

Differentiated legitimacy, differentiated resilience: beyond the natural in 'natural disasters'¹

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Abstract

This paper starts with a flood in southern Malawi. Although apparently a ‘natural’ event, those most affected argued that it was made much worse by the rehabilitation of a nearby irrigation scheme. We use this example to interrogate the current interest in resilience from a perspective informed by political ecology and political economy, arguing that a focus on resilience should not be at the expense of understanding the conditions that shape vulnerability, including the ways in which ‘communities’ are differentiated. Complex factors are at play – and the ways in which these combine can result in a ‘perfect storm’ for some individuals and households. These factors include the effects of history combining with ethnicity, of legitimacy influencing voice, and of the interplay of political dynamics at different levels. In particular, processes of commodification have played an important role in shaping how some may benefit at the cost of catastrophic harm to others.

Keywords

Resilience; irrigation; legitimacy; formalisation; Malawi; flooding.

Introduction: a natural disaster?

The floods came at night while we were all sleeping. I felt my blankets getting soaked and I jumped up, put some clothes on and got everyone up. We spent the rest of the night outside, we were afraid of the house collapsing on us while we slept... We had told them that this would happen, that we would suffer more when the flood season started. They told us they had to protect their scheme and that there were more infrastructural developments on the other side that needed protection from floods.

(Female farmer, Makhapa Village, Malawi)

In 2014, a group of villages in Nsanje District, Southern Malawi, was hit by serious flooding. The Tangadzi River burst its banks and water inundated the surrounding area. Houses, livestock and roads were washed away, crops destroyed and food insecurity increased.

People said that that their already precarious livelihoods were now even more vulnerable; they had less to sell, their assets were lost and their access to markets was worsened.

Flooding in this area is not uncommon. Nsanje is located in the Shire Valley, a region of very low altitude and drained by the major river systems in Malawi particularly the Shire and the Ruo. Most years, Nsanje District is beset by both drought and flooding. Rainfall is increasingly unpredictable and climate scientists agree that such increases in variability of climate are associated with effects of climate change. But in early 2014 those affected argued that the flooding had been caused by a bund that had been constructed to protect the adjacent irrigation scheme. They said that the bund had the effect of diverting water from the Tangadzi River away from the scheme and towards them and that nobody had listened to their concerns.

The bund was constructed with donor support as part of a rehabilitation of the irrigation scheme, based on principles of community participation, ownership and consultation. It was intended to help build resilience of the scheme to increasingly unpredictable climatic events. Prior to its construction, participatory meetings had taken place in the villages and determined that this is what the community wanted. Following the flooding, angry villagers confronted the scheme committee, blaming them for their problems. In the district centre, officials shrugged off the dispute, saying ‘those people should move.’

These events can be interpreted in several different ways. For some, they may confirm doubts about the wisdom of people continuing to live in places that are apparently so marginal and vulnerable to the vagaries of the climate and the extreme weather events it brings with it. For others, it is a sad account of the power of nature. From the perspective of those concerned with resilience to climate change, it bodes poorly for resilience; the flooding erodes assets and livelihoods and thus increases vulnerability and reduces the possibility that those affected will ‘bounce back’. In contrast, in this paper we argue that the events in Southern Malawi confirm the crucial importance of questions around access to and control over resources, and of whose voices are heard – and why; questions of political economy and political ecology that are occluded by the language of resilience. Bernstein (1992, 2010) has framed the key questions of political economy as : ‘who owns what, who does what, who gets what and what do they do with it?’². These questions are central for understanding the social relations of production and reproduction and

²As Peters (2013) points out, this set of questions has also been reiterated, with slight variations, by various scholars, including Borrás et.al (2010), Fairhead et.al (2012), Scoones et.al 2009, White et.al 2012)

processes of rural differentiation. However, it is precisely these questions that are not asked in prevailing narratives of resilience. Nor is there much interrogation of the role of bureaucratisation and formalisation of institutions in such relations. In this paper, we argue that taking a political economy/ecology approach in combination with an associated investigation of such bureaucratisation and formalisation can provide insights that are overlooked in many accounts of resilience. Bureaucratisation plays a key role in shaping legitimacy and voice. Such intensely political processes are at odds with resilience thinking with its language of systems and stability, rather than differentiation, power and conflict.

The argument that so-called 'natural disasters' are not *simply* natural has been around for many years (for example O'Keefe et.al 1976. Watts 1983), and has been given salience in recent thinking about vulnerability. For example, Taylor (2013) argues that the relative vulnerability of households to climatic variability is strongly influenced by their control over productive assets such as land, labour, water and credit. As Methmann and Oels (2014: 278) put it: '...the adverse effects of natural hazards on people do not only lie within the hazard itself, but derive from the position of these individuals within social, economic and political relations'. However, the argument bears reiterating given the increasing popularity of resilience thinking that tends to focus more on what contributes to resilience, and less on what underlies precarious livelihoods and vulnerability. In much of the current conceptualisation of 'resilience', not only are disasters naturalised afresh, but as Ribot (2014: 672) has argued, pre-existing precariousness is also 'naturalized – as a background condition'. As we will discuss, much analysis of vulnerability rests on ideas concerning the functioning of laws and formal institutions that enable access to resources such as land and water. But what underlies these and how do they reflect less formal negotiations and the ability to shape what is accepted as legitimate in terms of access to resources? How do they change with the commodification of such resources? These are the central questions framing this article.

In what follows, we first elaborate on the themes of resilience and vulnerability, considering the rise of resilience as a concept and the emerging critiques of this. We then show how these ideas have relevance in the context of efforts to develop and encourage small-scale irrigation; specifically the ways in which institutions that manage induced irrigation have been formalised as a central element of development policy at national and international levels. Lastly, we turn to the story of the flooding with which we started this paper and explore it with regard to issues of contested legitimacy, institutions and commodification which, we argue, play a central role in shaping the vulnerability of those least able to influence the interventions of the state and other outside actors. We conclude by stressing the importance of the political processes that determine these outcomes.

