



SMALLHOLDER COFFEE DEVELOPMENT PROJECT (CODE-P)

# ANALYSIS STUDY ON POLICY AND REGULATORY BOTTLENECKS AFFECTING COFFEE SUBSECTOR IN THE SOUTHERN HIGHLANDS OF TANZANIA

Lawrence Chuma  
Consultant  
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## LIST OF ABBREVIATIONS

AMCOS	Agriculture Marketing Co-operative Societies
ANSAF	Agricultural Non-State Actors Forum
ASDP	Agricultural Sector Development Programme
CODE-P	Smallholders Coffee Development Project
CPU	Central Pulper Unit
DAE	Dan & Associates Enterprises Ltd.
DED	District Executive Director
DC	District Council
EDF	European Development Fund
FOB	Free-On-Board
HH	Household
HP	Home Processing
ICT	Information and Communication Technology
LGA	Local Government Authorities
MDA	Ministries, Departments and Agencies
MoA	Ministry of Agriculture
NGO	Non-Governmental Organization
TaCRI	Tanzania Coffee Research Institute
TADB	Tanzania Agricultural Development Bank
TCA	Tanzania Coffee Association
TCRA	Tanzania Communications Regulatory Authority
TCB	Tanzania Coffee Board
TWLB	Tanzania Warehouse Licensing Board
USSD	Unstructured Supplementary Service Data
VEO	Village Executive Officer
WRRB	Warehouse Receipts Regulatory Board

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## EXECUTIVE SUMMARY

This report was conducted by ANSAF to identify systemic bottlenecks in policies, strategies, regulations and laws that are affecting the coffee subsector development in the southern highlands regions of Tanzania, to build recommendations from key value chain actors, and to develop an advocacy strategy to address issues identified.

The study involved collection of data from literature review and survey that involved data collection from the field. The field visits used structured questionnaires, key informant interviews and focus group discussions. Primary data were collected from Nyasa DC and Mbinga DC in Ruvuma Region, Ileje DC and Mbozi DC in Songwe Region, and Mbeya DC and Rungwe DC in Mbeya Region. Respondents includes LGA officials, smallholder producers, local investors, AMCOS and other key coffee value chain stakeholders.

The overall objective of the study was to identify policy and regulatory bottlenecks affecting the coffee subsector development in the southern highlands, the study further carried out a comprehensive review of existing and relevant literatures to identify the coffee key policy issues affecting coffee subsector and thereafter develop an advocacy strategy to address identified policy issues as well as developing a policy brief on the issues as identified. Additionally, the study was expected to conduct SWOT analysis on coffee value chain actors in relation to the existing policies and practices, as well as identify challenges facing famers and other local investors in the coffee subsector.

The analysis involved review of policies, acts and regulations that affect the coffee subsector directly or indirectly, and discovered both policy and non-policy issues in access and ownership of land, access to quality inputs, access to quality extension services, post-harvest management, marketing, access to finance, gender and youth inclusion, infrastructure, and the use of ICT in the sub-sector.

The analysis further carried a SWOT analysis of the policies, acts and regulations themselves and discovered strengths and gaps, and has recommendations on way forward that is accounting for issues that smallholder farmers and local investors face, and best practices for the subsector after consulting with all stakeholders along the coffee value chain.

## 1.0 INTRODUCTION

### 1.1 Background

The coffee subsector constitutes among significant agricultural subsectors in the country. Coffee is one of Tanzania's primary agricultural export commodities accounting for about 5% of total export value, and generating export earnings averaging USD 100 million per annum over the last 30 years. It is further asserted that, the coffee subsector provides direct income to more than 450,000 farmer households, thus supporting the livelihoods of an estimated 2.4 million individuals (TCB, 2012). Moreover, coffee is the second most important export commodity after tobacco in Tanzania, which accounts for about 14% of agricultural export value (TCB, 2012). However, Tanzania's share in the World Coffee Market is less than 1 percent (TCB, 2017)

Despite its smaller share in the world market, the Tanzanian coffee industry has a bright future because it produces Mild Arabica coffee of Colombian origin which is of higher quality and demand compared to other coffee such as Robusta. It is further estimated that 90 percent of coffee in Tanzania is produced by smallholder farmers with less than 1 hectare of land (TCB, 2012). The estates production is estimated to be 10 percent (Ibid.). Smallholder farmers produce coffee mainly for commercial purposes, only 4.8 to 7 percent of annual production is consumed domestically and the rest is exported (TCB, 2017). Generally, In Tanzania, Coffee is mainly grown in Kilimanjaro, Arusha, Tanga, Iringa, Morogoro, Mara, Kigoma, Kagera, Katavi, Mbeya, Songwe and Ruvuma regions. Kagera is the main producer of *Robusta* which makes about 30% of all coffee in Tanzania, and the remaining areas produce *Arabica* – with most of the Southern Highland regions producing the mild Arabica, while Tarime in Mara produces the hard Arabica coffee.

ANSAF is currently working in a consortium to implement a four years (2020-2024) project dubbed Smallholder Coffee Development Project (CODE-P). Other members of the consortium are Vi Agroforestry as the lead implementer, TaCRI, BRAC and Cafe Africa. The project is financed by the European Development Fund (EDF) through the Ministry of Finance and Planning of the United Republic of Tanzania. The main objective of CODE-P is to contribute towards inclusive and sustainable development of the coffee value chain for enhanced incomes and improved nutrition status of smallholder farmers in six districts of three regions namely Ruvuma (Mbinga and Nyasa), Mbeya (Mbeya and Rungwe) and Songwe (Ileje and Mbozi).

Specifically, the project seeks to achieve three goals, firstly, an increased climate resilience, production, and productivity of quality coffee; secondly, an increased income from improved postharvest, processing capacities and market linkages; and thirdly, an enhanced competitiveness of coffee value chain with supportive policy and regulatory framework. ANSAF's role in the project is to lead advocacy efforts to promote a conducive business and policy environment for the development of the coffee sub-sector. The project envisages to benefit 24,000 smallholder farmers, comprising of 14,400 young women (60% women) farmers and 9,600 young men (40% men) farmers between the age of 18-35 years.

The Southern Highlands emerged as one of the potential areas for the coffee growing areas in the country due to considerable favorable potentials in land including favorable climate and availability of uncultivated fertile lands which make it an ideal for extension to bigger coffee farms. Despite the conducive climate, average of last five year's coffee productivity in the southern regions has been

0.748 tons per hectares, equivalent to 0.54 kg per tree, as compared to 1.8 kg per tree in the Western regions of Tanzania (TCB, 2017).

## 1.2 Objectives

The main objectives of the assignment were to provide a comprehensive policy analysis on coffee value chain development in Tanzania, specifically in southern highland regions (Mbeya, Ruvuma and Songwe) and examined strength and weaknesses of the coffee value chain, policy/Acts constraints and recommendations to improve coffee value chain development. Specifically, the analysis involved:

- a) A comprehensive review of existing and relevant studies, reports, policies and guideline to identify the key policy issues affecting coffee subsector development,
- b) A SWOT analysis on coffee value chain actors in relation to the existing policies and practices,
- c) An identification of challenges facing famers and other local investors in the coffee subsector, and,
- d) Developing advocacy strategies to address identified policy issues and uptake of proposed recommendations

Therefore, this report is specifically prepared to addresses those four objectives of the assignment.



## 2.0 METHODOLOGY

The analysis employed the collection and analysis of mainly qualitative data, from a list of systemic randomly sampled participants from the specific Districts in which the analysis was conducted for secondary data, and analysis of coffee policy literature for primary data.

Guided interview of key informants using questionnaires was used, while focus groups discussion was used for smallholder farmers and AMCOS leaders and members. Outlined below is our coverage, sampling, data collection and data analysis of this analysis.

### 2.1 Coverage

The analysis covered 6 district councils in 3 regions of the southern highlands and southern zone of Tanzania. The regions and DCs covered are Rungwe DC and Mbeya DC for Mbeya Region, Nyasa DC and Mbinga DC for Ruvuma Region, and Ileje DC and Mbozi DC for Songwe Region. These six DCs are the main producers of coffee in that part of Tanzania. The table below indicates productivity data for each of the regions that are covered by this analysis with regards to coffee for the past three years.

*Table 1: Productivity in the regions of analysis*

Region		MBEYA	RUVUMA		SONGWE	
DC		Mbeya & Rungwe DC	Nyasa DC	Mbinga DC	Ileje DC	Mbozi DC
Productivity (tonnes)	2020/21	65,235.11	881	10,288	895	15,885
	2019/20	60,651.70	1,395	10,310	644.32	10,935
	2018/19	68,149	1,629	13,445	716.58	11,559

The analysis further reviewed and analyzed all relevant policies, procedures, acts, and other legal frameworks that directly or indirectly affect the coffee sub-sector, including those that affect areas that support the development of the coffee subsectors. Such areas are access to quality inputs and extension services delivery, post-harvest management, marketing, access to finance, gender and youth inclusion, nutrition, ICT and infrastructure. The literature review included considerable documents among them include, The Coffee Industry Act (2001), Tanzania Coffee Industry Development Strategy (2011-2021), Tanzania National Climate Change Strategy (2012), Cooperative Society Act (2013), The Seed Act (2003), Agricultural Sector Development Programme phase II (2016), National Agriculture Policy (2013), National land Policy (2016), Land Act (1999), Village Act, Local Government Finance Act, Cap 290 (2019) The Finance Act (2011), The International Coffee Agreement

(2007), Sustainable Industries Development Policy (1996-2020), National Business Blueprint Regulatory Framework (2017) Reports from TCB and TaCRI, reports, publications, plans and strategies on various aspect.

## 2.2 Sampling & Data Collection

### 2.2.1 Sampling

Given the nature of the study, a purposeful sampling was undertaken to ensure that responses were obtained from specific people who were in one way or the other involved in the coffee subsector, for that case, the choice of the study representatives was carefully done to ensure that only those needed for the study were required to participate. The initial planned numbers of representatives categorized as follow, 40 people per Districts representing the 5 main groups were selected. The 40 were randomly sampled in the following manner: 20 smallholder producers/farmers, 5 LGA/DC representatives, 5 Local Investors – processors, coffee Agri-input agents; 5 AMCOS leaders and members, and 5 representatives from regulatory bodies (TCB and TaCRI) making a total of 240 people as the sample for the 6 DCs of the analysis.

The sampling was so done to ensure that information garnered provide a full picture of the coffee subsector from the policy perspective, while at the same time focusing most on the smallholder producer who is the key integral in the supply chain.

The total number of people reached by the study was however, only 125 people. The respondents who were reached and their details – names and positions information are appended at the end of this report. The reasons for not reaching the entire intended list of sampled people are: it was both farming season, and festive season, so most smallholder farmers were not accessible, either being busy in their farms or travelled for end of year festivities; there was also a small number of respondents who respectfully asked that they not take part in this study even if they are available.

### 2.2.2 Data Collection

Primary data was collected from all the gathered relevant policies, acts and legal frameworks. The documents were reviewed with respect to the coffee subsector and policies affecting the development of the coffee subsector were noted, as it will be noted in 3.2 of the report where an in-depth look into the strengths and gaps of each policy document is detailed.

Secondary data was collected through the data collection tools involved questionnaires for each of the main stakeholder in this study: the smallholder producers (SHPs), LGA officials, institutional or regulatory stakeholders like TCB and TaCRI, local investors and AMCOS. We also employed Focus

Group Discussion for SHPs and for AMCOS leaders, and Key Informant Interviews for LGA officials, local investors and TCB, TCA, and TaCRI staff.

### 2.3 Data Analysis

The analysis sought to find patterns and understanding in the qualitative data we gathered from the field, as well as analyze the documents reviewed versus the actual practice on the field to measure the level of consistency between policy and practice. This included a lot of time corresponding with stakeholders and reviewing the documents supplied by the TCB and TaCRI.

