

# Master Thesis 2022



## **“Top-down or bottom-up? Defining the best approach for agricultural training programs provided to coffee farmers on the Mount Elgon, Uganda”**



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## **Abstract**

Coffee – the black gold – is the agro-commodity ranked as the top cash crop for its economic value in developing countries with a market involving around 25 million smallholder farmers. This research analyses coffee production in Uganda, one of the top coffee producers and exporters in Africa, by first carrying out a thorough comparison of top-down and bottom-up approaches to the agricultural training programs provided to coffee farmers on the Mount Elgon, and subsequently proposing a mixed-approach to agricultural community development. The opinions, ideas, and discourses around the agricultural extension services of, on the one side, the coffee farmers in Munyende village and Bududa sub-county and, on the other, of the field officers and junior agronomists have been investigated through participants observation, focus groups discussions, and semi-structured interviews and subsequently analyzed through the application of the Community of Practice (CoP) model, the Participation Ladder, and the social, environmental, and didactic types of learning. The mixed-approach to agricultural trainings and community development is not extensively investigated in academic research as the focus is often reserved to top-down or bottom-up methods. This study wishes to inform current research on the possibility of such solution to guarantee the smooth and effective collaboration as well as the equal involvement of all the stakeholders in agricultural training programs, always aiming at benefitting the farmers and improving their livelihoods.

## **Keywords:**

coffee; farmers; extension services; agricultural trainings; knowledge transfer; top-down; bottom-up.

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## 1. Introduction

Coffee, also called the black gold, is one of the most valuable traded commodities, second only to oil (Ponte, 2002). Not only it is an extremely profitable commodity for Northern countries, but it also ranks as the top cash crop for its economic value in developing countries (Wahyudi & Jati, 2012) as its market involves around 25 million smallholders (Mojo et al. 2017). There are two species of internationally traded coffee, “Arabica” and “Robusta”, the former producing superior-quality beans compared to the latter (Ghoshray, 2010). In Uganda, 80 per cent of the coffee produced is the Ugandan indigenous Robusta variety, while the rest is Arabica (GAIN., 2015). No matter the species, coffee plays a vital role in the livelihood of smallholder farmers in Uganda, as the country is one of the top coffee producers and exporters in Africa, owning 2.5 per cent of global coffee production (Chiputwa & Qaim, 2016). Since coffee cultivation requires elevated amounts of labor, especially in the production and harvesting stages, coffee increasingly became throughout time one of the drivers of development in Ugandan rural areas (Pratiwi, 2015). However, many smallholder farmers still struggle to make a living from it. Indeed, in most coffee cultivation areas in Uganda, smallholder coffee farmers barely live above the subsistence level, making them part of the 33% of those affected by extreme poverty of the country’s 39 million inhabitants (Bartl, 2020). This is mostly due to the lack of farmer’s accessibility to external inputs and technologies essential in conventional agriculture, which prevents them from boosting their agricultural productivity both on the ground and in the market (Makate & Mutenje, 2021). On top of that, the overall recent increase in the market demand of sustainably produced agro commodities can at times make it even harder for single coffee farmers. Indeed, many consumers in rich countries are eager to pay higher prices for food labelled as sustainable (Chiputwa, Spielman, & Qaim, 2015). To satisfy such demand, international organisations, and private companies – often Westerns – require agro-commodities as coffee to comply with voluntary certifications. Despite being challenging, this can nonetheless represent an optimum way for coffee farmers to gain access to the international market (Gouët & Van Paassen, 2012). Moreover, those same organisations or companies also help farmers dealing with technological changes by working towards improving farmers’ access to financial services, farm inputs, market information, and advisory services (Snider, A. et al., 2016).

One potentially effective method to diffuse new technologies in such contexts is agricultural extension service, also called agricultural training (Nakano, Tsusaka, Aida, & Pede, 2018). The word “extension” has been often condemned as intrinsically linked with the “top-down” diffusion of

information while neglecting other ways (usually “bottom-ups”) of streaming information between farmers, extension agents, and research. This research adopts the word “extension” interchangeably with “training”, but hereby disclaims that, by no means, a uniquely “top-down” approach is meant by using the first term. Not only this, but this author also takes the position that the coexistence of diverse sources of information is something farmers can benefit from as they can then (ideally) choose the most suitable information source for themselves. The term “agricultural extension” or “training” here refers to trainings on agricultural methods given to the farmer and his family with the final aim of assisting them in increasing their knowledge on farming practices based on latest scientific discoveries and research (Perk, 1980). An agricultural extension service is based on the transfer of technical agricultural advice to farmers, while providing them with the inputs and information necessary to subsidise their agricultural production (Swanson et. al., 1997). Such programs entail a wide-ranging area comprising of improved crop varieties, better livestock control, improved water, weeds, pests, or plant diseases management. Where appropriate, agricultural extension may also contribute forming local farmers' groups and cooperatives so that they can easily prosper from extension programs (Nakano, Tsusaka, Aida, & Pede, 2018). Non-agricultural extensions are important as well, namely all activities not directly linked to agriculture or livestock production, yet fundamental to the farm families. These could be home economics, family health and nutrition, population education and community development (Oakley & Garforth, 1985). Besides agricultural knowledge and inputs, access to the trainings will help smallholder farmers to identify the most competitive market, the right time, and the best price to sell their produce at, while also uplift their bargaining power when selling (Magesa & Mkasanga, 2021). This substantially upgrades farmers’ ability to make informed decisions concerning their produce, markets, prices, business partners (traders), processors, and government intervention as in cases of food insecurity (CTA, 2015). It is important to stress that trainings’ attendance may lead to productivity improvements only if a differential originally exists between the farms’ actual productivity and the productivity farmers could potentially gain with more advanced know-how. Trainings contribute to the tightening of this gap by increasing technology transfer and improving farm management skills (Anderson & Feder, 2007).

However, this is not an immediate result and challenges daily faced by farmers are unfortunately not avoided by simply offering them more advanced knowledge and skills (Anderson & Feder, 2007). Knowledge/technology transfer is not a straightforward and a neutral/technical process. The concept of adoption as it has been applied in agricultural research in Africa is



profoundly flawed. It is too linear, too binary, too centred on individual decisions, and blind to many important aspects of technological change. As Glover et al. (2016: 4) argue, technology is often seen as “discrete and generic transferable packages of material and practical components constituting a relatively simple, largely individual, dichotomous yes/no, once-and-for-all and linear progression by which inferior existing materials, tools and/or methods become obsolete and are abandoned in favour of new, superior ones”. Moreover, agricultural extensions are usually a service encouraged by governments with the final aim of improving agriculture (Stone, 2016). Although the agents carrying out these services are often interested in farmers’ well-being, the actual knowledge network they rely on is all based on bureaucrats’ and scientists’ personal interests among all. Therefore, it often happens that wealthier and strategically located farmers are prioritised as extension recipients, leaving more spatially distant smallholder farmers without effective information providers (Bentley, Van Mele, & Acheampong, 2010).

Despite that, agricultural trainings are decisive for what is called “rural community development”. Here, the word development stands for “change”, something that can be brought about either from the elite (top) or from the people of the community itself (bottom), or else from both (Isidiho, & Sabran, 2016). This step is paramount in understanding that in development, no one has absolute knowledge. The “bottom”, the community, can and must also bring about change and development following its own ideas and values when the necessary means to achieve it are available (e.g., knowledge, finance, and manpower). In this regard, Gene F. Summers comprehensively explains what rural community development is. As he stated in his book, “rural community development is planned intervention to stimulate social change for the explicit purpose of the “betterment of the people”. [...] The focus of rural community development is on the quality of life, or well-being, of people residing in sparsely settled areas, meaning small cities, towns, and villages in nonmetropolitan areas. [...] Rural community development is derived from a vision of society which stresses the utilisation of knowledge, particularly science and technology, to solve problems.” (Summers, 1986, p. 347).

The title of this research “top-down or bottom-up” poses a question onto who should control the decisions regarding the utilisation of this knowledge. Should control be in the hands of those whose lives are at stake (i.e., bottom, community, coffee farmers), or should it reside with the organisations providing the knowledge and technology (i.e., top, elite, coffee companies)? This notion of control reflects in the way agricultural trainings are designed and approached, by determining who is in the lead and the way participation and power sharing between the “top” and

the “bottom” are arranged. More specifically, this duality refers to different perspectives and theories of knowledge transfer. One approach is the ‘classroom version’ of knowledge in which a teacher instructs the students. The other approach is a ‘practice’ approach in which the community learns by itself from the sources and resources at hand. Within this framework, I investigated the way current agricultural trainings are arranged for coffee farmers on the Mount Elgon in Uganda by comparing data gathered from two different groups of farmers. Hereby, I propose a final approach that I deem best fit considering the data collected on the ground. In this sense, this research sought to define the best approach fit to agricultural trainings provided to coffee farmers on the Mount Elgon in Uganda, specifically in the case of those laid out and implemented by the Dutch non-governmental organisation (NGO) 100Weeks, which supports women in their journey to lift themselves out of poverty. Their current training program targets women in extreme poverty by providing them with weekly cash transfers of 8 euros. These cash transfers are complemented by a series of 100 trainings over the course of 100 weeks. Recently, 100WEEKS has been exploring opportunities to expand their training model to include a more specific focus on agricultural practices, a change driven by external coffee companies’ requests and interests. This research provides recommendations in defining the design of these trainings by pursuing a farmer centered perspective - as farmers represent both the object of the trainings as well as the recipient actors on the ground - to understand how they access and adapt knowledge to their conditions.

Indeed, this research aims at collecting subjective and ethnographic forms of knowledge as well as objective knowledge on how agricultural trainings can affect the lives of coffee farmers in Uganda and how such programs respect their needs and requests.

To attain such objective, the following research questions were asked:

- Do farmers prefer to have external coffee companies’ interests dictating the knowledge of agricultural training programs (top-down), or would they like the structure and topics of those trainings to be based on their own needs, challenges, and interests (bottom-up)?
- What are the main differences between a top-down and a bottom-up approach in the context of agricultural trainings provided to coffee farmers in the Mount Elgon area in Uganda? How and where is knowledge accessed, shared, and adopted by the farmers? Which methods are being used to transfer the knowledge to the farmers?

This research contributes to a broad agricultural literature and converges multiple domains: rural community development, knowledge transfer, agricultural extension services, and farmer decision-making and learning processes. The thesis is structured over seven chapters. After this introduction, the Theoretical Framework is described in Chapter 2 aiming at consolidating the theory backing this research within a specific framework. This framework begins with the analysis of the concepts of participation and learning, as they are core to the understanding of the different approaches used in agricultural training programs. Such notions represent the basis supporting the central theories backing up this research, namely: the “Pedagogy of the oppressed” by Paulo Freire, the communities of practice theory by Jean Lave and Etienne Wenger, the environmental, social, and didactic learning by Glenn Davis Stone, and the participation ladder by Sherry R. Arnstein. The theories found in this framework are themselves built on an extensive analysis of the main topics backing this research: rural community development, top-down and bottom-up approaches in rural community development, and agricultural training programs. Those have been disclosed in the Annex, under Appendix 6. The third chapter is on the Methodologies used to analyze the data supporting this thesis. There, not only the specificities of the fieldwork are described but also all the necessary information concerning the research site and context are provided. The results are presented right after the methodologies, specifically in the fourth chapter, where both farmers and staff members’ views and information are coded to have a complete picture of the situation answering the abovementioned research questions. Afterwards, the discussion chapter follows, where a final comparison of the top-down and bottom-up approaches is given by incorporating the analysis of the data collected and existing literature. Based on these, the most suitable approach for the upcoming 100Weeks agricultural training programs offered to farmers on the Mount Elgon is proposed. Limitations to this research are disclosed at this point as well. Finally, the concluding chapter summarizes the whole study and its main findings while bringing recommendations for future research.

## 2. Theoretical Framework

The notions of participation and knowledge transfer are core to the understanding of the different approaches used in extension services. From these two, the concept of learning also stands

out for its relevance to this research as well as the several discourses that academics formulated around it.

This chapter progressively builds up a theoretical framework using the description of the abovementioned notions as a starting point which serve as the basis for understanding the explanation of the central theories backing up this research. Indeed, to answer the main research questions, the “Pedagogy of the oppressed” by Paulo Freire, the communities of practice theory by Jean Lave and Etienne Wenger, the environmental, social, and didactic learning by Glenn Davis Stone, and the participation ladder by Sherry R. Arnstein have been used as lenses through which to approach the fieldwork, to analyze the data, and draw the results.

The following paragraphs begin with a comprehensive background, followed-up by the description of the actual theories.

## 2.1. Theoretical background

Participation is essentially a discourse in rural community development studies which follows the assumption that communities are the key subjects and actors of social change, and that professionals external to such communities can only bring about tools and means to serve their goals (Eversole, 2012). Citing the words of Robert Chambers, “participation has implications for power relations, personal interactions, and attitudes and behaviours that participatory can apply to almost all social contexts and processes, not least in organisations, education, research, communities and the family” (Thomas, 2013, p. 5). Indeed, participation can take various forms and dimensions and it is not feasible to provide one single definition for participation that encapsulates its whole meaning in development. However, Pearse and Stiefel (1980) tried to define participation as “the organized efforts to increase control over resources and regulative institutions in given social situations on the part of groups and movements of those hitherto excluded from such control” (Rahman, 2015, p. 203). Furthermore, as Oakley (1991) accurately points out, participation can be meant both as a means or as an end. In the first case, participation as a means entails the adoption of participation to attain a certain goal. Put it in a different way, here participation is viewed as a strategic tool – often used by government and development agencies – to access rural resources and achieve the targets of development projects. On the other hand, participation as an end is seen as a process which unravels throughout time and encourage rural people to increasingly participate

and shape development activities. Given that here the “end” is participation itself, such process does not involve measurable goals (Oakley, 1991). Since the late 1970s, a huge part of literature has been devoted to researching the concept of participation, significantly shaping development strategies and interventions, and giving birth to the so-called “participatory development” (Neef & Neubert, 2011). This shift involved a complete reorientation of the *modus operandi* in development, substantially conforming its principal features with the new rule. Participatory kind of development sees as its main aim the strengthening of rural people’s capacity to make them able to set their own goals and act on these. Nevertheless, on-the-ground approaches to participation favour the opposite of people-driven change. Indeed, participation often aims at “fetching” people and communities into the formal procedures and institutions of development: the project, the meeting, the boards, and all those formalities commonly used in the Western world that inevitably frame community action (Cornwall, 2008). The issue with this approach is that it reveals a deeply embedded assumption, one that pervades practices of development organizations from the United Nations system to small local NGOs: that development is brought about by formal agencies, streaming from *us* to *them* in the binary, and relying on the institutional knowledge of professionals (Eversole, 2012). On top of this, creating truly participatory processes comes with several challenges. The first one concerns the way we think and approach knowledge. Indeed, knowledge hereby is not viewed as an objective or neutral entity but rather as one always linked to specific contexts. From this consideration follows that learning is not about having a transfer of knowledge from one actor to another, but rather about learning communities and situated practices. Indeed, this theoretical framework begins with the analysis of Paulo Freire’s work, “Pedagogy of the Oppressed” (1968), where the author enshrines a transformative view of the cognitive individual type of learning. Furthermore, the focus shift to Lave and Wenger’s Communities of Practice model of social learning which will function as a solid base for this research. This theoretical framework continues with the analysis of Glenn Stone’s work on didactical learning which offers a framework for a general theory of agricultural knowledge production combining environmental, social, and didactic learning and focusing on the benefits for small-scale farming. Finally, the participation ladder by Sherry R. Arnstein will be discussed and further used in my research as a tool to measure participation levels and power shared between the coffee farmers, 100Weeks, and the coffee companies.

## 2.2. The evolution of the education concept: Paulo Freire's "Pedagogy of the Oppressed"

By viewing education as a subversive force allowing for the transformation of an unjust and unequal society, Paulo Freire marks the beginning of a booming literature in the field of critical pedagogy (David, 2009). Paulo Freire was born in 1921 in Recife, and he was soon forced to experience situations of extreme poverty which significantly shaped his work (Bentley, 1999). Indeed, Paulo Freire incarnated a rediscovery of the humanizing vocation of the intellectual and demonstrates the power of thought to negate accepted limits and open the way to a new future. To do so, he operates on one basic assumption: that man's ontological vocation is to be a subject who acts upon and transforms his world, and in so doing moves towards ever new possibilities of fuller and richer life both individually and collectively (Fischma & Diaz, 2013). This world to which he relates is not a given and static reality, rather it is a problem to be worked on and solved. For Freire, the Western world provides the resources for that task in the form of advanced technology, ignoring that the Southern world goes through different social struggles. The author believes that every human being, no matter how "ignorant" or submerged in the "culture of silence", is still capable of looking critically at the world in a dialogical encounter with others (David, 2009). Provided with the proper tools, the individual can perceive personal and social realities as well as the contradictions in it, becoming conscious of his or her own perception of the reality and deal critically with it. In this process, the old, paternalistic teacher-student relationship is overcome. As this happens, the world takes on a new power. It is no longer an abstraction but a means through which people discover themselves and their potential. As Freire says, "each individual wins back the right to say his or her own word, to name the world" (Freire, 2005). Indeed, he believes that through education, either perpetuation of the existing conditions of oppression or, oppositely, transformation to a freer society is brought about. He is against what he named the "banking" concept of education (i.e., traditional form of teaching where the teacher delivers knowledge to the students – who are seen as passive recipients – in a didactic manner) as he believes such method was substantially oppressive, violent, and exploitative (Meiers, 2007). This concept views education as an act of "depositing". Instead of interactively communicating, teachers make "deposits" of knowledge into students' empty minds. In the banking concept of education, knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider knowing nothing (Freire, 2005). Projecting an absolute ignorance onto others, a characteristic of the ideology of oppression, neglects education and knowledge as processes of inquiry. The more the

students work at storing the deposits entrusted to them, the less they develop the critical consciousness which would result from their intervention as transformers of the world. The more they fully accept the passive role imposed on them, the more they tend simply to adapt to the world as it is and to the fragmented view of reality deposited in them (Shah, 2021). Indeed, the interests of the oppressors lie in “changing the consciousness of the oppressed, not the situation which oppresses them” (Freire, 2005). To counteract such trend, Freire propose the problem-posing method of education which sees education as a tool through which we can problematise the world around us, and the relations we have within it (David, 2009). In this view, the role of the teacher would be to stimulate students into becoming active subjects in their own education. Therefore, teachers do not simply deliver facts to the students, rather they would pose questions and problems for the learner to investigate and resolve in innovative ways. Thus, those who lead educational processes should not simply explain the way forward to the people, but should converse, and work in communion with them (Hickey, S. & Mohan, G., 2006). Freire’s dialogical method can serve as a conceptual framework to analyse the top-down “development” strategies currently being pursued in most African countries, and in Uganda. Indeed, Freirean pedagogy highlights the importance of participatory forms of development, revindicating a “bottom-up” perspective where power is shared between the leaders/teachers and the people/students. For this reason, Freire’s theory serves as the necessary analytical basis to question the current power structures between the top and the bottom, and therefore farmers’ involvement in changing or improving their production.

### 2.3. Communities of Practice theory

Jean Lave and Etienne Wenger take the notions of “learning by doing” and apprenticeship, merge it with the analytic perspective of Marxism, inherited from Freire, and give form to a theoretical perspective they named legitimate peripheral participation (LPP). This notion describes the process through which a beginner becomes an expert of a specific practice in a specific community. However, Lave and Wenger do not reify practice as they believe there are multiple ways of engaging in communities and in learning. Following this thought, they do not support the notion that increased participation is attained by the training of pupils by the teacher, but rather by facilitating change in the identity of the learner (Jaarsma, Maat, Richards & Wals, 2011). By doing so, they distance themselves from the Freirean direct link of education with the schooling concept. Nevertheless, they do not deny that learning can take place where there is teaching, but they do

not believe schooling to be the maximum source of learning. They instead insist that the role of the senior learners/participants does not consist of transferring knowledge to the apprentice, but they function more as intermediaries who support the apprentice in finding his or her own way in the CoP either by guiding them or by being observed by them (Jaarsma, Maat, Richards & Wals, 2011). Lave and Wenger leave the traditional, cognitive-abstract, classroom type of education behind and come closer to the conceptualisation of education as both a more practical activity to master as well as a social act to make (i.e., embedded in social relations with co-workers). They place practice as the centre of their learning theory and develop the Community of Practice (CoP) model. Communities of Practice is defined by Wenger as “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (Wenger, McDermott, Snyder, 2002, p.4). In other words, CoP is a social entity which binds different members together through their mutual engagement (Noe, 2012). The Communities of Practice (CoP) model of social learning organises around the interaction between knowledge, practice, and social structures. Learning through a CoP can primarily be considered a process of social construction and knowledge sharing, rather than a process of knowledge transfer. Indeed, it is based on participation, where knowledge is present in, and constructed from, shared practice (Morgan, 2011). Rather than looking at learning as the acquisition of certain forms of knowledge, Jean Lave and Etienne Wenger gave the learning process a different meaning by placing it in the context of a social relationship, i.e., situations of co-participation (Hay, 1993). The word *participation* here does not only refer to the mere act of engaging with others in specific activities but, more specifically, to the act of taking part in a more comprehensive mechanism which contributes to the construction of individual identities in relation to these communities (Noe, 2012). To make these assumptions true, the two authors draw attention to the need to contextualise and *situate* the knowledge in a specific CoP (Smith, 2003). However, as already stated above, a community of practice involves much more than the acquisition of technical knowledge gained from practicing some tasks. It consists of engaging with a set of relationships and things that matter to the community, and in so doing, people become full participants in the world by generating new meanings and, therefore, transforming the social structure in which learning firstly took place (Darnhofer, Gibbon & Benoît, 2012). This type of learning, also called situated learning by Lave and Wenger, is a model of social learning where knowledge is linked to constructive processes of learning. In the context of agricultural development, social learning demands for participatory process design, and the communities of practice theory has been repeatedly used as



a learning platform for groups of farmers as a part of an extension tool with the final aim of improving new ideas within the existing old groups in the extension context (Noe, 2012). Indeed, CoP has increasingly been used as a tool to grasp and devise social interactions between research, extension agents, and farmers with the final aim of improving the endorsement of new agricultural practices through the acquisition and sharing of new knowledge and skills (Fiore, Colantuono, Conto, & Adamashvili, 2020). Morgan (2011) found that CoP's farmers significantly boost their learning process compared to non-CoP farmers simply by gaining knowledge from their peers. This occurs due to their shared farming style and common understanding of what agriculture encompasses which makes the knowledge-transfer process smoother. The CoP model is used as an analytic approach to learning contraposed to Freire's method as the former can be commonly called "peer-learning" and therefore analyses the bottom-to-bottom interactions. The CoP model expresses the features and characteristics of practice and community, where practice refers to a social and interactional process (Brown & Duguid, 1991) and community is defined as a relation of constant interaction between the building and preservation of social bonds (Morgan, 2011).

