Euricse

European Research Institute on Cooperative and Social Enterprises

# Identifying Processes and Policies Conducive to Cooperative Development in Africa

An exploratory study on cooperative development projects in the agricultural sector.

Summary, concluding remarks, and hypotheses for further work.

International Cooperative Research Group

OCDC US Overseas Cooperative Development Council

USAID FROM THE AMERICAN PEOPLE

## Outline

This report is the intermediate outcome of the research project "Identifying Processes and Policies Conducive to Cooperative Development in Africa", an exploratory study conducted by Euricse in partnership with the International Cooperative Research Group, a division of the US Overseas Cooperative Development Council (OCDC).

The project team was comprised of Carlo Borzaga (scientific supervisor), Cecilia Navarra (principal investigator), Barbara Franchini (project manager), Federica Tolotti and Andrea Tonini (research assistants) for Euricse; and by Paul Hazen, Judith Hermanson, Emile G. Nadeau, and Kristen Scott Kennedy for OCDC. Please cite this report as:

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## 1. Purpose of the research

This report is the intermediate outcome of a joint project by the International Cooperative Research Group, a division of the US Overseas Cooperative Development Council (OCDC), and the European Research Institute on Cooperatives and Social Enterprises (Euricse), designed to support the creation of cooperatives and the scaling up of development strategies in the agricultural sector of sub-Saharan Africa (SSA). The research is focused on cooperative development programs conducted in the agrarian sector of African countries by cooperative enterprises, as well as by cooperative development organizations (CDOs) linked to the North American and European cooperative movements.

Research in this field is particularly relevant as the 2030 Agenda for Sustainable Development emphasizes the engagement of the private sector and the scientific community as a necessary condition to achieve the Sustainable Development Goals. Moreover, it acknowledges the role of cooperatives amongst the means of implementation of the Agenda and calls upon all businesses to apply their creativity and innovation to solving sustainable development, encouraging effective partnerships building on their experience and resourcing strategies[1]. Similarly, the European Union Agenda for Change that informed the programming process for the 2014-2020 period supports the development of a competitive private sector in developing countries, promoting SMEs and cooperatives, supporting legislative and regulatory framework reforms and their enforcement as well as agricultural, industrial and innovation policies[2]. The Commission's Communication on a stronger role of the private sector in development cooperation also supports inclusive business models, including cooperatives. Moreover, it recognizes that one useful way to deliver support to developing countries is through strengthening producer associations and member-owned self-help organizations: "Cooperatives, social enterprises and other forms of people-centred business are often leading the way in providing decent jobs, sustainable livelihoods and inclusive solutions to social problems"[3].

The purpose of this research is thus to provide insight into the factors that can help or hinder the creation of agricultural cooperatives in Africa, based on the challenges and opportunities facing a

[1] Transforming our world: the 2030 Agenda for Sustainable Development. For more details, see www.sustainabledevelopment.un.org

[2] See COM(2011) 637 final: Increasing the impact of EU Development Policy: an Agenda for Change.

[3] See COM(2014) 263 final: A Stronger Role of The Private Sector in Achieving Inclusive and Sustainable Growth in Developing Countries.

number of selected cooperative development programs and on an analysis of the legal, economic, and policy environments of the countries in which those programs are located. By developing a better understanding of the context for cooperatives in a variety of countries and the effectiveness of different cooperative projects, the research seeks to help CDOs in North America and Europe improve the effectiveness of their co-op development strategies.

Overall, the project seeks to tackle the following research questions:

- What is the national context for cooperatives in the selected African countries in terms of economic environment and legal frameworks?
- What is the history of the selected cooperative projects in each of these countries? What characterizes their membership and their relationship with foreign partners? What are the different strategies used by CDOs to provide technical and financial assistance to the identified or newly created cooperatives and cooperative-like farmer organizations? How do they interact with other actors in the value chain in which they are embedded? What benefits do they produce for their members? How are these benefits distributed? How are these benefits perceived?
- What management strategies and public policies can maximize the advantages that cooperatives bring to a community and minimize potential problems?
- What are the advantages and problems that can arise in trying to promote agrarian cooperatives?

The current phase of the research, the results of which are presented in this report, consists of a preliminary desk study of a selected number of cases, designed to inform an in-depth field study to be conducted in Phase 2. This first desk work is divided into two main steps:

a. Mapping cooperative development projects in the agricultural sector implemented by a selected sample of CDOs in the African continent in the last five years (2010–2015).

b. Conducting four exploratory national case studies; analyzing the legal, economic, and policy environment for cooperatives in the selected countries; and assessing the main features of selected cooperative development projects in each country with the goal of identifying the factors affecting cooperative development in the agricultural sector and establishing a set of hypotheses concerning project outcomes.

It is important to note that the research should not be interpreted as an evaluation of these cooperative development projects, as project evaluation was beyond the scope of this work (which did not include any field work). The analysis reviewed project documents and included interviews with relevant actors (such as CDOs' project managers), but only from within the projects themselves. External evaluation reports were considered only where provided by the CDOs along with the project documentation (in a very limited number of cases). This approach provided important insights, but is not sufficient to state conclusively whether a project was a success or a failure. Nevertheless, drawing from this material and from the available literature, this document attempts to extrapolate some key points to be taken into consideration when addressing cooperative promotion in agrarian contexts in SSA. The project case studies were complemented with a rather extensive analysis of the contexts to be able to clarify within which frameworks the projects were developed and which problems/potentialities could be found on a broader level (policy, legal framework, value chain characteristics, market structure, etc.). The key lessons that emerged from the analysis are summarized in the final section of this report.

The report is organized as follows: Section 2 outlines the purpose, methodology, and main results of the mapping survey, as well as the criteria that were adopted to select both countries and projects for the national studies; Section 3 presents a brief summary of the main findings of each country study (Kenya, Mozambique, Ethiopia, and Senegal); Section 4 presents a cross-country comparative analysis; Section 5 outlines a set of key issues for cooperative development that emerged from the country studies; and Section 6 concludes with a set of questions for further research. Annexes to the research report include the full report on the mapping survey (Annex I) and the complete country studies (Annexes II-V).

## 2. Mapping survey

### *2.1 Overview of the mapping survey*[4]

The aim of the mapping exercise was to identify the cooperative development projects implemented by a selected sample of CDOs in the agricultural sector during the last five years (2010–2015), and their main characteristics in terms of geographical concentration, budget, type of partners involved, funding source, type of activity delivered, and so on.

Fifteen CDOs were invited to participate in the survey. The selected CDOs include cooperatives and cooperative development organizations linked to the North American and European cooperative movements[5]. The selected sample is intentionally non-random, as the research targets a specific type of CDO (those linked to the cooperative movement); therefore, the sample should not be considered representative of the universe of initiatives aimed at promoting cooperatives in rural Africa. However, the selected CDOs are relevant actors in the field and represent a significant portion of this universe. The selected US-based organizations are members of OCDC[6], while the selected European CDOs are members of Cooperatives Europe and part of the "Cooperatives in Development"[7] initiative. The CDOs that were selected and participated in the survey are listed in Table 1.

**Table 1 – CDOs involved in the survey**

| Name | Country | Website |
|---|---|---|
| Agricultural Cooperative Development International & Volunteers in Overseas Cooperative Assistance (ACDI/VOCA) | US | www.acdivoca.org |
| Canadian Cooperative Association (CCA) | Canada | www.coopscanada.coop |
| Cooperative Resources International (CRI) | US | www.cri.crinet.com |
| Coopermondo | Italy | www.coopermondo.it |
| European Community of Consumer Cooperatives (EuroCoop) | Belgium | www.eurocoop.org |
| Fédération Nationale des Coopératives d'Utilisation de Matériel Agricole (FNCUMA) | France | www.cuma.fr |
| German Cooperative and Raiffeisen Confederation (DGRV) | Germany | www.dgrv.de |
| Global Communities (GC) | US | www.globalcommunities.org |
| Legacoop | Italy | www.legacoop.coop |
| Land O'Lakes Inc. (LOL) | US | www.landolakesinc.com |
| National Cooperative Business Association CLUSA International (NCBA-CLUSA) | US | www.ncba.coop |
| Société de Coopération pour le Développement International (SOCODEVI) | Canada | www.socodevi.org |
| The Co-operative College | UK | www.co-op.ac.uk |
| We Effect | Sweden | www.weeffect.org |
| World Council of Credit Unions (WOCCU) | US | www.woccu.org |

[4] An exhaustive description of the methodology and results of the mapping survey is provided in Annex I "Agricultural Cooperatives in Africa. Report on the mapping data of CDOs and their projects".
[5] See Appendix A for a description of the CDOs involved in the project.
[6] http://www.ocdc.coop/our_members.html
[7] https://coopseurope.coop/development/

The selected sample includes CDOs with different organizational forms and is split in two main groups. The first group is composed of cooperatives or federations of cooperatives (five CDOs); the second is composed of non-profit organizations supported by the cooperative movement for advocacy purposes and the promotion of cooperation around the world (10 CDOs including the Co-operative College, which is a non-profit research institution)[8].

The CDOs were asked to provide a list of their agricultural cooperative development projects that have been initiated or completed in the past five years (2010–2015) in African countries, along with specific related information. The questionnaire developed by Euricse and the OCDC Research team was composed of five sections:

i. Basic information on the project: project title, country(ies) of implementation, and start and end years of activity
ii. Funding: funding organization names and types and project budget
iii. Partnerships: name, type and country of each partner, and identification of the lead organization
iv. Activities: type of activities implemented
v. Availability of project evaluation material or ex-post studies

The types of funding organizations, lead organizations, partners, and activities were coded in advance[9]. The process of completing the questionnaire was carried out in three subsequent steps during August–September 2015. The overall response of the selected CDOs was positive[10]. However, not all sections of the questionnaire were exhaustively answered[11]. Missing values affected the number of observations that could be used for the analysis. To partially address this issue, the project team filled in some of the missing information by systematizing the materials collected with the CDOs' help, as well as through information available on the Internet. The missing information was still a major concern, which significantly reduced the number of observations illustrating budget data or project partners.

The survey mapped 186 projects in 30 countries, almost entirely in SSA[12]. Sixty percent of the projects identified are finalized, while 40% were still ongoing at the time of the survey (expected closure date after the end of 2015).

The collected information shows that the projects are quite concentrated in a small number of countries, mainly in eastern and southern Africa, with the first 10 countries hosting more than 70% of the total identified projects. Among these 10 countries, the only West African countries are Senegal and Mali. The countries that host the most projects are Kenya (24), Tanzania (18), and Uganda (17), followed by Ethiopia and Rwanda (13), Zambia (12), Malawi (11), Mali and Mozambique (10), and Senegal (9). The number of CDOs active in a specific country varies: some countries are the focus of one or a few CDOs (e.g., SOCODEVI in Mali). In other countries, the presence of a greater number of donors is observed (e.g., six different CDOs operate in Mozambique, Ethiopia, and Kenya).

[8] While cooperatives in Europe are generally considered part of the non-profit sector, they tend to be considered for-profit enterprises in the US.
[9] See the report on the mapping survey for details on the methodology and the results of the survey.
[10] Only one out of 15 CDOs never replied to the invitation to participate in the research.
[11] Details on how the research team has dealt with missing information can be found in the mapping report (Annex I).
[12] Multi-country projects have been considered different projects, counting one project per country.

