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Panel D26 - Multiplicity of learning events: the relationally of learning in Africa and beyond

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Farmer-centred multi-stakeholder platforms (MSPs) as pathways towards more inclusive learning: A study on MSPs with smallholder farmers in Ghana

Abstract

In response to persistent challenges related to poverty, food insecurity, unsustainable farming, and climate change, knowledge co-creation in multi-stakeholder platforms (MSPs) receives growing attention from donors and scholars. This paper discusses farmer-centred MSPs in Ghana: an approach towards knowledge exchange and co-creation with smallholder farmers fulfilling central roles while engaging with institutional actors and researchers. A farmercentred and relational approach to learning is embedded in inclusive development theory, which foregrounds marginalized people, sectors and countries in social, political and economic processes for increased human well-being, social and environmental sustainability, and empowerment. While the body of knowledge on MSPs increasingly recognises the importance of local knowledge in generating novel solutions for persistent and complex challenges and achieve inclusive development, it is insufficiently clear how MSPs can be genuinely inclusive of smallholder 'farmers' knowledge and contribute to inclusive development. Hence, this paper asks how and under what conditions these MSPs provide a safe space for smallholders to voice their concerns, bring in their knowledge and innovation capacity, and learn from the interactions. Findings obtained from action research, observations, interviews and focus group discussions reveal that, first, providing a safe space for farmers to share knowledge with peers and other actors makes them feel included and empowered. Second, farmers adopted practices shared by their peers during platform meetings, while the knowledge from farmers was also valuable to practitioners and researchers. Third, organizing the platforms at district level enhanced the engagement of actors working closely with farmers. Fourth, several local actors took ownership of the platform principles, which created opportunities for their manifestation in future collaborations between local actors and farmers. Key challenges of this approach include the limitations of genuine knowledge co-creation aiming at finding solutions for persistent challenges related to poverty, food insecurity, unsustainable farming, and climate change, restricted participation of crucial actors at higher scale levels, the limited number of MSP meetings and interactions among participants in between meetings due to financial constraints, and the donor dependency of the platforms, resulting in their collapse after project closure. Despite these challenges, we conclude that farmer-centred MSPs can contribute to learning including smallholder farmer knowledge, provided that other actors are willing to foreground their knowledge and innovation capacity.

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Keywords: Farmers-centred MSPs; knowledge co-creation; peer-to-peer learning; inclusive learning; relational learning; innovation capacity; Ghana, South Africa (?)

Biographical information

This paper was written by a team of researchers affiliated to the University of Amsterdam (UvA) in the Netherlands, the University of Energy and Natural Resources (UENR) in Ghana and the Royal Tropical Institute (KIT) in the Netherlands. The lead author of this paper, Edith van Ewijk (PhD), is a postdoc researcher currently affiliated to both the UvA and the Technical University Delft. This paper was written as part of the Putting Heads Together Project, of the Science of Using Research call of NWO-WOTRO Science for Global Development in the Netherlands. All co-authors were either part of this project or of one of the projects on whose experiences the findings in this paper are based. These are the Treefarms project coordinated by the Resource Management Support Centre of the Ghana Forestry Commissions and the Inclusive Value Chain Collaboration project coordinated by a consortium involving various organisations from the Netherlands, Ghana and South Africa. The three projects were coordinated by Mirjam Ros-Tonen (PhD), associate professor at the UvA. Mercy Derkyi (PhD) is Dean of the School of Natural Resources and Senior Lecturer at UENR; Martha Ataa-Asantewaa and Kwabena Asubonteng are PhD researchers at the UvA, Yves Van Leynseele (PhD) is lecturer and postdoc researcher at the UvA and Anna Laven (PhD) is senior researcher at KIT.

