Soya bean expansion in Mozambique: exploring the inclusiveness and viability of soya business models as an alternative to the land grab

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ABSTRACT

Throughout the world, soya beans and seeds are typically cultivated in large plantations. The way plantations have been established are often discussed as what represent the 'global land grab'. Little has been discussed, however, about how large plantations evolve as they interact with various actors at national and local levels. In Mozambique's plateaus, the soya sector was initially inspired by the large-scale South American production and it showed characteristics of the land grab. At the same time, it has developed into new types of business models, from contract farming to sourcing, which integrate more than 10,000 smallholders in the value chain. This paper proposes to analyse the evolution of the soya sector in Mozambique, drawing on data collected from 160 households in Gurue district, in the province of Zambezia. It highlights how contract farming that is supposedly more 'inclusive' than the large-scale plantation had gone through a boom-and-bust cycle, as smallholders have accumulated experience to exercise their agency to deal with the market, investors and fellow producers and begun to exit from the business and sell their produce to the open market. This process reveals how smallholders have exercised their agency to reject the contract and developed the soya bean production as a part of local struggles that are simultaneously influenced by multi-scale land and agricultural development projects of civil society and external donors. The paper concludes that developing the capacities of governments at different levels to grasp such evolvement, as well as of smallholders to hold governments accountable for their experience, is vital to make current soya business models socially inclusive and economically viable.

INTRODUCTION

Foreign direct investment (FDI) flows have steadily increased worldwide since the mid-2000s. Sub-Saharan Africa witnessed the inflows of US$160 billion in 2012, eight times more than in 2002 (Brookings Institution, 2014). The increase is underpinned by, inter alia, the participation of new investors from emerging economies in the world production and trade systems, mainly China, Brazil and India, especially in the agribusiness sector (Cheru and Modi, 2013). Many recipient African countries in turn are embracing the new investors, as they aim to reduce aid-dependency and develop more market-oriented economies.

Mozambique hosts one of the fastest growing agricultural markets in the world (Hanlon and Smart, 2008; Di Matteo and Schoneveld 2016). After the end of the prolonged civil war in 1992, the country strived to expand commodities production and accelerate economic development by progressively increasing its use of foreign investors and international donors to recreate agricultural development projects. The agricultural development projects, which had been shaped during Mozambique's post-independent socialist state-building, are increasingly exposed to private sector involvement – supported by active governmental promotion (MINAG, 2011) – that seeks large tracts of land concessions. As all the land in Mozambique is 'public', spared for the country's population, who are in majority small farmers, the increasing private concessions are seen as the typical case of land grabbing that works to squeeze out small-scale poor farmers from their land (see Nhantumbo and Salomão 2010, and Borras et al., 2011, for examples of the country's attempts to expand sugarcane plantations for biofuel production).

Recently, the debates on land grabbing are highlighting the nature of particular crops, such as sugarcane and soya beans, as 'flex' crops that work to facilitate the grabbing process. Flex crops are those that can be used for food, feed, and fuel production and that are planted in a large scale monoculture as typically seen in South America, and because food is integrated into the feed and fuel markets, they can have significant impacts on local food security and quality (Gillon, 2016). At the same time, little is still known about flex crops impacts at the micro-level and how they interact

with social relations, capital accumulation and power relations (Borras et al., 2015).

In particular, flex crop development typically uses contract farming in order to include smallholders into their business operation to make the business more inclusive (Hall, 2011; Robertson and Pinstrup-Andersen, 2010). At the same time, the process by which the contracted farmers experience integration into new cash-based production systems and come to exercise their agency to optimize benefits remains unclear. This paper aims to explore how the farmers are included in and also eventually excluded from this business model and reshape the soya bean sector in central Mozambique, which has been involving extensive agrarian and landscape transformations through the integration of more than 10,000 smallholders over the last decade.

More specifically, the paper traces, chronologically, smallholder adoption pathways in three phases including how contract farming emerged and declined. It pays particular attention to the role of associations and the international donor community in Gurue district in the province of Zambezia. It elaborates on a case study of the smallholders' experience, using data collected during three months of field research in 2015 that involved 160 household surveys and interviews with key stakeholders. The principal questions are: what factors have contributed to processes of inclusion and exclusion in the soy sector? And, how have smallholders and support organizations shaped sector development trajectories?

The paper finds that small producers in Gurue had not meekly gotten their land grabbed or had not been subordinated to the contracts given by the buyers, as often indicated in the previous critiques of flex cropping or contract farming. It instead shows that because they experienced contract farming they were able to reject it and embed their soya bean production in their everyday management of livelihoods. The embeddedness led them to make different demands in relation to their membership with smallholder association groups directly involved in contract farming, and to available markets that they deal with at the independent farm level. The paper concludes that while individual farmers are naturally embedded in multi-scale

land and agricultural development policies, they are also exercising their agency.

