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Participatory Video Proposals: a tool for empowering farmer groups in rural innovation processes?

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Abstract:

While efforts are increasingly made to democratize research relationships, empower participants and include marginalised voices in agricultural research for development, it is acknowledged that power imbalances in knowledge creation remain integral to researcher-participant relations. Moreover, published results seldom report on the different dimensions that empowerment can encompass. This paper addresses this gap, presenting an original methodological approach for collaborating with smallholder farmers and developing an analytical framework to critically assess associated modalities of empowerment. With the intention of developing more democratic processes of knowledge production to support innovation processes, five smallholder farmer groups were invited to apply for action funds to co-develop innovations to enhance livelihoods. Employing participatory video (PV), groups applied for the grants using a 'video proposal'. Group members collaboratively produced videos representing their problems, aims and innovation plans. Having conducted participant observation, interviews and feedback sessions with the farmer groups, key findings around group empowerment are presented and reflected upon with regard to the different modalities of "power- to", "power-with", "power-within" and "power-over".

The PV proposal process proved to be a good tool for supporting farmer group capacity building and the development of competencies in relation to farmers' rural innovation projects. The processes enhanced farmer groups' "power-to" in terms of planning capacities. This fostered motivation for action and a sense of collective ownership; thus building "power-with" within the groups. The understanding of power mobilised in this paper enabled us to highlight some context-specific limitations to democratising research relationships and creating more inclusive spaces for participatory action research and rural innovation development. These are related to entrenched socio-cultural power dynamics within the groups and to possibilities to sustain the empowerment process beyond the duration of the project. Nevertheless, funding agencies and local rural development organisations could consider the method discussed in this paper as a valuable tool for assisting marginalised groups in accessing innovation funds.

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Introduction

Participatory rural innovation processes are characterised by an appreciation of farmer-generated knowledge and a prioritisation of farmers' perspectives and decisions (Cuéllar-Padilla and Calle-Collado, 2011). While efforts are increasingly made to democratize research relationships, empower participants and include marginalised voices in agricultural research for development (ARD), it is acknowledged that power imbalances in knowledge creation remain integral to researcher-participant relations (Chambers, 1997; Cooke and Kothari, 2001; Hayward et al., 2004). This is perhaps especially the case in ARD in the Global South, which often involves a strong contingent of professional agronomists based or trained at Western universities. Moreover, while the involvement of practitioners (in this case, farmers) is central to participatory ARD, published results report less frequently on the so-called "empowerment" (Brandt et al., 2013) of farmers, or on the different dimensions that empowerment can encompass (Rowlands, 1995; Bartlett, 2008). This paper addresses this gap, presenting an original methodological approach for collaborating with smallholder farmers and developing an analytical framework to critically assess associated modalities of empowerment.

With the intention of developing more democratic processes of knowledge production to support innovation processes, a Participatory Action Research (PAR) approach was designed within the frame of two ARD projects operating in Kenya and Tanzania[1]. In the 'discovery' phase (Restrepo et al., 2014: 44) of these projects, five smallholder farmer groups were invited to apply for Action Funds to implement innovations. This served to give farmers decision-making power over the choice of innovation and the way the innovation should be implemented. Through participatory video (PV) activities, groups applied for the grants using a video proposal A video proposal communicates a project concept in audio-visual format, setting out details such as context, capacities, aims, action plan and budget so that a funder can assess the plan and make a decision on whether or not to fund it. An underlying (optimistic) motive of this approach was to facilitate a process of empowerment, in terms of supporting capacity development and enhancing the effectiveness of farmer groups in relation to their future innovation projects. The PV method, in particular, aimed to support the groups in jointly

[1] Both ARD projects are financed by the German Federal Ministry of Education and Research and the Federal Ministry for Economic Cooperation and Development, under the framework of the GlobE project. Trans-SEC ("Innovating pro-poor strategies to safeguard food security using technology and knowledge transfer: a people-centred approach") aims at "improving the food situation for the most vulnerable rural poor population in Tanzania by identifying successful food securing upgrading strategies (UPS) and/or innovations along local and regional food value chains (Riisgaard et al., 2010; Gómez et al., 2011), test and adjust them to site-specific, sustainable settings and tailor these concepts to be disseminated for regional and national outreach" (Graef and Sieber, 2013:1, unpublished project proposal) (see http://project2.zalf.de/trans-sec/). RELOAD ("Reduction of Post Harvest Losses and Value Addition in East African Food Value Chains") aims to improve knowledge, build capacities and develop technologies that help reduce post-harvest losses in Eastern Africa (unpublished project proposal http://reload-globe.net/cms/.)

conceptualising their innovation processes, while at the same time creating 'spaces of inclusion' (Caretta and Riaño, 2016: 261) in which power relations could be renegotiated. Although PV as a methodology has been hailed as an appropriate tool for empowering participants in various ways (White, 2003; Colom, 2011), this paper suggests a more cautionary appraisal.

In the section that follows, we situate our methodological approach in relation to the literature on participatory rural innovation processes. We then define a framework for exploring empowerment and power relations within such processes. The relevant literature on PV is reviewed, with attention placed on arguments relating to PV and empowerment. Significantly, there is very little published on the specific topic of *participatory video proposals*. The paper thus explains the method and steps involved in the participatory production of video proposals. Having conducted participant observation, interviews and feedback sessions with the farmer groups, key findings around group empowerment are presented and reflected upon with regard to the different modalities of "power-to", "power-with", "power-within" and "power-over". We especially highlight farmers' perspectives on the participatory process of video production, with regard to its contribution to empowering (or not) the farmer groups across these different modalities, before offering our own critical reflections as researcher-facilitators of the process. In conclusion, we address the question: "to what extent are PV proposals a tool for empowering farmer groups in participatory rural innovation processes?"

Participatory rural innovation: strategies to empower farmers

Participatory approaches to ARD have a long and far from linear history and are critiqued and celebrated in seemingly equal measure. Notwithstanding the prominent and pertinent commentaries concerning the ethical (Cahill, 2007), political (Cooke and Kothari, 2001; Pugh and Richardson, 2005) and epistemological (Janes, 2016) questions raised by the practices and the rhetoric of participation, several recent rural innovation projects[2] push forward an agenda of participation, inclusion and integration of stakeholders (cf. Restrepo et al., 2014). While ethical and political justifications can be made for this, a participatory approach is to a large extent a pragmatic one, aiming to better solve practical and wicked problems related to rural livelihoods and agricultural systems (Folke, 2002; Kaufmann et al., 2013). Participatory rural innovation processes are thus situated within this striving for more appropriate and effective solutions.

Since the 1990s, PAR has been a key framework through which researchers have sought to engage with farmers in more collaborative ways. Reason and Bradbury (2006) define PAR as 'a participatory, democratic process concerned with… [bringing] together action and reflection, theory and practice, in participation with others in the pursuit of practical issues of concern to

[2] For example Krupnik et al. (2012), Podestá et al. (2013), Halbrendt et al. (2014), Roba et al. (2017), Jerneck (2018).

people, and more generally the flourishing of individual persons and communities' (p.1, cited in Kindon et al., 2007:11).[3] Despite these intentions of PAR-driven projects, there remains an ongoing problematic issue around taking ownership of the problem and/or solution at stake, especially since these collaborations are initiated by scientists and funds are normally in the hands of research institutes who received them from donors. To promote local innovation, grants for farmers are one way in which scientists have tried to address this issue. As has been noted by "Local Innovation Fund" pioneers, grant funds specifically targeted to smallholder farmers are a promising agricultural policy instrument (Katz and Barandun, 2002; Waters-Bayer et al., 2004). Evidence suggests that such funds stimulate smallholders to experiment with improved practices and to engage with research, extension and business development services providers (Wongtschowski et al., 2010; Ton et al., 2015). Past experiences of the German Institute of Tropical and Subtropical Agriculture (DITSL) with integrating group "Action Funds" into participatory innovation projects in Mozambique, Kenya and Mali, have also demonstrated that such funds enhance learning opportunities and farmers' sense of ownership over their innovations (Kaufmann et al., 2013). However, putting financial management and control into the hands of farmers does not *necessarily* lead to success (Mieves, 2016). Due to a variety of issues, including a lack of group unity and trust (possibly leading to group failure), unforeseen environmental constraints and/or a competency deficit, such innovation projects can and do still fail.

