Development of Inclusive Business Models (IBM) for leveraging investments and development in Acholi sub-region

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<table>
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<th>Definition</th>
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<tr>
<td>AAU</td>
<td>Amathelon Agri Uganda</td>
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<tr>
<td>ACE</td>
<td>Area Co-operative Enterprises</td>
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<tr>
<td>AVO</td>
<td>Assistant Veterinary Officer</td>
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<tr>
<td>BAT</td>
<td>British America Tobacco</td>
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<td>DFID</td>
<td>Department for International Development</td>
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<td>FAO</td>
<td>Food and Agriculture Organization</td>
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<td>FCV</td>
<td>Flue Cured Virginia</td>
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<td>ha</td>
<td>Hectare</td>
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<tr>
<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus Infection and Acquired Immune Deficiency Syndrome</td>
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<td>IBM</td>
<td>Inclusive Business Model</td>
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<tr>
<td>IFAD</td>
<td>International Foundation for Agricultural Development</td>
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<td>IFC</td>
<td>International Financial Co-operation</td>
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<td>Mt</td>
<td>Metric tons</td>
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<tr>
<td>NUAC</td>
<td>Northern Uganda Agricultural Centre</td>
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<td>NUTEC</td>
<td>Northern Uganda – Transforming the Economy through Climate Smart Agri-Business Market Development</td>
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<td>P4P</td>
<td>People 4 People</td>
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<tr>
<td>PCS</td>
<td>Primary Co-operative Society</td>
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<td>PDM</td>
<td>Processor-Driven Marketing</td>
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<tr>
<td>PWD</td>
<td>People with Disabilities</td>
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<tr>
<td>RPO</td>
<td>Rural Producer Organization</td>
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<td>UGSH</td>
<td>Uganda Shillings</td>
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<td>UN</td>
<td>United Nations</td>
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<td>SACCO</td>
<td>Savings and Credit Cooperative</td>
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<td>SC</td>
<td>Site coordinators</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>VODP</td>
<td>Vegetable Oil Development Project</td>
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<td>WACU</td>
<td>West Acholi Cooperative Union</td>
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<td>WFP</td>
<td>World Food Programme</td>
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1. Introduction

The report provides a brief description of the agriculture sector across the Acholi Sub-Region. It then explore four models currently being implemented in Uganda that strengthen and promote existing best practices for the implementation of inclusive business models (IBMs) before presenting three models appropriate for the unique social, political and economic situation in the Acholi Sub-Region with recommendations on how they might best be implemented to develop prominent enterprises comprising cattle, charcoal and shea nut and foster sustainable engagement with vulnerable groups including youth, elderly, people with disabilities (PWDs) and resource poor in the context of the Acholi Sub-Region. Finally the report provides a brief description of the main medium to large scale agricultural enterprises currently operating in the area.

1.1 Background

Farmgain Africa Ltd was contracted by Trócaire to produce a detailed, easily understandable study report on possible variety or alternative Inclusive Business Models (IBMs) that would be appropriate to implement in the Acholi Sub-Region. The IBMs are therefore intended to circumvent existing market failures and inefficiencies to successfully integrate the poor, either on the demand side as clients, or on the supply side as employees, distributors, or suppliers of goods and services. Trócaire intended to produce a Guide document that will spell out at least 4 (or more) IBM options that local actors could choose from, detailing the requirements and steps involved in establishing them.

1.2 Objectives of the assignment

The specific objectives of this study were:

i. To set out an ownership framework for each of the 4 (or more) proposed business models, and of key project assets such as land and processing facilities that might accompany any development;

ii. To produce a structural guide that would assist communities when making informed decisions around business options – this would include key variables to consider in
weighing decisions, consider arrangements for review of grievances and or conflicts (including mediation & arbitration), and put forward mechanisms for dealing with irregularities in information access;

iii. To spell out the advantages and disadvantages associated with each IBM option. This would include commercial (i.e. production, supply and market) opportunities & risks. This analysis would also encompass looking at the wider risks such as political and reputational risks the general community and other special interest groups such as women, youth and PWDs would face;

iv. To indicate workable models for sharing of economic costs and benefits, including price setting and finance arrangements for IBMs.

1.3 The task

Farmgain Africa Ltd was to accomplish the following tasks:

i) Conduct an extensive study and produce a report indicating possible options for IBMs implementable in the Acholi Sub-Region;

ii) For each case, study and spell out the organizational and structural requirements for smooth implementation of the IBM, inclusive of a right-based approach to development and investment in the Acholi Sub-Region;

iii) Do a SWOT analysis of each option and spell out the risks likely to be encountered;

iv) Suggest possible models of shares framework applicable to each IBM;

v) Present the draft findings in a half day workshop of key stakeholders for comments and feedback.

1.4 Deliverables

The following were the expected deliverables;

i) A Report outlining four or more possible options for IBM with their implementation framework that are considered viable for implementation in the Acholi Sub-Region;
ii) A simple to understand guide on four selected inclusive business models that the community can assess, analyse and utilize.

2. Methodology and approach

Farmgain undertook this assignment by proposing 4 best bet inclusive business models basing on past experience of models that have been used especially in similar geographical, social and cultural settings. Each of these models was assessed for their philosophies, rationale, structure, components, functionality, merits and demerits.

Information pertaining to these models was largely be obtained from literature (websites, reports, publications...) and this shall be consolidated with some extra information obtained by interactions with persons who have been part of these models or those who have promoted/worked with them. Farmgain drew a lot from its past experiences and interactions with these models which also consolidated the write-up. The following were some aspects that are highlighted for each of these models:

- A general description of the model
- Rationale and philosophy of the model
- The model structure (highlighting its key components)
- A description on how actors benefit from the model
- The inclusivity of the model to vulnerable groups (youth, women, disabled, resource-poor)
- Major advantages/merits of the IBM
- Main disadvantages/demerits of the IBM
- Risks and threats associated with the IBM
- An illustration of where the IBM has been successfully or otherwise used.
- Conclusion

Farmgain further visited 5 businesses (agricultural related) operating in the Acholi Sub-Region to find out what models they were using, how they were operating, what challenges they faced and how successful their models were. These visits involved travelling to the
respective business premises and conducting interviews with senior management as well as
other staff. Information obtained from these visits was consolidated with observations and
perceptions from persons affiliated to these business. Information obtained was used to
consolidate the write-up on the 4 inclusive business models as well.

This assignment was by two of the senior consultants in Farmgain Africa and both had
substantial experience working across northern Uganda with a particular focus on the Acholi
Sub-Region. One of them was an agricultural economist with strong knowledge of farming
business models while the other had vast experience in operationalization of inclusive
business models and has worked extensively in northern Uganda on development projects
with a strong focus on land governance and agriculture.

3. Inclusive business models

The term “Inclusive Business Model” comes from the terms “business model” adjoined with
the term “inclusion.” The term “business model” refers to the way in which a company/firm
structures its resources, partnerships and customer relationships in order to create and
capture value whereas the term “inclusive” essentially refers to encompassing concerned
parties. In this regard, “Inclusive Business Models” refer to collaborative arrangements
between large-scale investors and local small-scale farmers and communities on fair and
equitable terms. Inclusive business models tend to run on the following four aspects namely:

- **Ownership:** concerning who owns which asset
- **Voice:** referring to who has a say on what (Key business decisions, bargains,
  information access and asymmetry)
- **Risk/uncertainties:** considering the possibility of unpleasant occurrences and how
  these can be averted or minimized
- **Reward:** This basically refers to how benefits are shared

This section presents the 4 inclusive business models that are to be proposed to Trócaire for
consideration. They include the Integrated Cooperative Model promoted by Uganda
Cooperative Alliance (UCA), the Processor-Driven Marketing model (PDM) used by Mukwano Industries, the JI model used by Joseph Initiative and the AFGRI model.

4. Acholi Sub-Region

The Acholi Sub-Region is situated in central northern Uganda and currently comprises eight districts of Gulu, Kitgum, Lamwo, Agago, Pader, Omoro, Amuru and Nwoya. The Region is mostly characterized by tropical savannah grassland and light forest undulating land with fertile alluvial soils. Altitude ranges 600 and 1,200 m above sea level and rainfall across the region is bimodal and averages approximately 760 - 1,520 mm. Precipitation continues to be more or less regular in the different areas of the region despite global changes. With a population of approximately 1,500,762, the average population density across the Acholi Sub-Region is 75 people per square kilometre against the national average of 188.4 people per square kilometre.