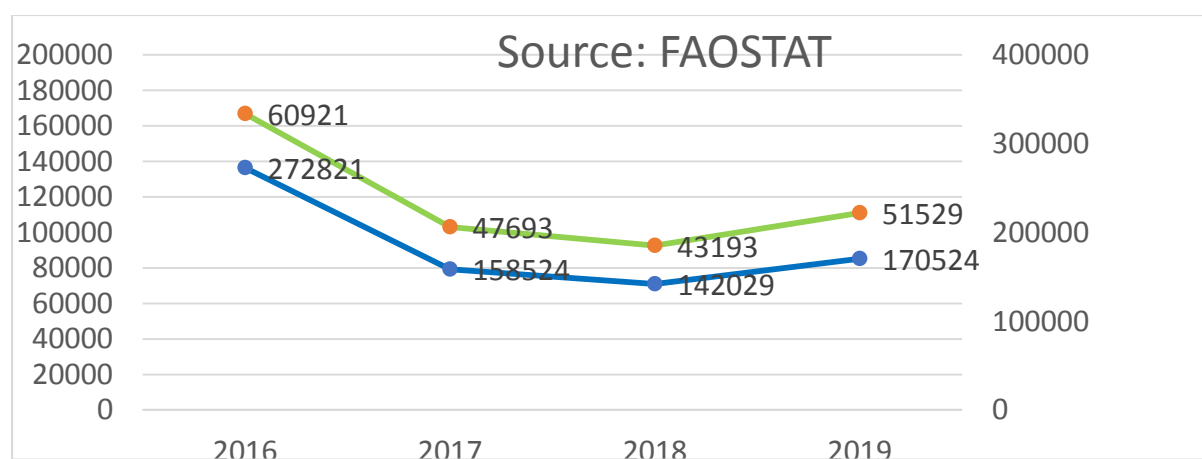
## 3.0 FINDINGS & DISCUSSIONS

### 3.1 Policies and Institutional Framework

The coffee subsector is one of major economic importance sectors in a country which generate considerable foreign exchange, tax revenues and employments for the smallholder farmers and other categories of people and organizations who are engaged in ancillary nodes of coffee value chain, such as research, production, processing, extension, transportation and Marketing (TCB, 2017). Globally, it is estimated that, coffee cultivation provides livelihoods for 20-25 million farming families and engages over 100 million people in its producing and processing (Hakorimana, 2017). It is further estimated that, in Tanzania alone, there are more than 2 million people engaged in the coffee ancillary activities (TCA, 2009).

Despite the fact that Tanzania produces the best coffee of mild Arabica of Colombian origin which is of higher demand compared to other coffee such as Robusta, yet, the production of high-quality coffee has declined dramatically and remained low over 30 years (Mmari, 2018). An interesting data that compares Tanzania and Vietnam, indicate that in 1980, Vietnam produced only 73,000 bags, as compared to Tanzania's 1,062 million bags in the same year. By 2009, Vietnam produced 18 Million bags, while Tanzania produced 709,000 bags (ICO, 2010). For the past a decade production of coffee in the country has generally been either stagnant or decline as the years go by comparing with other coffee producing countries such as Uganda or Ethiopia, looking at Tanzanian' coffee production figures indicate that, in 2008 coffee production stood at 1186 Million bags, and ten years later (2018) the coffee production was at 1175 million bags, whereby, in Uganda on the same years the coffee production was recorded rising from 3335 to 4704 respectively (ICO).

Table 2: COFFEE TRENDS: AREA HARVESTED (Ha) v. PRODUCTION QUANTITY (Tonnes)



There have been considerable reasons advanced behind declining in both quality and quantity in the productions of coffee in the country, some of the reasons indicate that, Tanzania's coffee industry is increasingly unpredictable due to many factors which include, low adoption of improved varieties and old coffee trees, poor coffee agronomy and ineffective agricultural extension services, frequent drought and increasing temperatures that are unfavorable for coffee production; pests and disease, soil infertility and low fertilizer use, negative social norms that deny access to land for women, poverty and low access to agricultural credit, coffee market monopoly and low prices, unstable production and processing, shifting marketing policies, political interference in technical matters and

sector management, impractical implementation of ineffective rules and regulations and poor coffee development strategies (Mmari, 2018) (TCA, 2009) (Maghimbi, 2010) (Banturaki, 2010).

The question of productivity and quality of coffee has been considered as among challenges hampering the growth and progress in coffee subsector, poor mechanisms of coffee handling process has been repeatedly mentioned as among the factors to lead to low coffee quality produced, that, given the fact that 90% of coffee in Tanzania is produced by smallholder farmers (TCB, 2012), and that 90% of coffee produced by smallholder farmers is not processed by Central Pulperies Units (CPUs), but rather is processed through Home Processing (HP) (Ruben, 2018), it all leads to the coffee produced to be in low quality compared to the processed by the CPUs. Moreover, the pricing volatility has also been noted to further aggravate to the decline in morale of the farmers and hence abandoning handling the farms. The establishment of new Cooperatives (Tanzania, 2013) was considered to be a recipe for farmers to obtain good prices for the coffee, the expectations of the farmers was that, cooperatives will have more bargaining powers for the coffee prices stabilization and voicing the farmers concerns related to coffee production issues the respective authorities. The Cooperative Societies Act (Tanzania, 2013) articulates that, a society' principal objects shall include, conducting the business of supplying inputs for crop production, purchasing, financing, processing, marketing and distribution of agricultural produce. It further articulates the need for the cooperatives to raise the standard of living of its members. With all that described; however, the reality has been far from the reach that, coffee prices per kilogram of coffee have been low and delays in payments have been constant which both disturb and hurt the smallholder farmers. (Ministry of Industry, 2017) – it is no wonder that even with land available for expansion of coffee production (MINISTRY OF AGRICULTURE, 2013), there has been consistently decline in productivity and morale in smallholder producers, most of the AMCOS established have been struggling to live up to their courses and support farmers as required, additionally, most of the AMCOS are weak and characterized by considerable challenges manifested in lack of managerial capacities(ANSAF, 2020), all this has witnessed in their slow but steady shifting from coffee farming to farming other things like vanilla, avocados and horticulture (ANSAF, 2016).

The role of Tanzania Coffee Board (TCB) in the coordination, controlling, monitoring and supervision of coffee industry subsector in the country can't be over emphasized, the Coffee Board which is the creation of the Coffee Industry Act (Government T. U., Coffee Industry Act, 2001) and the Coffee Industry Regulations (Government T. U., 2003) has been conferred with considerable powers to deal with all matters related to the coffee industry subsector and everything relates to the coffee value chain, ranging from production, processing, quality monitoring, grading, auctioning, license issuing, to exporting. The Coffee Board is further mandated to regulate and coordinate different actors in the field to include, local investors, such as processors, exporters, buyers and registering of smallholder producers (the report indicate that, approximated 320,000 households were registered by 2007 out of the 450,000 households (Ministry of Industry, 2017). Moreover, the Coffee Board, has also been vested with powers and authorities to liaise and coordinate with other agricultural players such as TaCRI, and other legally established authorities, including, the National Seeds Committee (established by the Seeds Act, 2003, with the mandate to regulates the importation, exportation and sales of seeds in the country (Government T. U., The Seeds Act, 2003))and Tanzania Fertilizer Regulatory Authority, and so on, on matters patterning to the growth and development of the coffee subsector in the country. Given the TCB roles and mandates on coffee industry subsector and its importance as described earlier, it was seen imperative to engage with the TCB in getting the understanding on the

issues that impede the growth and progress of the coffee sector in the country with particular interest on coffee productivity, external and internal marketing and coffee quality improvement and the others issues related to the coffee value chain.

As earlier articulated, quality of coffee, price fluctuation and marketing, are among the critical issues facing the coffee industry. The Agricultural Marketing Policy (2008) acknowledges that, depressed prices for primary commodities in global markets and constraints to access local markets are some of the challenges facing agricultural products including coffee; equally, the share of export of coffee in the global markets has been shrinking yearly, largely due to increasing competition from other suppliers and subsidized productions. Looking at the statistics from International Coffee Organization (Tanzania is a member to the International Coffee Agreement (ICO, 2010) the data shows that, for the past decade, coffee export fell from 1157 Million bags to 856million of bags for 2008/9 and 2018/9 respectively. This raise doubts as to whether the country meets the annual export quota as required by the international commodity agreement (ICO, 2007).

Literatures further indicate that, considerable initiatives have been taken by the Government to revive and increase coffee productivity and value chain, in processing, marketing and export, etc. The Agriculture Sector Development Programme Phase Two (ASDP II) (Government T. U., 2017) It establishes coffee as a priority commodity, with an intent of increasing export quality and quantity. The Programme further, describes the government's intent to conduct local value addition on coffee and diversification of products by allowing more local investors to enter processing. It also articulates the establishment and piloting of the commodity/mercantile exchange platform for coffee – this added another way which markets are access for smallholder farmers.

Another milestone plan was articulated in the TCB formulated document, though, Tanzania Coffee Industry Development Strategy (2011 – 2021) (TCB, 2012) which establishes four very clear areas of focus: namely, First, *Increased productivity* from 50,000 tons to 80,000 tons by 2016 and 100,000 by 2021, and also make TaCRI to produce 20million seedlings annually; 10,000 new hectares of planted coffee. Secondly, *Enhanced internal marketing process and business environment* though suppress unnecessary intermediaries and diminish transaction costs so that the farmers may receive at least 75% of the FOB price by 2021.,Thirdly, *Improved quality*, through Increasing quality of premium coffee from 35% to 70%; Progressive replacement of old coffee trees, extension officers capacity building, increase coffee quality through adoption of better harvest/post-harvest practices and enhanced processing equipment including Central Pulper Units (CPUs), and Fourth, *Development on new markets including sustainable coffee through enhanced promotion of Tanzanian coffees on export markets* in order to improve price premiums as well as exploration of new market opportunities. While the strategy seemed to be attractive, however, as the time frame approaches to the finality, the status of implementation is yet to be known.

The enactment of the National Agricultural Policy (MINISTRY OF AGRICULTURE, 2013) which informs the entire agriculture sector was meant to provide for the commitment of the government in the agricultural sector and address issues of concern of agricultural production which in one way or the other could have an impact on the agricultural sector. In a nut shell, the National Agriculture policy indicates the government willingness to Provide services to promote Finance research and extension services; Disseminate relevant information to stakeholders in the industry; and Promote production, value addition and marketing, to name a few, although the policy does not directly address coffee subsector, yet, it provides for a broader framework on the aspect of land related matters and other

connected issues and the role of various actors in agriculture sector. The policy further acknowledges that, high pre- and post-harvest losses, which make up 30-40 percent of the total annual crop production is among the key challenges in the agriculture sector; hence, it may have a negative impact on coffee smaller holder producers.

The climate change has been identified as among the reasons that affect agricultural produce, it has also been highlighted as a factor to low quality of coffee production. In the recent years, the reports by weather authority indicated changing in the rain's patterns, associated with fewer rains or floods in the coffee growing regions. The National Climate Change Strategy (Government U. R., 2012) which introduces the concept of climate change in the Tanzanian context gives the country's situational analysis – temperature and rainfall trends, it provides the actual strategy and implementation arrangements that focus on building the capacity of Tanzania's to adapt to climate change impacts, enhancing resilience of ecosystems to the challenges posed by climate change, Enable accessibility and utilization of the available climate change opportunities through implementation, enhance participation in climate change mitigation activities that lead to sustainable development, enhance public awareness on climate change, information management on climate change, put in place a better institutional arrangement to adequately address climate change and Mobilizing resources including finance to adequately address climate change. The strategy establishes Coffee as one of crops affected by increasing incidents of pests and diseases that are a result of changes in climate. It was therefore useful to establish the magnitude of impact of climate change and whether there are strategies put in place to encounter the climate change on smallholders' producers and other stakeholders.

Given the importance and potentiality of the coffee production in the southern highlands, the study was carried out to understand the practicability in the various laws, policies and programmes that are currently in place, and that, within those lines, to establish setbacks and challenges facing coffee smallholder producers and other key actors in the areas of coffee value chain.

## 3.2 SWOT analysis of Policies and Value Chain Actors

SWOT analysis was conducted to identify strengths, weaknesses, opportunities and threats for value chain actors in relation to the existing policies and practice. The findings from actors are organized in line with the value chain activity/node, these are the inputs node, production node, processing node, curing and warehousing node and Marketing and export node.

