Article

Implementing Climate-Compatible Development in the Context of Power: Lessons for Encouraging Procedural Justice through Community-Based Projects

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Abstract: Climate-compatible development (CCD) is being operationalised across the developing world through projects that integrate development, adaptation and mitigation using community-based approaches—community-based CCD (CB-CCD). By incorporating and considering local people's concerns, these projects are positioned as more effective, efficient and sustainable than 'top-down' climate and development solutions. However, the literature pays little attention to whether and how these projects achieve procedural justice by recognising local people's identities, cultures and values; and providing local people with meaningful participatory opportunities. We address this gap through an analysis of two donor-funded CB-CCD projects in Malawi, drawing on household surveys, semi-structured interviews and documentary materials. Our findings show that the projects had only limited success in facilitating procedural justice for the target populations. Households' meaningful engagement in project activities and decision-making was often curtailed because power asymmetries went unchallenged. While many households were well engaged in projects, the recognition and participation of others—including many of the most vulnerable households—was limited. Building on our findings, we present a six-step approach to help CB-CCD project staff understand, manage and challenge power asymmetries; and create widespread recognition of, and meaningful participatory opportunities for, local people.

Keywords: social justice; climate change; mitigation; adaptation; equity; triple-wins; trade-offs; international development; participation; fairness

1. Introduction

In conjunction with other stressors (e.g., poverty, inequality, disease), climate change impacts are already compromising the achievement of development goals (e.g., poverty reduction, access to clean water, food security) [1]. In this context, climate-compatible development (CCD) is emerging as a way of mainstreaming climate change mitigation ('mitigation') and climate change adaptation ('adaptation') within development efforts [2]. CCD is defined by Mitchell and Maxwell [3] as 'development that minimises the harm caused by climate impacts, while maximising the many human development opportunities presented by a low emissions, more resilient future' (p. 1). By challenging fossil-fuel-dependent development pathways that are unsustainable and create inequitable outcome distributions, CCD is considered to have potential as a transformative approach [4].

CCD is being operationalised across the developing world through projects that integrate community-based development, adaptation and mitigation [5]—community-based CCD (CB-CCD). The literature on community-based projects (see e.g., [6,7]) stresses the need to involve local people (people that reside in local communities that are targeted by projects) in different stages of project

implementation and allow them to play a role in decision-making. Projects are therefore positioned in contrast to 'top-down' climate and development solutions that have been criticised for marginalising local people's concerns [8].

It is proposed that local involvement can help improve projects that seek to reduce vulnerabilities—where vulnerability is considered a function of: exposure to socioeconomic, political and environmental (including climatic) shocks and stressors; sensitivity to these shocks and stressors; and capacities to adapt and respond to them [1]. By drawing on local knowledge and experiences, community-based approaches profess to enhance projects' effectiveness, efficiency and sustainability [9,10]. For example, Shrestha et al. [11] suggest that community-led processes for measuring forest carbon help build local people's capabilities whilst being more resource efficient than, but just as accurate as, technological, expert-led alternatives.

However, criticism of community-based approaches is widespread. It is often suggested that they involve local people in a tokenistic manner and/or cause harm. For example, Cooke, Kothari and others [12] showcase examples of where 'community-based' projects allow outsiders to dominate decision-making and/or reinforce the interests of already powerful local people. These projects' aims are not valued locally and they have exacerbated inequalities by marginalising the most vulnerable individuals and groups.

Eschewing tokenism and offering people genuine participatory opportunities (and choices over whether they wish to harness these opportunities) can help community-based projects to fulfil their promise and manage their potential for harm [13]. Together with recognition, meaningful participation is required to achieve procedural justice: fairness through processes that allocate goods and benefits [14]. Recognition is achieved when people's identities, cultures and values are acknowledged [15]. Outcomes resulting from fair decision-making processes are more likely to be acceptable to recipients, meaning procedural justice can facilitate distributive justice [14]. However, procedural injustices can result when project staff fail to comprehensively consider and manage cross-scale power dynamics that exist within implementation contexts e.g., [12,16]. Power refers to the networks of institutions (formal and informal) and resources that delimit the boundaries and scope of procedural justice opportunities [17].

The importance of securing procedural justice through climate and development solutions is increasingly acknowledged e.g., [18,19]. However, recognition, participation and the extent to which power dynamics condition the achievement of both have been underexplored. Community-based climate and development solutions are being implemented at a much faster pace than their implementation is being critiqued and evaluated [8]. Little attention has been paid to the procedural justice implications of implementing community-based projects that simultaneously pursue triple-wins across development, mitigation and adaptation. Addressing this literature gap is crucial because local involvement in, and acceptance of, projects are important enabling conditions for the successful rollout of CCD [20].

This article aims to evaluate whether and how procedural justice and injustices result from the implementation of two major donor-funded projects that pursue CCD triple-wins in Malawi. In so doing, our intention is to develop insights that can help to inform and advance CCD policy and practice. The fulfilment of two research objectives is sought to aid this:

(1)   Identify the extent to which different individuals and groups have been recognised by, and are able to participate in, processes used to implement case study projects in Malawi;
(2)   Ascertain how power shapes and conditions case study projects' procedural (in)justice implications.

2. Community-Based Projects and Procedural Justice: Evidence from Theory and Practice

Integrated community-based climate and development projects are well established in developing countries [21,22]. Their origins lie in the surge of interest around community-based development in the 1980s [23]. Around this time, policymaking was increasingly informed by the subsidiarity principle: the idea that decision-making should be devolved to the least centralised competent authority [24]. Sustainable development discourses that were formalised at the 1992 Rio 'Earth Summit' stressed

the need for decision-making based on 'the participation of all concerned citizens, at the relevant level' [25] (p.2). Value was placed on encouraging greater local involvement in resource management and decision-making [10].

A similar paradigm change occurred with respect to climate adaptation a decade later. Policymakers and practitioners began to acknowledge that large-scale engineering and/or technology-centric investments are not always the optimal way to reduce climate vulnerability. Adaptation projects involving indigenous people that make use of locally available resources are now widespread [6,26]. Although their responsibility for climatic change is minimal, it has also been recognised that developing country populations could make a significant contribution to global mitigation efforts [27].

Community-based projects that simultaneously pursue climate and development goals are championed by policy standards, supranational organisations, donor agencies and non-governmental organisations (NGOs) [6,22]. Integrating development within community-based climate projects can encourage local people to undertake mitigation and/or adaptation activities that generate longer-term benefits [9,28].

There is significant overlap between the theoretical basis of community-based approaches and procedural justice. Both propose that local people should have direct control over decisions affecting their lives; and that decision-making processes should be participatory and locally appropriate. Hence, both aim to enhance people's political and socio-cultural freedoms to live the lives that they choose [6,29]. A range of participatory methodologies have been developed to help operationalise local involvement in projects [7]. Toolkits have been designed to aid practitioners e.g., [30,31]. Nevertheless, there is mixed evidence over whether community-based climate and development projects facilitate procedural justice in practice. Lawlor et al. [32] and Mathur et al. [33] evaluate multiple projects implemented in developing countries with the potential to achieve CCD triple-wins and highlight that some succeed in engaging a diversity of local people in project activities, management and decision-making. However, in others, the participation and recognition of target populations is uneven and/or curtailed.

It is suggested that community-based projects struggle to achieve procedural justice because they do not comprehensively consider and manage cross-scalar power dynamics within their implementation contexts e.g., [12,16]. Three forms of power can be distinguished: visible; hidden; and invisible. Visible power concerns formal and observable rules, structures and institutions governing project processes. Stakeholders' capacities and capabilities condition their engagement with these processes. Hidden power relates to individuals' and organisations' abilities to 'set the agenda' and control 'who' is afforded recognition and participatory opportunities and in relation to 'what'. Finally, invisible power constitutes the ideological and psychological contours of action: belief systems shaping the degree to which particular stakeholders consider themselves and others deserving of recognition and participatory opportunities [34].