#### 2.4. Environmental, social, and didactic learning

In his 2016 research "Towards a General Theory of Agricultural Knowledge Production: Environmental, Social, and Didactic Learning", Glenn Davis Stone revendicates the presence of didactic learning model in agriculture and further discusses its often-bypassed relationship with environmental and social learning. This model of learning includes the presence of several off-farm sources and agents of advice and information with their own interest at stake. Examples of such parties can be officers, farmer field schools, environmental activists, bureaucrats, regulatory authorities, researchers and book authors, private companies, and NGOs. In his work, Stone argues that this type of learning differs from environmental or social learning as in the former the interests pushed forwards can also not be fully aligned with the farmers'. In this research of 2016, he explores the importance of each model and offers a framework for a general theory of agricultural knowledge production focusing on the benefits for small-scale farming.

Before continuing, it is fundamental to make clear what is meant by these two terms. As Stone (2016, p.2) defines, environmental learning means "observing and basing decisions on empirical payoff information from experiment". Indeed, environmental learning can be classified as a type of experiment-based learning, namely learning by doing, by having experiences, and reflect on those

(Dunn & de Saintonge, 1997). Social learning, instead, is described by the same author as the practice of individuals emulating “behavioural models on social criteria—on who the models are, how many of them there are, or some other social standard rather than on payoff signals from their farming practices” (Stone, 2016, p.9). And he further explains that “Farmer X may be observing payoff information on a seed, but his decision to even try it may have been influenced by seeing a high-status farmer grow it, and his interpretation of its performance may be influenced by what other farmers are saying about it” (Stone, 2016, p.9). Hence, the two types of learning – environmental and social – might even intersect. As a matter of fact, as environmental learning’s payoff information becomes more expensive, farmers progressively confide on social learning (Stone, 2007). Both types of learning are nearly free of external interests, which is something that differ them from the didactic type of learning which instead sees “agricultural didacts [...] acting primarily out of their own interests while claiming to act in the farmer’s interests” (Stone, 2016, p.10). The term didactic learning in farming indicates the typical teaching method comprising a teacher giving lessons to a group of students (i.e., banking concept of Freire) (Flenley, 1980). Glenn Davis Stone recognises three different types of didactics: commercial, governmental, and NGO. The first one is driven by profit motive and assumes that farmers adopt only products that benefit them (Stone, & Flachs, 2014). Governmental didactics, instead, often pursues its bureaucratic interests by prioritising large-scale and wealthy farmers and then profess to have “empowered” farmers (Bentley, Van Mele, & Acheampong, 2010). Finally, NGO didactics is described as more aligned with farmers’ interests. In this sense, NGOs are not meant to profit from or exercise control over farmers, yet contrarily to the formers, the agents of this last type enjoy a lack of accountability that the others do not, possibly leading to contradictions between the interests of farmers and NGOs (Stone, 2016).

After making this distinction, Stone analyses how the three types of learning are related. In fact, he states “social learning is a core adaptive strategy, indispensable in so complex and variable enterprises as agriculture. It is usefully theorized as a distinct form of learning although in practice it is entangled with environmental and didactic learning. But it is important that farmers often follow other farmers’ signals on grounds other than actual observation of payoff information, especially on the basis of prestige and herd effects” (Stone, 2016, p.10). Stone here is highlighting the fact that – while indeed present – the modality of didactic learning is currently being ignored among leading theories of agricultural learning. He then proposes a new and preliminary framework for understanding agricultural decision-making process, one that takes into consideration environmental, social, and didactic learnings all together and that is situated – once again – with the

technology and context into which it is introduced. In fact, environmental and social learning constantly contribute to each other. To cite an example made by Glenn Davis Stone (2007) that perfectly shows how the two types of learning are interrelated: “Even a direct environmental observation made on one’s own crop (“Brahma cotton yielded 6 quintals/acre for me last year”) is likely to be interpreted or contextualized through a form of social learning (“which was much more than my neighbor said he got with the same seed”). Even a classic case of conformist adoption (“I am planting Brahma because my neighbors are”) assumes at least an indirect environmental basis (“and they wouldn’t all be planting it unless someone had an indication it would do well”). Moreover, Glenn Davis Stone (2016) also examines how didactic learning interacts with environmental and social learning respectively. Indeed, it is in didactic learning’s interests to weaken the importance of environmental learning. Usually, didactic learning is sold as a commodity to larger farms, while environmental learning spreads noncommercially among smallholder farmers. However, with the farmer first movement initiated by Chambers et al. 1989, there was a new stream in agricultural development pushing forward the idea that agricultural programs should focus on training and encouraging farmers to gain and transmit information about technological advancements. This new trend was regarding didactic learning in combination with environmental learning. For what concerns didactic and social learning, these two also work side by side given that the former uses the latter to “legitimate and popularise technologies and practices” (Stone, 2016, p.13). This is achieved following two types of biases: conformist and prestige. Conformist bias represents people’s propensity to behave as those around them do rather than following their own intuition and perception (Wakano & Aoki, 2007). Applied to this context, this bias regards the tendency farmers own to follow other farmers’ behaviour when it comes, for example, to the right choice of seed to plant. On the other hand, prestige bias is essentially a bias towards imitating the behaviour of “prestigious” members of a community, namely those who usually are high-status, more skilled, or successful in a commonly valued social sphere (Jiménez & Mesoudi, 2019). In farming, input producers often exploit this bias in their favour by convincing prestigious farmers to act as models in the community by offering themselves or their plots as “demonstration” fields, amongst others (Stone, 2016).

To conclude, Glenn Davis Stone (2016) hereby analyses the way didactic, environmental, and social learnings entangled and, by doing so, he proposes a comprehensive framework examining key components shaping farm decision making – a framework which builds on the theories

discussed in the previous chapters while also bringing in new elements and applying those in the rural and farming context.

## 2.5. Participation ladder

In her work “A ladder of citizen participation” of 1969, author Sherry R. Arnstein equates citizen participation with citizen power. She says “It is the redistribution of power that enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future. It is the strategy by which the have-nots join in determining how information is shared, goals and policies are set, tax resources are allocated, programs are operated, and benefits like contracts and patronage are parcelled out. In short, it is the means by which they can induce significant social reform which enables them to share in the benefits of the affluent society” (Arnstein, 1969, p.3). Furthermore, she stresses how meaningless participation without redistribution of power is as it gives the opportunity to powerholders to claim that, in a specific intervention, all sides were considered while, in fact, only the most powerful actors were truly benefitting from it. Following this mode of thinking, she developed a typology of eight levels of participation arranged in a ladder pattern, each notch coinciding with the extent of citizens’ power in affecting the results.

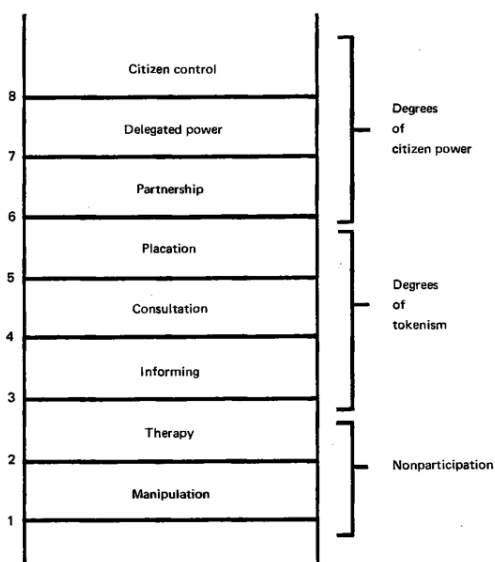


Figure 1. Participation Ladder by Sherry R. Arnstein, <http://dx.doi.org/10.1080/01944366908977225>

The bottom rungs are (1) manipulation and (2) therapy and are associated with levels of “non-participation”. Their aim is to purely direct participants in their actions by telling them what they

need to do, instead of rendering them full and free actors able to choose for themselves. Steps 3 and 4 are described as levels of “tokenism”, linked to the words informing (3) and consultation (4). At this stage, people are being informed and consulted but only with the final aim of being placated (5), i.e., giving them the power to advice but not the right to make direct changes. However, they still lack the power to be heard, determine, and act upon their interests. Decision-making power is ever more equally shared the further up we climb the ladder, and these changes are expressed by the words: partnership (6), delegated power (7), and citizen control (8), which express the way the two parties can engage and negotiate their power shares.

It is true that in the real world there might be way more rungs with even more blurred borders and definitions, and that there might be more than just two defined homogenous parties in competition for power. The explanation for adopting such simplistic structures is that in reality, what Arnstein calls the “have-nots” really do regard the powerful as a uniform “block,” and powerholders actually do perceive the have-nots as an undefinable conglomerate of “those people,” with poor understanding of differences among them (Aazami, Pouya, & Motaghd, 2016).

## 2.6. Application of the theory

This research examines social learning processes among coffee farmers and explores the application of the Community of Practice (CoP) model in this context. It considers the CoP model as a way of exploring social learning processes among Ugandan coffee farmers, but also as a management tool to the interest of 100Weeks concerned with improving agricultural extension services provided in the field. The CoP model is applied to case studies of social learning fora among coffee farmers and their interactions with 100Weeks as the interaction between people and technology is a study in itself, as technology is part of the CoP to engage with in the same way as one engages in social relations (Jaarsma, Maat, Richards & Wals, 2011). The case studies are compiled from participant observation, focus groups, and in-depth semi-structured interviews with farmers and other actors relevant to this research.

As explained in the theory above, communities are there not just perceived as social entities but rather as communities focused on a particular practice. In the case of farming, it is possible to identify several practices and activities around which farmers grow their produce (e.g., if you are specialised on a specific crop production or type of farming, if you have livestock, which type of

livestock etc.). Those practices are not clearly defined entities, therefore make the borders of the communities blurred and give the possibility to the individuals to operate and belong to different communities at the same time. In this study, the CoP model is used to define the borders of my sample and my research.

Building on the “apprenticeship” concept of Lave and Wenger, several questions were asked to define learning as a social process and practice in the context of both 100Weeks and the Ugandan coffee farmers. As the experts believe, the beginning of this participation comprises gaining access to the community – to its knowledge, skills, social relations, tools, and so on (Jaarsma, Maat, Richards & Wals, A., 2011). And this is what the questions asked during both focus groups discussions and one-to-one interviews were based on. Moreover, farmers, who are seen as a social component, are facilitated by 100Weeks to be inserted in another CoP, the one of cocoa farmers.

On top of this model, the literature provided by Stone served as a base to analyse the way different types of learnings are intertwined in the technology transfer process in agriculture, with a strong focus on didactic learning (i.e., representing agricultural extensions). This was done by identifying and considering those agents involved in such process and what their practices consisted of. Then, it also further defined the framework I used to investigate how interactions between extension agents and coffee farmers worked in the first place, and the way they are facilitating the up taking of new practices by the farmers. Finally, the participation ladder of Sherry R. Arnstein and all the gradations of the different levels of citizen participation laid out by her made it possible to understand and rank the (possible) demands for participation from the “have-nots” (i.e., the bottom, the community, the coffee farmers) as well as the spectrum of responses from the “powerholders” (i.e., the top, the elite, the coffee companies/NGOs).

This theoretical framework guided my understanding of the many knowledge transferring activities carried out by extension providers in the field as well as my analysis on the socialisation process between the different agents involved. Such insights have been fundamental for the analysis of the data collected and for laying out the results as I posed the investigation of farmers’ learning process as the necessary basis to examine their preferred approach.

## 3. Methodology

### 3.1. Research design

This study is an in-depth ethnographic type of research examining the agricultural trainings provided to two different groups of coffee farmers located on the Mount Elgon, Uganda. The two groups are situated in the Munyende village and Bududa district respectively. The first group of coffee farmers collaborates with the Manafwa Watershed Restoration and Stewardship (MWARES) project which operates following the Plan Intégré du Paysan (PIP) approach. The second group of coffee farmers, instead, works with the Konokoyi cooperative, which runs under "Mount Elgon Agroforestry Community Cooperatives Ltd" (MEACCE) company. The two sets of data collected with these two groups of coffee farmers are analyzed and compared in the next chapter. In the sections below, a description of the two is carried out.

### 3.2. Research site

The Mount Elgon region comprises an extinct volcano that lies astride the Eastern Uganda and Western Kenya border. The peak of this mount is protected by national parks in both Uganda and Kenya, creating a wide conservation area which has been declared a UNESCO Man & Biosphere Reserve. Bududa district is in the upper part of the Manafwa watershed, in the Mount Elgon region. Bududa district is bordered by Sironko District to the north, Kenya to the east, Manafwa District to the south, and Mbale District to the west. Munyende village is in Bushika sub-county in Bududa, Bunabultti parish. The major language spoken in this area is Lumasaba. The national population census conducted on 27 August 2014 put the population at 210,173, with a woman to man ratio of 1:1 (Uganda Bureau of Statistics, 2017).

The coffee farmers living in Bududa district were relatively easier to meet compared to the ones in Munyende village, as the latter were located further up on the Mount compared to the former. Therefore, proper streets were not present, so the possible transport options concerned either hiking up the Mount or driving a mountain motorbike to reach this group of farmers. It is important to mention such difference in location as this leads to a visible contrast in terms of farmers' life conditions as well as availability of trainings, which is going to be explained further in Chapter 6. Despite the dissimilarities, both groups of coffee farmers cultivate Arabica coffee, and both get

trained on agronomic practices related to coffee as well as other crops which are necessary for coffee intercropping (e.g., beans). Differences arise in the approaches used from the organisations, as MWARES is following the PIP approach while MEACCE works through Coop Business Model. These two are described below.

### 3.2.1. MWARES project and the Plan Intégré du Paysan (PIP) approach

The MWARES project is a 4-year project initiated in August 2019 proposed to DOB-ecology and prepared by a consortium of actors, namely Wageningen Environmental Research (WENR), Africa 2000 Network (A2N), Tree Adoption Uganda (TAU), Kyambogo University in Uganda, Makerere University in Uganda, and Wageningen University (Department of Environmental Sciences). This project has the final aim of restoring resilience and stimulating stewardship of the degraded and over-exploited Manafwa Watershed, as these are fundamental for the region in providing crucial ecosystem services, such as the regulation of water and climate, and the provision of food and raw materials. Due to this situation, few of the main issues encountered by the farmers entail frequent floods, landslides, shrinking forest reserves, soil degradation, and droughts. The MWARES project focuses on mobilizing the local population to tackle these challenges. This requires a bottom-up participatory approach, in which generating intrinsic motivation, commitment and collaboration to invest in the watershed are crucial. Moreover, the Manafwa watershed transcends several districts, of which Manafwa and Bududa districts are in the upper part and are therefore most important to the project.

The main concept that this project wants to push forwards is “resilience-based stewardship”, which in this case means that stakeholders in the Manafwa watershed understand and accept their responsibility to be good stewards of the land and its natural resources and agree to work together to restore and preserve the watershed’s biodiversity. Indeed, land and people (i.e., both farmers and Ugandans and international experts) are at the centre of the Plan Intégré du Paysan (PIP) approach, the one applied by this project, and which has already proved effective in other regions of the world, as Burundi (Musabyimana, 2019). The PIP approach (in English, “Integrated Farm Planning approach”) – rooted in sustainable development approaches – is implemented to guarantee a change in the mindset of the stakeholders involved in MWARES project: changes in their intrinsic motivation, behaviour, knowledge, and capacities, as well as changes in their practices



and willingness to collaborate. Indeed, the PIP approach shifts away from the top-down technology-transfer approach and instead focuses on the farmer-to-farmer knowledge transfer, farmers' envisioning, and the built of intrinsic motivation (Kessler, van Duivenbooden, Nsabimana & van Beek, 2016), the latter referring to the capacity of people to shape their own life (Cherry, 2022). For this reason, all the activities under the PIP approach are set through the active involvement of all household members. Farmers are also encouraged to draw the actual and future vision (Fig.2) for their farms to achieve over the period of the project (in this case, MWARES) as well as to lay out the household's action plan (Fig.3) with the commonly-arranged tasks division specifying: the activity, its target, timeline, the name of the person appointed for such activity, the necessary resources, and the source from which they are going to obtain the resources. The activities mostly regard sustainable agriculture, but they can also cover other areas such as health, savings, microcredits, etc. This approach can be scaled-up horizontally (from farmer to farmer). Indeed, the MWARES staff firstly trains the Paysan Innovateur (PIs, "innovative farmers" in English) – namely those farmers most trusted by the community who are willing to experiment on their farms – on the PIP approach for a total of eight continuous weeks, until their graduation day, where farmers present their household's visions and action plans (Kessler, van Reemst & Nsabimana, 2020). The farmers who graduated will then start conducting trainings on the PIP approach to another group of farmers in another village, assuring the sustainability of this approach. Based on the outcomes of the visions and action plans, training programs on agronomic practices are laid out or adjusted by the MWARES staff and farmers can start receiving those after being graduated.



Figure 2. Farm actual and future vision example, Munyende

NO	ACTIVE TARGET	TIME/LIMIT	WORKS	PLANS	RESOURCES	2020-2023
1	Establishing a school	400	15th March 2020 20th March 2020		From school From labor	From school From labor
2	Planting indigenous trees	200	10th March 2021 20th March 2022		From labor From compost From money	From labor From compost From money
3	Building a school house	3 years	10/1/2021 10/2/2022		From cattle From labor From money	From cattle From labor From money
4	Planting coffee	300	10/1/2022 20/2/2022		From labor From compost From money	From labor From compost From money
5	Planning to build a toilet	1 year	10/1/2022 12/1/2023		From family From labor From money	From family From labor From money
6	Planting banana	500m	10/6/2022 20/6/2022		From labor From compost From money	From labor From compost From money

Figure 3. Household action plan example, Munyende

In this research, the MWARES staff and, most importantly, the PIP approach, and subsequently the agricultural training programs received by the coffee farmers in Munyende represent a concrete example of the bottom-up approach to rural community development.

### 3.2.2. MEACCE and Coop Business Model

MEACCE is a Secondary Level Cooperative owned by 12 primaries which produces certified (Fairtrade and Organic) Washed Bugisu Arabica Coffee cultivated on the slopes of the Mount Elgon since 2017. In fact, MEACCE buys organic coffee from farmers in the Mount Elgon region and provides trainings to the farmers following the requirements of Organic, Fairtrade, and Rainforest Alliance standards. Moreover, MEACCE works following the Coop Business Model and, among the 12 primary societies which it represents, there is also Konokoyi in Bududa District. The nouns “MEACCE” and “Konokoyi” are hereby used interchangeably to refer to this organisation. Given that MEACCE primarily focuses on buying coffee, it has been used in this research as the one representing the top-down approach to rural community development.

For what concerns the Coop Business Model, it is essentially a business model which combines the features of a small business ownership and a corporation (Reynolds, 2013). In fact, cooperative

enterprises are built based on the idea of forming an association of individuals and, therefore, they can take many different forms (Jussila, 2013). Concerning MEACCE cooperative, it is “producer owned”, namely it includes small-scale business operators in coffee farming (e.g., Konokoyi). For this reason, a cooperative is not community-owned, yet the main benefit of business operators in holding an ownership share relies on the greater price and fewer costs they get by joining (Mazzarol, Mamouni Limnios, & Reboud, 2013). In practice, Konokoyi staff recruits farmers by firstly visiting them at their homes, then explaining them the benefits farmers would gain by producing organic coffee for MEACCE and, in case of a positive outcome, farmers need to buy a share at the society to become members and subsequently secure this working relationship via an employment contract signed by both parties, i.e., the farmer, and a representative of the organisation (Annex 5). The benefits farmers receive from working with Konokoyi entails revenue from selling coffee, second payments for their coffee, social benefits, and organic fertiliser provided for free. Also, in case of violation of the contract (e.g., production goes against organic standards, or they refuse to get their farms inspected by the staff) farmers get sanctioned and are eventually expelled from the program. These farmers only receive trainings on agronomic practices related to coffee and – on request – trainings or advice on other crops used for intercropping practices (e.g., beans). The trainings are carried out directly on demos, namely on plots of lands few farmers put at the service of the community to organise demonstrations. Farm-field schools have been recently introduced as a knowledge-transfer method for farmers in Konokoyi, and they are considered a more participatory approach to knowledge-transfer practices, however only few farmers have received those by the time the data were collected.

As already mentioned at the beginning of this paragraph, farmers in Konokoyi Cooperative produce their coffee following Fairtrade standard. Milford, (2004) perfectly shows (Fig. 5) how the Fairtrade labelling system works and the way it is related to the coffee commodity chain.