### 3.2.1 SWOT analysis of Policies

Table 3: SWOT Analysis of Policies

LITERATURE	STRENGTHS/OPPORTUNITIES	GAPS
The Coffee Industry Act (2001)	<ul style="list-style-type: none"> <li>- Establishing the TCB and its mandate</li> <li>- Comprehensive on growers' registration, cultivation &amp; husbandry, grading, licenses and coffee quality control</li> </ul>	<ul style="list-style-type: none"> <li>- SHP registration is just over 70% and has not reached 100% coverage</li> <li>- Cultivation and husbandry measures and quality controls are not fully implemented</li> <li>- Coffee Warehouse License v. TWLB</li> </ul>

	<ul style="list-style-type: none"> <li>- Only graded coffee to be sold</li> </ul>	issued licenses
The Coffee Industry Regulations (2013)	<ul style="list-style-type: none"> <li>- Builds on the strengths of the Act</li> <li>- Outlines good agricultural practices</li> <li>- Establishes the Coffee Stakeholders' meeting at the national level</li> <li>- Outlines contract farming as an option for registered growers</li> <li>- Establishes regulation for LGA role and their by-laws</li> </ul>	<ul style="list-style-type: none"> <li>- Coffee Warehouse License v. TWLB issued license is still not addressed</li> <li>- Contract farming has not yet been realized as a way to access markets for smallholder farmers</li> <li>- LGA by-laws at times do the opposite of what the regulation instructs them to do (increase production and maintain quality)</li> </ul>
Tanzania Coffee Industry Development Strategy (2011-2021)	<ul style="list-style-type: none"> <li>- Clarity on situation, opportunities, challenges, vision and implementation plan</li> <li>- Clearly outlines the 4 strategic thrusts [increase productivity; efficiency in value chain; quality improvement; new markets]</li> <li>- Domestic consumption has increased with the rise of urban coffee shops and home brewing</li> </ul>	<ul style="list-style-type: none"> <li>- The value chain still lacks the efficiency the document promised 10 year later</li> <li>- Productivity still averaging 300kg/ha and area harvested has decreased</li> <li>- Farm-gate to FOB average time is still 3 months</li> <li>- Transaction costs from farm-gate to FOB are still more than 25%</li> <li>- % of coffee processed in CPUs is less than 40% for Mbeya, and 35% for Songwe and Ruvuma regions so is coffee grade 1-7</li> <li>- % of coffee that is sustainable is still miniscule</li> </ul>
Agricultural Sector Development Programme phase II (2016)	<ul style="list-style-type: none"> <li>- Establishes coffee as a national priority commodity and as a cash crop of choice for Southern Highlands</li> <li>- It analyzes well the Tanzania policy environment and the role of agriculture in Tanzania's long term and mid-term policy framework</li> <li>- Establishes implementation strategy for national, regional</li> </ul>	<ul style="list-style-type: none"> <li>- It's implementation at regional and local levels has not been very effective</li> </ul>



	and local levels	
National Agriculture Policy (2013), The Seed Act (2003), The Fertilizer Act (2009)	<ul style="list-style-type: none"> <li>- Informs on sectoral policy issues, cross-cutting issues and institutional framework for policy implementation; defines conducive environment for policy implementation</li> <li>- Establishes Seed Committee, licensing of dealers</li> <li>- Establishes the Fertilizer Regulatory Authority, licensing of dealers</li> </ul>	<ul style="list-style-type: none"> <li>- Irrigation schemes are still not widespread</li> <li>- Agri-financing is still a challenge. While most AMCOS budgets are financed by banks and financial institutions, some farmers cannot access loans for a lack of collateral, including the traditional land deed.</li> <li>- Funding allocated for R&amp;D is still under 1%</li> <li>- Agro-processing is still low and infrastructure in rural areas remains poor</li> <li>- Weak producers' organizations</li> </ul>
National Land Policy (2016), Land Act (1999), Village Land Act (1999)	<ul style="list-style-type: none"> <li>- Establishes land ownership and land use in planned and unplanned areas</li> <li>- Encourages the private sector to mobilize resources to develop land</li> </ul>	<ul style="list-style-type: none"> <li>- Village land councils' operations are at times subject to corruption</li> <li>- Foreign entities cannot acquire village land by any means including leasing and this prohibits large scale investment specifically for coffee</li> </ul>
Cooperative Society Act (2013)	<ul style="list-style-type: none"> <li>- Establishes the TCDC, and outlines formation, registration, duties, privileges, funds and property of cooperative societies</li> <li>- Establishes the inspection of affairs cooperative societies</li> </ul>	<ul style="list-style-type: none"> <li>- The cooperatives, especially, primary societies are weak, and lack proper management</li> <li>- Funds and properties are not well managed</li> </ul>
Tanzania National Climate Change Strategy (2012)	- Offers an in-depth situational analysis, climate strategy and implementation arrangements	<ul style="list-style-type: none"> <li>- The strategy could not arrive at a definitive cost of implementing the strategy (it gives a \$100-500m per annum as a range estimate)</li> <li>- Has not been much implemented</li> </ul>
National Business Blueprint Regulatory Framework	- The Blueprint comprehensively analyses the existing regulatory challenges taking into account best practices internationally, and proposes robust principles	- It needs incredible political will to be implemented, and its adoption into practice has been slow paced

(2017)	and guidelines for reforms for many sub-sectors including coffee	
Sustainable Industries Development Policy (1996-2020)	- It adopts the private sector as the principle vehicle for productive activities	- The PPP growth has been sluggish, and the government remains a controlling player in many productive activities

### 3.2.2 SWOT analysis of Actors

#### *Inputs node*

On the input provision node, agricultural input dealers and factory processors play a huge role in providing agriculture inputs to AMCOS who further distribute to their members and farmers according to the projected output of the small holder producers. They issue the inputs on a loan basis, and TCB on behalf of inputs dealers deduct the financial equivalent after the small holder's producer's coffee has been sold and the farmers will receive the difference after all deductions have been made. TaCRI plays a role here by researching and providing seedling of the new coffee variants that are resistant to coffee leaf rust and coffee berry diseases. The District Councils, Village Executive Officers (VEO), and in some areas even the private sectors, operate nurseries for these seedlings. Financial institutions also have roles to play in provision of finance for purchasing land, agricultural inputs and machinery.

The SWOT analysis identified in this node is tabulated below:

*Table 4: SWOT Analysis of inputs node*

Strength	<ul style="list-style-type: none"> <li>• Presence of laws and regulations providing content and direction on inputs and coffee subsector, such as, The Coffee Industry Act, 2001, and regulations 2003, The Fertilizer Act No. 9 of 2009, the Seeds Act, 2003, etc.</li> <li>• Presence of legal institutions to control and supervise management of inputs, such as, Tanzania Fertilizer Regulatory Authority, National Seeds committee, TaCRI, and Tanzania Coffee Board (TCB), Primary Cooperatives etc.</li> <li>• Most of farmers are members to AMCOs and farmers associations</li> <li>• Most of the farmers pay for the inputs as required with minimum defaulting level</li> </ul>
Weakness	<ul style="list-style-type: none"> <li>• TaCRI lacks the capacity to produce adequate seedling required by farmers</li> <li>• Poorly funded TaCRI to undertake research and seedling quality control in coffee established farms regions</li> <li>• Bad road infrastructures such restrict easily availability of inputs on time and increase costs/ prices</li> <li>• Inadequate level of information among the farmers regarding the inputs and fertilizers</li> <li>• Inadequate capacity of regulatory bodies to supervise and manage the coffee sector as required by laws and regulations</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>• Demand for seedlings is bigger than the supply available to farmers</li> </ul>

	<ul style="list-style-type: none"> <li>• Demand for inputs is constant and required yearly by the farmers</li> <li>• Readiness and willingness of farmers to buy coffee seeds for their respective farms</li> <li>• The private companies can engage in importing and distribution of fertilizers as articulated in the fertilizer act (cap.378) and the fertilizer (bulk procurement) regulations, 2017</li> </ul>
Threats	<ul style="list-style-type: none"> <li>• Political interference and unpredictable political statements and instructions</li> <li>• Shrinking in the space and motivation of private sector to take an active role in the coffee subsector, as well as, a slow pace in the implementation of the Public Private Partnership Act, 2010, and its regulations 2011, may reduce production and competitiveness in the coffee sub sector</li> </ul>

#### *Production node*

The production node sees a combination of both public and private players – from banks that finance labor, machinery and agricultural inputs; to NGOs that provide small holder producers with extension services, financial literacy, support group formation and management, governance and how to setup savings groups; to private coffee traders who help farmers to access agricultural inputs and seedlings (for farmers under contract farming, and those who export directly); to the LGA that provide extension services to producers as well as coffee inspection through the District Coffee Inspector's office.

The SWOT analysis identified in this node is tabulated below:

*Table 5: SWOT Analysis of Production mode*

Strength	<ul style="list-style-type: none"> <li>• Presence of legal and policy enabling environment for new investors</li> <li>• Willing farmers to learn on new approach of modern coffee farming</li> <li>• Available arable land for establishment of new farms and extension of the same</li> <li>• Small farmers who are engaged in the coffee farming irrespective of price fluctuation</li> </ul>
Weakness	<ul style="list-style-type: none"> <li>• Absence of coffee production curriculum to train and mentor extension officers and farmers</li> <li>• Absence of Coffee National Policy to provide content and direction for coffee subsector at national level</li> <li>• Considerable number of taxes and levies which reduce ability of farmers to invest in coffee farms</li> <li>• Low quality of coffee production as results of inadequate investment to farms and poor tools for coffee primary processing</li> <li>• Withdrawing of farmers from coffee farming over other marketing reliable crops</li> <li>• Small farms cultivated with poor methods of farming</li> <li>• Inadequate capital for famers to invest in their farms</li> <li>• Inadequate financial engagements in the coffee activity, with higher interest rates for loans products</li> <li>• Minimum number of youth and women engaged in the production of coffee due to social and economic al factors</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>• The southern regions have bigger areas for farms extension and cost for land acquisition still not as higher as other places in the county where coffee is grown</li> </ul>
Threats	<ul style="list-style-type: none"> <li>• Climate change which could lead to unpredictable rains and unfavorable weather, may affect the production of coffee</li> <li>• Persistence fall in the coffee prices in the World market may discourage farmers to continue engaging in the coffee production</li> </ul>

	<ul style="list-style-type: none"> <li>and switch to easily available alternatives</li> <li>Lack of national coffee production competitive strategy may witness continuation of our coffee losing price battle</li> </ul>
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### *Processing node*

The processing node of coffee value chain has actors that are involved in the processing of coffee from ripe beans (cherries) to parchment coffee. These actors include: AMCOS through their owned CPUs, LGA's coffee inspector for quality control, LGA regulation of coffee processing licenses, as well as the small holder producers who process their coffee at home not in a CPU.

The SWOT analysis identified in this node is tabulated below:

*Table 6: SWOT Analysis of Processing node*

Strength	<ul style="list-style-type: none"> <li>Presence of legal and policy enabling environment for coffee processing investments</li> </ul>
Weakness	<ul style="list-style-type: none"> <li>Decrease in production of coffee by farmers withdrawing and abandoning their coffee farms led to low demand and decrease in the amount of coffee to be processed</li> <li>Small pace of opening in new coffee farms and general investment in</li> <li>Taxes and other levies imposed by LGA discourage investors to invest more in the processing arena</li> <li>Traditional way of processing with inadequate or low innovation in the processing mechanisms Amy wipe away the</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>Investment in establishment of new coffee farms and produce high quality coffee</li> <li>Investing in sophisticated processing machines for coffee such as CPU or hand-pulping machinery that can be afforded by small farmers</li> </ul>
Threats	<ul style="list-style-type: none"> <li>Discovering of new technology for coffee processing machinery may discourage current processing investors if no adoption to new technology is made</li> <li>Shrinking in the space and motivation of private sector to take an active role in the coffee subsector, as well as, a slow pace in the implementation of the Public Private Partnership Act, 2010, and its regulations 2011, may reduce production and competitiveness in the coffee sub sector</li> </ul>

### *Curing & Warehousing node*

The curing and warehousing node is where the parchment coffee is transformed into green coffee ready for export. Banks finance loans that are secured against the sale of the coffee, local investors like Dan & Associates Enterprises Ltd (DAE) in Mbinga, Ruvuma provide curing and warehousing facilities. TCB issues the curing & warehousing license. Warehouse Receipt Regulatory Board (WRRB) is responsible to ensure that warehouse operate smoothly and offer services, and this is done by inspecting the licensed warehouses from time to time.

The SWOT analysis identified in this node is tabulated below:

*Table 7: SWOT Analysis of Curing & Warehousing Node*

Strength	<ul style="list-style-type: none"> <li>Presence of legal and policy enabling environment for coffee investments in curing and warehousing</li> <li>Curing and warehousing business is part of the Coffee Industry Act therefore its licenses and operations are legally established and defined</li> </ul>
Weakness	<ul style="list-style-type: none"> <li>In the southern and southern highlands zone, curing and</li> </ul>

	<p>warehousing is mainly carried by foreign investment plants, or government plants like the one in Mbinga, but they are both not enough to satisfy the demand.</p> <ul style="list-style-type: none"> <li>Local investors, e.g., Dan &amp; Associates Enterprises (DAE) Ltd, are very few</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>Establishment of curing and warehousing plants</li> <li>Enough land already farmed and enough land for coffee farm expansions that will produce enough coffee to make an investment into a curing &amp; warehousing plant a feasible business</li> </ul>
Threats	<ul style="list-style-type: none"> <li>New policy allowing SHP to sell coffee in other channels not just AMCOS, may reduce the amount of coffee curing &amp; warehousing plants receive and with it, reduce their economies of scale</li> <li>Shrinking in the space and motivation of private sector to take an active role in the coffee subsector, as well as, a slow pace in the implementation of the Public Private Partnership Act, 2010, and its regulations 2011, may reduce production and competitiveness in the coffee sub sector</li> </ul>

### *Market & Export node*

Coffees is auctioned by the Tanzania Coffee Board which runs and conduct auctions in identified zones – for the Southern Tanzania, that is the Mbinga auction and Mbeya auction. TCB controls, regulates and set rules of the auction. TCB is further mandated by the Coffee Industry Act, 2001, among other key functions, to manage and supervise the coffee production, processing and marketing in the county as well as encourage establishments of liquor points.

