

Bulking Practices in the Vegetable Oilseed Sub-sector
The case of sunflower in Lira District, Northern Uganda

**A Research project submitted to
Larenstein University of Applied Science
In Partial Fulfilment of the Requirements for
The Degree of Master of Development,
Specialization International Agriculture**

By

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September 2008

**Wageningen
The Netherlands**

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ACKNOWLEDGEMENT

Thank you to my supervisor and Course coordinator Mr. Eddy Hesslinks for the intellectual insight and guidance provided during the course and the thesis. Many thanks to staff of Uganda Oilseed Producer and Processors Association- Lira district, for the support given during my field study. I am appreciative to the stakeholders who participated in the interviews and Focus Group Discussion during the research. This work would not be what it is without your input. I would like to thank all my colleagues and friend in MoD and APCM Master Course for the academic and moral support during my study and thesis period. Special thanks goes to my Parents, Brothers, Sisters, Relatives and friends for the support accorded to me. To the sponsor- Nuffic, I am so grateful for the financial support offered and finally Glory to God Almighty for all He has done to me. Forever His name is praised!

DEDICATION

To the rural small holders farmers of Northern Uganda

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LIST OF ACRONYMS

WB	World Bank
IMF	International Monetary Fund
WFP	World Food Program
UOSPA	Uganda Oilseed Sector Producer Association
OSSUP	Oilseed Sector of Uganda Producer
RNG	Royal Netherlands Government
BIDCO	
A.K	
CEDO	Community Enterprise Development Organization
PEAP	Poverty Eradication Action Plan
PMA	Plan for Modernization of Agriculture
GOU	Government of Uganda
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
NARO	National Agricultural Research Organization
NAADS	National Agricultural Advisory Services
FAO	Food Agriculture Organisation
FGD	Focus Group Discuss
VODP	Vegetable Oil Development Program

Bulking Practices in the Vegetable Oilseed Sub-sector
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By Freda Bella Anek

ABSTRACT

CHAPTER 1 INTRODUCTION

1.1 Introduction to the study topic

Agricultural marketing systems are changing, driven by factors such as liberalisation, urbanization, the rise of supermarket chain and globalization. These changes have created new market opportunities but also increased market access challenges for small holder farmers (Gideon t al 2007). In general, changes in these markets are projected to continue in the foreseeable future and consequently creating significant access challenges for smallholders' farmers such as:

- Bulking difficulties which limit regular supply of economic volume by smallholders
- Increased transaction costs,
- Increased variability in prices and
- Limited opportunities to manage price risk.

Robin et al (2002) mentioned that, 'It is apparent, that rapid market reforms were in part responsible for changes in management systems that led to the collapse of the co-operative movements in many African countries. This has meant that economies of scale enjoyed by farmers and also the quality control of products available to the market have declined. To combat this process, new methods of collective action and new agencies to promote this activity are required, to bring together farmers, who will then be more able to aggregate produce, improve quality standards and negotiate more effectively with traders to increase their incomes. Bulking is virtually a prerequisite to effective trade and given that there is strong evidence of collusion between traders in many African countries and evidence that farmers are paid below-market prices, tackling this issue is critical. Low farm-gate prices caused by the lack of market transparency means that a resource (money) is flowing away from the countryside thus increasing rural poverty, however little is known about bulking practices at farm gate and also about the pricing, information and transaction cost related to bulking, therefore this study was undertaken to give an insight into bulking practices in the oilseed sub sector in one of the districts in Uganda.

1.2 The organization of the Report

Chapter one includes introduction to the study which gives an overview of agricultural sector in Uganda and an elaboration of the situation in vegetable oilseed sub sector which gives the background of the study and subsequent problem statement, definition of concepts. Chapter two spot out literature on the key concepts which include; bulking, market institution, supply chain and value addition of sunflower. The third chapter is research methodology which includes; research strategy, data collection, research area, data analysis and limitation to the study. This is followed by chapter four which talk about results found during the research and subsequent discussion.

1.3 Background information on the research topic

1.3.1 Brief overview of Agriculture sector – Uganda

The economy of Uganda is highly characterised by Agriculture which accounts for 30% GDP. Farming engages 80% of the workforce. 45% of land area is farmland (8.5 million hectares). The output is mostly from smallholders, who use mostly farm labor. Food crops account for 65% of agricultural output and 54% of monetary value comes from the informal sector. The Agriculture industry is heavily resource based with labor and land being the most significant resource.