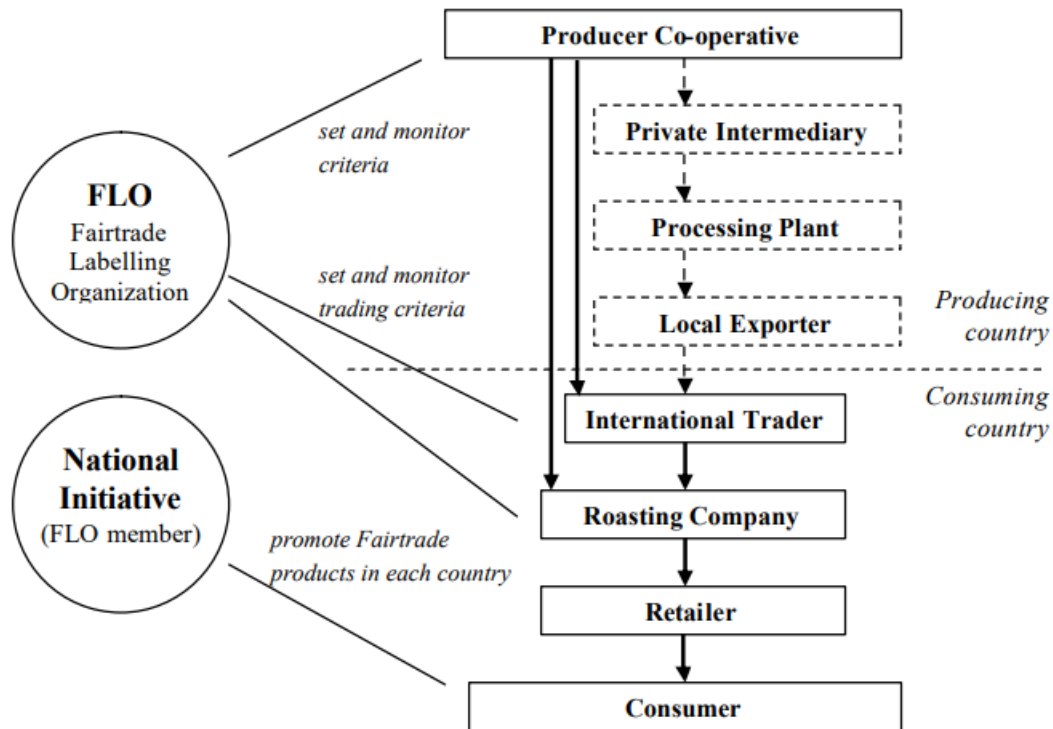


Figure 4. Fairtrade labelling system in coffee commodity chain by Milford, A. (2004). <https://www.cmi.no/publications/file/1802-coffee-co-operatives-and-competition.pdf>

Indeed, following this chain, the producer organisation registered with Fairtrade (e.g., MEACCE) sells their coffee directly to an international trader or roasting company in a consumer country (often Western) to assure that most of the consumer price is kept by the producers. Small business organisations as MEACCE conveniently decides to be registered as Fairtrade certified enterprises as this gives them better chance of entering in business with international traders who would otherwise be sceptical of collaborating with unknown, small organisations (Milford, 2004). Moreover, farmers also economically benefit as the minimum fair price for selling coffee is calculated by using the Fairtrade tool which covers the costs of sustainable production and living. On top of this price, secondary payments and premiums are also provided for the community as a strategy to increase shareholders (i.e., farmers) joining the cooperative and to override the competition of private intermediaries in the area offering the same prices.

### 3.3. Research methods

Regarding the methods: participant observation, focus groups discussions, and semi-structured interviews are the qualitative tools chose for this type of research. The fieldwork

consisted of 9 weeks spent in the Mount Elgon area, in Uganda. I was based in Mbale, a city in the Eastern Region of Uganda, where I had the chance to be hosted at the MWARES office. Participant “focused observation” has been carried out, meaning that I focused on one specific aspect of local reality, i.e., agricultural trainings. The observation phase lasted the whole length of the fieldwork, beginning with studying the MWARES and Konokoyi’s offices to grasp the working approach used by extension agents, followed by on-farm visits to farmers aimed at understanding how their farms are organised and getting an overview of the way the coffee supply chain functions in Uganda. Furthermore, focus groups discussions have been organised and carried out to get an understanding of both the extent of the impact the trainings have on the life of coffee farmers, as well as the farmers’ perceptions of the extension agents and the trainings. Finally, one-to-one semi-structured interviews were executed with 19 farmers and 2 extension agents (one from MWARES and one from Konokoyi Cooperative) where topics like participation, prices, market, trust, decision-making and knowledge-transfer processes were discussed. The order followed to implement these qualitative methodologies has given me the opportunity to progressively dig into the farmers’ values, culture, and knowledge hidden behind the detectable reality. Hereby, the description of the methods used.

### 3.3.1. Participant observation

Participant observation is a qualitative methodology aiming at discovering about a specific community’s culture and activities through observing its members’ interactions since only through participating in the same experience is possible to gain a wider level of understanding of the researched issue (Kawulich, 2005). For of this reason, participant observation was chosen as leading method during the whole duration of the research, not only to learn about how agricultural trainings are organised and delivered to the farmers on the Mount Elgon, but also to grasp the meaning attributed to such trainings by local farmers and its interrelation with the context and the culture. In addition, undisguised participant observation was carried out as the observer (i.e., myself) was considered an outside observer to the environment, and not a full participant (Bositis, 1988). I started by establishing rapport with the actors I was going to observe (i.e., farmers and local workers) and learning to act so that people go about their business as usual when I show up in the field in order not to have bias in my research. This allowed me to gather enough data by participating in the daily routine of coffee farmers in the region, assisting to the way they work with their produce as well as capturing how farming activities were split among the population sample under study.

Furthermore, I had the opportunity to visit their farms, homes, and crops, as well as to witness coffee production at every stage: from coffee growing (Fig.6), to coffee picking (Fig.7) and coffee drying (Fig.8), until coffee packing and bulking (Fig.9). This was done to get familiarised with the field as well as to get an overview of the community dynamics and the role of the agricultural trainings in relation to the farmers and the extension agents, as well as to meet local workers.



Figure 5. Coffee plantations in Munyende



Figure 6. Ripe and unripe coffee beans in Munyende



Figure 7. Arabica coffee drying in Bududa district



Figure 8. Coffee bulking in Kampala

All the observations have been documented in a diary, or jottings (i.e., scratch notes), or a log (i.e., pre-planning of each day versus what I achieved that day) in form of fieldnotes at the end of every day. Moreover, informal interviews have also been carried out at this stage. Such type of interviewing is characterised by a total lack of structure or control from the interviewee and consists of remembering conversations heard during a day in the field and then jotting them down on a second moment (Bernard, 2011). They have been very useful to build greater rapport and to get an idea of how willing people were to cooperate with my research. For this reason, before beginning with focus groups discussions and interviews, I have voluntarily participated in ordinary meetings between the staff and the coffee farmers. This was done for multiple purposes. First, to find out about usual meeting places where I could organise the focus group discussions so that to facilitate farmers. Second, to understand whether any of them was an English-speaker so to hire a translator accordingly. Third, to detect specific cultural norms to follow when interacting with the farmers. Indeed, both groups of farmers were usually meeting in

local churches and women and men were sitting in opposite sides of the room due to cultural reasons I was able to discover.

### 3.3.2. Focus group discussions

Focus groups discussions are essentially organised group meetings aiming at exploring a specific set of issues around a topic. They differ from the broader category of group interviews as, with focus groups, group interactions themselves are used as research data. In focus groups, the facilitator can employ several group exercises (e.g., card game) which facilitate the collection of data. Group work is based on the principle of giving priority to the respondents' language and concepts, *their* frameworks for understanding the world (Basch, 1987). In fact, through focus groups, I had the opportunity to learn how farmers refer to their land, how they perceive the trainings received and who receive them, the words they use to describe those trainings and their feelings about the whole process. It was important to organise focus groups before having semi-structured interviews, as they played a vital role in assuring rapport and openness about the topics further analysed and discussed during one-to-one interviews. Group interactions may seem chaotic and not useful at the beginning, but such "unstructured" outbursts are extremely relevant to the collection of data on what people "know". The negative side of group dynamics is that the group may censor any divergence from group standard, discouraging people from speaking up their truth about the topic. However, I have been lucky enough not to encounter such issues. The groups I have worked with perfectly functioned as facilitating arenas where everyone – also the shiest ones – felt comfortable enough to openly talk about their views on the topic discussed (Kitzinger, 1994).

In total, four focus groups were organised, two per community. A Focus Group Guide has been laid out (Annex 1). Purposive sampling was the selected methods to choose the composition of the groups. Purposive sampling is a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their surveys. The first two group discussions organised with MWARES farmers were arranged between 5 and 10 farmers respectively. The choice of this is justified by the fact that, on average, focus groups involve from around 4 to 12 participants to avoid issues arising from having a too big group. The first group consisted of 5 farmers as I preferred to begin with a smaller one to try my hand at it first. The focus group discussions planned for farmers working with Konokoyi amounted to 10 participants per

group. Focus groups discussions were held among farmers who are directly receiving trainings from either MWARES or Konokoyi, and not from other farmers. The groups were as heterogeneous as possible and, when doable, with slightly more females than males as women are the ones following trainings and taking care of the crops while men mostly take care of marketing (i.e., taking the coffee to the collection point and getting paid). Focus group discussions lasted around 2 hours each and were carried out either in Lumasaba (using a local translator) or in English, based on the preference of the members. Moreover, focus group discussions were recorded using a mobile phone. Prior consent for such practice was asked to the participant, and they all agreed with no hesitation. Local churches were used as sites where discussions occurred. Incentives or remuneration for their participation was provided at the end of the discussions in form of lunch or snack. There were no detectable divisions in terms of power within the communities and everyone was able to speak up freely.

### 3.3.3. Semi-structured interviews

Semi-structured interviews entail a dialogue between an actor asking questions (i.e., interviewer) and one replying to those questions (i.e., interviewee). The questions at stake are open questions which are focused on a specific topic and can vary according to the discussion (in this case, agricultural trainings). With such type of interviews, it is therefore useful to make a list ranking the topics to discuss during the interview in order of importance to follow such outline during the interview as well (Bernard, 2011). The success of such interviews strongly relies on the rapport gained during the participant observation phase, which will get people to open easily to me. In the specific context of this research, semi-structured interviews uncovered an in-dept understanding of details regarding the agricultural trainings, the organisation behind the activities organised on the ground, and the way the knowledge is transferred to the farmers. Two different types of Interview Guides have been laid out (Annex 2 and 3) for the different types of interviews I held (i.e., extension agents and coffee farmers). This guide has been double-checked by my supervisors before going into the field. Purposive sampling and snowball sampling were the selected methods to choose the participants, after the focus group discussions phase was over. The former was explained above, while the latter, namely snowball sampling, uses already interviewed participants to identify other relevant stakeholders that may be of interest for the researcher to interview. Respondents were selected based firstly on the length of their cooperation with MWARES or Konokoyi. This to make



sure they have had the chance to attend enough trainings and activities organized by the Organizations. Moreover, the respondents had to be direct recipient of the trainings from the organization and not from other farmers, better if they were the first generation of farmers or PIs receiving them. In addition, when selecting possible interviewees, I tried to maintain the men to women ratio as equal as possible. Interviews lasted around 30-60 minutes and were carried out either in Lumasaba (using a local translator) or in English, depending on the preference of the respondent. Moreover, interviews were recorded using a mobile phone. Prior consent for such practice was asked to the participant, and they all agreed with no hesitation.

A total number of 21 interviews has been collected, among which 10 coffee farmers from Bududa district, 9 coffee farmers from Munyende village, 1 junior agronomist from MWARES and 1 certification officer from Konokoyi, both taking care of trainings' delivery to farmers. The initial plan was to interview 10 farmers from each group, but data saturation was reached already when working with farmers in Munyende. The two groups of coffee farmers are quite homogeneous. All 19 farmers have been cultivating Arabica coffee for a minimum of 2 years to a maximum of 40 years. They all cultivate coffee, matoke (i.e., banana), and beans, while some others also cultivate onions, Irish (i.e., potatoes), and other crops (often vegetables). They all provide for themselves and for their families, and gender heterogeneity has been maintained for both groups. They all live in the same area, only difference being living either at the foot of the Mount or at the top. For what concerns fertiliser and input's provision, both groups of farmers must reach Mbale by public means to buy it. However, the group of coffee farmers in Bududa district occasionally receives organic fertiliser from Konokoyi Cooperative.

### 3.4. Data Analysis

The interviews and FGDs have been personally manually transcribed, coded, and analyzed. The transcripts of those were inserted in the program Atlas.ti, which was used to perform a qualitative analysis by deducting the relationships between codes, evaluating their importance, and visualizing the relations between them. The Code Book used for data coding can be found in Annex 4, and it was based on the research and sub-research questions of this thesis as well as on the theories enshrined in Chapter 2. Indeed, starting from the latter and supplementing those with information

gathered during the participants observation phase, codes were developed exploring farmer-to-farmer as well as farmer-to-agents interactions.

Below, an overview of the interviews and the numbering providing references for the results and discussion Chapters.

MWARES farmers	Interviews nrs. 1-9	June 2022
MEACCE farmers	Interviews nrs. 11-20	June 2022
MWARES Junior Agronomist	Interview 10	June 2022
MEACCE certification officer	Interviews 21	June 2022
Focus Groups 1-2	Community MWARES farmers	June 2022
Focus Groups 3-4	Community MEACCE farmers	June 2022

### 3.5. Ethical concerns

Any type of research activity is a moral enterprise since moral issues are entangled in the research methods applied, the process of researching as well as the obtained results. The present thesis engaged in following the most appropriate moral guidelines, adapting them to the peculiarity of the local context. In this regard, every person whose data was necessary for the realisation of this thesis has always been considered free to decide whether to participate in this research or not, thus, everyone was asked for explicit consent for collaboration in any part of the research, while informing them with all the details about this study. Likewise, all participants were able to withdraw themselves or their information from the research at any moment. Anonymity was assured as a strategy to protect the confidentiality and the privacy of the participants. For what concerns participants observation, consent of all participants was ensured by informing them about the purpose and the details of the research. Coming to the focus group discussions and interviewing

process, permission to record the sessions and use the provided information for the results was always orally asked. This research results will be shared with 100Weeks and WUR, and any other external party upon prior agreement. Finally, as a researcher, I want the results to be as objective as possible for them to be valid. Therefore, no assumption was made on neither the effectiveness of one approach over the other nor about the intentions of the actors involved in my research, but I have simply investigated into that as objectively as possible and reported the data as they are. Overall, as a researcher, I have biases and therefore, for this reason, I have continuously reflected about my role and the impact of my positionality on the research, in respect to the local context. I consider that being myself an external researcher could have had an impact on the participants' behaviour; thus, I acknowledged this as well as my personal biases in the interpretation of the results.

## 4. Results

### 4.1. Setting the scene: MWARES and MEACCE approaches in practice

The two organisations providing training to the farmers represent the two different approaches to training programs as well as two different interests. MEACCE, is interested in transferring knowledge to the farmers specifically concerning agronomic practices related to coffee, in fact, as the MEACCE certification officer stated, “the target is mostly on coffee, but farmers can ask for agronomic advice on other crops and I can help them” (Interview 21). This is because MEACCE’s target is the organic market and the national organic program and therefore, the staff has “trained the farmers on what they should apply” (Interview 21). Moreover, “the final purpose of MEACCE is buying coffee”, and if farmers ask MEACCE for more trainings and topic diversification, they “can accommodate their requests but only if focused on agronomic advice for other crops related to coffee” (Interview 21).

This greatly differs from the scope of MWARES actions, whose “goal is to build a resilient environment and resilient farmers who can conserve their land, their natural resources, and use their land efficiently” (Interview 10). Indeed, MWARES project aims at supporting the farmers and help them “remaining there, using their land well and sustainably and then conserving the

environment” (Interview 10). The MWARES project is not focused on making profit since it has a different nature than business-oriented, as the staff member interviewed explained “we are not gaining anything, but we are working on livelihoods to see that these people, who are vulnerable and ever into hazardous situations, maybe have a good life” (Interview 10). Finally, MWARES offers a variety of trainings to their farmers, not only related to coffee or other crops’ agronomy, but also on the PIP approach.

The two organisations differ also in terms of their farmers’ recruitment processes, which for both begins with a baseline survey. MEACCE’s baseline surveys consist of a questionnaire submitted to the farmers on the first field inspection. Farmers are required to provide information concerning “what they are using as inputs, where do they get their inputs as coffee seedlings for example” [...] “how does a farmer pick the coffee, whether he/she is using containers, if the farmers are picking the right ones, ripe but not overripe cherries. Some farmers may use sacks or any other chemicals which you don’t need in an organic market” (Interview 21). In this regard, the farmers commented that the baseline surveys of Konokoyi were only focused on the way farmers were planting their coffee (Focus Group 3), and farmers’ opinions and needs were assessed only after having already implemented the training material (Interview 11, 12, 13, 15, 16, 17, 18, 19, 20). On the other hand, MWARES staff first carried out a needs assessment of the farmers by asking directly to them what they wanted to gain out of the training programs they were going to offer “it may be to improve banana plantation, coffee plantation, onion agronomy, or reducing soil erosion on their farm. Now, they want to get trainings on how to do that. If someone wants to plant bananas in a better way, they need the training. We initially carry out an assessment where we ask them to rank the things they want to do, then we come up with a list of the things they want” [...] “then we look at those with the highest rank, those that had so many people, until when we came to individual. If you have even only one person who wants passion fruit, you can offer training” (Interview 10). Indeed, MWARES trainings are also laid out according to the knowledge gap farmers have pointed out during the needs assessment phase. Differently, MEACCE trains its farmers based on what MEACCE needs, “what farmers are supposed to apply to their coffee plantations, what they should not apply on an organic farm and so on” (Interview 21). As a matter of fact, when the organisation wants to recruit new farmers, a staff member goes to their farms, and goes through a standard questionnaire together with them. In this occasion, the officer explained: “we tell them what we need and what we don’t need on a farm” (Interview 21).

Moving from recruitment to the teaching methods implemented by the two organisations, a practical demonstration is showed to the farmers directly on their plots to give them a hint of what and how trainings are run at MEACCE so that farmers will be eventually convinced to join future training sessions as well because of this initial interaction (Interview 21). Following this, MEACCE farmers who want to join the organisation must submit a written application for it as well as buy a share at the cooperative (Interview 11, 13, 14, 15, 18, 19, 16, Focus Group 3, Focus Group 4). Currently, the price of the share amounts to 25,000 UGX (Interview 18), while in the past it was 1,500 UGX (Interview 16).

*“We are not selected, you join willingly because of the training and benefits. There is a process you go through before you are officially a member. You have to apply first to the committee then the committee develops that list of people who applied. During the usual meeting they present that list to the general assembly and then they decide to welcome new members or not. If those who applied are not well-behaved persons, the membership is denied.” (Focus Group 4)*

*“They gave us conditions, that if we managed to go organic, we were going to be accepted. They explained the topics and their programmes, and we accepted it.” (Focus Group 3)*

This changes completely with MWARES, as the interviewee believes that “you first have to get them to tell you what they think before you advise them. Going with the literature of ours telling them “do it like this and like this” it may not work” as imposing your own literature down to the farmers might be counterproductive as certain types of knowledge might not be applicable to certain places and contexts” (Interview 10). Therefore, the approach the MWARES project follows is to first listen to farmers’ knowledge carefully, understand where possible gaps are, and then try to adjust it when necessary. And the interview continues “that is why we say needs-assessment is based on their needs. We may find that farmer A is not interested in coffee, farmer B is interested in coffee. So, you cannot give trainings on coffee to the one who is not interested in it. So that is why we say it is based on their needs, you train them according to their needs. You cannot force someone “come I’ll teach you about mushrooms” yet he wants passion fruit. So, it is based on their needs.” (Interview 10). Indeed, most of MWARES farmers also agreed that the staff came to their village and asked them about their needs and challenges, reason for which they then laid out the training programs accordingly (Interview 7, 5, 6, 8, 9).

*“When MWARES came, the staff asks them about the challenges, and he mentioned some of the ones he was facing. Like, soil erosion, which was the biggest challenge for him, but after MWARES came and trained him on how to protect his soil and guard his land, he now built the trenches which improved the soil fertility. Another challenge he shared with MWARES was related to pests and diseases, so he then attended training on pests and diseases management, and he is now using the knowledge gained by spraying pesticides on his crop and he is indeed getting good yields now.” (Interview 7)*

*“When MWARES came here, he shared with the MWARES staff the challenges he was facing, and the project has been able to meet some of his needs and challenges. He says that previously they were all facing landslides, they were leaving their lands in bad conditions, but after MWARES arrived and trained them, they have been able to dig trenches, to protect the soil, but also to reduce the run-off of water so the soil has not taken it away. [...] the project is targeting the needs of the farmers.” (Interview 6)*

Coming to the criteria followed to select the farmers who are going to attend the trainings, MWARES looks for “twenty-five people per village, those people should be innovative, should have land, should be farmers, and should be willing to volunteer because we do not pay them anything. Also, they must be people that can translate what they have learnt and put it into practice” (Interview 10) while MEACCE considers first the issue of “gender equality: all people are allowed to participate in our trainings either men or ladies are free to participate. Then, commitment: you should have time to attend the trainings and you should attend regularly to be a member” (Interview 21). Divergently, MEACCE also provides input to its farmers in terms of organic fertilisers which farmers do not need to pay back as they already provide coffee to MEACCE (Interview 21). Apart from input provision and first payment of coffee, MEACCE offers to its farmers also a second payment and social premiums. The former being a top-up of 200 UGX on farmers’ second delivery of coffee to the cooperative each season, and the latter being a saving account of money donated by the farmers and subsequently invested in developmental projects in Bududa (Interview 21). Those benefits are firstly enlisted to the farmers by field officers to encourage them to join the cooperative, together with the promise of having a direct buyer buying their produce, eliminating the middlemen from the picture (Interview 12). Finally, MEACCE staff also offer a refreshment (e.g., sodas) for the farmers from time to time to incentivise their participation in the training sessions (Interview 21).