Table 1 shows how the achievement of procedural justice through community-based project implementation can be complicated by visible, hidden and invisible forms of power. Difficulties are likely linked to failures to reconcile stakeholder priorities during CB-CCD design. In Wood et al. [48], we showed that design processes often provide local people with insufficient opportunities to articulate their vulnerabilities and preferences; and do not account for their divergent interests, capabilities and power bases. Projects also design mitigation activities without attempting to reconcile the divergent worldviews held by local people and project developers with respect to climate change. This study complements our previously published work by considering local people's involvement in project implementation.

Table 1. Issues that can complicate the achievement of procedural justice through community-based project implementation and associated power dynamics.

Issue	Procedural Justice Implications [Power Dynamics in Square Brackets]	References
Local leaders and other authority figures actors subvert 'fair' decision-making processes	Local leaders and other authority figures use their influence [hidden power] to dominate decision-making with opportunities for less powerful people curtailed	Mansuri and Rao [10], Wong [35], Stringer, et al. [36], Barrett [37]
	As a consequence of dominating decision-making, authority figures, their family and close acquaintances benefit disproportionately from project inputs and outputs (although sometimes control of participatory processes is used to benefit vulnerable groups). Accrued resources [which enhance leaders' and authority figures' visible power] further entrench their domination over decision-making processes	
Project design overlooks that 'communities' are made up of local people with diverse interests, identities and capabilities	Particularly vulnerable groups lack the resources [visible powerlessness] that they need to participate in project activities and decision-making e.g., financial capital/assets, land, time	Agrawal and Gibson [38], Hendrickson and Corbera [39], McDermott and Schreckenberg [40], Ellis [41], Nation [42]
	Particularly vulnerable groups sometimes suffer from low self-esteem [a lack of invisible power] and therefore fail to register to participate in project activities or speak within decision-making fora	
	Context-specific community norms influence for whom participation is deemed socially acceptable [invisible power]. These norms may be at odds with the intentions of project developers	
Worldviews of local people at odds with project developers	Local people regard climate change as a natural phenomenon beyond human control and do not have access to climate science that informs project design. Their participation in mitigation activities may be therefore motivated by incomplete or misunderstandings [invisible powerlessness]	Jindal et al. [43]; Mubaya et al. [44];
Projects frame target populations' vulnerability to climate and development shocks as an exclusively local issue	Projects do not recognise or aim to alleviate international (e.g., globalisation, trade agreements), national (e.g., ill-conceived government policies) and regional factors (e.g., inadequate extension support) that condition local vulnerabilities and might compromise project success [an invisible power dynamic]	Dodman and Mitlin [8], Tompkins, et al. [45], Cunguara and Moder [46], O'Brien and Leichenko [47]

In summary, mixed evidence exists over whether community-based climate and development projects have facilitated procedural justice for local people. In some cases, the literature shows that projects have succeeded in engaging a diversity of local people in project activities, management and decision-making. However, other projects have exacerbated existing procedural inequalities. The achievement of procedural justice can be compromised when project implementation strategies do not comprehensively consider and manage visible, hidden and invisible forms of power within the contexts in which they are implemented.

The following section of this article provides detail on the research location, case study approach and data collection and analysis methods that were used to fulfil our research objectives. It presents a framework that can be used to evaluate: (a) whether and how community-based CCD project implementation processes facilitate recognition of, and participation by, local people; and (b) to what extent visible, hidden and invisible power shape and condition this. We found no existing literature that has comprehensively evaluated how visible, hidden and invisible forms of power condition and shape procedural justice through community-based CCD; or presented frameworks for guiding such analyses. In Sections 4 and 5, we detail and discuss the results of using the framework that we have developed to evaluate two major donor-funded projects that pursue CCD triple-wins in Malawi.

3. Research Approach and Methods

3.1. Research Context and Case Study Approach

Malawi was chosen as a research location because: (a) it is amongst the world's most climate-vulnerable countries; and (b) projects that pursue CCD goals are already being implemented in the country.
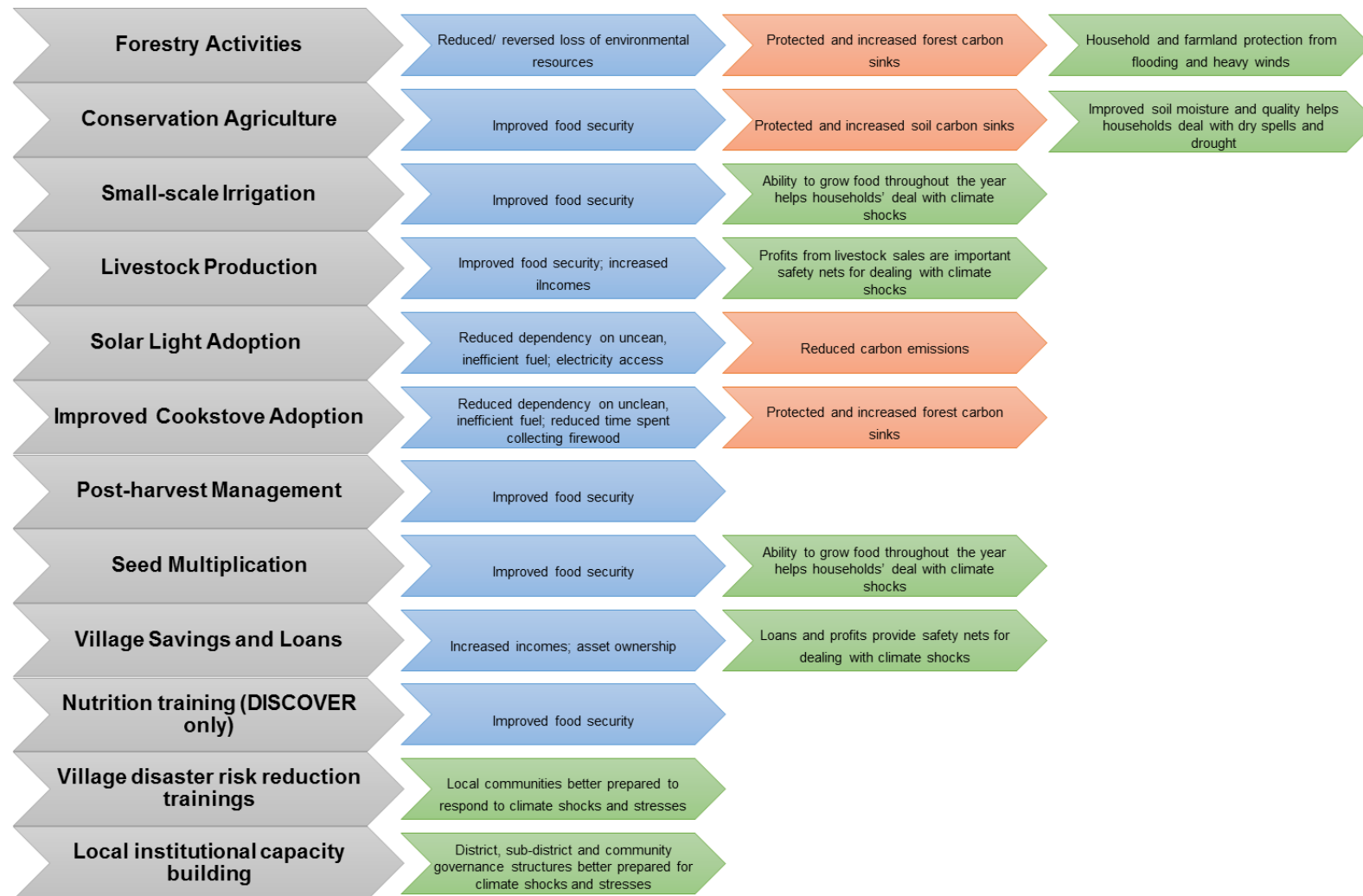
Two reasons informed the selection of the Developing Innovative Solutions with Communities to Overcome Vulnerability through Enhanced Resilience (DISCOVER) project and Enhancing Community Resilience Project (ECRProject) as case studies. Firstly, their procedural justice implications were more far-reaching than other projects pursuing CCD goals that were identified in Malawi: DISCOVER and ECRProject target 305,000 and 298,500 beneficiaries. Together, they formed the Enhancing Community Resilience Programme (ECRP) that was financed through U.K., Norwegian and Irish Government grants worth £21.5 million [49]. The projects' size and financial resources also provided them with significant scope to influence policymaking and practice through with advocacy activities [48].