Friis-Hansen and Duveskog (2012) argue that groups must be further supported to develop capacity to articulate their demands upon ARD and extension systems. Indeed, with farmer groups such as community based organisations (CBO) often playing a pivotal role in innovation processes (Dongier et al., 2003), it is essential that such groups are supported to develop the necessary competencies for implementing, managing and communicating their own projects (Manji and Naidoo, 2005). For farmer-managed innovation funds to be more successfully mobilised for sustainable action, such competencies need to be developed as a basic prerequisite for success. It is thus recognised that tools should be developed to support ongoing learning and empowerment as an integral part of participatory innovation processes.

One such tool, increasingly employed to support innovation projects, is PV (Chowdhury and Hauser, 2010). In 1999, Johansson et al. defined PV as:

> '...a scriptless video production process, directed by a group of grassroots people, moving forward in iterative cycles of shooting-reviewing. This process aims at

[3] PAR is further characterised as involving: participatory communication tools; collaborative relationships between community practitioners and researchers in a joint process in which both contribute (McTaggart, 1991); co-learning (Stuttaford and Coe, 2007); local community empowerment, and; focus on creating change in a system for the betterment of the community (Greenwood et al., 1993; Minkler, 2000).

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> creating video narratives that communicate what those who participate in the process really want to communicate, in a way they think is appropriate' (1999:35).[4]

As indicated by the title of Shirley White's (2003) edited collection *"Images that transform and empower*", PV has become firmly aligned with discourses of transformation and empowerment. Since the publication of Shaw and Robertson's (1997) *Participatory video: A practical approach to using video creatively in group development work,* PV has become a popular tool in the frame of community development projects but also since the 2000s, in social science research, accompanying the general transition towards more participative approaches (Pain, 2004). It has been argued that PV encourages iterative group learning and empowerment by putting the camera, directorship and video-making skills into the hands of the community (Lunch and Lunch, 2006).

It is in this context that the authors combined the elements of PAR, local innovation funds and participatory video for collaborating with five farmer groups. In adopting this integrated approach, a goal of the researchers was to facilitate an innovation process that could also have the potential to catalyse "empowerment" processes[5] (Bartlett, 2008). More specifically, a key motive for using PV to develop the farmers' proposals was to create an inclusive space in which hierarchical relations between scientists and farmers and also between farmers in the group could be disrupted and renegotiated. Moreover, it was hoped that the PV proposal process might foster group learning and competency development, so that the farmers could be better able to implement, manage and importantly, to communicate their innovation projects. However, we would not wish to imply that by participating in such a process, "empowerment" was a necessary outcome. Rather, in considering the relationships between methodological processes and empowerment-related outcomes, we adopt a cautious approach to power and empowerment. Following Shaw (2016), we take heed that '[t]here is a pressing ethical need to acknowledge the messy reality of practice, interrogate the power dynamics as processes evolve and incorporate participants' experience of taking part' (Shaw 2016:419). This paper engages with this call by critically interrogating the "messy reality" of our experiences with using PV for making video proposals with smallholder groups in Kenya and Tanzania. Having connected this study to the context of the participatory rural innovation, we now review and connect the current debates around empowerment and PV.

[4] The use of PV has expanded exponentially since the mid-2000s and with it, associated interpretations (High et al., 2012; Milne, 2016).

[5] As opposed to an "adoption process", which is the more conventional goal of ARD innovations projects (Bartlett, 2008).

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The empowerment potentials of Participatory Video

Conceptual framing of empowerment

Before one can respond to questions concerning the potential of PV to empower, it is necessary to define what is meant here by "power" and "empowerment". These terms are deeply contested and remain the subject of ongoing conceptual debate across the social sciences (). Here, we utilise a prevalent conceptualization of power that differentiates between different modalities in terms of "power-over", "power-to", "power-within" and "power-with". In the discourses around empowerment, the notion of having capacity to act (Carr, 2003; Alkire, 2008) or, "power-to" (Rowlands, 1995) features strongly and can be distinguished from the exercise of violence, force and authority that tends to characterise "power-over" (Allen, 2016:3)[6]. Empowerment in terms of enhanced "power-to" is a generative definition: 'an increase in one person's power does not necessarily diminish that of another' (Rowlands, 1995:102). Further, power is a potential rather than an actuality; it can be thought of as the capability to shape possible futures (Allen, 1998:2).

Empowerment in general is considered to be processual, involving an enhancement of both "powers-to" and "powers-over", over time; for example, Zimmerman (1995) describes empowerment as 'a series of experiences in which individuals learn to see a closer correspondence between their goals and a sense of *how to* achieve them, gain greater *access to* and *control over* resources, and where people, organizations, and communities gain *mastery over* their lives' (p. 583, our emphasis). Rowlands also emphasises that empowerment 'must be about bringing people who are outside the decision-making process into it' (1995:102). She goes on to highlight the additional importance of including 'processes that lead people to perceive themselves as able and entitled to occupy that decision-making space' (*Ibid*:102). This implies an additional sense of power as "power-within" (Bery, 2003); of building self-esteem, awareness and confidence (Rowlands, 1997; Nikkhah et al., 2011).

However, as highlighted by Rowlands (1995), efforts to foster empowerment processes often focus on the individual level and imply that a sense of agency and "power-within" will enable a person to change their existing situation, or reduce constraints. Reflecting on the difficulties of this in reality, Carr (2003) suggests that 'empowerment is an inherently interpersonal process in which individuals collectively define and activate strategies to gain access to knowledge and power' (p.18). Recognition of the inter-personal group/community dimension of empowerment is commonly framed as "power-with" and focusses on social connection, mobilisation, alliance,

[6] Confusion arises when one considers that power-over relations can be defined as a derivative form of power-to (Allen 1998).

cooperation and coalitions. With this emphasis, Carr thus recommends 'long-term, intensive, small-group work is a highly efficacious means of empowerment practice' (*ibid.*:19).

Critically, it has been highlighted that empowerment discourses, particularly in development contexts, have a tendency to take 'the troublesome notions of power, and the distribution of power, out of the picture' (Rowlands, 1995:106; cf. Cooke and Kothari, 2001). Focusing on individual, group or local-level empowerment can hide more systemic relations of domination and inequality (Granovetter, 1985). As such, Pettit (2012) argues that projects that aim to foster empowerment should not forget that 'the power relations that drive inequality and exclusion do not yield easily, and efforts to challenge them can be quickly 'hollowed out', co-opted or rendered tokenistic' (*ibid*.: 2).

Importantly, the different forms of power that have been identified above *all* operate within and upon every given situation. For example, in their work on community forest management in Nepal, Nightingale and Ojha (2013) suggested that in each social interaction, there is the possibility for power relations to be performed as "power-over" and "power-to" simultaneously. Thus, power relations between different agents can be changed or resisted, but always with reference to existing conventions and in the context of systemic inequalities.