1. Introduction

In response to persistent challenges related to poverty, food insecurity, unsustainable farming, and climate change in agrarian landscapes, knowledge co-creation in multi-stakeholder platforms (MSPs) receives growing attention from donors and scholars. This paper discusses farmer-centred MSPs in Ghana: an approach towards knowledge exchange and co-creation with smallholder farmers fulfilling a key role in their engagement with peers, institutional actors and researchers. A farmer-centred and relational approach to learning is embedded in inclusive development theory, which foregrounds marginalized people, sectors and countries in social, political and economic processes for increased human well-being, social and environmental sustainability, and empowerment (Gupta et al. 2015). Farmer-centred MSPs are also linked to the growing recognition that farmers' local knowledge needs to be included in or even lays at the basis of agricultural innovations (Dabire et al., 2017; Weyori et al., 2018; van Ewijk et al. forthcoming), and that different kinds of knowledge – tacit, technical and cultural embedded knowledge based on experience, and codified scientific knowledge (van Ewijk and Baud, 2009)¹ – have to be combined to find solutions for challenges related to poverty, food insecurity, unsustainable farming, and climate change (e.g. Totin et al., 2013; Triomphe et al., 2013; Shaw and Kristjanson, 2014; Akpo et al., 2015). Using a combination of different knowledges and knowledge-sharing methods can be helpful to address both

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¹ Ochollo (2007) distinguishes between tacit knowledge, which covers local and indigenous knowledge, and non-tacit knowledge, which is equivalent to codified knowledge. We prefer the more refined distinction by van Ewijk and Baud (2009) which also includes context-embedded experiential knowledge of practitioners and experts.

'tangible' issues (e.g. soil erosion) and 'non-tangible' issues (e.g. marketing) (Musvoto et al., 2015). So, the MSP-approach fundamentally differs from conventional extension services and one-way learning processes that focus primarily on externally set goals to improve agricultural productivity and uptake of technologies developed by 'experts' (Pyburn and Woodhill, 2014). Although most MSPs indeed aim at knowledge co-creation and joint learning, in some of them one-way transfer of knowledge, like in traditional extension approaches still prevail (Cullen et al., 2014; Schut et al., 2018, 2016).

While the body of knowledge on MSPs is increasing and the importance of including local knowledge² is emphasized in order to come to novel solutions for persistent and complex challenges and achieve inclusive development (e.g. Akpo et al., 2015; Lamb et al., 2016; Shaw and Kristjanson, 2014), it is insufficiently clear how MSPs can actually be truly inclusive of smallholder farmers' knowledge and contribute to inclusive development. In our view, a farmer-centred approach considers learning as being potentially inclusive when (i) knowledge exchange effectively aligns with farmers' varied livelihood orientations, knowledge, experiences, capabilities and innovation capacity, (ii) they achieve more equitable outcomes and self-determination for farmers; and (iii) take sustainability and landscape concerns into account. Hence, this paper asks how and under what conditions these MSPs provide a safe space for smallholders to voice their concerns, bring in their knowledge and innovation capacity, and learn from the interactions. The paper builds on action research carried out within the framework of the Putting Heads Together project, analyzing the experiences with farmer-centered learning platforms in two projects: the Inclusive Value Chain collaboration Project³ and the Treefarms project⁴, both funded by the Netherlandsbased NWO-WOTRO Science for Global Development. Both programmes took a farmercentred approach, which included the organization of MSPs in which researchers, practitioners and farmers exchanged and co-created knowledge.

2. Methodology

2.1 Case studies

The paper includes an analysis of two case studies in Ghana: a practitioner-steered project and a researcher-steered project in which MSPs were organized. The practitioner-steered project was the Treefarms project, funded under the Applied Research Fund (ARF) of NWO-WOTRO and carried out from 2016-2019. The Resource Management Support Centre (RMSC) of the Forestry Commission, Kumasi, Ghana was the lead institution for this project and closely collaborated with academic partners (the UvA in the Netherlands and the UENR in Ghana) and non-academic partners in Ghana (MOFA; the Ministry of Food and Agriculture, the NGO Rural Development and Youth Association (RUDEYA) and the private sector partner Agribusiness in Sustainable Natural African Plant Products (ASNAPP). The

² Several terms prevail in the literature to refer to local and traditional knowledge, including ecological knowledge, traditional ecological knowledge, local ecological knowledge, indigenous knowledge and indigenous local knowledge, which all refer to forms of context-embedded knowledge of local habitants (Yanou et al., forthcoming).