Following the restructuring of the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), some of its functions were divested to semi autonomous bodies such as the National Agricultural Research Organization (NARO), Uganda National Seed Industry Authority (UNSI), National Agricultural Advisory Services (NAADS) to mention but a few. The mandate of the Ministry is now “to support, promote and guide the production of crops, livestock and fisheries so as to ensure improved quality and quantity of agricultural produce and products for domestic consumption, food security and export”.

In a bid to attain broad-based economic growth, GOU designed comprehensive national development framework on poverty reduction the “Poverty Eradication Action Plan” (PEAP) in 2000. The target of PEAP is to reduce poverty from 35% to less than 10% by the year 2017 (PMA, 2000).

The vision of PMA is to modernize the agricultural sector as a means of rural poverty eradication through the promotion of “profitable, competitive, sustainable and dynamic agricultural and agro-industrial sector”, to considerably contribute towards the improvement of incomes by raising farm productivity, increasing the share of agricultural production that is marketed and creating on-farm and off-farm employment.

NAADS was established as one of core implementation arm of PMA to spearhead the delivery of advice to farmers in effective way that aligned with the overall Government policies of decentralization, liberalization, empowerment of the people in decision making for development processes.

1.3.2 Vegetable Oilseed sub sector

The government of Uganda with support from donors e.g. WB, IMF, SNV and RNG identified the oilseed subsector as one of the entry points for the transformation of agriculture (Agricord, 2005).

Emphasis on the subsector as a trigger of development is focused on market and particular attention to rural farmers (PMA, 2000). Since inception, different strategies have developed and have attracted various stakeholders (public agency, NGOs, private sectors and individuals) in the sector. Specific strategies include market liberalization, development of favourable policy framework, and deliberate attraction of foreign investors (e.g. A.K Oils, BIDCO) as well as encouraging local investors.

Through funding from the international Fund for Agricultural Development (IFAD), the country has also been able to increase domestic oil production. Under the VODP, the area planted with sunflower in the project districts is 222,600 hectares, which yielded 306720 MT of sunflower seeds. This translates to 6680 MT of sunflower oil worth Ushs138 billions and 230,000MT of cakes worth Ushs 34.5 billions (\$ 20 million as of May 2008) since the project started. Uganda’s earnings from sunflower production have yielded Ushs138 billions (\$ 80 millions) since the VODP project was launched (VODP 2008)

This has resulted into annual sector growth at a rate of 3% and a reduction in importation of edible vegetable oil from 95% in 1995 to 70% at present (Agricord, 2005). This growth is the effort of the above stakeholders who engaged in activities such as coordination and formation of farmers’ organization, improvement of the available seeds through multiplication and distribution, increase of processing capacity, training and building the capacity of farmers to bargain for better prices, improve nutrition status of farmers’ household and collectively save money for investment.

1.3.3 The Lira district production.

Lira district¹ where the study was conducted is one of the many chosen district by the government of Uganda for promotion of oilseed under VODP. The rationale of selection was based on the potential of the district in production of traditional Vegetable oilseeds, in particular sunflower (VODP 2006). More so it is Government initiative to promote the oilseed sub sector in the northern region to enable farmers increase income and rehabilitate the economy which has been devastated by the long civil war, hence, subsequent poverty in the region.

Poverty levels are high in Lira; 53% of the population are living below the poverty line, (hard core poor). Average household income is Ush. 170,000= per annum This makes Lira 29th out of 56 Districts; while the neighbour Apac ranks 16th with 46% of her population below poverty line, Gulu - 55%, is 36th, Kitgum 60% is 37th, Kampala has the least people below poverty line with 20% and Kotido has the highest number of people below the poverty line with 70%; on average 39% of Uganda live below poverty line.

Table 1: Main source of household livelihood

Activity	Household (No_)	Population
Subsistence Farming	86,478	402,322
Commercial Farming	373	1,880
Petty Trading	2,343	10,775
Formal Trading	503	2,387
Cottage Industry	3,290	15,670
Property Income	487	2,089
Employment Income	8,258	33,386
Family Support	6,309	20,713
Other	1,916	6,079
Not stated	1,981	3,611
Total	111,938	498,912

¹ Lira district is one of district of Lango sub region, situated in Northern Uganda.