In what follows, the paper first reviews debates on land grabbing and contract farming in recent years to highlight the importance of looking into local populations' agency – that is, the capacity to make a difference or 'to act otherwise' (Giddens, 1984) and to make their own lived - in places by interacting with political processes related to soy expansion at various scales (Pierce et al., 2011). The review is followed by the introduction of the methodology and then a case study of smallholders who have accumulated experiences in soya bean farming in Gurue. The paper concludes by listing specific policy recommendations to make current soya bean expansion genuinely beneficial to the well-being of smallholders.

I. FLEX CROP EXPANSION, CONTRACT FARMING, AND INCLUSIVE BUSINESS DEVELOPMENT

The phenomenon that came to be called land grabbing in the late 2000s created a 'hype' among academics and development professionals as well as activists who question the development contributions of the large-scale purchase or lease of farmland in developing countries by foreign investors (Kaag and Zoomers, 2014). The foreign investors, usually in collaboration with national governments, often acquire land through dispossession of smallholders (Schoneveld, 2013). Even if physical displacement does not occur, resultant landscape transformations have been known to bring profound adverse impacts to smallholders who make their living in relation to 'enclosures' that are produced by these large-scale investments in which selective capital inflows and outflows fail to benefit local livelihoods (Ferguson, 2006; Li, 2014).

The rise of flex crops has accelerated landscape transformations and changed smallholders' relationship with the places in which livelihoods are organized (Borras et al., 2015). In combination with the concerns for climate change mitigation, the large-scale land deals came to be justified for

fuel production in addition to food production, and sugarcane or soya bean productions became especially attractive to investors. Large-scale soya bean plantations are especially justified, not only for the production of biodiesel, but also for livestock feed and human consumption.

In practice, efforts to enhance the potential development relevance of large land deals and flex cropping exist. In principle, these efforts are materialised as arguments for the increased employment opportunities, commercialisation opportunities, macro-economic growth and increased productivity, which are increasingly termed 'inclusive business models' (German et al., 2013). For example, the World Bank have outlined codes of conduct and forms of global governance to ensure the inclusivity of land deals and to prevent local communities from losing their land (De Schutter, 2011), and one of these codes emphasises the need to involve the local population in the business processes. One method to include the local farmer in the process is contract farming.

Contract farming itself is not a new concept. It has been widely practiced throughout the world but in particular in southern Africa since the 1970s (Glover, 1990). During the 1980s and 1990s, it started to be even more widely practiced to boost agricultural exports of high value cash crops and accumulate capital in the countryside. This widespread practice led to industrialisation of agriculture within contracted spaces and the elimination of what is often considered to be inefficient and low-yield subsistence farming by small-scale farmers (Little and Watts, 1994).

What is new about contract farming in situations such as flex crop expansion and the recent capital accumulation is that production of biofuel or chicken feeds – that require large tracts of land – may require little manual or only seasonal labour, particularly in the soya sector. Consequently, flex crop production in Mozambique has been diverted away from the vision of smallholder inclusion (Hall, 2011). Nonetheless, contract farming persists as an inclusive business model, which aims to establish "an agricultural production system carried out according to an agreement between a buyer and farmers…and conditions for the production and marketing of a farm product or products" (FAO, 2012: 1). This agreement is ideally understood

as a way of sharing the value creation among those who participate in the contract farming (Veldwisch, 2015).

At the same time, the concept of inclusiveness attached to contract farming usually considers how investors should include local populations in their investment projects as a starting point, in the form of 'productive employment' and 'inclusive growth' planning (Szirmai et al. 2013; OECD/WTO 2015). This inclusion is supposedly beneficial to the producers who need to increase access to markets and inputs, and to the buyers who need to ensure stable supply sources to generate economies of scale (FAO, 2012). Yet, there are works raising doubts on whether benefits are being seized by already better-off landowners; and that employment conditions remain underpaid and temporary (Hall et al., 2015). Thus, there is an emerging understanding that the contract farming and its inclusiveness could rather be endorsing the underlying inequality that has produced impoverished smallholders in the first place – although the literature still lacks empirical works to substantiate these claims.

While the inclusivity of flex crop contract farming is an important topic of enquiry, the agency of the various actors who are involved in this process deserves particular attention, since this strongly shapes the social organisation that drives processes of exclusion and inclusion. After all, contract farming creates 'nodes of relationships' between transnational and national investors, the government at all levels, and local communities (e.g. Massey, 2004); and leads to open 'rooms for manoeuvre' as farmers experience these relationships (Clay and Schaffer, 1984). What are the experiences of contracted farmers or those who decide not to go under contract in the process of crop expansion? What have they done along the way and how have their experiences affected the very modalities of contract farming and the 'inclusive' business models?