³ https://inclusivevcc.wordpress.com/.

⁴ https://treefarms.wordpress.com/.

project's main objective was to generate knowledge and build capacity to enable the integration and production of shade-tolerant non-timber forest products (black pepper, grains of paradise and honey) in on- and off-reserve tree farms and their successful processing and marketing. Within the framework of this project Community of Practice (CoP) meetings were organized. The researcher-steered Inclusive Value Chain Collaboration (Inclusive VCC) Project was carried out by a consortium consisting of the UvA and KIT in the Netherlands, the UENR and Ghana Agricultural Associations Business & Information Centre (GAABIC) in Ghana, and the University of Limpopo and Agricultural Research Council in South Africa. The project's main was to examine whether and how value chain collaboration with smallholder tree-crop farmers (cocoa and oil palm in Ghana, and macadamia nuts and avocado in South Africa) can be made more inclusive of poor farmers, women, and the environment. Within the framework of this project, annual learning platforms were organized between 2016 and 2019, whereby researchers, practitioners and farmers exchanged and cocreated knowledge. Farmers formed half of the participants and brought in their 'innovations from below', facilitated by researchers of KIT, UENR and UvA. Although the project was carried out in both Ghana and South Africa, this paper focuses on Ghana only. The Inclusive VCC project was active in the Ahafo-Ano North District of Ashanti Region (Tepa) and Kwaebibirem Municipal; a district in the Eastern Region. The Treefarms project was carried out in the Nkawie, Goaso and Mankranso Forest Districts in the Ashanti and Ahafo Regions of Ghana.

2.2 Action research

The paper is based on action research in which the lead author was involved as an action researcher in all project activities carried out in the last years of the project (2017-2019). Methods included 1) observations and active participation during the MSPs in Ghana, 2) indepth interviews with key stakeholders engaged in the projects, 3) focus group discussions, 4) a survey carried out for the Treefarms project⁵, 5) validation and dissemination workshops, and 6) document analysis with a focus on project documents of the Treefarms and Inclusive VCC projects. The other authors of this paper were actively involved as organizers, facilitators, or contributed by bringing in their research findings during the learning platforms of 2016, 2017 and 2018.⁶ For both projects, the lead author carried out 22 in-depth interviews in 2018 (Treefarms) and 2019 (Inclusive VCC). Respondents included project partners and lead actors engaged in the projects. Findings on the perspectives of farmers were gathered at the closing evaluating parts of MSPs, while an additional survey was carried among farmers involved in the Treefarms project to compensate for the lack of such an evaluating part during the platform meetings. Additionally, two focus group discussions were organized (one

⁵ At the end of a Community of Practice meeting (27 November 2018, Forestry Commission Training Centre, Akyawkrom), a survey was carried out by students from UENR, including 85 participants made up of 22 institutional actors and 63 farmers.

⁶ The two PhD researchers attached to the Inclusive VCC project –Martha Ataa-Asantewaa and Kwabena Asubonteng – played a central role by bringing in research findings; Mercy Derkyi and Kwabena Asubonteng moderated the learning platforms; Mirjam Ros-Tonen (project coordinator) presented the overall project findings; Anna Laven and colleagues at KIT developed the approach of identifying and collecting 'innovations from below'; and Yves Van Leynseele was involved in the overall set-up of the Inclusive VCC project and as postdoc researcher. Mirjam Ros-Tonen and Mercy Derkyi were responsible for the research set-up of the Treefarms project and were both consortium member as well as action researchers.

for the Treefarms project and one for the Inclusive VCC) with a select number of farmers who were engaged as change makers in one of the learning platforms or fulfilled a leading position in their communities. Farmers also participated in the validation and dissemination workshops. COVID-19 influenced the last year of the research project as the postdoc researcher and coordinator of the SURe project programme were not able to travel back to Ghana. PhD researcher Martha Ataa-Asantewaa carried out the final dissemination and validation workshops for this project, in close collaboration with the postdoc researcher and first author of this paper.