Differentiating resilience and vulnerability

'Resilience' has become something of a buzzword³ in international development or, as Watts (2015:37) would have it, a 'gospel', so expansive is its reach. At the Third International Conference of the Stockholm-based Resilience Alliance in 2014, more than 1000 papers and presentations addressed the theme 'Resilience and Development: Mobilizing for Transformation'. 'Resilience', at least when used in mainstream discourse, suggests agency when applied to individual people and their capability of dealing successfully with stresses. When applied to 'systems' it is similarly positive, even upbeat. Like 'empowerment' and 'participation' before it, the notion of resilience has a strongly uniting force. Also like empowerment and participation, the attractiveness of the concept of resilience may lie partly in the combination of both its affirmativeness and its under-specification (see Henkel and Stirrat 2001).

Part of the problem in determining the meaning of 'resilience' may lie in the fact that it has roots in diverse fields and disciplines. Much discussion of resilience arises from 'hard' sciences: ecology, engineering and increasingly disaster management. The current interest in resilience is commonly dated back to research conducted by Holling on *Resilience and Stability of Ecological Systems* (1973). This in turn is related to a tradition of work on systems adaptation, especially in relation to climate change (Eriksen et al 2015), which as Bassett and Fogelman (2013) note, was robustly critiqued by political ecologists from the 1970s onwards. Perhaps such origins are also the reason for a tendency to focus on the 'naturalness' rather than the social construction of resilience. However, resilience is also used in the social and behavioural sciences: to analyse resilience to economic hardship; and in psychology to understand the resilience of children and adults in the face of trauma (Masten and Powell 2003). In all of these contexts, resilience has tended to be treated in a normative (and frequently romanticized) way (Bene et.al 2012, Olsson et al 2015). It is a 'good thing' and something to be aspired to. For example, in discussing the 'resilience and strengths of low income families', Orthner et.al (2004) seek out indicators of family strength and resilience that enable them to avoid crime, homelessness and deviant behaviour. Or, as Seligman puts it: 'resilient people have a realistic, positive sense of self and regard themselves as survivors' (cited in Hegney et.al 2008: 12). In the development context, Barrett et.al (2014: 14626) are unequivocal that: 'development resilience has clear normative foundations. More is better'.

Critical perspectives on the proliferation and use of resilience concern both its theoretical coherence and its political implications, including its failure to explicitly address social and political relations and the

³ See Cornwall and Eade 2010 for discussion of 'buzzwords'

power that underlies these. On the one hand, there is criticism of the diverse levels and scales at which resilience discourse operates. The concept of resilience has been used to apply to many different scales and levels: to individuals, households, communities and 'systems'. As examples of this, 'household resilience' is conceived as being about moving beyond 'poverty traps', which may include the erosion of assets (Enfors and Gordon 2008). 'Systems' resilience may cover both ecological and 'social' or 'community' resilience (Langridge 2006). But the implications of resilience at each of these levels may be very different and occasionally contradictory and this is seldom explored. In aggregating resilience across diverse levels, from 'communities' through to 'households', it is possible to overlook the ways in which resilience for some at one level may be at the cost of resilience for others, at a different level. This may occur between 'communities', between households within the same community, and within households. For example, collective labour arrangements, frequently seen as enabling resilience, can disadvantage the chronically poor if they are unable to take part in them for reasons of age or ill health (Cleaver 2012). Household resilience may be at the cost of the erosion of the ability of individuals within the household to 'bounce back' – something which is particularly pronounced when women's reproductive labour contributions are taken into account (Hossain et al 2010). More recent criticisms of the resilience paradigm are concerned by the failure to take these factors into account and stress its narrowness and its limited capacity to take account of agency and power, or ask questions about 'resilience of *what* and for *whom*' (Friend and Moench 2013: 104, see also Bene et.al 2012, Cote and Nightingale 2012).

The failure to ask such questions can partly be explained by the rather normative nature of much resilience thinking, and by its natural science origins, noted above. Olsson et.al (2015) argue that there are similarities between resilience theory and functionalist ideas that have long fallen out of favour among social scientists. While resilience becomes equivalent to stability and harmony, social theory tends to emphasise conflicts of interest, power and so on. There is still however relatively little analysis of how social difference and resilience intersect (Brown 2014). Related to this is the mounting criticism that resilience has become aligned with neo-liberal political and economic paradigms, especially when adopted by powerful public and private sector actors such as the UNDP, DFID, the World Bank and the Rockefeller Foundation (Bene et. al 2012, Olsson 2015). As such, it becomes a 'pervasive idiom of global governance' (Walker and Cooper 2011: 144). For example, Leach (2014) has questioned the politics and social justice implications of the notion of 'Planetary Boundaries' which has emerged out of resilience thinking, arguing that resilience has become a policy discourse that suggests problems and solutions, but seldom with cognisance of the inherently political aspects. As Friend and Moench (2013: 102) note, there is a tendency for resilience to be seen as desirable but nonetheless a rather individualised (or household level) quality: '... where resilience is applied in the context of social policy, it can be done so with connotations of

enduring adversity, of standing on one's own as the priority, rather than advancing social improvements or addressing structural factors'. Indeed, the 'resilience agenda' may be attractive to, or be co-opted by, interest groups and political perspectives that use it as justification for a focus on the individual at the expense of reduced responsibility the state or the public sphere more broadly (Harrison 2012, Mohaupt 2008). The project of poverty reduction, for example, becomes depoliticised: 'adopting a default position which individualises that which should, in fact involve structural or collective effort for change' (Boyden and Cooper 2007: 5). The flipside of celebrating resilience may thus be the withdrawal of support for the more vulnerable and less powerful.