Population densities vary across the region with the densest populations along major infrastructure routes while outlying areas especially in Lamwo, Nwoya and Amuru less densely populated with 24, 28.5 and 52 people per square kilometre respectively. With a population growth rate of approximately 3.3 percent per annum, the population increased by 200 percent since the onset of war.

The protracted civil conflict across the region from 1986 to 2006 had a significant disruptive impact on the socio economic fabric and the movement of people. Residents in IDP camps have moved into formally unpopulated areas either communal grazing or hunting areas and recently de-gazetted wildlife reserves. Furthermore, the region has also experienced rapid urbanization with large numbers of the rural population moving to the municipalities in search of work and livelihoods.

Marginalized groups comprising women, elderly, youth, people living with disabilities, mentally and/or physically ill and the extreme poor have faced serious challenges accessing land for agriculture. Individuals within these groups are regularly marginalized and fall victim to opportunistic behaviour and are denied their full rights to secure livelihoods.
4.1 Unique characteristics of Acholi Sub-Region

The Acholi Sub-Region exhibits a relatively unique set of social, political and economic features. These factors should be considered in the development and implementation of any meaningful Inclusive Business Model (IBM) for the region. Acholi customary practices including the organization and governance of communities by clans and sub-clans remain very strong. Recent studies on land tenure in the area exploring the ownership, access and control of land across the Acholi Sub-Region have reinforced the strength of customary practices and confirmed the prevalence of communal land. National politics and the protracted civil conflict have had a significant impact on the region and heavily influenced the current economic situation in the Acholi Sub-Region. Capital is scarce and very few Acholi’s have the capacity to make more than small investments in agricultural investments across the region. As already described, the majority of investors in the agricultural sector across the region are from foreign sources.

4.2 Agricultural Sector

The vast majority of farms across the Acholi Sub-Region comprise subsistence farmers cultivating 1-5 acres. Numerous initiatives have been funded by development partners such as the P4P by the World Food Program (WFP) with the warehouse receipt system and Farmer Field School (FFS) by UN FAO, numerous USAID initiatives, DFID’s Northern Uganda –Transforming the Economy through Climate Smart Agri-Business Market Development (NUTEC) initiative focussing on developing the capacity of medium to large scale agricultural initiatives across northern Uganda and IFAD’s Vegetable Oil Development Programme (VODP) aimed at developing small to medium scale farmers to promote the growth of oil seeds, mostly sesame seed and sunflower, across eastern and northern Uganda including the Acholi Sub-Region. Additionally, a large number of initiatives have been implemented by local and international NGOs such as Trócaire to develop the agricultural sector and promote
commercial agriculture by strengthening the capacity of farmers to produce larger quantities at better quality through training, awareness and the provision of support to value chains of inputs and outputs.

Curiously, many of the stakeholders engaged in the development of agriculture across the region are not aware of other initiatives being implemented, including the very large scale programmes such as the US$130 million VODP value chains development programme implemented by IFAD and the £48mNUTEC project to support agribusiness growth, climate resilience and the lives of people earning their livelihoods through farming being implemented by DFID.

**Constraints to Agricultural Development**
A number of constraints to the development of agriculture have been identified across the Acholi Sub Region. Agriculture skills of many of the farmers is extremely limited and restricted to subsistence agriculture. The socio-economic issues related to the protracted civil conflict has distorted the social fabric of the Acholi Sub-Region disrupting families and cultural practices. The usual cultural mechanism for care and engagement of marginalized people have been disrupted with low levels of education, breakdown of trust, alcoholism, and the spread of disease including HIV/AIDS.

**Environmental Challenges**
As with the majority of tropical environment, soils generally very fragile across the region and require appropriate care and management. The depth of fertile topsoil mostly ranges 30-60cm. Weather patterns are changing, seasons disrupted and resilience of people is minimal especially among the poor and most vulnerable. The excessive demand for raw materials from urban centres such as charcoal and timber is also causing the further depletion of trees and forests already under threat of clearing for agriculture.

**Infrastructure**
There are also varying levels of infrastructure such as the availability and quality of roads, telecommunications, and electricity. While many community roads are in very poor condition, a number of key major roads have been significantly upgraded in recent years. The road between Kampala and Gulu Road has been restored; the recent construction of the
road from Gulu to Elegu/Nimule border, the Anaka to Gulu road is almost complete, the regular maintenance of the Kitgum-Karenga road have provided access to considerable swathes of the rural population. Kitgum-Lira road would provide good access to the region. While most of the sub-region is within mobile telephone network, access to data for accessing information remains patchy and electrification underway is only available in major towns and municipalities.

4.3 Tenure systems in the Acholi Sub-Region

There is a variety of different land tenure arrangements across the Acholi-Sub Region as recently documented. The majority of rural land across the Acholi Sub-Region has been identified as customary communal land (ngomkware) vested in and belonging to recognized patrilineal kinship groups – clans (kaki) or sub-sections of clans (doggola-kaki or dog gang). This system has long been based on access to the land through a network of social relations, for specific designated uses, namely: (i) the homestead (gang), which included surrounding gardens (pototok gang), and kraal (dwol/akuldyang); (ii) farmland, based on shifting cultivation (Aker/Okang); (iii) grazing land (olet); (iv) hunting ground (timdwar); (v) cultural/spiritual sites (wangayweya/abila pa kaka); (vi) forest (bunga); (vii) rock outcrops and mountains (Got/godi); and (viii) streams, rivers and swamps (kulukidaggo). In this system, the land belongs to the community as a corporate entity, rather than the political organs through which control of the resources of the land was exercised.  

A salient issue to note when examining land tenure security is access to land. Recent research has shown conclusively that the majority of land across the Acholi Sub Region is held along clan lines rather than by individuals. While individual members of the clan night may not be considered owners of the land--with rights to alienate or sell--individual clan members clearly have certain rights over the land, including access and control, in accordance with customary norms, rules and principles.
There is growing anecdotal evidence to suggest that an increasing amount of land is being alienated in the names of individuals without the consent of the family of clan in some parts of the Acholi Sub-Region and that approximately 10 percent of land has been bought and sold within the past three years. While women will, where possible buy land as individuals free of obligations to manage the land in accordance with customary practices, sales of land are commonly done in consultation, if not cooperation, with family and clan members. Certainly, the sale of land owned by the clan requires consultation, if not permission, of family and clan members.

While there is some dispute on the prevalence of land related conflict across the Acholi Sub-Region, land conflicts continue to be common across the Acholi Sub Region. Nonetheless, existing community level mechanisms have been found largely effective resolving these land related disputes. While neither statutory nor customary mechanisms are without weaknesses, they continue to function and resolve the majority of land disputes to the satisfaction of all parties involved. The traditional leaders generally have the trust of the community, a sound knowledge of the situation and the immediate actors involved, and are well positioned to engage in alternative dispute resolution (ADR). Where this fails, they are well placed to document existing boundaries and the relationship between the parties to the dispute that can be used in evidence in statutory courts.

Evidence suggests that where the family or clan is strong and organized, the rights of each member of the clan including women and future generations are better protected while in instances where the clan or family is weak or fragmented women’s rights to land are more often abused. While the definition of a “strong” family or clan remains very subjective and difficult to define, let along quantify; strength in this context is more usually associated with the financial resources at the family’s disposal rather than the physical size of the family. An obvious way to increase financial capacity is through careful use and management of the resources at the family or clan’s disposal including land. The successful implementation of appropriate inclusive business models (IBMs) is an obvious way to achieve this. Other factors associated with the strength of the family or clan include the levels of education,
“love,” “unity” or “cohesion” within the family or clan institution. Strong families or clans are also more likely to respect the rights of neighbouring clans and enjoy higher levels of social capital and respect within the community substantially reducing susceptibility to land related conflict.16

While the price of land has experienced an sudden increase in value, particularly in areas close to main highways, large tracts of land in remote areas Nwoya and Amuru Districts is still available for lease at UGSH20,000 (US$5.50) a year (two seasons) or purchased outright at UGSH350,00 (US$96) to UGSH500,000 (US$137) an acre.17

5. Potential Business Models

This report presents four Inclusive Business Models (IBMs) applicable in Acholi Sub-Region. These models have been applied in the most prevalent value chains in Acholi and neighbouring regions for over a decade and their performance is evident to all. They include the integrated cooperative model, the processor driven model, the Joseph initiative model and the AFGRI model.