The SWOT analysis identified in this node is tabulated below:

*Table 8: SWOT Analysis of Market & Export Node*

Strength	<ul style="list-style-type: none"> <li>Produce the best mild Arabica coffee of Colombian origin which is of higher quality and demand compared to other coffee such as Robusta</li> <li>Launching of zones auctions which are closer to farmers in the southern highlands, reduction in transportation costs</li> <li>Presence of legal channel and regulations that allow exporting of coffee across the globe</li> </ul>
Weakness	<ul style="list-style-type: none"> <li>Production of low-quality coffee due to inadequate investments, inputs and crops diseases</li> <li>Weak and un coordinated AMCOs to handle farmers marketing related issues</li> <li>Taxes, charges and levies and bureaucracy in the coffee exportation</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>Promote consumptions of varieties of coffee products, such as beverages, ice creams, candy, etc., to be in local market</li> <li>Establishment of liquor center/ points or coffee shops</li> <li>Establish new links and markets through partnerships, joint ventures, agency etc.</li> <li>Engagement in the direct marketing to customers in a foreign jurisdiction</li> </ul>
Threats	<ul style="list-style-type: none"> <li>Increase in availability of complementarity in beverages, such as tea and other soft drinks which hinder and reduce the markets and needs of coffee consumption</li> <li>Competition from other producing countries, such as Brazil, Vietnam, Ethiopia and Uganda who seem to produce coffee with best quality and quantity</li> </ul>

	<ul style="list-style-type: none"> <li>• Advancement in technology and inventions by coffee rosters who seem to control markets and control production of varieties of coffee irrespective of quality or types of coffee (Robusta or Arabica)</li> <li>• Lack or ineffective coffee production, marketing and exporting strategies may lead to declining prices and unreliable markets for Tanzanian produced coffee</li> <li>• Persistence in COVID 19 pandemic, is likely to cause more prices for coffee to go down further due to economic changes in many foreign markets especially, Europe and America</li> </ul>
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### 3.3 Challenges facing farmers and local investors

Beyond a comprehensive review of existing and relevant studies, reports, policies, and guidelines, as well as SWOT analysis to identify the key policy issues affecting coffee subsector development, the analysis further intended to identify challenges facing farmers and other local investors in the coffee sub-sector. To reach this objective the analysis included a field visits to the specific areas of interventions, namely, Mbeya region (Mbeya DC and Rungwe DC), Ruvuma region (Mbinga DC and Nyasa DC) and Songwe region (Ileje DC and Mbozi DC). In these locations, interviews with key stakeholders along the coffee value chain were conducted. The findings below were collected using guided interviews and questionnaires which were specific to different actors. The following are responses from the respective coffee actors with corresponding districts, areas with tick marks, indicate that, the responses were the came from all coffee actors interviewed.

Table 9: Findings from SHP and local investors

ACTORS	CHALLENGE	MBEYA		RUVUMA		SONGWE	
		Mbeya DC	Rungwe DC	Mbinga DC	Nyasa DC	Ileje DC	Mbozi DC
Small holder producers	Access to relevant, quality and affordable inputs (seedlings, fertilizers, insecticides, fungicides)	✓ AMCOS give SHP less than needed fertilizers and insecticides. Delays in inputs.	✓ Older SHP hold dear their pre-colonial coffee trees and are reluctant in replacing them. Delay in inputs.	✓ Nursery for seedlings, not adequate to satisfy demand of farmers. Inputs came up to a month after the season has started.	✓ No Agri-input supplier, they have to source inputs from Mbinga.	✓ No Agri-input supplier, they have to source from Rungwe	✓ Seedlings for new coffee variant from TaCRI reached farmers late
	Access to professional services (extension services, coffee inspection)	x Farmers acknowledge receiving extension services	x Extension officers reach the farmers	X Extension officers reach farmers	x SHP mention that the Coffee Inspector is working really close with them in helping them	✓ Coffee farming ward is 75 km from DC office and extension services reach farmers	✓ SHP felt that they do not get enough access to professionals in their farming

					farm coffee	sparingly	
	Processing and quality management (Home processing, HP versus Coffee Pulper Unit, CPU)	✓ Over 70% of farmers questioned use HP	✓ Available CPUs do not have enough capacity to match the productivity, hence use of HP	✓ 3 of the 7 CPUs linked to the 3 AMCOS reached are out of use. Farmers prefer HP than CPU because of cost.	✓ Of the 3 AMCOS reached, most CPUs are out of service in Nyasa, only 1 AMCOS has a functioning CPU, and it geographically not easily accessible by other AMCOS	✓ 9 out of 10 farmers use HP. Of 3 AMCOS reached, all their CPUs are not working.	✓ CPUs do not have capacity to process all coffee produced here, since coffee has a time window in which it must be processed. Therefore, farmers use HP more.
	Payment delays	✓ SHP complain of delayed payment after collecting coffee to AMCOS. Up to 2 months delay.	✓ SHP complain of delayed payment after collecting coffee to AMCOS. Up to 3 months delay.	✓ SHP complain of delayed payment after collecting coffee to AMCOS. Up to 3 months delay.	✓ SHP complain of delayed payment after collecting coffee to AMCOS. Up to 4 months delay.	✓ SHP complain of delayed payment after collecting coffee to AMCOS. Up to 5 months delay.	✓ SHP complain of delayed payment after collecting coffee to AMCOS. Up to 3 months delay.
	AMCOS management issues	✓ Government has limited the power of AMCOS compared to 1970s Cooperatives	✓ SHP said at times AMCOS leaders show partiality when it comes to who gets inputs first	✓ SHP reported AMCOS leaders can be dishonesty and not likely to be trusted	x Female-led AMCOS had farmers say that they trusted their leaders	✓ SHP reported that the government has limited the power of AMCOS compared to 1970s Cooperatives	✓ SHP reported that the government has limited the power of AMCOS compared to 1970s Cooperatives
	Shifting to other crops	✓ Farmers are	✓ Farmers are	✓ Farmers are	✓ Farmers are	✓ Farmers are	✓ Farmers are



		shifting toward vanilla farming because of assurance of payment	shifting toward avocado and horticulture farming because of assurance of payment	shifting toward maize and beans farming because of food security	shifting toward maize and beans farming because of food security	shifting toward vanilla farming because of assurance of payment	shifting toward vanilla and avocado farming because of assurance of payment
	Financial charges (various charges on the coffee price and bank charges)	✓ Farmers reported that they weren't not informed prior about the bank charges of operating an account and would prefer an over-the-counter payment than bank because of this.	✓ Farmers commented that the various charges on coffee price are too much squeezing their revenue close to 50% of FOB price	✓ Farmers are unaware of what exactly are the charges that are supposed to be charged on coffee price per kilogram	✓ Farmers feel left out on the auctions and are suspicious if the charges the AMCOS leaders tell them are right.	✓ Farmers are unaware of what exactly are the charges they are to be charged per kilogram of coffee	✓ Farmers noted that the money they get is somewhere between 50% and 60% of FOB price
	Youth and women involvement	✓ The involvement of youth is increasing albeit gradually. Involvement of women is low, especially on owning land.	✓ Few female-headed households are among coffee farmers, but their number is low and all AMCOS leadership was male	✓ Youth are involved mainly in the transportation of coffee with their <i>Boda-boda</i> and on their shoulder for hard-to-reach areas. Women involvement low.	✓ Youth are involved mainly in the transportation of coffee with their <i>Boda-boda</i> and on their shoulder for hard-to-reach areas. Women involvement low.	✓ Village executive officer is female and she is one of the successful farmers. Though she admits female and youth involvement is low.	✓ Some male farmers showed an open objection to the concept of a female owned and operated farm.

	Coffee prices	✓ Farmers commented that they were being squeezed to get low prices because AMCOS do not negotiate the best deals	✓ Farmers noted that they were getting better deals before the time of AMCOS	✓ Farmers noted that prices under AMCOS are almost half of the prices before AMCOS	✓ Farmers who are older noted how in the former Cooperatives paid good competitive prices.	✓ Farmers say the AMCOS system give them the lowest possible price since they don't have bargaining power – all their coffee goes to AMCOS only	✓ Farmers said since AMCOS system started they are getting lower prices.
AMCOS	Infrastructure	✓ Roads to most farmers are inaccessible with a truck leaving moving option to be manual labor	✓ Farmers are forced to carry produce on heads to reach some AMCOS	✓ Access to farms in the highlands is hard and has limited accessibility to foot pathways and <i>Boda-boda</i>	✓ Access to farms in the highlands is hard and has limited accessibility to foot pathways and <i>Boda-boda</i>	✓ Farmers are forced to carry produce on heads to reach some AMCOS	✓ Roads to most farmers are inaccessible with a truck leaving moving option to be manual labor
	Government abandonment	✓ AMCOS leaders feel that the government has abandoned them after reinstating cooperatives 3 years ago	✓ AMCOS leaders commented that the only time the see government commitment to them is on collecting revenues	✓ AMCOS leaders commented that the only time the see government commitment to them is on collecting revenues	✓ AMCOS leaders commented that the only time the see government commitment to them is on collecting revenues	✓ AMCOS leaders noted while government cannot interfere with AMCOS because of policy, they expected the government to be closer to them that currently	✓ AMCOS leaders and members noted that they do not get enough advice from Cooperative Officers to help them become strong AMCOS

	Input loan defaulters	x We did not find a case of input loan defaulters	X We did not find a case of input loan defaulters	X We did not find a case of input loan defaulters	✓ Some farmers had defaulted on the input loan by selling some of the produce to private buyers instead of taking it to AMCOS because they had personal issues to take care of like food, family member sickness, etc.	✓ Some farmers had defaulted on the input loan by selling some of the produce to private buyers instead of taking it to AMCOS because they had personal issues to take care of like food, family member sickness, etc.	✓ Some farmers had defaulted on the input loan by selling some of the produce to private buyers instead of taking it to AMCOS because they had personal issues to take care of like food, family member sickness, etc.
	Unprepared for new policy	✓ AMCOS commented that they feel they are unprepared for the new policy that allow coffee to be purchased in 5 different ways – [auction, contract farming, direct export, mercantile exchange and private buyers]	✓ AMCOS leaders said that the government should've given more time to strengthen AMCOS before introducing new policy	✓ AMCOS commented that they feel they are unprepared for the new policy that allow coffee to be purchased in 5 different ways – [auction, contract farming, direct export, mercantile exchange and private buyers]	✓ AMCOS commented that they feel they are unprepared for the new policy that allow coffee to be purchased in 5 different ways – [auction, contract farming, direct export, mercantile exchange and private buyers]	✓ AMCOS commented that they feel they are unprepared for the new policy that allow coffee to be purchased in 5 different ways – [auction, contract farming, direct export, mercantile exchange and private buyers]	✓ AMCOS commented that they feel they are unprepared for the new policy that allow coffee to be purchased in 5 different ways – [auction, contract farming, direct export, mercantile exchange and private buyers]

Local Investor	Infrastructure	✓ Location of AMCOS in relation to Agri-input dealers makes the cost to deliver the inputs high which effects the prices the farmers get	✓ Investors in transportation note that the roads to where AMCOS are is challenging especially during rainy seasons	✓ Transportation to processing plant is long from Nyasa DC, since curing & warehousing investment are done in Mbinga	✓ Transportation to Mbinga is arduous for farms that are deep in the mountains	✓ Investors in transportation note that the roads to where AMCOS are is challenging especially during rainy seasons. AMCOS are also over 100kms from where curing & warehousing plant is.	✓ Local investors in the Agri-supply noted that distance to AMCOS is a factor that drives price.
	Policy inconsistency	✓ Policy inconsistency has translated into low productivity, and this has in turn meant less coffee for processing plants	✓ Investors in curing & warehousing fear that policy inconsistency may render them irrelevant	✓ Investors in curing & warehousing are worried that they won't get enough coffee for the economies of scale of their plants with the new policies	✓ Investors in transportation commented that contract farming and direct export seem to be skipping them in the transportation role, and hire other transporters from other regions	✓ Agri-input supplier investors expressed concern that there has not be surety on the area that they serve that would ensure a business flow	✓ Investors in transportation commented that contract farming and direct export seem to be skipping them in the transportation role, and hire other transporters from other regions
	Soil testing date	✓	✓	X	✓	✓	x