Participatory video and empowerment claims

Having set up a conceptual framework for the consideration of power and empowerment, we now briefly review the PV literature from this perspective. There is little information available pertaining to the use of PV for producing video proposals, but more broadly, PV has been deployed in different types of projects to foster enhanced participation, inclusion and dialogue (Odutola, 2003; Goodsmith, 2007; Harris, 2009). PV has been described as "amplifying voices" (Lemaire and Savage, 2012) and enabling self-representation. In this regard, it is positioned as a bridge, representing communities' concerns or project outcomes to policymakers, academics and/or donors and thus, enhancing participants' "power-to" in terms of communication and representation (Kindon, 2003; Howley, 2005). Using PV, academics such as Mistry and Berardi (2012), Hurst (2014), Davis (2015), Wiebe (2015), Bignante et al. (2016), and Milne (2016) have attempted to decolonise the process of research by integrating local knowledge and enhancing participants' "power-to" influence the research process. Video has also been embraced for its ability to travel, overcoming distance to communicate with the outer world (Van Mele, 2006; Harris, 2009; Purcell, 2009). In such ways, PV can be understood to foster participants' "power-to" speak out and exert influence.

A further empowering aspect of PV is framed in terms of enhanced competencies, commonly including the acquisition of ICT skills and improvement of communication skills such as listening

and public speech (Stuart and Bery, 1996; Boni et al., 2017). The competency to cultivate and communicate group knowledge, it is suggested, strengthens capacity for action, or again, the "power-to" of participants). However, such competencies cannot be assumed to result from PV and Gumucio-Dagron (2009) highlights the need for careful attention to the appropriateness of the technology to the specific context of use. Plush (2013) also suggests that for PV to really enhance participants' "power-to", it needs to be embedded in longer-term projects so that competencies can be practiced and put to sustained use.

In addition to the above arguments around representation, communication and enhanced competencies, there are many claims regarding the effect of PV as a social leveller. Such arguments articulate the notion of "power-with". The idea is that through the participatory communication process, power asymmetries within the group can be addressed, serving to improve group dynamics. In their influential 2006 *Handbook for the field,* which has been accessed by thousands of facilitators and groups around the world[7], InsightShare propose that:

> The ability of the video format to replay footage instantaneously using the playback function creates a lively feedback loop and serves to reflect back "our reality". Watching footage is an intimate group experience. *PV brings everyone to the same level. Hierarchies that exist outside the workshop space tend to disintegrate*. The participants are constantly changing roles, from camera operator to subject, from director to actor, and the dynamics of power are constantly shifting. *The footage captured is truly a joint endeavour and as such demands the development of joint ownership and joint responsibility* (Lunch and Lunch, 2006:56, our emphasis).

The collaborative, interactive nature of the PV process, it is suggested, allows for intra-group relations to be reshaped. It is thus suggested that the video-making process and its outcome can cultivate "power-with" through building a group's collective sense of achievement and ownership (Sawhney, 2009). With reference to the affective properties of video as a tool for group therapy, Oravec (1995) discusses how video images and the narratives that are constructed around them can help groups to congeal, enabling them to see themselves as a unit. Oravec's study also implies ways that group-produced videos can capture, reinforce or irritate group power dynamics: 'Much in the way that some spoken phrases are performative, certain images can be used explicitly to alter or reinforce already-sanctioned relationships or construct new categories of social interaction' (p.435).

In addition to irritating power asymmetries within groups, studies also suggest that power relations between groups and the wider community can also be affected by the PV process.

[7] Accessed at: http://insightshare.thisisyoursite.co.uk/resources/insights-into-participatory-video-a-handbook-for-the-field

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Harris (2009) and Peters et al. (2016) reported that reciprocity and trust between participants and other members of the community were enhanced during a PV-driven research process. For example, working with sufferers of leprosy, Peters at al. (2016) found 'demonstrable effects on community stigma are achieved by screenings of the videos' (p.680). The videos made by stigmatised leprosy sufferers shared knowledge about the disease as well as giving insights into the lived experience of the stigmatised participants. Promoting a shared understanding and a sense of empathy in this way can support community trust-building. Further, in some contexts, simply taking part in a video project may increase the social capital or respectability of the makers (Fernandez, 2016).

Thinking further about the PV group-community nexus, empowerment of participants to initiate change in their community has also been observed and is often explained in terms of a process of conscientisation (Freire, 1972): '[t]he impossible becomes possible. A new experience of feeling powerful, of "empowerment", can lead to the group making local interventions, for example to improve the quality of life in the neighbourhood' (Lunch and Lunch, 2006:56). This ability to influence social change is explained in terms of an awakened "power-within", constituted through a new awareness or confidence in one's own agency (White, 2003; Plush, 2013; Boni et al., 2017).

Drawing attention to the relationship between researcher/facilitator and participants, Sara Kindon has argued that PV offers potential for researchers to "look alongside" rather than "look at" participants (2003:143).This argument is echoed by Mistry and Berardi (2012) who suggest that PV challenges the traditional narrative of 'male/white/Western film-maker or ethnographer representing the "other"' (p.2). Facilitators and participants can exchange roles during the production process, in front and behind the camera, which may lead to enhanced levels of trust in the research partnership. In that regard, PV can be said to destabilize traditional power relations and to some extent undermine notions of academic authority, giving participants "power-over" the video/research process and outcome.

In sum, the literature suggests that PV may enhance participants' "power-to" in terms of communication, self-representation and agency. In relation to cultivating "power-with", PV is said to disrupt social hierarchies within groups and include marginalised voices. The approach is also argued to potentially instigate a process of personal conscientisation, enhancing the "power-within" of individuals and groups and thereby enhancing their sense of "power-to" influence their own lives as well as the wider community. Finally, this review has highlighted the argument that PV can disrupt norms of authority and ownership in the production/research process, giving participants "power-over" decision-making.

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While the arguments for the potential of PV as a tool enhancing participants' "power-to", "power-with", "power-within" and "power-over" are clear, it is important to give attention to the *critiques* of the empowerment narrative within which PV has become embedded (Shaw, 2012; Milne, 2016). First, important ethical issues have been raised in terms of anonymity and informed consent, given that one cannot always be sure of how far a video can travel (Richardson-Ngwenya, 2012). Moreover, there is every reason to assume that PV, as a social process, includes/excludes some people more than others. As Shaw concurs, '[c]ommunity practitioner-researchers are enthusiastic about participatory video's potential in opening space for new relational dynamics to evolve across difference. In reality, practice involves negotiation between intention to build expressive agency and the (often conflicting) agendas of the various positioned project actors' (Shaw, 2016:419). A critical issue is that as a group process, PV has potential to empower *some,* but not without potentially dis-empowering others; equitable experiences of "power-to" and "power-with" cannot be taken for granted (Cleaver, 2001, 2004).

Further, the potential of PV to shift power relations between researcher-facilitator and participants has been critiqued (Kindon, 2016; Walsh, 2016). Coming and going from a community bringing in (relatively) expensive equipment, researchers may re-inscribe power structures before a single workshop has taken place (Mitchell et al., 2016). Further, when funding is most often derived from the research side of the PV relationship, this can result in power-laden expectations and demands from both participants and researchers). PV processes are likely to lead to topics and outcomes beyond the initial aims of the researcher, and the researcher's obligation to meet original proposed objectives may then collide with emerging demands from participants (Mistry and Berardi, 2012; Mistry, Bignante and Berardi, 2016). While research project agendas may be adapted in order to incorporate divergent needs so that participants' interests are met, critics have highlighted that beyond the project life cycle, researchers are likely to receive more benefit from their own participation in the video project than the supposed "beneficiaries" (Walsh, 2016).