These critiques arise from the fact that much resilience thinking has developed in isolation from political economy approaches - or indeed critical social science more broadly, in which power within and across societies is examined (Cote and Nightingale 2012). In a recent review of climate change adaptation literature, Bassett and Fogelman (2013) found that only 3% of the articles considered focused on the social roots of vulnerability (the dominant focus was climate change itself). What might such an examination look like in the context of the resilience expected from changes to agrarian systems in general and specifically from supporting small-scale irrigation? In the context of agrarian change, key factors shaping marginality and vulnerability include access to land, the capacity to access means of production such as tools and seeds, and the capacity to command adequate labour (Bernstein 2010: 106). In addition, while control over water resources, including for irrigation, has long been of interest (Fairbairn 2014), this question becomes particularly pertinent in the context of emerging discourses of formalisation as a way to ensure legitimacy of such control. A key element of any answer therefore needs to be based on an examination of the conditions that shape vulnerability. Among these, prior social differentiation is important, as is a critical analysis of the processes through which legitimacy is formed and exercised and differentiation is increased through commodification

Vulnerability is often seen as the reverse face of resilience, implying a lack of resilience, or something that can be reduced by increasing resilience (e.g. Berkes 2007; Gaillard 2010; Manyena 2006; Norris et al. 2008). But understanding what lies beneath vulnerability requires more than this. In seeking to establish a theoretical basis for causal analysis of vulnerability, Ribot (2014), building on Leach et al (1999), returns to Sen's work on entitlements (Sen 1976, 1981). Entitlements are "the set of alternative commodity bundles that a person can command in a society using the totality of rights and opportunities that he or she faces" (Sen 1984, p. 497). However, as Ribot notes, one of the main problems with entitlements theory is that it tends to be based on a legalistic and somewhat individualistic notion of rights and ownership (drawn from theorists such as Locke and Nozick) and that these can have unacceptable moral consequences, such as

when famines unfold in the context of (legally) legitimate systems of rights and entitlements. He proposes a wider approach – ‘access theory’ - which stresses the importance of *ability* rather than just rights and of considering all that enables or disables the ability to benefit from things. ‘Rights-based approaches and rule of law are not everything. Access theory – explaining the ability of people to benefit from things – provides broader empirical (rather than just legal) analytic of what people are able to obtain and use’ (Ribot 2014: 682).

The significance of Ribot’s argument here is that it foregrounds the *processes* that shape vulnerability. This is an important critique of resilience approaches that are insufficiently rooted in social science understandings generally – and both political economy and political ecology more specifically. He stresses the significance of the ways in which people are – or are not – able to influence these processes. Not everyone is able to get their voice heard equally, rendering formalistic or static accounts of vulnerability inadequate. A combination of intertwined factors such as gender, generation, ethnicity, and wealth strongly shape the ability to influence decisions or to have access to institutions, especially the more formalised institutions. This becomes especially significant when policy makers assume formalisation through such institutions as a necessary route to being able to exercise choice. As Peluso and Lund (2011) note, formalisation can result in exclusions, especially in cases where there is legal pluralism and an unclear role of law. This matters because institutions ‘...do not just organically or ‘naturally’ emerge from the polycentric ether’ (Ribot 2014:689); they bear the imprint of the relations of their production. Formalisation also accompanies the processes of commodification that are also increasingly normalised as part and parcel of development and economic growth. Such perspectives all support the argument that it is important to interrogate all factors that enable or disable access –to go beyond the formally legal to incorporate discursive claim making and the ways in which legality and illegality are defined.

Some resilience scholars, for example Adger et.al (2005), have begun to incorporate such insights by considering the ways in which institutions shape resilience, arguing that issues of social inequality and legitimacy are also relevant in assessing particular institutional configurations. However, there is a continuing tendency to assume that this means that it is just necessary to effectively ‘try to get the rules right’ rather than consider how such legitimacy is itself shaped by and reinforces power. Indeed, sometimes attempts to engage in reshaping institutions can result in exclusions that contribute to vulnerability (Cote and Nightingale 2012; Peet and Watts 2004). An approach that attempts to unpack local political histories, of both formal and informal institutions, and shows their relationship to wider national and international politics and discourse, will give a more nuanced account of what shapes vulnerability and resilience – and for whom: ‘In short, one person’s resilience may well be another’s subjugation, and what is

termed resilience might be part of the problem, not its solution' (Taylor 2015: 79). In the remainder of this article, we show how such a framing provides an alternative analysis to the problems of resilience thinking outlined above. In order to do this, we first describe the turn towards formalization of the management of small-scale irrigation, before examining the detail of the Malawian case itself.

Small-scale irrigation development: formalising institutions

Small-scale irrigation has been seen as a 'privileged solution' to problems of agricultural development and growth in sub-Saharan Africa (Moris 1997). It has also been seen as having failed to live up to this potential, in contrast to the widespread irrigation practised in much of Asia. A substantial literature documents so-called 'traditional' systems of irrigation, many rooted in a pre-colonial past (Adams et.al 1997, Gray 1963, Hilborn 2012, Tagseth 2008). These include for example, the furrow irrigation on the slopes of Mount Kilimanjaro in Tanzania and floodplain irrigation in the Tana River Delta in Kenya. Such irrigation was generally embedded in wider 'traditional' institutions and moral economies of resource use and access (Malunga and Holcombe 2014; Mowo et.al 2013, Trawick 2003).

Irrigation has also been enthusiastically promoted by international donors, such as the FAO and the World Bank, in collaboration with national governments (Adams and Anderson 1988, Sakaki & Koga 2011; Veldwisch et.al 2009). In contrast to 'traditional' practices, this has on the whole, been via 'schemes' which involve tracts of land being allocated for irrigation, which are then accessed by the smallholder farmers. A fundamental tension within such schemes is that they combine the individual with the collective; farmers irrigate 'their' plots for individual/household gain, but the scheme needs to be managed by a group which has a collective interest in fair and mutually acceptable distribution of water. This fundamental tension is scarcely mentioned in donor attempts to understand why, time and time again, such schemes have 'failed'; they have fallen into disrepair, been abandoned, failed to achieve the expected productivity gains. While within the social science literature, there have been extensive attempts to understand and theorise the ways in which institutions for managing such tensions exist and evolve (see for example Cleaver 2012, Ostrom 1990), this has not tended to enter into donor discourse.