Previous studies on land governance have shown that any process of official territorialisation, including land grabbing, affects and is simultaneously affected by local struggles (Otsuki, 2013). The dialectic interaction between the official demarcation and local struggles potentially rearranges social and power relationships and creates a new space for change in which individuals and groups reflexively claim their rights to be included "in so-

cial, economic and political life" (Beall and Piron, 2005: 8). This is not the usual invited space where investors outline terms of inclusion for poor people; it is a space where people are supposed to freely negotiate their terms of collaborating with investors or where people decide not to collaborate with investors at all.

II. THE CASE OF GURUE DISTRICT

In what follows, we trace how contract farming and the experiences of the contract farmers evolved in Gurue. Following a description of the study's methods, we analyse soya expansion processes in the district and how different business models to commercialize the sector evolved. The boom and bust processes experienced by soy contract farming are examined, including farmers' own interpretations of this process.

Methodology

To understand the evolution of soya expansion and contract farming, three months of field research were conducted in four areas in Gurue district. The district was chosen for its large concentration of soya smallholder producers. According to TechnoServe, a US-based non-profit organization developing business solutions in Mozambique, Gurue has approximately 4,000 soya bean farmers against 10,000 in the province and 19,000 in the country. Lioma, Tetete and Magige localities (administrative division in Mozambique) were chosen for their relevance in Gurue's soya production system. A total of 160 household questionnaires were collected, using CIFOR´s LIFFE project (Large-scale Investments in Food, Fiber and Energy) methodology that includes interviews and focus group discussions with relevant stakeholders, such as smallholders, associations, investors, governmental officers, among others. Among these questionnaires, 60 provided information on non-participant households, that is, the households who have stopped production for more than two years or have never produced soya. Questions were generally about the inclusion criteria for soya associations, about

whether the households had produced soya before, and about conditions for starting producing, besides general household and employment characteristics. Questions were also about the reasons for not producing soya or having stopped production. Additionally, focus groups discussions were conducted with more than 20 local and provincial governments, community authorities, producer forums and associations, civil society and investors to obtain information on the existing policies and institutional constraints.

Important limitations of the analysis, however, are that the sample size does not allow extrapolations for the whole district. It does allow inferences about the configuration of the situation, especially in terms of access to inputs, reasons for not producing soya, and inclusion criteria in associations under the Federation. In addition, the numerous focus groups discussions and interviews with key stakeholders substantiate the results found through sampling.

Soya expansion in Gurue

The cultivation of soya bean began in the 1980s when the country's socialist regime looked to develop state farms throughout the country. The centre of soya bean production was in the administrative post of Lioma, within the district of Gurue, on the Zambezia plateau. The state farm, Agricultural Complex of Lioma (CAPEL), planted, among other crops, between 400 and 500 non-irrigated hectares of soya bean, with technical assistance from Brazilian development cooperation. This project failed when the widespread armed clashes of the Civil War reached Lioma. The Civil War ended in 1992, but soya bean production in Mozambique would not resume until the early 2000s.

In 1997, Mozambique passed a new Land Law, declaring all land as public land and that should be used for the benefits of local communities. At the same time, failed state farms such as CAPEL were being re-occupied by small and medium sized farmers, and development NGOs were very active in their involvement to promote food and nutrition security. In the early 2000s, the international NGO, World Vision, introduced soya bean production in the region as part of a project to enhance nutrition and food security

of children. The project encouraged women in all the districts of the province of Zambezia to learn how to make soya porridge for their children; and helped smallholders to organise themselves into associations and cooperatives. With the incipient and successful dissemination of soya production, other international non-profit organization as well as the government and the private sector began to recognize opportunities to commercialize soya bean production in order to contribute to poverty alleviation and to facilitate market access for smallholders in the region. New varieties of soya were bred by the International Institute for Tropical Agriculture (IITA), adapted to the Zambezia plateau's agro-ecological conditions and disseminated with support of non-profit organizations.

In 1995, CLUSA (Cooperative League of the USA), a US-based association of cooperatives commenced operations in Mozambique (CLUSA, 2016a). Their aim was to help small producers by developing markets and food security activities. In 2006, it supported smallholders' associations to establish local platforms and the Federation of Producers of Gurue (FEPROG). In 2009, CLUSA also opened demonstration plots as a part of its Prosoya project (CLUSA, 2016b) to teach small farmers the benefits and techniques of soya cultivation, and aimed to consolidate the associations and FEPROG. In 2010, the American technical assistance agency TechnoServe (TNS), who had been active in the dissemination of soya in the district since 2008, joined CLUSA to form another two projects (GateSoja and AgriFuturo) , which aimed to upscale the production of soya beans. In these three projects ending between 2012 and 2014, new varieties from Brazil and locally adapted varieties were introduced, and linkages between producers and markets were strengthened.

Through these projects (Prosoya, GateSoja and AgriFuturo), many farmers became convinced of the benefits of soya production, as the non-profit organizations (NPOs) supported them in the context of securing food, land tenure, and nutrition in the impoverished Zambezia plateau. In this way, soya bean disseminated rapidly throughout the region. The expansion attracted large private enterprises that aimed to produce soya beans, mainly for chicken feed. The chicken industry grew considerably in Mozambique

over the 2000s, increasing the demand of chicken feed to unprecedented proportions. The demand for soya for chicken feed production is still not met by the domestic market.