3. Results

3.1 A safe space for the inclusion of knowledge from farmers

At least half of the participants in learning platforms organized within the framework both the Inclusive VCC and Treefarms projects consisted of farmers, and female and male farmers were largely equally respresented. This gave farmers a strong position and contributed to their empowerment by providing them a space to share their knowledge and experiences and voice their concerns. This was observed during learning platforms and COPs and both farmers and institutional actors confirmed this. Farmers participated actively and brought in their knowledge facilitated by the researchers. They also raised their voice and openly asked questions to representatives of institutions. There was also space for their critical perspective, for instance towards the social corporate responsibility activities of an oil palm company in Kade (observation during the learning platform of July 2018). A farmer in Kade compared the learning platforms to a knowledge market, where there was a fair exchange of knowledge between farmers and others (i.e. the researchers and institutional actors). A farmer and purchasing clerk of licensed cocoa-buying company Armarjaro Ghana explained:

"These practitioners use to bully us with their knowledge because they seemed more educated than us, farmers, and coming to their office was even a challenge for us. However, with the learning platform, we were at the same level" (farmer and purchasing clerk Armajaro Ghana Ltd, validation workshop Tepa, December 2020).

Safe spaces were also created by Ghanaian researchers of UENR and UvA who spoke the same language as the farmers (Twi) and were familiar with them due to their longstanding presence in the field during which they had built up trust. As such they also acted as knowledge brokers during learning platforms.

Prior to the organization of the learning platform meetings, a well-trained research team carried out fieldwork for a full month (five-days per community) in order to identify key themes of farmers' concern and their innovations. The methodology followed human design principles, which facilitated an inclusive data collection process from the start. Data was analysed, followed by the identification and collection of the so-called 'innovations from below' of farmers which were brought in to the learning platform meetings. Dissemination through live interviews on the spot and the documentation of these innovations in videos facilitated the process of bringing in farmers' experiential knowledge (van Ewijk et al.,

forthcoming). 'Innovations from below' are understood "as farmers' simple and low-cost responses to day-to-day problems and opportunities [which] can be either local adaptations of 'top—down' interventions or a form of resistance against those" (Ros-Tonen et al. 2019:12). The combination of methods helped including both 'tangible' and 'non tangible' issues (Musvoto et al., 2015) and forms of knowledge (Ochollo, 2007). Based on interviews with farmers, institutional actors, and author observations, we conclude that farmers felt empowered because their knowledge and innovations were put central. In the words of a male farmer:

"MoFA and AGL kept telling us that farming is like a business, but I never saw it that way. However, coming to the learning platform every year and meeting other stakeholders who valued our knowledge as farmers made me also feel like an expert of my trade. I started planning and keeping records of my farming since then and now I calculate things like a businessperson" (male farmer participant in the Tepa validation workshop, December 2020).

A female farmer, explained:

"For me, it was the fact that we women were included, and we could voice out during the programme. Many of us women have tried many things after the learning platforms and it's all thanks to the fact that we felt included and recognized" (female farmer participant in the Kade validation workshop, December 2020).

Institutional actors and researchers highly appreciated farmers' local knowledge and they adopted some of farmers' innovations (see next section). A NGO representative attached to the Treefarms programme, for instance, explained the relevance of listening to the farmers to learn from their knowledge:

"We always thought beehives are just a thing. But then in the community, people told us that the type of wood determines how many bees are attracted into the beehives... it was community-knowledge" (Interview with NGO representative in the Treefarms project, June 2018, Accra).