Secondly, projects' comparability meant the procedural justice implications of their different implementation methodologies could be isolated and analysed. This allowed for the development of recommendations to inform current and future policy and practice. Both projects operated over identical time periods (2011 to 2016). They implemented identical packages of activities. Projects aimed to achieve a range of development goals and help households adapt to the consequences of: dry spells and drought; heavy rains and flooding; and heavy winds. Project activities incorporated a mitigation component by avoiding or reducing greenhouse gas emissions (Figure 1). Households perceived as the most vulnerable—female-headed, elderly, extremely resource-poor, and those with disabled or chronically ill adults—were primarily targeted by the projects [31,50].

ECRProject and DISCOVER worked within seven and five districts in Malawi, respectively. Comparable district and village sites were chosen as case studies in order to isolate the procedural justice implications of project implementation processes. Based upon discussions with project staff and analysis of documentary material [31,50–52], Dedza (DISCOVER district), Kasungu (ECRProject district) and Nsanje (both projects) districts were selected. Dedza and Kasungu have comparable socioeconomic profiles (for example dominant livelihood activities, average household resource wealth, agricultural market access) and climatic conditions. Both are considered to have a superior socio-economic status to Nsanje, where income and agricultural productivity is lower and households are isolated from markets [51]. Nsanje district is amongst the most climate-vulnerable in Malawi: populations experience regular floods and droughts [53].

Similarities between Dedza and Kasungu meant DISCOVER and ECRProject actions in each could be compared. The projects were compared directly in Nsanje.

In each district, two villages were chosen as study sites. Study villages were chosen that were: comprised of similar numbers of households; located close to each other; targeted with similar project activities; not experiencing research fatigue. Working with field staff was crucial for building trust and relationships with local people in study villages. In order to reduce possible bias in the information they provided, their advice was verified through: researcher observations of village dynamics; wealth ranking exercises and; discussions with local people throughout the process of data collection.

Forestry Activities	Reduced/ reversed loss of environmental resources	Protected and increased forest carbon sinks	Household and farmland protection from flooding and heavy winds
Conservation Agriculture	Improved food security	Protected and increased soil carbon sinks	Improved soil moisture and quality helps households deal with dry spells and drought
Small-scale Irrigation	Improved food security	Ability to grow food throughout the year helps households' deal with climate shocks	
Livestock Production	Improved food security; increased ilncomes	Profits from livestock sales are important safety nets for dealing with climate shocks	
Solar Light Adoption	Reduced dependency on uncean, inefficient fuel; electricity access	Reduced carbon emissions	
Improved Cookstove Adoption	Reduced dependency on unclean, inefficient fuel; reduced time spent collecting firewood	Protected and increased forest carbon sinks	
Post-harvest Management	Improved food security		
Seed Multiplication	Improved food security	Ability to grow food throughout the year helps households' deal with climate shocks	
Village Savings and Loans	Increased incomes; asset ownership	Loans and profits provide safety nets for dealing with climate shocks	
Nutrition training (DISCOVER only)	Improved food security		
Village disaster risk reduction trainings	Local communities better prepared to respond to climate shocks and stresses		
Local institutional capacity building	District, sub-district and community governance structures better prepared for climate shocks and stresses		

Figure 1. ECRP project activities (grey arrows) and links to development (blue arrows), mitigation (red arrows) and adaptation goals (green arrows). Sources: [31,50]; surveys conducted with project employees.

3.2. Material Collection and Analysis

Data were collected in Malawi between September 2014 and May 2015. Information was sought from all stakeholders involved in project implementation. Surveys (*n* = 457) and semi-structured interviews (*n* = 140) were utilised to collect quantitative and qualitative data from households within study villages. The same surveys and interviews were also used to generate data on the design of the ECRP, which is presented in Wood et al. [48]. Data that were obtained and used in this article focused on whether and how households perceived that they were recognised by, and able to participate in, the implementation of ECRP projects. Households were asked questions related to: whether they were taking part in ECRP projects; particular activities they were taking part in; whether they felt respected by projects; and whether they felt able to express their views and influence projects. Projects provide benefits to households rather than individuals [31,50], meaning households were the appropriate data collection unit.

Survey responses were sought from all consenting households in each village, including both ECRP participants and non-participants. Dialogue with non-participants enabled understanding of whether their involvement was impeded by procedural justice barriers. Survey data were coded to elucidate key themes related to households' procedural justice opportunities [54]. 140 purposively selected households were then interviewed in order to follow up on these themes [55]. A participatory wealth ranking approach [56] helped distinguish responses of 'lower-than-average wealth' (LAW), 'average-wealth' (AW) and 'higher-than-average wealth' (HAW) households. Participatory wealth rankings are considered more precise and locally appropriate than methodologies that rely exclusively on expert knowledge [57].

32 professional stakeholders were also interviewed: two donor agency employees; 21 NGO employees; one national and eight local government employees. Professional stakeholders were identified using a snowball sampling approach [58]. Project documentation [31,50] helped distinguish project developers as initial interviewees. They suggested other stakeholders who were relevant to the research and were interviewed to expand the quantity and breadth of perspectives considered. Professional stakeholder interviewees were asked about the extent of local peoples' recognition and participation during project implementation and factors conditioning these procedural justice opportunities.
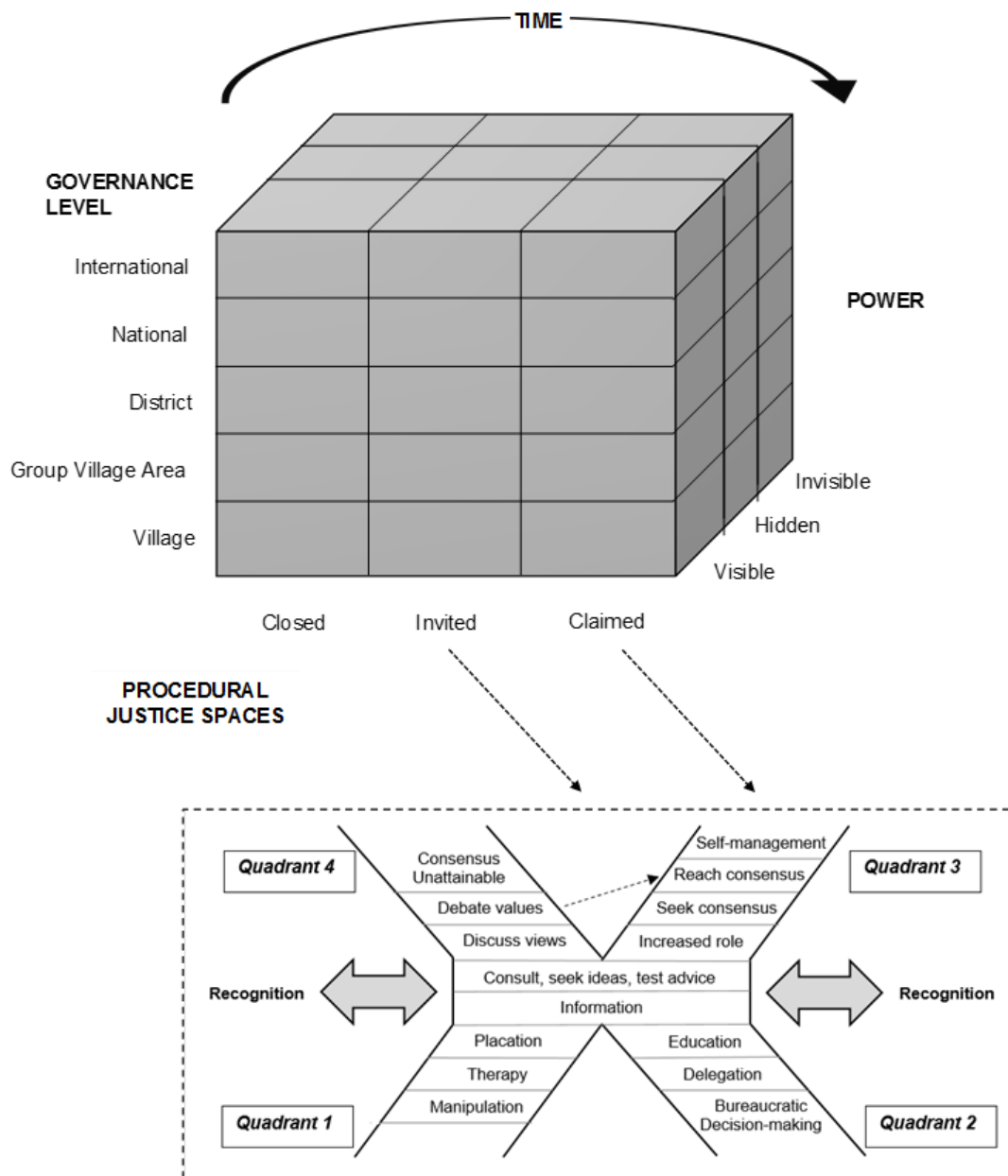
Documentary material was also collected and analysed, including: two project design documents [31,50]; one NGO complaints and response mechanism protocol [59]; one project monitoring report [60]; one government policy document [61]; and one consultancy report [62].