The great majority of projects (almost 84%), are carried out by CDOs that are non-profit organizations (10 out of 15 CDOs in the sample). The CDOs that are cooperative enterprises or cooperative federations carry out 30 projects. In a significant number of cases, the CDO is not the project's lead organization, but participates in a partnership led by another organization. This is a more frequent option in the case of CDOs that are cooperatives or cooperative federations, where 40% of projects have a lead organization different from the CDO.

Cooperative development projects are carried out in partnership with different types of organizations. The collected data show that non-profit CDOs are more likely to work in partnership with other non-profit organizations (46% of the identified projects). Non-profit partner organizations include both local civil society organizations based in the beneficiary country and international NGOs. Cases in which non-profit CDOs engage in partnerships with a first-level cooperative or a farmer organization are quite rare (less than 5%), while more often, they enter into a partnership with a farmers' federation (18%). CDOs that are cooperatives or cooperative federations are more likely to have partnerships with first-level farmers' organizations as well as with non-profit organizations (both 29%). It is worth mentioning that project partnerships in only a few cases envisage the participation of government institutions or other local public administrations (around 10%). Moreover, relatively few projects involve multilateral organizations, but when they do, they also tend to have a much larger budget.

The average project budget is about 3 million USD, but the distribution of the projects by budget size is characterized by a large number of small projects and a few large ones (around 50% of the projects have budgets lower than 860,000 USD). Taking into consideration the total budget in the sample (the sum of all 186 projects), the countries that attract a higher amount of funds (between 50 and 100 million USD each, for a total of almost 295 million USD) are Ethiopia, Rwanda, Senegal, and Tanzania.

As regards the sources of funding, results of the survey show that all selected CDOs apply for external funds (public or private) and that the great majority of projects are funded by public national agencies. CDOs that are both cooperatives or cooperative federations and non-profit CDOs heavily rely on public donors. However, the former group is more likely to mobilize its own funds or funding from national cooperative federations, while the latter has greater access to funds from multilateral agencies and private donors (e.g., private foundations).

The number of projects and share of total budget for each CDO reveal differences in the project size and, probably, in intervention strategies. Some organizations have opted for a model based on a large number of relatively small projects (e.g., We Effect in Kenya), while others have relied on a smaller number of larger projects. The organization that has implemented the greatest number of projects is the Swedish CDO, We Effect, with 58 projects (almost one-third of the whole sample); SOCODEVI (Canada) and three US-based CDOs (ACDI/VOCA, Land O'Lakes Inc., and NCBA-CLUSA) follow. More than 70% of funds are managed by the three largest US-based organizations: ACDI/VOCA, Land O'Lakes, Inc., and NCBA-CLUSA. Non-profit CDOs have, on average, larger projects (3.8 million USD versus 2.7 million USD of CDOs that are cooperatives or cooperative federations).

The average project duration is around four years, but half of the projects last three years or less. A few projects cover a much longer span of time: five projects have lasted 10 years or more.

As regards the type of activity delivered by the development cooperation projects, the CDOs indicate that most of their projects (73%) deliver training and capacity building as their primary activity. If both primary and secondary activities delivered are considered, this value amounts to 82%. Only a few projects have delivered other types of activities (e.g., consulting, financial support and investment, and institutional strengthening).

### *2.2 Selection of countries and projects*

The second stage of the research consisted of drafting four exploratory national case studies. The analysis was conducted on two levels. On the one hand, it focused on the context of each selected country (e.g., analysis of the legal, economic, and policy environment for cooperatives, agrarian policies, and characteristics of the agricultural cooperative movement). On the other hand, it focused on the assessment of the main features of the projects carried out by CDOs (selected amongst the ones identified by the mapping survey), with the scope of identifying the factors that affect cooperative development in the agricultural sector and establishing a set of hypotheses concerning project outcomes.

The selection process of the four countries followed several criteria identified by the research team, including the following: having a relatively large number of projects, diversity in terms of historical context, former colonial status and legal background, and a focus on "donor darling" countries. The availability of previous studies on the legal and economic context for cooperatives was another criterion. The countries that were selected by applying these criteria were Ethiopia, Kenya, Mozambique, and Senegal.

The projects were selected to cover different types of interventions and to be able to compare different strategies. The selected projects have different durations, different budgets, and different approaches to cooperative promotion (e.g., value chain or multi-product) and intervene at different levels (local/national/regional). The analyses focused on both ongoing and finalized projects. The selection of projects was adapted to the constraints determined by the availability of CDOs to provide materials and relevant documents and to identify informed persons to be interviewed.

A short description of the analyzed projects is presented in Table 2.

**Table 2 – Selected projects[13]**

| CDO | Target country | Project title | Main partners | Period |
|---|---|---|---|---|
| ACDI/VOCA (US) | Kenya and Ethiopia | Cooperative Development Program (CDP) II | Ethiopia: Regional branches of the Federal Cooperative Agency.<br>Kenya: Agri and Cooperatives Training and Consultancy Ltd.<br>US Overseas Cooperative Development Council (OCDC)<br>Funding organization: US Agency for International Development (USAID) | 2010–2015 |
| CCA (Canada) | Ethiopia | Climate Resilience and Co-operatives | Self Help Africa (SHA, UK), Ethio-Wetlands and Natural Resources Association (EWNRA, Ethiopia).<br>Funding organizations: Co-operative Development Foundation of Canada (CDF) Department of Foreign Affairs, Trade and Development of Canada (DFATD). | 2012–2014 |
| Co-operative college (UK) | Ethiopia | Assessment of Advanced Certification and Rebranding of Agricultural Co-operatives | Agricultural Transformation Agency (ATA, Ethiopia)<br>Funding organizations: Agricultural Transformation Agency (ATA, Ethiopia) and Bill & Melinda Gates Foundation (US) | 2012–2013 |
| FNCUMA (France) | Senegal | Introduction of shared mechanization to go through the dry season: a cooperation project empowering both French and Senegalese farmers | Association Vétérinaire des Eleveurs du Millavois (AVEM, France).<br>Senegal: Association des Groupements de Producteurs Ovins (AGROPROV), Ecole Inter Etats des Sciences et Médecine Vétérinaires de Dakar (EISMV), Institut Sénégalais de Recherches Agricoles (ISRA),<br>Conseil national de concertation et de coopération des ruraux (CNCR)<br>Funding organization: FNCUMA Ayeron (France) | 2000– ongoing |
| Land O' Lakes Inc. (US) | Mozambique | Food for progress | Banco Oportunidade (Mozambique), Tillers International (US), Corridor Agro (Mozambican branch of an international organization)<br>Funding organization: US Department of Agriculture (USDA) | 2010– ongoing (expected end date: 2016) |
| Land O' Lakes Inc. (US) | Kenya and Ethiopia | Cooperative Development Program (CDP) | Ethiopia: Ada'a Dairy Cooperative, Selale Dairy Cooperatives Union.<br>Kenya: Lari Dairy Alliance, ltd, Limuru Dairy Farmers Cooperative Society, Ltd., Meru Central Dairy Cooperative Union, Ltd. | 2010–ongoing (expected end date: 2016) |

[13] Two more projects carried out in Senegal had been originally selected, but the implementing CDO declined an invitation to provide project materials and to arrange interviews with project managers. The research group decided not to include other projects in the study to replace them.

| | | | | |
|---|---|---|---|---|
| | | | International Dairy Enterprise Alliance (IDEA)<br>Eastern and Southern Africa Dairy Association (ESADA)<br>Funding organization: USAID | |
| Legacoop (Italy) | Senegal | Stop World Poverty, Cooperation and Solidarity: Fruit and quality of life: support to fruit growers from Senegal | Senegal: Association des Planteurs de l'Arrondissement de Diouloulou (APAD)<br>Cooperazione Sviluppo Paesi Emergenti (COSPE, Italy),<br>National Federation of Consumer cooperatives (ANCC, Italy)<br>Coop Adriatica (Local federation of consumer cooperatives, Italy)<br>Funding organization: National Federation of Consumer cooperatives, (ANCC, Italy) | 2008–2010 |
| NCBA-CLUSA (US) | Kenya and Mozabique | Cooperative Development Program (CDP) III | Kenya: PAFID NGO, East African Brewery, Kenya Agricultural Research Institute (KARI), Ministry of Agriculture, Livestock and Fisheries, Ministry of Industrialization and Enterprise Development, Ministry of Gender, Culture and Social Services, Ministry of Health,<br>European Cooperative for Rural Development (EUCORD; Belgium).<br>Mozambique: Mozambican Association for the Promotion of Modern Cooperatives (AMPCM)<br>Funding organization: US Agency for International Development (USAID) | 2010– ongoing (expected end date: 2018 for Kenya, 2020 for Mozambique). |
| NCBA-CLUSA (US) | Mozambique | Competitiveness and Agribusiness Program (AgriFUTURO) | Mozambique: Banco Oportunidade, Banco Terra, Corridor Agro (Mozambican branch of an international organization)<br>Funding organization: US Agency for International Development (USAID) | 2009–2014 |
| We Effect (Sweden) | Kenya | Strengthening Smallholders participation in Coffee value chain | Kenya Coffee Producers Association (KCPA) | 2013–2015 |
| We Effect (Sweden) | Mozambique | FOFPI (phase II) - Institutional Development of UNAC | Mozambique: União Nacional de Camponeses (UNAC), National Forum of Cotton Producers of Mozambique (FONPA), Ministry of Agriculture (MINAG).<br>Funding organization: Swedish International Cooperation Agency (SIDA), Agricord (international network of farmer organizations) | 2014– ongoing (expected end date: 2017) |

## 3. Main conclusions of the four country studies[14]

The four country studies conducted by the project include a context analysis and a review of the selected cooperative development projects. The context analysis investigated: (i) the economic and historical context of each country, with a special focus on the agrarian sector and the policies in place to support its development; (ii) agrarian cooperatives and producers' organizations in the country; and (iii) the evolution and characteristics of the legal framework regulating cooperatives. For each of the selected projects, then, the country studies present a brief description of the CDOs interventions and provide a preliminary analysis according to available projects documentation and the interviews carried out with the people responsible for the projects implementation. The concluding sections of the country studies summarize the main issues raised by both the context analysis and the analysis of the single projects.

The complete country studies are available in Annexes II-V. The present Section is not aimed at summarizing the country studies, but at presenting the major conclusions that can be drawn from them and that are relevant for a reflection on cooperative development.

### *3.1 Kenya*

Kenya is the country with the highest number of projects identified by the mapping survey (24) and is amongst the countries with the highest number of active CDOs (6). However, according to available data, it is not amongst the top recipients in terms of project budget size (20 million USD of total funding). Most projects (18) have been carried out by the Swedish CDO We Effect and have a relatively small budget.

Four cooperative development projects carried out by four different CDOs were selected for the analysis, and each of them employed a different strategy. The NCBA-CLUSA project focuses on food security through the promotion of farmers' groups for poverty reduction; the We Effect project intervenes on a cash crop value chain (coffee); LOL's project focuses on the dairy value chain; and the ACDI-VOCA project delivers training activities aimed at strengthening management capacities and supporting the production of partner organizations.