In recent years, there has been a renewed interest in support for irrigation. For example the World Bank doubled its lending for irrigation between the periods 2000-2005 and 2006-2010 (You et.al 2011). Much of this renewed support has been in the form of the rehabilitation of former schemes and, importantly, of greater attention to the institutions that are charged with scheme management. In particular, and broadly

in line with dominant discourses that both prioritise ‘farmer first’⁴ ideas, and turn responsibility away from the state and towards ‘communities’, this has been based on policies of ‘irrigation management transfer’ (IMT). IMT assumes that schemes are ‘handed over’ to the ‘communities’ that work in them and that, as part of this process, it is important to formalise the institutions that are responsible for scheme management. This has generally been through the formation (or re-formation) of Water Users’ Associations (WUAs). Indeed, much development support to small-scale irrigation has the formation of such WUAs as a key indicator of successful transfer. WUAs are treated in much of this discourse as proxies for, and representative, of the ‘community’, thus overlooking the ways in which such communities are both stratified and have contested and overlapping boundaries⁵.

Malawi has broadly reflected these trends. The 2006 National Adaptation Programme of Action (NAPA) identified fifteen ‘priority areas’, one of which is increasing the resilience of food production systems. This is put into action via the donor-supported Agriculture Sector Wide Approach (ASWAp), which identifies increased use of irrigation as one strategy to ‘increase the resilience of communities in rural areas to the adverse effects of climate change’ (Chinsinga et.al 2012: 5). Formalisation has been a key element of this policy context. For example, it is widely accepted that there is limited history of ‘traditional’ irrigation in Malawi, reflecting a tendency to assume that irrigation does not exist simply because it is not formalized or part of schemes. ‘...its dispersed nature and its integration into rain-fed cultivation, rather than separation in discrete blocks of “irrigated farming”, has tended to make it less visible to officials and technical staff trained to differentiate “irrigated” and “rainfed” agriculture as separate production systems’ (Woodhouse 2012; 784). In fact, in Malawi, as elsewhere in SSA, water management, for example through farming in the *dambo* wetlands has long been an integral part of livelihood strategies and in recent years there has been an intensification of wetland production that has been critical for food security (Veldwisch et.al 2009). However, such practices are generally not seen as such by those seeking to measure and promote irrigation. Instead, ‘schemes’ have dominated the public and policy discourse, and this has been the case since colonial times.

⁴ ‘Farmer first’ ideas came to prominence in the late 1980s, following a workshop at the Institute of Development Studies, University of Sussex. The resulting volume (Chambers et.al 1989) is seen as an early statement of the approach.

⁵ The catch-all term of ‘community’ continues to have widespread use and appeal within international development discourse, despite more than fifty years of critique from anthropologists and other social scientists who point out that constitutes the boundaries of communities are varied and contested; communities do not necessarily neatly equate with place or interest group, and they are internally differentiated, by gender, class, status and so on (see for example Agrawal and Clark 1999, Cleaver 2012, Guijt and Shah, Harrison 2011, Li 1996).

Between 1946 and 1960, a limited number of such schemes were introduced by the British. But it was really in the immediate postcolonial period that the ambition for irrigation expanded, in line with the general donor interest in irrigation (Nkhoma 2011). Between 1967 and 1975, 16 irrigated rice schemes covering 3600 hectares were constructed with foreign funding and technical assistance. These were settler schemes, which effectively bypassed the authorities of chiefs (Veldwisch et.al 2009). By the early 1980s, most of these schemes were seen as failures: they were poorly maintained, had low levels of productivity, and apparently had failed to generate any sense of 'ownership' among their settlers, who continued to also farm on the drylands. During the 1980s and 1990s, there was a shift in policy towards support for 'traditional' or informal irrigation. However, an emphasis on rehabilitating the earlier schemes, this time with farmer control and management, began to gain traction in the period immediately following the establishment of multi-party democracy in 1994. As with elsewhere in SSA, IMT became an important precondition for donor support to such rehabilitation (Ferguson and Mulwafu 2007). The 2000 National Irrigation Policy and Development Strategy (NIPDS) sets out these ideas of farmer control and management:

Informal and formal group formation will be an integral part of ensuring community involvement in the schemes and the sustainability of interventions. Assistance will be provided to the farmers in forming farmer organizations and common interest groups for development, management, operation and maintenance of the schemes and also in the marketing of crops and supply of inputs. Water Users Associations (WUAs) will be the main focus of attention with guidance and training provided including the role and operating procedures of an association, structure and responsibilities of farmer organizations officers, procedures for their election, internal rules and regulations and the rights and obligations of the members.

(Government of Malawi 2000)

On the basis of these principles, there have been various donor-supported initiatives to promote and rehabilitate irrigation. One of the most significant of these is the World Bank/IFAD-supported Irrigation, Rural Livelihoods and Agricultural Development Project (IRLADP). IRLADP was launched in 2006, and its initial aims included the rehabilitation of irrigation schemes in 11 districts, among which was Muona, the scheme at the centre of the account with which we opened this paper. By 2011 the total cost of IRLADP was \$65 million and its 2011-2015 phase involves scaling up from 11 to 28 districts. In its initial appraisal report (2005), the World Bank notes that the project considered adopting a 'top down' approach, and instead rejected this in favour of 'bottom up' and 'farmer driven' approaches. One of its principle components has been support and capacity building for the government Department of Irrigation and

Ministry of Agriculture and importantly, the formation of Water Users' Associations and community mobilization. Indeed, formation of WUAs was one of the World Bank requirements as an indicator of successful performance of the projects. Whether the WUAs were functioning adequately or not was not included in the progress indicators. In a mid-term report, some of the participatory principles for community management are clarified:

Prior to commencement or rehabilitation works, communities should be made aware of the objectives of the rehabilitation works and the subsequent handover;

The PRA process should ensure that communities are ready to take part in decision-making and provision of labour as their input to the rehabilitation works;

Communities should help to identify and prioritize rehabilitation works. This would help to address problems as identified by communities themselves in which case it would be easier for them to take part in renovations

(World Bank/Government of Malawi 2009: ix)

A 2011 consultancy report further specifies:

Farmer's participation at all stages is mandatory for the development and the rehabilitation of all the schemes concerned by the IRLAD. More, the formation and the capacity building of beneficiary's organizations such as WUAs are essential elements to prepare the beneficiaries for sustainability of the management of operation and maintenance of the schemes

(SOFRECO 2011).