Model 1: Integrated Cooperative Model

Description of the Integrated Cooperative Model:

In this model, members of a community in a geographical area (a Parish) form one primary cooperative society (PCS) for purposes of improving their farming. Primary societies are the basic units which comprise of about 20 - 30 individual members with a common need (e.g. improved farming, collective marketing...). About 15-30 such primary cooperative societies in a larger geographical area known as a Sub-county form a secondary cooperative known as Area Cooperative Enterprise (ACE). The Primary Societies plus the ACE then form one SACCO which is shared by all the three categories as their financial institution.
Rationale and philosophy of the Integrated Cooperative Model

This model runs on the basic cooperative principles where by persons unite voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically controlled enterprise. Cooperatives are member formed out of a need and are member owned, member financed, member used, member controlled and member benefiting business enterprises. Their values are based on self-help, self-responsibility, democracy, equality, equity and solidarity.

Components of the Integrated Cooperative Model

The basic components in this model are the following:

i) **Primary cooperative society (PCS):**

At this level, individuals learn to participate in aspects such as micro savings and credit. Farmers can also access services collectively (e.g. collective marketing, quality inspection, market information and agro-inputs).
 ii) **Area Cooperative enterprise (ACE):**

ACEs collect and disseminate market information while collaborating with the primary societies to guide members in the selection of 3 enterprises to focus on during production. ACEs store members’ produce after it has been bulked and delivered by the primary co-operatives. ACEs can also just keep the records of what is where. ACEs also check on quality of produce delivered by the members. ACEs are used by the members to market their produce. However, a single ACE must specialize in 3 commodities / products. ACEs may engage in drying and storage and adding value to members produce where it is desirable and feasible as well as bulking and market of members produce. ACEs may participate in issuing stores receipts to the primary co-operatives members for their produce which they can use for accessing credit from SACCOs.

 iii) **Savings and Credit Cooperative (SACCO)**

The role of SACCOs is to accept savings from all categories of members and provide safe depository as well as providing credit/loans to individuals and primary and secondary cooperatives. SACCOs also offer financial literacy education.

**Perceived benefits and merits of the Integrated Cooperative Model**

The prime beneficiaries of this model are the smallholder farmers who are enabled to collectively sell what they produce at better terms through the ACEs while accessing friendlier loans from their SACCO. Farmers are also able to access good quality and cheaper agro-inputs because they purchase jointly using the advances from their SACCOs in collaboration with the primaries and ACEs. They are able to bargain effectively and get the inputs at a lower cost which leads to a lower production cost and hence higher incomes.

The method of bulking which is used by the cooperatives in this model reduces the need for the huge financing volumes which means it is more efficient, cheaper and safer. This is an antidote to the problems that led to collapsing of traditional unions which used to secure
loans from banks and government in order to buy the members’ produce and would fail to service them.

The ACEs are also beneficiaries in that they can borrow money from the SACCOs to finance purchase of equipment especially for adding value to their members’ produce so as to obtain higher incomes. ACEs under this model have been able to buy equipment for primary processing such as rice hulling, maize milling and packaging material such as honey packaging bottles, wine packaging etc.

SACCOs have attracted banks towards financing agriculture because they are closer to the members knowing who is credit-worthy and how to recover loans. With their presence in the system, SACCOs have become the bridge between farmers on one hand and financial institutions on the other. With that kind of relationship the banks feel much more comfortable collaborating with SACCOs.

With this model, payments to farmers have been made much easier. Since farmers possess accounts with SACCOs, bulk payments can be made to SACCOs and then farmers get paid by the SACCOs which are closer to them. This enables farmers access financial services especially in areas where banks are absent and the requirements tend to be less stringent.

This model can easily allow for the implementation of the Warehouse Receipt System which enables farmer’s access to funds in advance against their stored up produce in a certified warehouse. Through the warehouse receipt system, it has been possible for the producers to get high prices at a later date instead of selling in a rush immediately after harvesting when the prices are depressed.

Participants in this model are easily linked to service providers and this creates a critical mass which attracts business partners just as the farmers benefit from discounts. It brings a win-win situation to all the players involved in trade.

**Inclusivity of vulnerable groups (youth, women, disabled, resource-poor)**

This model has been in use for 10 years and has good prospects. It is very accommodative and inclusive to all kinds of farmers. First, it guarantees equal voting rights to all members
which enables the vulnerable population categories to also participate adequately. Secondly, members have equitable access to services provided by the model components which also enhances inclusion. The risk envisaged is the potential mismanagement of the organs by leadership however, the rewards of this model are numerous including empowering farmers (including the vulnerable) and giving them a chance to access inputs, markets and to save.

**Main disadvantages/challenges of the Integrated Cooperative Model**

One of the key disadvantages of this model is the negativity it attracts due to bad history associated with cooperatives. Often, cooperatives have been looked at suspiciously as arrangements prone to failure again. This stigma often denies this model a chance.

One of the challenges of this model is the inadequate storage facilities such as silos with drying facilities, cold storage which are connected electric power for effective handling of the members’ produce.

Another challenge is the inadequate loan funds in SACCOs to enable them extend appropriate loans to all farmers. The SACCOs are still operating below the required volume and can only afford short-term credit to the borrowers. The needs to be met are quite many, right from the individuals to Primary Societies and ACEs.

**Risks and threats associated with the Integrated Cooperative Model**

The most common risk to all cooperative arrangements is usually mismanagement by the leadership. This often occurs when the members are not vigilant enough and are less participative in the activities of the cooperative. This can be combated by empowering the members to be active and vigilant. Members should also be equipped with ample knowledge on their rights, duties and privileges.

**An illustration of where the UCA model been used successfully**

This model has registered several successes especially in western and central Uganda. By 2012, about 46% of the SACCOs were located in the central region, followed by western region with 24%, then the eastern region with 21% and lastly northern region with 9% (Thangata\textsuperscript{18}, 2016).
Set-up costs and financing arrangements of the Integrated Cooperative Model

This model initially requires mobilization of farmers to form primary cooperative societies (PCS) each comprising of 20 – 30 farmers. Funds would be required to organize and sensitize farmers on working together. When this is done, funds would then be required to set up storage and drying facilities for each Area Cooperative Enterprise which caters for 15 – 20 PCSs. Such a facility can cost about USD 80,000 – 100,000 depending on the capacity of produce handled ranging from 200 to 300 metric tons.

Working on an assumption that savings amounting to 20% can be made by selling through this model’s arrangement, movement of produce with volumes amounting 200 – 300 metric tons can bring about a saving/benefit estimated at about USD 12,000 – 18,000 assuming each metric ton is valued at USD300. As such, an investment of a store/drying facility for an ACE would pay itself back after 6 cycles or 3 years assuming each year has 2 seasons of production.

Model 2: The Processor-Driven Marketing Model (PDM)

Description of the PDM model

The Processor-Driven Marketing Model (PDM) is one promoted and used by the Mukwano group which is one of the largest private sector actors in Northern Uganda engaged in the production, processing and marketing of grain and oil seed. It was developed by the Mukwano group and was specifically designed for sunflower though it is used for soybean
and maize. The motivation behind this model was to boost production of sunflower to meet the processing capacity requirements.

The processor is the initiator and central player in this model. Every 25 farmers constitute a farmer group. For every 10 farmer groups, there is a site coordinator (SC), who is a private sector actor, doing purchases of the commodity. The SC is not an employee of the processor but simply purchases the commodity from the farmers and sells to the processor to earn a commission. The commission earned caters for all their costs and expected margins. The processor utilises the services of the SC to avail improved seed to the farmers at a subsidised price. This is aimed at breeding some loyalty between the farmers and the processor. The processor employs extension coordinators to offer advisory services to the farmers through the farmer groups and site coordinators. Furthermore, the processor employs procurement
coordinators to supervise and support the procurement process conducted by the site coordinators.

**Rationale and philosophy of the PDM model**

The rationale and philosophy of this model is that private sector drives the supply chain to create a win-win situation for all actors through elimination of some unnecessary rent-seeking intermediaries.