On the other hand, MWARES does not provide farmers with any type of inputs (Interview 7, 1, 2, 3, 4, 5, Focus Group 1, Focus Group 2). On a different note, both organisations regularly provide trainings to their coffee farmers and adapt the training schedule based on the farmers' necessities (Interview 21, 10). Moreover, they also both employ farmer-to-farmer knowledge transfer as the main important method to diffuse the knowledge from innovative farmers to the rest of the community. Particularly, MWARES also adopts exchange visits, where farmers welcome other farmers coming from different areas in their gardens to show them how their plots have improved (Interview 10).

The topics analysed so far (i.e., farmers' recruitment, agents-to-farmers knowledge transfer methods) bring significant implications on the way farmers are included in decision-making processes. The term "decision-making" here refers to the process and power of making choices related to the contents of the trainings, which differ in the two organisations. In fact, as MWARES interviewee stated, "we do not go with our papers and our knowledge, we involve the farmers themselves" (Interview 10). For this reason, the organisation expanded the focus of the training programs from the PIP approach and coffee to also including passion fruit and other crops, and even more trainings not only related to agronomic practices, but also to savings coffee marketisation. These changes were all based on farmers' requests (Interview 10). To satisfy such demands from the farmers, MWARES was at times also hiring external consultants to add knowledge and value to their training manuals (Interview 10). This information was also confirmed by the farmers themselves, who affirmed to receive trainings covering a broad range of topics such as on how to advance their agronomic practices on bananas, coffee, and onions as well as managing these crops (Interview 7, 8, 9, 1, 2, 3, 4, 5, 6, Focus Group 1), then on how to plant indigenous trees and dig trenches (Interview 8, 2, 3, 4, 5, 6, Focus Group 2), on the PIP approach (Interview 1, 2, 3, 4, 5, 6, 7, 8, 9, Focus Group 2), and to maintain their sanitation and hygiene in their homes (Focus Group 2). Moreover, MWARES farmers also have trainings on savings:

*They have a group and leaders and chairpersons and treasurers and secretary. MWARES gives them saving boxes with three locks and three keys, each person under that leader has a key so when they come together, they can put the savings (Focus Group 2).*

In addition, the training date is commonly agreed on directly by the farmers (Interview 10, Focus Group 1, Focus Group 2).

*“Some of the trainings are done when it is season, and there are ones in which you do not need practical, like the PIP approach you train them when they have enough time. Basically, it is the farmer who gives us the agenda and the time for the trainings.” (Interview 10)*

*“They were meeting at least twice every week and some weeks they were doing trainings three times per week depending on the need.” (Focus Group 2)*

MEACCE runs business in a different manner, given that it follows Fairtrade standards and environmental requirements. However, in both cases the training manuals were not directly showed to the farmers (Interview 21, 10) but their contents were described to them. As enshrined above – given that the scope and interests of the two organisations are completely different – MWARES farmers actively participate in constantly shaping the manual, adapting it to their needs, while MEACCE farmers sign a business relationship with the organisation in which they must satisfy the demand of the organic coffee market by producing their coffee following certain criteria. Sanction and expulsion from the program being the consequence of a violation of such contract (Interview 21). Based on the nature and application of such contract, farmers’ have less room for influencing decision-making in such context. However, content-wise, MEACCE farmers too also have trainings on how to jointly save money at community level (Focus Group 4, Interview 14). In broad terms, MEACCE trainings are mostly related to coffee cultivation and Fairtrade standard (Interview 13, 15, 16, 17, 18, 19, Focus Group 3, Focus Group 4), planting of indigenous trees (Interview 13, 15, 20, Focus Group 3, Focus Group 4), as well as the construction of cookstoves (Interview 13, 14, 15, Focus Group 3, Focus Group 4).

*“In our area, we are implementing two certificates: Organic and Fairtrade. They are similar. [...] In Fairtrade standard I have got trainings about four major things: social economic development, labour conditions or child labour conditions, democracy, and environmental development. Under environmental standard of development, we have to maintain indigenous areas like forests, and we are not supposed to go and cultivate in the forests, also wetlands... it is all about biodiversity. We are not supposed to cultivate along the river, we are not supposed to unnecessarily cut down trees, and we have to plant young trees, we have to separate non-decreable and decreable waste. [...] That is under environmental development. Under democracy, we must emphasise or practice democracy during*



*cooperative elections. There should be one vote each farmer and we are not supposed to discriminate women from elections. Women must also participate and be members of the society like we do. [...] Then socio-economic development, we have to do some developments in the community where the society is located like in agriculture, we farmers can be supplied with coffee seedlings to raise yields. [...] Then about social, we have to extend some social services to the community as members, we don't discriminate others from benefitting on our resources. They also have to benefit because during some coffee activities, they help. [...] We are supposed to use clean planting materials, that is Integrated Pest Management. As farmers, we are trained on how to raise seedlings from the soil. Not only for coffee, but even for other trees, most especially the indigenous trees which can integrate well with coffee as shade trees. For coffee pruning, application of manure at the right time. Soil conservation like mulching, soil erosion control, all those. We are advised not to use chemicals on organic coffee fields. [...] There is a list of chemicals which are allowed, and we can use them on crops which allow it to be used like vegetables, and those fields must be away from our coffee. If they are near the coffee, then we have to develop buffer zones to control chemicals.” (Interview 15)*

Moreover, for MEACCE farmers, the content of the trainings depends on the season and follows the coffee calendar. For example, if it is coffee picking season (e.g., July-August) then trainings would be about post-harvest handling, while when it is coffee planting season (e.g., March), trainings would aim at advancing farmers' agronomic practices (Focus Group 4). Farmers are called into trainings by Konokoyi officer. They are usually organised by Konokoyi staff, and they are held either at the cooperative or at some demo farms (Interview 13, 16, Interview 21). Overall, trainings' topics are not selected based on farmers' challenges, instead they are chosen to teach the farmers about Organic and Fairtrade coffee production, and to educate them on “what is good and what is bad” for their coffee (Interview 11), “it is just like a teacher making a scheme and lessons plans” (Interview 15).

*“She said they don't normally ask them, but they just train them on the topics already designed.” (Interview 17)*

*“They did not ask him about his opinions, but they organised specific topics and then he went for those trainings.” (Interview 18)*

Farmers members of Konokoyi cooperative also takes part in Farmer-Field-Schools, namely “a group-based adult learning approach that teaches farmers how to experiment and solve problems independently” (Dhamankar & Wongtschowski, 2014). In FFS groups, farmers meet on a regular basis together with a facilitator who trains them. This type of approach has only recently been implemented for trainings provided to MEACCE farmers (Interview 21), in which the field officer transfer knowledge to the farmers “practically, by showing them what we do” (Interview 21).

*“They have a format called “farmers field schools”, which was formed long time ago but because of the collapse of the secondary organisations then those farmer schools have collapsed as well.” (Focus Group 4)*

Moreover, Konokoyi cooperative gives the possibility to farmers of electing their own leaders who can participate in annual meetings with MEACCE where they receive information on coffee business (Interview 15).

*“There is a category of members. We have general assembly, with all members of Konokoyi, namely those who get trainings on agronomic practices, soil conservation, and so on. This assembly’s members are allowed to elect members, a board of 7 members. Those latter members are also subjected to trainings, they must be knowledgeable since they are the leaders of the society, and they must have the capacity to run the society. The society is an inclusion of members affiliated with the society and community members. [...] Konokoyi is the primary, MEACCE is the secondary (society) farmers are members to Konokoyi” (Focus Group 4)*

MWARES adopts a similar approach to transfer the knowledge from experts to farmers. In fact, MWARES officers train the selected PIs, and those then train directly other farmers to pass on the knowledge (Interview 9).

*“He participated in MWARES activities, but he was elected as a PI, after that he was trained and after the training he graduated, got a certificate, and after that he went back implementing what he was trained about. For example, he started digging trenches, improving hygiene and sanitation, drawing his household vision, and he has trained others, about 26 farmers.” (Interview 5)*

## 4.2. What dictates participation: farmers' interests, benefits, and ambitions

Farmers' participation in agricultural trainings can be motivated and regulated by a range of numerous factors. As a trend was detected during data collection, the three recurring factors (i.e., farmers' interests, benefits, and future ambitions) are going to be analysed in this chapter.

In the one-to-one interviews, farmers cited several examples explaining their benefits in collaborating with MEACCE or MWARES, meaning what they gained out of the collaboration with such organisations. As for what concerns the former, MEACCE farmers have almost all pointed out to the stability of receiving a good price for their coffee (Interview 12, 13, 14, 16, 17, 18, 19, Focus Group 3, Focus Group 4) which they can use to take care and provide for their families (Interview 11, 12, 13, 14, 16), the second payments and social premiums which add extreme value to their collaboration (Interview 12, 13, 14, 16, 17, 19, 20, Focus Group 3, Focus Group 4), the inputs received from MEACCE, mainly in the form of organic fertiliser (Interview 11, 12, 13, 14, 17, 18, 19, 20) and often as a special reward for the farmer who delivers the larger volume of coffee per year (Interview 13), and the large amount of knowledge they gained on coffee cultivation and climate change issues which resulted in better farm management practices (Interview 12, 13, 14, 15, 17, 20, Focus Group 3).

*“Good prices, premiums, the supply of certain inputs like organic fertilisers. The cooperative wanted to give more coffee, afterwards they realised the harvest was reducing. That one brought in the need of trainings, they realised farmers needed to be trained on good farming methods which now became the long-term benefits.” (Focus Group 4)*

Other factors resulted in the presence of the staff on the ground (Interview 11), the positive impacts of training programs on their gardens (Interview 11), and a noticeable improvement in coffee quality (Interview 12, 20). Especially during FGDs, MEACCE farmers jointly agreed that there were also other benefits the organisation was bringing in for them. First, they strongly appreciated the fact that “Konokoyi is a cooperative organisation that brings farmers together for a stronger bargaining power” (Focus Group 4). Thanks to their coalition, farmers have more leverage when it comes to coffee selling, and they can also demand a higher price for their coffee (Focus Group 4, Interview 12). Moreover, being part of a cooperative also allows farmers to request loans from banks, which can be a life-saving solution during hard times (Interview 17, 18, Focus Group 4). Another benefit

which was highlighted by the participants during the FSDs is that transparency, democracy, and gender equality principles are respected and implemented during meetings (Focus Group 4).

*“I saw benefits people were getting, I saw when people were getting their coffee, they get the first payment and again they go back and get another one. They even got the premiums, I saw them. One time, I saw people getting big cows, but I was not a member. I thought: If I join, I will also get one.” (Interview 14)*

Among the benefits listed by MWARES farmers, increased knowledge on best agronomic practices (Interview 7, 8, 9, 3, 5, 6, Focus Group 1, Focus Group 2) which led to visible improvements in farmers gardens in terms of bigger banana bunches, growing coffee yields, and better soil conditions (Interview 7, 8, 9, 3, 5, 6, Focus Group 1, Focus Group 2) have been the most quoted ones. In addition to these, also the provision of better hygiene and sanitation conditions in farmers' homes (Interview 8, 3, Focus Group 1, Focus Group 2) and the transfer of knowledge related to community management and degraded area restoration (Interview 8, 5, 6, Focus Group 1, Focus Group 2) were also considered extremely important. Finally, all the farmers agreed that MWARES brought significant changes in terms of farmers' life conditions in Munyiende (Interview 2, 3, 4, Focus Group 1, Focus Group 2), particularly related to envisioning and planning for their lives (Interview 4, 6, 3, Focus Group 1, Focus Group 2) and enhanced their capacity of training others (Interview 9, 6, 4, Focus Group 2).

*“The depth of the knowledge and trainings she got from MWARES is really good and special because they empowered them to teach other community members to transform. Indeed, they have been told how to do planning and envisioning for their lives, and this idea can be passed to children and grandchildren. So, the knowledge and the ideas transferred are unique. She values it a lot and she is happy to pass it on.” (Interview 4)*

During the conversations carried out with MEACCE farmers, the participants described their interests, motivation, and gains in attending Konokoyi's training programs. Amongst all, the fact that the organisation provides a good and secure price for their coffee is the main captivating aspect of MEACCE (Interview 11, 12, 13, 14, 15, 16, 19, Focus Group 4, Focus Group 3) followed by the distribution of input (Interview 11, 12, 13, 17, Focus Group 4), and the disbursement of second payments and social premiums (Interview 13, 14, 17, Focus Group 4, Focus Group 3). Nonetheless, most of the farmers would collaborate

with MEACCE even without the inputs provision (Interview 19, 18, 17, 16, 15) and they would indeed keep being members of Konokoyi cooperative because the most important thing is that “it provides market” (Interview 15). Additionally, also being part of a cooperative is remarkably convenient for farmers, particularly when it comes to coffee selling as the cooperative support them with a good market where their contact with middlemen is avoided (Interview 11, 12, 13, Focus Group 4).

*“At first, it was because coffee is a business, so we wanted to get into business.”  
(Focus Group 4)*

*“I like to work with Konokoyi because I get high prices with them. They give us inputs, more trainings, therefore I want to work with them.” (Interview 13)*

*“I decided to join because I was motivated, and I wanted premiums and secondary payments. [...] We work together as a cooperative because when we sell individually, we do not gain any profits but, in this way, we also have other benefits from the society such as second payments, and premiums, namely additional money on our coffee” (Focus Group 3)*

On the other hand, only few of MWARES farmers agreed that their main interest in working with the organisation was based on the income they would have gotten out of improving their agricultural practices (Interview 4, 5, Focus Group 2). Most of them were attracted to it because of the knowledge and new skills they were going to develop by attending the training programs (Interview 7, 8, 9, 1, 5, Focus Group 1). Finally, they also appreciated the idea of sharing the knowledge with other farmers in the neighbouring villages (Interview 8, 9) and of restoring the area (Interview 7, Focus Group 1).

*“She is saying that the motivation for her to participate is the knowledge they gain when the trainer comes around, this is what motivates her. Getting knowledge and applying it.” (Interview 1)*

*“Since the very beginning, MWARES told the farmers that they were going to do voluntary work, the work is not paid by MWARES. And, secondly, share the knowledge and skills with other farmers so they can change their community. That is why they decided to work with MWARES.” (Interview 8)*

What also came up in the focus groups was a difference in ambitions between the two group of coffee farmers. MWARES farmers would like to have a stable market where they can sell their coffee to (Interview 1, 4, 5, 6, Focus Group 1, Focus Group 2) alongside trainings specifically focused on the marketisation of coffee to empower them with the knowledge necessary to trade with the middlemen (Interview 1, Focus Group 1, Focus Group 2).

*“For them, there is market for the produce, but they want to be trained in how they can market their produce and collaborate with the traders. [...] They are saying that if MWARES could have an idea of buying coffee they would feel very very very great about it. Or if it could link them with coffee buyers it would improve their livelihoods very very well.” (Focus Group 1)*

Other desirable improvements include setting up a warehouse where farmers can keep their produce (Interview 3) and connect the Munyende village to the towns nearby through the construction of solid roads (Interview 5).

During the FGDs with MEACCE farmers, they jointly recognized their strongest ambition: adding value to their coffee to then sell it at a higher price (Focus Group 4, Focus Group 3). This topic was further discussed during one-to-one interviews (Interview 13, 15, 17).

*“We intend to process coffee jointly at the society to improve coffee quality and we think that if we do that our coffee is going to be of good quality and it will attract good price.” (Interview 15)*

Currently, MEACCE farmers lack the necessary machines and equipment to add value to their coffee, i.e., pulping machines, and big container to use for fermentation (Focus Group 4, Focus Group 3). Moreover, they also complained about the fact that they do not know the taste of their coffee because now – since they do not have the machines – they are selling non-processed coffee and therefore they cannot consume it (Focus Group 4, Focus Group 3). Indeed, they would like to be able to taste it.

*“We grow coffee, but we don’t even know how the taste of coffee is, we sell it and that’s it. If they could help us processing the coffee so, we can also take it and know the value of coffee and maintain the standard of coffee. [...] We can also be happy if we can add value on coffee ourselves instead of selling it in parchment, we add*

*on it by acquiring a machine which can roast, and we sell a final product. When we sell a final product to a buyer, we can get a higher price.” (Focus Group 3)*

### 4.3. Farmers’ challenges and instabilities

Having a broad overview of farmers’ daily challenges and struggles related to coffee production is paramount also in understanding the motives and reasonings behind certain data and answers. Therefore, this section will be entirely dedicated to the analysis of the environmental and infrastructural instabilities threatening their farm business.

To begin with, MWARES farmers in Munyende are located on the high slopes of the Mount Elgon, in a village which only mountain motorbikes can reach – something not affordable for everyone in Uganda. The location and the poor transport network create problems of accessibility for people coming from outside (Interview 7, 8, 10, 1, 5, 4), as well as complications for farmers to reach essential facilities as hospitals and schools located downstream. Moreover, as mentioned above, trainings and fertiliser are also less available to MWARES farmers due to these connection issues (Interview 7). This challenge was partly solved with the set-up of the MWARES project, “before, he used to carry the produce on his head and walk up to the market. Since when MWARES came and taught them about collaboration, they have been able to open that road which takes up to here as a community so that when it is not raining the motorcycle can come up to here and take the produce to the market” (Interview 7). MWARES officer also added more information on this issue by saying that extension agents “cannot reach the farmers. They can reach the ones near, but those who are far from, no. So, when the chance comes, you can give them a little fuel and go with them and they also try to offer such, but without our intervention some of the farmers have never even seen the extension workers.” (Interview 10). Unfortunately, there are other challenges which are tied to the issue of transportation. First one being food perishability (Interview 5, 1), indeed, “some of the products like tomatoes and cabbages, when you harvest them, you cannot store them properly when there is surplus of it, so then they end up selling it at a very low price” and due to the lack of transports, farmers are forced to carry the produce on their heads “but when it rains like this, and the market is very far they get so tired that when they reach there they sell at a very low price” (Interview 5). This is particularly true especially when heavy rain comes, one of the harsh consequences resulting from climate change (Interview 7, 5). This is something MEACCE farmers

also agree on, and which destroyed a lot of crops and settlements, and has given them lower harvests (Interview 17, Focus Group 4). Finally, the biggest problem MWARES farmers found in coffee production is related to coffee selling. In fact, traders and buyers offer low prices for their coffee (Interview 8, 1, 2, 3, 4, 5, 6, Focus Group 2), but farmers in Munyende are “forced to sell to local traders” and middlemen whether because “they do not have capacity to reach far markets or better buyers” (Interview 1) or else because there is a produce surplus but they lack the facilities to store it properly (Interview 5, 4). This is the challenge which all the farmers have stressed on: the fact that they must sell their produce to the middlemen because they have no other option (Interview 8, 1, 3, 2, 4, 5, 6, Focus Group 2).

*“Because of the nature of the structures: when she produces it, she does not have the capacity to transport it and take it to the organisations which collect it. So, there are many people that come to her who have the capability and finances to transport it to the next location. The preference would be that those willing to buy come and buy it directly from her. She has no capacity to buy it from here and also transport it. Those middlemen play the role of transport it and bargain the price.”*  
(Interview 1)

In addition, sometimes farmers are in urgent need of cash due to family constraints for which they cannot wait for the berries to get dried and therefore decide to sell them fresh (Interview 1). However, selling them fresh implicates a loss in terms of revenue for the farmer, as fresh beans are sold at 2.000 UGX per kilos, and the dried ones at about 10.000 UGX per kilos (Interview 2).

The challenges MEACCE farmers are forced to face are of a different kind. This is mostly due to two reasons: first, they are in a business relation with MEACCE, therefore they do not deal with middlemen as Konokoyi is collecting their coffee (Focus Group 3); second, they do not have the issue of transports since they live at the foot of the Mount Elgon and all the essential facilities are at reachable distance. Unfortunately, these advantages do not exclude the farmers from struggling, particularly when it comes to coffee selling. Indeed, being part of a cooperative does not guarantee their long-term stability and does not assure them market. MEACCE farmers are greatly dependent on their secondary organisation, and when this collapses, farmers are left without market (Interview 14, 15). Also, in case Konokoyi collapses, “farmers would get stuck with their produce because farmers collect coffee at Konokoyi, then Konokoyi takes the coffee to MEACCE, then MEACCE looks for the buyers. If Konokoyi collapses, then farmers would also collapse because we would have



nowhere else to sell the coffee” (Interview 14). MEACCE farmers rely on cooperatives to earn their living, therefore their uncertain nature represents a great deal of stress for them up to the point that they lose hope for their future and families and get demotivated in producing coffee (Interview 14, 15, 12, Focus Group 3, Focus Group 4).

*“You can imagine that if a primary organisation is working with several secondary organisations and at times it keeps collapsing, the business of the farmers on the ground is always at risk.” (Focus Group 4)*

*“If the organisation collapses it is because of management issues at the top so farmers cannot predict it. [...] As for now, we are stable. We are worried about the future. If MEACCE collapses, we are in trouble.” (Focus Group 3)*

On top of this, farmers also lamented that Konokoyi sometimes failed to immediately pay them for their produce due to momentary cash unavailability (Interview 17, 12) or else that they are paid less than what they deserve (Interview 12). A comparatively smaller issue they face concerns the fact that, despite MEACCE officer reported “every season, we always give out inputs to farmers [...] three times per year” (Interview 21), farmers have stated otherwise. In fact, amongst many of them stated that MEACCE is supposed to supply them with organic fertiliser, but this does not always occur (Interview 11, 13, 15, 17). To conclude, MEACCE farmers must meet the quality conditions and the environmental requirements set by Fairtrade standard, hence, sometimes they might end up not selling their produce as “the quality can dictate our failure since the buyers can reject our coffee and this is also a frustrating situation” (Focus Group 3).

*“You can reach there, and they can tell you that the moisture of your coffee is not good enough and you have to re-dry the coffee and as you do it then coffee reduces the kilos, and you are adding more money, labour, and transports”. (Interview 12)*

#### **4.4. Farmer-to-farmer knowledge transfer and the concept of empowerment**

In this section, farmer-to-farmer knowledge transfer and the diverging motives behind it are going to be discussed. In addition, the concept of empowerment has been investigated, hereby viewed as the process through which people increasingly gain power and control over their own lives by getting the support they need and that is right for them. Applied to the context of this

research, empowerment is a process facilitated by the extension agents but which only coffee farmers can determine whether it has been reached or not.