Emergence of contract farming

In 2012, CLUSA finished the Prosoya project, in which they offered seeds under the condition of receiving in return double the volume in soya beans. For receiving seeds, producers would pay a symbolic participation fee. Besides seeds, inoculants (paid after the harvest) and free technical assistance were also offered. For those producers willing to apply biocides (which was not necessarily part of the package), CLUSA could also provide these at a cost-recovery basis, also paid after harvest. In addition to inputs, CLUSA helped the farmers' associations to find buyers for their produce such as Abílio Antunes and Frango King (chicken producers in Manica and Nampula provinces, respectively).

This CLUSA experience set foundation for the development of outgrower schemes, with CLUSA seeking to improve market relations and develop a commercial farming culture among small farmers. However, this initial experience went by almost unreported in the face of a parallel process of large-scale plantation establishments that made headlines as infamous land grabbing cases. For example, the project HoyoHoyo acquired the 10,000 ha from the former state farm of CAPEL, from which 1,650 ha of land were established as a soya bean farm. Families previously occupying that land were relocated to areas allegedly unsuitable for farming and were offered soya inputs as a form of corporate social responsibility (CSR). Such a land grabbing case attracted more media and scholarly attention than the process that CLUSA established by which farmers started to engage in management of a soya seed bank, as a part of the widespread technical assistance given to the organised farmers across the district.

The seed bank was the mechanism CLUSA established to sustainably exit from the Prosoya project. It would later prove itself to be the pillar of success of this first project. The seed bank was meant to function as a repository from which the association members could withdraw seed before the

campaign and repay in double the quantity of loan in grains after harvest. The grains would then be sold and the proceeds used to replenish the bank with high quality soya seed. The scheme was essential for the great majority of smallholders, who are not able to buy inputs themselves, either because of prohibitive prices, for lack of inputs nearby or for not being in a contract farming scheme. The coordination led the FEPROG to continually grow and, in 2014, it hosted 127 smallholders' associations, organized under 11 geographically defined platforms, called Forums – which managed the local seed banks. This signifies that more than 5,200 agricultural producers (of which 2,400 are women) could be mobilised to engage in the soya bean production.

As CLUSA would only identify potential buyers, but would not mingle in negotiations between them and the farmers or in the arrangement of transportation to take production to agreed locations, FEPROG became increasingly central to establishing linkages between producers and buyers. In addition, FEPROG catalysed not only NGOs and NPOs that sought for projects partnerships, but also the government and companies. In this way, FEPROG became the centre of the soya bean mass-dissemination, only rivalled by recent TNS efforts to establish self-sustaining local inputs market and rental markets for machinery by creating a small-scale commercial farming class (explained ahead), already reaching 30 percent of the soya producers of Gurue and the neighbouring district, Alto Molocue. As Smart and Hanlon (2014, pp. 26) noted, once the scene was set for the commercial soya production in Gurue, the private sector was easily attracted to the region. By the same time contract farming companies fully came in and set up their schemes.

Boom-and-bust cycle of contract farming

In Mozambique, only a few sectors have proven to be viable for contract farming, namely the cotton, the tobacco and the sugarcane sectors. Contract farming in the soya sector in Zambezia in contrast proved not to

be viable. Of at least six identified investments that entered the soya sector in the region, three trialled contract farming. Only one remains active – though reportedly still unprofitable – to supplement production from its nucleus plantation, which forms the basis of its business model. Almost all soya smallholders are thus now involved in the sector through open market sourcing, as opposed to the previous contract farming schemes that reached at some point about 500 farmers (according to an interview with TNS). The main reason for the failure of contract farming in the areas of soya production was the incompliance with contracts resulting from increased prevalence of side selling, the difficulty of monitoring the marketing behaviour of contract farmers, and the influx of informal and formal grains traders.

The practice of side selling by producers was quickly endemic. Side selling often happened for the following reasons. Firstly, unlike the operations in the tobacco sector, most companies of the soya sector did not assign enough personnel for on-sight monitoring of smallholder activities (the tobacco sector, for example, had a team of 550 extension service officers in 2014)[1] . Secondly, among local rural communities there are blatant local perceptions that a) inputs – seed, inoculants, etc. – should be offered for free, or for a symbolic price as the producers had initially experienced with other NGOs, and the state, and b) if a current project that distributes inputs fails, another one will certainly soon replace the previous. These two perceptions are rooted in what can be seen as a 'donor culture', which leads to a misalignment of expectations between farmers and contract farming principals. In other words, since most soya farmers were only familiar with NGO-led technical assistance projects, where consequences of incompliance are limited, many contract farmers do not understand or do not want to honour contract farming agreements that are less favourable since they operate through market principles. Once soya is harvested, smallholders therefore aim to obtain the highest possible prices in the market, in turn disregarding the costs that the buyer had with the purchase and distribution of inputs. This means that considerable time and resources must be devot-

1 According to a presentation held by Mozambique Leaf Tobacco, on 29th May 2014.

ed to ensuring soya farmers appreciate the importance of respecting more market-oriented productive relations.