**The components of the PDM model:**

**The processor:** This is the engine of this model acting as the initiator and central player in this model. They appoint the site coordinators and purchase from them commodities bought from farmers. They also engage site coordinators as suppliers of quality inputs to farmers. The processor provides extension and advisory services to farmers through their farmer groups.

**Site coordinators:** These are the innovators behind this model. Though they are independent, they operate in the interest of both the farmers and the processor. They ensure that the flow of commodities is smooth while observing quality standards and delivering benefits to the actors in the chain.

**Farmer groups:** These are the basic component of this model. Without them, there is no commodity. Their role is to mobilize individual farmers to produce a specific commodity as desired by the off-taker (processor) then to work collectively in bulking the produce to avail it for purchase by the site coordinators. They are tasked to mobilize farmers in production and to help them access inputs while selling their produce collectively.

**Perceived benefits and merits of the PDM model**

This model brings about the following benefits:

- Amalgamation of input and output trade
- The quality of the produce, in terms of varietal specificity, is controlled through this model. The processor avails the farmers the seed for the type of variety desired.
• This model may be most suitable for a situation where a specific crop is being produced in an area by majority of the farmers. The market for the commodity is quite assured.

• Extension service support is easier rendered under such a model because it is mostly focused on a single commodity.

• This model is an outstanding example of how private sector can complement government efforts in the provision of extension and advisory services while ensuring availability of good quality inputs to farmers as well as a market for what they produce.

Inclusivity of the PDM model to vulnerable groups (youth, women, PWDs, resource-poor)

This model is quite flexible and can allow for special interest groups to participate. Farmer groups of youth, women and persons with disability can be formed and assigned a site coordinator. In terms of voice, this model allows for information exchange amongst participating actors to occur whereas in terms of ownership, the processor is pretty much in control. The probably risk is for the processor to behave unfavourably to the vulnerable groups but also side selling from farmers is possible. The reward is that farmers get access to good quality inputs and are assured of a market which implies consistent revenue.

Disadvantages/challenges of the PDM model

Some of the disadvantages and challenges of this model include the following:

• This model was basically designed considering a Monopsony situation whereby only one buyer exists to purchase goods from several producers. However, when other buyers surface, they exhibit the “free rider” behaviour by poaching on the clientele built by the initial investor. Mukwano Industry has experienced a shift of loyalty by farmers to other produce buyers / processors who attract them with a slight price increment. This model, therefore, is unable to protect the investors to ensure they reap from the investments made in building linkages with farmers.

• This model cannot guarantee loyalty of farmers to a specific value chain. This implies that the investors into this model are not guaranteed of reaping the benefits once competition from other actors/ investors set in.
• This model is heavily dependent on the processor and in a situation where the processor loses interest in the business; farmers are likely to suffer most.
• The model cannot guarantee farmer loyalty even where there exists a signed contract between the farmers and the processor. Often the cost of arbitration is too high to justify its pursuance.

Risks and threats associated with the PDM model

The most salient risk facing this model is that it is difficult to determine or control the decisions made by private sector players. This model, therefore, makes farmers very vulnerable to erratic decisions made by an investor (processor). Furthermore, once the investment climate is not favourable, the entire value chain is bound to collapse leaving farmers in a much worse off state.

An illustration of where the PDM model been used successfully

This model has been used by the Mukwano group in northern Uganda for over 20 years. Currently, Mukwano boasts of using this model to reach out to 2,300 farmer groups with over 70,000 farmers of which approximately 35% are females. The model has enable Mukwano group grow their business to a level of moving volumes of agricultural produce estimated at about 60,000 metric tons annually (worth Ugx 60 billion or USD16 million p.a.).

Set-up costs and financing arrangements of the PDM model

This model essentially requires mobilization of smallholder farmers to form groups which are linked to site coordinators. Funds are required to hire procurement coordinators and extension coordinators to facilitate bulking of the commodity and render advisory services and inputs to farmers, respectively. Much of the investment in this model is made by the processor and is towards setting up a facility for handling, storage and processing of produce. Promoters of such a model should aim at identifying a suitable private sector actor to work with as a processor.
Model 3: The Joseph Initiative model

Description of the JI model

This model was developed by the Joseph Initiative (JI) which is a grain management and trading company set up in 2012 by MF Africa Ventures, the Kyklou Group and Agilis Partners Ltd. Today, JI has a large scale grain farm, a network of out-growers and is also involved in grain trading and in processing with a plant in Masindi which produces flour sold locally in Uganda and in neighbouring countries.

![Diagram depicting the Joseph Initiative model](image)

Figure 3: Diagram depicting the Joseph Initiative model

This model comprises of a rich network of village agents and buying centres spread across major grain-producing areas. Each of these centres is located near or by a relatively good road and 2.5 – 4Km from another centre. Each centre comprises of a crib for storing cobs and a simple structure which houses the coordinators office and some equipment. Farmers are able to sell their produce and at the same time access agro-inputs at these centres. Each of these centres serves about 150 to 200 farmers. The grain purchased through the network of JI centres is transported to a central processing facility where value is added to it then the commodity sold to locally and to neighbouring countries.
Each of these JI centres has a couple of staff one being in charge of procuring grain whereas the other is in charge of supporting farmers in agronomy and post-harvest. JI offers basic training to farmers on farming as a business, crop husbandry as well as post-harvest handling and observance of quality standards. Farmers under these Joseph centres are able to access micro credit to prevent them from side selling at lower prices.

**Rationale and philosophy of the JI model**

The rationale and philosophy of this model is that quality is critical and is rewarded through price premiums. The processor is committed to availing farmers with knowledge, inputs and advice on how to grow in order to obtain a “win-win” situation. Their bottom up approach emphasize the following aspects as critical to success and these include; i) People ii) Systems (under which the JI centres operate), iii) technologies which make the systems work and iv) Capital.

**The components of the JI model:**

**The buyer/processor:** JI in this case is the central and pivotal actor in this entire model. JI finances the setting up of the purchasing network infrastructure and keeps it running.

**Farmers:** These are independent producers of commodities who are affiliated to the JI centres where they sell their produce and also access knowledge and inputs.

**JI village agents:** These are employees of JI who manage the centres. Two of them manage one centre one being in charge of procuring grain while the other in charge of supporting farmers in agronomy and post-harvest.

**Perceived benefits and merits of the JI model**

This model renders several benefits to both the farmers and to the buyer/processors:

- The buyer/processor is in a better position of obtaining reasonable volumes to purchase due to the upstream investment in setting up buying centres.
- The buyer/processor may obtain good quality produce due to prior availing of inputs, credit, knowledge and advice to farmers
- To farmers, benefits range from having a steady market for what they produce to also having easier access to credit, good quality inputs, knowledge and advice.
Inclusivity of vulnerable groups in the JI model (youth, women, PWDs, resource-poor)

This model is quite flexible and can allow for special interest groups to participate. Farmers in the categories of youth, women and persons with disability can be assigned a JI centre.

Disadvantages/challenges of the JI model

Some of the disadvantages and challenges of this model may include the following:

- The model is very much hinged on the buyer/processor which makes all the other actors quite vulnerable and not cushioned from exploitation or manipulation. Furthermore, the investment required by the buyer/processor to set up the entire structure is quite enormous.
- The storage facilities at the buying centers are quite too basic and may expose the produce to damage.

Risks and threats associated with the JI model

The most salient risk facing this model is that is difficult to determine or control the decisions made by buyer/processor. This model is therefore, very vulnerable to erratic decisions made by the buyer/processor and if the investment climate is not favourable, the entire establishment can collapse leaving farmers in a much worse off state.
An illustration of where the JI model been used successfully

This model has registered huge success in Uganda since its introduction by its inventors in 2012. For instance, JI grew from 10 centres initially set up in 2012 to over 60 centres in 2016 of which 40 are in Masindi and Kiryandongo districts while 20 are in Mubende district. Furthermore, farmers under this arrangement have experienced growth in productivity from a mere 500kg/ha in 2012 to about 3Mt/ha in 2016. Currently, JI boasts of steady growth from 15,000 farmers supplying about 10,000Mt of grain in 2013 to about 50,000 farmers are supplying almost 30,000Mt of grain to JI through the collection centres\(^\text{19}\).