We will return to IRLADP when we come to discuss the Muona case in the next section. What this overview of the national and international context has demonstrated is that the emergence of policy discourses of resilience have taken place alongside persistent narratives that stress the need for formalisation, especially in the case of the institutions that 'manage' irrigation. In what follows, we aim to look closer at the complexity of factors at play when these narratives are translated into development intervention– and how sometimes the compounding of these factors can result in a 'perfect storm' for some individuals and households.

The irrigation scheme: institutions and formalisation

Insert Map 1:

Muona Irrigation Scheme and Makhapa

The Muona irrigation scheme is located in Nsanje District in the far South of Malawi. In 2014, it covered some 450 hectares and reportedly supported the livelihoods of around 4500 households. It draws on a catchment of some 45 villages, each with their own histories and range of formal and informal institutions, including the institutions of village headship, village development committees and so on. Among these villages, seven are under the authority of Group Village Head (GVH) Makhapa⁶, which is just adjacent to the scheme itself. The fact that the scheme is not, a 'community' in any straightforward sense, as donor discussions of community and resilience tend to imply, is important for understanding what shapes the vulnerability of some as opposed to others. In this, history combines with ethnicity and formalisation of institutions with commodification.

The history of the scheme has shaped current claims of who legitimately represents the 'community' and makes decisions regarding the land and water on which it relies. In turn this influences how conflicts over what constitutes the interests of both the scheme and its surrounding villages are resolved. The scheme was originally a development of an area where people had been irrigating in the 1960s, known as Magreaver, after the colonial agricultural officer who had worked with the farmers. Prior to the establishment of the formal scheme in the 1960s, the land that is now called Muona Scheme was cultivated by farmers with allegiance to Group Village Headman Chipondenani, under Traditional Authority Mlolo. These were, like most in the area, matrilineal Man'ganja people. During the mid-1960s, Sena migrants from Mozambique started to arrive and these settled in an area that became known as Chinzeti. The land was allocated by Chipondenani, so it is said, to prevent mixed marriages between the matrilineal Man'ganja and patrilineal Sena. However, as the Sena settled and grew in numbers, intermarriage became more common: for the Sena men, marriage to Man'ganja women allowed them access to land. Then, in the late sixties (around '68-69) Chinzeti village was identified as a location for the new scheme:

Gwanda Chakwamba approached Kamuzu Banda and asked him to bring the Chinese to come and construct the scheme. He felt that Magreaver had not done a good job in establishing the scheme; his scheme was very small. They now wanted some people who had a lot of experience in this sort of thing. The Chinese came in 1969, did a survey and then

⁶ It is common for the name of villages and the name of the headman/woman to be the same – so Makhapa refers to both a group of villages and an individual.

decided on the layout. They identified the place for the off-take, and then suggested that the people of Chinzeti be moved to another place, as the area was good for irrigation (Male WUA member).

This was apparently a very sensitive subject and respondents were reluctant to discuss it as ‘something that might unleash disharmony in the community’. The villagers of Chinzeti were moved to a new area, losing land and having to meet the costs of relocation and building without any government support. In order to obtain land in the scheme, the Chinzeti people had to put their names forward like everyone else. Reports are that this was accepted because the authority and legitimacy of both government and traditional authorities could not be questioned: “We were told: development is coming and is for everyone, we all have to make way for that” (Male farmer, Muona). However, such overt acceptance may of course obscure all sorts of resentments and jockeying for position.

It is reported that when the Chinese came to construct the scheme in the 1960s, they initially called it Tangadzi, referring to the river, but people from Chipondeni said it should be called Muona which translates as “*You shall see*”, referring to the huge tree at Traditional Authority Mlolo’s house, which indicated that you had indeed arrived at the TA’s house. This was preferred to using the name of a river since a river could pass through many other locations and ‘the same name could be used by a distant community for their own schemes’. In other words, Muona was – and is - identified as synonymous with TA Mlolo, to distinguish it from any lingering claims on the behalf of the people from Chinzeti. This background and tension is then reflected in the claim-making around rights to land that are played out in contemporary disputes. For example, those with originally good land allocations (lower down and therefore able to benefit from gravitational flow) are still in stronger positions and better able to irrigate their plots as and when they need. These are generally Man’ganja people who are principally identified with Chipondeni.

So clearly location matters, and this has connotations with ethnicity and affiliation to particular village heads, given the history of the scheme. These connotations are not definitive or exclusive, but associations with those seen as being the ‘original’ inhabitants may well make a difference to claims to legitimacy, especially when development intervention enters the picture, formalising institutions and consolidating exclusions. Like others in the country, Muona scheme fell into disrepair during the 1980s. There was some minor rehabilitation work undertaken during the 1980s and 1990s. Then, in 2006, the scheme fell under the auspices of IRLADP. Rehabilitation included infrastructural work: the construction of a new ‘headworks’ to improve delivery of water from the Tangadzi, new and better canals, the construction of a water storage

dam and, importantly, the construction of the protection bund that aimed to prevent the scheme from flooding. In addition, a new scheme management committee - or WUA - was formed to ensure good community management of the scheme. Indeed, the formation of the WUA was one of the principle elements of the project and seen as an important part of the 'handing back of the scheme to the community' that was a key dimension of the IRLADP project.