In this regard, MWARES project aims at building resilient communities who can provide for themselves and for the environment in which they live in. Since its scope concerns bringing about mindset change, the project also invests on the long-term sustainability of the knowledge they transfer to the PIs. Indeed, farmer-to-farmer knowledge transfer method is paramount. The same can be said for Konokoyi cooperative, which implement the same strategy to assure that the knowledge on Fairtrade certification standard and coffee production requirements can spread as quickly and as efficiently as possible. The findings so far show a divergent path in terms of farmers' motivation and interest in passing their knowledge to other farmers. In the case of MWARES, for example, farmers in Munyende believe the knowledge must be shared to the community to empower its members and to change their life standards by improving their coffee plantations (Interview 9, 4, 5, 6, Focus Group 2). Usually, these trainings cover coffee pruning and planting, banana management, onion agronomy, spacing and seeds management (Focus Group 1). They are entirely organised by farmers and are run on a voluntary basis (Focus Group 1, Focus Group 2). However, during one of the FGDs, MWARES farmers stated that "they would also appreciate if the staff worked more closely with them, the reason is that sometimes those other people listen more to the MWARES staff than to them. Even if they have the knowledge and they can teach on their own and everything, the staff presence makes a difference." (Focus Group 2). Moreover, MWARES farmers made a strong connection between farmer-to-farmer knowledge transfer and feelings of empowerment. Amongst others, the participants from this group of farmers believe that the depth of the knowledge gained during training sessions with PIs both on agronomic practices as well as envisioning and planning has truly empowered them (Interview 7, 8, 9, 4, 5, 6, Focus Group 1), reason for which they happily volunteer to train other communities and share knowledge on improved farming practices and PIP approach (Interview 8, 9, 4, 5, 6, Focus Group 1).

*"They feel relevant in the project because after receiving training they are also volunteering to train other communities and they have become trainers of trainers, where the knowledge on improved farmers is being shared in the community."  
(Interview 9)*

MEACCE farmers have different views on transferring knowledge to other farmers. First, they want more members to join Konokoyi cooperative to bulk coffee together and sell more to MEACCE (Interview 11, 16, 17, 18, 19).

*“At the end of the day, if production is high, farmers would sell, get money, and more social premiums given by different companies to develop your area. For example, they brought a drying facility in this area for this.” (Interview 18)*

Second, by advancing the agronomic practices of others, farmers will also protect their own garden and their own coffee by stopping pests and diseases from forming and spreading as well as stealing from less advanced farmers (Interview 12, 14, 19). The same concept of community development and improvement of farmers’ life standards expressed by MWARES farmers here takes on a different meaning:

*“Because when you are in a community and you are better off, those who suffer in the community will be a burden to you because they are starving, lacking food and milk, and they will come and steal those things from you but if you give them the knowledge to implement in their farms, they also become okay”. (Interview 12)*

Farmers from MEACCE do not train other farmers on coffee practices, but rather on indigenous trees planting and on the importance of cooking stoves (Focus Group 4, Focus Group 3). Some farmers are also paid to carry out trainings on cooking stoves, or to make them for their neighbours (Focus Group 4). Konokoyi officers do not participate in these types of training sessions, however some farmers have claimed they would like them to help (Interview 17). As it can be also logically deduced, empowerment at Konokoyi cooperative is not linked with farmer-to-farmer knowledge transfer. MEACCE farmers feel empowered because, through the cooperative, they can unite their voices and speak up about their challenges (Interview 11, 12, 14, 18, 19, 20).

*“The time I joined Konokoyi, I was just a woman who could not even talk to people because I was scared. [...] I feared talking to people, I had limited words to talk to them, but now I have words and I can talk to them [...] because I am not alone, we are many people we have put out voices together.” (Interview 14)*

Specific mentions to the improvement of gender-balance within the households were also among the most important factors MEACCE farmers indicated when discussing their empowerment (Focus Group 4, Interview 14, Interview 19).

*“There was a programme which came, it was called Gender Action Learning System (GALS), where they explained us that there are some activities that are traditionally considered for men and others for women. Those activities were not shared traditionally, but when members got access to trainings things changed and now men and women are sharing the activities within the household. [...] It brings development, it brings a lot of differences in the families, people are empowered, not only women but also men. So, if the woman is sick for example, the family can go on with the daily activities and let her rest. Before, when the woman was sick no one was cooking for the family.” (Focus Group 4)*

Finally, they also define themselves as “empowered” because of the money they are earning through coffee production and coffee selling (Interview 12, 13, 14, Focus Group 4) “which can sustain me, I have trainings which make me produce enough food for my family” (Interview 12).

#### **4.5. Top-down and bottom-up: a farmer’s perspective**

This section presents further data concerning the farmers’ words and views on the training programs they attended by focusing on farmers relationship with the staff (and their loyalty to their respective organisation) as it constitutes a dominant aspect influencing the final opinion of farmers on the training programs. Additionally, the same sub-chapter (4.5.1.) also contains the investigation of the changes which farmers detected in their business thanks to the training programs. This comprises the evaluation of coffee price, quality, and coffee selling. Finally, the opinion of both groups of farmers on the training programs will be assessed in the sub-chapter 4.5.2. as well as their preferences.

##### **4.5.1. The value of loyalty in the farmer-officer relationship**

An extremely influential factor shaping the opinion of farmers on the training programs is their relationship with those who trained them, i.e., MWARES and MEACCE officers. This is particularly relevant as a path has been detected in the sets of data collected: loyalty. Farmers are loyal to their respective organisations, and this was evident from specific answers they gave both during interviews as well as FGDs. Despite being an honourable value, loyalty significantly impairs the

exploration of the true opinions of the coffee farmers on the trainings they have been receiving. In this regard, this section also shows the important role of trainers in shaping the perceptions of farmers and pushing their behaviour towards certain directions.

All MWARES farmers hugely appreciate their collaboration with MWARES staff (Interview 7, 8, 9, 1, 2, 3, 4, 5, 6, Focus Group 1, Focus Group 2). The reasons provided for such positive judgement are few. First, they feel comfortable in talking and making requests to anyone of the staff (Interview 7, 8, 9, 1, 2, 3, 4, 5, 6, Focus Group 1, Focus Group 2), second, because MWARES “has moved with” the farmers (Interview 7) “as a group” (Interview 8) and it has been with them since the very beginning (Interview 7, 8, 2, 4).

*“The relationship is good for example the facilitators of MWARES staff are approachable, they are not so tough, they never cancel appointments they make with farmers, and if she makes mistakes, they never blame her and always advise her and appreciate what she is saying. [...] This is evident based on the training offered to the farmers but also on what she has been taught of training other communities to change their life standards as well.” (Interview 9)*

Third, they appreciate the knowledge received from MWARES and for this reason they trust the officers (Interview 7, 8, 9, 2, 3, 4).

*“I trust them because now in my home I can stay well thanks to MWARES.” (Interview 5)*

They indeed trust them to the point that they strongly believe that if MWARES started buying their coffee, it would grant them a very good price for it (Interview 9, 1, 5, Focus Group 1).

Alike topics were discussed with MEACCE farmers, who also stated that they place a lot of their confidence in the officers (Interview 11, 12, 13, 14, 15, 16, 17, 18, 19, Focus Group 4) reasons being that the first and second payments as well as the premiums were always provided to the farmers (Interview 11, 12, 13, 14, 15, 18, 19, 20).

*“I trust them, and I am used to them. Konokoyi has always been giving farmers their benefits that is why we have full trust in Konokoyi.” (Interview 13)*

However, some circumstances which occurred made MEACCE farmers feel unstable in their business and subsequently decreased their level of trust in the extension agents. Such events concern

MEACCE failure to maintain their promises such as: providing farmers with resistant coffee varieties suitable to the changes in the climatic conditions and collecting the plastic waste organised by the farmers (Focus Group 4). Apart from this, MEACCE farmers are overall satisfied with the work implemented by Konokoyi field officers and the way they treat them. In fact, they trust them so much to claim that they would never leave it, not if the cooperative stopped buying their coffee in favour of an external organisation offering a better price, and nor even if the latter was providing more informative training modules (Interview 11, 13, 14, 15, 16, 17, 18, 19, 20).

*“The price is not good because there are so many companies in Uganda which buy coffee so sometimes these companies buy coffee at higher prices than MEACCE but because we are loyal to Konokoyi we sell our coffee to them at a lower price. We give Konokoyi because it is our groups which collects our coffee and sells it at a low price. [...] even if they don’t buy my coffee I have to go there and get trainings because I trust them and I am used to them.” (Interview 13)*

MEACCE farmers appreciate the presence of Konokoyi officers in their farms especially when compared with other organisations who “only come and buy our coffee, they cannot even call for you premiums or second payments, they cannot provide trainings to the farmers, they just come here as businessmen and once they buy your coffee, you will never see them again until the coffee get ripe again. With Konokoyi, they are with you” (Interview 11). Konokoyi represents a stable and sure market for its farmers, something which other organisations cannot assure (Interview 12). When farmers build a relationship and establish a tight bond with a specific extension service organisation, they do not want to leave it (Interview 11, 13, 14, 15, 16, 17, 18, 19, 20), because they “are used to get knowledge from them” (Interview 13) and “even if they are paying less, [...] (they) would stay with Konokoyi” (Interview 18). Indeed, sometimes the value of loyalty could also be considered as an imposition which farmers feels obliged to follow, even at their disadvantage. For example, when this question was posed to the farmers: “what would you do if a new coffee company steps in and wants to provide you with better trainings and higher price for your coffee at the request that you do not work with MEACCE anymore?”, most of the farmers replied by saying that they just “cannot leave Konokoyi” (Interview 11, 13, 14, 15, 16, 17, 18, 19, 20), that they “*must* be loyal” (Interview 17). However, for MEACCE farmers, there are also economic interests behind this unbreakable loyalty oath, as one of the interviewees explained:

*“It is very important to be loyal to your organisation because it is one of the factors that can make it stand. Because if things keep on changing, it will not always be unique to provide high prices and so on to farmers. At times, you will also find some challenges. If members are not loyal to it, then it will run away and collapse.”*  
(Interview 15)

*“It is not a guarantee that you must sell all your coffee to the primary, but it becomes a loyalty of the farmers. Me, I owe to my primary society and if I sell out then my primary society does not get coffee. Also, prices out there are manipulated by traders. [...] it is not written that you must sell your coffee to them, but it is a soft request that you should deliver your coffee to them.”* (Focus Group 4)

MWARES farmers agree with MEACCE’s regarding being accustomed to their organisation (Interview 7, 8, 3, 4, 6) as they know “the background of MWARES” and “how far it has moved with” the farmers, as well as “the vision of MWARES” (Interview 7). Moreover, they appreciate the fact that MWARES is the only organisation which “has managed to come this side” while “there is no other organisation who has ever come to this area”, indeed “they have been left behind and it is MWARES which has awakened them and empowered them” (Interview 8). In fact, when the same question about leaving MWARES for an external organisation was asked, none of the farmers stated that they would join the latter (Interview 7, 8, 1, 3, 4, 6), because “it would make (them) break the engagement with MWARES and (they) would not like it” (Interview 1) and further because they “have a strong bond (with MWARES), they started together” so farmers “cannot abandon them” (Interview 4).

*“When such company approaches him and says that he cannot join MWARES, he would not go with the company. This is because he knows MWARES, the staff has supported him throughout this time and MWARES has known him for quite long, they know his goals and objectives and based on that he has seen some changes in his home. So, this company coming and promising air to him, namely things that they cannot promise or maintain 100%, he cannot join the company. He stays with MWARES which he has known for quite long.”* (Interview 6)

#### 4.5.2. Coffee farmers' assessment of MWARES and MEACCE training programs and their impact on the coffee business

MWARES farmers confirmed that the training provided by the organisation have advanced their livelihoods from many different angles (Interview 7, 8, 9, 1, 2, 3, 4, 5, Focus Group 1, Focus Group 2). First, the knowledge gained on agronomic practices improved their crops, not only because they are now harvesting way more coffee than they used to (Interview 7, 2, 3, 4, 5, Focus Group 1, Focus Group 2) but also because they are getting bigger banana bunches (Interview 7, 2, Focus Group 1, Focus Group 2), and soil fertility has improved through the digging of trenches (Interview 7, Focus Group 1, Focus Group 2).

*“The training which are brought by MWARES aims at improving their livelihoods and in fact there has been a great improvement in the challenges they were facing at home-level.” (Interview 7)*

*“The training is still so far good, and the training approaches and methodology are also okay.” (Interview 8)*

*“Based on the trainings they received by MWARES they have improved their gardens, they have done the trenches which were not there and they have planted new trees along their farms. Based on the trainings they went through there has been a progression in their home which was not there before, and the members are now collaborating more in achieving their goals. Based on the trainings on coffee agronomy, now they have started stamping coffee as they used to have very big trees and now they have good yields.”*

Moreover, MWARES “took through and solved” all the challenges the farmers shared with the staff at the beginning of their collaboration (Interview 9) and the trainings “have positively impacted their lives” (Interview 3). Thanks to the knowledge received from MWARES, few farmers have also been able to build their own houses (Interview 7, 3, 5, Focus Group 1) with improved sanitation and hygiene systems (Interview 7, 4, Focus Group 1).

*“She would choose MWARES because it has taught her so many things, not only related to agronomic practices and environmental concerns, but it has also taught her how to work in group and collaborate, as well as everything related to the*



*establishment and maintenance of sanitation and hygiene in their homes.”*

*(Interview 4)*

Furthermore, when the following question was posed to the farmers: “is there anything you would like to change of the trainings received from MWARES?”, farmers often replied that there is nothing else they would like to add (Interview 7, 8, 9, 2, 3, 4, 5, 6, Focus Group 1), or else that, since they are not truly aware of what type of knowledge they are missing, they leave the choice to MWARES in case he has any new topics in mind and then they would be happy to receive trainings on it (Interview 1, 2, 4, 6, Focus Group 1).

*“She does not feel there is anything that must be removed in the trainings. She feels that if MWARES has more knowledge they want to share with them, they can bring it to them and introduce it to them. So far, she is happy with what the trainings are covering.” (Interview 1)*

An interesting explanation to the positive judgement of MWARES training programs was given by one of the interviewees, who stated:

*“The holistic approach of MWARES is what he likes the most. The fact that MWARES does not only focus on agronomic and farming-related practices, but also conservation and protection of the environment. For example, here they used to have a lot of landslides, but thanks to MWARES they began to conserve the environment through planting indigenous trees, building trenches and conserving the environment.” (Interview 3)*

All the farmers agreed that the goal of MWARES project and its staff is to improve the farmers' livelihoods (Interview 7, 8, 9, 2, 5, 6). In fact, “the project makes them and their lives the absolute priority” (Interview 2) and “this is evident based on the training offered to the farmers but also on what she has been taught of training other communities to change their life standards as well” (Interview 9). Finally, MWARES farmers also stated that the training programs provided by the organisation impacted and improved the quality of their coffee (Interview 7, 8, 9, 1, 2, 3, 4, 5, 6). Some of them also agreed that, thanks to this, the price for their coffee has also increased (Interview 8, 9, 1, 2, 3, 4, 5, 6). This is because “the price you get depends on what you sell. If you sell the fresh berries, you do not have much bargaining power (against middlemen) because you are only selling a fruit. But if you pulp it and dry it and all that, then you can have some bargaining power there and demand for a higher price” (Interview 1) and since “before they used to get so little coffee in their

gardens and used to sell it at 500 UGX while now, they can also sell it (1 kg) at 12.000 UGX. She feels like the quality of her coffee beans has improved” (Interview 4). In fact, another farmer confirmed that “before he received the training on coffee agronomy, he was harvesting 1 kg per coffee tree, but after pruning he is expecting to get 12 kg per coffee tree” (Interview 5). Despite these progresses in terms of prices and quantity, coffee selling is still a challenging stage of the business for MWARES farmers. Before diving into this topic, it is first worth explaining how coffee selling works. To do so, the words of a farmer are going to be reported:

*“There are levels along the chain depending on how much money someone has. If a person has the capacity of buying smaller quantities, they buy according to the money they have and then sell it to someone else who has more money. That one collects and sell the coffee to someone else who has more money. So, the chain continues until reaching the person who can bulk the coffee. So, it is the money which dictates who you are going to sell the coffee to next. The chain is not so straight though. You know you harvest the berries, you can sell them as fresh berries to local traders who then pulp the coffee and get the coffee but when it is still wet. They can also sell it at that stage to someone who is going to dry it. So, the chain can have so many different sub-chains. So, the farmers can either sell the fresh berries or pulp them wet or dried. This also dictates who you are going to sell your coffee to.” (Interview 1)*

As a matter of fact, local coffee buyers still purchase their produce at a price which is lower than the one offered on the market (Interview 7, 9, 1, 3, 4, 5, 6, Focus Group 1), this is because “the nature of the middlemen is also a problem, they do not have a lot of money so they cannot buy their coffee at a higher price” (Interview 3).

*“Local traders are not few, but they also cheat them by changing the weights of the kilos of coffee the farmers bring. You may harvest 100 kg of coffee, and you are also sure those are 100 kg, but when you take them to the trader, he measures 95 kg. That is about 50.000 UGX of loss.” (Interview 6)*

This is a renowned problem for coffee farmers on the Mount Elgon. An issue which MWARES is trying to solve by first increasing the value of their coffee. In fact, as one of the farmers also highlighted, such a challenging situation can completely change when farmers start producing better quality coffee and bulk it together because “when the buyer is supposed to come this side,

he will be more motivated to come up here knowing there is a big quantity of coffee waiting for him. You cannot tell a buyer to come all the way up here only for a bag of coffee. If you have like 100 bags of coffee, it is easier to connect farmers to buyers” (Interview 5). However, they still have to start bulking their coffee as, so far, farmers have been selling their produce individually “because one harvest and sell fresh coffee beans, while another one may sell the dried ones” due to personal reasons and necessities (Focus Group 2). MWARES farmers’ main buyer is Kyagalanyi coffee company. As it has been recorded throughout this research, all the local traders who buy coffee in Munyende village, they then resell it to Kyagalanyi (Focus Group 1, Interview 9). Kyagalanyi can also buy the coffee directly from the farmers, “but not always and not from everyone, only from those who are willing to take their produce to the agent” (Interview 9). MWARES farmers are unable to sell directly to these agents due to location issues (Interview 1). Moreover, MWARES farmers are not very satisfied of having Kyagalanyi as the only buyer because it “buys their coffee at a cheap price. 1 kg of coffee may be at 10.000 UGX on the market, and Kyagalanyi pays them 5000 or 6000. [...] Kyagalanyi buys coffee here for a cheap price, but it sells at expensive prices elsewhere, maybe 20.000 just for five grams” (Focus Group 1). Being a coffee farmer can be extremely rewarding but it comes with some salty costs, especially for inputs, and it might be more convenient if the extension agents also take care of providing farmers with those. However, some farmers from MWARES affirmed that, not only they are happy with the training programs, but they also prefer not to receive inputs or fertilisers as “it would be like a trap because you know when they give these incentives as fertiliser and trainings then they give them out on (certain) conditions (such) as “you can sell to them only”. So, she would prefer the freedom of doing her own thing, and she sells at the price she wants and to anyone she feels like selling to, rather than having one trader” (Interview 1). On this same topic, another farmer added that he prefers MWARES compared to other companies as “the (MWARES) project gives him the knowledge and then he can use the knowledge to do what he wants and sell to who he wants to” (Interview 2). On the same line of thought, another interviewee stated that MWARES project is okay as it is since “through the knowledge they are receiving they can start doing things on their own and then more support will come on the way” (Interview 3). Finally, MWARES farmers are also satisfied with how trainings are arranged, and how decision-making is currently shared between the community and the staff.

*“The approaches they are using are okay, there is no need to change them. The approaches on farm trainings are working, if MWARES proposes another approach*

*maybe they will consider it, but the one they are currently using is working fine.”*

*(Focus Group 1)*

On the other hand, MEACCE farmers are indeed satisfied with the coffee training programs offered through Konokoyi cooperative because they teach them what they can directly apply in the field to improve their coffee production (Interview 12, 14, 15, 16, 17, 18, 19, 20, Focus Group 4, Focus Group 3). Only one farmer disagreed with this general opinion by stating that “farming practices have barely changed, but I think that practically very few coffee farmers have put into practice what they have learnt through the trainings” (Focus Group 4). Moreover, they also think Fairtrade standard is “not hard to follow. They say to use this organic manure which we have because we have cows, so it is not hard. The other one with the artificial fertiliser it needs money to buy it and you have to apply it every time you put it there. This one of ours you can just pick it somewhere (in our land), so it is easy for us” (Interview 14). Most of MEACCE farmers believe there is nothing else they would like to add to the trainings, nor anything they would like to change. As one of the farmers clarified during the interview:

*“I can’t decide the trainings, I usually don’t know because me here I understand here but those people with laptops and smartphones, they can see a challenge, they can see a benefit, so I trust them when they come with what they have discovered and train me, it is good for me. I cannot decide myself because they are there to see for us, they give us information. If we get ideas from down, we can suggest them, and they do the same with us.” (Interview 14)*

However, few of them also pushed forward some complaints (Interview 11, 15, 16, 11, 13, 12, 20, 17, 18). For example, they would like to be involved differently in the program and have more decision-making power (Interview 11, 15, 16). They would like the staff to inquire more on the challenges farmers have to face on a daily basis (Interview 11, 16) and also provide them with more inputs (Interview 13). They would like to broaden the scope of the trainings, from only focusing on coffee to teaching farmers about livestock management (Interview 12, 20), or tailoring (Interview 16) to diversify their income. Moreover, MEACCE farmers affirmed that the main interest of MEACCE in working with farmers is to buy coffee (Interview 20, 19, 18, 16, 14, 12).