The existing literature on agrarian dynamics in Kenya focuses on two main issues: the changes that occurred after liberalization and decentralization (Chamberlin and Jayne, 2009; Nzuma, 2013) and the difficulties linked to food production, as the country has had problems during the past 50 years in keeping pace with population growth (Nyairo et al., 2013; Foeken and Klaver, 2014). This literature argues that Kenya has substantially improved on the cash crop production side, but that this is not able to compensate for its food security problems (Nzuma, 2013). The history and main dynamics of the cooperative movement are depicted in Gyllstrom (1991), Wanyama et al. (2009), and Borzaga and Galera (2012). Fischer and Qaim (2012) focused on cooperatives in the banana sector and on selection into membership. Indeed, a relevant strand of literature has focused on specific value chains. Minai et al. (2014) and Casaburi and Macchiavello (2015) focused on specific value chains that are relevant to the selected projects (coffee and dairy production).

From most interviews, it appears that the Kenyan context has some positive aspects for the emergence of cooperatives, mainly due to two factors. First, it displays a greater commitment of the public administration to cooperative development relative to other countries, and second, it has a more

[14] Please refer to Annexes II-V for the complete country studies.

established cooperative movement. This has to do with the ability of the state to implement policies, to enforce contracts, and to engage in the revitalization of the agrarian sector. At the same time, efforts are needed to strengthen the bargaining position of farmers (see the We Effect-KCPA partnership in the coffee value chain). As in other countries, Kenya went through a centralized phase first and then through state disengagement. It seems, nevertheless, that public policies in Kenya have started again—despite a lot of limitations—to support the agrarian sector and smallholder organizations.

Based on the analysis of the context, food security appears to be a great concern. This is probably an important element to be considered in cooperative development, which has traditionally been focused on cash crop production in Kenya. This is, for example, reflected in the approach of the CDP III project (NCBA-CLUSA). More broadly, the need for safe and regular income can be addressed by farmers' organizations. This is underlined by the findings of the research on a dairy cooperative by Casaburi and Macchiavello (2015): even though the cooperative pays lower prices than private middlemen, farmers still sell a part of their production to the co-op because it guarantees a regular—though lower—flow of earnings and works as a savings device. This helps to shed light on the side-selling problem, which very often affects cooperatives. When it is difficult for co-ops to offer better prices than other buyers, this puts participation itself under pressure. This can be addressed in several ways that are not mutually exclusive: the search for new market outlets, the integration of the value chain through the development of processing activities, and the provision of income-security devices to members. The safety orientation of cooperatives is also highlighted in the East African Community Cooperative bill, which can also be a tool to enhance this function of co-ops. Mixed results from the point of view of price premiums are also highlighted by Fischer and Qaim (2012), who stressed that the main advantage of cooperatives in their study on the banana subsector has been increasing yields and, thus, expanding production. This underlines the important role of co-ops in a variety of activities besides marketing, including input purchasing, information sharing, and extension service provision.

A relevant issue that emerges is the role that may be played by the development of processing activities in a vertical integration framework. Wanyama (2009) underlined the risk for agrarian co-ops of becoming trapped in the "low tail of the value chain", since historically they have focused on bulking and marketing activities. This is a crucial activity, but may not be enough to solve market power problems; in these cases, further integrating the value chain and developing high value-added activities may be necessary options. This is a relevant lesson learned from the dairy cooperatives supported by Land O'Lakes: the possibility of integrating processing activities appears to be a major success factor for the Meru cooperative. In a monopsonistic environment, this is a major issue, since being tied to a single buyer exposes the cooperative to low market power and to price variability. This project and CDP III carried out by NCBA-CLUSA also emphasize the important role of governance structure, as a multi-level organization can have a comparative advantage in integrating the value chain (and allowing for higher prices paid to members) or in developing more complex activities, such as credit. The second project suggests another relevant issue, which is the positive impact of the integration of intervention on the input-supply side and the output-marketing side. These are a set of key observations that will emerge in other countries too.

It is difficult to evaluate the problem of self-selection in cooperatives, but it seems quite acknowledged by scholars and CDOs. Fischer and Qaim (2012) identified a "middle class effect" in the case of banana production, which is a sort of exclusion of the poorest and richest producers.

In terms of internal governance, some differences can be identified between groups that already had a background before CDO support and groups that were formed by CDO intervention itself. The first group seems to be able to mobilize more resources in terms of social capital, even though those co-ops often suffer from some inherited problems. In this respect, it seems that the debt burden in Kenya is a major problem for co-ops (cumulated debts under the centralized-economy system have been left up to cooperatives themselves after liberalization).

A second tradeoff regarding governance mechanisms relates to the turnover of board members. A high turnover may have positive effects on democratic control over the organization, limiting capture by board members, but it may limit the results of training, and it may lower board empowerment with respect to the management (some cooperatives are managed by professional CEOs, which have higher education with respect to farmers). Leadership training and commitment are crucial variables in cooperative success. The experience of CDP II conducted by ACDI-VOCA highlights the positive impact of training programs that are tailored to the specific needs of each group, and second, the importance of leadership (and of its renewal) and the empowerment of the membership towards the leaders at the same time. Continuing training programs are recommended to make turnover sustainable. Moreover, leaders' training has to be coupled with the empowerment of members to encourage them to be vocal towards the leadership and to monitor the leaders' activities. The CDP II also highlights the importance of investigating the possible reasons behind the "unwillingness to change" or the "lack of a proactive attitude". Some elements that should not be underestimated include the highly risky environment and the low risk-bearing capacity of poor producers, which may make it rational for farmers to consolidate small gains rather than to pursue constant change.

### *3.2 Mozambique*

According to the mapping survey, Mozambique hosted 10 projects carried out by six different CDOs, with a total budget of over 32 million USD. Larger projects were promoted by first-level cooperatives and non-profit organizations. More frequently than in other countries, farmers' federations were amongst the project partners, although on smaller projects in terms of budget.

Four cooperative development projects carried out by three different CDOs were selected for the analysis. The initiative promoted by We Effect focused on the strengthening of the Mozambican national farmers' organization and the federation of cotton producers. LOL targeted first-level organizations with a specific focus on the dairy value chain. NCBA-CLUSA targeted first-level associations as well, even if this was not the main focus of its project AgriFuturo, which more broadly focused on the promotion of the private sector in agrarian value chain (namely oil seeds). The fourth project analyzed was also carried out by NCBA-CLUSA and intervened at the legal framework level.

The literature analyzing agrarian dynamics in Mozambique highlights two distinct phases of agrarian policies (state-led vs. market-oriented), but with a substantial lack of structural change (Mosca, 2009). The contradictions and the constraints of market inclusion policies are stressed in several studies (Boughton et al., 2007; Navarra, 2013; Pellizzoli, 2013; Hanlon and Smart, 2014). More complete analyses of the constraints that Mozambican agriculture faces were conducted by Hanlon and Smart (2008, 2014), who identified the tiny size of landholdings, low productivity, and low risk-bearing capacity as crucial problems in rural Mozambique. Another very relevant strand of literature analyzes poverty dynamics in rural areas (Cunguara and Hanlon, 2010).

A frequent concern that emerges in Mozambique is the need to define a new framework for cooperative development. This has been at the core of NCBA-CLUSA activities and has led to the constitution of AMPCM (the Mozambican Association for the Promotion of Modern Cooperatives) and to the new law on cooperatives enacted in 2009. The aim has been to "rebrand" cooperatives and to formalize all the existing entities in the agrarian sector that were similar to cooperatives, but were not recognized as such. Another major concern has involved mainstreaming the idea of cooperatives as more business oriented. The challenge nowadays is the implementation of the new law and the diffusion of knowledge about it.

Other elements that have to be taken into account include the extreme poverty of Mozambican rural areas, the small size of landholdings, and the subsistence orientation of production. Competition among potential buyers of primary products in the value chain is low, while competition among suppliers— including international traders—is high.

In this framework, the new law leaves some open questions. First, the process of publication (the official registration of a cooperative) is complicated, long, and costly. According to some actors, some proposals have already been made to modify this process[15].

The law has some features that aim to make cooperatives attractive for middle-range producers to avoid the effect of "selection of the smallest". Still, middle-range producers are rare in Mozambique (Hanlon and Smart, 2014). A big challenge may be finding ways to scale-up the activities of small producers, which are the wide majority in Mozambique.

The law underlines the need for cooperative farmer members to bear the risk of the economic activity. While this is clearly directed to explaining the entrepreneurial nature of the cooperative and the difference with a state enterprise (clearing up the confusion created in the first decade after independence), this may end up underestimating the problem of the low risk-bearing capacity of Mozambican small farmers[16]. This is a major issue, and a cooperative model probably has to take into account to some extent the need for loss-sharing mechanisms and protective measures against some risks for farmers.

This issue is also linked to the role of cooperatives as partners of agribusiness exporter firms, which is highlighted in the public policies and public debate. This is of course an interesting development direction, but without any action taken to protect farmers, producers may be exposed to the volatility of world market prices. Both value chains analyzed for this study (the dairy value chain addressed by the LOL project and the We Effect partnership with the organization of cotton producers ) saw decreases in recent years in world prices, which threaten the livelihood of small farmers. This in turn raises several issues. One issue is the advantages of integrating single cooperatives in upper-level organizations. In addition, linking a cooperative one-to-one with a private firm is highly risky; the farmers' cooperative may become dependent on the firm and may suffer if the firm collapses, as has been the case in the Siwana association (Hanlon and Smart, 2014). In addition, the risk of monopsony is crucial: a cooperative may offer the service of bulking produce to small farmers, but if the market structure is unfavorable (they sell all the production to a single buyer, who is facing no competition), they will have no bargaining power on prices and conditions. Changing market conditions are indeed a major challenge, as has been the case for the dairy project carried on by LOL. For example, farmers

[15] Interview with M. Bachir, lawyer [December 8, 2015].
[16] Mozambique gained independence in 1975.

may develop processing capacity on their own when the market is not competitive enough for price negotiations. Another risk to be taken into consideration in contractual relations with buyers is the need for strict monitoring of actual contract enforcement: this has been highlighted in the case of the AgriFuturo project (NCBA-CLUSA) that also worked on conflict mediation. Lack of contract enforcement—favoring the strongest contractual party—is a major concern in Mozambique. Another challenge is developing the input purchasing side. Inputs are a major issue, especially high-value inputs that are unaffordable to producers (e.g., they are too expensive for the average income, and they have to be purchased far away from the field)[17]. Agricultural cooperatives must tackle this issue to be viable. This is closely related to credit; access to financial tools is extremely limited in Mozambican rural areas. It may be important to develop a channel of credit cooperatives to make credit and input supply more accessible.

The advocacy side is also crucial. From several analyses, it is clear that Mozambique needs bigger investments in small and medium-sized agriculture and in rural development. A strong movement of agrarian producers organized in cooperatives may advocate such interventions. As Theron (2010: vi) puts it, "Cooperative autonomy must thus be regarded as representing the litmus test for evaluating the policy and legislative framework. However cooperative autonomy should not be used as a fig leaf by governments to avoid doing more to promote cooperatives". An element highlighted by the We Effect program, which supports organizations at the national level, is that an advantage of operating on such a scale is that it supports entities that have policy initiative and advocacy capacity, avoiding contextually the risk of creating conflicts or fractures within a cooperative network or farmers' movement.