The WUA was thus established as the principal arbiter of disputes within the scheme and as the main representative of the 'community' with which the developer would work. Those who came to take the key formal roles within the WUA – President, Secretary, Treasurer and so on - were not necessarily significantly richer than others, but they were those that had historically had a strong association with the scheme in its earlier guises. The WUA is structured around a range of formal and bureaucratic conventions, reflecting what has been called the 'widespread bureaucratization of village life' (Crewe and Harrison 1998: 166). It has several management committees, which include a Water Jury to manage disputes among scheme members. Such disputes are common, and tend to involve issues of people taking water out of turn, or flooding each other's land. However, reportedly, the WUA has only a limited ability to manage such conflicts. For example, although we heard of a manual explaining how the Water Jury should work, no one we spoke to was able to identify where it might be. There is rather little clarity over where authority to act lies between the WUA and the Water Jury and considerable rumour over the relative powers of the two formal entities. Indeed, even the chair of the WUA was unable to tell us the formal status of the Water Jury.

Importantly, the WUA also administers the issuing of 'leases' for those farming within the scheme. These are seen to ensure rights and security of tenure for farmers for 25 years, but importantly have become the basis for significant exclusions, as those who had not taken out leases are not seen as having rights to either land or water⁷. With the rehabilitation of the scheme, and particularly with the formalisation of leases for farmers within it, those farming in Magreaver have been prevented from accessing water from the Tangadzi. The construction of the protection bund as part of the rehabilitation now prevents the fields in Magreaver from receiving water from the regular flooding of the Tangadzi River. Moreover, the construction of a new weir further upstream means that water is diverted into the main canal supplying the scheme and hardly any water is left to flow along the river. There is an issue of 'rights' too: the new leases have been important for ensuring that the farmers have a sense of security of tenure. Interestingly,

⁷ Although we encountered considerable variation in views of how long the leases were thought to last for and what their implications were. Indeed, lack of clarity over the leases reflects broader confusions over the nature and status of land rights, both within the scheme and more generally.

one threat that they see themselves as guarding against is that of 'land grabs' on the part of government or commercial interests:

The lease means that in the future, should a company want to take away our land and put in sugar cane, we can use our lease to prove that we own the land. That way the lease protects us from exploitation by these companies.

(WUA Official).

But an accompanying effect of this formalisation is the argument that commodification is a valid justification for exclusion. Farmers in Magreaver are portrayed by the WUA executive as being informal and customary and without rights to water as they are not registered, as opposed to those who are part of a formalised scheme that has established rights to water. The grounds for this are made clear: 'we pay for the water; therefore it cannot be used by others'. On these grounds, the WUA ensures that when farmers in Magreaver try to divert water into their area, their canals and other structures are destroyed.

In all of the disputes, within and associated with the scheme, people make distinctions between 'legal' and 'illegal' activity. But as we suggested earlier such a neat dichotomy obscures the fact that much of what is declared legal or illegal may be such according to rules that are neither universally accepted, nor formally recognized as laws. 'Legality' is thus subject to interpretation and may be asserted in diverse spheres. For example, within the villages within which they reside, people – including irrigators – are still also subject to the rule of headmen and headwomen in resolving conflicts. The headmen are still seen by some as more legitimate arbiters, although with arguably decreasing authority. But most of the village headmen are poor and are not capable of summoning richer people to their courts. This widespread reduction of their authority has coincided with the emergence of relatively new institutions, including the WUA, on which there is not 'traditional' representation. As a result, what is 'legal' or not depends on not only formal rules but on the context in which such rules are articulated. This is perhaps not surprising: within the country as a whole, the 'law' concerning, for example, access to land is complex and overlapping, and reforms are 'always political' (Bernstein 2010: 98) Recent legally-enacted land policy aimed at reforming and rationalizing existing systems coexists with those earlier 'customary' systems, which are themselves in flux and much less definitive than is often assumed (see for example Berge et.al 2014; Jul Larsen and Mvula 2009; Takane 2009).

So, in southern Malawi, as in other contexts, what is seen as legitimate representation 'varies between and within cultures and over time, and is continuously (re)-established through conflict and negotiation' (Sikor

and Lund 2009: 7). It also reflects existing rural differentiation, consolidated through history and through processes of commodification, as with the Magreaver farmers. Importantly too, this negotiation and establishment of legitimacy (and hence voice) are mediated by relationships with other actors and institutions beyond the local. The World Bank and the government of Malawi are not simply 'uncovering' or working with local institutions; they are themselves playing a part in how they are shaped - a process with which people engage with differential abilities, as explored further below.

The construction of the bund: resilience and vulnerability

The Muona 'scheme' is clearly not the 'community' that it is presented as by developers. Location and ethnicity have combined with formalisation to shape differentiated access to resources and legitimacy. But the construction of the bund with which we started this paper further underlines these processes and demonstrates the significance of voice in them. In order to understand this we need to ask how different groups and individuals were differently able to influence the construction decision and what this tells us about resilience and underlying vulnerability. In attempting to answer these questions, it is important to unpack the different perspectives of different actors; there is clearly not one single narrative or 'truth', so much as a series of conflicting ones, in which certain voices become more dominant than others at certain times. We are therefore reconstructing a history based on partial and inevitably incomplete information.

The rehabilitation of Muona scheme was nominally the result of 'participatory' engagement. As noted, for IRLADP, this is an important principle. We were told of a 'big meeting' in 2010 (of between 150 and 1000 people, depending on the source) at which people decided 'by deliberation, not voting' to shift the intake further up the Tangadzi River so as to avoid the overly silted channel as the river approaches the scheme. The later decision to build the bund was perhaps less inclusive in its participation. In interviews with scheme farmers in Chipondeni Village, we heard of another, perhaps less public, meeting in which the 'community' in the form of the WUA leadership discussed with the consulting engineers from the scheme, impressing on them the importance of the bund. Apparently, the concerns with flooding within the scheme were emphasised. The contractors initially said that there was no money for construction of the bund but realised that it was necessary when they saw the flooding of the scheme that the WUA was so concerned about. The idea was that the bund would increase the resilience of the scheme.