The impossibility to monitor contract farmers also stems from the fact that the soya bean sector is not able to establish a monopsony scheme, unlike other successful contract farming cases in the cotton sector. It is also very difficult to build a monopoly, as happened in the tobacco sector, which makes contract enforcement more straightforward for the buyer. And, there were no mechanisms to control smallholder production through consolidated production, as is commonplace in the sugarcane sector in southern Mozambique, where smallholder production is organized through block farms.

The involvement of a large number of buyers and a relatively large space for the farmers to develop their own production poses yet another issue. In Gurue, for example, the access to international grain traders, such as Cargill and ETG, to middlemen and third party commercial people (typically called Bangladesh, as middlemen in Mozambique are mostly with South Asian origins) has rapidly improved in recent years. Just like it is impossible to monitor smallholders' activities when they are highly dispersed, it is impossible to fully regulate the practices of independent buyers. The availability of these alternative buyers facilitates side-selling by farmers who wish to do so against their contract.

After the bust

Companies gradually abandoned their contract farming activities in 2014, and the seed bank managed by FEPROG's Forums became in practice the primary source of soya seeds that the producers could obtain on a credit basis. Its management however proved dysfunctional when CLUSA's involvement in the seed bank in the region finished in 2014. The seed bank became a peer-controlled self-organised scheme, but without adequate accountability mechanisms resulted in high rates of default. Although the existing social capital within Forum structures could have generated sufficient incentives for smallholders to comply with repayment conditions, those responsible for managing the seed banks set poor precedents by fail-

ing to repay themselves. Eventually, most Forums were unable to generate sufficient resources to replenish its seed banks with high quality soya seeds.

By 2012, TNS had already started an alternative to the then flailing seed bank. It engaged small commercial soya farmers (SCF) in the commercial dissemination of soya seeds and inputs, as well as machinery for rental. There are currently around 30 SCFs in Gurue and Alto Molocue (most in Gurue) and they are large producers in comparison to their smallholder neighbours, with at least 10 ha of land to be used for TNS' project. Whereas the seed bank smallholders would access seeds by credit to be repaid at the end of the agricultural campaign, in the TNS scheme they need to pay cash upfront to their local SCF distributer. Although according to TNS already reaching around 30 per cent of Gurue's and Alto Molocue's soya producers, the system does not tackle a relevant issue for most (prospective) producers: accessibility and affordability of inputs.

Currently, the declining availability of quality and affordable inputs is forcing many interviewed smallholders to reuse past campaign seeds, which yearly decrease in quality and germination capacity. And the main current connection of smallholders to the soya market is through the middlemen and newly entering 'sourcing companies' that purchase soya beans at fixed amounts and prices at farm gate. A few intentional statements for sourcing started to be signed in the past two years, but no inputs are offered through these arrangements. These statements merely stipulate the quantity of soya to be delivered by associations at a pre-defined price and date of collection.

At the same time, a large proportion of smallholders struggle with inaccessibility or unaffordability of inputs (even when subsidized) and land loss and crop failures. A different situation compared to the times in which soya prices and production were high and producers were able to improve their housing conditions, pay for secondary school fees for their children, and acquire inter alia motorcycles, bicycles and cell phones.

III. THE CONSTRAINTS TO RE-ENGAGE WITH THE SOYA PRODUCTION

As we have seen so far, various factors forced smallholders to cease their engagement in contract farming, but there are persistent interests among farmers in the soya bean sector. In order to outline possibilities for these farmers to re-engage in production, we will need to specifically look into the sample of those producers who do not produce soya.

(1) Unavailability of inputs

According to the survey conducted in 2015, in Gurue, the majority of the smallholders want to enter the soya business. Of 60 non-producers households surveyed in four areas, 87 percent said they would like to become soya producers, and 8 percent answered they would not like to produce, but would change their mind if certain conditions, such as better prices for inputs or access to credit, were met. Focus groups discussions with associations not producing soya also substantiate this claim.