Participatory Video proposal production: context and process

In the framework of two transdisciplinary ARD innovation projects, five smallholder farmer groups (Table 1) were invited to collaborate with DITSL. As far as was possible within the project contexts, farmers had the status of co-researchers; they had a voice in the process of defining, designing, testing, implementing and evaluating sustainable solutions for jointly defined real-world problems. The groups in Tanzania are located in the Central and Eastern provinces of Dodoma and Morogoro. While these groups are quite different from each other, they share some similarities. They were invited to collaborate in 2014 following interviews with 12 group leaders, a few months before the video proposal phase began (citation removed to anonymise). They were approached by the project team on the basis of being pre-existing and active farmer

groups with a mixed-gender membership of between 10 and 25 people. Groups were mainly agricultural in focus and membership was not restricted to particular religious or political affiliation. Before the groups were selected for participation, they were asked to articulate some specific hopes for how they wished to move forward, so that researchers could gauge whether collaboration with the project could be beneficial to the farmers.

The group in Idifu was composed of largely non-literate farmers and included elderly members. Levels of education and income were low. In 2014, they were focused on papaya production but were not making any income from it and were looking to develop a new income-generating strategy. The Upendo farmers in Changarawe offered a strong contrast. This group was dominated by younger members who were involved with agriculture as well as off-farm enterprises. They had a fairly successful horticultural project and wanted to expand their activities to include a small local transport (bicycle rental) business. This group, although successful economically, had a larger membership and struggled more with intra-group communication and conflict. The third group, Tuamiho, was a calmer, well-organised group running a small horticultural project. They were particularly active in training and extension activities in their community and wished to build on their existing activities to improve output. The Tanzanian groups all demonstrated innovative behavior through their activities but had no experience with making project proposals, written or otherwise.

The two groups in Kenya are located in Nakuru County. Group members are mainly smallholder dairy farmers trying to increase the benefits from milk production. In both groups, membership was not restricted to particular religious or political affiliation. The project team was initially looking for smallholder farmers engaged in milk production activities, willing to commit to a collaborative learning process to reduce milk post-harvest losses.

The Mukinduri Self-Help Group (SHG) was created in 2013 in the frame of the ARD project after farmers in the village stated (to the research team) their desire for learning together to improve the benefits from milk production. The group is composed of 20 small-scale dairy farmers from different tribes, including men and women of various ages. Some members had previous (unsuccessful) experience in applying for funding with other groups.

In Lare (village), numerous ARD projects by different development agencies and research institutes were carried out. According to the local leaders from the village, the externally-driven ARD projects had not led to results expected by the community. The Lare Community Based Organization (CBO) formed in response, following an increase in the awareness of community leaders about the importance of working together to solve their own problems, rather than depending on externally-led projects. After several interviews with the group leaders in 2014, the Lare group was invited to collaborate with DITSL.

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Agriculture is the main economic activity in the areas where the groups are located. The contexts and profiles of the five smallholder farmer groups, presented briefly in Table 1, are diverse. Each group had different capacities, needs and goals, and they accordingly implemented diverse self-defined innovations within the frame of the projects.

Table 1 Group profiles and innovation projects implemented

Case studies: Project frame and participating group	Location	Number of members	Problematic situation communicated in the video proposal	Self-defined innovation proposed in their video
Case study 1: ReLOAD, Mukinduri Self-Help-Group	Nakuru Highlands Kenya	20	Reduced milk production during the dry season	Testing different types of (drought resistant) fodder
Case study 2: ReLOAD, Lare CBO	Nakuru Lowlands Kenya	20	Reduced milk production during the dry season	Silage making – conservation of fodder to buffer seasonality
Case study 3: Trans-SEC, Upendo	Changarawe village, Morogoro region, Tanzania	25	Need for regular cash income to support horticultural investments	Bike rental enterprise
Case study 4: Trans-SEC, Wendo	Idifu village, Dodoma region, Tanzania	12	Need for cash income and diversification; low income from agricultural activities	Soap commercialisation
Case study 5: Trans-SEC, Tuamiho	Ilakala village, Morogoro region Tanzania	17	High manual labour involved in irrigation of group garden; need for better income generation	Irrigation upgrade

With the intention of developing more democratic processes of knowledge production to support innovation processes, groups were invited to apply to Action Funds (up to 500 Euro per group) using a PV proposal [8]. The PV proposal method was designed to enable group members to collaboratively produce their own videos representing their problems, aims and plans. An underlying intention of this approach was to support group members in democratically

[8] The decision to grant or not the funds to the groups depended on the assessment of DITSL.

conceptualising, planning and communicating their innovation projects and in the process, to define necessary competencies for implementing their chosen innovation.

Participatory Video Exercises

To produce the PV proposal, it was necessary to introduce basic skills in (video) camera handling to the groups as well as techniques on video planning and making. The structure and organization of the activities was based on "Making Video Proposals: A guidebook for Community Groups" (Ngwenya, 2010). The workshops conducted with the five groups followed a similar structure, but were adapted according to group context and circumstances (Figure 1). The research team aimed to make activities as participative and inclusive as possible by encouraging all participants to adopt different roles, which included presenting, audio controlling, camera operator or director.

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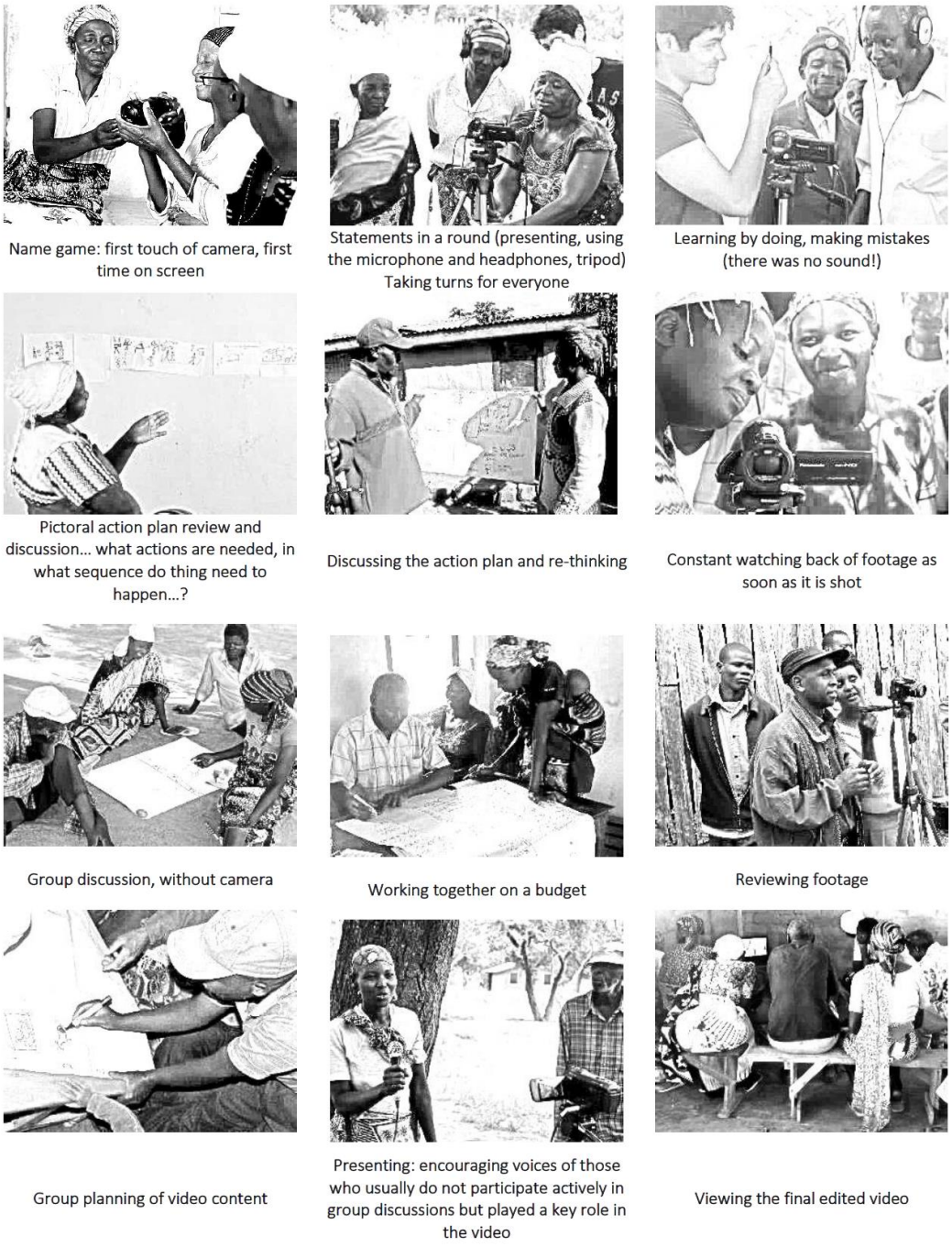