So what was the role of the people of Makhapa, the village that was eventually flooded, in all of this? It is apparent that a combination of exclusion from decision-making and powerlessness contributed to their vulnerability. One of the Chipondeni farmers told us:

Well yes, they felt their livelihoods were in danger, but they didn't know who to tell or how to raise the money to build their own bund. They did nothing. They just scratched some small defences with a hoe. People on this side wanted to protect the place from where they get their food. Of course they wanted the bund.

(Male farmer, Chipondeni)

In Makhapa, the village civil protection committee appeared unable to act to stop the building of the bund or its effects:

Yes, we do have a VCPC in this village. They had a meeting under that mango tree a few weeks back, and they were talking about the sealing off of the channel. I never heard what came out besides that – I had gone to the fields.

(Female respondent, Makhapa)

After the flooding had taken place in 2014, the headman of Makhapa Village went to the President of the WUA. We were told of a confrontation that came close to blows: the President of the WUA told us 'that man, he wanted a war – he came with a machete and pangas'. The President also stressed that 'this is not a problem for us – it is for the government to solve.' Arguably, for him the linkages with the donor-funded project and through this to the government, absolved the WUA of responsibility. Meanwhile, those in the flooded villages concentrated on immediate priorities: getting emergency assistance, rebuilding their houses, selling their remaining assets in order to get food. There was no concerted attempt to come together. But the key thing in this was that people of Makhapa *didn't know where else to turn*. The headman went to the WUA because this was seen as the only possible point of influence. It was certainly the case that the WUA was one of the main entities pushing for the construction of the bund, but this was embedded in a series of other intersecting relationships, and it was in these that the Makhapa farmers were unable to intervene. The reasons for this lack of ability are not entirely clear; they seem to combine both ignorance of where power lay, a strong sense of their own powerlessness, and the immediacy of the crisis.

Members of the WUA were on good terms with the contractor, having the power to ‘sign-off’ on its work⁸, the contractor took its instructions from the government Department of Irrigation, which in turn was in discussion with the IRLADP project, with offices in Blantyre and Lilongwe. For each of these actors, at a step moved from the flooding in Makhapa, it was seen as just something that was outside the priorities of the project. For informants at the district centre in Nsanje, the best solution was for the villagers to move to higher ground and only come down to farm their fields: ‘We have a challenge with these people. There are too many people who live in flood prone areas. So we should leave them and they will move out. (District level informant, Ministry of Agriculture).

However, as the villagers in Makhapa pointed out:

It is difficult to move if you have no money. A residential stand up there will cost you over K60,000. No one has that kind of money here, very few indeed. It is easy for them to say, ‘hey you, move from there’, but we have spent all our lives here. It wasn’t like this before. This year has been the worst. (Male informant, Makhapa)

For government staff, there are familiar problems of capacity; for example, across the district there are less than 30 agricultural extension workers, many of whom have no transport. The Irrigation Department is even more under-resourced with only two irrigation officers for the entire Nsanje district. It is perhaps therefore not surprising that engaging with these effects of the construction of the bund was not a priority. We asked about a socio-economic study about which we had heard reports and were told: ‘Yes, there was a study. But we never got to see it. You could ask for it in Lilongwe or Blantyre’. An irrigation officer told us that ‘Once consultancy reports have gone through and are approved it becomes difficult to enter any new and different views on the field situation’. Back in Blantyre, we talked to people in IRLADP about the scheme and their perspective on the floods. In particular we wanted to know if such a social impact appraisal had been done before the bund was constructed and where we might find it. Again, the answer was somewhat unclear:

...we were led to believe that those Makhapa farmers would build a bund on their side. We consulted with the Department of Irrigation and they gave the go-ahead. Some bananas were planted for protection. They were really choosing between the best of two evils. (Irrigation officer, Nsanje).

⁸ Indeed, many suggested that this relationship was unduly close involving inappropriate favours on both parts. There is no concrete evidence to support these allegations.

On pressing for more information on where responsibility might lie, the importance of Department of Irrigation 'capacity building' was stressed: they were the ones who were meant to liaise with other projects; they were the ones who might have done a social impact appraisal. On the other hand, the successful 'participation' engendered by the scheme was also emphasised; the farmers (albeit, as discussed, a limited group) 'chose' the bund, so it was a good thing. The farmers' role in managing the contractor was also seen as important; 'He only gets paid when he has done the job'.

In September 2014 the rehabilitated scheme was officially 'handed over' to the WUA and aspirations for community management were apparently realised. The Minister of Agriculture attended the ceremony, which highlighted the promise for countrywide irrigation development that the scheme represented. The issue of the Makhapa flooding was brought up by some, but not discussed in depth. Later, a senior IRLADP official who had not been present seemed ignorant of the extent of the flooding. He said to us: 'We are lucky that we didn't have floods last time, otherwise all the investments that the government has put would have been lost.'

Discussion and conclusions

This is of course a partial reconstruction of what took place in 2013-4 in terms of the decision-making and attribution of blame. We certainly never found that social impact appraisal. Nonetheless, a pattern emerges: one of unclear and compartmentalised responsibility in which different institutions and individuals 'pass the buck', suggesting that responsibility lies elsewhere. In this, government departments, such as Irrigation and Agriculture, did not co-ordinate with each other, or with the donor agencies that fund their projects. In our critique of the concept of 'resilience' at the start of this paper, we noted that the concept may be useful for social actors (such as government or development donors) for whom devolving responsibility is important. Although 'resilience' in this case was only one among several tropes used by such actors, the devolution to an imperfectly understood 'local' certainly resonates with this critique. More generally, we noted that hegemonic accounts of resilience that presume largely apolitical 'systems' are still widespread. The events in Southern Malawi confirm this suggestion.