*“Konokoyi is targeting coffee, they want to buy good coffee from the farmers.”*

*(Interview 18)*

*“Konokoyi is targeting coffee with farmers, so it is to get coffee from the farmers.”*

*(Interview 19)*

Others have also added that community development and livelihoods improvement is also an important matter for the organisation (Interview 20, 16, 14, 12, 11, Focus Group 3).

*“Konokoyi’s target is community development and getting coffee. They want to improve famers’ standards and buy their coffee.” (Interview 20)*

*“According to me, I think the main goal of Konokoyi is to improve coffee’s productivity, then to improve on the farmers’ standards of living.” (Focus Group 3)*

For what concerns the coffee business, MEACCE farmers are increasingly receiving many buyers (Interview 11, 12, 13, 14, 15, 16, 17, 18, 19, 20), but farmers refuse to sell them their produce because they “are satisfied with our buyer Konokoyi” (Focus Group 3) or else because “they will take it to Konokoyi and get the social premium you are supposed to get so you also miss that one” (Interview 12) or even because they follow the logic for which “since you work for an organisation, you sell it to them” (Interview 15). As it occurred for MWARES farmers, the buyers have increased because the quality of their coffee has improved (Interview 11, 12, 17, 18, 19, 20). Coming to the price at which they are currently selling their coffee, many farmers stated that “it is good, but we have a very big task on making our good, clean, coffee, and it should be improved. The price we are selling at it is not enough” (Interview 11). Adding on this, another farmer claimed that the price “is not enough for my life. If we talk of a good price, we mean the price when if you sell your coffee you are earning good money. [...] we have many buyers, but we have not improved on our livelihoods” (Interview 15). However, this is not entirely MEACCE’s fault, as the price for coffee “depends on the time you bring your coffee to them. [...] For example, last season started at 8,000 UGX in August 2021 and it kept on increasing up to 13,000 UGX in January 2022. [...] We sold the coffee at 11,400 UGX which was a little bit higher compared to previous prices” (Interview 13). For this reason, someone suggested that Konokoyi only offers them one unique price for their coffee (Interview 17). Despite this, they have recognised a positive trend regarding the coffee price, since “before Konokoyi, we were selling at 5,500 UGX so when Konokoyi came it topped it up to 6,000 UGX and as the years passed the price kept increasing” (Interview 12). Moreover, they also appreciate the fact that MEACCE buys a better quality of coffee (Interview 12), compared to other organisations which “buy coffee even when it is still wet, and when you put it together, it ferments, and the quality is compromised” (Interview 15).

#### 4.5.3. Inquiring each farmer's opinion when comparing top-down and bottom-up approaches to the agricultural training programs in practice

To deeply investigate the farmers' current opinions and future ambitions regarding the agricultural training programs, questions asking them to compare the work of the MWARES/MEACCE with the one of an external – either real or hypothetical – organisation were posed. In this sub-chapter, an overview of the different answers given by the farmers is laid out.

The questions asked to MWARES farmers led to a specific set of results highlighting the desire of farmers to get trained and gain knowledge from MWARES staff only, and not to change it for any other organisation (Interview 8). There are several explanations provided for this choice. Some farmers claimed such out of loyalty, as “MWARES has prepared everything” and took them where they are now (Interview 8, 3, 4), and for this, they cannot “break the engagement with MWARES” (Interview 1). Others stated that many of the coffee companies are only focused and interested in buying coffee from farmers and therefore their sole aim is to train smallholders on coffee cultivation. Instead MWARES “is handling many crops and it focuses on diversification of income for the farmers” (Interview 9). Moreover, preference goes to MWARES project also because farmers described working for any other coffee company as “a trap, because [...] when they give these incentives, fertiliser and trainings then they give them out on conditions such as “you can sell to them only””, but some farmers “would prefer the freedom of doing their own thing” as well as selling at the price they want to whoever they like, rather than having only one trader (Interview 1). Indeed, they favour MWARES which “helps them getting better yields, and from that also more money that they can use to buy fertiliser” themselves (Interview 1). In addition, one of the farmers criticised the average coffee companies for being “so profit-oriented” and for this reason “he would prefer MWARES because the project gives him the knowledge and then he can use the knowledge to do what he wants and sell to who he wants to” (Interview 2). Furthermore, “it seems that the company, that is supposed to come and train farmers, in reality it just comes in the mid of the season when the coffee is fruiting, they take pictures of their gardens, and then they go around and come back during harvest season. So, it looks like they just use them to make reports without actually coming and training them, so it sounds quite dishonest” for them (Interview 3).

During the one-to-one interviews carried out with MWARES farmers, discussions on the comparison between MWARES and three other organisations (i.e., Trees for the Future, Uganda Coffee Development Authority - UCDA, and Kyagalanyi) were explored. Concerning Trees for the

Future, a farmer explained that this one “is mainly into planting of trees and when it comes to gardens management they do not mind if you have intercrops of like five different crops and if the garden is too chaotic because you are planting too many things. While MWARES cares about plants spacing, specific combinations of plants growing in the same garden, which truly makes a difference” (Interview 4). Moreover, the farmer also confirmed that her preference between the two would go to MWARES, “because it has taught her so many things, not only related to agronomic practices and environmental concerns, but it has also taught her how to work in group and collaborate” (Interview 4). Digging deeper on this decision, the same interviewee evidenced a difference between the approach of MWARES and the one of Trees for the Future. She made an example related to the selection procedure:

*“With Trees for the Future, whenever you feel like getting a training you go and get it. If you do not feel like attending it, you do not go. With MWARES is different, there was a method they used to select people. When it comes to trainings, MWARES always have follow-up meetings in which the staff come and see how you implemented the knowledge received. This does not happen with Tree for the Future, they come and teach you, but they do not care whether you implement or not” (Interview 4).*

Finally, she stated that her needs are met through MWARES project, and not through Trees for the Future (Interview 4). Shifting to the opinion on UCDA work with coffee farmers, this organisation also provides coffee farmers with seedlings, yet farmers affirmed that “comparatively they prefer MWARES. Why? Because MWARES staff comes to their gardens, their homes, compared to UCDA which invite them to learn at the sub-county and just give them some theory without practical application, [...] but MWARES is just a project which comes to improve their livelihoods, so the locals are benefitting from the project, but the project is not benefitting from them. So, he feels MWARES is better in this sense, as it also offers trainings on soil and water management and other crops unlike UCDA which focuses only on coffee” (Interview 3). Finally, the most severe judgment of MWARES farmers has been reserved for Kyagalanyi’s work. As Interview 9 explained, “the approach is similar: the farmers receive practical courses and demonstrations on how to plant, prune, and harvest, same of what MWARES does” (Interview 9). However, Kyagalanyi did not submit a baseline survey to the farmers, the staff “just came and mobilised the farmers, they trained the farmers, and they left them without coming back” (Interview 9). In truth, most of the times Kyagalanyi does not train the farmers (Interview 1), the staff usually just comes during harvesting season (Interview 9)

and try to buy their coffee (Interview 1). Few farmers do not trust Kyagalanyi (Interview 9) because “coffee companies like Kyagalanyi are only interested in buying their coffee and go, they do not provide technical advice, they are only interested in buying coffee from already established farmers” (Interview 5) “but MWARES is handling many crops and it focuses on diversification of income for the farmers” (Interview 9). One of the criteria chosen for making such comparison would be the “quality of the knowledge and the training materials because with those he can be able to help himself further” (Interview 3).

*“Kyagalanyi farmers train only on harvesting and how to pulpit and drying coffee, but MWARES starts from seedling raising, spacing, pest and disease management up to harvesting. [...] Sometimes Kyagalanyi gives them fertiliser while MWARES does not provide hand-outs. But they prefer MWARES because it starts trainings from seedling raising because it conducts trainings with the whole process of coffee, but Kyagalanyi comes in the later stages”. (Focus Group 1)*

Deviating the attention from MWARES to MEACCE, the same topic of support was underlined by few farmers when explicating their preference for Konokoyi’s work compared to other organisations. Indeed, Konokoyi’s close relationship with coffee farmers and its continuous and present support for their work was one relevant factor farmers mentioned in MEACCE’s favour (Interview 13, 14, 15). Moreover, as MWARES farmers, also MEACCE participants feel the need to be loyal to their cooperative (Interview 13, 14, 16, 17, 18, 20, Focus Group 3, Focus Group 4), either because Konokoyi has assisted them for so long (Interview 16), or because they are the ones who trained them on coffee production (Interview 17).

*“Other organisations, they are only after money. For us here, you can see that there is actual change in lifestyle, we are okay now because of these trainings. As I have mentioned earlier, we have good drinking water, we have homes, and we have general welfare of the farmers.” (Focus Group 3)*

Even under hypothetical scenarios in which another organisation offers either a better price or a better training program to the farmers, still they would choose to be trained and work with MEACCE (Interview 13, 14, 16, 17, 18, 20, Focus Group 3, Focus Group 4). A farmer even stated that “Kyagalanyi was buying coffee at 10,300 UGX and Konokoyi was selling at 10,000 UGX but I remained with Konokoyi. Because I am used to Konokoyi” (Interview 13).



*She cannot leave Konokoyi completely, she can only sell these people part of her coffee and the rest to Konokoyi because she must be loyal. So, if the price is higher than the one of Konokoyi or if Konokoyi has no money, she would then give some of her coffee to another organisation. (Interview 17)*

Aside from loyalty, farmers also benefit more from the training programs provided by MEACCE, since organic coffee attracts “higher market for partners in the UK [...] more cup testing” (Focus Group 3). Furthermore, most of the interviewees confirmed that they would choose MEACCE over any other organisation mainly for the benefits the former provides them with (Interview 13, 14, 15, 17, 18, 19, 20, Focus Group 3, Focus Group 4), namely second payments, inputs provision, and social premiums.

*“She prefers giving her coffee to Konokoyi and not the other companies because of the benefits Konokoyi gives her farmers, despite the price sometimes being lower than the others.” (Interview 17)*

*“They don’t provide for all life needs, but they give him something at least, compared to other organisations.” (Interview 18)*

In fact, if farmers sold their produce to other coffee companies, they would then “miss the benefits” of MEACCE (Interview 14). Some of them further explained that the market is what they care about the most, even more than the quality of the trainings, as it is possible to read in the Interview 12’s transcript:

*“She does not care about trainings, the only thing that could make her leave Konokoyi is in case they are not paying her. However, since they are giving her services she enjoys, she cannot leave Konokoyi.” (Interview 12)*

Also, farmers “cannot be members in two organisations implementing business of the same product”, as it is written in the cooperative statute (Interview 15). Two interviewees claimed to prefer working with Konokoyi because it buys only quality coffee (Interview 15, 12), while other companies might even buy low quality one causing Mount Elgon farmers’ resentments as their produce would not be validly represented on the world market (Interview 15). Indeed, Interview 15 expressed a long and structured criticism to the work of coffee companies as Kyagalanyi. He first began by explaining that “Kyagalanyi in the first place is a member of Volo Cafe which is a multinational company which comes on the ground only to buy the coffee” (Interview 15). He then

chose quite harsh words to describe Kyagalanyi's work with farmers, such as "Kyagalanyi steals coffee from farmers", "they do not allow them to have other business", "they do not report to members how coffee business is moving" (Interview 15). Particularly related to this last point, the interviewee explained that MEACCE annually invites leading members into a meeting at the end of every coffee season in which the company reports to farmers on the business for that financial year (Interview 15). Additionally, he even affirmed that:

*"The individuals who are agents, they benefit themselves and not farmers. When they get coffee from farmers, they accumulate that coffee and when they are paid second payments, they eat it, and they don't take it back to farmers." (Interview 15)*

Finally, this research also inquired onto preferences of MEACCE farmers related to decision-making in agricultural training programs. For this reason, during the one-to-one interviews, a question was posed asking farmers to choose between two organisations representing two different approaches to the training programs. Respectively, approach one represented the bottom-up approach, namely an organisation directly reaching farmers and first investigating on their needs, challenges, desires, ambitions and then basing the training programs on such information. Additionally, this organisation was also linking farmers with coffee buyers offering a fair price. On the other hand, approach two embodied the top-down approach, namely an organisation which trains farmers following standard requirements (e.g., fairtrade standards requirements) but also buying their coffee at a fair price. Many MEACCE farmers opted for the second approach (i.e., top-down) (Interview 14, 16, 18, 19, 20) mostly because they are "member of Konokoyi" and they "prefer Konokoyi to (eventually) come on the ground and to ask for the needs and challenges of the coffee farmers" (Interview 20). Two farmers stated that the approach implemented for the training programs is not relevant for them (Interview 18, 19), as "trainings are not the main issue, the main issue is prices" (Interview 19) and therefore, an ideal scenario would be to "divide and sell to different organisations" (Interview 18). Other farmers, instead, agreed that they would prefer working with an organisation implementing the first approach (bottom-up) or that they would like MEACCE implementing it (Interview 11, 15, 16, 17, 19). Among the factors influencing this choice, farmers were most enthusiastic about having the possibility to target their needs and challenges (Interview 11, 15, 16, 17, 19) and to be "at the centre of the decisions" taken by the organisation (Interview 11). Referring to MEACCE, one farmer said: "we want them to teach us about what we want. If they consider my opinions for the trainings, I would like it. Maybe my coffee is not producing

well, and they can help me through my opinion” (Interview 16). More views on the first approach (i.e., bottom-up) affirmed that:

*“The uniqueness is that they would involve her in deciding the topics to be trained on.” (Interview 17)*

*“I would prefer the first one because it is going to make me more independent than the second approach because the second sets standards and they tell me to work within specific limits, while the first one I would also have to present my views and opinions before start working together.” (Interview 15)*

Two farmers expressed their scepticism concerning the first approach (i.e., bottom-up). One defined the first approach as riskier compared to the second one, as “you do not know how it is going to go” since it is different from what they have been used to so far (Interview 15), while another farmer said:

*“In case they address her needs and challenges, then she would take up the first approach. [...] For example, if she needs a cow for manure and they cannot give her, then she would stay with Konokoyi. Like, they might ask for her needs but maybe they won’t satisfy them.” (Interview 19)*

## 5. Discussion

The aim of this research is to first compare two different approaches (i.e., top-down, and bottom-up) to the agricultural training programs provided to coffee farmers on the Mount Elgon in Uganda, and then to propose the most suitable approach for the upcoming 100Weeks programs with farmers in the same area. Chapter 4 – in which qualitative data collected directly from the coffee farmers on the Mount Elgon are analyzed – serves as the basis for this new section. Indeed, hereby the main findings are presented and incorporated with existing literature to provide answers to the main research question of this thesis, namely:

*Concerning the context of the Mount Elgon in Uganda, do farmers prefer to have external coffee companies’ interests dictating the knowledge of agricultural training programs*

*(top-down), or would they like the structure and topics of those trainings to be based on their own needs, challenges, and interests (bottom-up)?*

To attain such objective, two different sets of data collected from two groups of coffee farmers situated respectively in the Munyende village and Bududa district on the Mount Elgon were compared (more details in Chapter 4). The first group of coffee farmers collaborates with the Manafwa Watershed Restoration and Stewardship (MWARES) project which operates following the Plan Intégré du Paysan (PIP) approach. The second group of coffee farmers, instead, works with the Konokoyi cooperative, which runs under "Mount Elgon Agroforestry Community Cooperatives Ltd" (MEACCE) company (more details in Chapter 3). Despite embracing a farmer-perspective to this research, prior to commencing analysing the data collected with them, the first insights setting the base for the main findings were provided through the field officers' interviews. This was done to support the reader with more detailed information regarding the practical application of the two approaches on the ground, before shifting the focus towards a deep exploration of the farmers' knowledge. Indeed, this first set of information is now going to be incorporated with the farmers' point of view, as the final goal is to understand how farmers access and adapt knowledge to their conditions. Encompassing their many similarities and differences, six main themes have been selected to reflect on the farmers' perspectives and opinions regarding the agricultural training programs they have been receiving. These topics include 1) the perception of benefits; 2) farmers' relationship with field officers; 3) opposing ambitions: being a decision or a price maker; 4) challenges and disadvantages; 5) the role of the community; 6) comparing the two approaches: loyalty and trust issues. These arguments and the range of sociological theories supporting them – such as the Community of Practice (CoP) model, the Participation Ladder, and the intertwining social, environmental, and didactic types of learning (Chapter 2) – are mutually informing and strengthening each other for broader academic research on agricultural training programs. In conclusion, this chapter formulates the final considerations followed by the limitations of this thesis and recommendations for further research (disclosed in Chapters 6 and 7 respectively).

## 5.1. Main findings and implications

The data reported in Chapter 4 indicates three main recurring points of analysis which impact the final answer to the research question, namely the way trainings are set up, the influence of farms' location and the availability of a reliable infrastructure system, as well as the role of the trainers in building a relationship with the farmers. Building on the theoretical framework, the notion of participation – the guiding principle of this research – is severely shaped by these three factors and, by so doing, impacts the didactic, environmental, and social learning process of the farmers. Through the analysis of these three factors, the main differences between the two coffee farmers' groups arise, and with those the recommendation on the most fitting approach for the agricultural training programs (discussed in section 5.2.).

A remarkable elements in the comments of the farmers is that MEACCE and MWARES groups have different ambitions and scopes related to their participation in the agricultural training programs. In fact, MWARES farmers aims at improving their livelihoods by attending the training programs and implementing the knowledge received, while MEACCE farmers' scope is to either improve or maintain their coffee business stable. MEACCE farmers are focused on the productivity of their coffee, reason for which their current main ambition regards adding value to their coffee through the purchasing of a pulping machine at community-level. Indeed, since they define themselves as businessmen, it follows that they view coffee as a fruitful commodity whose profit will lift them out of poverty. This distinction is important as it denotes a fundamental difference in the nature of the farmers' employment. Despite both groups being interested in uplifting the community's life standards by improving the farms' conditions, MWARES group wants to do that to live in a better and safer environment, while MEACCE farmers is more focused on the productivity of their coffee business. In fact, the role MEACCE plays in its farmers' lives is the one of an employer who – by teaching them about Fairtrade standard and its environmental requirements – secure the community a stable and unique market where they can sell their produce. MWARES farmers, on the other hand, do not recognize the field officers under the role of employers, and yet neither as their equals, but more as a support network they can freely access. Throughout the past three years, they have managed to establish a strong and close relationship with the extension agents, for which MWARES farmers are extremely grateful, as they view them as the ones supplying them the tools to upheave their life standards. Additionally, MWARES farmers feel empowered thanks to the knowledge gained by the project because it gives them the capacity to build their own life. They are

not necessarily interested in inputs provision or in value addition for their coffee, they are more concerned with getting the tools necessary to lift themselves up on their own. In this sense, MWARES project assures the sustainability of their farmers' wellness, while MEACCE, with a totally different scope and fully business-oriented, often leaves its farmers unstable and hopeless. This must not be intended with a negative connotation, as farmers are satisfied with MEACCE's work, knowing the organisation is only interested in buying their coffee. They are aware that the training programs are functional for enhancing the productivity of organic coffee, and they appreciate them. In fact, their demands are either related to coffee selling or to the implementation of other businesses. Apart from the training programs, the data collected suggests that a possible reason causing such a contrast between the two groups can be found in the slightly different environments they farmers live in. As already mentioned in Chapter 3, the coffee farmers living in Bududa district were relatively easier to meet compared to the ones in Munyende village, as the latter were located further up on the Mount compared to the former. Therefore, as proper streets were not present, the possible transport options included either hiking up the Mount or driving a mountain motorbike to reach this group of farmers. This is necessary information to disclose as it leads to a visible divergence in terms of farmers' life conditions as well as availability of trainings, given that the group living in Munyende distinctly has less chance to be connected to knowledge organisations and it is therefore conditioned to a decreased access to innovation systems. Furthermore, based on the data analysed, farmers living in Munyende experience much more risks related to land degradation and heavy rains compared to the ones in Bududa, something undeniably hurting their coffee cultivations. Also, farmers living in Bududa district benefit more from their proximity to the local market to sell their produce as well as their nearness to the main district's facilities (e.g., hospitals, schools, coffee organisations' offices, coffee bulking centres). All these factors significantly impact farmers' development and fundamentally shape what the farmers yearn for and what they want to gain out of their cooperation with the organisations. Indeed, the group of farmers who are economically more developed (i.e., MEACCE farmers), also demand more efforts from the extension agents and are harder to satisfy (Kassem, Alotaibi, Muddassir & Herab, 2021). The level of development of these groups does not depend on the organisations providing extension services to them, but rather on their location and proximity to knowledge organisations, market, and basic facilities. In practice, MWARES farmers' goal is to boost their own knowledge and they extremely appreciate the life-changing trainings they have been receiving through the project. MEACCE farmers think and act as businessmen. They want to add value to their coffee and to secure the slice

of the market related to organic and Fairtrade coffee production and, by so doing, be able to demand for a higher price for their produce. These opposing ambitions concerning their final goals are also reflected in the ways they perceive their communities. MWARES farmers explained that the reason for which they transfer knowledge from farmer to farmer is that they want the community's members to be empowered by passing on the PIP approach message on practicing envisioning to change life standards. MEACCE farmers, on the other hand, rightly believe that having more members joining Konokoyi cooperative would mean enlarging their business, selling more coffee, and earning more money. Indeed, if an increasing number of farmers attended MEACCE training sessions, gained knowledge on Fairtrade standard, produced coffee accordingly and was willing to bulk it with the rest of the community, farmers would be able to sell more coffee, and enrich their society. With a higher revenue, MEACCE would also progressively be less at risk of failure, benefitting the farmers too. This can be considered a smart and strategic choice, as the data gathered with MWARES farmers indicates that not having a direct buyer and being forced to deal with middlemen to sell coffee is a risky and often unfair practice to farmers. Indeed, this group of farmers struggles with earning a fair price for their coffee, as the location of their village and the available means significantly reduce their bargaining power. On the other hand, MEACCE farmers are obliged to respect specific criteria for their coffee cultivation and can only secure themselves a stable market by following the Fairtrade requirements imposed on them. Meanwhile, MWARES farmers can produce coffee as they prefer and are not restricted or tied to any coffee company. Another aspect of notable relevance for this research concerns the trainee-farmers relationship and its implications. Data suggests that farmers experience serious trust issues when it comes to working with a new organisation. As it was indicated by the participants during the interviews and FGDs, coffee farmers in Bududa live under extremely precarious and unstable conditions, either due to the lack of support from a variety of extension service organisations or for the unpredictability of their main source of revenue: coffee farming. The fluctuations of the market price, the unfairness of the middlemen when it comes to weighting the produce or setting its price, as well as the changing and threatening climatic conditions (Okonya, Syndikus & Kroschel, 2013) are few of the elements complicating the coffee business for farmers, making them extremely vulnerable in this regard. Despite their divergencies, insights on the data collected leads to the theory stating that both groups of farmers are extremely tightened to their respective organisations, turning this gratitude into boundless loyalty. The value of loyalty significantly impairs the authenticity of the data in relation to farmers' opinions on the agricultural training programs. The sustainability of the

agricultural extension services and the long-term cooperation between agents and farmers depend on the willingness of the latter to keep either participating in the trainings or selling their coffee to the same organisation. The notion of “willingness” is strictly linked with farmers’ satisfaction, which is also based on a variety of factors which ultimately define their opinions (Dehghanpour, Yazdanpanah, Forouzani & Abdolazadeh, 2022). As a matter of fact, the data shows that both groups of coffee farmers exhibit a high level of commitment to their organisations, reason for which they are willing to work with them under any circumstance, with the only difference being that MEACCE farmers would consider selling their produce also to other companies but only in case their primary fails to pay them. On the other hand, MWARES farmers feel extremely tied to the project, being it also the first one truly investing in Munyende community. The importance of recognising these differences is that, no matter the development of their community or their personal interests, one aspect which accumulated both coffee farmers is their need of market. As it was reported in Chapter 4, some of them have also stated quite explicitly that inputs provision or quality of the trainings are not their top priorities. Indeed, farmers’ first concern stands on having a stable buyer who offers them fair prices for their coffee. This is also the peculiarity of the “black gold”, a cash crop and second most valuable traded commodity in the world (Ponte, S., 2002), which stands out for its globally recognised value compared to any other agricultural products farmers in Uganda might cultivate.