Of the sample of non-producers, 65 percent of the households had never produced soya. However, almost 80 percent of those are interested, but they are practically unable to do so due to a series of reasons. Lack of inputs nearby was the main cause for 61 percent of the households, a constraint that TNS is trying to solve through the SCF schemes. Prices of accessible inputs are another issue, since 16 percent of the interested households declared them to be prohibitive. Moreover, access to credit with post-harvest repayment options was considered a problem for 25 percent of the respondents, and the limited access to land was also consider a constraint for 16 percent of the households[2]. For the 35 percent of the households that have at least once produced soya, two-thirds (66 percent) pointed to input issues as the main reason for having stopped soya production. The main input constraints were related to prohibitive prices of inputs and the lack of inputs nearby. As main reasons for stopping or never starting soya production re-

2 Households pointed out one or a combination of two of the presented reasons. Thus, the total percentage superior to 100 percent.

volve around inputs access and prices, these results underpin the necessity of cheaper and more readily available soya inputs (such as quality seeds, fertilizers, pesticides and inoculants) to support smallholder production, as TNS is trying to do. Conversely, access to credit with post-harvest repayment options at reasonable rates can offer an alternative to smallholders to access the needed inputs.

It is worth recapitulating, however, that the contract farming schemes and soya seed banks offered this credit solution, but was soon made unfeasible due to the high default and side-selling rates. Nonetheless, since 80 percent of the non-producers surveyed are currently not members of any association they might not have experienced the seed bank, nor contract farming-type schemes, which may explain the reason for a great amount of interviewed households to place their hopes on a credit-based scheme of inputs access. Indeed, 47 percent of all the surveyed non-participant households pointed out access to credit with post-harvest repayment options as one important condition to become a soya producer, followed by cheaper prices for inputs (24 percent).

For the participant households, however, accessing inputs has also become a problem. Of 59 households currently producing soya, 43 (73 percent) are reusing seeds from past campaigns. An important difference, nevertheless, is that those still producing had access to seeds from the seed bank managed by the Federation's Forums.

(2) Reluctance to associate under FEPROG

The high prevalence of non-associated households suggests a correlation between having access to the means of soya production and being member of an association – particularly if under the Federation. As seen before, the FEPROG was one of the main links between buyers and producers during the heydays of contract farming. And it is performing a similar role now with the substitution of contract farming for sourcing schemes based on intention agreements. In this sense, understanding household reasons for not being members of an association (Figure 1) is important for understanding the reasons for smallholders not to produce soya.

Certain exclusion criteria were observed. After asking the households about the reason for not being member of an association, 6 percent explained that they are too far from an existing association, and 25 percent alleged that they do not have enough land or means to be accepted by their local associations. Others (6 percent) claimed that participation in associations are only for influential people of the communities, and 4 percent pointed out that they do not produce soya as the main reason for not being accepted in an association. Another 17 percent are waiting for an invitation or were actually denied by associations for no specific reason. However, a remarkable 38 percent of the surveyed households do not want to be part of an association or are sceptical about its organisation and benefits. Therefore, although being part of an association under FEPROG is decisively an easier way of acquiring necessary inputs and particularly market for soya, a considerable group still wants distance from these associations, including disillusioned former members.

Through the interviews with head members of FEPROG, it was possible to identify that associations are struggling with the lack of enough soya inputs and sourcing contracts for all of its members, meaning that even current members are already being excluded from soya production.

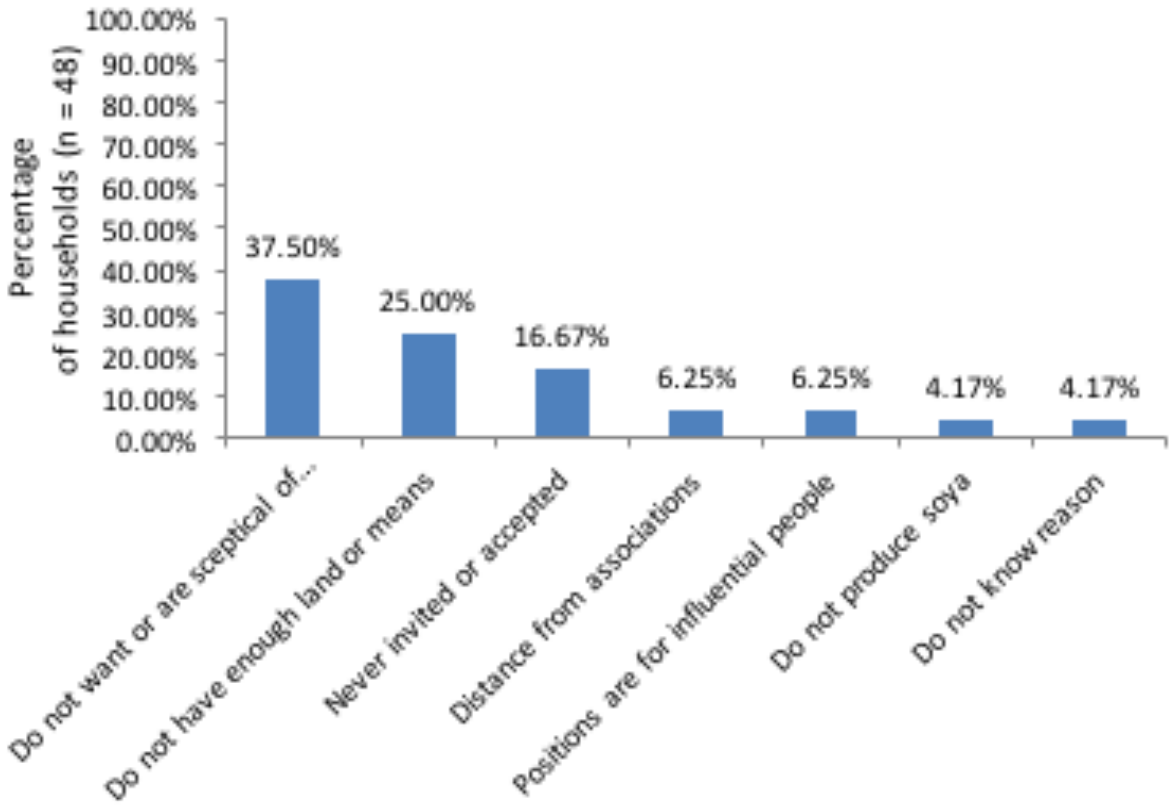
In sum, acquiring inputs for soya production is unequivocally the highest hurdle for smallholders to get themselves engaged in the soya sector. The high prices of quality soya seeds, for example, means that often only better-off commercial producers can acquire them. The agricultural department of the government lacks resources to provide enough and constant subsidized soya seeds for everyone; and the SCF scheme is not able to reach the large portion of the population and offer inputs at prices they can pay. Hence, many small producers are not able to engage in the soya sector.