A general problem is the project time frame: working on cooperative promotion implies big changes that are often not aligned with the timing of project-like interventions. Projects are bound to produce visible and measurable results. This is often difficult to do when the aim is the strengthening of a local organization. It requires constant support, since important work has to be done at the level of management practices to produce good and sustainable results—"it's a people's challenge". This is also the case for projects working at the level of the regulatory framework and the legal system involving cooperatives (NCBA-CLUSA CDP III project).

### *3.3 Ethiopia*

The mapping survey identified 13 projects carried out in Ethiopia by six CDOs. Ethiopia is at the top of the ranking of recipient countries, with a total budget of over 100 million USD.

Four cooperative development projects have been selected for the study. Two of them are carried out by US-based CDOs (LOL and ACDI/VOCA) and intervene respectively in the dairy value chain and in capacity building for government cooperative promoters and leaders. The third project is carried out by the Canadian Co-operative Association and intervenes in supporting farmers' cooperatives in poor contexts where dependency on weather conditions is strong and harmful. The fourth project has been implemented by the British CDO Co-operative College to promote the establishment of a certification mechanism for Ethiopian cooperatives in relationship with the Ethiopian Agricultural Transformation Agency (ATA).

[17] See section 1 of the full country study, where data on purchase and consumption of fertilizers are presented.

The history of agrarian policies in Ethiopia is analyzed by several authors, among which were Bernard and Spielman (2009), Chinigò (2013), and Chinigò and Fantini (2015). These authors underline the centrality of agriculture in Ethiopian development policies in the framework of an economic model defined as a "Developmental State". Recent policy trends to develop output commercialization and to reform input supply are highlighted by Francesconi and Heerink (2011) and Chinigò and Fantini (2015). On what concerns the cooperative movement, the main addressed issues are the extension of coverage, selection into cooperatives, effects of cooperative membership on commercialization, and technical efficiency (Bernard and Spielman, 2009; Francesconi and Heerink, 2011; Abate et al. 2014).

It seems that there is a greater investment in cooperatives as development tools in Ethiopia compared to most SSA countries. This is likely due to the fact that Ethiopia as a country is not focused on natural resources extraction, and as a result agriculture has a more central role. The public discourse on agrarian policies has a strong focus on reconciling the need for efficiency and the need for equity in rural development (Chinigò, 2013) and cooperatives may gain importance in this perspective. More public policies focus on cooperatives in Ethiopia compared to other countries also because cooperatives are still the channels for input distribution in the countryside. A major policy issue is how to develop the commercialization side of their activity, thus providing incentives for membership.

The strong relationship with the national policy level is reflected in the selected projects (namely CDP II by ACDI-VOCA and The Cooperative College project in partnership with ATA), which seem more embedded into public policies with respect to other countries. This may help avoid the risk of project isolation and help project sustainability in the long run.

The cooperative movement in Ethiopia is likely to suffer from the absence of apex bodies, both concerning agrarian cooperatives and the financial sector (i.e., cooperative banks). This limits both the advocacy capacity at the decision-making level and the capacity to exploit economies of scale. Both horizontal and vertical integration of value chains are crucial aspects of cooperative development in Ethiopia. If there is an important investment in extending cooperative outreach (one cooperative per *kebele*[18]), investments may also be necessary to satisfy the needs of single cooperatives to reach wider markets and to be able to engage in processing activities.

As in numerous other cases, a selection effect seems to be at work. Bernard and Spielman (2008) identify a "middle class effect," such as in the case of the banana sector in Kenya (Fischer and Qaim, 2012).

A major policy shift that is worth pointing out is the willingness to transform input-purchasing cooperatives into marketing cooperatives. Agrarian cooperatives cannot sell inputs on credit anymore and rely on the credit provided by the local Savings and Credit Cooperatives Societies (SACCOs) for input provision; a pilot project also applies this system to output marketing (voucher systems). This is important, since it invests in a strong integration of cooperatives with different purposes, which can be a crucial positive element. At the same time, since credit is a key function of agrarian cooperatives, this link should be closely followed and monitored, verifying that delegating credit to another institution does not limit access to it.

[18] *Kebeles* are the smallest administrative division in Ethiopia.

Although this model had not been implemented in the analyzed projects, it seems that the policy for cooperative development in Ethiopia proposed by ATA in the 2012 strategy goes in the direction of an agribusiness model, as it states the following: "One reason that successful African agricultural cooperatives tend to market cash crops is that they have fewer buyers, making it easier to form strong relationships with buyers over time". Nevertheless, this model has to be adapted to the market structure of each context. In the case of a monopsony, cooperatives may find themselves in a risky position if they rely on a few buyers. It might be best, in such situations, to vertically integrate the value chain and internalize some of the processing functions. From the observed projects (in particular LOL's CDP), it can be deducted that value chain integration may be of strategic importance: a high number of buyers are not enough to increase competition in favor of producers, since buyers can collude on prices. CDP also teaches the importance of upstream value chain integration, on input supply. The need for good quality inputs is also raised by the CCA project, which had a different approach since it focused on cooperatives as vulnerability-reduction tools. Good-quality-input provision and common storage facilities and marketing devices are considered crucial for defending farmers from post-harvest losses and for increasing their bargaining power.

The centrality of training is another major issue that emerges from the analysis (Coop-College and ACDI/VOCA interventions). ACDI/VOCA's CDP highlights that the continuity of training is important to reconcile leadership skills and democratic turnover.

The observed projects carried out in Ethiopia have the common characteristic of being framed in a short span of time. This is probably a major challenge to be addressed, since 12–18 months is a very short time to intervene in cooperative development. This is even a major constraint for projects focusing on training and capacity-building activities.

### *3.4 Senegal*

The mapping survey identified nine projects carried out in Senegal by five CDOs. Senegal is the third top recipient country, with a total budget of about 68 million USD. Most of these funds are related to interventions implemented by the US-based CDO NCBA-CLUSA (one of their projects has a budget of 40 million USD).

Due to specific circumstances, the research team had the opportunity to analyze only two projects carried out in the country. The first project was carried out by the French organization FNCUMA, through one of their affiliated associations (AVEM) and focuses on increasing livestock production through sustainable technological innovations carried on by a local association (AGROPROV). The Italian NGO COSPE carried out the second project in partnership with the biggest Italian consumer cooperative (Coop), which is a member of Legacoop: they supported a fruit processing association in Casamance area.

The history of agrarian policies in Senegal was analyzed in particular by Mbodj (1992), from the main phases of "rural socialism", to the investment in the export-oriented peanut sector, to the liberalization phase. It is relevant to notice that Senegal is one of the most import-dependent countries in West Africa in terms of agrarian production (Nuweli et al., 2013). A system based on the import of food crops and the export of cash crops has entered into a crisis since the prices for peanuts and cotton (the main Senegalese cash crops) started to decline. Stads and Séne (2011) add, as critical elements, the poor control of water resources, the degradation of land and agricultural inputs, and the

negative effect on production of the withdrawal of the state from seed and fertilizer subsidies in the late 1980s. An example of dependency on imports is the rice sector, which is one of the main food crops in Senegal (Colen et al., 2013). Most of the literature underlines a high participation of farmers into associations but a low commercialization of agrarian products and smallholders. Moreover, cooperatives suffer from a lack of capacity to aggregate output (Colen et al., 2013; De Janvry and Sadoulet, 2004; Bernard et al., 2015). The literature on the history of the agrarian cooperative movement in Senegal (De Janvry and Sadoulet, 2004; Migliardi, 2013) includes analyses of this phase and the relationship with peasant's movements on the one hand and with public policies on the other.

The most widespread form of collective organization of production is not the cooperative, but the *Groupement d'Intérêt Economique* (GIE). This is due both to the legacy of cooperatives for rural people—as they recall the very centralized and top-down phase following independence—and to the difficult administrative procedures to create a cooperative. The advantage of a GIE is first of all its lean structure and ease of creation. At the same time, the existing literature highlights the notion that GIEs have a potential limitation in that the incentives they provide are more related to credit than to collective commercialization. Marketing through a GIE is often done up to the quantity that serves the function of debt repayment. As seen in the rice sector, GIEs often do not manage to engage in advanced forms of processing or storage. GIEs also have the downside of probably being more constrained to remaining small. Cooperatives or second-level organizations could be a way to include more members in a wider area and to obtain more bargaining power. This highlights an excessive emphasis on credit and finance by the government, since the tools that are in place seem to focus on this aspect only.

A major problem in Senegalese producers' organizations is the capacity to aggregate output, as they remain more active in credit and input provision. According to Bernard (2015), at the time of harvest, producers are visited by private traders that offer immediate payments. This leads to important side selling that limits the possibility of the organizations to trigger economies of scale and bargaining power. This problem coexists with the fact that, in most cases, the organization manages to offer higher prices. Problems can arise due to the timing of payment and to trust issues among members. The importance of a binding agreement on quantity conferred to the cooperative is therefore crucial, together with the strengthening of the capacity of the cooperative to gain the trust of members and to pay for the produce at least partly at the moment of collection. This requires that cooperatives have the financial capacity to anticipate payments, and this is a major aspect that should probably be addressed by cooperative promotion projects.

In the analyzed cases, some groups were observed playing important roles in promoting investments in fixed capital that would have been impossible at the individual level, both in terms of mechanization and in the introduction of processing techniques. This is the case of both the observed projects: the AVEM-AGROPROV partnership, which allowed for the mechanization of some aspects of cattle breeding, and the fruit processing project in Casamance, developed by the *Groupement d'Interet Economique* APAD and supported by COSPE, which can be considered as a pioneering experience, since there was no processing plant in the area.

Still, the projects that have been analyzed show that there can be difficulties on a larger scale (costs of wider transports and export possibilities), which opens a space for higher-level organizations. This highlights the need for vertical integration of the value chain. This seems to be, for example, the case of APAD: direct export for relatively small actors has several problems and costs, namely, when

infrastructures are poor and risks are very high. In this respect, upper level organizations may facilitate the process. Moreover, producers' groups face problems when large investments would be needed (e.g., refrigerated trucks to transport fresh fruit across long distances). To make large investments, a small organization needs to be sure of having a secure market. The APAD case also highlights the importance of a binding agreement on quantity conferred to the cooperative, even if this quantity is not 100% of production.

Another important issue that emerged in the analysis concerns the duration of the projects. The possibility of carrying out interventions in a longer span of time that is not limited to strict project time frames may have positive impacts in terms of cooperative development. An interesting example in this respect is the 16-year-old partnership between the French association AVEM and the Senegalese AGROPROV.

The observed cases underline the difficulties linked to the cooperative form in Senegal, which has been replaced by an easier structure, the GIE. The positive aspect of the latter is that it is simpler than the cooperative one. GIEs probably have the downside of being more constrained to remaining small. Establishing cooperatives could be a way to include more members in a wider area and to obtain more bargaining power, for example, as potential exporters.