		Lack of proper data from the Soil Analysis report that might help them in planning and distribution of fertilizers.	Lack of proper data from the Soil Analysis report that might help them in planning and distribution of fertilizers.	Agri-input investors did not present this concern	Lack of proper data from the Soil Analysis report that might help them in planning and distribution of fertilizers.	Lack of proper data from the Soil Analysis report that might help them in planning and distribution of fertilizers.	Agri-input investors did not present this concern
	Fake inputs and price per bag	✓ Agri-input investors commented on competition in the market from fake inputs	✓ Agri-input investors reported that most farmers find the price per bag (averaging at TShs 60,000) is higher than what they are willing to pay, TShs 50,000	✓ Agri-input investors reported that most farmers find the price per bag (averaging at TShs 60,000) is higher than what they are willing to pay, TShs 50,000	✓ Agri-input investors commented on competition in the market from fake inputs	✓ Agri-input investors reported that most farmers find the price per bag (averaging at TShs 60,000) is higher than what they are willing to pay, TShs 50,000	✓ Agri-input investors commented on competition in the market from fake inputs
LGA	Infrastructure	✓ Distance to AMCOS and farmers makes it hard for extension offers to execute their duties. Some lack means of transportation and the budget is constrained.	✓ Distance to AMCOS and farmers makes it hard for extension offers to execute their duties. Some lack means of transportation and the budget is constrained.	✓ Distance to AMCOS and farmers makes it hard for extension offers to execute their duties. Some lack means of transportation and the budget is constrained.	✓ Distance from highland farming wards, make getting coffee transporting permits a burdensome task, which will take a full day or two.	✓ Distance to AMCOS is over 75kms and over 90km to some farms. There is no public transportation to and fro, which leaves only <i>Boda-boda</i> , which charge a	✓ Distance to AMCOS and farmers makes it hard for extension offers to execute their duties. Some lack means of transportation and the budget is constrained.

						staggering TShs 50,000 from farming ward to DC offices. This means that a small task like getting a coffee transporting permit costs TShs 100,000 just on transportation alone.	
	Seedlings availability	✓ LGA nursery doesn't have enough seedlings to cover the demand from farmers.	✓ LGA nursery doesn't have enough seedlings to cover the demand from farmers.	✓ TaCRI Mbinga's nursery is assisting LGA nursery but still they don't make enough seedlings to cater for the demand.	✓ LGA nursery doesn't have enough seedlings to cover the demand from farmers.	✓ LGA nursery doesn't have enough seedlings to cover the demand from farmers.	✓ LGA nursery doesn't have enough seedlings to cover the demand from farmers.
	AMCOS leadership and challenges	✓ LGA officers reported some AMCOS leaders are selfish and show partiality.	✓ LGA officers have had to help some AMCOS resolve problems caused by farmers who are non-members who cause trouble because	✓ LGA officers noted that some AMCOS are really strong while others are struggling and need constant eye	✓ Cooperative officer noted that most AMCOS leaders lack financial and business operation literacy	✓ LGA officers have had to help some AMCOS resolve problems caused by farmers who are non-members who cause trouble because	✓ LGA officers have had to help some AMCOS resolve problems caused by farmers who are non-members who cause trouble because

			of their influence.			of their influence.	of their influence.
	Climate change	✓ Rainy seasons have become unpredictable over the years, and they start later than normal	✓ More lime is needed to treat soil now, and some farms have had to rely on irrigation	✓ Rainy season has become shorter and farms are moving more and more to higher lands	✓ Rainy season has become shorter over the years	✓ Rainy seasons have become unpredictable over the years, and they start later than normal	✓ Rainy seasons have become unpredictable over the years, and they start later than normal
	Policy Consistency	✓ LGA officers commented that the government has not been consistent in policy	✓ LGA officers commented that the government has not been consistent in policy	✓ DAO noted that the government has not truly communicated clarity on its new policy	✓ LGA officers commented that the government has not been consistent in policy	✓ LGA officers commented that the government has not been consistent in policy	✓ LGA officers commented that the government has not been consistent in policy

### 3.4 Potential strategies to address Identified Policy Issues

This part of the report intends to provide key findings that were identified during the data collection process which are categorically intended to describe the coffee value chain, in terms of respective policy, its practicability and proposed recommendations. The areas or categories of coffee value chain to be described in this part include, land, access to quality inputs and extension services delivery, post-harvest management, marketing, access to finance, gender and youth inclusion, ICT and infrastructure. This part will also highlight on general recommendation which will include broadly issues related to coffee productivity.

#### 3.4.1 Policy Issues and Recommendation

##### 3.4.1.1 Land

Land is a key factor in coffee production – both a specific type of soil and climate are needed to make coffee production a success. Therefore, it follows that the availability, access to ownership and fertility of said land will be major influencers in the coffee sub-sectors. Throughout the six Districts where the study was conducted, several things were consistent: There was more available land for coffee farming expansion; villages around the new areas were already planned by District Planning Officers, however, a good chunk of land, particularly the soil was not tested yet. Through the Tanzania Land Policy of 1995, Tanzania Land Act No.4 and the Village Land Act No.5 both of 1999 – Tanzanians are ensured by law a secure land tenure, and the policy further promotes for the optimal use of land resources for social economic development. Given that coffee farming is a long-term yielding farming, that is, the coffee tree will be producing coffee fruits for several decades, it is important for farmers to know and be sure that their land tenure is secured and they don't risk their lands taken from them without proper compensation, as stipulated in the land law. For the most part, during our field visits, we did not encounter issues on land ownership challenge as caused by gap in land policy - apart from cases of men domination of coffee farms as will be described later on in this report. Moreover, some policy issues in the area of land have been articulated here under:

##### *Policy Issues #1: Limited ownership of land*

It was witnessed by this analysis that the land ownership in the subsector is skewed towards adult males, and that the few young men and women who have embarked in production of coffee, do not have land deeds or traditional deeds which would help them much in issues like getting financing and the like. While the policy for traditional deeds is very clear, its implementation however has lacked behind in these DCs.

##### *Policy Issue #2: Limited access to soil analysis data*

The Land Policy of 1995 properly articulates that land must be put to optimal use, and part of this concern was what lead to the national soil survey, and its subsequent report of 2012, which among other things, points out the types of soils and the fertilizers that will be needed in that particular soil. For most SHP and local investors, they are not adequately informed on these data that will help them in applying the right amount of the right kind of fertilizers, know which seedling variety to use, and where necessary, which chemicals (pesticides and fungicides) to use. Soil analysis which can be done by kits, and gives the soil pH and 3 main nutrients – nitrogen, phosphorous and potassium, help much in bridging this gap.

**Recommendations:** The report recommends that:

- Land ownership to continue to be protected by the law and actual implementation of the law observed and safeguarded



- That the government bring soil labs to the DC level to help communicate soil analysis data to the smallholder producers
- That the available land for coffee farming expansion be targeted for youth involvement in the subsector.
- While land under the Ministry of Natural Resources is protected under the law, agricultural land is not protected in a similar manner, and most times its use is changed towards something else based on the political atmosphere of the time. Agricultural land needs to be protected in a similar manner.

#### **3.4.1.2 Access to Quality Inputs and Extension Services Delivery**

With the existences of legal frameworks, for instance: (Government T. U., The Fertilizer Act, 2009) (Government T. U., The Seeds Act, 2003); legal institutions who control and supervise management of inputs, such as, Tanzania Fertilizer Regulatory Authority (TFRA), National Seeds Committee, TaCRI, and Tanzania Coffee Board (TCB), Primary Cooperatives, etc.; the presence of AMCOS and the LGA Officials who are in charge of extension services – there exists a legal structure on how smallholder farmers should access quality inputs and extension services. TaCRI's research has yielded better coffee variants that are resistant to diseases and is more productive, and fertilizers and other inputs are mostly accessed by smallholder producers through AMCOS.

#### **Policy Issue #3: Limited access to quality inputs**

In practice, smallholder farmers have limited access to quality inputs – from seedlings, where TaCRI has yet to reach production capacity that equals to or exceeds the demand from SHPs. And because of this, some farmers remain with their legacy coffee trees since there are no seedlings to replace them with. At the same time, AMCOS give farmers input loans based on their past productivity, not based on their current need and projections – this limits the area of the farm in which the SHP can apply fertilizer, or they are forced to apply less than is required thereby limiting productivity. Due to lack of adequate data from soil surveys, farmers are using way less fertilizers than is required. Current average fertilizer used per tree is 65g, while the recommended amount per tree is 300g (TCB, 2021). This is clearly evidenced in the low productivity compared to other markets. At the same time, local investors who are suppliers of inputs, do not carry enough to satisfy the true demand that farmers have. A few instances of fake agriculture inputs were noted in Ileje DC and Nyasa DC. SHPs in Mbozi DC, Mbeya DC and Mbinga DC commented that the price per fertilizer bag, that ranged around TShs 60,000 should be reduced to TShs 50,000 and that it should not be fluctuating.

#### **Recommendation: The report recommends that:**

- TaCRI zonal offices be funded enough for them to produce seedlings that match with the subsector demands
- Private sector should also be looped in to ensure the number of seedlings produced match the market demand.
- Local investors be given proper data on the demands of inputs from the AMCOS they are serving and the projections on the increase thereof so that they stock enough to support the subsector
- Government should empower TCB to truly supervise the quality of inputs and ensures that the subsector is served well
- LGAs to strengthen the supply and distribution of inputs so that it can curb the existence of fake inputs. With collaboration with the TFRA, they can implement technology that allows all stakeholders, local investors, smallholder producers and AMCOS to verify if particular

fertilizer is genuine by code text based verification for feature phones and QR code scanning for smartphones.

#### ***Policy Issue #4: Limited delivery of extension services***

By their own admission, LGA officials in the DCs that we met with confessed that more could be done in delivering extension services. Specifically to coffee, agricultural officers mentioned the geographical challenges (coffee is consistently farmed in higher altitudes and district offices are consistently in lower altitudes), coupled with the officers not having a means of transportation such as a motorbike and/or lack of (reliable) public transportation as was the case for Ileje DC where there is no public transportation from DC head-quarters to the ward where coffee is farmed, and they have to lease *Boda-boda* to get there at a steep price of TShs 50,000 per trip. The consultant had to pay TShs 100,000 to go to the ward and back on a 2 hours *Boda-boda* ride. These challenges, together with the fact that all districts had only one coffee inspector, made it difficult, if not impossible in the LGAs to deliver the level of quality extension services that would be needed. The National Agricultural Policy of 2013 wants TCB to fund some extension services delivery – which for the most part has not been the case, and it looks like TCB does not have that capacity at the moment. Case in point, over half of the wards in Ileje DC (5 out of 9) that farm coffee, do not have extension officers. 28 villages in Ileje DCs and 41 villages in Mbozi DC which farm coffee, do not have extension officers. This

***Recommendations:*** This report recommends that:

- Extension officers to receive capacity building, as per the Coffee Industry Development Strategy, the 2012 Amendment with the utilization of the national Extension Officers Training Manual.
- And the government to employ agricultural officers at village and ward levels in order to bring the service delivery closer to the smallholder producer as well as equip them with transportations means such as motorbikes.

#### ***3.4.1.3 Post-harvest Management***

The National Agriculture Policy (2013) acknowledges that, among the key challenges in the agriculture sector, is the high pre- and post-harvest losses, which make up 30-40 percent of the total annual crop production. The Post-Harvest Strategy (2019 – 2029) estimates that, up to 40% of crops is lost through different manners, this lead to considerable loses that farmers incur. While there is no data on how much is lost in the coffee sector, yet, the estimation could either be almost the same to crops production, given the mechanisms that take to prepare coffee.

The Coffee Industry Act of 2001, and its regulations of 2003 articulates that “The picking and primary processing of coffee shall be done to the satisfaction of an authorized officer, and the Board may issue orders for proper coffee picking and primary processing”. The Coffee Industry Development Strategy comments that it aims to “increase coffee quality through adoption of better harvest/post-harvest practices and enhanced processing equipment including Central Pulper Units (CPUs)”. Post-harvest management refers to all practices and activities immediately after harvesting coffee berries and before roasting. This stage involves coffee processing – that act of removing the outer fruit encasing (pulp) to get the sought-after green beans. Afterwards the green beans are hulled, cleaned, sorted and (optionally) graded.

#### ***Policy Issue #5: Prevalence of HP over CPU in post-harvest management***

Over 90% of post-harvest activities in Tanzania are done by the traditional home processing (HP) and not in Central Pulper Units (CPUs). And consistently, in all 6 DCs, about half (7 of 16) of CPUs for the AMCOS we reached were either out of order needing maintenance or completely written off with

parts of it not accounted for. And even for the exiting functioning CPUs, some are geographically too far from smallholder producers and the AMCOS that don't have CPUs (the case for Nyasa DC), or their capacity is way smaller – less than 30%, than the output of smallholder farmers by far (the case for Mbozi DC, Mbinga DC and Ileje DC), or significant capacity – just over 60%, but not enough to satisfy demand yet (the case for Mbeya DC and Rungwe DC). Currently the national output of quality coffee is 35% according to the Tanzania Coffee Industry Development Strategy. And the use of HP consistently brings down the quality of our coffee. If we are to be competitive, and use our competitive advantages for our benefit, we must move towards CPUs that HP. Hence, the Post-Harvest Loss.