In one sense then, the vulnerability of some of Muona's neighbours was a result of processes that are in an obvious way far from their control and influence: the machinations of national and international development politics and processes. But what is also important is the ways in which these play out at a local level and intersect with the local politics and history that reflect the fact that the 'scheme' does not

serve a 'community', but is located at the intersection of a range of communities. Importantly, our case demonstrates that 'resilience' cannot be understood in isolation from the factors that shape vulnerability, among which formalisation and commodification play a key role: "over romantic views of coping have no place in a proper definition of being resilient (Cannon and Mueller-Mahn 2010:623). The farmers of Muona scheme might have appeared to be a resilient community, but those surrounding it were vulnerable in complex ways – and this was increased by the construction of the bund.

This vulnerability is compounded by the growing dominance of a model that stresses the importance of putting a price on assets, including water. In this, winners and losers become merely casualties of market mechanisms. Contributing to classic agrarian studies questions of the effect of commodification in agrarian societies (e.g. Bernstein and Byres 2001), Woodhouse has argued that rising land values associated with more intense land and water use are part of 'processes of commodification and individualisation of access to land -'enclosures' – which reduce access to land for the poor' (2003: 1717). This is partly the case when local forms of tenure already embody inequality and conflict (Peters 2013). In the case in southern Malawi, commodification occurs when what has been informally 'shared' because abundant develops value that turns it into a scarce commodity. The case of those who had been farming in Magreaver, next to the irrigation scheme, demonstrates how the commodification of water for irrigation has resulted in the reduction of their resilience and an increase in their vulnerability. The reliance of the irrigation project on a private contractor under the formal control of the WUA also opened up opportunities for exclusions based on the ability to engage in these relationships and institutions. Much current development thinking takes for granted that such commodification is a given – and a good. We suggest that, to the contrary, it is neither of these, but rather a process which contributes, both positively and negatively, to both resilience and vulnerability.

Exclusions resulting from commodification were compounded by processes of formalisation. As we discussed earlier, Ribot (2014) argues that a criticism of entitlement theory as a way of understanding resilience is that it relies on an overly formal and legalistic conception of entitlements and that it is important to explore empirically what people are or are not able to obtain and use. Ostrom, focusing specifically on common property resource management, has stressed the significance of rules and of crafting institutions for sustainable management, based on such rules, or 'design principles'. She has considered how such institutions might related to each other across different scales, and developed the idea of 'polycentric systems' for addressing collective action problems such as climate change (Ostrom 2010). However, as Cleaver (2012) notes, much policy building on these insights assumes an institutional deficit that can be filled by designing new institutions (such as WUAs). Such institutions inevitably reflect

complex histories. They are not value free and there are varying and contested local usages of notions of 'legality' (see also Peluso and Lund 2011). In our case, in terms of the influence and access to institutions that are key dimensions of resilience and vulnerability, what is apparent from discussions subsequently is that the Makhapa farmers didn't even know where to start when it came to influencing what went on. An angry approach to the WUA and hope for assistance seemed to be the only options open to them. Behind this, the history of the scheme is one in which the WUA has gradually assumed a position as representative of 'community', although clearly that position is contested and somewhat unstable. Our evidence supports the well-established argument that legitimacy at the local level is contested and reflects power (Cleaver 2012, Li 1996, Peters 2013, Sikor and Lund 2009). However, understanding this clearly requires analysis beyond the local; what is equally significant are the links between local context and the nature of national and international narratives that stress formalisation and seeks partnerships with 'communities' without engaging with their complexities. The causal relationships between national and international policy and practice and outcomes for diverse farmers have long been a concern for political economy scholars (see Watts 2015 for an elaboration of this), but they remain largely absent from resilience discourses that are rooted in ecological and engineering epistemologies.

Our account of what underlies vulnerability is thus about power and legitimacy, exercised through different institutional formations; it is via these institutions that claims to legitimacy are articulated and cemented (Eriksen et.al 2015). We thus concur with Ingalls and Stedman's recent (2016) argument about the need to incorporate analysis of power more comprehensively in discussions of resilience. Our evidence confirms that this is not a straightforward binary between the more or less powerful, but demonstrates the different ways in which power can be exerted in different environments., The WUA, for example, might have been able to exert influence on the project and the contractors to get the bund built, but it is often unable to get its members to do what is expected of them and sometimes suffers from a lack of legitimacy in certain spheres. However, proximity to the WUA and being part of the representation of the interests of the scheme enables greater influence than having none at all. While in the case discussed here, ethnicity is one element of claim making and access, this is intertwined with the specifics of the ability to influence change which transcend neat equations of power with identity group.

Part of the ability to assert power and to appear legitimate is thus about acting collectively. However, this case confirms the need for caution in assuming that such collective action is always good – or at least that it is good for all. Indeed, it is also the case that people will be involved in different 'collective' activities at the same time (Adams et.al 1997). This might seem an obvious point, but is obscured in discussion of institutions and institution-strengthening and simplistic attachment to notions of 'community', especially

in relation to apparent resilience, that do not take into account processes of inclusion and exclusion. As we have shown, this is also problematic because communities do not necessarily equate neatly to place or identity, despite continuing prevalent narratives to the contrary.

As we argued in the introduction, resilience discourse too often disguises the causes of vulnerability and the ways in which, as one group becomes more resilient, another is rendered more vulnerable. These are essentially social and political processes that are also inherently relational. They build on patterns of accumulation and dispossession that are constructed in relation to differences of class, gender, age, ethnicity and so on. In this, the choices that are made by formal institutions of which group they see as the legitimate representative of 'community' can be highly significant. Preferences for formalisation can favour those who are able to function and get their voices heard in particular ways. For the residents of Makhapa, a combination of these diverse institutional exclusions underpins the vulnerability that became so exposed in early 2014. These arguments are, as we noted, not necessarily new. However, they remain important and need reiterating precisely because a resilience discourse based on assumptions about 'systems' and 'community' continues to be so influential.

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