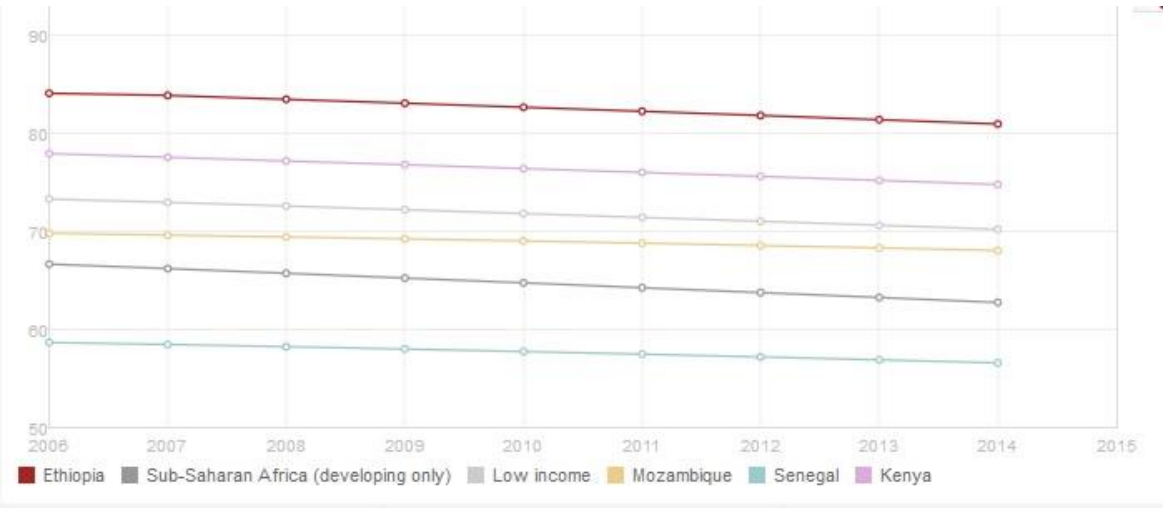
## 4. Cross country analysis and comparative elements

### *4.1 The relevance of the agrarian sector*

The first common element that emerged during the analysis is the relevance of the agrarian sector in all the analyzed countries. The rural population is far more than 50% of the total population in all countries and is more than 80% in Ethiopia (Figure 1).

The relevance of the agrarian sector in the four countries is very high as a share of GDP (Figure 2), considering that it is less than 2% in the European Union and in the United States, for example. However, the relevance of the changes in the agrarian sector across the four countries is reflected in the different attention given to the sector by the governments: compared to the other countries, we found the greater investment in agrarian cooperatives in public policies in Ethiopia and Kenya. Mozambique is very similar to Kenya in terms of economic structure and population, but its public policies devote much less attention to the issue of agrarian cooperatives, suggesting an overall underinvestment in agriculture (this is confirmed by the literature that relates it to the natural resource orientation of the country economic policies in recent years). The agriculture potential of Mozambique is nevertheless very high, at least as measured in terms of availability and quality of land (Figure 3).

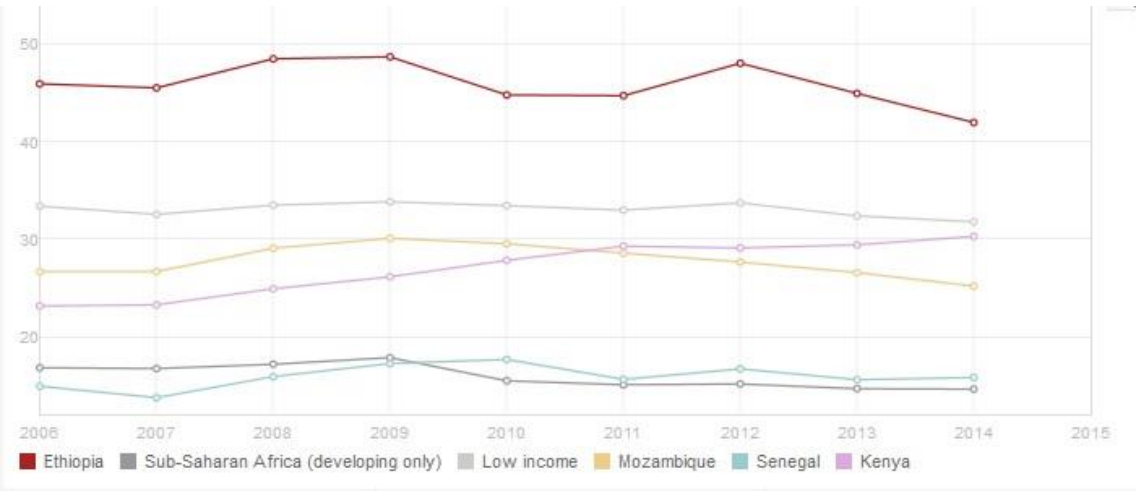
**Figure 1 - Rural population over total population (%)**




*Source*: World Bank data[19]

[19] http://data.worldbank.org [Accessed: February 27, 2016]. "Rural population refers to people living in rural areas as defined by national statistical offices. It is calculated as the difference between total population and urban population". This information is used as a proxy for agrarian employment, as the research team do not have access to comparable data.

**Figure 2 - Agriculture value added (% of GDP)**




*Source*: World Bank data[20]

**Fig. 3 Agricultural land over total land area (%)**

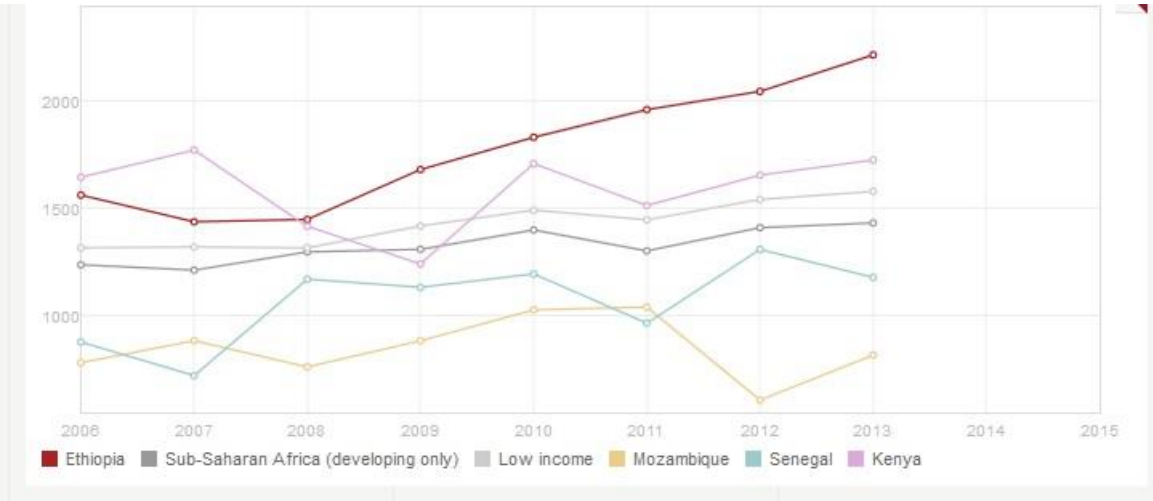

*Source*: World Bank data[21]

[20] http://data.worldbank.org [Accessed: February 27, 2016]. "Agriculture corresponds to ISIC divisions 1–5 and includes forestry, hunting, and fishing, as well as the cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for the depreciation of fabricated assets or the depletion and degradation of natural resources".

[21]http://data.worldbank.org [Accessed: February 27, 2016]. "Agricultural land refers to the share of land area that is arable, under permanent crops, and under permanent pastures. Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land that is temporarily fallow. Land abandoned as a result of shifting cultivation is excluded. Land under permanent crops is land cultivated with crops that occupy the land for long periods and need not be replanted after each harvest, such as cocoa, coffee, and rubber. This category includes land under flowering shrubs, fruit trees, nut trees, and vines but excludes land under trees grown for wood or timber. Permanent pasture is land used for five or more years for forage, including natural and cultivated crops".

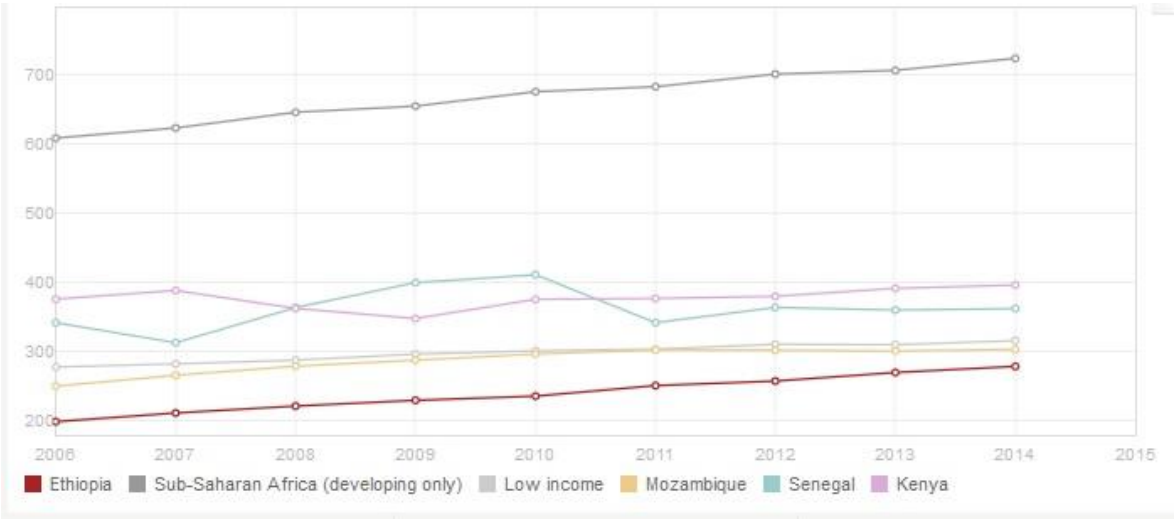
Relative land scarcity in Ethiopia is reflected in the high productivity, as measured by cereal yields per hectare (Figure 4). The consequences of the recent investments in agriculture are highlighted both by this indicator (which started an important increase in 2008) and by the productivity of labor in agriculture (Figure 5). The latter is comparatively lower than in the other countries (also because of the high share of the population involved) but has been constantly increasing in the last decade.