Data were all analysed using content analysis [54] and critical discourse analysis approaches [63]. Statistics derived through combining survey responses were analysed using univariate analysis techniques [54]. The framework developed in Wood et al. [48] was used to evaluate household recognition by, and participation in, ECRP project implementation processes. It draws on the 'power cube' developed by Gaventa [17] to facilitate evaluation of the procedural justice 'spaces' that are created by CCD (Figure 2).

Three procedural justice spaces were identified: (1) the *Introduction Space*, which encompassed processes by which ECRP projects were instigated within target villages; (2) the *Execution Space*, which encompassed processes by which specific project activities were carried out; and (3) the *Monitoring and Evaluation Space*, which encompassed processes by which project performance was tracked and reported. Content Analysis and Critical Discourse Analysis methods helped to elucidate overt and covert stakeholder procedural justice opportunities in each space, respectively.
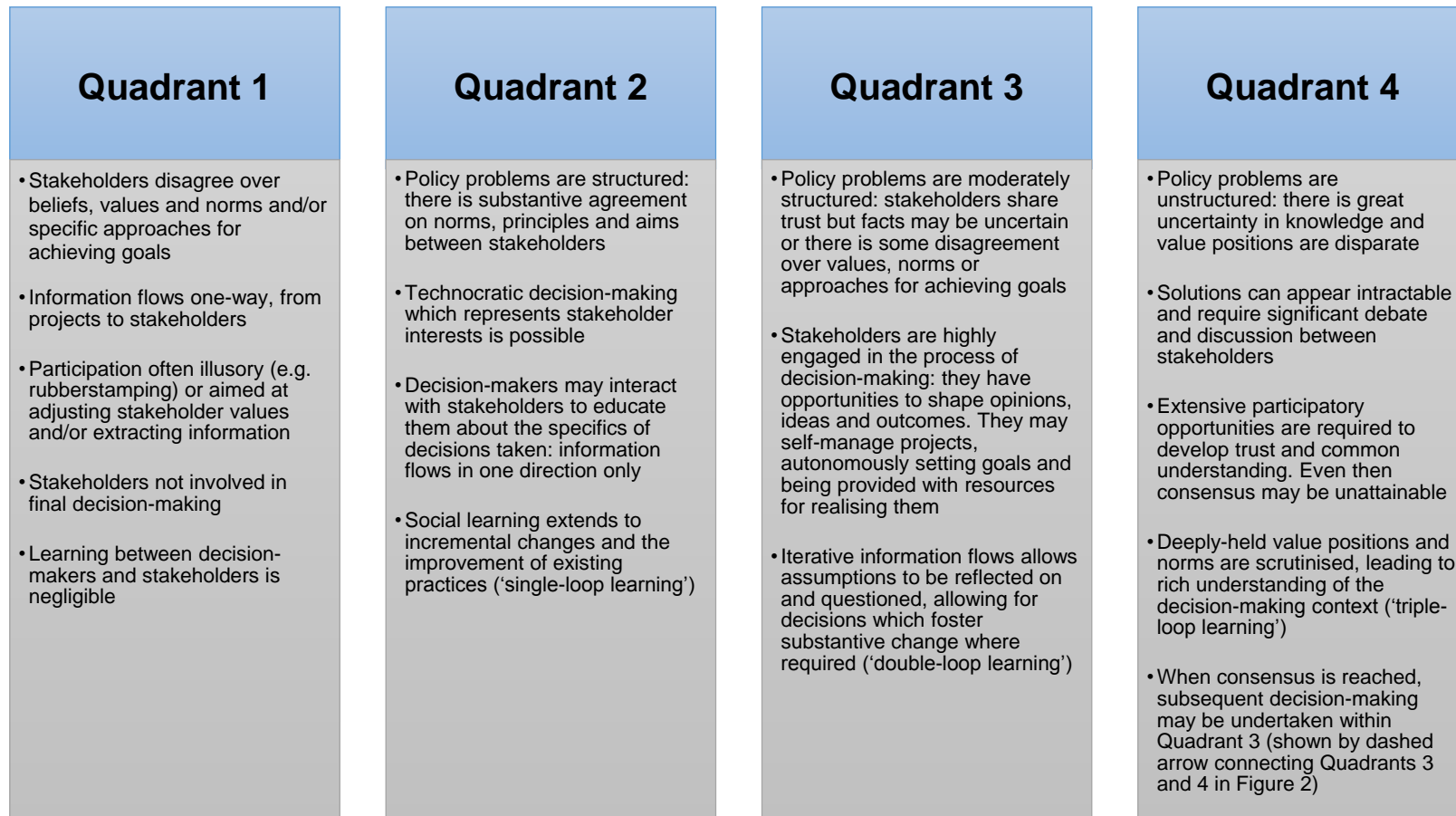
The framework draws on Hurlbert and Gupta's [13] 'split ladder of participation' to analyse the pertinence of participatory opportunities within each space. Crucial to their approach are the following suppositions: participation often comprises collective action involving multiple stakeholders who engage in social learning; stakeholders may participate for different reasons; the specifics of a policy problem dictate the participatory opportunities required to solve it. Figure 2 sets out four quadrants of the split ladder and Figure 3 describes each quadrant. Locating ECRP participatory opportunities within different

quadrants enabled appraisal of whether they were appropriate for solving policy problems within project implementation spaces.

Figure 2. A framework to guide exploration of procedural justice spaces that exist for stakeholders under ECRP projects. Adapted from Gaventa [17]; Hurlbert and Gupta [13].

Quadrant 1

- Stakeholders disagree over beliefs, values and norms and/or specific approaches for achieving goals

- Information flows one-way, from projects to stakeholders

- Participation often illusory (e.g. rubberstamping) or aimed at adjusting stakeholder values and/or extracting information

- Stakeholders not involved in final decision-making

- Learning between decision-makers and stakeholders is negligible

Quadrant 2

- Policy problems are structured: there is substantive agreement on norms, principles and aims between stakeholders

- Technocratic decision-making which represents stakeholder interests is possible

- Decision-makers may interact with stakeholders to educate them about the specifics of decisions taken: information flows in one direction only

- Social learning extends to incremental changes and the improvement of existing practices ('single-loop learning')

Quadrant 3

- Policy problems are moderately structured: stakeholders share trust but facts may be uncertain or there is some disagreement over values, norms or approaches for achieving goals

- Stakeholders are highly engaged in the process of decision-making: they have opportunities to shape opinions, ideas and outcomes. They may self-manage projects, autonomously setting goals and being provided with resources for realising them

- Iterative information flows allows assumptions to be reflected on and questioned, allowing for decisions which foster substantive change where required ('double-loop learning')

Quadrant 4

- Policy problems are unstructured: there is great uncertainty in knowledge and value positions are disparate

- Solutions can appear intractable and require significant debate and discussion between stakeholders

- Extensive participatory opportunities are required to develop trust and common understanding. Even then consensus may be unattainable

- Deeply-held value positions and norms are scrutinised, leading to rich understanding of the decision-making context ('triple-loop learning')

- When consensus is reached, subsequent decision-making may be undertaken within Quadrant 3 (shown by dashed arrow connecting Quadrants 3 and 4 in Figure 2)

Figure 3. Quadrants for examining the depth of stakeholder participation within ECRP project implementation. Adapted from Hurlbert and Gupta [13].