Figure 1 The Participatory Video Proposal process (starting from top left, ending with bottom right, but the steps in between followed a different order for the different groups)

During the PV process, participants were first introduced to the basic functions of camera and the use of tripod through playing group games. Researchers and group members established ground rules together to govern group interactions during the workshops, the use of the camera

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in the local environment and the use of recorded materials by the projects, researchers and the group itself. Activities to better understand the farmers' problematic situation and to facilitate the development of action plans took place and included resource mapping, problem trees, visualisation of group goals, participatory photography and road journeys. In parallel to these context-focussed activities, the groups were introduced to video making techniques, shot types and storyboarding. The final video making project was conducted in the last stage and was carried out following a structure previously determined by the research team, but which each group planned and adapted to deliver its message in a customized way. These core elements of the video structure included a presentation of the problem faced by the group, their solution, an action plan which includes where necessary a marketing strategy, risk assessment[9] and budget.

Farmers' perspectives on the process: data collection and analysis

After the groups had developed their video proposals and received the Action Funds, a qualitative research approach was employed to reflect back and gain insights into the farmers' perspectives on the PV proposal experience. In Tanzania, the innovation implementation process was in its early stages, whereas in Kenya, the innovations had already been tested and evaluated by the groups. The second and third authors of this paper conducted 73 semi-structured interviews, including critical incident questions (after Brookfield 1995) where farmers narrated their most remarkable learning experience in producing a video proposal, including benefits, difficulties and suggestions for improvements. Five narrative interviews were conducted (after Jovchelovitch and Bauer 2000), where farmers recalled specific parts of the process of producing the video proposal. Finally, three feedback sessions were conducted, where farmers gave accounts of their personal experiences of producing the video proposal (Table 2). During these sessions, critical reflection was encouraged. The fact that the same personnel who facilitated the participatory video proposal process also conducted the evaluation and feedback activities, poses a potential problem in terms of bias, with both participants and facilitators more likely to reflect positively on the experience. Further, participants could have been inclined to withhold criticisms, given their hopes for gaining more support for their projects in future. This is something borne in mind when discussing results in the section below, which places emphasis on critical reflections. Moreover, during interviews and feedback sessions, efforts were made to focus on learnings, problems and challenges and through the narration of experiences, researchers could learn the basis on which farmers perceived different outcomes.

[9] Only in the Tanzanian groups

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With the permission of every farmer, all interviews and sessions were audio recorded. The duration of the interviews and sessions was between 45 and 90 minutes. The recordings were later translated and transcribed for qualitative content analysis. Conscious of the possible bias resulting from our multiple roles as facilitators and researchers, we initially found that our "results" were overly positive in terms of farmers' reflections on the PV proposal experience. We then reframed the data analysis approach, explicitly seeking to find examples of negative or critical reflections from the farmers and importantly, analysing the farmers' comments from a sceptical standpoint.

Table 2 Data collection methods[10]

	Semi-structured interview	Narrative interview	Feedback session
Mukinduri SHG	20	3	
Lare CBO	20	2	
Wendo	12		1
Upendo	11		1
Tuamiho	11		1
Total	73	5	3

The framework for analysing the data (see Table 3) mobilised the four different modalities of power presented in this paper. Codes reflected aspects of empowerment that are elaborated in the literature review. The Computer-Assisted Qualitative Data Analysis software, RQDA, (see Huang, 2014), was used to select and code data segments, create memos and build families of codes, based on themes that emerged from the data (as described by Attride-Stirling 2001; Braun and Clarke 2006; Flick 2009).

Key findings: participant empowerment and the video proposal process

Analysing the data through the lens of the conceptual framing presented above, key themes emerged and are summarised in Table 3. Farmers' perspectives on the PV proposal process indicate that power relations were affected across all four modalities; more significant positive results related to enhanced "power-to" and "power-with". Although results are presented according to the four modalities, it is important to remember that (as highlighted in the review) different forms of power operate within and upon every given situation and it is possible for

[10] The difference between the number of feedback sessions and narrative interviews is due to the different timeframes and agendas between the in Kenya and Tanzania projects. The feedback sessions included for analysis here were with the Tanzanian groups and the narrative interviews were undertaken in Kenya.

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power relations to be performed across different modalities simultaneously. For example, the act of self-representation can embody "power-to" and "power-over" at the same time.

Table 3 Summary of aspects of empowerment through the PV proposal process, in relation to four modalities of power

Power modality	Key findings: aspects of "empowerment" through the PV proposal process
to	• communicate and represent • create a clear and logical plan to execute projects • produce own videos • influence wider community
with	• enhanced group unity/consensus • enhanced transparency • building trust, solidarity or initiating change with wider community
within	• enhanced confidence, self-esteem
over	• decision-making within their innovation plan • self-representation to outsiders

i.) Power to

During the process of producing the proposals, farmers built competences and skills to: 1) communicate and represent, 2) create a clear and logical plan to execute projects, 3) produce own videos, and 4) influence wider community.

Communicate and represent

In the five groups, farmers with different literacy levels recognized the advantage of producing video proposals to communicate with the donor and obtain the grant. Some group members in Kenya had previous experience applying for grants in other groups in which they had participated. Here, it is a common practice to pay an external consultant to write proposals, with minimal input from the (literate) group leaders and no contribution whatsoever from regular members. In contrast, as expressed by one of the farmers, "*borrowing grants using a video proposal is very simple; it can be used by farmers and does not depend on whether one knows how to write or not. So even an illiterate person can do a video.*" (Lare CBO member). During feedback sessions and interviews in Tanzania, participants said that "thanks to the video", they were able to communicate with the project donor more directly. In the two Kenyan groups, members also highlighted that the PV proposal process helped them to represent themselves: "*The video was good: with it we could show that we are participating as a community; men and women, old and young*" (Mukinduri SHG member).

Create a clear and logical plan to execute projects

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The PV proposal process served to assist the groups in conceptualizing the innovation processes in greater detail than they had previously considered. As a member of Upendo reflected, "*it (the process) enabled us to fulfil the group's objective*" (Upendo member). Group members collaboratively produced the video by re-viewing, re-negotiating and expressing their capacities, problems and plans. In relation to the process of re-viewing, a group member in Mukinduri stated: "*the benefit of using a video proposal is that if you are not satisfied (with the content) after watching it, you can change it*" (Mukinduri SHG member). In the Upendo group, members expressed that the video proposal process improved understanding about their planned project and a Wendo group member talked about how the process of making an action plan helped them to understand more about the soap-making process. The discussions generated while producing and screening the video proposals facilitated building shared understandings and collectively planning their innovations, which in turn enhanced "power with".

