
5) Domestic Violence & Abuse	Between the structural violence of poverty & exclusion, and the abuse of the most vulnerable.	• Improving communication in the HH with couples counselling evenings, financial management training, and village awareness dramas on domestic violence and rights. • Involvement with school safeguarding committees, and dramas in schools to support increased reporting of child sexual abuse.

Annex 5.2: Mhototi Action Plan(model solutions developed by 32 people - 08.03.17)

MHOTOTI ACTION PLANNING FRAMEWORKS		Developed 08.03.17 x 32 participants (East, Central, West, North Devon)
Action Group (resilience)	**Problem / contradiction**	**Model solution(s) developed by working groups**
1) Productive diversity	Low productive diversity undermining resilience (to social, ecological, political and climate shocks)	• Seed & small grain multiplication and storage increases availability & diversity in ward • Capacity for water capture & storage increased. • Availability of diverse foods improves access & nutrition.
2) Innovation	Limited experimentation and innovation leading to low adaptive capacity to ecological & climate challenges.	• Improved breeds & feeds increases livestock resilience to drought. • *Seed & grains (see G 6)* • Soil management for more moisture retention & fertility enhanced.
3) Market development	1) Poor understanding and planning for market demand. 2) Lack of diversity for consistent (seasonal) market supply	• Market demand research increases opportunities. • Value addition (VA) provides diverse & consistent supply for market.
Action Group (agency)	**Problem / contradiction**	**Model solution(s) developed by working groups**
3) Traditional ritual and practice.	1) Domestic violence & abuse. 2) Corruption and lack of transparency 3) Lack of respect for sacred places 4) Community division	• Support for Group 7 with shared strategies to resuscitate *dare*. • Village-level grain produced & stored at *zunde* restores unity & trust, & increases resilience. • Sacred spaces mapped and protected for ritual purposes. • Communities come together to celebrate farming rituals & traditions for shared understanding.
5) Biocultural protection & environmental regs.	1) Lack of implementation of environmental regulations causing disputes & degradation 2) Erosion of bio-cultural norms & resources resulting in poor resilience.	• Awareness about the importance of environment increases observance of regulations & reduces degradation. (see G2) • Increased awareness of sacred sites and species of cultural importance protects against loss & improves social-ecological connections. (see G1
6) Leadership & Transparency	Lack of transparency in leadership decision-making undermining legitimacy and resilience, resulting in a sense of unfairness - creating mistrust at community level.	• Collective decision-making increases people's voice, and creates fair & transparent distribution of resources. • Village-level grain production & storage through *zunde* restores unity & trust, & increases resilience. • Clear by-laws provide clarity & moderate behaviour between each other and our environment. *(see G3)*
Action Group (peace)	**Problem / contradiction**	**Model solution(s) developed by working groups**
7) Domestic Violence	1) Physical & psychological abuse in the home 2) Child sexual abuse (CSA) 3) Marital rape.	• Improved communication results in decreased domestic violence. • Cases of child abuse being identified & engaged with. • Increased awareness reduces cases of marital/statutory rape.

Annex 5.3 Chikukwa Action Plan (Model solutions developed by community group of 22 people – 14.07.17)

Action Group : Resilience	Problem / contradiction	Model solution(s) developed by working groups
1) Productive diversity	Low productive diversity leading to poor access to nutritious foods & undermining resilience (to social, ecological, political and climate shocks)	• Seed multiplication and storage skills increases food diversity & availability. • Managed livestock protects against crop damage & reduces cases of conflict. • Village nurseries producing diverse trees for human & animal nutrition reduces pressure on crop land. • Restoration of village springs increases water availability for production.
Action Groups : Agency	Problem / Contradiction	Model solution(s) developed by working groups
2) Leadership & Transparency	Corruption in formal & traditional authorities undermining legitimacy - eroding community trust & cohesion.	• Increased awareness by traditional leadership on impact of corruption improves accountability & trust. • Collective decision-making enables fair & transparent distribution of resources. • Political dialogues reduce tensions & encourage open communication - freedom of speech & expression
3) Participation	Lack of community involvement, participation and ownership over CELUCT creating a sense of and disconnection.	• Village catering teams rotating at CELUCT rebuilds relationship & restores mutual confidence. • Village-based rotation of labour & security leads to improved ownership over & security of CELUCT • CELUCT's fresh food requirements equitably purchased from the PCCs, benefits community growers and supports growth.
Action Groups: Peace	Problem / Contradiction	Model solution(s) developed by working groups
4) Security & Trust	Lack of trust in leadership and decision-making on resource access resulting in a feeling of frustration, suspicion and insecurity in community.	• Community cohesion & trust increased as it holds leadership to account for decisions • Fair and inclusive access to healthcare restores faith in equitable service delivery • Community members & leaders coming together promotes diversity & tolerance through traditional ritual & inclusive celebrations.
5) Domestic Violence	Child sexual abuse (CSA), Physical & psychological abuse in home, and marital /statutory rape hidden from view.	• Cases of child abuse being identified & engaged with. • Improved communication results in decreased domestic violence • Increased awareness tackles the culture of silence about marital/statutory rape.