Based on the reflections and observations, we conclude that the farmer-centred MSPs under study represented a truly different approach compared to conventional extension and one-way flows of knowledge, which despite all rhetoric may still prevail in MSPs (Cullen et al., 2014; Schut et al., 2018, 2016). The learning platforms created a safe space where farmers felt comfortable to share their knowledge and innovations and to voice their concerns. This had a highly empowering effect on both male and female farmers.

3.2 Adoption of knowledge and practices

We found several examples of farmers adopting knowledge from their peers in both the Treefarms and Inclusive VCC project. As knowledge was generally low-tech and low-cost, it was generally also easy to apply. A farmer in Kade compared the learning platforms organized at the district level with the first meeting that was organized in Accra:

"When we went to Accra for the first learning platform, it was very boring because it was all about expert knowledge... I found the later learning platforms especially useful because there you learn something that you can try as soon as you get home" (male farmer participant at validation workshop, Kade, December, 2020).

Examples of widely adopted lessons according to several respondents who participated in the Inclusive VCC project are the planting of trees, the introduction of organic manure and mulching, the introduction of plant-based extracts as pesticides, the formation of saving groups, the introduction of pruning of cocoa trees, and the diversification of farming practices. A policy officer of the Forestry Commission explained that right after a learning platform where information was given on tree planting and the registration process, many farmers came for seedlings and registered the trees that they had planted on their farms. Several farmers also referred to changes in yields and income as a result of adopting lessons learned at the learning platform meetings (Survey participants CoP November 2018, focus group discussions June 2018, October 2019, validation workshops December 2020). For instance, at the validation and dissemination workshop carried out in December 2020, a farmer recalled the learning platforms of 2016 where he learnt about the importance of diversification, which he wanted to introduce, but he was scared to take risks. In 2017 he took up soap making and selling, after a female farmer had explained the soap-making process at a learning platform. With the income gained from the soap-making business, he was able to buy a commercial motor bike (aboboya) that he used for the transport of harvested food crops. A survey carried out among participants of a CoP meeting at the closing of the Treefarms project in November 2018⁸, revealed that 26 out of 85 (30.6%) participants reported that their income had increased as a result of introducing non-timber forest products (NTFPs) in their reforestation plots or off-reserve tree farms⁹ or other farming practices like more weeding or applying organic manure. Eight of 85 participants (9.4%) referred to poverty reduction and/or improved livelihoods. Seven farmers (8,2%) anticipated results soon, and 5 farmers (5,9%) said they did not experience any changes as a result of the project. Twenty-two farmers (25,8%) reported various other results, including the formation of groups, enthusiasm to introduce NFTPs and new partnerships with other actors. A systematic literature review on agricultural and food-related MSPs also showed several positive

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⁷ The Ghana Forestry Commission pilots the registration of trees planted on farms because of the conflicts arising from the fact that farmers are only allowed to fell trees on their land that they planted themselves. Naturally regenerated trees, including those on farmland, fall under the custody of the Forestry Commission, which can issue permits to registered timber operators to harvest these trees (Gaither et al., 2019; Ros-Tonen and Derkyi, 2018).

⁸ As explained at the methodology, due to time constraints at the CoP, a final conclusion session at the closure of the CoP was missing and in order to capture views of the participants a short survey was carried out by students of UENR. It should be stressed this survey was carried out with the participants of one CoP and that the findings are not representative to the communities involved.

⁹ Although some of the introduced NTFPs, such as black pepper, are strictly speaking not considered as such, the organizations (RMSC and RUDEYA) that took the initiative to introduce NTFPs in reforestation schemes and off-reserve tree farms use the terms because the products find their origin as a 'forest food' and as such can be considered as domesticated NTFPs. Moreover, they qualify as such because they are secondary products from the reforestation schemes aside the trees (Bannor et al, 2020).

outcomes and impacts resulting from joint learning in MSPs (van Ewijk and Ros-Tonen, 2021).