Introduction and *Execution Spaces* comprise moderately structured policy problems: local people participating in the projects and other stakeholders agreed on the need to introduce and execute project activities within villages. However, cultural, climatic and other differences require that the projects are implemented differently across target villages [31,50]. Likewise, there is potential for disagreement over implementation strategies between households within individual villages. The *Monitoring and Evaluation Space* comprised an unstructured problem: project design documents stress the fact that different stakeholders and types of information may affect project performance in different ways and must be considered.

Instances of where local people's identities, cultures and values were (mis)recognised were identified in the data using an inductive approach [64]. Use of comparison techniques established links between individual instances, allowing patterns of (mis)recognition to emerge [54]. The framework enabled analysis of procedural justice across five levels at which ECRP decision-making processes occurred: international; national; district; group village area; and village. Consideration of power completes the framework, which facilitates understanding of the extent to which visible, hidden and invisible power delimited the boundaries and scope of procedural justice opportunities. Content analysis and critical discourse analysis techniques enabled visible (content analysis), hidden (content analysis and critical discourse analysis) and invisible power (critical discourse analysis) dynamics to be identified.

4. Results

Procedural justice opportunities afforded to local people within *Project Introduction*, *Execution* and *Monitoring and Evaluation Spaces* are now presented. Dedza study villages are referred to as Dedza Village 1 (DV1) and 2 (DV2); Kasungu villages as Kasungu Village 1 (KV1) and 2 (KV2); and Nsanje villages as Nsanje Village 1 (NV1) and 2 (NV2).

4.1. Introduction Space

In Malawi, development assistance must be approved by district governments [60]. District government employees directed ECRP projects towards villages perceived as most vulnerable to climate and development shocks and who were not already benefitting from similar development interventions (five NGO employees; five district government employees).

The projects were introduced to target villages through traditional governance structures. Traditional Authorities, which form part of district governments [61], facilitated meetings between project staff, Group Village Heads (GVH) and Village Heads (VH). There was consensus amongst NGO employees, GVHs and VHs that meetings were used to provide a general overview of projects' aims and activities. GVHs and VHs were then given opportunities to accept or reject the implementation of projects in their jurisdictions. The testimony of VH NV1 supported NGO interviewees' statements that Village Development Committees sometimes played an advisory role.

Having accepted the projects, GVHs and VHs used village meetings to introduce them to households. Meetings were used to select: household participants to take part in different project activities; Village Extension Multipliers (VEMs); and committee members. VEMs provide technical support to households to help them carry out activities. They were introduced by the projects because '*Government Extension Workers do not always give people enough support [in project activities]*' (NGO employee). In addition, the projects have ensured that target villages have functioning Civil Protection Committees (VCPCs). VCPCs communicate local vulnerabilities to Area and District governments, develop disaster contingency plans and are tasked with taking actions (for example early warning, co-ordinating evacuations) to deal with climate shocks and stresses. All VEMs and committee members are volunteers.

Households across all study villages unanimously considered that the projects have recognised and respected their customs by involving traditional governance structures and utilising village meetings. One NV2 AW household head remarked: '*ECRP respects our culture and ways of doing things but just offers us new opportunities*'. Four NGO employees reported that households in target villages were given opportunities to self-manage project introduction. They stated that households were presented with,

and briefed about, packages of project activities during meetings. Particular activities to be implemented within villages were then chosen through deliberation. The same employees suggested that activity participants, VEMs and committee members were chosen through popular nomination and election. However, working through traditional governance structures reinforced the hidden power of VHs; they allegedly used this to subvert participatory processes designed to help local people self-manage project introduction. Table 2 outlines how this, and other issues, led to reported instances of procedural injustice.

Table 2. Reported instances of procedural injustice during project introduction and associated power dynamics.

Procedural Injustice Reported	Description [Associated Power Dynamics in Square Brackets]	Reported by
Mismatches between district government records of village boundaries and local people's conceptions meant some intended target households not introduced to projects	20 KV2 households were not invited to introductory meetings because local leaders did not regard them as village residents [local leaders' hidden power enabled them to determine who was recognised as eligible to participate in the ECRP] [1]	5 NGO employees; 5 KV2 households (1 EH HAW; 1 FH AW; 1 HAW female and elderly-headed; 1 AW; 1 AW FH)
Householders unable to ask questions and express their opinions about projects during introductory meetings	*"In village meetings, authorities say things but they do not ask for comments, which makes us feel bad and like we are worth nothing"* (LAW, EH household head, KV1) [local leaders' hidden power enabled them to restrict participation in introductory meetings]	11 household interviewees spanning all household types across all study villages
Households unable to self-manage selection of project activities, committee members, VEMs and project activity participants	Field staff reportedly chose activities prior to local engagement in NV2: *"We were just told of the activities. There were no opportunities for us to choose"* (VH NV2) [the hidden power of field staff enabled them to restrict opportunities for households to self-select project activities]	VH NV2
	Committee members and VEMs were chosen by the VH in NV2 [misuse of the VH's hidden power]	5/22 NV2 household interviewees
	VHs, committee members and VEMs controlled the selection of participants for project activities: *"the leadership and committee members chose everything"* (household interviewee) [misuse of hidden power]	(2 AW; 1 AW female- and elderly-headed; 1 EH AW; 1 HAW) 21 households spanning all types across study villages in Dedza and Nsanje

[1] Similar issues are likely to be widespread because, according to 5 NGO employees, groups of households in Malawi often form 'breakaway' villages in the hope of receiving increased development assistance from Government and NGOs.

Eighteen interviewees (from a total *n* = 93) spanning all household types across all villages in Dedza and Nsanje reported that the control of selection processes by VH, committees and VEM translated into preferential access to project activities for themselves, their friends and families. They considered that they had been excluded from decision-making and were recognised as subjects rather than active citizens. Local people were afraid to complain publically about their perceived exclusion because VHs have the authority to marginalise them from village life. The head of an EH LAW household in DV1 worried that complainants '*will not receive other benefits brought by the authorities because their card has been marked*'.

Using VSLAs as a project entry point helped minimise instances where village leaders' misuse of their hidden power led to misrecognition and exclusion errors. In Kasungu, household participation in ECRProject was conditional on their assembly into VSLAs of 15–25 people, while additional project activities were introduced through associations. VSLAs 'separate the powers' within villages by creating new spheres of influence outside of traditional leaders' control. According to five household interviewees that were taking part in VSLAs in Kasungu (total *n* = 62) (3 AW, 2 LAW), members appoint people into key positions (for example Chair, Treasurer) based on deliberation and free election. Group constitutions, drawn up with assistance from Field Officers and VEMs, supported members in

expressing their views and participating in decision-making: *'We have equal opportunities to share our views within VSLAs. We are all bound by the constitution, even the Chief. So no one is superior to anyone else'* (HAW household interviewee, KV2).

Five household interviewees (covering all household types) reported that members self-determined target beneficiaries of project activities implemented through VSLAs. One household in KV2 reported that they were excluded from all village development activities on racial grounds—a misuse of the VH's hidden power, likely influenced by their personal belief systems about race and identity (invisible power). This occurrence aside, there were no reported instances of the project introduction process involving bias of any kind in Kasungu; this contrasted starkly with findings from villages in Dedza and Nsanje.

Making project participation dependent on household abilities to join VSLAs was found to exclude those suffering from extreme income poverty (visible powerlessness). Sixteen LAW, three AW and two HAW households from villages in Dedza and Kasungu where VSLAs had been established reported that they could not afford the required contributions.

4.2. Execution Space

ECRP projects contributed human and material resources with the intention of allowing households to self-manage the execution of project activities. Nine VEMs reported that they received up to five days of training on how to implement particular activities before passing on this expertise to households. Additional training was provided to households by Field Officers and Government Extension Workers (four NGO employees; two Government Extension Workers). The projects operated in accordance with DfID's *'no handouts'* policy (donor agency employee) but some material inputs were provided. VEMs received bicycles to travel within and between villages. Some activities, such as livestock, seed systems (initial animals and seeds) and irrigation (treadle pumps) also required inputs [31,50]. Self-management opportunities were intended to equip households with skills to enable their continued participation in activities until the ECRP's formal end in 2016 [31,50].