Farmers under the Joseph centres have been enabled to access micro credit to hinder them from the temptation of side selling at lower prices. Loans of about Ugx 100,000 to Ugx 1,000,000 (US$27 – 270) are disbursed under this arrangement. JI boasts of having a loan recovery rate increasing from 45% in 2014 to about 85% in 2016 and this is attributed to the skills farmers have acquired under this arrangement.

Set-up costs and financing arrangements of the JI model

This model basically requires setting up of bulking centers in the producing areas and each of these can have a crib and a small office for the 2 recruited officers, one for procuring and the other to provide extension and advisory services. Each of these centers may cost about USD 2,000 to set up and can store about 15 – 20 metric tons of grain. The benefits gained by the investors as well as farmers can be estimated at 20% of the volumes traded which amounts to USD 1,200 per crib per cycle.
Model 4: The AFGRI model

Description of the AFGRI model

This model was developed by AFGRI which is a multinational grain trading company which entered the Ugandan market in 2012. In Uganda, its main focus is on grain management mostly for food security and also reduction in post-harvest losses. It focuses on grain trading, drying & storage services facilities, and farm inputs and mechanization services.

Figure 4: Diagram depicting the AFGRI model

The model involves the key player (big grain trader) setting up buying centres in key grain producing areas and through them, purchases of grain are effected with strict adherence to quality standards. Farmers, whether individuals or in groups are free to supply grain to these centres though certain minimum quantities are set for effective management. These Farmer
Service Centres (FSCs) are fitted with handling, pre-cleaning, sorting and storage facilities of reasonably high standard and upon purchase; the grain is weighed, inspected, dried and cleaned prior to being stored for future sale.

Under this model, farmers, through FSCs, are availed with good quality inputs (seed, chemicals, fertilizers,) as well as advice on how to get better yields while observing quality standards. As a way of boosting production, tractor hire services are also rendered to farmers. All these inputs and services are offered on a check-off basis whereby payments can be done settled after harvest when the commodity is delivered at the buying centre.

**Rationale and philosophy of the AFGRI model**

The rationale and philosophy of this model is that farmers need to be assisted in obtaining better yields and good quality produce. However, they are constrained by resources which, if availed, can create benefits for the trading company as well as the farmers hence creating a “win-win” situation. Quality is critical to this model and incentives for quality are integrated into the produce purchasing mechanisms.

**The components of the AFGRI model:**

**The trading company:** This is the engine of this model charged with the role of sourcing all the funding to keep the model together. Funds are required for procuring the produce, avail inputs and mechanization as well as setting up FSCs and VGACs. The trading company operates large cleaning, drying and storage facilities capable of handling the bulk of produce purchased.

**Farmers:** These are the base on which the model is built. Without them, the model would malfunction. Farmers are expected to produce the tradable commodities and to do so with strict quality observance. Farmers aggregate into producer organizations though some may function as individuals if their scale of operation is reasonable.

**The Farmer service centres (FSCs):** These places where produce is procured from farmers and also services such as access to quality agro-inputs, advice, knowledge and mechanization
are rendered. FSCs are also equipped with storage, pre-cleaning and inspection facilities to ensure adherence to quality standards.

**Village Grain Aggregation Centres (VGACs):**

In areas where FSC are not established, the structured Producer Organisations clustered around Village Grain Aggregation centres will be utilized to provide platform for supply of agro-inputs and advisory services. These have basic storage aimed at temporarily holding the bulked stock prior to its being transported to the trading company.

**Perceived benefits and merits of the AFGRI model**

This model renders several benefits which include the following:

- The trading company, through its upstream investments, is able to consolidate volumes of tradable produce as opposed to operating in a random manner.
- Strict adherence to quality standards is made easier hence this model positively impacts on the quality produce traded
- Under this model, farmers are facilitated to produce even when they are resource constrained. This is done by availing them with the required production factors (mechanization, inputs, advice and knowledge) which they can pay for later after harvesting.
- This model has impacted positively on yields in the areas where it has been implemented.

**Inclusivity of vulnerable groups in the AFGRI model (youth, women, PWDs, resource-poor)**

This model is quite flexible and can allow for special interest groups to participate. Farmers in the categories of youth, women and persons with disability can be assigned a Farmer Service Centre or a Village Grain Aggregation Centre.

**Disadvantages/challenges of the AFGRI model**

Some of the disadvantages and challenges of this model may include the following:
- This model is very dependent on the trading company for its existence hence without such an actor, it cannot exist. Farmers are much subjected to relying on the good will of the trading company.
- This model is not well cushioned from the vices of side selling since behaviour of farmers may be erratic and litigation with numerous parties can be quite costly.

**Risks and threats associated with the AFGRI model**

The most salient risk facing this model is that is difficult to determine or control the decisions made by trading company which is the main actor. This model is therefore, very dependent and vulnerable decisions made by the trading company and if erratic, the entire establishment can collapse leaving farmers in a much worse off state.

**An illustration of where the AFGRI model been used successfully**

This model has registered huge success in Uganda since its introduction by its inventors in 2012. Farmers under this arrangement are able to access high quality inputs such as seed and fertilizer as well as support services such as spraying and maize shelling equipment. For instance, farmers under this arrangement have been able to increase their yields from 600kg/ha to about 2Mt/ha due to using good quality inputs. Currently, AFGRI moves volumes of grain estimated at 22,000 metric tons up from 10,000 metric tons when they’d just entered the Ugandan market in 2012.

**Set-up costs and financing arrangements of the AFGRI model**

This model basically requires setting up of farmer support centers (FSCs) and the village grain aggregation centers (VGACs). Each FSC can cost about USD100,000 to set up but the gains accruing from such an investment are estimated at USD20,000 per cycle or production season. The VGACs are much simpler and cheaper to set up.
6. Recommended models

The four models present above have been tried out in different parts of Uganda and have registered good results. Each of the models seems to be adaptable to catering for vulnerable groups such as youth, women and persons with disabilities. Nonetheless, three of the four models presented are very much dependent on once actor which makes them very vulnerable and susceptible to the behaviour of that one actor. The fourth model presented is embedded in the cooperative outfit which has been around and tested over a long period of time.

However, each model emphasizes delivery of services to farmers and these include access to information and to quality agro-inputs, extension/advisory services as well as financial services (savings & credit). In conclusion, all these models can be applicable in northern Uganda though aspects of culture and social behaviour are dynamic and should always be examined before a particular model is selected. Aspects of inclusion embodied in the voice, ownership, risk and reward are also to be critically considered when choices are being made.

As such, the three models which have presented namely; the processor driven, the Joseph initiative and the AFGRI model can be collapsed into a hybrid model. This hybrid model hereby referred to as “Private Investor-Driven Hybrid Model (PIDHM)” encapsulates key features of the 3 models described that include the following:

i) A central party (investor) who injects much of the capital required to set up the outfit (i.e. setting up the processing plant or main storage, establishes the support services to producers, recruits a procurement team and advances inputs)

ii) Mechanisms of availing good quality inputs to producers (i.e. seed, fertilizers)

iii) Mechanisms of rendering services to producers (e.g. credit, advisory, market information, etc….)

iv) Mechanisms of bulking produce and adding value to it

v) Linkage to market opportunities

The envisaged Private Investor-Driven Hybrid Model is diagrammatically represented as follows:
The service centres are primarily responsible for coordinating the availing of inputs and support services to the producers whereas the bulking centres are responsible for the aggregation and procurement of the produce. The procured produce is improved either by cleaning, sorting, drying, hulling or even processing into products of higher value prior to being sold in the local, regional and international markets. This happens at the central facilities which must have adequate storage facilities.

7. Applicable models to prominent enterprises

Three specific enterprises identified by representatives of the Technical Committee of the Joint Acholi Sub Regional Leaders Forum: i) Cattle, ii) Charcoal and iii) Shea nut. These three
enterprises each have considerable potential to unlock a huge section of the population from poverty.

Apparently, the Acholi Sub-Region has comparative advantage in each of the above mentioned enterprises and the following are some of the key considerations to take into account when developing inclusive business models centred on them.