Annex 6: Data Collection Methods Table

#	Methods	Participants & KIs	Participant #	Data collected
1	FGD: Mapping (landscape, body, event timeline)	Farmers participating in agroecological activities	**Dema**: 23 ppl - 13 men / 10 women. **Mhototi**: 34 ppl - 17 m / 17 w (of which 13 youths) **Chikukwa**: 21 ppl - 12 m / 9 w (of which 4 youths)	Transcribed audio recordings. Visual representations (on flip charts). Photographs.
2a/b	FGD: Indicator Development and ranking (2 days).	Farmers participating in agroecological activities	**Dema**: a) 25 ppl – 13 m / 12 w; b) 26 – 10m / 15 w. **Mhototi**: a) 34 ppl – 15 m / 19 w (of which 17 youths); b) 31 ppl – 13m / 18 w (of which 11 youths) **Chikukwa**: a) 29 ppl – 14 m / 15 w (of which 12 youths); b) 26 ppl – 10 m / 16 w (of which 11 youths)	Transcribed audio recordings. Indicator longlists (M, W, Y) and final shortlists (flip charts). Photographs.
3	Survey	Agroecological, 'hybrid' and conventional farmers	**Dema**: 62 ppl – 27 m / 35 w (10 youths) (6 villages) **Mhototi**: 65 ppl – 31 m / 34 w (20 youths) (4 zones) **Chikukwa**: 54 ppl – 24 m / 30 w (22 youths) (8 villages)	Quantitative data disaggregated by sex, age, village, farming typology.
4	FGD: Storytelling	Farmers participating in agroecological activities	**Dema**: 21 ppl – 10 men / 11 women. **Mhototi**: 27 ppl – 10 men / 17 women (of which 10 youths) **Chikukwa**: 38 ppl – 12 men / 26 women (of which 9 youths)	Written and recorded stories (transcribed). Photographs. Video of final performances.
5a	Survey feedback – data findings, discussion & selection of actions.	FGD participants, survey respondents, traditional leaders, ward councillors, NGO/CBO staff.	**Dema**: 63 ppl: 28 men / 35 women **Mhototi**: 75 ppl: 40 m / 35 w (13 youths) **Chikukwa**: 50 ppl – 26 men / 24 women	Transcribed audio recordings, group cause/effect trees & power maps. Photographs.
5b	Workshop: Action Planning	Farmers & village heads selected by feedback attendees to represent their villages/areas.	**Dema**: 17 ppl: 9 men / 8 women (of which 2 youths) **Mhototi**: 32 ppl: 18 m / 14 w (of which 5 youths) **Chikukwa**: 22 ppl: 9 m / 13 w (of which 5 youths)	Transcribed audio recordings, group action plans, power maps. Photographs.
6	Semi-structured interviews (individuals, some as HHs and groups)	Farmers, traditional leaders, ward councillor, district officials, CBO/NGO staff, donors.	**20 Dema**: Farmers x 15 (8 m / 7 w); ward councillor, Agritex AEW, district natural resource officer, donor, NGO, elder, headwoman. **18 Mhototi**: Farmers x 20 (10 m / 10 w); village heads, NGO staff, Agritex AEW. **28 Chikukwa**: Farmers x 13 (6 m / 7 w); NGO staff, Agritex AEW, village heads, spirit medium, donor, forestry official; 4 peace teams (13 ppl – 7m / 6 w). **Harare**: DFID governance advisor.	Translated & transcribed audio recordings

Aligned with Figure 4.1 field research activities (in Methods Chapter - p. 88)