VEMs were often regarded to have performed well, providing useful training and responding to household needs: *'I feel very comfortable raising issues with the VEMs'* (LAW FH household head, KV2). Likewise, the majority of household interviewees considered committees to have administered project activities well, allowing households to ask questions and express concerns.

Village leaders' misuse of hidden power in the *Introduction Space* enabled them to enhance their visible power in *Execution Space* and led to reported procedural injustices. VHs, committee members and VEMs reportedly had superior access to resources required for implementation in Dedza and Nsanje. For example, six interviewees (three AW; one EH LAW; one EH AW; one AW female- and elderly-headed) across both Nsanje villages (total *n* = 55) accused them of hoarding seeds and treadle pumps needed to execute irrigation and agricultural activities. Those not afforded chances to sign up for activities during project introduction were excluded from participating in them, leading to despondency: *'we feel very bad about being sidelined. Others are benefitting . . . the village is becoming more unequal'* (LAW household head, NV1).

Using VSLAs as an entry-point activity minimised misrecognition, exclusion and misuse of village leaders' hidden power during the *Introduction Space*. In the *Execution Space*, VSLAs facilitated both procedural justices and injustices. According to one household interviewee (AW, KV1), VSLAs offered a forum for participants to *'share experiences about activities'* that improved implementation quality and efficiency. Moreover, two female interviewees, both from AW households in KV2, supported the sentiment that VSLAs are *'especially empowering for women as we can take part without our husbands watching'*. They explained that VSLAs had helped women look after the needs of their households. In the past, they explained, men controlled household finances within the village.

Emergent power dynamics within VSLAs caused misrecognition and restricted some households' participation. Household interviewees reported that elected VSLA leaders (for example Chairs, Treasurers, Secretaries) misused their new hidden power and limited other people's opportunities to speak within meetings. For example, one HAW household head in KV1 explained, *'I am not considered worthy to ask questions because I am not in the leadership'*. 10 interviewees reported that disagreements

within VSLAs related to loan payback and profit sharing had led to ill-feeling and caused members to drop out. When households failed to pay back loans to VSLAs, members sometimes confiscated their property as a form of repayment. Six debtors, three of which were female, elderly household heads (the remainder comprised two LAW and one AW male household heads) reported that they were subject to verbal and physical insults during debt collection. A female, elderly-head of a LAW household explained that: *'debt collectors . . . were very rude and violent. They came to my house at 5:00 am . . . [and] just started chasing my goats [to confiscate them]'.*

The most vulnerable households often struggled to participate in project activities due to a lack of visible power. Table 3 breaks down participation in ECRP projects by household type. HAW households were significantly more likely to have participated in the projects and took part in more project activities. Fifty percent, 46% and 32% of LAW, FH and EH households' survey respondents, respectively, did not participate in the projects. Participating LAW and FH households took part in 29% and 24% fewer activities than HAW households, respectively. Study village households engaged in fewer activities than ECRP households overall: a mid-term evaluation found that 61% of households took part in three or more activities (although the target was 80%) [62].

The participation of LAW, FH, EH and some AW households was constrained by 'resource poverty', 'caregiver' and 'incapacity' barriers (visible powerlessness), which are presented in Table 4. Poor water access also curtailed women's participation across all household types. In KV1, a village without boreholes or shallow wells, two women from AW households reported that they walked for four hours at least twice a day to collect water. This reduced the time that they had available to take part in project activities. Evidence suggests that ECRP projects had not put in place sufficient measures to overcome the visible powerlessness of the most vulnerable households and enable them to participate in project activities.

Participation in low-carbon activities occurred without people necessarily fully understanding what they were doing or how it related to climate change. The worldviews of local people, which contrast with those held by project developers, did not incorporate scientific explanations for climate change. For instance, 187/506 household survey respondents were unsure why weather conditions change over long periods of time; 263 believed that trees were the most important regulators of rainfall and climate. Commonly, this reflected a belief that God rewards villages that look after natural resources with good weather. Only two household respondents reported that greenhouse gas emissions cause climate change. Moreover, 35/202 and 5/21 of households participating in forestry and improved cook stove activities, respectively, reported that they were solely motivated by their belief that growing or protecting trees would bring improved rainfall consistency and predictability.

Table 3. Participation in ECRP projects by household type.

Households	Number (%) of Households Taking Part in One or More Project Activities	Average Number of Activities per Household
All	329/457 (72%)	2.43
Average Wealth (AW)	201/258 (77%)	2.13
Less-than-average Wealth (LAW)	53/105 (50%)	1.92
Higher-than-average Wealth (HAW)	75/88 (85%)	2.71
Female-Headed (FH)	53/94 (56%)	2.07
Elderly-Headed (EH)	92/135 (68%)	2.21

Table 4. Barriers constraining households' visible power and their participation in the ECRP.

Barrier Type	Description	Reported by
Resource poverty	Households' lack of material wealth limited project participation: 1. Household heads unable to take part in activities because they took part in income-generating activities (*tenant* work—seasonal labour on commercial farms—, selling firewood and *ganyu*—rural piecework contracted by better-off households) in order to meet their families immediate needs. 2. Poor access to land limited involvement in forestry and agricultural activities. 3. Extremely low incomes made VSLA contributions unaffordable (in Kasungu, where VSLAs acted as ECRProject entry points, households unable to afford contributions were prevented from engaging in other project activities)	50 LAW and AW households across all study villages
Incapacity	Physical disability and frailty due to old age prevented adult household members from taking part in project activities.	26 EH households across all villages and 5 households (one from DV2, KV1 and KV2; two from DV1) whose adult members suffered from disabilities
Caregiver	Female household heads, who were often widowed, were forced to spend most of their time doing domestic work and caring for children.	17 FH households from DV1, DV2 and KV2

An NGO employee reported that efforts had been undertaken to educate local people about mitigation through village meetings: 'we say that if you use dirty energy then the gasses that come out of the smoke are bad for the atmosphere and destroy gases in the air that are important for our existence'. However, she admitted that: 'for people who plant with the mindset of getting rainfall, this is a problem'. Overall, reconciliation between the worldviews of project developers and local people was limited, resulting in the latter's invisible powerlessness. Evidence suggests that, because CB-CCD is borne out of a worldview that is grounded in climate science (and may be at offs with local belief systems in developing countries), it risks creating new forms of procedural injustice compared with community-based development activities.

4.3. Monitoring and Evaluation Space

Households had opportunities to discuss their views about project implementation through village discussions with Field Officers and dialogue with VEMs and committees. Ongoing monitoring and evaluation was verified through annual DfID/Project Management Unit field visits (donor agency employee) and an independent mid-term evaluation [55].

Table 5 provides examples of multi-level project responses to households' concerns. Despite evidence of project responsiveness, one donor agency employee and two NGO employees considered monitoring and evaluation processes to be cumbersome, leading to delayed responses. They perceived that '*the chain of command is really too long*' meaning '*transmitting information takes a long time*' (donor agency employee) and '*trickle down of information to the field-level can be difficult*' (NGO employee).

Table 5. Examples of multi-level ECRP monitoring and evaluation responses.

Level	Monitoring and Evaluation Issue	Response
Village	(1) Village livestock destroy stalks required for organic soil cover under conservation agriculture. (2) Households worried about theft of VSLA savings.	(1) The Field Officer *"taught us a new method of storing the stalks, which involved tying the stalks together and looking after them at our homes"* (AW household head, KV2). (2) *"[The VEM] helped us set up an account at the Malawi Savings Bank to make things safe"* (EH AW household head, NV1).
District	Externally-reared goats transported to Kasungu (ECRProject) and Salima (DISCOVER) for livestock production schemes dying of local diseases.	Coupons provided to households for purchase of local goats (two NGO employees).
National	(1) ECRProject afforestation targets were missed. (2) Households suffering from poor water access struggle to participate in DISCOVER.	(1) Switch to all-year round tree-planting [59] (2) Households incorporated into Concern Universal-led 'Water, Sanitation and Hygiene' programme in Dedza (NGO employee).