**7.1 Proposed model for Cattle**

The Acholi Sub-Region is endowed with lush savannah grasslands that are very suitable for livestock grazing and population density across the region is relatively low compared to the rest of the country. Cattle were never a core aspect of traditional Acholi culture; nonetheless, they have been an important aspect of household wealth and the majority of adults across the Acholi Sub-Region possess the basic knowledge of cattle keeping. Approximately 98 percent of the cattle in the Acholi Sub-Region were slaughtered, stolen or perished during the protracted civil conflict. The number of head in Gulu District in 2008, which included Omoro District that has since broken away, was approximately 21,000 head. Restocking programmes implemented across the region by government and development partners have had a significant impact on increasing the number of livestock across the region pushing the number of head in Gulu District to approximately 32,000 head in 2013. In 2017 the number for Gulu District alone is approximately 50,000. Agago and Pader Districts to the East of the Acholi Sub-Region are within the cattle corridor. The cattle corridor stretches up across from the south western Uganda which has 80% of the cattle in the country and where the average number of cattle per household is 2.11 animals up across northern Uganda which has 0.67 animals per household against to the east of the country. It is interesting to note that the national average of cattle in Uganda is 1 animal per household.

As detailed above, the customary communal land *(ngom kwaro)* tenure system, grazing land *(olet)* is among the eight designated uses of land. As such, cattle rearing could readily be integrated into the cooperative model which is well suited to the land tenure system socio-cultural context of the Acholi Sub-Region. Many areas have already been designated for grazing, traditional leaders and other opinion leaders within the community could play an
important role in reinforcing and disseminating this IBM information and where necessary identify new or additional areas of land to be allocated for grazing purposes. Community members interested to participate would have to be identified and allocated land in line with customary integrated criterion based on capital, skills and knowledge.

Enrolled farmers would have to establish their leadership or governance structure and would be task to safeguard and maintain resources such as the water-points and grazing lands which are key in livestock rearing. Collective action on aspects such as tick control and vaccination against diseases as well as control of disease spread would be the salient issues that the leadership deals with. Furthermore, identification of market opportunities and access to markets would be wise ventures to pursue jointly. Leaders would have to mobilize resources from members to set up livestock buying centres/markets where animals are transported to for purchase by potential buyers. Via such centres, farmers would be availed with advisory services and market information to enable them maximise returns. Credit and input provision can also be availed at such centres as long as farmers are well profiled. Buyers can also be regulated in terms of registering them and allocating them particular days of buying animals. This may be a good mechanism of reducing vices such as animal thefts. However, the risks of disease outbreaks can also be jointly handled through this model.

Details of how to set up the integrated cooperative model are illustrated in the guide and these can be tailored to livestock. The model can also be adapted to suit the local situation basing on the local knowledge of the implementers and room for innovation is necessary.

7.2 Proposed model for Charcoal

The Acholi sub-region is endowed with natural vegetation which comprises of some tree species that are suitable for the manufacturing of charcoal. Demand for charcoal remains high primarily due to the prohibitive cost of alternative fuel sources such as electricity, solar and cooking gas. As such, this can be a business opportunity worth pursing as long as environmental sustainability concerns are well adhered to. The implication is that cutting of trees for charcoal has to be matched with adequate re-afforestation and protection of the
same tree species. The model, therefore, has to comprise of an active investment in conservation and forestation to replenish whatever trees being cut for charcoal and ensure sustainability.

As already detailed, grazing land (olet); (hunting ground (tim dwar), forest land (bunga), rock outcrops and mountains (Got/godi) along with streams, rivers and swamps where firewood can be gathered are all recognized uses of land under the customary communal land (ngom kwaro) tenure system. Such customary tenure arrangements are extremely conducive the integrated cooperative model that is also recommended for the charcoal enterprise. The rationale for this recommendation is that it allows for several small scale and resource poor actors (including women and youth) to participate. The model should involve all concerned stakeholders who may include the community, its leaders, the local government (policy makers), environmental conservation persons, civil society and development partners. Experts should first establish the most suited tree species to plant in consideration of the agro-ecological factors.

The model would help farmers organize themselves into governable units for jointly accessing inputs for tree planting while also organizing their bulking and eventual marketing of the charcoal. Selling centres can be established and farmers availed with adequate market information to enhance their bargaining position. Actors in this value chain can be profiled for easier contact on issues such as sensitizations regarding sustainable environment utilization.

Risks such as forest fires as well as prohibition of charcoal selling can be handled once the value chain participants are working together and can give assurances that degradation is well catered for.

7.3 Proposed model for Shea nut

Acholi Sub Region is naturally endowed with a tree species called Vitellaria paradoxa also known as Shea and locally known as Moo yao. It is indigenous to Africa and its fruit consists of a thin, tart, nutritious pulp that surrounds a relatively large, oil-rich seed from which Shea butter is extracted. Shea butter has many uses and may or may not be refined. In the West it
is mostly used for cosmetics as emollient but throughout Africa, it is used extensively for food and is a major source of dietary fat as well as medicinal purposes.

The Acholi Sub-Region can exploit this endowment using the private investor hybrid model. The rationale behind recommending this model is that; greater gains can be obtained if Shea nut is locally processed and sold to international markets as shelf ready products. The gains include employment and the added value which can be captured in the selling price of processed products. For this to happen, huge investments have to be made and these may require a reasonable capital injection plausibly by an investor. It is important to note that this investor can be local or foreign.

The investor would have to set up a processing plant then establish a procurement mechanism which adequately rewards farmers. Advisory services should be established to ensure sustainable harvesting of the nut and preservation of the trees. Tree planting programmes should also be incorporated for sustainability purposes as the trees are difficult to propagate. The major risk to be safeguarded against is the depletion of the tree hence experts are to be hired to advice farmers and other environment exploiters accordingly. Farmers can also gain more from such a value chain once they are equipped with some basic processing skills. This may imply more revenue into their pockets.

Details on how to set up this model are illustrated in the model guide and these can be tailored and adapted to suit the shea value chain. Land could be secured by the investor under freehold or leasehold title, at least for the process centres. The farmers engaged in supplying the products would harvest the shea nuts off any of the eight recognized different forms of tenure in accordance with customary practice and their rights to harvest these trees in consultation with clan (kaki) leaders.

8. Conclusion

The four potential models presented above have been implemented in different parts of Uganda and have registered good results. Each of the models seems to be adaptable to catering for vulnerable groups such as youth, women and persons with disabilities. Each
model emphasizes delivery of services to farmers and these include information, access to quality agro-inputs, extension/advisory services as well as financial services (savings and credit); however, three of the four models presented are very much dependent on one actor which makes them very vulnerable and susceptible to the behaviour of that one actor. These 3 have been collapsed into a hybrid model which is private investor driven.

The applicability of the models to the three enterprises identified as most promising for Acholi sub-region (cattle, charcoal and shea nut) has been analysed and presented cognizant of the prevalent culture, social behaviour that are typical of the sub-region. Environmental sustainability has been accorded careful consideration to ensure that the proposed economic activities are harmonious and adaptable to climate change and to the environment in general.
Annex 1: **Report on Agricultural Enterprises in Acholi Sub region.**

**Agricultural Enterprises in the Acholi Sub-Region**

With the availability of large tracts of land, relatively fertile soil, high regular annual rain fall approximately 1,400mm and lower population density, Nwoya and Amuru in the west of the Acholi-Sub region have attracted the majority of medium to large scale agricultural investors since the end of the protracted civil conflict in 2004. These initiatives comprise foreign firms from the Arab Emirates, United States, India, Denmark, South Africa, Germany and North America. A number of these initiatives were examined for this study. The West Acholi Cooperative Union (WACU) provides a clear model of the benefits of organizing farmers, especially vulnerable groups, in the provision of support and securing more favourable terms and conditions for agricultural inputs and outputs.