Nonetheless, soya bean has not lost its importance in Gurue as one of the main cash crops[3]. The majority of the producers are still waiting for the return of donors or buyers who could make affordable credit schemes available for inputs. The influx of farm gate buyers has however revived hope amongst smallholders, particularly for those in associations that secured a statement of sourcing intentions through the Forums. However, for those

3 Last year's (2015) high market prices for pigeon peas (feijão-boer) may trigger a shift in next years' production in the region. Nevertheless, it is unlikely to completely replace soya beans. The presence of sourcing companies such as ETG and Cargill for sesame and other grains are also likely to provide alternatives for disillusioned farmers.

who are reluctant to organise themselves as a Forum-belonging association, the issue of access to credit and quality inputs remains unresolved. For this reason, the issue of developing more accessible input markets in the district is yet to be addressed. As mentioned, TNS is trying to address this issue by engaging small commercial farmers in the distribution of inputs and machinery rental in their localities. However, although reaching many smallholder producers who can afford these inputs, the scheme is still unable to reach the bulk of (prospective) producers – and soon, TNS is exiting the program and leaving it to be self-managed by the SCFs.

FIGURE 1 – PERCEIVED REASONS FOR NOT BEING MEMBER OF AN ASSOCIATION



Source: Authors' surveys

IV. FINAL DISCUSSION AND RECOMMENDATIONS

The process of soya bean production first expanded through the NGO interventions in the mid-2000s, then contract farming evolved into a transient experience in the district, and finally the current expressions of constraints that regards the input market and weak attraction of association in Gurue can be translated as the current structural impediments of the soya bean sector. Taking into account this process, if the logic of small farmers' side-selling and exit from the contract farming is analysed more in depth, it is possible to understand this entire process as one by which farmers exercised their agency to appropriate the development intervention, such as the seed bank and NPOs projects; the large-scale business investments, with which conflicts have arisen; and the ways that the contract is enforced. As farmers constantly engage in their local struggles to make their ends meet, they try to fit the sector development into their livelihoods strategies, leading to the disrespect for the contract or for the organisational base of this contract i.e. the Federation-belonging associations, which they did not deem fair.

These ways farmers exercise their agency in everyday places highlights that the system of contract farming and even sourcing in the region must rely on the existing local organisational capacities. Moreover, since the context of soya sector proved different to others and heavily susceptible to local agency, the system of contract farming and sourcing need to consider approaches that are different from cotton, tobacco or sugarcane sectors and, rather, more nuanced to local context and expectations. For example, first, individual farmers' access to input markets needs to be guaranteed, either by introducing affordable seeds; or re-vitalising the seed bank scheme with affordable credits and accountability enforcement. Alternatively, TNS's initiative of mobilising a commercial farming class as pivotal centre for inputs dissemination and smallholders inclusivity should be further explored, since it offers a sustainable alternative to the existing practices of FEPROG – which, as seen, are not attractive to all the small producers of the region.

Second, as the failure of the sustainability of the seed bank indicated, there needs to be more engaging technical assistance programme for the farmers to understand the importance of self-management of such an initiative. Many non-associates or those who left associations express their distrust of the managing board members of the associations, citing incidents of corruptions or misuse of assets. Ideally, local governments – typically the District Services of Economic Affairs (SDAE) – that work on rural extensions should be more engaged to ensure that the organisational management capacity of the farmers is enhanced. It is comprehensively difficult, though, when the local government counts with roughly one extension officer per locality to address producers issues and doubts with all types of crops.