## 5.2. Top-down or bottom-up?

The data collected on the judgment of the training programs by the coffee farmers illustrates extreme disapproval of both groups towards the kind of coffee companies only focused and interested in buying coffee from farmers and therefore training smallholders for the sole purpose of increasing the productivity of their coffee cultivations. The results suggest that farmers criticise the organisations which are only focused on making profits out of their cooperation with coffee producers. Data on MWARES farmers’ assessment of the trainings show that they prefer having an organisation providing them with the most advanced knowledge and skills related to coffee production, but not to be tied to it via an employment contract. Farmers from this group reported their ambition of choosing to whom sell their coffee, and not being forced into a working relation from the top. Moreover, they also expressed a certain degree of interest towards the establishment of a confidential relationship with the extension agents, where the latter not only provide them



trainings on coffee, but also care to follow-up on farmers' correct implementation of the knowledge gained and pay visits to their farms. Results gathered with MEACCE farmers also pointed towards this last point, where presence on the field and constant support from the field officers were ranked as one of the most valuable aspects of their collaboration. Furthermore, despite working with an organisation eventually interested in buying coffee, MEACCE farmers also reported the same data concerning their discontent towards uniquely profit-oriented organisations. Finally, both groups of coffee farmers reserved a severe judgment for Kyagalanyi's work, which is the one in the end unanimously criticised by them. The data therefore demonstrates that farmers disapprove of impersonal relationships with the organisation. Instead, they want to benefit from a support system which primarily cares about their needs and challenges and tries to practically address them in the layout of agricultural training programs aimed at improving their agricultural practices first, but also extending the scope to the advancement of their personal skills and livelihoods. They want their needs and ideas to be assessed during the baseline surveys, and they want to collaborate more in the training programs' design. However, they do not want to renounce to the staff support and leading role in the structuring and implementation of the trainings. The results expressed by MEACCE members shows that they support the bottom-up approach, where farmers are directly consulted by the organisation which first investigate on their needs, challenges, desires, ambitions and then base the training programs on such information. They agreed that they either would prefer working with an organisation ensuring the bottom-up approach or that they would like MEACCE implementing it. Among the factors influencing this choice, farmers were most enthusiastic about having the possibility to target their needs and challenges and to have their interests posed at the centre of the decisions taken by the organisation.

To conclude, based on what the results advocate for, a mixed-approach to agricultural community development is proposed. Such comprehensive approach involves a combination of the top-down and bottom-up where neither the community at the bottom nor the people at the top are excluded (Isidiho & Sabran, 2016). The analysis of concepts such as farmers' empowerment and agency, the role of the trainers, and the challenges posed by the different environments and infrastructure system (see Chapter 4) have been fundamental to reach this conclusion as they contributed as analytical entry points when reviewing the two approaches. However, according to what the data revealed, farmers need and want to make use of professional workers' expertise to advance their knowledge on new technologies and innovations, as they often lack access to education. Under such approach, farmers' ideas and interests are maintained with additional collaboration provided by the

external organisation. On the other hand, the mixed approach would eliminate the domination of projects and agricultural programs by the top and would stop them from making their own interests out of such cooperation. There would be room for checks and balances from each side, but it would guarantee a farmer-centred perspective to the agricultural training programs.

## 6. Limits and Recommendations

This thesis contributes to the debate concerning top-down or bottom-up approaches to agricultural extension services for smallholder farmers. However, acknowledging challenges and limitations to this research is necessary as those have influenced the outcome of this thesis. First, as it was already uncovered above, the difference in terms of the communities' locations certainly shaped the data collection. These farmers do not fully share the same challenges and needs, and there are many other personal factors influencing their opinions and ideas related to the training programs. The same goes for the concept of farmers' loyalty to their extension agents and projects, which also contributes to limiting the authenticity of the data collected. Furthermore, key informants were contacted and used to reach the communities. MWARES staff put me in contact with its farmers in Munyende, introduced me to them, and drove me there with their motorbikes every day. While for MEACCE, two leader farmers cooperating with Konokoyi assisted me in the organisation of the FGDs and interviews. Not only I have entered the field as an overt researcher, but I have found my way through trusted representatives of the organisations under study. This might have caused a difference in the behaviour of the participants of this study compared to how it could have been in case my direct link with the extension agents was not proved. In addition, my role as a European, young, and white researcher surely filled their hearts with hope concerning the results of my thesis. Despite having specified the scope of this research at the beginning of every interaction, still most of the farmers met in Uganda asked me to use my connections to put them in direct contact with coffee buyers in Europe. This includes the possibility that farmers might have adapted the knowledge they shared to fill and fit in my research. Moreover, the initial idea was to compare MWARES farmers data with Kyagalanyi's ones, as they truly embody the two different extremes for the agricultural training programs. However, this plan did not go through, and, after few weeks, I was able to discover the work of MEACCE and Konokoyi cooperative in Bududa. As Reynolds (2013)

explains, cooperatives are usually set up as a response to an existing problem in the market, often due to an imbalance of power between the two forces at play: a supplier of goods and the buyer. Indeed, a cooperative may serve as a force to lower prices or raise the quality of service or influence the market in other significant ways (Reynolds, 2013). Indeed, the concept of cooperative, despite being business-oriented, differs from the one of other coffee companies, which can be the true expression of top-down development.

## 7. Conclusion

The aim of this research is to first compare two different approaches (i.e., top-down, and bottom-up) to the agricultural training programs provided to coffee farmers on the Mount Elgon in Uganda, and then to propose the most suitable approach for the upcoming 100Weeks programs with farmers in the area. In order to do that, the opinions, ideas, and discourses around the agricultural extension services by, on the one side, the coffee farmers in Munyende village and Bududa sub-county and, on the other, by the field officers and junior agronomists have been investigated through participants observation, focus groups discussion, and semi-structured interviews and subsequently analyzed through the application of the Community of Practice (CoP) model, the Participation Ladder, and the social, environmental, and didactic types of learning (Chapter 3). The main findings of this study concern the struggles, challenges, and ambitions which coffee farmers on the Mount Elgon experience regarding all parts of the coffee business which directly affect them. These information set the basis for a far-reaching understanding of the role agricultural extension services and the relationship between farmers and field officers as well as farmers and community play in the participants' life. In this regard, this research discovered that, despite being geographically close, these two groups of farmers do not entirely share the same issues and views. The data collected with both groups of farmers also point to the extreme gratitude they feel for their field officers, a value that eventually turns into boundless loyalty, which sees farmers self-imposing on them a strict ruling of full commitment to their respective organisation. Based on what the results showed, a mixed-approach to agricultural community development is proposed with this study. Such comprehensive approach includes a combination of the top-down and bottom-up features where both parties are equally participating and neither the

community at the bottom nor the people at the top are excluded. The findings which led to this conclusion involve the fervent appreciation and plea from the farmers for the presence and constant support of extension agents and external experts on the field, while still assuring that their needs and requests are the central points in the design of agricultural trainings. The mixed-approach to agricultural trainings and community development is not extensively investigated in academic research as the focus is often reserved to top-down or bottom-up methods. This study wishes to inform current research on the possibility of such solution to guarantee the smooth and effective collaboration as well as the equal involvement of all the stakeholders in agricultural training programs, always aiming at benefitting the farmers and improving their livelihoods. Finally, to better understand the implications of the results provided by this research and according to its limitations, future studies could address the data collection between two increasingly more divergent groups embodying top-down and bottom-up approaches, while making sure that similarity in terms of environmental, economic, and social conditions is assured.

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# ANNEX

## Appendix 1. Focus Group Discussions Guidelines

### INFORMED CONSENT

**\*Ask permission to record\***

**\*Start recording\***

Hello everyone, thank you very much for participating in this activity. I would like to introduce myself first. I am Annalisa Iovieno, I am originally Italian, but I am studying at Wageningen University, in the Netherlands. I am doing my master's degree in international development studies, but I focus on food security and sustainable agriculture. I am here for a period of two months to conduct research on my Master thesis, which is on the different approaches to the agricultural trainings provided to the coffee farmers in this region, the Mount Elgon. For this reason, I would like to ask you few questions related to the trainings you have been attending, and your opinions on it. The reason why I have invited you is because you share similar backgrounds and social characteristics which are necessary for the purpose of my research. I also want to highlight that there is no right or wrong answer, I simply want to know your opinion and views on this topic. I want to learn from your knowledge, therefore feel free to interrupt me during the discussions with anything you want to share. I will assure anonymity of the data I will collect with you; therefore, your name will not appear in the research. Once again, thank you so much for your cooperation.

**\*Read out informed consent and ask for compliance\***

**\*Prayers\***

**\*Round of introductions\***

### FOCUS GROUP DISCUSSION QUESTIONS

#### Part 1: Assessment of the training programs

- Do you like to participate in this project? Why?
- How is it going? What went well or what went less well? Why?
- How do you want to change these issues?
- Is there anything you would like to change of the project? Why?
- Who is going to decide on the actions needed to improve the situation?

- Do you receive remuneration to attend the training sessions?
- Why did you decide to participate in the project?
- Have your priorities changed since you began working with (organisation)? How?
- Have you received trainings from other projects before (organisation)?

### **Part 2: Farmers' knowledge transfer process**

- What did you learn in the training sessions?
- Who thinks it is useful knowledge? (Voting by raising hands) Why?
- How are the trainings structured? How does a training session with the staff work if you had to describe it?
- How do you decide the focus of the trainings?
- Have your farming practices changed since you work with (organisation)? How?
- Are you happy with these changes?
- What do you think it is the final purpose of this project?
- Do you think you would have been able to achieve the same results without (organisation)?
- Would you like to continue working with (organisation) in the future? Why?

### **Part 3: Farmers participation in decision-making process**

- Were you planting coffee even before this project?
- Are you happy to be a coffee planter? Why?
- Who do they sell the coffee to?
- Do they bulk their coffee together?
- Who sets the price for your coffee?
- Are you confident to plant coffee on your own without (organisation)?
- How often do you plant coffee?
- Do you decide how often to plant it or does the staff communicate it to you?
- Who decides what to plant?
- Who decides how to plant?
- Who decides when to plant?
- Are you happy with how things are arranged right now or would you like to be involved in a different way?
- What motivates you to participate in the trainings?

### **Part 4: Learning process**

- Who do you interact with since you grow coffee?
- Do you consider them helpful people?
- What did they teach you?
- How often do you receive trainings?
- Who decide on the topic of the trainings and how often do you receive them?
- After receiving the trainings, will you train yourself other farmers?
- How will this process work?
- Who decides what to plant?
- Who decides how to plant?
- Who decides when to plant?

This is the end of the activity. Feel free to add any other information that you deem important and valuable for my research. Thank you again for your participation.

## Appendix 2. Farmers' Interviews Guidelines

### INFORMED CONSENT

**\*Ask permission to record\***

**\*Start recording\***

Thank you very much for taking the time to participate in this interview. I would like to introduce myself first. I am Annalisa Iovieno, I am originally Italian, but I am studying at Wageningen University, in the Netherlands. I am doing my master's degree in international development studies, but I focus on food security and sustainable agriculture. I am here for a period of two months to conduct research on my Master thesis, which is on the different approaches to the agricultural trainings provided to the coffee farmers in this region, the Mount Elgon. For this reason, I would like to ask you few questions related to the trainings you have been attending, and your opinions on it. I also want to highlight that there is no right or wrong answer, I simply want to know your opinion and views on this topic. I want to learn from your knowledge, therefore feel free to interrupt me at any time during the interview with anything you want to share. I will assure anonymity of the data I will collect with you; therefore, your name will not appear in the research. Once again, thank you so much for your cooperation.

**\*Read out informed consent and ask for compliance\***

- What do you mainly cultivate?
- How did you start cultivating coffee?
- Which type of trainings are you receiving at the moment? What do they cover?
- Are you happy to receive trainings on coffee? Why?
- How many organisations are currently giving you trainings? Who are they?
- Which one of them do you like the most? Why?
- Do you feel like your needs are being met by the (organisation)? Why?
- How is it going with (organisation)? What went well or what went less well? Why?
- How do you want to change these issues?
- When did you start receiving trainings from (organisation)?
- Were you involved by the staff on the setting up of the trainings at the beginning? How?
- Once laid out, did the staff ask for your opinion on the trainings you were going to receive?
- At the beginning of the project, did you feel the staff hear your complaints and challenges and brought you what you needed through these training programs?
- Do you feel like you participated in the project? How?
- Do you feel empowered by this project?
- Do you feel like the staff has your interests at heart?
- What do you think are the main interests of (organisation)?
- If there was another coffee company stepping in willing to train you with better material and offering a higher and stable price for your coffee at the condition that you stop working with (organisation), would you do it? Why?
- Do you like the relationship you have with the staff? Why?
- Is there anything you would like to change of the trainings you are receiving at the moment by (organisation)?

- If you wanted to change these issues, what would you have to do? Would it be possible for you to discuss it first with the staff?
- Why do you work with (organisation)? What is your motivation/benefit you are gaining from it?
- Are you receiving any incentives to work with (organisation)?
- Are you receiving inputs or credit for inputs from (organisation)?
- If you didn't receive \*incentive\* to participate, would you have participated anyway? Why?
- Are you having more or less coffee buyers now compared to before implementing the knowledge gained from (organisation)? Why?
- Is it more or less difficult for you now to get a better price for coffee?
- Do you train other farmers? Why?
- What do you think it is the most important thing when cultivating coffee? What is the thing you need the most when cultivating coffee?

This is the end of the activity. Feel free to add any other information that you deem important and valuable for my research. Thank you again for your participation

### Appendix 3. MEACCE and MWARES Officers' Interviews Guidelines

#### **INFORMED CONSENT**

**\*Ask permission to record\***

**\*Start recording\***

Thank you very much for taking the time to participate in this interview. I would like to introduce myself first. I am Annalisa Iovieno, I am originally Italian, but I am studying at Wageningen University, in the Netherlands. I am doing my master's degree in international development studies, but I focus on food security and sustainable agriculture. I am here for a period of two months to conduct research on my Master thesis, which is on the different approaches to the agricultural trainings provided to the coffee farmers in this region, the Mount Elgon. For this reason, I would like to ask you few questions related to the trainings you are providing to the coffee farmers. The questions will space from the structure of the trainings sessions and the way you have laid out your training



manual to investigating the goals and ambitions of the organisation you are representing. I also want to highlight that there is no right or wrong answer. I want to learn from your knowledge, therefore feel free to interrupt me at any time during the interview with anything you want to share. I will assure anonymity of the data I will collect with you; therefore, your name will not appear in the research. Once again, thank you so much for your cooperation.

**\*Read out informed consent and ask for compliance\***

- Which are the necessary characteristics and on what basis are farmers selected to receive trainings?
- How and where is knowledge accessed, shared, and adopted by the farmers? Which methods are being used to transfer the knowledge to the farmers?
- Which type of approach is being used for trainings received by coffee-farmers?
- Who set the agenda for the trainings?
- Who decides on the knowledge transferred to the farmers? Who decided this at the very beginning of the project?
- On what basis are you defining a training manual for the farmers?
- How is it structured? Which topics are discussed? Who decides the topics?
- Has the manual ever changed in the last years? Why?
- Did you inform the farmers you were changing it and asked for their opinion?
- How does a training session with the farmers work if you had to describe it?
- Do they have private land or communal lands?
- Are the farmers receiving trainings on coffee from other organisations?
- Are farmers receiving external agricultural services from the government?
- Do you provide inputs to the farmers?
- At what price are you buying coffee from the coffee farmers?
- Has anyone ever withdrawn from the program? Why?

- Do you carry out different types of trainings other than the ones focused on agronomic practices?
- What does your Organisation gain from it? What is its final purpose when working with coffee farmers?

This is the end of the activity. Feel free to add any other information that you deem important and valuable for my research. Thank you again for your participation.

#### Appendix 4. Code Book

Code	Definition	Examples
<b>Farmers' general information.</b>	Data and details regarding the farmers. Answers to the questions "which crops do you cultivate?", "when did you start cultivating coffee? Why?", "how is it going? What went well in these years? What went less well? And why do they think so?" and "what type of trainings are you currently receiving?", "how many organisations are giving you trainings?", "what new things did you learn in the trainings you received?", and "If you had to describe a training session to me, how would you describe it? Where do you go? How often do you have them? How are you informed about the trainings?" given by the farmers.	Structure of a training session, crops the interviewee cultivates, years she/he has been starting cultivating coffee, type of training programs received, type of knowledge received, and number and names of organisations delivering the training programs in the current period and/or in the past.
<b>Level of satisfaction gained by receiving the current training programs on coffee.</b>	Answers to the question "are you happy to receive trainings on coffee? Why?" given by the farmers.	Economic rewards, knowledge transfer.
<b>Initial reasons behind working with a particular organisation.</b>	Answers to the question "why did you decide to join xx at the beginning?" given by the farmers.	Logistics, other people in the community were working with it, economic reward, life quality improvements.
<b>Farmer-staff type of relation.</b>	Answers to the questions "at the beginning of your cooperation, did the organisation ask you about the challenges you were facing and about your needs?" "Do you feel you can trust the staff? Why?", "Do you feel comfortable in talking to the staff?" and "have you received trainings from other	Closeness to the staff, quality of the training programs, payment of coffee.

	organisations before this one?" given by the farmers.	
<b>Decision-making dynamics between farmers and staff.</b>	Answers to the questions "is there anything you would like to change of the trainings you are receiving? Why? Have you asked the staff to change it? Why?", "Do you think the staff would accommodate your ideas? Why?", "Does the organisation ever ask for your opinion on the trainings?" and "Who sets the agenda for the trainings? Who decides the topic of the trainings and when the trainings are going to be?" given by the farmers and the staff member.	New training programs on crops other than coffee, new ideas related to coffee production, training manuals.
<b>Farmers' perception of the organisation's interests.</b>	Answers to the questions "what do you think is the main interest of the organisation in working with farmers?" and "Do you feel like the organisation truly care about the farmers' lives and has your interests at heart?" given by the farmers.	Uplift farmers' standards of living, economic rewards.
<b>Farmers' interests in working with the organisation.</b>	Answers to the questions "If there was another coffee company coming here and wanting to train you on coffee farming and buy your coffee, would you work with them?" given by the farmers.	Loyalty, economic rewards.
<b>Level of farmers' loyalty to the organisation and farmers' interests.</b>	Answers given to the questions "What if a new organisation provides you better training programs?" and "What if they provide a better price for coffee?" given by the farmers.	Loyalty, history in their relationship.
<b>Farmers' preference between a top-down and bottom-up approach.</b>	Answers to the question "If there was an organisation coming here and asking you first "what do you need? What are the challenges you are facing? What do you want to get trained on? Is it cattle or is it coffee?" and then they also link you to coffee buyers with a good price. This represents approach one. Then there is another organisation, training farmers on fairtrade standards and buying the coffee. This is the second approach. So, the first approach	Farmers' needs assessment, lack of trust.

	focuses on people, it starts from the people, from the farmers, by asking them what they want. The second approach focuses on selling coffee. Which of these two approaches would you prefer?" given by the farmers.	
<b>Farmers' empowerment through the training programs.</b>	Answers to the questions "Do you feel empowered by the trainings?" and "do you think you would have been able to achieve the same results without the project? Why?" given by the farmers.	Raised farmers' voice, encouraged farmers, growing more coffee, feeling more independent.
<b>Inputs that farmers receive by the organisation and the way they impact their work.</b>	Answers to the question "Do receive inputs from the organisation?" and "would you still work with them without the inputs? Why?" given by the farmers.	Fertilisers, loyalty.
<b>Farmers' current motivation in working with the organisation.</b>	Answers to the question "what is your main motivation in working with the organisation?" and "Have your priorities changed since you began working with the organisation? How?" given by the farmers.	Economic rewards, empowerment.
<b>Coffee quality assessment after attending training programs.</b>	Answers to the question "has the quality of your coffee improved since you started working with the organisation and following the trainings?" given by the farmers.	Quality improved, quantity decreased.
<b>Coffee buyers' assessment after attending training programs.</b>	Answers to the question "are you having more or less coffee buyers now?" given by the farmers.	More, less.
<b>Coffee price assessment after attending training programs.</b>	Answers to the question "has the price increased or decreased compared to before?" given by the farmers.	Decreased, increased, market uncertainty.
<b>Farmers-to-farmers knowledge transfer process and farmers' motivation.</b>	Answers to the question "do you train other farmers on coffee farming? Why?" given by the farmers.	Avoid stealing, community development.
<b>Main motivation in coffee growing for farmers.</b>	Answers to the question "what is the most important thing of being a coffee farmer for you?" given by the farmers.	Economic rewards, trainings.
<b>Farmers' involvement in laying out the trainings.</b>	Answers to the question "At the beginning of the project, was the planning of the trainings and their contents shared with the	Deeply involved, not involved, engaged in discussions with the staff.

	farmers? Did they ask your opinions or approvals on them or not?" given by the farmers.	
<b>Staff general information.</b>	Answers to the questions "how many farmers have you trained so far?", "what is your role in the organisation?" given by the staff member.	Role, number of farmers trained.
<b>Farmers' selection process.</b>	Answers to the question "which are the necessary characteristics and on what basis are farmers selected to receive the trainings?" given by the staff member.	Innovators, have a coffee plot.
<b>Approach used for the training program.</b>	Answers to the question "on what basis do you layout the training programs for the farmers?" given by the staff member.	Baseline surveys, crops, practices, manuals, standards, needs' assessment.
<b>Methods used to transfer knowledge.</b>	Answers to the question "which methods are being used to transfer the knowledge to the farmers?" given by the staff member.	Farmer-to-farmer, on-farm trainings, exchange visits.
<b>Organisation's main interest in working with farmers.</b>	Answers to the question "what does the organisation gain from working with farmers?" given by the staff member.	Improving farmers' life quality, buying coffee.