**Figure 4 - Cereal yield (kg/ha)**




*Source*: World Bank data[22]

**Figure 5 - Agriculture value added per worker (constant 2005 USD)**



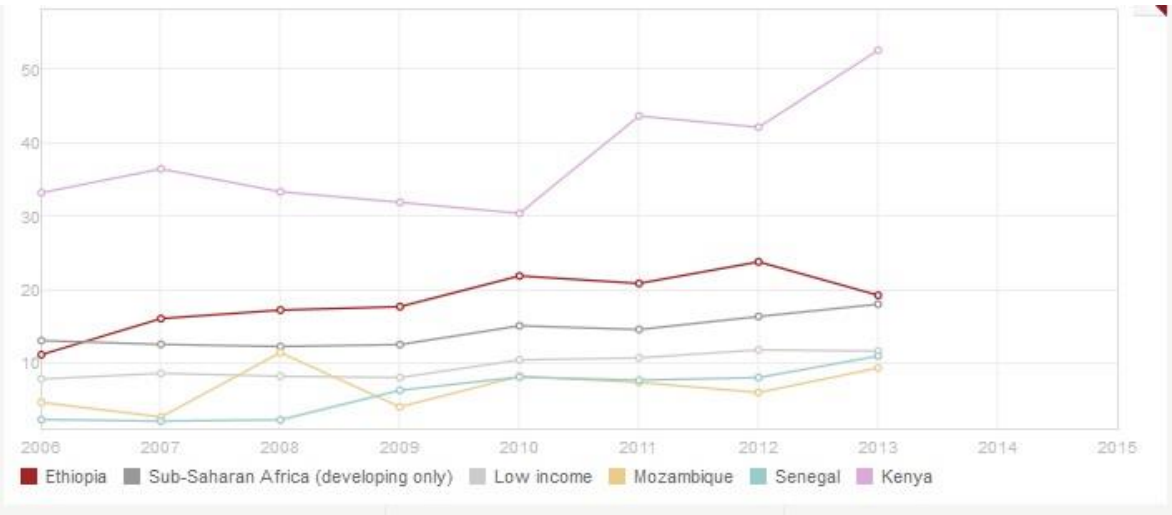

*Source*: World Bank data[23]

[22] http://data.worldbank.org [Accessed: February 27, 2016]. "Cereal yield, measured as kilograms per hectare of harvested land, includes wheat, rice, maize, barley, oats, rye, millet, sorghum, buckwheat, and mixed grains. Production data on cereals relate to crops harvested for dry grain only. Cereal crops harvested for hay or harvested green for food, feed, or silage and those used for grazing are excluded. The FAO allocates production data to the calendar year in which the bulk of the harvest took place. Most of a crop harvested near the end of a year will be used in the following year."

[23] http://data.worldbank.org [Accessed: February 27, 2016]. "Agriculture value added per worker is a measure of agricultural productivity. Value added in agriculture measures the output of the agricultural sector (ISIC divisions 1–5) less the value of intermediate inputs. Agriculture comprises value added from forestry, hunting, and fishing as well as cultivation of crops and livestock production. Data are in constant 2005 USD".

The productivity of agriculture is a synthetic indicator of the number of problems that affect agriculture in the analyzed countries. One of the core elements that emerged concerning productivity is the difficult access to high-quality inputs: the price of fertilizers, for example, can be extremely high with respect to rural incomes, and this is reflected in their low use (Figure 6).

**Figure 6 - Fertilizer consumption (kg/ha of arable land)**




*Source*: World Bank data[24]

At the same time, the fact that the majority of the population lives in rural areas makes the issue of agricultural production crucial for the selected countries (and most African countries in general). The relevance of these problems becomes more evident when considering the data on rural poverty, which is higher than 55% in both Senegal and Mozambique (World Bank data, 2010 and 2008, respectively). In Ethiopia, it seems lower (consistent with the greater investment in agricultural policies) but still above 30% (World Bank data, 2010)[25].

As explained in detail in the four conducted studies, there are other problems besides market failures that affect the agrarian sectors in the analyzed countries. However, market failure is relevant when we observe the lack of efficient markets for credit and inputs, which are crucial issues. At the same time, a major issue is a broader concern in regard to increasing productivity and products' quality. Innovation introduction and diffusion thus becomes a major goal, which requires an integrated approach to agrarian development in which cooperatives can play an important role. This is not just a matter of "making markets work", but also a matter of organizational strength that can produce

[24] http://data.worldbank.org [Accessed: February 27, 2016]. "Fertilizer consumption measures the quantity of plant nutrients used per unit of arable land. Fertilizer products cover nitrogenous, potash, and phosphate fertilizers (including ground rock phosphate). Traditional nutrients—animal and plant manures—are not included. For the purpose of data dissemination, FAO has adopted the concept of a calendar year (January to December). Some countries compile fertilizer data on a calendar year basis, while others are on a split-year basis. Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded".

[25] Referred to a poverty headcount ratio at national poverty lines.

knowledge, protect smallholders in the risky innovative process, bear the costs of experimenting, and build the necessary trust to introduce changes in production.

### *4.2 The potential of the cooperative form*

Among the main problems that emerged from the four country studies, the following are particularly significant:

- Smallholders' weak bargaining power towards buyers and low prices paid to small-scale farmers
- High vulnerability to risks, both in terms of natural agents and in terms of price volatility
- Difficult access to input, especially high quality inputs
- Scale-related constraints to make productivity-increasing investments
- Market-size problems and constraints on the demand side
- Constraints to innovation introduction and diffusion for small producers, related to different aspects: knowledge production, network building, risk bearing capacity, and scale and scope economies

The literature on agrarian cooperatives shows that these organizations can play a role in facing these issues. The main reasons for this are summarized below.

First, cooperatives are organizations that allow for the exploitation of economies of scale and economies of scope, both by increasing the size of production and therefore reducing unitary costs and by allowing for several activities to be carried out together by the same organization: for example, they have comparative advantages in being able to simultaneously address output commercialization and input purchases.

Second, cooperatives are crucial actors in addressing market power issues, as seen in several cases in the selected countries; market power imbalances create strong disadvantages for small producers who face monopsonies and oligopsonies, as buyers are able to lower the prices of primary products. Cooperatives can intervene by organizing the supply side, which counterbalances buyers' market power. In many contexts, the strong presence of cooperatives fosters price increases for all producers, including non-members. Moreover, cooperative enterprises can play an important role in economies where the agribusiness model is widely expanding and smallholders are facing limited bargaining power with respect to "big" buyers and risk being locked into a relationship of dependence *vis-à-vis* a private investor.

Moreover, cooperatives can facilitate the introduction of agricultural production innovations. Innovation introduction requires the capacity to experiment and to incur losses in case of failure, which is seldom the case for small individual producers. Knowledge production can be a strong advantage for cooperatives in such contexts and sectors. This is also linked to the scale and scope of production, since most innovation processes have threshold effects in terms of scale and spillovers across activities. Besides introduction, innovation processes are composed of adoption/diffusion phases, which are affected by several aspects: first, the ability to mitigate risk. Indeed, cooperatives can play a role in mitigating the risk embedded in the production process by means of loss-sharing mechanisms by transferring the risks from the individuals to the organization, by allowing for a more diversified range of activities, or by providing social security arrangements. This allows for the

diffusion of organization and production innovations. This diffusion requires knowledge sharing in contexts where extensions services are often missing or weak, and trust within groups and organizations. In this respect, again, cooperatives can play a major role. They can promote innovation diffusion networks, having a more integrated approach when compared, for example, to single-product contract relationships with buying firms. They make it possible to integrate several activities (input- and output-related) at the same time, thus having an integrated approach to producing, promoting and disseminating knowledge and skills, and to mitigating the risk faced by small producers, altogether creating an important advantage for cooperatives in the field of innovation.

One could argue that large investor-owned enterprises also allow for scale and scope economies. Nevertheless, there are reasons to think that cooperatives have important advantages when it comes to economic development. Investor-owned companies require farmers to either become wage workers of the enterprise, or become individual out growers for the private company. An evident limitation of the first option is that farmers are forced to sell their land, while the second option puts small producers in a disadvantageous market power position, with low bargaining power vis-à-vis few big private firms. Moreover, in most contexts in the selected countries, agriculture is also a major food production activity, and the need of families to produce for their own consumption needs to be taken into account. Indeed, moving from food to cash crop production is much more complicated than the liberalization policies of the 1980s and 1990s in Africa had expected: low asset endowment, high vulnerability to risk, low access to productivity-increasing inputs, poor marketing infrastructures are only some of the elements that prevent farmers from turning from subsistence to commercial production. Finally, the evidence of increasing inequalities in rural areas calls for an inclusive approach to rural development, which tries to improve the income and the standard of living of the most disadvantaged groups. The selection into commercial farming can be highly exclusive and only the less disadvantaged may be able to enter, thus reinforcing inequality instead of mitigating it.

Conversely, cooperatives can be tools that allow small producers to collectively obtain services aimed to increase production, productivity and ultimately incomes. This is not without difficulties, as will be discussed in the next section. Nevertheless, cooperatives are present in all four countries and are relevant actors in the agricultural sectors.

The analyzed countries display different structures in terms of the cooperative movement, which can be ascribed to different historical trajectories. According to the distinction noted by Wanyama et al. (2009), the “unified model” is found in Kenya, where a single cooperative movement is in place, with a single apex body and a consequent legal framework that provides for the different levels of this unified stricture. In Senegal, the model is defined as a “social economy model” and is characterized by a multiplicity of possible organizational forms with mutualistic purposes. On the contrary, the tradition in Mozambique—inherited by the Portuguese colonizers—is more oriented towards a cooperative as a tool for small entrepreneurs-producers (but, as seen, this fails to capture some characteristics of the rural Mozambican economy). The Ethiopian model has been less affected by colonization and is characterized, compared to the other countries, by a stronger link with agrarian policies at the national level.

The cooperative organizations that are supported by the selected projects[26] have different characteristics, but they can be broadly classified in three categories:

a) single-value-chain organizations (milk, coffee, cotton, and fruit) that are mainly marketing cooperatives and that sometimes engage in input-purchase;
b) multipurpose farmers' groups that both develop crop marketing and diversification activities and innovation diffusion and provide local public goods;
c) second- or third-level organizations (cooperative federations or local unions).

### *4.3 The political and normative constraints to cooperative development*

The four countries display different approaches to rural development and to the role of agricultural cooperatives. It was possible to identify different levels of attention paid by the respective governments to cooperative promotion as a strategy for the development of the agrarian sector. A greater investment in cooperatives within public policies is a major factor in creating an enabling environment, as seen in Kenya and Ethiopia. Indeed, several factors that directly depend on the public action may be extremely relevant for cooperative development: road and infrastructure availability, contract enforcement in businesses, exchange rate policies to protect (or not) local production, promotion of agro-industrial sectors, and so on.

Lack of infrastructure is a key constraint to cooperative development, and indeed to developing all economic activities on a wider scale. Several cases observed in this research face the lack of basic infrastructures, such as roads, markets, and railways. This increases the transaction costs of marketing activities and contributes to the difficulty in accessing inputs. This constraint can, though, be relaxed at the meso and macro levels, through government interventions in rural infrastructures.

Another frequent problem in the analyzed contexts seems to be the difficulty in mobilizing high levels of trust. This is more evident in contexts where historical and institutional factors have negatively affected the social relations and have hampered local economic systems, which has been the case in Mozambique because of the long-lasting civil war that ended in the early 1990s. While this is a complex issue, it is another aspect related to public policies that may contribute to shaping people's expectations and trust.

If the policies with respect to cooperatives seem to go in different directions, legal frameworks are converging into a similar model, based on the cooperative principles of the International Cooperative Alliance (ICA). This legal convergence is pushed, among other factors, by the regional economic frameworks: Kenya and Ethiopia have a common framework that is the East African Community one, while Senegal is part of the Organization for the Harmonization of the Business Law in West Africa (OHADA). Nevertheless, the extent of application and enforcement of the laws is a challenge to different extents in the four analyzed countries.

[26] In the case of projects targeting specific organizations. Several projects were also observed where the target was the regulatory framework or the promotion of national organizations for cooperative promotion.

A more detailed overview of the four country legal frameworks concerning cooperatives is presented in Appendix A. The analysis draws on the Principles for Legal Reform identified in CLARITY framework[27]. However, the analysis integrates the CLARITY principles with other relevant aspects and presents a descriptive rather than a normative analysis, aimed not only at checking whether, but also at describing how these aspects are considered in each national regulation.