Two of the biggest ventures examined, Vinayak and NUAC farm their own land. They do not make use of out-growers and while they both engage some local staff, many of the individuals employed in their operations are from other parts of Uganda and/or Kenya. Several agricultural ventures including Alliance One and Amatheon currently have out-grower programmes. Alliance One has a very extensive network of out-growers on which it relies exclusively while Amatheon has substantially downsized its out grower programme in recent months due to challenges associated with farmers accepting inputs before selling their produce to other buyers offering more competitive prices and then failing to honour their commitments for the inputs received. AFGRI has moved has moved from using out-growers and now provides inputs on a cash basis. Several large scale agricultural ventures comprising Horyal Investment Company Holdings, Bukona and FOL Logistics are in advanced stages of establishing their enterprises in the Acholi Sub Region. They are looking to make significant use of out-growers, but are yet to properly design their programs. Omer is now a well-established agricultural enterprise and is looking to engage approximately 200 out-growers with maize, rice and soya beans through 2018 and is also yet to design it programme.30
Out-growing arrangements provide a relatively straightforward approach to engaging local subsistence farmers. The particular arrangement of the relationship with out-growers vary as detailed in the description of the different companies outlined below. In some instances the agricultural enterprise provide the farmer or land holder with inputs such as assistance with land preparation, seeds, fertilizers, herbicides, pesticides, harvesting/post-harvest handling, storage, transportation and technical support in addition to establishing agreements to buy what they produce at specific or market prices. The capacity of farmers across the Acholi Sub-region to grow good quality produce in economically viable quantities remains a challenge. The organization of out-grower programmes can be extremely high cost to the enterprise requiring serious medium to long term commitment, high levels of organization and time through the provision of extension services. In terms of land tenure security, the status quo is maintained and even reinforced as household members fulfil particular roles.

While the majority of large to medium scale agriculture enterprises secured land through formally registered leasehold or sub-lease agreements some agricultural enterprises have entered into informal agreements with land holders or people claiming to be the legitimate owners of the land. Formally registered land tenure arrangements provide maximum security to the investor. Some of the enterprises established joint ventures with land owners such as Omer, NUAC and Vinyak. Amatheon secured leasehold titles in the names of the local land owners buttressed by a written legal agreement that Amatheon would utilize the land for a given period at negotiated rates for all or a portion of the land. The company ensured that the land had been surveyed and registered and local agreements with local land owners for the plots where they positioned key infrastructure including office buildings, workshops, staff accommodation, packing sheds, stores and silos.

These arrangements provide land tenure security to the investor and a set amount of income to the local land owner; however the benefits to the local community depend on the level of mechanization employed by the farm. Nonetheless there are opportunities for skills transfer although in the case of highly mechanized operations skills transfer is minimal, though good for nurturing the development of other entrepreneurs in the region.
1. West Acholi Cooperative Union (WACU)

West Acholi Cooperative Union is a cooperative based, members owned institution situated in Gulu engaged in cotton processing and marketing in addition to maize and soya beans. It is originally an Indian cotton ginnery established in 1961. WACU reopened in 2006 and now comprises 45 separate cooperatives. In 2009, the Gulu Agricultural Development Company took over the main ginnery in Gulu town on a three year lease to refurbish the machinery. WACU holds a 49 year lease on 9,000 acres.

The Annual General Meeting attended by 2 representatives of each of the member cooperatives to examine accountability, review policies, provide direction and elect the nine member board. Currently only one board member of WACU is female, however, plans are under way to increase the number of women participating in the management. WACU focuses on developing market linkages and providing its members with assistance in identification of good quality inputs and selling their produce in addition to training them in different aspects of agronomy. WACU also encourages members to save.

2: AFGRI

It is a subsidiary of the South Africa founded AFGRI and commenced operations in Uganda in August 2014. AFGRI is engaged in the collection and marketing of grain comprising
primarily maize, but also rice and soya bean that is sold in Kampala and in neighbouring countries. AFGRI has created an arrangement with farmers to have access to good quality inputs then offset this cost through a check-off system but this has been greatly undermined by the vice of “side selling”. AFGRI faced difficulties recovering the money from farmers to cover the cost of the services and inputs provided. Currently, AFGRI operates an up-front cash basis mechanism for the inputs and services provided which include ploughing, seeds, planting, herbicides, pesticides, harvesting, drying, cleaning, transport and storage. The costs charged for these services depend on the distance of the distance of the plot from their depot to cover the cost of the logistics involved. This arrangement is restricted to farmers with plots of half an acre or more. However, AFGRI is committed to buying even very small quantities of produce so long they meet the required quality standards. AFGRI endeavours to offer competitive prices to produce delivered for purchase by farmers especially the smallholders.

3: Amatheon Agri Uganda Ltd (AAU)

![Photo 4: Recently closed storage facilities of Amatheon in Gulu](image)
Amatheon Agri Uganda is a subsidiary of Amatheon Agri Holding N.V. an agribusiness and food company, headquartered in Berlin with operations in Uganda, Zambia and Zimbabwe. The company is currently engaged in the implementation of active due diligence in an additional 6 countries across Sub Saharan Africa and focuses on farming, trading and food processing.33

Amatheon Agri commenced operations in Nwoya District in 2013 and has above 3,000 hectares under cultivation, mainly maize, rice, soya, sunflower and sorghum.

Amatheon Agri utilizes state-of-the-art technology in cultivating, planting, cropping and harvesting equipment, as well as post-harvest storage and handling facilities. The main crops are maize, soya beans, rice and groundnuts and all activities are undertaken by a committed team of managers and trained operators. Before commencing operations, Amatheon undertake in-depth Social and Environmental Impact Assessments, Environmental Monitoring Plans and develops close ties with the surrounding communities. The company is committed to responsible investment in agriculture and follows the IFC Performance Standards, UN Principles for Responsible Investment in Farmland and the UN Guiding Principles on Business and Human Rights. In 2015, Amatheon Agri was accepted as a member of the UN Global Compact and is guided by its ten principles.34 Trials are being conducted and an expansion into other crops is planned.35 The company has established eleven rural depots and provides farmers with access to inputs and outputs; market for their crops. Amatheon also provides farmers with free trainings on crop establishment and rotation, crop health, usage of agro-chemicals, business education and financial literacy. Amatheon has invested heavily in giving back the communities where it operates. Under its CSR, it has provided assistance with the establishment and maintenance of over 34 kilometres of road in the vicinity of its operations. Amatheon has also provided support to the Anaka Referral Hospital which offers medical services to 14 villages in Nwoya District through a Public Private Partnership. During health outreach program initiated in 2014, a mobile unit comprised of medical professionals, equipment and drugs visits communities neighbouring Amatheon AFGRI’s farm on a quarterly basis to cover a range of health services and topics including HIV/AIDS, Sexual Transmitted Infections, Hepatitis B and Malaria.36
Amatheon Agri provides support to small-scale farmers to boost economic participation in the community. The company has a nucleus site and has established rural depots that allow farmers easier access to quality inputs and act as a trading platform for those who wish to sell their produce to Amatheon.³⁷ Farmers also received free training in Conservation Farming, Farming as a Business, and financial literacy to improve their production and marketing to foster an entrepreneurial mind-set as part of Amatheon’s inclusive-growth strategy that strives to create shared value for both the company and surrounding communities³⁸. Until recently, Amatheon had a very significant out grower programme comprising approximately 1,800 farmers³⁹ however, the programme has faced a series of challenges associated with the reliability of farmers to sell their produce to Amatheon and no other buyers offering more competitive prices. According to a company representative, Amatheon currently has 52 out-growers and is not looking to engage any more for the foreseeable future.⁴⁰

4. FOL Logistics

Based in Dubai in the Arab Emirates, FOL Logistics, Uganda first established itself in Uganda in 2015.⁴¹ Headquartered in Namanve Industrial Park in Mukono District adjacent to Kampala, the company employs approximately 600 people and is already engaged in the full rice value chain comprising the procurement, processing, marketing and distribution of rice branded as Kingdom Rice in Uganda and across East Africa.⁴²

Figure 6. FOL Rice crop in Nwoya District, rice crop
FOL Logistics recently cleared land and planted 1,000 acres of rice in Ywaya Parish, Anaka Sub-County in Nwoya District in 2017. The company is experimenting with advanced varieties of rice that mature within 70 days and the first harvest is expected in February 2018. They have plans to expand its nucleus farm in Nwoya District to 9,000 acres and establish a programme to support between 300 to 1,000 out-growers with inputs comprising pesticides, seeds, tractors and training in modern farming methods. The Contract Manager explained that they would deduct the cost of these inputs when buying the rice from the out-growers. He was not in a position to provide any further details on the out-grower programme which is yet to be established, but acknowledged a primary problem with such arrangements is the tendency of farmers to sell their produce to buyers offering the highest price and that the recovery of the cost of inputs by the company can be a challenge.

According to a recent media report on President Yoweri Museveni’s participation in the official launch of the farm in Nwoya District on 25 November 2017, FOL Logistics has a three year plan to further develop the value chain by investing in rice milling, bio mass silicon fertilizer and edible oil and is looking to establish operations in different regions across Uganda.