**Recommendations:** This report recommends that:

- The government to implement a regulation that would require all farmers to process only through CPU, and with it, provide incentives for local investors to operate CPUs so that the number of CPUs will match the demand from production.
- LGAs to have a by-law that requires private sector that operate CPUs to make sure that they are properly maintained and services
- The government to strengthen infrastructure to allow easy transportation of coffee from farms to AMCOS for processing
- CPUs to be maintained and repaired, and where necessary new ones bought, even with some help of debt financing, so that majority of our coffee is processed with CPUs
- Each AMCOS to have a CPU that is enough to satisfy the demand of their people.

#### **3.4.1.4 Marketing**

After coffee has underwent the post-harvest management processes, it is roasted and packaged to markets. In Tanzania, these markets can be access in five different ways: First, it is the TCB coffee auctions (established by the Coffee Industry Act of 2001 and its subsequent regulation of 2003) – this is where AMCOS take the coffee they've gathered from their members and farmers to be auctioned; Second, is Contract Farming – where farmers are allowed to enter into contract with buyers, where by the agree on price beforehand, and buyer will supply farmer with inputs, and will come collect the harvest at agreed price regardless of what the market price will be; Third, is Direct Export, whereby SHP organized through AMCOS can get a direct export buyer and sell their coffee straight as export after it has been certified to meet standards; Fourth, is Private Buyers, where SHP or AMCOS are at liberty to sell to private buyers instead of at the auction if they can fetch a better deal; Fifth and finally, it is though the Mercantile/Commodity Exchange Market digital platform (established in the ASDP II of 2017), an option currently available only for SHPs/AMCOS in the Northern Zone since the market is in Moshi, Kilimanjaro. Through these five ways, Tanzanian coffee enters the market.

**Policy Issue #6: Low farm gate prices/low free-on-board (FOB) price for farmers**

**Policy Issue #7: Multiplicity of Taxes, Charges and Fees on Coffee price per kg**

These two policy issues are combined here because they are linked and one informs the other. Because of non-optimal internal marketing process, high transaction costs – which are made even higher due to multiple taxes, charges and fees, most farmers end up with 50-60% of FOB, while the goal is to get it to 75% (TCB, Tanzania Coffee Industry Development Strategy 2011-2021, Amended Version, 2012). It is important to bring to perspective the fact that some of the regulatory challenges in the Agriculture sector have their origin in revenue motive of the regulatory agencies. Regulatory agencies survive and operate based on such revenue following the failure of government to financially support the operation of the Boards as directed by Circular No. 25 of 2006. As a result, various Boards

reverted to re-introduced charges and fees to cover operational costs of the Board. (Ministry of Industry, 2017). For instance, a study on the produce cess taxation system on Coffee by the Agricultural Council of Tanzania, showed the following as costs per 1 kg of clean coffee (Table adapted from The Blueprint for Regulatory Reforms to Improve Business Environment (Ministry of Industry, 2017):

*Table 10: Charges per 1kg of Coffee*

Clean coffee Price per KG	4500	Percent
TACRI Research fee 0.75%	33.75	0.8%
Fee to cooperatives	200	4.4%
Fee to main cooperative	100	2.2%
Coffee transportation	26	0.6%
Money transportation	9	0.2%
Crop insurance	1.25	0.0%
Money insurance	1.25	0.0%
Bank interest	150	3.3%
Local government (street) fee	135	3.0%
Processing fee (excluding VAT)	63	1.4%
Packaging Materials	65	1.4%
Health insurance	70	1.6%
VAT	23	0.5%
Value adding to coffee (organic)	50	1.1%
Pembejeo Voucher	100	2.2%
Price regulatory fund	100	2.2%
Total	1127.25	25.1%

So, at optimum levels, it is already 25.1% – any shift in any of these items means that the farmer gets less and less with each round. These multiplicities of cuts and non-optimal internal processes hurt smallholder farmers. For example, in Ileje DC, it costs SHP/AMCOS TShs 100,000 to and from their DC to get the coffee transportation permit, and that is if they will actually find the appropriate officers in the office, if they have to wait until the next day, that is an extra cost in meals and accommodation. These inefficiencies hinder progress of the subsector.

The government, in line with the Blueprint for Regulatory Reforms to Improve Business Environment, has implement direct changes in these charges, by removing over 100 charges on different agricultural products, 20 of those, on coffee itself. (Agriculture, 2020) The fees and charges removed are:

- i. *Green Coffee Export License for companies and AMCOS (Tshs 2,000,000)*
- ii. *Coffee Warehouse License for companies and AMSOS (Tshs 1,000,000)*
- iii. *Curing/Hulling License for companies and AMCOS (Tshs 2,000,000)*
- iv. *Premium Coffee Export license for companies (Tshs 2,000,000)*
- v. *Premium Coffee Export license for AMCOS (Tshs 1,000,000)*
- vi. *Roast Beans and Instant coffee export license for companies and AMCOS (Tshs 1,000,000)*
- vii. *Parchment/dry cherry coffee buying license for companies only, no charges for AMCOS (Tshs 2,000,000)*
- viii. *Green coffee export license for companies and AMCOS (Tshs 40,000)*
- ix. *Warehouse license form for companies and AMCOS (Tshs 40,000)*
- x. *Curing/hulling license form for companies and AMCOS (Tshs 40,000)*

- xi. *Premium coffee export license form for companies (Tshs 40,000)*
- xii. *Premium coffee export license form for AMCOS (Tshs 40,000)*
- xiii. *Roast Beans and Instant coffee export license form for companies and AMCOS (Tshs 40,000)*
- xiv. *Local roasting license form for companies and AMCOS (Tshs 40,000)*
- xv. *Cherry processing license form \$20*
- xvi. *Parchment/dry cherry coffee buying license form for companies only, no charges for AMCOS (Tshs 40,000)*
- xvii. *Auction administration costs (0.5% of proceeds of the auction)*
- xviii. *Coffee inspection fee contributed through coffee processing industries*
- xix. *Fees to the Tanzania Coffee Development Trust Fund, which was 0.1% of the sales revenue by producers and buyers*
- xx. *Export fee of auction price of coffee, charged as 0.25% of the price*

With these changes, which were defined in December of 2020, coffee smallholder producers are expected to get more from what they will sell as these changes take effect from this season.

**Recommendations:** This report recommends:

- The government should consider addressing overlaps in Regulations. Whenever more than one regulator does similar activity, the mandate should be given to a single regulator. The removed charges are a great step in the right direction. We applaud the government on the same. More efforts should be put in place to review all other charges and see which can be further removed in order to boost the sub-sector.
- The government could consider implementing Circular No. 25 of 2006 (after amendments, if necessary). This Government Circular established that the government should support the operations of Boards such as TCB. This will help TCB and similar boards to stop acting like revenue collectors and more like promoters and regulators of their sub-sectors. (Government T. U., Circular No.25 , 2016)

#### **3.4.1.5 Access to Finance**

Coffee financing play an important role in the modernization and development of the coffee subsector; however, the challenge remains that, most of the public and private financial institutions refrain from financing agriculture under the pretext and fear of high-risk involvement. Absence of finance to the agriculture particularly coffee sub-sector, affects investment for medium and large-scale farming. The coffee subsector is characterized by small farmers' producers who own an average of 3 acres of land in size, most of these farmers unable to borrow from financial institutions due to lack of collaterals and other issues as related to sales records. There has been considerable call to private and public financial sectors to intervene in the rescue of coffee farmers so that they may be able to support the coffee production though inputs and other necessary costs. The government through the National Agriculture policy (2003) committed to strengthen Financial Institutions and Financial Intermediaries (rural/community banks, SACCOS) to make them responsive to agricultural development financial needs. However, the implementation of the same seems to be rather impractical.

In our analysis, we met with officers from CRDB, NMB, MCCCCO (AMCOS) and City Coffee and discussed issues surrounding financing and the gaps that they see can be addressed. Here below, they are articulated:

### ***Policy Issue #8: Limited access to finance***

This study has revealed considerable challenges that coffee farmers are facing in the efforts to obtaining finance to support or extend their farms. Among the difficulties encountered include, lack of collateral, inadequate awareness and knowledge on loans and repayment terms this is further aggravated by high costs for management of loans by financing institutions. During the interviews with AMCOS, most of them did not show interest or willingness in taking loans from the banks due to high interests charged by the commercial banks which ranges between 1.5 to 2.5 per centum per month, which is of the highest side. Many of the farmers were of the view that the Tanzania Agricultural Development Bank should support the famers by lending at low interest rate, however, many of the famers admitted to know very little about the Tanzania Agricultural Development Bank (TADB) and how it operated.

Banks and other financial institutions, on their side noted that access to finance is challenged because regulatory framework doesn't necessarily require smallholder producer to take their coffee to the AMCOS from which they took inputs as loan. As such some farmers take this loophole and take their coffee to other AMCOS and default on paying their loan which in turn affects the AMCOS repayment and increases the risks for banks, and with such risk, they have to set interest rates that account for such risk.

***Recommendations:*** This report recommends:

- Government issues a regulation framework requiring by law all coffee produced by a smallholder farmer who took input loan from AMCOS, to be collected to that specific AMCOS. This will reduce the risk for banks, and in turn benefit AMCOS with lowered interest rates
- Access to finance; interviewing the famers and AMCOs leaders on the challenges and difficulties faced in obtaining financing for coffee related activities, it was realized that, there is a need for the farmers and AMCOs in general to change their perceptions and embrace innovation in farming and financing, as it was noted, most of them still embrace traditional approach of farming and financing, as used to be in the past, where the government took a major control in the coffee production, and that, they wished that the old systems be restored, which is rather impractical.
- It will be useful that the Government through TCB should facilitate and expedite the adoption of Warehouse Receipt System (WRS) in the Southern highlands so that farmers could minimize the challenges as they currently encountering on financing. Learning from examples of the Primary Cooperatives societies that have used the system, it has shown the potential for alleviating financing constraints experienced by cooperative societies in the past, enabling them to pay their members on time, at lower interest cost and avoiding the accumulated debts problems experienced by the union. The WRS method also involves a transparent mechanism through which cooperative societies know exactly quantity and quality of their coffee sold, either through auction or direct export, and the amount received, in both foreign and local currencies. (KILICAFE, 2001)
- Another coffee financing can be done through finance linkage, whereby, AMCOs and members could look for external sources and funders with low interest rates, who on specific arrangements and agreements can procure some required machinery such as CPU to be used by members for reduced costs. moreover, as it was further noted, some of the AMCOs are young of two to three years old, and most of them do not have assets to use as collaterals for loans, it will be useful that AMCOs join forces by creating their own unity and enter into negotiated deals with interested investors or wholesalers or inputs producers in order to lower the cost of finance or increase internal investments.

- As noted during the interviews, coffee farmers normally tend to have good money after harvesting and selling their coffee produce, that, during this time, farmers would indulge themselves in leisure by spending significant amount of money and forget to attend or invest back in their coffee farms, as a result, unattended farms will produce meager produce in the following harvesting season. While, this information could not be verified, or agreed by many farmers, I see the need for TCB and coffee stakeholders to conduct special programmes with farmers on the importance of reinvestment as a sustainable way for capital accumulation and doing away with financing problems.
- As further noted that, the southern highlands have a bigger area where expansion of coffee farms or opening of new coffee farms is much easier than other places or regions where the land has almost been occupied, for that case, I further learnt that, some individual farmers have bigger lands with small part of it developed or planted coffee trees, it will be useful that, the farmers are educated on the importance of using their land as collateral for financing purposes.
- As earlier elaborated, the number of women and youth engaged in the coffee production chain value is very small, lack of funds was the main reason advanced for them not being able to engage in the coffee agriculture. Since the Local Government Authorities set aside 10% (in the ratios of 4-4-2) of their gross income for the youth, Women and people with disability, it will be prudent that, the LGAs should establish special fund schemes with mid-term and long-term financing (5 -10 years) and advance the funds to youth and women who have interest and passion to invest in coffee agriculture or in any of coffee value chain opportunities.