Thirdly, a similar approach is lacking to curb side-selling risks deriving from NGOs former works in the district and other parts of the country that set a wrong precedent, distributing free inputs, instead of incentivizing a commercial mentality among local producers – and wrongly believed that the private sector would build on their work. When TNS and CLUSA advanced their soya bean projects in Gurue relying on a commercial mentality, the so-called donor culture mentality was already very much part of the local culture, and it was decisive for the failure of the seed bank. Understanding and working on curbing these issues are essential actions to avoid the failure of the commercial system that TNS is trying to consolidate with small commercial farmers.

Additionally to the aforementioned, currently there is no system of safeguarding smallholders from the potential crop failure or the price fluctuations, especially in the international market; and this sustains the vulnerability of the soya bean or any other crop sectors in Mozambique. Farmers should be able to thrive on diversified plantations that secure their own food and nutrition, and there should be a support for this diversification as the current focus on 'food sovereignty' has argued (Otsuki, 2014). Alternatively, they should also be able to specialize in sustainable manners, in case they decide so.

The failure of contract farming and potentially sustainable self-managed measures are new opportunities to rethink the entire set up of smallholder engagement in areas of crop expansion, and the soybean sector is an inter-

esting sector to look into in this sense, as it allowed farmers to create their own spaces of manoeuvre.

V. CONCLUSIONS

This paper has discussed the process of soya bean expansion in Mozambique, often illustrated by land grabbing cases. , It rethinks the process and shows how smallholders accumulate their experience and act upon the evolution of the process. The paper has paid particular attention to contract farming, as it is often promoted as an 'inclusive' business model that is alternative to the land grabbing.

The experience of the soya bean farmers in Gurue district has shown that they are partly in fact deciding how they want to be included into different models, and this decision-making process is something we need to closely investigate. The soya bean expansion in Gurue has been accompanied by popularisation, struggles of plantation models, and the development and decline of contract farming throughout the past decade. This process has shown how farmers evaluated their experiences in relation to their everyday life, and addressed needs to specifically improve conditions of farming in relation to, but not necessarily confined within, the framework of contract farming. The problem is that little attention has been paid to the farmers' experiences on the ground and manifestations that could potentially work to improve their livelihoods and relations with the market.

The paper has detailed evolution of the soya sector in Gurue, which has gone through the structured experience with soya plantation in the 1980s. Then, in the early 2000s, after a gap of around two decades, soya reappeared with a nutritional goal and rapidly disseminated throughout the plateau for the private business. These businesses were preceded by three NPO-led projects (in about one decade) to train smallholders, amplifying the dissemination and commercialisation of soya. This trajectory clarified that some investments were interested in plantation schemes only, whilst others wanted to involve smallholders. In this setting, cases of land grab

occurred, but contract farming also blossomed. The involvement of international non-profit organizations was essential to shape sector development trajectories, in particular during the years of formation of associations and their seed bank. Smallholders organised in associations under a Federation were able to access soya inputs and increased soya production in a period of high soya grain prices – defining the golden age of smallholders' soya production. Many smallholders failed once the seed bank project was made unsustainable, and the aftermath is currently showing the decrease of smallholders' production. At the same time, while all but one investment gave up on contract farming and moved away or started sourcing soya instead, the new SCF scheme is contributing to the re-inclusion of many producers that faced this decline in inputs availability.

Such an evolvement has implications for the policies of international cooperation that, differently from what TNS and CLUSA tried to implement, often turn out to be unsustainable and create aid dependencies, for lacking a commercial long-term perspective. In the case of Gurue, different factors reveal the failure of the implemented policies: national governments attracted private investors to resource-rich areas while being unable to monitor their operations; local governmental rural extension services were often absent from the accompaniment of farmers' organisational activities such as seeds bank; and, local associations and federations failed to attract non-associates to get organised and to be involved in the management. The smallholders struggle to develop their livelihoods in their everyday places throughout the multi-scale policy failures and incapacities of the state, as well as of not commercially motivated NGOs and international cooperation.

In a broader view, the case of Gurue can also translate into meaningful learning for other sectors in Mozambique. Involving smallholders has proved to be a challenge in the country, and the issues here presented partly translates into other sectors. Side selling, for instance, is reported throughout the country and is one of the main reasons for many investments failures, as many investors operating through smallholders have large losses because of contract breaching. In addition, there are many projects of crop expansion and markets development organized by the international and national public sector in Mozambique. Observing the trajectory of the soya

sector and how overlooking local smallholder agency translated into failure of otherwise sustainable systems, can provide relevant insights for many projects in the country.

This situation reveals the importance of having policies that focus on building capacity of the state at different levels, based on a deep understanding of local contexts and nuances, and that support initiatives of commercial character, such as CLUSA's seed bank and TNS' small commercial farmers scheme Moreover, they should also build capacities of producers, to ensure they are able to hold the state accountable for making these initiatives sustainable.

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