Produce own videos

This was the first time farmers in the five groups produced their own videos and in general, farmers had not been previously exposed to the use of cameras and video equipment. As expressed by one of the farmers: "*we learned to do videos and even made a video alone*" (Mukinduri SHG member). Although this aspect was considered an auxiliary and cursory benefit from the researcher perspective, when asked about what had been gained through the experience, the first point almost always remarked upon by farmers was the acquisition of new skills to handle cameras and make videos. Producing the PV proposals engendered a feeling of `*we can do it´*. In Lare CBO, group members expressed that PV proposals are suitable for all literacy levels, as can be seen by the following comment: "*It is easy to make it (video proposal) because you don't have to write anything, we only used pictures to tell the story (storyboard)*" (Lare CBO member). The immediate visible manifestation of learning this new skill (realised through watching the video) is also thought to have contributed to a sense of "power-within", as discussed further below.

Influence wider community

In Tanzania, where farmer groups are not widespread in the study sites, the PV proposal process evoked a feeling of `*we can make the village a better place!´* Paraphrasing one of the members: "*It had an impact in the community, we believe the experience with the video has inspired the community on the importance of groups*" (Upendo member). During an interview with an Upendo member, it was suggested that the video was a "*good advertisement for the group and a way to communicate its activities"* (Upendo member). Similarly, Wendo members felt that the video could help them to advertise their soap (innovation project).

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ii) Power with

During the process of producing the video proposal, the five groups moved from building shared understandings to taking collective action and experiencing "power with". Specifically, the process aided in: 1) building group unity/consensus, 2) enhanced transparency, and 3) sharing with wider community.

Building group unity/consensus

Members from all groups agreed that the PV proposal workshops functioned as a group building activity, as they were encouraged to interact and share, whilst having fun. As group members stated, "*the video brought all members together because we had to discuss and agree what to do. It helped in decision making*" (Lare CBO member). Tuamiho members reflected in a feedback session that the process *"helped them to act together*". During the workshops, group members had the opportunity to get to know each other better, which aided in building friendship and trust. Upendo members suggested that "*the workshop[s] enhanced the love and unity that group members feel for each other*".

Simultaneously, such interactions engendered a feeling of commitment, one farmer suggesting that commitment to the group was raised after the process (Tuamiho member). Similarly to Idifu, the leader of Wendo reflected in an interview that the video workshop had been an encouragement to stay in the group and that the "*group is more motivated now",* which was demonstrated by the level of contribution of members. The activities together forced the realisation that "a*s an individual, one would not be able to achieve all those things alone*" (Mukinduri SHG member).

Enhanced transparency

The PV proposal process fostered transparency as members' from the groups collectively agreed upon the message of the video, as expressed by the following comments: "*everyone participated (in producing the video), ... even if I did not appear in the shot, I am happy because I know I am part and parcel of that*" (Lare CBO member), and "*it also shows the relationship in the group, because it is not one person doing it, but you share... everyone has done something and everyone agrees it is true*" (Lare CBO member). This contrasted with members' previous experiences in other groups, where the details of a written proposal were not known to all members, as expressed by one farmer: "*in written proposals officials are the ones writing, they can write something not visible, even if they gave you a copy to read, you will not know. But a video is transparent*" (Lare CBO member).

Farmers commented on how watching and reviewing the video proposal together enhanced transparency in two further ways: firstly, members not present during parts of the video

production process could view it and comment on it. Secondly, groups were able to watch the video proposals again later to remember what they planned after receiving the grant: "*we are able as a group to look at it again and again and remember if there is something we have forgotten*" (Lare CBO member).

Sharing with wider community

Members from the farmer groups recognised the opportunity to share the videos with the wider community; "*we can watch with other people*" (Tuamiho member), or paraphrasing a member of Upendo, "*after having a copy (of the video), we can show it to other people*" (Upendo member). Tuamiho members suggested in a feedback session that they could utilise the video and their new skills to reach out to the community and train other people in video-making. In Upendo, they believed that the video production inspired the community and had positive impact in terms of encouraging others to form/join groups.

iii) Power within

Collectively, farmers' views suggest that the process of producing the video proposal engendered a sense of confidence and self-esteem, which came from gaining awareness of one's own situation and realizing the possibility of doing something about it. As expressed by one of the farmers in Upendo, producing the video fostered self confidence in their own capabilities. This then enhanced motivation to work together and implement what had been proposed in the video, as expressed by one of the farmers: "*the video was very encouraging*" (Lare CBO member) and similarly with the Wendo group, it inspired "*courage"* and *"motivation to carry on*" (Wendo member). Producing the PV proposal engendered a sense of pride, as expressed by one of the Tuamiho members, the video made me*" feel good and proud…*".

iv) Power over

During the process of producing the video proposal, group members experienced "power-over" 1) the decision-making within their innovation plan and 2) self-representation to outsiders.

Decision-making within their innovation plan

During a narrative interview, a farmer in Mukinduri FHG stated that the most important part of the collaborative learning/innovation process was that the group had power over the decision process in terms of defining their own problems and deciding on their action plans: "*we were saying the problems that we experienced and the support that we needed*". In Kenya, group members expressed the importance of being heard: "*using a video can be of great help for our government to listen to our problems so that we are assisted*" (Mukinduri SHG member).

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Discussing the definition of problems and potential solutions, in the Lare CBO, farmers remarked that *"it is us who are speaking for ourselves",* which feeds in to the next point.

Self-representation to outsiders

In a feedback session, the Tuamiho group admitted that at the beginning of the process, they had thought the video training and proposal production might be a "*waste of time"*. However, they realised in the process that "*they could raise their voice*" to be heard by the donor and to contact NGOs, thus gaining a little "power-over" their ability to self-represent and overcome a communication barrier. As a result of this self-representation in the form of a video, Tuamiho felt that they "*got respect from society* "(Tuamiho member).

Again, as some group members in Kenya have previous experience in writing proposals, they expressed that the visual material helped them to better represent themselves, or as commented by one member from Lare CBO "*by looking at the images they* [donors] *can know what our problems are without much explanation".* They also perceived that the video proposals are faster: "*a video has its benefits because we benefited when we got the yellow maize. If we did a written proposal, we would have taken too much time. We have tried to write a proposal but we did not succeed, so I think it* [the participatory video proposal approach] *is very useful"* (Lare CBO member).