Table 2: Acreage of crops produced

Crop	Years				
	2001 ²	2002	2003	2004	2005(Up to-June)
Maize	15104	18000	16231	12227	7456
Sunflower	14372	17770	6970	10250	7218
Beans	31342	27321	20172	18973	6421
Simsim	17728	17540	14261	11184	8261
Millet	24155	46240	38520	20242	19741
Cassava	14120	19482	11720	8456	7954
G/Nuts	5231	8321	6148	5628	4969
Sweet Potatoes	9638	10317	9384	6819	4528
Cotton	16321	15124	18420	14370	-

Source: Lira district development plan 2005/6 – 2007/8

Under VODP program, the four major vegetable oilseeds being promoted in Lira district are sunflower, soybean, simsim and groundnuts with 31,987 farming households benefited.

Nowadays sunflower, simsim and groundnuts has become cash crop because farmers do not only grow them for food but majorly for sale to earn income. According to the trend shown in figure 1 below, the production declined last year and this year the production projection is 18,200MT. Majority of the farmers are small farmers and rural base with average land acreages of 2- 3 per household

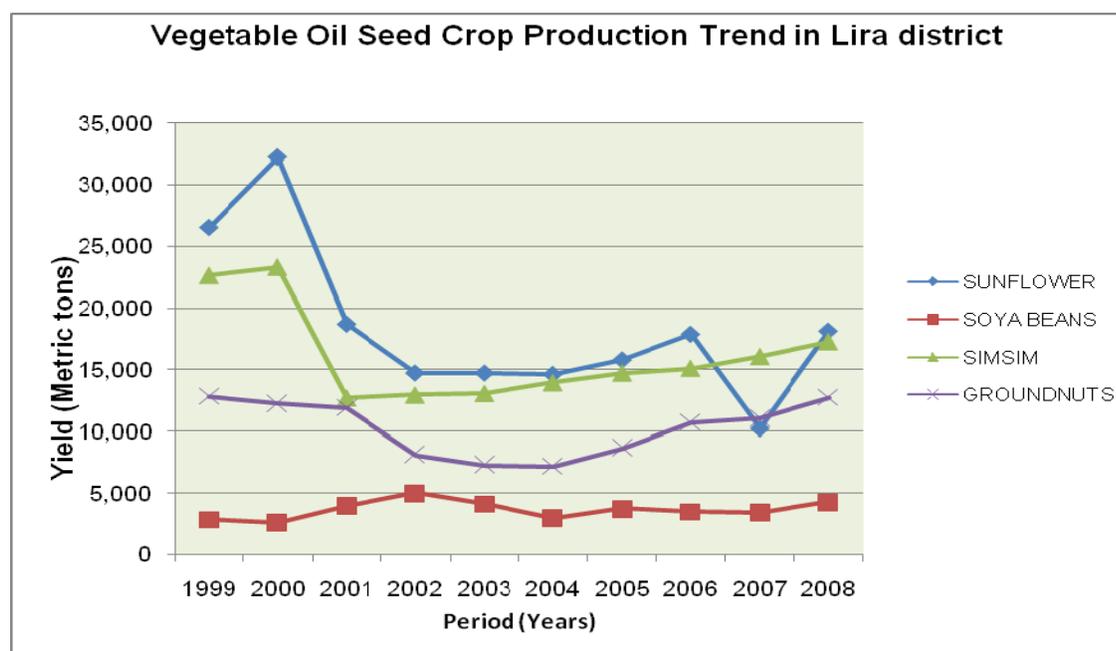


Figure 1: Graph showing vegetable oilseed crop trend in Lira district – Uganda
Source: District Production and Marketing Department - Lira

² No reliable figures are available for the period before 2001

Transport and roads are still poor as one penetrates into the rural areas. The feeder roads become inaccessible during raining season, making it difficult for farmers to access market far from their location. This too has got implication on the on bulking transaction cost