## Appendix 5: MEACCE contract with coffee farmers

CONTRACT BETWEEN MEACCE ORGANIC, FAIR TRADE AND RFA ARABICA COFFEE PROGRAM AND;

Farmer Name	Farmer Code
Parish and Village	Primary society

I the above-named Farmer/ family member accept the contract terms below;

1. I will attend trainings and meetings organized by society at all times in person without fail.
2. I will follow the principles of Organic Fair Trade and SAN agriculture as laid out below.
3. I will not use artificial inputs such as fertilizers, pesticides, fungicide, herbicides and treated seeds in or near my coffee plantation or on any intergroup in the coffee plantation.
4. I will not use prohibited chemicals on non-coffee fields,
5. I will use personal protective equipment while spraying on fields
6. I will maintain good agricultural practices as follows;
  - a. Use clean planting materials,
  - b. Maintain and improve soil fertility by mulching and application of natural fertilizers,

- c. Maintain soil cover and prevent soil erosion,
- d. Maintain coffee plantation by pruning,
- e. Maintain adequate shade trees in coffee plantation.

7. I will observe the following practices during and after harvesting;

- a. Timely harvest of coffee selecting only pipe cherries,
- b. Ensure that coffee, is pulped within 1 day of harvesting,
- c. The coffee must be fermented for two days in a clean fermentation container,
- d. Wash the coffee after fermentation using clean water,
- e. The fermentation water will be poured into compost pits and will not be poured directly into the river,
- f. During washing I will remove coffee beans that float,
- g. The coffee will be dried on a clean raised surface,
- h. The pulp will be composted and reused as fertilizer on my farm,
- i. The coffee will be stored in clean containers away from any possible source of contamination,
- j. Am willing to deliver coffee to the primary society.

8) I will ensure a good environment is kept by;

- a. Following the waste management practices,
- b. not bathing, washing clothes, plates, coffee or farm tools and equipment in or near the rivers, streams or springs,
- c. Not cultivating on land close to rivers that would lead to erosion and pollution of the water,
- d. Avoid environmental degradation by practices such as un-necessary cutting down of trees.

9) I will allow free access to my facilities of all MEACCE visitors during inspections as per MEACCE Project instructions.

10) I will present a copy of my contract/coffee delivery card whenever I or my family member delivers coffee for sale to the project.

11) I will not employ children below 18yrs or prisoners on my farm.

12) I will keep farm records.

13) In the case of any violations of the organic, Fair Trade and RFA farming principles I will report to the Certification Officer.

14) In the event of serious violations of the internal standards I accept to be expelled or suspended from the project.

MEACCE Project is committed to providing the following support:

- 1) Buy your coffee at premium prices when the coffee is of suitable quality.
- 2) Provide support services to you by way of the extension support.
- 3) Submit your farm for official International Organic, Fair Trade, and RFA Certification.

- 4) Implement community development projects that have direct impacts to all members of the society.

I the undersigned farmer agree that the above terms of contract have been explained to me and I clearly understand and therefore accept them as signed below:

Farmer Signature	FO Signature
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H/H Position	Husband	Wife	Daughter	Son	Other
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Date	Name of FO
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## Appendix 6. Literature Review

The notions functional for the comprehension of this thesis are defined and described throughout this chapter by carrying out a narrative literature review. Hence, literature concerning agricultural trainings and top-down and bottom-up approaches in rural community development is reviewed.

### Rural community development

All the three terms used to formulate the discipline of rural community development are grounded in a broader literature. For this reason, each term is going to be described and explained singularly before reaching the core comprehensive definition of what “rural community development” envelops.

A community can be described as a group of people who share a common identity, culture, and desires, and it is often linked with a specific geographical area or social and psychological condition (Chanan, 2002). Adding on this definition, community concerns persons in social interaction within a delimited geographic area who experience one or more common ties reinforced through communication and exchange (Lee, Kim, & Phillips, 2015). As follows, it is possible to say that the term community comprehends a certain degree of social interaction among its members. Before going further with what the term “rural” expresses in this discipline, it is necessary to distinguish between the terms “agricultural” and “rural”, as those express different angles of approach to the same issue. Indeed, while the term “agricultural community” encompasses persons who participate in farming, the term “rural community” refers to the portion of population residing in rural areas and outside cities or major inhabited centres (Basant, & Kumar, 1989). Hence, the

term “rural community” includes the agricultural community while also admitting people employed in other kinds of occupation in the countryside, which can also be related with agriculture. Now, by applying the concept of community to the one of rural and, more specifically, the agricultural context, it is possible to identify that a path of social relationships and a community system emerge in every agricultural area. Farmers get inputs from certain sellers in specific locations, meanwhile selling their products to others. Social services, such as schools, hospitals, and churches, expand at the needs of the rural population. Therefore, a net of human relationships in farming and rural living arises and its existence is common to every country, making it a renowned subject of studies and research worldwide (Weitz & Landau, 1971).

Regarding the notion of development, such concept is difficult and complex and has no commonly agreed-upon academic meaning. However, to provide a general conceptualisation of it for the purpose of this thesis, development here is meant as “all those policies, programs, institutions, and interventions geared towards changing and improving lives”, as Professor Bram Büscher (2015) describes. Now, community development, can be considered as a practice whose value is to improve people’s lives. As such, it includes the engagement of different stakeholders from local to national levels and from any sectors, ranging from public to private (Lee, Kim, & Phillips, 2015). Moreover, community development aims at promoting active participation of all its members to consciously facilitate the decisions shaping their lives. Indeed, community development focuses on capacity building and promotes active participation of each individual in a group (Phillips & Pittman, 2015). Again, the concept of community development bears different meanings to different people. For some, community development represents the conceptualisation of the physical transformation of territories, from less technologically advanced environments to avant-garde buildings and facilities. For others, community development is meant as a fresh mode of management of law and order in a community, going side by side with the foundation of indispensable services in agriculture, education, and medical care (T. J., Undiandeye, & Anogie, 1999). Despite the meanings attached to community development, its most important feature is that it cannot be extensively described in terms of its content, but rather in the way it tackles the development of the community itself. In this sense, community development can be interpreted as a process, as a movement, or as a program. As a “process”, since it indicates what occurs, both socially and psychologically, to individuals participating in community development. Under this scenario, people are given the possibility of gaining new skills and attitudes which they can subsequently implement to independently identify and solve the issues they face in their daily lives



assuring long lasting effects (Anyanwu, 1992). This view of community development entails changes happening not around communities but within them. Meanwhile, the concept of the community development as a (social) movement puts emphasis on the idea that people will achieve social change through cooperation and a shared sense of belonging (T. J., Undiandeye, & Anogie, 1999). Indeed, such type of community development arises from the aspirations of betterment of the community itself, which will unify them into commencing a path of progress (Anyanwu, 1992). Finally, community development as a program implies the laying out of a plan of action for the community to follow in order to attain a specific goal regarding social change.

Building on this concept, rural community development defines community development happening within rural communities (Summers, 1986). Development occurring within such contexts relies on several factors, as Cavaye (2001) accurately points out. First, an adequate infrastructure system is necessary to assure the smooth pursuance of the community life. Second, policies must be such that access to means and capital needed to boost the economy is granted to community members. Moreover, they must place the rural community in the condition of being economically competitive, socially fair, and environmentally woke. Finally, continuous investments and provision of services in rural communities is of paramount importance to grant the smooth functioning of the local economy and social system by preserving employment and a good quality of life (Cavaye, 2001).

Before continuing with reviewing the two approaches this thesis aims to compare, an overview of the actors involved in rural community development is provided. This step is paramount to understand the complex dynamics dominating such context.

The first category of actors concerns the change agents, namely technical advisors, or civil servants, coming from either the same or a different culture compared to the one of the community. Each change agent is considered an expert in a specific field covering all sectors from agriculture to health, and he/she is called in to provide help and knowledge to the community (T. J., Undiandeye, & Anogie, 1999). Since they are trained professionals, the scope of their work is to support the individuals of the community into improving their own conditions by making use of the available local resources (Rana, 2012), therefore attaining community development. Change agents function as a bridge between the government and the community, and they are not interested in the community's accomplishment of material goods but rather in a positive shift in the attitudes and desires of the individuals (Boon, 2009). Another category of actors in community development is

the one of local leaders, fundamental for the mobilisation and development of the whole community. This figure might be covered by local government representatives as the district Chairman or local members as the leader farmer (Mencher, 1970). A successful local leadership can unify an entire community, fostering a sense of belonging which can increase individuals' participation and enhance community development (Rana, 2012). A third category of actors is represented by the community itself, namely the beneficiaries of the development project. The last type of actors contributing to community development regards non-governmental organisations (NGOs), external public institutions, and private companies. These stakeholders provide either financial investments or technical manpower to the community (Mencher, 1970).

In this research, the way these actors engage with one another specifically in the context of coffee production on the Mount Elgon in Uganda is going to be discussed further.

### Top-down approach to rural community development

The top-down approach to rural community development is essentially an expert-driven approach to development projects in rural areas. Such approach basically entails an actor *external* to the community (e.g., an NGO, private company, government institution, etc.) holding full decision-making power and defining the community's priorities and designing training programs accordingly, with the final aim of supplying those to the community members (Child Resilience Alliance, 2018). Under the top-down approach, the external experts usually have personal interests into helping the community, especially when it comes to worldwide businesses with agro-commodities as coffee. Nonetheless, the top-down approach has accomplished considerable results in developmental projects not only in the urban areas, but also in the rural world. This is particularly due to the expansion to those areas of the shift from interpersonal relationships to business relationships typical of the capitalist system (which see directions taken at the top level and enforced upon the bottom). For this reason, the top-down approach is the most used method worldwide as it allows for more rapid responses to the undertaken planned development actions given that the whole process is mastered by professional actors and not by entire communities (Cooksey & Kikula, 2005). As a matter of fact, this approach is usually adopted by managers who follow fixed timetables and standardized protocols and need fast results to meet donors' expectations (Child Resilience Alliance, 2018).

Arguments going against the top-down approach include the fact that it often applies a one-size-fits-all method without taking consideration of the sociocultural variabilities of each community and their learning path (Isidiho & Sabran, 2016). This mode of operating can lead to decontextualization in which the proposed external models are unfit to local context. What's more, this approach can be considered as conceptually wrong since it assumes that rural communities are not aware of their needs and have no thoughts on what is good for themselves, thus the "top" steps in to bring them solutions to improve their lives (Carey, Crammond & Riley, 2014).

Most commonly, the top-down approach to rural community development resonates with the *modus operandi* of agri-business or commercial companies, only in that its nature focuses on maximizing profits out of its business.

### Bottom-up approach to rural community development

Differently from the former, the main interest of the bottom-up approach to rural community development is to encourage the local community's members to raise their voices in designing the development path for their region, one that accommodates their own desires, projects, and lifestyle (Isidiho & Sabran, 2016). An example of the application of such approach can be microfinance and NGO-based development projects that want to embody a community-perspective in their initiatives across developing countries (Kaiser, 2012). The bottom-up approach, therefore, comprises efforts undertaken by local groups to bring about change and wellbeing in their communities through the negotiation of their space with the power holders. In fact, opposite to the top-down approach, here community members fully participate in creating the life they desire (Eversole, 2012). They cover all the stages of a development project, from identification to monitoring and evaluation, and they are either involved through consultation or partnerships which allow them to shape the program at their benefit while assuring its sustainability as well (Isidiho & Sabran, 2015). In addition, this approach views the decision-making power related to the development activities in the hands of the community's members, and it believes that such activities should not be dictated upon individuals, but designed by them instead (T. J., Undiandeye & Anogie, 1999). For this reason, the bottom-up approach to rural community development is most found in the work of NGOs, only in that their nature does not focus on profits maximization, but on more various issues. Despite all the efforts being made to place local communities at the heart of rural development programs, the bottom-up approach is not applicable in every circumstance, but it rather strictly depends on the socio-cultural context (European Network for Rural Development,

2016). It indeed provides successful results in small-scale local community projects, but the same cannot be affirmed for big national-scale projects as the ones related to tertiary education, or road construction. In those scenarios, direct control of the activities by local people would be utterly unfeasible (Kaiser, 2012). Moreover, the notion of bottom-up approach implicates a strong sense of community supporting it. Yet, “community” may be disputed or even completely absent in certain contexts. A bottom-up approach to rural development might be unsuitable to such circumstances, especially when there are conflicts existing within a community challenging the social cohesion of the group. Not only conflicts, but also differences in terms of religious or ethnic preferences might result in hostile relationships among community’s members. Here, a bottom-up approach would be not only unpractical, but it would also mean devoting – or else wasting – a lot of time into resolving the community’s conflicts while trying to ensure an equal power distribution across so different groups (Child Resilience Alliance, 2018). Apart from conflict-resolution problems, there are also other issues arising from bottom-up approaches such as the ones of full participation and control in bigger groups. Naturally, it would take more time for people to gather for meetings in the first place, and it would also be challenging to debate and come to agreements when the group’s composition is so heterogenous (Isidiho & Sabran, 2015). More pressure limiting the success of the bottom-up approach could be exerted from outside actors such as donors and investors. Most commonly, donors demand for prompt outcomes and rigorous obedience of the timetable and agenda, with fixed outputs to achieve (Neef & Neubert, 2011).

To conclude, in case of big national projects as roads and airports’ construction or water and electricity provision, undergoing top-bottom approaches might be essential since they require many technicalities and external supports that top managers could easily provide. Accordingly, the endorsement of bottom-top methods hinges on the type of projects concerned and the cohesion of the local communities and their donors (Thomas, 2013).

### **Agricultural training programs**

The literature reviewed so far is preparatory for the definition of agricultural trainings that will now be presented.

Conducting training and providing high-quality educational programs on the latest technological advancements is a fundamental step to take to develop the agricultural sector (Cho & Boland, 2004). This is because farmers’ performance is linked with human capital, which

comprehends both inborn and acquired skills. Such skills are boosted with the provision of agricultural training programs, which provides streams of information that can optimize farmers' performance (Jamison & Moock, 1984). By doing so, a faster growth of yields and rural incomes is provided to the rural communities (Birkhaeuser, Evenson & Feder, 1989). Other than to foster agricultural development, there are multiple objectives of agricultural training program. First is to transfer knowledge from researchers to farmers, then to advice farmers on best practices related to their crops, and finally to provide them with the necessary information and tools to make better decisions and set long-term goals and visions to improve their lives (Umali & Schwartz, 1994). These objectives vary according to the nature of the organization providing the agricultural training program. For example, in the case of a government organization, the change agents might feel accountable to politicians who set the budget for such activities and allocate the staff members accordingly (Van den Ban, 2000). As a matter of fact, there is a large volume of public budget allocated to agricultural training programs, which are delivered on average by universities, autonomous public organizations, and NGOs in developing countries, where most of the world's farmers are located (Anderson & Feder, 2007). One the one hand, such trainings, also called extension services, support the reduction of the differential between potential and actual yields in farmers' crops by speeding up the technology adoption process and assisting farmers in maturing better farm management practices. On the other hand, they also function as a bridge connecting scientists to farmers by promoting the adaptation of technology to local conditions (Birkhaeuser, Evenson & Feder, 1989). This is done through the identification of the challenges farmers faced on the ground by extension agents, and the utterance of such constraints directly to the researchers (Anderson & Feder, 2007).

The level of adoption of technology by farmers is influenced by several aspects. In fact, if farmers are previously educated on issues as crop management techniques, prices and market information, effective methods of storage, nutritional values of food, climate change, sustainable production and so on, then their adoption level significantly increases (Sunding & Zilberman, 2001). To do so, not only communication skills are required from extension agents, but also their ability to first comprehend an often-over-complicated circumstance, and then put their technical expertise into practice to identify specific problems and advise the farmers on possible solutions or coping mechanisms to apply (Hardaker, Lien, Anderson & Huirne, 2015). Moreover, the effectiveness of training programs includes fair and timely access to those by farmers. Nonetheless, access to information is not enough for agricultural development (Jamison & Moock, 1984). As a rule, farmers

will endorse a specific technology only if it fits their socio-economic and agricultural environments. This applies when certain conditions are met, namely when there is availability of improved technology, accessibility of advanced agricultural inputs, and assured profitability at a tolerable level of risk (Hardaker, Lien, Anderson & Huirne, 2015). In this regard, a recently recurring bottom-up view on agricultural development programs is that those must be designed and implemented through the cooperation with the local people, as it will support the community to discover and work on potential leadership. This will help individuals to reach full awareness of their selves and of their roles in the society and simultaneously awaken in them the desire to actively participate in the development of the community they are part of (T. J., Undiandeye & Anogie, 1999).

The agricultural trainings' agents, or extension agents, are those actors who carry out the agricultural training programs and who have the role of transferring the knowledge directly to the farmers. Such agents can be financed by several stakeholders, namely the government, commercial companies, farmers' associations, consultancy firms, and NGOs (Van den Ban, 2000). The way those agents approach extension services varies based on whether their work is publicly or privately financed. Public extension staff may be remunerated by farmers themselves for special sessions either through cash payments or other goods as food. Private sector extension services averagely target cash crops (e.g., coffee) or inputs sale (e.g., organic, or artificial fertiliser, chemicals, machinery, and seeds), an example of which are extension staff employed in private agribusiness firms, all of which provide information to satisfy a specific end (Schwartz, 1994). In line with the purpose of this research, only the role of commercial companies and NGOs in financing agricultural training programs is analysed.

Commercial or agribusiness companies' role, including farmers' cooperatives, is to profit from the agro commodity or input through trade. For this reason, they will invest on trainings only in case they are sure this step will further benefit their economic activity. In fact, under the scenario of a company selling pesticide, it is in its interests to assure that its products are applied in the proper way to avoid bad reviews from the farmers and a subsequent decreasing in the sales (Van den Ban, 2000). This means that it is in the company's interest that farmers are successful. Taking a coffee company as an example, it is in its interest that farmers produce and sell to them good quality coffee or follow a certain certification standard when producing it, because farmers doing so would mean more productive trade for the coffee company. In addition, commercial companies will only provide farmers with advice on a specific topic because it would be unprofitable for them to make recommendations on more than one sector (Schwartz, 1994). Finally, a changing technology can

shake the balance of an established rural community by increasing competition among suppliers, buyers, and even among towns. To fit in and bring back stability is also another reason for which commercial companies decide to provide extension services to farmers (Weitz & Landau, 1971). Indeed, private firms are incentivised to sell information to farmers only if they are sure that information is not provided for free anywhere else (Schwartz, 1994).

For what concerns the role of the NGOs in financing agricultural training programs, it is difficult to draw exact conclusions about it given that the wide range of work they promote. NGOs' activities in a rural area are usually financed by donations from national or international donors or commercial companies, or by subsidies given by the government (Adebayo, 2004). The reason why a government often decides to support the work of NGOs and, in this case, the implementation of extension services for farmers by change agents, is that, differently from government extension agents, NGO staff are almost always extremely well-trained to assist farmers in group association and productivity increase (Boon, 2009). Indeed, government extension agents are often viewed as generalists, while NGO staff commonly provide more technical information (Schwartz, 1994). Moving from information sharing to information acquiring, the benefits of attending agricultural training programs for farmers are only truly perceivable if access to the essential complementary goods and inputs (e.g., seeds, machinery, fertiliser, water, storage etc.) is provided. For this reason, agri-business companies providing extension services to farmers usually pair them up with inputs provision (Umali & Schwartz, 1994).

Top-down and bottom-up methods to agricultural training programs are also noticeable when pointing out the difference in the main goal of the work of NGOs compared to the ones of agri-business or commercial companies. NGOs' main goal is to implement welfare policies through extension services rather than increasing crops' productivity (Villars, 1999). Especially in the case of foreign NGOs, and therefore not directly tied to the socio-cultural context, the impact they make to changes in power structure can even be stronger. The opposite can be asserted for commercial companies. If the main objective for such realities is to increase profits through crops' productivity, then providing farmers the necessary knowledge to make better decisions on their own is rarely viewed as an efficient method to achieve it. Not only this, but it may even be more convenient for the company to keep the farmers dependant on the extension services (Van den Ban, 2000).