Critical reflections: acknowledging the "messy reality of practice"

Results from the farmers groups in Kenya and Tanzania have shown that the PV proposal process can be a tool for empowering farmer groups in specific ways. The previous section laid out how empowerment was experienced across the four modalities of power from the farmers' perspectives. It has shown that certain aspects of' "power-to" and "power-with" were particularly enhanced during the process. Importantly, it must be noted that some findings were specifically linked to the video proposal production (and its implied outcome- a grant to implement a group innovation), whereas other aspects of empowerment were more broadly connected with the PV process. As researcher-facilitators, we now reflect critically on the results and offer a less rose-tinted perspective on the potential of PV proposals as a tool for empowering farmer groups, which acknowledges the "messy reality of practice" (Shaw, 2016: 419)

The action research undertaken with the five farmer groups revealed several different ways in which farmers' "power-to" was enhanced through the participatory process of creating a video proposal, specifically with regard to their "power-to" communicate and represent, produce own videos and influence wider community. It is important to consider that these aspects are largely

inter-dependent. Therefore, the lack of video equipment remaining with the groups and the lack of on-going training beyond the project duration thus potentially limits the longevity of all three gains. Although several farmers in the villages own phones with video capabilities and there is therefore some potential for self-motivated participants to continue developing their video skills independently, we have limited evidence of this occurring. Moreover, there are few DVD players in the villages and the videos are not online; therefore, the possibilities to sustain the power-to "reach out" were largely limited to researcher-led screenings. As an exception, some members of Mukinduri in Kenya have continued to send the researcher-facilitator short videos created by them using their phones. It was also observed, after the PV workshops, that farmers used their phones to video peer-to-peer exchange events with high levels of competency and exchange their videos using Bluetooth. For the project personnel responsible for assessing the proposals from afar, being able to see and hear the farmers and getting a view of the local situation gave a feeling of connection and a sense that the groups were representing themselves, putting forward their own ideas and demonstrating their capacities more affectively. The level of both explicit and implicit detail contained in the videos made it easier for the funder to assess the feasibility and context of the proposals, on the basis of their own previous experience and knowledge of similar groups and areas.[11] Overall, the video screening activities and events were attractive in the community contexts and raised interest in both the groups and their projects. In sum, the media itself could be said to have communicative and representational advantages over verbal presentations or written proposals.

Nevertheless, Shaw (2016) and Carr (2003) have argued that empowerment is not an event but a process. As such, the instances of enhanced "power-to" conveyed by the farmers could be argued to have little value unless the groups independently find ways to sustain the empowerment process beyond the video proposal production experience. Limitations of project duration and technological capacity have been discussed frequently in the literature (Plush, 2013) and in some ways, they could be overcome by a different approach from the researchers, such as the initial donation of equipment to the groups, integration of more appropriate technology (Gumucio-Dagron, 2009) and more in-depth training of local facilitators to sustain the video training activities for a longer time (Lemaire and Savage, 2012). However, giving more time is a both challenge and a compromise for researchers *and* farmers (Mistry and Berardi, 2012).

[11] However the quality of the proposal was not the only criteria for the decision on whether the funds should be granted. Rather the video was judged together with the PV process in relation to whether the group members invested effort in its preparation and hence were thoroughly motivated to invest their time and energy in the implementation of the innovation. This was assessed based on the information provided by the facilitator/researcher and using other documents, such as the drawing-based story boards.

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On the other hand, the farmers' enhanced capacities to create a clear and logical plan to execute projects appears to be a more durable aspect of "power-to"; no equipment is required to sustain this. The proposal-making task was thus here intrinsic to the farmers' experience of empowerment; being compelled to think through the group problems, solutions, action plans and associated risks in detail meant that the innovation plan became increasingly well-developed as the process evolved. The investment of facilitation time with the groups increased the likelihood of strong proposals and hence, funded innovation projects. The PV method in particular, incorporating an iterative cycle of planning, shooting and viewing, enabled this capacity-building and co-learning to take place more effectively than would have been possible without the video tools. The ability to record, watch back together, discuss, re-record, and so on, allowed the group to continually improve their ideas and thereby the quality of their proposals, as the process unfolded. Moreover, most of the group members, especially in the WENDO and Mukinduri, being non-literate, were much more able to contribute actively to the video proposal than would have been possible through written means. Essentially, the PV process made it fun: as described by a member of Tuamiho, "shooting video was like a joke…but somehow serious".

Enhancing the "power-with" of farmer groups in terms of building group unity was also an important outcome of the PV proposal process according to the participants. Farmers used affective, inter-relational terms such as "love", "bonds" and "ties" to infer a feeling of togetherness, constituted in the space of the group activity. Unity was described as a feeling, but also as a manifestation of practice in terms of "acting together". In other words, group unity was produced performatively (Butler, 1997) through tangible actions (including the process of planning, directing, filming and viewing the video together), as well as through the video images that helped the 'groups to see themselves as a unit' (Oravec, 1995:438; cf. Peters et al., 2016). It is likely that the ultimate goal of the video proposal- a grant to be able to implement a self-defined innovation project- was pivotal to providing the group with a united sense of purpose during the video-making activities. Another important benefit of going through the process was enhanced transparency for individual members, with everyone knowing what the group was trying to achieve and what they were planning to do. This knowledge is often made quite obscure through other kinds of group communication and planning practices such as writing, or irregular meetings with verbal messages filtered down from leaders to non-attendees. The affective force of the video record– seeing themselves on screen- , we suggest, also encouraged members to act in accordance with what had been promised on video, thus providing an opportunity for enhanced accountability.

However, when inviting feedback from the participants, facilitators felt that there was a tendency to over-emphasise the positive aspects of enhanced "power-with". As discussed in the

method section, this was no doubt related somewhat to the compromised positionalities of the facilitators, who had the simultaneous role of facilitating and co-assessing the process. From our perspective, social differences and associated power dynamics within the groups were oftentimes re-produced within the workshops: as previously described by Cleaver (2001, 2004, 2007) and Petitt (2012), entrenched, cultural and group-specific power structures have a tendency to reassert themselves, despite efforts to perform otherwise. For example, although facilitators attempted to include all participants in rotating roles during the PV workshops in Changarawe, we noted a tendency for men to take over the equipment while women dominated the on-camera presenting roles, seemingly re-inscribing the cultural norm for men to be in charge of mechanical equipment (as in farming activities) (Mnimbo et al., 2017; Richardson-Ngwenya et al., 2018). Further, especially in Idifu, it was noticed that gender-based exclusions were re-produced as a result of the continual lateness or frequent lack of attendance of female group members, resulting from their key responsibilities at home, which made it difficult for them to attend the (entire duration of) PV workshops. Unrealistic demands on (especially female) farmers' time[12] thus influenced the participation dynamics. Such critical reflections on the 'messy reality of practice' (Shaw, 2012: 419) are resonant with Cleaver's (2007) discussion of the complexities of facilitating collective action, noting that gender relations and '(i)mmediate livelihood imperatives, combined with unequal authoritative and allocative resources, may shape the exercise of agency', (p.235) thus skewing the 'decision-making power, the ability to mobilize authoritative and allocative resources, and the outcomes of this ability' (p.234).

In other ways, the unusual task of producing a video created opportunities for normal group power relations to be irritated or performed differently (Butler, 1997), at least on occasion, as has been discussed in other studies by Gumucio-Dagron (2009) and Magongo (2012). For example, within Wendo, facilitators noticed a clear change in the usual participative behaviour of the younger group members during PV activities: young men and women who, in the context of group discussions and meetings were usually quiet and reserved, immediately came forward to experiment with the video equipment and appeared to be more comfortable than the older members in presenting information on camera. Similarly in Ilakala, Tanzania, normal group power dynamics were irritated when the (elder, male) leader struggled to fulfil the role of "TV presenter", as recounted in the field notes of the facilitator: "*the chairman was not so adaptive to the new technology. To give an example, he was chosen immediately to be in charge of sending the last message in the video proposal. He struggled to convey a concise message that satisfied group members, then he left the session, and finally one of the young males took over"*(-----, field notes 2015). The PV workshops thus opened up new and uneven participative

[12] Workshops took place from Monday to Friday over the course of at least a week in Idifu.

spaces in the group, giving an opportunity for those with particular talent or interest in video production (especially youths) to experience an enhanced "power-to". However, once the video session was over, the chairman immediately resumed his dominant leadership role. This flux of positions of different group members was not reflected upon by farmers (in terms of how it influenced micro-politics or group unity), but we anticipate that it could have both positive and negative effects on the sense of "power-with" in each group. Indeed, the unique social constellation of each of the five groups rendered the influence of the PV proposal process on intra-group power dynamics quite unpredictable and specific to each group. Whether disturbing established group power relations in the midst of developing an innovation project is actually desirable, is a question in point.