Several institutional actors engaging in to both projects (MoFA, Cocobod, GAABIC and RUDEYA) mentioned that they incorporated local knowledge from farmers in their extension work or that they had changed their way of working. They referred to changing their approach to training and workshops, including providing more room for discussions and deliberations with farmers rather than embarking on one-way knowledge transfer (interviews representatives MoFA, Cocobod and GAABIC, October 2019 and RUDEYA June 2018). Despite the adopted practices, few institutions had changed their working plan or incorporated institutional or organizational changes, with two important exceptions. Following their engagement in the learning platforms of the Inclusive VCC project, the Ministry of Food and Agriculture VCC project integrated the costs for training on composting in their annual budget with a view to reaching out to more communities in the Ahafo-Ano North District of the Ashanti Region, where Tepa is located. Staff of the NGO RUDEYA, a consortium partner in the Treefarms project, adopted the approach of first exploring farmers' knowledge before just transferring knowledge to farmers as they used to do. They wrote a proposal for an EU-funded project in which they foregrounded local knowledge, which directly linked to what they had learned in the Treefarms project. The proposal was eventually granted (interview officer Rudeya, June 2018).

Hence, we conclude that the MSPs were indeed inclusive to farmers' knowledge: not only by giving the floor to farmers to bring in their knowledge, but also by adopting their knowledge. Whereas farmers in the Treefarms project mainly referred to the uptake of knowledge about NFTPs from institutions and researchers, farmers in the Inclusive VCC truly learned from other farmers. It should be noted that knowledge brought in by researchers was also mentioned as relevant, especially to raise awareness on sustainability issues and landscape changes. An extension officer explained that no one could soon forget the images and the explanations on landscape changes presented by one of the PhD researchers. Representatives of institutions that were part of the Treefarms and Inclusive VCC projects not only valued but also learned from farmers' knowledge. These findings are especially relevant as there are hardly any studies that analyse the uptake of farmer's knowledge by government institutions and NGOs (van Ewijk and Ros-Tonen, 2021).

3.3 Enhancing engagement of actors who work with farmers

In both projects, MSPs were organized at the district level, which was crucial as this was the level of farmers' professional networks, while it enhanced the engagement of actors working closely with them. During the MSP meetings, there was ample space for institutional actors to explain policies and for farmers to ask questions and hold institutions to account. This was even more relevant as institutions in the study area usually rarely meet each other, while their meetings with farmers usually take the form of one-way extension meetings. Although respondents were aware of the presence of certain institutions, they lacked personal contacts. Various respondents, both attached to the Inclusive VCC and Treefarms project, confirmed that the farmer-centred learning platform helped establish contacts and enhanced actors' engagements working with farmers. A researcher at OPRI referred to the creation of a

"family of institutions" and mentioned that institutions started to directly contact each other and include each other in most programmes for farmers in the municipality (validation workshop Kade, December 2020), while an officer of MoFA said that after the learning platforms he directs farmers with questions on cocoa to his personal contact at CHED (Cocoa Health and Extension Division of COCOBOD), while previously he would just have answered cocoa was not within their domain (interview MoFA, October 2019).

Towards the farmers, institutions were able to clarify their roles and based on the exchange, government agencies started to align their respective policies. In some cases, institutions used to convey conflicting messages to farmers. For instance, in the Tepa area, COCOBOD told farmers not to plant trees in cocoa farms, while the Forestry Commission stimulated farmers to do so. At the learning platform, the institutions reached a consensus to plant up to 19 trees per hectare of land (interview officer MoFA Tepa, October 2019). The synchronization and clarification of institutional policies following interactions in MSPs has also been reported by Johansson et al. (2013).