#### **3.4.1.6 Gender and Youth Inclusion.**

Gender consideration and practices play a considerable role in the aspect of social and economic development. In Tanzania majority of farmers are women who also constitute the majority of agricultural labor force. It is estimated that, over 90 per cent of active women in Tanzania are engaged in agricultural activities, producing about 70 per cent of the country's food requirements. Women are also actively involved in the production of cash crops and in also in household activities and chores. Given their big chunk of representation in the Tanzanian population, the role of Women in economic activities, particularly in coffee related activities cannot be over emphasized. The main challenges that most of women face include, inappropriate social-cultural practices and beliefs on their involvement in entrepreneurial economic activities, especially in the production of coffee production, and also access to land and property ownership. As on negative perception, women are often ascribed a primary role as homemakers and children's caregivers thus engaging in commercial agriculture is somehow considered to be improper and lack of respect to men.

Youth below the age of 35 in Tanzania present about 35% of the entire population; the youth also provide an opportunity for increased economic development through their involvement in agriculture and other productive sectors, Youth also constitute of about more than 65 percent of the total labor force, its undeniable truth that youth provide a tremendous opportunity for developing agricultural in an economy if properly harnessed. Despite of their number and impotence is social and economic developments, majority of them face considerable challenges such as unemployment, limitation on equity of resource allocation and capital accessibility to mention a few. The Small and Medium Enterprises development (SMEs) policy and the National Agriculture Policy, have pointed out the role of the youth and indicate in the policy statements that the Government in collaboration with the private sector, civil societies, youth organizations and business community shall promote the culture of entrepreneurship among youths and provide them with access to productive resources including



labor saving technologies (mechanization equipment), surveyed land, irrigation infrastructure and funds to enable them engage in agriculture.

#### **Policy Issue #9: Low Involvement of Women in production**

The fact that, formal legal rights protecting women's ownership of land and property are strongly described in various authorities in Tanzania, including, Small and Medium Enterprises development policy which has explicitly promulgated gender equality, and also the Article 23 of the Tanzanian Constitution which provides for right to own land and property, and also the National Agriculture Policy (2003) which emphasis on equal participation of Men and Women in accessing agricultural production resources, however, the rules of the game seem to be very different from the play of the game, While formal law recognizes the equal entitlement of men and women to own and inherit land and property, in practice, customary laws which exclude women remain to very strong in the regions of Songwe, Mbeya and Ruvuma who believe that Coffee crop belongs to Men and should have a last say and decision in all matters pertaining to the affairs of Coffee. During the interviews in Songwe and Mbeya, it was noted that, Women were under-represented in all AMCOs with less than 20 women members out 300 plus in total, and some AMCOs did not have any women members at all. In the interviews, Men-farmers tressed that traditionally Coffee related matters were handled by men and that Women were only allowed to cultivate and manage other different food crops, but when it comes to coffee, women could only participate in picking the berry and do other coffee related work in the farm as needed but should not intervene with coffee issues. Those taboo and traditions are still having roots and well-practiced to date. The women who were interviewed they also confirmed to the situation and added that they never thought they would one day owning the coffee farms but they found themselves in the ownership and operation of coffee farms after their husbands had passed away.

**Recommendations:** This report recommends:

- Women sensitization, it seems that women have been at the peripheral of coffee chain production over the years, many are not engaged, and for the few engaged still pushing the walls of acceptability by their men counterpart and leaning to navigate through the waters of costs to maintain the coffee farms, it will be useful that, the TCB, LGAs and other stakeholders engaged in the coffee sub sector to draw the attention in introducing specific programmes on women management for coffee production and parallel sensitize men on the importance of women participation in the coffee sub sector, this will help in breaking the barrier of gender stereotypes towards women as their farmers or business partners.
- The Participation of men and women in decision making processes regarding coffee value chain need to be enhanced, this should also be reflected in the leadership of AMCOs where women need to be included in the leadership as well, as it was observed during the interviews, no women held or was in any leadership position in all the AMCOs interviewed. As earlier pointed out, the affirmative action has to be taken to empower both men and women to see each other as business partners or farmers
- Since traditions have painted the picture of women to have specific roles in the society and communities as large, it is essential that, awareness creation and sensitization of communities on negative cultural attitudes and practices need to be enhanced in collaboration with various stakeholders.
- It was further noted that, as a consequence of the limited opportunities to own and control property, many female or women entrepreneurs are left with no other option but to use their husband's or relatives' land or to rent land and property from others, there is a need to



educate and sensitize communities in the areas of coffee farms and production areas to know the rights of women and other marginalized groups.

- As noted, farms that women owned seemed to be well taken care of and produced more produce than those of their men counterpart, it was further observed that, women were more organized than men on matters of finance and focused to their farms better than most men did, it will be therefore useful that, special interventions and programmes should be undertaken to empower men on the importance and need of engaging their spouses (women) in the coffee related works so that they are informed about the knowhow of coffee matters and be able to handle the farms well in the event that one spouse ceases to exist or became disable over any cause.

#### ***Policy Issue #10: Low involvement of youth in the coffee production***

Despite the notable policy statements and directives which require youth to be included in many aspects of economic productivity and agriculture value chain, the situation and actual practice is contrary to the reality, the study found out there are very few youths who are engaged in the coffee value chain in the regions of Mbeya, Songwe and Ruvuma, in the interviews with AMCOs, the number of youth members under 35 years never exceeded an average of 20 out of 300 plus members. The study discovered considerable reasons advanced by both AMCOs leaders and the youth themselves, the following were recorded as described below:

- Lack of access to ownership of coffee farms was a driving factor for them not to engage in the coffee value chain, that, majority of Youth don't own farms of their own, the farms their working on belong to their parents and that they never see the benefits of those farms since they don't have control over the and never receive any token from the same, then it best that the engage in other activities such as motorcycle riding where they may be able to get at least some amount.
- Lack of capital to establish or open up their own farms, this was another issue emerged during the interviews, youth don't have or possess any assets that can be used as collaterals, for that case, they are not loanable, this makes it difficult for them to step into the coffee agriculture, since, it requires significant amount of money for such an investment.
- Through the interviews with the LGAs officials, it was leant that, there was no any funds that has been allocated or directed to provide funds out of 10% for those who would to engage in the coffee value chain. This applied to all districts visited and interviewed.

***Recommendation:*** This report recommends that:

- There is a need for affirmative actions to adjust or change the lending terms to include the need of longer-term investments and provide revolving capital fund and training to youth so that they can also engage themselves in the coffee value chain, the funds could be either channeled through AMCOS or with specific agreements with the respective LGAs
- It will be useful that, AMCOS and older farmers are sensitized on the need to engage the youth in the coffee farming, since, youth are presumed to live longer than their parents (if all factors held constant) then they should be made part of the plan of coffee farming, moreover, for the sake of sustainability and continuity for future production, youth involvement in the coffee farming isn't an option, or else, the production in the future may not be available.
- There is also a need to train AMCOS to be innovative in their dealings particular in capital accumulation through the farmers, so that, they can be able to issue loans to youth at a lower

interest, this may lead to youth to remain in touch with the coffee activities and see the value and benefits of their engagements.

- LGA should issue 4% to youth coffee related projects as motivation etc.

#### **3.1.4.1.7 Information and Communication Technology (ICT)**

As part of the National Agricultural Policy of 2013, the application of ICT in agriculture is becoming increasingly significant and e-Agriculture/Agri-tech is emerging sub-sector, that aims at using ICT for improving efficiency in agricultural processes and services, including access to markets, last-mile delivery of inputs and access to information. It involves the conceptualization, design, development, evaluation and application of innovative ways of using ICTs in the agricultural value chains. The commodity exchange platform that was established as part of ASDP II, utilizes ICT to allow farmers and their AMCOS to access markets at a global level.

#### **Policy Issue #11: Limited utilization of ICT in coffee sub-sector**

Beyond cellular communication among and between farmers, AMCOS and extension officers, the use of ICT is yet limited in the coffee sub-sector. Well established AMCOS have a computer for keeping records of farmers, but most recent ones still use physical notebooks and ledgers. Given the way the coffee market is accessed at the moment, there almost always some entity between the smallholder farmer and the money – be it AMCOS, or private buyer, or the illegal middle man – because of the lack of transparency in the markets, something that ICT can address. ICT is also used very limitedly in proving if inputs supplied to SHP

**Recommendations:** This report recommends:

- The government to invite innovators from private sector to introduce solutions that will increase transparency in inputs verification, coffee prices in the market and allow smallholder producers to access important information for their sub-sector, including growth trends, new technologies and best practices. Things like extension services need not be limited by geography anymore in 2021. We should be employing technology to reach the farthest of Tanzanians as if they are our neighbors. Almost every household (82.2%) in Tanzania has at least a feature phone (TCRA, 2020) – we should be putting this to our advantage. Solutions could first come as Unstructured Supplementary Service Data (USSD) then later mobile applications

#### **3.1.4.1.8 Infrastructure**

A good part of any agricultural business is infrastructure, for it is infrastructure that supports sustainability functionalities – including roads, water supply, electrical grid, and telecommunication to mention a few that directly impact the coffee subsector.

#### **Policy Issue #12: Limited infrastructure**

Because coffee farming is predominantly in higher altitudes for their requiring a specific micro-climate to thrive, access to and from farms in terms of roads is an issue of concern for all 6 DCs. There are many places in the DCs where cellular network is very problematic and it requires you move to a certain area to receive signal. Water and electric access were not reported as severe issues.

**Recommendations:** This report recommends that:

- The government invests in improving paved roads and trunk roads to and from wards that farm coffee – this will have an effect in reducing transportation costs, and attract local

investors to introduce transportation services. This will mean more movement of people and good and more income for smallholder farmers.

- The government through TCRA to communicate to licensed mobile operators so that they increase coverage and allow more Tanzanians access to mobile services even in the mountainous areas where the farms for coffee are.

## 4.0 Conclusion and Recommendations

### 4.1 Summary

The performance and increase in coffee productivity and quality will require multi-combination efforts of different stakeholders and actors in the coffee subsector. The government has got a considerable role to play in the entire aspect of coffee subsector development, this may include among others, provision of content and direction of policy and regulatory framework as well as creating conducive and enabling environment for smooth operation and flourishing of the coffee sector. Smallholder producers and private sector equally have an important role to play in the entire coffee value chain, as observed in the findings, there has been a decline in the support and focus to support and capacitate small farmers producers and other actors to take an active role in the coffee productivity and value chain. TCB as a sole legally coffee coordinator and supervisor, is expected to be more robust and dynamic in propelling and championing the coffee agenda in the country through capacitating and encouraging various actors in the coffee sector to keep up in their work and support them in all aspects.

Looking at TCB's Coffee Industry Development Strategy (CIDS) as formulated in 2011, with an overall goal to improve incomes across the entire coffee value chain by increasing coffee production and quality. Production targets set were to increase from 50,000 tons to 100,000 tons by 2020, with strategies geared towards planting new coffee varieties (production of 200 million seedlings by 2020), expansion of farm land, organizational reform, increase in fertilizer usage, and control of coffee diseases and pests. Through the combination of these measures, crop yield is expected to increase from the current 250kg/ha (200g/tree) to 600kg/ha (450g/tree). As of 2020, ten years down the lane, despite considerable initiatives taken, still, not much has changed, the statistics indicate that, the maximum production capacity has been 59,000 tons (TCB, 2019/2020), the maximum capacity of seedling produced per year by TaCRI is 8 Million seedlings (2020) crop yield still below of 300kg/ha, which is the lowest production compared to countries such as Rwanda (385), Kenya (412), Uganda (708) and Ethiopia (800) on the same size of land. Additionally, disease, pests and availability of fertilizers have been reported to be among considerable challenges facing the sector to date.

The above snapshot, describes, the shortcoming that TCB faces which call for a new look into how it functions. Moreover, the coffee actors in the value chain need to be encouraged and promoted to realize their meaningful contribution to the sector. The value chain as it has been described, entails value creating activities all the way from basic raw material source from component suppliers through to the ultimate end-use product delivered into the final consumer's hand (Shank, 1993); Thus, for the coffee value chain to be meaningful, it has to include and consider all actors along the coffee value chain, their functions and interrelations; legal and governance mechanisms, etc. Among actors in the coffee value chain include, smallholders' farmers, processors, exporters, farmers' associations,

research institutions, Financial institutions, government (Ministries, Departments and Agencies) to name a few.

Given the importance and potential of the southern highlands regions in the production of coffee, and with efforts to revitalize and promote the coffee subsector in those regions, the government has no option but to practically work on proposed policy and non-policy issues as identified, to assure maximum productivity with quality required is produced. All this, should go hand in hand with considerable investments and capacity building efforts to coffee key actors.

## **4.2 Recommendations**

The general recommendations intend to provide issues of importance that were identified in the field and also through literature reviews conducted, the recommendations are further meant to describe areas for emphasis that respective actors need to take a keen interest in the development of coffee sector in the country. Below are issues as articulated; -

### **4.2.1 Strengthening of TaCRI**

The Tanzania Coffee Research Institute (TaCRI) is responsible for research on coffee issues related to diseases and develop new varieties of seedlings. Coffee Farmers in the areas that we visited and interviewed described how important TaCRI is for them, most of them are reliant on TaCRI for seedlings of the new coffee variant that has more yield and is resistant to diseases. Given that most farmers have coffee trees that are old with declining productivity and in need of replacing, TaCRI's role is beyond important.