As stated in the introduction, in concert with the deployment of a participatory rural innovation process and Action Funds, we use the PV methodology in an effort to democratise "knowledge production" (Kindon, 2003; Janes, 2016; Edwards and Brannelly, 2017) and create "spaces of inclusion" (Caretta and Riano, 2016: 261) or a sense of "power-with" between the researcher-facilitator and the groups. However, as has been discussed elsewhere by Bourke (2009) and Cleaver (2001, 2004, 2007), this was an intensely dynamic negotiation, entrenched in structures of power associated with social difference. This shaped the extent to which the conventional facilitator-group relationship could be inverted (Walsh, 2016; Milne, 2016). On the one hand, this was influenced by the "outsider" status and white, western subjectivities of the researchers and could have possibly changed with more time spent in the village, or by training a local facilitator to take on the role without the presence of outsiders. As suggested by a farmer in Idifu, "*you (researchers) make them (group members) nervous, because they are not familiar with you. You should stay here longer so that they feel more comfortable and willing to speak…"* (Wendo, group leader). Another member of the same group commented in an interview that "*seeing white people around has impacted; it might help alleviate poverty in the village*." Such a statement reflects a farmer view of social difference and power that has important, problematic implications for how we might reflect upon the motivations of groups to collaborate with us (Mistry et al., 2016). Further, assumptions and expectations such as this shape the extent to which research-participant power relations could, in this context, be transformed. As shown, power relations can be disrupted and individual/group agency can be momentarily enhanced, but structural relations are *not* easily transformed and externally imposed subjectivities have to be occupied on some level, even when attempting to transform them. This issue has also shaped the way in which "results" have been treated in this research paper, whereby we have explicit sought to scrutinise and critically reflect here upon the comments offered participants.

The findings and discussion presented above articulate the complex ways in which different modalities of power were dynamically influenced by the PV proposal process, in ways that

enhanced (or not) the empowerment of farmer groups within a participatory innovation process. Such an interweaving of multiple modalities responds to Allen's (1998) feminist argument that 'we require a conception of power that moves beyond the domination/empowerment impasse' and instead conceptualises empowerment as a 'complex, dialectical interplay' (p.468) whereby 'individuals can be dominated and empowered at the same time' (p. 458). This paper has focussed on the PV proposal making process, rather than assessing the whole, longer-term PAR relationships that framed our collaborations with the farmer groups (citations removed to anonymise). Results from across the five groups have been synthesised, drawing attention to the common experiences. The extent to which the outcomes of the grant applications (which were all successful) might have affected the farmers' reflections on their (empowering) experience of the PV proposal process, is a troubling caveat, but should not be understood deterministically. If the grant applications (i.e. video proposals) had been unsuccessful, the groups *could* have been more likely to reflect negatively on the video-making process. The "power-with" (e.g. group unity) is highly dynamic and could have been disrupted if the grant proposal was unsuccessful; likewise with "power-within" benefits. However, the "power-to" aspects described above, as well as the experiences of participation, inclusion and enhanced transparency would still stand, whatever the final outcome of their proposals. This emphasises the importance of the participatory process and methodological steps involved in making the videos.[13]

Conclusion: "in how far are PV proposals a tool for empowering farmer groups in rural innovation processes?"

In this paper, we have presented an original method for approaching participatory rural innovation in collaboration with farmer groups in the Global South. With little published in relation to participatory video proposals, this paper contributes significant methodological insights to the field. Moreover, the critical approach to analysing PV proposal-making in relation to power offers a novel contribution to the literature, especially concerning evaluation of PAR and participatory rural innovation processes in general, as well as PV in particular. In ARD at large, methods to serve the "empowerment" of farmers and analysis of the different dimensions that this might encompass are rarely systematically assessed (Bartlett, 2008).

The video proposal-making activities undertaken with the five diverse farmer groups brought together action and reflection, supporting co-development of solutions to the problems of concern to the participants involved. The video proposal method constituted a valuable means of communication to facilitate co-learning. From the funders' perspective, the high degree of facilitation led to a relatively good standard of proposal, while the group's commitment to

[13]Please see ------ *citation removed*----- for further elaboration of the PV proposal method.

creating the proposal demonstrated strong motivation and ability to work together on a project. Furthermore, the accessibility of video as a medium to transmit the voices of the group members assured the funders that the innovation plans were agreed upon and understood by the group as a whole. Although direct comparative data with other proposal-making methods is lacking in this study, some participants reflected upon a past experience with a written proposal and praised the video method in comparison. The extent to which the video method enhanced the quality of proposals is a moot point, but the authors are confident that the process described here enhanced farmer groups' "power-to" in terms of planning capacities and promoted reflection on the planned innovation processes. It fostered transparency, as group members were conversant with and agreed upon the content of the video messages, which were later accessible to them for re-viewing. This then enhanced motivation for action and a sense of collective ownership; thus building unity and "power-with" within the groups. The effect of PV proposals on promoting "power-within" was reflected in farmers' comments regarding group members´ pride in, confidence, control over and sense of ownership of their videos and their innovations.

However, while there were significant gains expressed by farmers in terms of enhanced competencies and "power-to", the limited duration of facilitator/project engagement with the groups will likely lead to attrition of these gains as the workshop experience becomes a more distant memory. Thus, for such benefits to be made more durable for the groups, the PV proposal process should ideally be embedded in longer-term relationships that are committed to building competencies over a period of several years. The critical understanding of power mobilised in this paper has also enabled us to highlight some context-specific limitations to democratising research relationships and creating more inclusive spaces for PAR and rural innovation development. These limitations were demonstrated especially well with regard, firstly, to the issue of entrenched socio-cultural power dynamics within the groups and secondly, with regard to possibilities to sustain the empowerment process beyond the duration of the projects.

In conclusion, the participatory video proposal process proved to be a good tool for supporting farmer group capacity building and the development of certain competencies, particularly planning, across a diverse range of farmer groups. It was also an excellent mode of communication between the (semi-literate) farmers and the funders, empowering the groups to represent themselves and their ideas to outsiders. The participatory method aimed to assist the groups in democratically conceptualising their future innovation processes, while at the same time creating 'spaces of inclusion' in which uneven power relations could be renegotiated. Whereas our experiences in Kenya and Tanzania have indicated a relative success on the former point, our critical reflections on the second point show that the disruption of entrenched intra-

group and participant-researcher power hierarchies was difficult, limited and ephemeral. So although we suggest that participatory video proposals are a promising tool for empowering farmer groups in specific ways in rural innovation processes, we caution researchers to also recognise the limitations and constraints.

Looking at the broader implications, it is important to highlight that video proposals are a relatively new possibility in the context of rural development projects. In our experience, they proved to be a valuable tool for supporting farmer groups in the Global South in project planning and applying for funds. Video proposals have the potential to more clearly communicate rural innovation plans and convey contextual detail to donors, especially when participants are non-literate and donors are located at a distance. A participatory video-making process supports collective planning and the video itself can inspire participant and community interest in the innovation processes under discussion. Non-literate participants are more effectively included in the process of planning and communicating. Furthermore, digital video, via online sharing, has the potential to reach a much wider audience- for example through crowdfunding platforms- than a written document. This opens up the question of how these technologies can be harnessed to empower more farmer groups wishing to implement innovation projects in their communities worldwide. We hope that both funding agencies and local rural development organisations will seriously consider the method discussed in this paper as a valuable tool for assisting marginalised groups in accessing innovation funds.

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