5. Bukona Out growers Agricultural Processing Company

Photo 5: Bukona plant in the final stages of construction in Anaka
This is a new distilling factory under construction in Anaka that intends to outsource fresh cassava or maize from farmers in the region. It is expected to utilize up to 200MT/day of fresh cassava when in operation probably by February next year and will be operating at full capacity by May 2108. It is going to produce industrial ethanol for pharmaceutical use and brewery/alcohol products.

The fresh cassava requirement as raw material is a huge one and management noted that they intended to work with NUSAF farmer groups to raise 250 acres, while a one Major General Otoma has an estimated 500 acres to feed this plant. Local government through the district authority is mobilizing farmers in every household in Koch Goma S/C where it is located to provide 2 acres per season of fresh cassava for this initiative. This then would raise production estimates to about 7,750 acres of fresh cassava out sourced from out growers main in surrounding areas but would buy from the entire region. Management intends to provide transport to its out growers in the region. The Strength for setting up this plant here is the presence of cassava in the region as one of the main food security crop. Apparently up to 60% of ethanol requirement in Uganda is imported from Kenya, Malawi and Swaziland.

The market for final product (ethanol) is therefore highly demanded especially for alcohol.

Other products apart from ethanol to be produced in the near future include bio fuel ethanol mixed with petrol (blending at a rate of 20%: 80% ethanol and petrol) and animal feeds. This enterprise offered to purchase fresh cassava at Ugx.700-750 per kg when the factory starts running from selected households in Koch Goma. From other farmers/traders within the region, they would buy at market value. Management also noted that they would advise their out growers to dry some cassava in order to distribute the cassava supply over a longer period of time during or in between seasons. Contrary to that, maize is equally a good source of starch, however, there is less starch content in maize but the factory can equally use it as row material.

In 2013, Nwoya District local government passed an ordinance that required every household to grow at least an acre plantation of cassava. The passing of the ordinance was intended to promote food security to fight biting famine in the area. In the near future the district is poised to become a cassava growing hub in northern Uganda.46
6. Alliance Once

Alliance One’s global headquarters is located in North Carolina, U.S.A.\cite{47} The Company took over leaf growing operations from British American Tobacco (BAT) Uganda in 2015.\cite{48} Alliance One sells its produce to British American Tobacco (BAT) Kenya and engages out-growers of Flue Cured Virginia (FCV) tobacco in Arua and Hoima and Burley tobacco in the Acholi Sub Region. The company currently has 8,500 out-growers in Hoima, 5,400 around Arua in West Nile and approximately 1,500 farmers in 11 different areas in Gulu and Amuru in the Acholi Sub Region where it is currently looking to further expand operations.\cite{49} The minimum size of the plot planted with tobacco required of the farmer by the company is half an acre. Farmers must have access to their own land and are required to sign a formal contract with Alliance One before the company provides inputs on credit comprising tractors or cash for ploughing, certified tobacco seed, chemicals and fertilizer chemical, two types of string for tying the tobacco, cash for labour, and cash for barn repairs. The company usually encourages farmers to build the barns valued at approximately US$600 to store the tobacco, but will occasionally provide some assistance with this such as the supply of gum poles. The company has invested a significant amount of time, money and effort into the development and maintenance of its field operations. They currently employ 10 managers to oversee 111 field technicians. Each field technician has a motorcycle and is responsible for the support of approximately 130 farmers.

Competition is high with a number of local companies and Uganda Tobacco Services, Continental Tobacco, Global Tobacco, Meridian Tobacco and Nima Investments in addition to a plethora of intermediate buyers operating in the region; however, Alliance One reported a credit recovery rate of 98 percent in Arua and 92-93 percent credit recovery in the Acholi Sub Region. It is very labour intensive, requires additional inputs including wood and health concerns for harvesters; potential earnings from tobacco are considerably higher than other crops. A farmer doing one hectare for FCV tobacco at a total cost of approximately US$1,320 including the cost of labour per half hectare earned approximately US$2,310 in the last season.
The potential high returns, cash advances and technical support provided by Alliance One in addition to the small minimum plot size of half a hectare required to engage the company are very attractive to farmers interested to move beyond subsistence farming into commercial agriculture and the terms and conditions render the programme very accessible to individuals classified within the vulnerable groups) youth, women, PWDs and resource-poor). Risks to the company appear to have been minimized by investment in strengthening social capital. Alliance One has made long term commitments to its presence in Uganda. While the company is a large and profitable international venture and certain to continue and in fact expand operations in Uganda in the medium to long term; risks to the farmers associated with being tied to one particular company are substantially negated by maturity of the tobacco industry in Uganda and presence of alternative companies.

7. Omer Farming

**Omer Farming** is a modern farming operation in Amuru District established in 2014 as a result of a partnership agreement between the family of the late Yaconi Ojwang and an Australian national on a fifty-fifty percent arrangement. Comprising 6,000 hectares of land, the investor has injected $3.5 million dollars as capital into the project while the Ojwang's family members provided the land. Today, approximately 2,700 acres have been cultivated with maize and soybeans. The farm is run by solar power although the grain dryers had to be supplemented with a diesel generator. The company has a fleet of new John Deere equipment and a large machinery shed and sufficient buildings to house the key personnel and the office. Omer is looking to engage approximately 200 out-growers with maize, rice and soya beans through 2018 and is also yet to design its out-growers programme.

8. Horyal Investment Company Holdings

The main factory of the Horyal Investment Company is located in Gem Village, Pachilo Parish, Atiak sub-county, Kilak County, in Amuru District. The company is owned by a Kenyan national of Somali origin and has 24,000 acres with freehold title and 1,300 acres under
cultivation. Once complete, the sugar factory will have a capacity to crush 1,650 tonnes of raw cane daily, producing 66,000 tonnes of powder sugar annually. The factory will employ over 1,500 people and has contracted with over 5,000 out-growers. In July 2017, the government of Uganda extended a credit facility of US$17.4 million to Horyal Investment Company Holdings Limited to complete construction, procure the machinery and commence sugar production. The factory is still being constructed and expected to be commissioned in June 2018.53

9: Northern Uganda Agricultural Centre (NUAC)

Northern Uganda Agricultural Centre (NUAC) was established in 2003 by two partners, a Uganda and a Danish National with 2 tractors to open land for local farmers. The two owners were a Ugandan and a Danish National respectively. In 2005 the company acquired its own land and started production in 2006. In late 2007 NUAC accessed land where it planned to start production of various crops. In 2010 the original Ugandan partner was bought out and the operation became solely foreign owned by a group of Danish partners. In 2012, NUAC joined hands with African Agricultural Capital Fund acquiring additional land and today comprises of 1,200 hectares. By early 2017, 200 hectares had been processed and held under leasehold title. The leasehold for the additional 1,000 hectares is currently in progress and being handled by a surveyor based in Gulu. NUAC does not engage out-growers. The company farms its own land and is highly mechanized, currently employing people, four of whom are Kenyan foreign nationals as the local availability of suitably qualified individuals is limited. The company regularly provides assistance with road maintenance and occasional ad hoc support to District Council in the form of fuel and other assistance for meetings. NUAC provides training to its employees on technical support and makes available mechanical equipment hire and services to surrounding farms.

10: Vinayak

Vinayak is an Indian company, based in Jodhpur, and operated by farmers and businessman from India. Vinayak started engagement with local land owners in 2012 and commenced farming in 2015. In early 2017, the company had 7,000 acres rice, 200 acres beans, 100 acres maize and green gram 100 acres under cultivation. The land is organized into five separate blocks within the same area and the land is mostly held under agreement with local
land holders. Vinayak have built an operating centre and other buildings and roads to access their field. They process some rice locally and cover shortfalls in production made up by buying locally.⁵⁴

Vinayak does not engage out-growers, but farms its own land. The company is reported to employ 13 local supervisors with 200 workers in the first season⁵⁵ Mid-level district officials estimated that this has increased to 350-400 workers during peak seasons⁵⁶. The majority of workers come from Nwoya and surrounding districts with some from outside northern Uganda.
Endnotes

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40 Interview with Amatheon AFGRI representative, Gulu, 29 November 2017.
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52 Telephone interview with senior representative, Kampala, 4 December 2017.
56 Senior District Council Administrator, 10 January 2017.