3.4 Ownership of platform principles

In the Inclusive VCC project, the UvA, UENR and KIT documented all meetings and made reports available to project partners. ¹⁰ They compiled a concept note ¹¹ about the key principles and methodology for organizing learning platforms and designed a learning platform brochure. 12 They also supported the first meetings of a steering committee installed in both Tepa and Kade, consisting of representatives of institutional actors and farmers and creating with a view to continuing the learning platform. As discussed in the previous section, several actors took ownership of the platform principles, such as giving farmers space to share their knowledge at meetings. Although sustaining the learning platforms was not explicitly formulated as a project objective, it was a wish from project partners in the two project locations where the Inclusive VCC project was carried out to make an effort to do so. To that end, steering committees were set up in both districts to discuss how to follow up on the learning platform approach after project closure. No learning platforms were organized in 2019, but in 2020 an extra learning platform was organized in the Kwaebibrem Municipal with funding from the Food & Business Knowledge Platform, which had assigned the Agrofood Broker of the Year 2018 Award to one of the PhD researchers. 13 The efforts to document practices and support the initial meetings of the steering committees were, however, perceived as insufficient to sustain the learning platform approach. Involved institutions were critical towards the donors and felt that there was a lack of support and that the UvA should have withdrawn its support in a more gradual manner. Especially assistance to secure funds to organize platforms in the future was missing. As a policy officer expressed it:

¹⁰ See https://inclusivevcc.wordpress.com/publications/.

¹¹ See https://inclusivevcc.files.wordpress.com/2019/09/laven-et-al-2017-concept-note-the-what-why-and-how-of-a-learning-platform-1.pdf.

¹² https://inclusivevcc.files.wordpress.com/2018/07/learningplatform_brochure.pdf.

¹³ https://knowledge4food.net/agrofood-broker-of-the-year-2018-kwabena-asubonteng/.

"We will still need small support. It could be by way of capacity building; how did they come by those resources? Teach us, so we can also fetch and get it too" (Interview with CHED policy officer, October, 2019).

The UENR has taken this up and organized fundraising and proposal writing training workshops in 2019 for the members of the executive committee that were established in Sunyani and Tepa with a view to continuing the learning platforms. This was done with funding from the Association of Commonwealth Universities (ACU-UK) under its CICLE¹⁴ uptake programme.

Suggestions were subsequently shared during the validation meeting in Tepa (December 2020) on how to sustain the platforms, including government agencies taking up the approach and including it in their annual workplans and budgets; making the learning platforms community-based with the chief farmers¹⁵ taking a proactive role; making use of social media platforms as many farmers now have mobile phones; and making more use of peer-to-peer (farmer-to-farmer) learning. Sustaining MSPs after project closure is a generally a key challenge (Dabire et al., 2017; Ragasa et al., 2016; Schut et al., 2018) and the farmer-centred MSPs analysed in this paper were no exception.

Project partners in the Treefarms project never expressed sustaining the CoPs as an explicit aim. The CoPs were also quite different as they did not include a process of identifying 'innovations from below' among farmers. That said, cross-over learning between the Inclusive VCC and the Treefarms project occurred: the learning platform concept was taken up by the Resource Management Resource Centre (RMSC) of the Forestry Commission in Kumasi, the lead organization of the Treefarms project. The project coordinator participated in the Inclusive VCC project's learning platforms, and eventually lobbied for adoption of the learning platforms in the workplans of RMSC. UENR, which participated in both the Inclusive VCC and Treefarms project facilitated the cross-over learning, and UENR researchers taught the learning platform method to RMSC staff. The RMSC subsequently adjusted the format of collecting innovations from below, as it had limited capacity to carry out and document the research. UENR and KIT also incorporated the learning platform approach in two other projects in Ghana.