Advocacy strategies were developed to communicate issues identified through monitoring and evaluation with district- and national-level policymakers. CISONECC, Malawi's Civil Society Network on Climate Change, provided ECRP projects with a forum to communicate issues with other civil society actors and build coalitions to influence national international climate change policymaking. These institutional linkages meant ECRP projects were well placed to challenge supra-local drivers of vulnerability.

Household opportunities to participate in monitoring and evaluation were constrained (hidden powerlessness) by limited NGO resources (a lack of visible power). For example, according to an NGO employee: *'one Field Officer looks after four GVHs . . . [comprising] up to 32 villages . . . The [monitoring and evaluation] plan hasn't been followed because of office work demands. Of late there haven't been many field visits.'* The same interviewee highlighted high staff turnover as a compounding factor: low Field Officer salaries led them to constantly seek better-paid job opportunities and options for further study.

NGO's limited financial resources (visible powerlessness) meant that VEMs were strongly relied upon to report accurate, quality village-level information. Yet, households considered that poor local project governance and leaders' ineffective use of their hidden power constrained monitoring and evaluation effectiveness: '[The VEM] *does not listen to our views or help us fix problems'* (HAW household, NV2). Limited access to mobile phones and transport facilities (visible powerlessness) meant that households had to communicate with the projects via VEMs and Field Officers. Yet, *'it is difficult to communicate concerns [about VEMs and local leaders] to the village authorities'* (AW household head, DV2). Households may also have suppressed complaints about Field Officer performance because they had to be made directly to Field Officers. Project staff recognised the need to introduce independent grievance procedures to enable households to communicate directly with project management. Table 6 sets out methodologies that had been proposed and were adopted under DISCOVER and ECRProject, respectively, shortly after data collection ended.

Table 6. Adopted and proposed ECRP grievance procedures.

Methodology	Project Location	Description	Possible Limitations
Scorecard	ECRProject: Kasungu, Nsanje (in operation)	Local people rate different aspects of project performance within focus groups and give qualitative insights that explain their answers (three NGO employees).	- Resource-intensiveness at odds with NGO resource-shortages. - Project village targeted with the methodology once during project lifecycle: unsuitable for identifying and responding to issues quickly. - Focus groups engage only small samples of total households. (NGO interviewee)
Community Accountability Boxes	DISCOVER: Nsanje (proposed)	Suggestion boxes located in villages allow local people to express comments and grievances. Boxes will be "*locked at all times and … keys will be kept by the monitoring and evaluation officer*" who will open them every month in the presence of a District Government employee [59].	- Could marginalise illiterate local people.

Two NGO employees suggested that monitoring and evaluation had implications for household participation in the *Execution Space*: '*where we do a lot of monitoring … there are more people participating because they feel encouraged*'. Owing to a legacy of colonialism and dictatorship, one NGO employee described Malawi as '*a country that is top down in approach*'. He suggested that households required support from 'above' the village-level—via NGOs, Government and other organisations—to ensure their engagement in project activities. This suggests that households had internalised a sense of inferiority—a form of invisible powerlessness that translates into dependency on external assistance (invisible power). Malawian district extension services are often patchy and insufficient, owing to local government resource shortages (visible powerlessness), which may have presented a problem for the sustainability of project activities beyond the formal end of the ECRP.

5. Discussion

Our findings show interrelationships between the concepts of procedural justice, vulnerability and power in the context of CB-CCD. Reducing vulnerabilities relies on projects decreasing societal marginalisation and providing local people with the political and socio-cultural freedoms to engage in implementation procedures. However, visible, hidden and invisible power dynamics condition these freedoms and shape patterns of procedural (in)justice. Study of the ECRP uncovered instances where project implementation processes confronted power and thereby facilitated procedural justice. However, overall, ECRP projects had only limited success in facilitating procedural justice for target populations. Households' meaningful engagement in project activities, management and decision-making was often curtailed because local power asymmetries went unchallenged.

Findings mirror those of wider research into community-based projects that pursue single- or double-wins across development, mitigation and adaptation [8,65]. Evidence from the ECRP suggests that power dynamics that condition the achievement of procedural justice through CB-CCD and community-based development approaches are similar [10]. However, CB-CCD is borne out of a worldview that is grounded in climate science and may be at odds with local belief systems in developing countries. In cases where project developers prioritise this scientific worldview over local

belief systems (a form of invisible power), CB-CCD risks creating new forms of procedural injustice compared with community-based development activities. In such cases, local people's participation in mitigation activities may be motivated by incomplete or misunderstandings of what they are doing and how they and others might benefit.

According to Cleaver [66] (p. 36), considering power within the implementation of community-based projects is often regarded as 'divisive', 'obstructive' and best avoided. By contrast, we suggest that in order to facilitate procedural justice, current and future CB-CCD projects must understand, manage and, where necessary, directly challenge cross-scalar power dynamics.

Others have recognised the need to contend with power within development contexts [67]. However, little attention has been paid to how this might be done. We propose a six-step approach for managing power through CB-CCD implementation. We highlight that power management is complex and challenging. However, we maintain it is integral for facilitating procedurally just CB-CCD across the developing world.

5.1. Co-Produce Power Analyses

Our findings suggest that project 'neutrality' in respect to power is seldom possible. In practical terms, neutrality translates into implementation processes that serve the powerful and disadvantage the powerless. However, the legitimacy of outsiders' efforts to intervene and challenge cross-scalar power dynamics is questionable. Interventions may even be counterproductive if implementing partners misunderstand local complexities and/or use processes to reinforce their own power and drive normative agendas [68]. One way to rectify this legitimacy deficit is to underpin interventions with power analyses that are co-produced by local people and other stakeholders with insights into local contexts [67]. This follows because power management is an unstructured policy problem involving hidden and invisible layers, disparate perspectives and diverse values. Substantive deliberation between stakeholders is therefore required to navigate it [13].

Co-produced power analyses can help reveal visible, hidden and invisible power that create procedural justices and injustices. Ex ante evaluations should take place as part of project baseline data collection, with projects configured accordingly thereafter. Baseline data should be used as a benchmark against which changes can be periodically assessed. Periodical re-evaluations can aid understanding of whether and how the introduction of projects have altered and/or created new power dynamics and how this translates into procedural justice implications.

Participatory methodologies used for conducting power analyses should proceed in a reflexive manner, with appreciation that power will also shape their implementation. Insights from local government officials, extension workers and/or other independent local-level stakeholders should be utilised to verify community-level findings and reduce the likelihood that methodologies are subverted by powerful community actors.

5.2. Reduce Opportunities for Domination

In Malawi and other developing countries, traditional leadership positions are determined by tradition and lineage rather than incumbents' suitability [69]. 'Culture' can be both a 'resource' for and a 'constraint' to the achievement of procedural justice [66]. When VSLAs were not used as entry-point activities in the ECRP, some traditional leaders used their reinforced hidden power to subvert project implementation processes. Exclusion errors prevented local people from taking part in project activities and decision-making and isolated them from monitoring and evaluation processes. Meanwhile, leaders and their friends and families monopolised opportunities see also [36,37].

Based on insights from power analyses, steps should be taken to reduce opportunities for powerful local actors to dominate and manipulate project implementation. One notable finding from this research was that when ECRP projects introduced activities through VSLAs, it helped prevent powerful local leaders from subverting procedural justice opportunities; improving the legitimacy and accountability of project management. Associations were beyond the authority of leaders who were unable to

capture project processes. This finding is novel within the literature on community-based climate and development, where VSLAs are commonly regarded as tools for reducing material aspects of vulnerability rather than enhancing sociocultural and political freedoms.

However, in Kasungu, extremely resource poor households' visible powerlessness, manifesting itself in their inability to make mandatory financial contributions to VSLAs, led to their exclusion from the ECRProject. Therefore, alternative fora with fewer participation barriers would make more suitable entry points. Introducing projects through multiple fora with few exit and entry barriers could prevent power dynamics that emerge within entry-point groupings from translating into procedural injustices. Yet, this would dramatically increase the complexities involved in administering projects for implementing organisations. Moreover, formal institutions created by 'outsiders' within villages to organise projects are criticised for lacking meaning for local people [66]. Further research that experiments with different entry-point institutions (both locally and externally conceived) is crucial for identifying suitable methodologies and uncovering their merits and defects.