A cross-cutting issue in the four countries is how to overcome an image of cooperatives that is linked to the centralized-economy phases. All four countries saw a historical phase where agricultural cooperatives were tools of top-down policies of organization of the peasantry. This is a heavy burden nowadays for cooperative movements: national cooperative movements and international CDOs are putting a lot of effort in "rebranding" the cooperative organizational form in light of a business-oriented approach to cooperatives. Some of the projects analyzed have actually moved in this direction (e.g., in Mozambique and in Ethiopia).

In Kenya, the renewed public attention to cooperatives has a longer history, but this is very recent in other countries. In Ethiopia, it mainly started with the 2010 Growth and Transformation Plan. In Mozambique, the "New Law on Cooperatives" represents a turning point. It was approved in 2009 but still lacks the regulatory decrees. In Senegal, a push towards reforming cooperatives has been given by the OHADA harmonization project, but it still seems that the cooperative organizational form is not gaining momentum; this can be seen from the major diffusion of other forms of enterprises, such as GIEs, or of associations of producers.

Harmonization of cooperative law across countries is a clearly important issue, since it allows for international activities and a clearer statute. Nevertheless, as every standardization initiative, it raises issues related to adaptation to specific contexts. This may also apply to projects aimed at "rebranding" cooperatives and to projects intervening at the regulatory framework level, when the legal model referred to is the cooperative model of industrialized countries. Again, an effort of adaptation to the context may be needed, e.g. to define registration procedures that are affordable and accessible for the target population. As seen in the case of Mozambique, the law has some features that aim to make cooperatives attractive for middle-range producers. Still, middle-range producers are rare in Mozambique. A big challenge may be to scale-up the activities of small producers, which are the wide majority in that specific context. In addition, the important need to rebrand cooperatives towards a market and business-oriented approach should be coupled with greater attention to the problem of the low risk-bearing capacity of small farmers: a cooperative model probably has to take into account to some extent the need for loss-sharing mechanisms and protective measures against some risks.

A common problem, which is more relevant in Mozambique and Senegal, seems to be the costs and obstacles to forming a cooperative. Complicated administrative steps may be a big obstacle when the low level of literacy in rural areas is taken into account. The process of publication (the official registration of a cooperative) may be complicated and long (in Mozambique, e.g., it can take up to one and a half years). In rural areas, many people lack ID cards, which is a first requirement do undertake any administrative procedure. Illiteracy is another crucial factor affecting the capacity to register a society or an organization. Registration costs can also be very high relative to rural incomes.

[27] The Cooperative Law and Regulation Initiative (CLARITY) was created in 2005 by the OCDC members, with support from USAID, with the aim of helping national cooperative movements in developing countries to create a legal and regulatory environment that enables cooperative business to flourish. For more information see: www.ocdc.coop/clarity.html

As they cannot be recovered in case of failure ("sunk costs"), they represent a strong constraint to cooperative creation. Indeed, when "lighter" forms are available, farmers are more likely to adopt them (such as in the case of GIE in Senegal), even though they have smaller objectives, and are often limited to facilitating access to credit and have limited opportunities in terms of exploiting scale economies.

The possibility for vertical and horizontal integration seems to be another important enabling factor, both for economic scaling-up and for advocacy purposes. This possibility depends mainly on whether this is allowed and encouraged by the normative framework; political processes should also be carried out with specific attention on not disrupting coordination attempts in this direction. In the case of the decentralization process in Kenya, some problems are left by the withdrawal of the national level (e.g., registration and firm-based credit cooperatives), particularly regarding the role of apex bodies and the dispute-settlement functions.

In recent years in most of the analyzed countries, the cooperative model has been connected to the agri-business sector, thus promoting cooperatives as suppliers of raw products to processing firms embedded into global value chains. Nevertheless, this model has to be adapted to the market structure of each context. In the case of a monopsony, cooperatives may find themselves in a risky position if they rely on a few buyers. In such cases, enabling policies may support vertical integration of activities and greater integration within the cooperative movement.

## 5. Summary of key issues for cooperative development

This section outlines the most relevant aspects that can be highlighted as factors to be taken into account in cooperative promotion projects. These aspects emerged from the analysis of the selected projects, and most of them found confirmation in the literature related to the analyzed countries.

A first, overarching point is the need for projects to be grounded on a deep analysis of the context, both in terms of market structure and the network of social relations in which the cooperative is (will be) embedded. One of the main risks that CDOs face is to focus on "exporting" strategies that have been successful in their home countries, without paying enough attention to the different contexts in which they will have to operate. An example is the focus on input purchasing activity, which is less urgent in contexts where input markets are competitive, but becomes crucial where this is not the case. Therefore, it should not be taken for granted that strategies that made cooperatives successful in Europe and the United States will work in SSA.

### *5.1 Market structure and value chain integration*

A crucial aspect that needs pre-intervention analysis is the market structure of the sector in which the cooperative is going to operate both in terms of output and input markets.

According to the market structure of the subsector, the cooperative should adopt different strategies concerning output marketing. When facing a monopsony (i.e., when there is only one accessible buyer), aggregating output may not be enough. It may produce a positive effect in terms of bargaining power on prices, since it reduces the competition on the supply side, but it ties the success of the cooperative to a single buying firm. Bulking production can be a viable strategy when the competition on the demand side is high, but in the opposite case, it may be worthwhile for the cooperative to invest in processing activities, thus vertically integrating the value chain. This is the case, for example, of several settings in the dairy value chain in Mozambique where the monopsonistic structure of the market and the one-to-one relationship with a buyer created problems for producers' cooperatives.

The strong orientation to agribusiness that a lot of the observed projects and policies display should push cooperatives to pursue strategies that protect them from the choices and weaknesses of the processing firms. Given the globalization of agri-food markets, the economic performance of these firms may be very unstable, which implies that the quantities bought and prices paid to farmers may be volatile and, thus, be harmful to the selling cooperative. Value chain integration and the development of processing activities can be tools to enter higher value-added sectors and to modify the market structure when oligopolistic market power is held by buyers.

### *5.2 The side-selling problem and the risk of a "small-scale trap"*

A big problem that emerges from the case studies is the difficulty that cooperatives face in bulking production in cases where many traders visit producers and compete to buy their produce. In some cases, cooperatives are too weak to offer higher prices; in other cases, prices are indeed higher but cooperatives cannot commit to pay immediately; in others still, producers may lack information or trust in the collective organization. This is a crucial issue, since it may put the cooperative in a weakening vicious cycle. Tackling it may require paying attention to different aspects.

First, cooperatives should look into other markets that are potentially on a wider geographical scale, which implies a scaling up of activities through unions and upper-level organizations. New outlets can also be found through vertical integration and the development of processing activities that allow the cooperative to enter into a higher-value-added market. Both the geographical coverage (and thus the integration in a wider cooperative movement) and the vertical integration option represent the need to escape the "small-scale trap" and the "low value-added trap", which are risks that cooperatives in the primary sector are strongly exposed to.

Second, an assessment of the needs of producers should be done in relation to product payment, since cooperatives face two competing needs: on one hand, the need of liquidity and therefore the need to be paid immediately and, on the other, the need for savings devices. A structure that allows both necessities to be taken into account may be a significant comparative advantage of cooperatives. This means that cooperatives need to have the means to pay for products immediately upon delivery, at least up to a certain amount: this implies the need to have the necessary financial capacity, which is not always the case in poor rural contexts. Projects may try to support a co-op to build up its financial capacity to start a process where selling to the cooperative becomes profitable to farmers.

Third, members may be attracted to cooperatives for a number of other reasons besides price incentives. Indeed, cooperatives could provide a set of services, including services related to production, support for technology adoption, knowledge and information sharing, and so forth.

Finally, based on the case studies, there is a need for clear and enforced rules concerning the quantity of product to be given to marketing cooperatives. In many cases, the rule of exclusive selling to the cooperative is there, but not enforced. Side selling is highly tolerated, which ends up being a mechanism that amplifies downturns. It may be necessary to set clear rules on quantities that have to be given to the cooperative and that are credibly enforced, while the cooperative credibly commits to selling the product at the best possible price. How to enforce agreements about sold quantities is clearly a central issue. In this respect, members' trust in the organization is crucial, as it creates self-reinforcing dynamics. This is affected by the leadership and the past history of the cooperative and its members. Some institutional arrangements may help as well, such as centralized processing activities, which may allow for increased value added (and therefore increased prices paid to producers) and may also work as commitment devices.

### *5.3 Integration of input- and output-related functions*

In some situations, cooperatives with the ability to focus clearly on the input supply-side *or* on the output marketing side were observed. The second case can be found, for example, in Mozambique, while the first case can be found in Ethiopia and Senegal. The problem with the first model is that it may miss a crucial element that limits production, which is access to good quality inputs and fertilizers, as is the case in Mozambique (see Figure 6). The problem with the second model is that by focusing only on input supply, cooperatives are not able to scale-up production and risk being unsustainable or limited to a small scale.

It may be important to take into account both aspects at the same time. This can happen within a single multipurpose cooperative or through an integrated system of cooperatives by promoting a multi-membership framework of farmers (the direction that seems to be taken by the recent proposal in Ethiopia).

The tools to evaluate the two systems are not currently available, but the aim is to highlight the importance for farmers' cooperatives to have an integrated perspective: first this means taking into account both input supply and marketing functions. Second, it means having a focus on innovation: the need for productivity-increasing investments is crucial in the analyzed agricultural sectors. Besides offering a "jump" in scale (for a majority of small producers), these investments should lead to innovative activities, knowledge sharing, and skill improvements. The introduction of innovations that are appropriate to the context and their diffusion requires some tools that the cooperative organization can put in place: risk-sharing, investments on a bigger scale, credit systems, trust network, and so on, as discussed in the previous section. This direction might be one of the main focuses of cooperative organizations in the future.

### *5.4 Selection into cooperatives*

It has to be noted that most of the cases confirm the idea that there is a selection effect for farmers' cooperatives, as not all producers have an equal probability of being members of cooperatives. Cooperatives are usually considered to have a "middle-class bias". This is emphasized in the literature on Kenya and Ethiopia, and it seems to be the direction that is given in Mozambique by the recent legislative process and some of the observed interventions. This requires some analysis of the context, for example, in the Mozambican case, where the "farmer middle class" is probably very narrow at the moment, while the biggest challenge is to allow the very small producers to scale-up production.

More broadly, different models of cooperatives may produce different selection effects. It is important to clarify the implicit assumptions of the cooperative model that are proposed and to see if these assumptions match the specific context.

### *5.5 Training and leadership*

Most projects underline the centrality of training of members and leaders. This is of course crucial and might for example mitigate the problems related to side selling: good training may make clear the long-term advantages of cooperative participation, thus reducing free-rider problems. Since the perception of future benefits from cooperation depends on different factors (e.g., trust and available information), training may play a partial role in decreasing the "discount rate" of these benefits. This requires that training programs focus on concrete elements in regard to the issues that are crucial for producers.

Continuous training is also important in terms of leadership. In several cases, a tradeoff between democracy within organizations (represented by a high turnover of leaders,) and solid training of leaders was observed. The cost of training leaders is high, while the rules of democracy require that leaders be changed regularly. Forms of training that are constant over time and involve the entire membership are important elements to make an effective leadership turnover sustainable.