3.5 Key limitations and challenges

The previous sections mainly described the added value of MSPs, but the MSPs also faced important limitations and challenges. The knowledge from farmers that was exchanged was generally low-tech and low-cost, which facilitated the uptake of knowledge but is arguably also inadequate to find solutions for persistent challenges related to poverty, food insecurity,

¹⁴ Climate Impacts Research Capacity and Leadership Enhancement (CIRCLE) Programme; https://www.acu.ac.uk/get-involved/circle/.

¹⁵ Chief farmers are influential people in Ghana's cocoa industry. They act as source of information, as a contact person for the implementation of government programmes such as the mass spraying programme of the Ghana Cocoa Board (COCOBOD). The title of Chief farmer is assigned to an influential person in a cocoa community. They represent their community at district meetings, where Regional Chief Farmers are elected. The latter are part of the Ghana Cocoa, Coffee and Sheanut Farmers Association (CCSFA), which the government recognizes as the legitimate negotiation partner on behalf of all cocoa, coffee and sheanut producers (Quarmine, 2015).

unsustainable farming, and climate change. To resolve such problems requires the combination of different kinds of knowledge from different actors. Although this is generally seen as an important added value of MSPs (e.g. Totin et al., 2013; Shaw and Kristjanson, 2014; Akpo et al., 2015), this has insufficiently happened at the learning platforms.

A key challenge is also the restricted participation of crucial actors at higher scale levels, such as the ministries at the national level. Their inclusion could possibly have facilitated the institutionalization of MSPs at the district level, while their involvement is also important for more fundamental changes. A systematic literature review showed similar limitations of agricultural and food-related MSPs in sub-Saharan Africa (van Ewijk and Ros-Tonen 2021).

The limited number of MSP meetings that were organized – on a yearly basis and at a few locations only – was another limitation of the projects. At the dissemination workshop of the Inclusive VCC project in Accra (October 2019), participants suggested to organize MSPs more frequently and at community level to reach more actors. The research projects, however, had limited funding and staff capacity to do so. Although researchers were appointed for an extended period of 5 years, interactions and follow up in-between meetings was limited due to financial constraints. As described in the previous section, the platforms' donor dependency can be perceived as another important constraint.

Despite these limitations and challenges, we conclude that farmer-centred MSPs can contribute to learning including smallholder farmer knowledge, provided that other actors are willing to foreground farmers' knowledge and innovation capacity.

4. Conclusions

The Inclusive VCC and Treefarms projects used a farmer-centred approach that was inclusive in various ways. First, knowledge exchange was effectively aligned with farmers' varied livelihood orientations, knowledge, experiences, capabilities and innovation capacity. This was achieved by organizing events close to the live world of farmers and actively identifying, documenting their knowledge and making this accessible. Second, there are strong indications that the projects achieved more equitable outcomes and self-determination for the farmers as they could easily adopt the low-tech and low-cost innovations that they learned from their peers, while there are several indications that it improved their well-being. The adoption of sustainable farm practices and the introduction of non-timber forest products increased farmers' yields and income. Thirdly, most practices taken up were well in line with sustainability and landscape concerns. Examples include the planting of more trees in reforestation schemes in the forest reserves¹⁶ and on-farm tree planting in off-reserve areas and the introduction of organic manure and mulching, which farmers felt as highly relevant due to experienced impacts of climate change. Some institutions had adopted some of these techniques, which generates potential for reaching more farmers. Despite the appreciation by

(Ros-Tonen et al., 2013)..

¹⁶ This was done in the modified taungya system (MTS), which is a co-management scheme between the Forestry Commission and interested farmers, under which trees are planted in degraded forest reserves and farmers are allowed to interplant food crops. Farmers can keep 100% of the proceeds of the food crops, while they are entitled to xx% of the timber proceeds in exchange for their work in tree planting and maintenance

local institutions, the organization of farmer-centred MSPs still relies on external donor funding and institutionalizing the approach at the district level remains a challenge.

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