5.3. Identify Enabling Factors to Engage the Most Vulnerable

The specifics of climate and development vulnerability can vary across spatial scales but also between individuals and groups within particular localities [1]. ECRP design processes were not adequately configured to capture these differences [48]. This has resulted in activities being inadequately tailored towards inter-household diversity. Sometimes, cultural constructions of roles and identities mean that local people derive more benefit and can better safeguard their social statuses through choosing not to participate in projects [69]. However, the persistence of factors associated with the vulnerability of LAW, FH and EH households, as well as those encompassing chronically ill and/or disabled adults, prevented their non-participation from being an empowering choice.

Households' limited economic and human resources resulted in their visible powerlessness that translated into 'resource poverty', 'caregiver' and 'incapacity barriers' to procedural justice. Barriers to climate action in developing countries associated with gender roles and ill health are well articulated. Issues associated with chronic poverty are also commonly discussed, although predominantly in terms of poor access to finance, land and other inputs and in the context of autonomous local adaptations [70]. Obstacles related to the livelihood profiles of the extreme rural poor in the context of planned actions—including NGO projects—are less frequently mentioned. However, in Malawi, LAW households' hand-to-mouth existence often prevented them from taking part in ECRP projects; circumstance forced them to prioritise participation in other income-generating activities that better helped meet their families' immediate needs.

Barriers to procedural justice may even exacerbate the vulnerability of affected households, trapping them into cycles of increasing marginalisation. Dependence on *ganyu* in Malawi forces poor men and women to sell their labour on highly exploitative terms. Women sometimes exchange transactional sex for food and money, which increases their chances of contracting HIV/AIDs. Moreover, terms of exchange become more unfavourable in times of food insecurity [71], which are predicted to become more common under future climate change [72]. Hence, procedural justice barriers in the present could trap people into downward spirals of vulnerability that worsen over time.

Results of power analyses should be used to identify context-specific enabling factors that help overcome resource barriers to procedural justice for the most vulnerable. Findings from Malawi and elsewhere [42,73] suggest that childcare provision and access to improved cook stoves (that use less firewood) could reduce caregiver barriers to procedural justice for female-household heads. Improved water access could also encourage more widespread involvement of women because household water collection burdens often fall upon women across sub-Saharan Africa [74]. The literature emphasises that CB-CCD can usefully incentivise mitigation and/or adaptation activities in developing countries by generating short-term development benefits [9]. However, to encourage the involvement of the extremely resource poor in CB-CCD, immediate-term benefits may be needed to offset the opportunity costs of foregoing alternative livelihood activities that sustain their hand-to-mouth existence.

CB-CCD projects must also consider how to overcome barriers to procedural justice for vulnerable people that result from invisible power dynamics. A culture of dependency on external development organisations exists in Malawi because households doubt that their own capabilities are enough to ensure prosperity. This is likely linked to a legacy of colonialism and dictatorship. Limited extension services may have closed down procedural justice opportunities if project field assistance was removed following the ECRP's formal end in 2016. Under the ECRP, well-trained VEMs helped many local people develop the necessary human resources to implement project activities. The 'VEM approach' could help overcome problems associated with patchy extension services that are found in many developing countries [46]. However, households' longing for external assistance means the VEM approach may be insufficient for preventing the closing down of procedural justice opportunities once extension assistance is removed.

5.4. Take Steps to Reconcile World Views through Project Implementation (and Design)

In Wood et al. [48], we argue that to avoid misrecognition through the incorporation of mitigation in CCD, steps should be taken to reconcile project developers' worldviews (which are often grounded in climate science) with those of local people and other stakeholders through project design. We suggest a range of methods for doing this (including community mapping and modelling, climate 'schools' and theatre-for-development) [48].

Evidence presented in this article shows that, in cases where CB-CCD project developers are unable or unwilling to reconcile stakeholder worldviews, local people's participation in mitigation activities during project implementation may be motivated by incomplete or misunderstandings of what they are doing and how they and others might benefit (an invisible power dynamic).

Local people may not always be able to give their full, informed consent to participate in mitigation activities if this contingent on them understanding and assimilating a scientific worldview. In such cases, project developers must make decisions create trade-offs between procedural and distributive justice. Proceeding with activities that generate mitigation benefits may be appropriate providing that they also facilitate substantial and locally-valued development and adaptation gains. However, this should go hand-in-hand with continued efforts to reconcile worldviews and reduce local people's invisible powerlessness during project implementation.

5.5. Establish Independent Grievance Procedures

Independent grievance procedures allow local people to report their concerns about project governance and facilitation—increasing their power to help set the agenda for project implementation. They could also identify causes of procedural injustice that are not captured by power analyses. ECRP project staff recognised the value of independent grievance mechanisms and have begun to implement different approaches, including 'Scorecard' see also [75] and Community Accountability Boxes.

The majority of International NGOs are now signed up to accountability standards such as the INGO Accountability Charter, the ISO26000 Standard and the Core Humanitarian Standard on Quality and Accountability. These standards commit to ensuring that local complaints about project implementation are heard and addressed [76,77]. However, most grievance procedures are NGO or project specific and lesson-sharing around good practice is limited [77]. Peer-reviewed evaluations of different methodologies are scarce. Research that addresses these gaps will be crucial for developing robust mechanisms that can be tailored to specific local conditions.

5.6. Challenge Supra-Local Drivers of Vulnerability

Institutional linkages meant ECRP projects were well placed to challenge supra-local drivers of vulnerability. Advocacy strategies provided channels for local issues identified through monitoring and evaluation to influence district, national and international policymaking. Efforts to strengthen and link VCPCs with Area and District governments provided opportunities for local people to communicate the specifics of their marginalisation and powerlessness. ECRP projects therefore

broke with previous community-based approaches that have framed target populations' vulnerability to climate and development shocks as an exclusively local issue—an invisible power dynamic [8]. However, exclusion and limited NGO resources (visible powerlessness) mean that only a very limited sample of households gained a voice in these processes.

To holistically contest local vulnerabilities, CB-CCD projects must form part of wider social movements for change [16]. Resource limitations might prevent projects from taking supra-local action. In such circumstances, umbrella organisations, instituted by civil society or governments, could help draw on project experiences and coordinate appropriate responses.

6. Conclusions

Through study of the ECRP, this article has evaluated the procedural (in)justice implications of CB-CCD and ascertained how power shapes and conditions them. It has identified ways in which CB-CCD implementation processes can better facilitate procedural justice. In doing so, it augments the CCD literature, in which research that evaluates efforts to achieve CCD triple-wins through individual community-based initiatives is scarce. It provides new insights into similarities and differences between the procedural justice implications and power dynamics of projects that pursue CCD triple-wins through community-based approaches compared with projects that pursue single- or double-wins.

Study of ECRP projects in Malawi finds that many households have been well engaged in project activities, management and decision-making. However, the participation of others—including many of the most vulnerable households—is inappropriate given the policy problems being addressed through project implementation. Visible, hidden and invisible power dynamics conditioned and shaped patterns of procedural justice and injustice. We argue that CB-CCD projects must understand, manage and, in some cases, directly challenge cross-scalar visible, hidden and invisible power in order to facilitate widespread recognition and genuine participatory opportunities.

To ensure the legitimacy of power management strategies, they must be underpinned by co-produced analyses that draw on local stakeholders' insights. We propose that procedurally just CB-CCD implementation requires that projects build on the findings of these analyses to reduce opportunities for powerful actors to dominate implementation processes; and identify enabling factors to engage the most vulnerable. To help households challenge cross-scalar power asymmetries, projects must also establish independent grievance procedures and integrate co-produced knowledge into wider movements for change. We acknowledge the complexities in managing power through CB-CCD but also maintain that project 'neutrality' in respect to power is seldom possible—in practical terms, neutrality translates into implementation processes that serve the powerful and disadvantage the powerless.

Methodologies to translate our recommendations into practice need to be developed and refined. Some promising participatory methodologies already exist for analysing and managing power (for example REFLECT [78]; Scorecard [75]; co-learning techniques—[7]). They need to be road-tested and, where necessary, adapted to the context of CCD. Building on the lessons presented here is crucial for improving local involvement in, and acceptance of, projects and, in so doing, helping to win the battle for CCD.

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