TaCRI currently produces 8 million seedlings per annum – and the demand is around 20 million per annum. Along with strengthening of TaCRI, we highly applaud TaCRI's initiative in partnering with the private sector and engaging them in production of seedlings to reach more farmers who are willing to buy – this is a sound business opportunity that local investors. This partnership should be further strengthened across all regions where coffee is being produced so that we can change the gap between demand and supply.

### **4.2.2 Encourage Use of modern irrigation systems and investment**

The nature of the crop requires smallholder farmers to be capital intensive, something that few can afford. We propose that a consideration be made to assist SHP to utilize modern irrigation systems with irrigation investment rounds from both government and the private sector. The ASDP II clearly outlines this plan, and it should be put into practice.

As long as we want to have consistent health, more yields of high-quality coffee beans, we should rethink irrigation especially precision irrigation for months when there is shortage of rain and higher temperature. Especially now with the way unpredictable our rain has been.

### **4.2.3 Revamping and strengthen of TCB**

TCB – as the regulatory body in charge of coffee industry in Tanzania, has limited to no powers to enforce the implement of the coffee industry development strategy at an LGA level. TCB They should have mandates that help them navigate how to collaborate with LGA officials in implementing the strategy, the system of working as coordinator (with no powers) on shared functions with LGA seems

to be not practically working, as all the funds that is collected as taxes and levies from farmers would be channeled into different LGAs programmes instead of reinvested in the coffee production related issues. During the interviews with the LGAs it was noted that, the LGAs coffee production priorities are not taken seriously and there is either inadequate budget or no implementation from the proposed budget.

The structure of the TCB could be revised or revamped to reflect an independent performing institution, such as, a Coffee agency, which will have all powers, resources and capable workers who are dynamic and capable to handle and commercialize the coffee sector. It is a fact that, much has changed in the coffee industry, traditional approaches to coffee handling issues are no longer relevant to this era, new dynamics require new strategies and capable people to drive them.

Moreover, at the moment TCB has not adequately utilized the local coffee markets with the rising popularity of coffee shops across urban centers like Dar es Salaam, and the lower and upper middle-class household's coffee consumption at their homes. TCB needs to creatively empower smallholder farmers and local investors to see this opportunity and do market linkage to ensure that together with exporting, our coffee also finds a market here.

TCB should have specific programs for youth and women to engage in coffee production which they don't have – the program could be both targeting exposure of industry and opportunity as well as sensitizing youth to be more actively engaged in the value chain, at the moment, TCB doesn't have any coffee programmes for such groups, for them they treat all famers generally.

The TCB auctioning systems are traditional and outdated and they need to rethink the auctioning model so that the auctions can involve more transparency, and widen the scope of buyers to beyond physically present at the auction. This would involve the use of ICT and involvement of stakeholders in the process. This is how Ethiopia and Uganda improved their auctions – making them transparent and participatory.

#### **4.2.4 LGA responsibility and accountability**

LGA have powers to collect taxes from coffee farmers but do not invest back as agreed (20%) – as the closest government to the citizens who are directly involved in the coffee subsector, LGA should ensure that a fifth of proceedings from the coffee industry is re-invested in the industry, especially in infrastructure and the many various things that allow coffee farmers to have an optimum operation. It could involve paving road to ease transportation, removing fees on inputs related to coffee, producing coffee seedlings and distributing them for cheap or free, and many more. Moreover, it could also use the funds to train and build capacity of LGA Officials who are working directly with the coffee subsector – including the coffee inspector and extension officers.

#### **4.2.5 Political interference in technical matters and sector management**

Politicians and the political statements they make create a sense of uncertainty in stakeholders and undermines professionals in the industry. If the subsector is to grow, it is imperative that politicians stay clear and try as much as is possible not to undermine professional opinion on this crop. Technical professionals should be elevated to SHP instead of political statements. This also calls for political leaders to take time to learn and deeply digest the ideas and advise they get before proclaiming publicly for implementation

#### **4.2.6 Strategically investment in few Identified business people for export related**

TCB with support of other key actors should strategically identify smallholder farmers, individual groups or business groups, as well as AMCOS that are doing well in terms of quality assurance and give them extra support so that their produce will be for direct export. There is a need to have special funds or scheme for empowering few companies or individuals who have shown interest to invest in coffee production. The Government should encourage and create environment for private sectors to invest in building inputs industries to cater for inputs shortage and pricing. Direct export should be encouraged – quality of coffee should be maximized through promotion use of CPUs, planting hybrid coffee seeds, etc.

#### **4.2.7 Strengthening of AMCOS**

Since AMCOS is one of the central players in almost all nodes of the coffee value chain – especially the input, the processing and marketing nodes; while assisting SHP in the production node and at times work as an intermediary warehouse – it is imperative that AMCOS be strengthened for this industry to really grow. Special focus should be made on the AMCOS management and leadership capacity building. The better the leaders (capability, honesty and diligence), the better the society.

AMCOs should be sensitized on saving and investment, and if possible, can merge up their resources and purchase CPUs or even invest in factories for inputs manufacturing. Strengthened capacity of AMCOS in different areas of operations will ensure that the subsector takes leaps of growth in a shorter time.

#### **4.2.8 Strengthening the Coffee Stakeholders Meeting**

The stakeholders' meetings from national to district levels are a great room to really bring up the regulatory bottlenecks, learn what works and what doesn't and offer a chance for quick implementations of agreements. They save tremendous amounts of time, and we recommend that they become periodic and from the bottom up – district meetings feeding regional meetings, which feed the zonal meeting, and that feeds the national meeting. That way, local issues that do not need a national outlook need not take time in the national meeting, and vice versa.

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## Appendices

### Appendix 1: Correspondent List

No	NAME	POSITION	DC	CONTACT INFO
1	Menance Ndomba	District Cooperatives Officer	Nyasa	-
2	Marwa Irinda	Towns & Villages Planning	Nyasa	-
3	Richard Katale	Coffee Inspector	Nyasa	0786711343
4	Mohamed Athuman	Irrigation Officer	Nyasa	0752018524
5	Rashidi A. Rashidi	District Agricultural Officer	Nyasa	0762957695
6	Rosalina Joachim Hyera	Smallholder producer	Nyasa	-
7	Godfrey Ndimbo	Secretary – Nyoni AMCOS	Nyasa	-
8	Raphael Petro Komba	Smallholder producer	Nyasa	-
9	Kassim Maswaga	DAO	Mbinga	0784383889
10	Thadei Mtweve	Irrigation Officer	Mbinga	-
11	Andrew Chiwinga	Coffee Inspector	Mbinga	-
12	Erasto Msanga	DCO	Mbinga	-
13	John Kapufi	Cooperative Officer	Mbinga	-
14	Lusajo Raphael	Cooperative Officer	Mbinga	-
15	Ernest Komba	Chairman – Kimuli AMCOS	Mbinga	0754807300
16	Festo Mapunda	Chairman – Sepkila AMCOS	Mbinga	0672909905
17	Baptist Ndunguru	Chairman – Kiukwa AMCOS	Mbinga	0622965039
18	Wenda Suday	Sustainability Manager, DAE	Mbinga	wsudayi@gmail.com
19	Lucas Nduguru	Project Officer, DAE Milling	Mbinga	info@dae.co.tz
20	Gaston Sanga	Ag. DAICO	Ileje	0764601772
21	Fredrick Lemanya	Agriculture Officer	Ileje	0628526579
22	Imani Lameck Kibona	Smallholder Producer	Ileje	-
23	Welson Juja	Chairman – Kasenge AMCOS	Ileje	-
24	Widbeck Elison Mbuki	Secretary – Kasenge AMCOS	Ileje	-
25	Ezekiah Simon Kapyele	Smallholder Producer	Ileje	-
26	Joshua Kalonge	Smallholder Producer	Ileje	-
27	Righton Kyomo	Smallholder Producer	Ileje	-
28	Donald Kalinga	Smallholder Producer	Ileje	-
29	Asumwisye Mwasapi	Smallholder Producer	Ileje	-
30	Elijah Staford Kivyoka	Chairman – Bwenda AMCOS	Ileje	-
31	Imanibule Kasebele	Smallholder Producer	Ileje	-
32	Rachel Mbele	Smallholder Producer	Ileje	-
33	Ezekiel Kaminyonge	Smallholder Producer / Retired Agricultural Officer	Ileje	-
34	Filisto Mbuguhi	Smallholder Producer	Ileje	-
35	Juma Haonga	Smallholder Producer	Ileje	-
36	Justin Sanga	Local Investor – inputs	Mbeya	0759691932
37	Ephraim Mwampaka	Chairman – Luswawi AMCOS	Mbeya	0754244293
38	Jeremiah Sambo	Chairman – Usongwe AMCOS	Mbeya	0756511633
39	Yona Kalinga	Local Investor – inputs	Mbeya	0755361403
40	Noel Mchau	Officer – City Coffee	Mbeya	0756311917
41	Hamimu Luvanda	City Coffee	Mbeya	0755744364
42	Hedman Nchepaje	Secretary – Msanyila AMCOs	Mbozi	0759417992
43	Endrew Sichalwe	Smallholder producer	Mbozi	0674449431
44	Paisoni Haonga	Smallholder producer	Mbozi	0752411383

45	Daniel Kamwela	Smallholder producer	Mbozi	0743973507
46	Charles Mgalla	Smallholder producer	Mbozi	0768066379
47	Laurent Joyo	Chairman – Msanyila AMCOS	Mbozi	0753690218
48	Renardi Ntania	Smallholder producer	Mbozi	0758504018
49	Anton Mkondya	Chairperson IGOMWA AMCOS	Mbozi	0766105052
50	Gidion Mkondya	Smallholder producer	Mbozi	0718202440
51	Chimi Kayuni	Smallholder producer	Mbozi	0762212033
52	Vone Kabuje	Smallholder producer	Mbozi	076231949
53	Eliya Tusanishe	Smallholder producer	Mbozi	0768813630
54	Roidi Mkisi	Smallholder producer	Mbozi	0766068438
55	Faster Mwabenga	Chairman AMCOS	Mbozi	0753441112
56	Zakalia Mwashamba	Smallholder producer	Mbozi	0766068434
57	Ibrahim Mwandiwa	Smallholder producer	Mbozi	0752155839
58	Twenti Mwasena	Smallholder producer	Mbozi	0763724922
59	Michael Mwazembe	Smallholder producer	mbozi	0757865278
60	Safari Mkisi	Smallholder producer	mbozi	0756541724
61	Christoma Mbuna	LGA officer - Rungwe	Rungwe	0765312400
62	Frank Msalipo	LGA officer Rungwe	Rungwe	0756734876
63	Anyimike Kasimbila	Chairperson – AMCOS -Kyoku	Rungwe	0622840531
64	Eliudi Silabi	Chairperson- AMCOS - Kyobo	Rungwe	0625411497
65	Edward Mwaisumo	Katibu AMCOS	Rungwe	0754770366
66	Edward Bukuku	Smallholder producer	Rungwe	0753210972
67	John Bukuku	Smallholder producer	Rungwe	0759691864
68	Assa Kapungu	Smallholder producer	Rungwe	0752344016
69	Subila Kalinga	Smallholder producer	Rungwe	0628222249
70	Matrida Mwesya	Smallholder producer	Rungwe	0628230157
71	Frank Kamwambo	Chairperson - AMCOS	Rungwe	0741592073
72	Bukuku Mkanje	Katibu - AMCOS	Rungwe	0757558732
73	Hekima Mtafya	Smallholder producer	Rungwe	-
74	Wilson Mahene	Smallholder producer	Rungwe	-
75	Dodfrey Masuba	Smallholder producer	Rungwe	-
76	Henerico Mtafya	Smallholder producer	Rungwe	-
77	Daniel Emmanuel	Smallholder producer	Rungwe	-
78	Paulina Kasombole	Smallholder producer	Rungwe	-
79	Faiden Kinyoka	Extension Officer - LGA	Rungwe	0765963902
80	Mathias Kalinga	Chairperson – Ikuti AMCOS	Rungwe	0768554886
81	Simon Kilindu	Smallholder producer	Rungwe	0752885949
82	Maiko Msonge	Smallholder producer	Rungwe	0763431715
83	Furaha Asangalwise	Smallholder producer	Rungwe	076979095
84	Nasobile Mkalinga	Smallholder producer	Rungwe	0763471919
85	Haule Mwandi	Smallholder producer	Rungwe	0764145980
86	George Songela	Smallholder producer	Rungwe	0759918113
87	Leonard	Officer	TaCRI	
88	Kajiru	Officer	TCB	