An important element is the content of trainings: it is important that they provide competence and skills directed to increased production and productivity, increased commercialization, and increased services provided by the cooperative. Sometimes, on the contrary, training programs have directed leaders to focus on "moral" issues related to leadership capacity and skills. Since two of the main

tasks of coops are increasing productivity and diffusing innovation, it is probably more relevant to construct training programs to build up competences that serve that purpose in a way that is adapted to the context.

### *5.6 Relationship with legal frameworks*

Some of the interventions observed in this study were directed to empower local actors to modify the legal framework or to develop proposals for national regulations involving cooperatives. With respect to these projects, the need for a close follow-up of the process is observed, since a widespread problem is that laws are passed that remain on paper and lack implementation. A close follow-up on the approval of the related decrees and regulations is necessary, as is the diffusion of awareness of the new legal tools to the concerned actors (farmers, in this case).

A difficult aspect of the attempts to formalize the cooperative sector is that it is not always clear which registration/certification/compliance actions should be required. Since the costs of registration are usually high compared to the incomes of potential farmer-members, the benefits of registration should be, in principle, immediately visible and appropriable by them.

A crucial element is the length and cost of registration procedures, mostly in cases where farmers are illiterate or lack identification documents. Costs and difficulties in registering a cooperative seem to be relevant obstacles in a number of the observed cases.

### *5.7 Advocacy and cooperative movement organization*

Two needs in particular seem to emerge from the selected cases: one is the need for a wider horizontal integration of production, as previously discussed (the need to bulk production, to look for more distance market outlets, but also to initiate processing activities); the other is the need for political representation of the cooperative movement. Cooperatives should advocate for greater attention to agrarian development, smoother registration processes for cooperatives, and so on; and should negotiate with national and local governments on the relevant laws and regulatory tools. These needs may be answered by the emergence of upper-level organizations. Upper-level organizations that may respond to these critical issues may be of two types: cooperative federations and second-level cooperatives. The latter are consortia-type organizations that aggregate several first-level cooperatives and that take over some functions that have to be tackled at a higher level (e.g. marketing functions, in cases where reaching a wider market is needed). The former are higher-level federations that perform advocacy tasks, provide political representation, and offer some services (e.g., financial training).

The emergence of advocacy organizations that could lobby for favorable legislation, monitor their application, ask for infrastructure interventions when needed, and so on would be a positive development, since the support that public policies can provide to cooperative growth is crucial. Public policies indeed play a very important role. As Theron (2010) puts it, “Cooperative autonomy must be regarded as representing the litmus test for evaluating the policy and legislative framework. However cooperative autonomy should not be used as a fig leaf by governments to avoid doing more to promote cooperatives”. Some examples (which do not necessarily apply to every context) include: interventions in access to credit, input markets, tax regulations, and infrastructure. These public

policies could be triggered if there were strong enough actors within the African countries to ask and lobby for them.

In many countries, it seems that apex organizations are somehow weak (or missing altogether). This may be the product of several factors that partly overlap with the reasons for the weaknesses of agrarian cooperatives themselves. In this study the historical path that some African countries have witnessed was underlined, from a state-led approach to agrarian cooperation, to a market-oriented model with a high degree of state withdrawal from agrarian policies: both phases may have had a negative impact on the structuring of vertical representative bodies of peasants and agrarian cooperatives. Moreover, this structuring may have been weakened in contexts where cooperatives had been promoted just in selected export-oriented value chains (although in Senegal, the vertical organization of peasants reaches a wider extent than in other countries, it had to build on the crisis of the groundnut-focused cooperatives of the previous decades). The strengthening of apex bodies might be an important aspect to empowering the national cooperative movement and enabling it to negotiate policies at a higher level. The effective participation of these organizations in a project aimed at improving the regulatory and policy framework might be an important aspect to make these projects sustainable.

### *5.8 Time dimension of the project*

Projects are bound to somehow standardized time frames. The problem that may arise is that some of the changes that are wanted may require a longer span of time. This is the case for projects intervening on the regulatory framework: this kind of change needs time to be implemented and to become effective in the everyday life of farmers. This may also be the case with the introduction of appropriate technology or with the development of a value chain in a context where it does not already exist. It may be important to develop tools of intervention that allow for a long-lasting relationship with a context that goes together with a high degree of ownership of the process by the local organizations that are partners of the projects. This does not necessarily mean increasing the financial size of the projects, but structuring them over longer time spans.

## 6. Questions for further research

Several research gaps exist in the study of agrarian cooperatives in Africa, their potential, and their constraints. These issues are highlighted here, drawing on the summary of the main issues raised by the desk study. Also, looking at issues that have not been presented may deserve greater attention.

### *6.1 Market structure and value chain integration*

*Q1. Under which conditions is it necessary for a cooperative to develop processing activities?*

One of the main issues raised by the desk study is the risk of cooperatives being locked into one-to-one relationships with a monopsonistic or a few oligopsonistic buyers. The first hypothesis to be tested is as follows: in cases of market structures that allow strong market power for the buyer, the cooperatives have a comparative advantage in developing processing activities and in integrating the value chain and should be assisted in going in this direction.

More broadly, the strategies that a cooperative may adopt in a monopsonistic context to expand and differentiate the demand for its product should be analyzed in more detail. Processing activities, marketing strategies, investment in transport, and vertical integration in broader organizations should be investigated.

*Q2. What is the impact of vertical integration on the incomes of producers?*

Several interviews highlighted the need for processing activities to increase the income producers obtain through value addition. On the other hand, several cases were observed of cooperatives that were integrated into an agribusiness model and bound to be sellers of raw products. This located them at the low tail of the value chain. This opened the question of the importance of value chain integration, not only in terms of the stability of sales and prices but also in terms of prices levels and eventually producers' incomes. This also raises the issue related to the importance of investments in infrastructures and processing and storage activities whose deficiency is observed not only at the local level, but also in cooperation and development initiatives.

*Q3. Do cooperatives play a role in empowering producers in contract enforcement?*

The relationship between producers and buyers in several agrarian contexts in Africa is marked by pitfalls in contract enforcement that—given the widespread monopsonistic market structure—gives further power to the buyers. Do cooperatives intervene in this respect, both by organizing the supply side and by acting as legal mediators that make contracts binding and respected? By these means, which lead to increases in the prices paid to producers, do they contribute to increasing the incomes of farmers who are not cooperative members?

### *6.2 The side-selling problem and the risk of a "small-scale trap"*

*Q4. What are the factors that lead to side selling and to what extent is this a threat to cooperatives?*

In the desk research, several cases of side selling were observed. Several factors can contribute to this problem: the cooperative may be unable to pay higher prices than the competitors can, the cooperative may be unable to pay immediately upon delivery, or members may not trust the organization enough to believe in a commitment for future payments or refunds. In some cases side selling is tolerated out

of necessity, but this weakens the collective action behind the organization. A more accurate analysis of all these (or similar) cases may shed light on the underlying reasons for this phenomenon and possibly provide answers to the problem.

*Q5. Which conditions are more conducive to the reduction of side selling in cooperatives?*

The conditions that affect side selling may be of different natures; two issues are internal rules and financial capacity. A further comparison of different cases in both respects may shed light on their respective roles. A financial capacity that could secure the possibility of cooperatives being able to buy produce is a crucial aspect. It may also have the power to create positive expectations for the cooperative and therefore build trust and lead to enforcement of the rules. How is financial capacity built in "success-story" cases? What undermined it in cases where the cooperative had a negative experience?

### *6.3 Integration of input- and output-related functions*

*Q6. Under which conditions do cooperative specialize into a single function or integrate several functions?*

Situations where cooperatives focused on the input supply-side *or* on the output marketing side were observed. The problem with the first model is that it may miss a crucial element that limits production: access to good quality inputs and fertilizers. The problem with the second model is that by focusing only on input supply, cooperatives are not able to scale-up production and risk being unsustainable or limited to a small scale. Therefore, the following hypothesis is offered: in contexts of the market integration of a partially subsistence-oriented agriculture, no advantage in specialization exists, and on the contrary, it is advantageous to integrate different functions. This is the first element to be tested by observing both examples of specialization and integration choices. Which rules and project practices produce incentives to specialize?

*Q7. Under which conditions do cooperatives manage to promote innovation and increased productivity?*

Productivity-increasing investments appear to be core needs of small producers. They require a significant increase in the scale of production and an investment in innovative activities, knowledge sharing, and skill improvement. In theory, cooperatives can play a major role in this respect, since they allow for scale economies, risk-sharing, credit systems, and trust networks. Under which conditions do they manage to respond to this need?

### *6.4 Selection into cooperatives*

*Q8. Which governance structures are more conducive to a greater inclusion of poor producers in cooperatives and to the scaling up of their activities?*

Different models of cooperatives may produce different selection effects. It is important to clarify the implicit assumptions of the cooperative model that is proposed and to see if these assumptions match the specific context. For example, in contexts where producers are very small, a strategy that wants to select the "middle class" risks missing the majority of the target population. The aim here is to analyze different strategies, with an attempt to identify implicit assumptions about the role of

cooperatives (as a promotional tool for the poorest producers, as a marketing tool for the agrarian "middle class", as an instrument for agri-business contract arrangements, etc.) and the selection effects that may be implied when implemented in specific contexts.

*Q9. Which strategies are more conducive to including women?*

An aspect that has been less analyzed in the desk study is gender inequalities in rural households and in agrarian work, which may be both reflected or counterbalanced in producers' organizations. In the selected countries, women's work in agriculture is relevant. Can specific strategies for including women in cooperatives be observed? Is this related to the food crop/cash crop differentiation? What can be learned from the observation of these strategies or from their absence?

### *6.5 Training and leadership*

*Q10. What are the contents of training and what are the effects of different training strategies?*

In this study, training programs for leaders were often observed that tended to focus on a "moral" approach to leadership capacity. The hypothesis here is as follows: since one of the main tasks of co-ops is productivity increasing and innovation diffusion, it is probably more relevant to construct training programs to build up competences that serve that purpose in a way that can be adapted to the context. Future studies should compare different training strategies and observe the effects that they have had on cooperative organizations.

### *6.6 Advocacy and cooperative movement organizations*

*Q11. What are the effects of integration into a wider cooperative network? Under which conditions has it had positive effects?*

As highlighted in the previous section, upper level organizations may be of two different kinds and play two crucial functions. One function is political representation and advocacy; another function is the economics scaling up of the cooperative activity (looking for wider markets, developing processing activities and marketing strategies, bulking greater production for export, etc.). What kinds of experiences in this direction can be observed? What were the results? When this is absent, does it hinder the economic viability of cooperatives? What are the constraints to its emergence?

*Q12. To what extent do cooperatives manage to respond to other needs besides the purchasing price of produce?*

Some of the discussed cases highlighted how agrarian producers, besides obtaining a good price, have other economic needs, such as saving devices or social protection schemes. Under what conditions should cooperatives respond to these needs? Cooperatives that have a more "holistic" approach to poverty reduction among rural producers have been observed, as well as cooperatives with an approach that focuses more narrowly on the marketing needs of commercial producers. How do these two models affect trust relationships and contribute to solving the problems linked to cooperative commitment and delayed payments? What can be learned from a comparison of these strategies?

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