The Uganda Oilseed Producers and Processors Association (UOSPA) is the main institutional player which was set up in 1995 to contribute to increased production. Its membership currently includes both oilseed producers and processors, consisting of 947 farmer groups with a total of 73,295 households and 62 processors (VODP, 2006). Some sunflower producers in the Lango region are organized in farmer groups and some of them are practicing collective marketing through various forms of bulking facilitated by different conditions and organizations such as UOSPA, National Agricultural Advisory Services and Mukwano (UOSPA, 2007)

Unlike in the past where cotton was the main oilseed crop, the current focus has shifted to sunflower, groundnuts, simsim and other upcoming oil crops such as Shea-nut, lemon grass and citronella. The shift in focus particularly for sunflower is attributed to drought tolerance, low labour requirements at peak periods, has a greater oil content (25 – 40%) as opposed to cotton which is 10-15%, and the dominant variety (Sunfola) is high yielding (about 2500 kg/ha), and has a greater oil content (25 – 40%) and is easy to crush because of its thin seed coat.

Farmers have developed remarkable interest in sunflower because of the certainty in the market although the price is unstable depending on the season (UOSPA, 2006). Some school of thought explain that on-farm oil processing technology such as the ram press provided a soft landing for sunflower into prominence amongst other oilseed crop (Tiffany 1998). The ram press was promoted as a strategy for encouraging growth of cottage industry and increasing value addition to crushable oil seeds on farm.

According to (UOSPA , 2006),the subsector has the potential to increase production volume of both raw material and vegetable oil, replace imports, reduce poverty, and improve household nutrition and food security especially in the northern region which has been ravaged by prolonged civil strife. There is possibility for economic development of the region as a range of economic participants are involved, right from the farmers in groups, individuals, owners and workers in oilseed processing enterprises, press manufacturers, sales agents, and consumers

1.3 .4 Market situation of the oilseed in Lira district

However for a while now, the vegetable oilseed subsector is surrounded with a number of problems such as: seasonal variation and fluctuating harvests in production cycle. This leads to irregular supply of raw materials to the market; undefined pricing and price determination mechanisms; Non transparent market practices (middlemen/lack of information), scattered and undefined collection points. There are no standard measurements; hence product adulteration is rampant (SNV, 2007).

Jeff D. and Wagubi P. (2002), noted that, marketing of products in Lira follows three marketing channels, these are; through Agent, or periodic market or Large companies and NGO. Urban traders engage agents to enable them to procure farmers' surplus crops at farm gate. This is the main channel used by farmers to dispose of oil seeds (sunflower, sesame, soybeans), food crops (millet, cassava, sweet potatoes, maize, beans). Periodic markets have been set up at sub county levels by local governments. Their main purpose was to promote trade within the respective areas. The farmers move their surpluses on bicycles and on foot .This channel is characterized by large scale trading companies and few NGOs like Techoserve, OLAM etc that promote spe-

cific crops as earlier mentioned. These large scale trading companies and NGOs organize transport to pick up crops from farmers at farm gate

Archambault (2004) cited that poor group leadership or little involvement of members in decision making created mistrust amongst farmers and has caused farmers not to bulk their produce in a centralised location for collective marketing.

On the other hand although small and medium millers need continuous supply during the year, they cannot buy everything after harvest due working capital constraints. As a result, farmers are forced to sell at the farm gate to private traders/middlemen who proved to be unreliable and they offered low price as they collect small amount from each farmer such that the farmers have no control over prices, weights or measures. The farmers are forced to take whatever price they can get, and bow to the traders dictates (Mundy P, 2006). The end result is exploitation of farmers by traders/middlemen who often hoard during peak harvest periods when prices are low and sell later at a higher price (Agricord, 2005).

According to Tiffany (1998), these constraints are magnified by inadequacies in inventory, logistics management, and governance mechanisms that result in the failure to provide cost competitive products. Furthermore, the lack of financial resources limits the capacity of farmers to cope with the ability to invest in appropriate technologies to better improve performance. SNV, 2007 also noted that, 'there seems to be unclear market coordination leading to risk in market based arrangement/ opportunism (unpredictable market, pole vaulting, and "predatory" governance systems)'. However, Mundy .P (2008) urged that creation of strong relation between chain actors can help to reduce the cost and the risk they are facing in their business, and will benefit if they manage to make their chain relation more stable, more transparent and better organized.

In line with this a platform of multi-stakeholder was formed to find effective institutional framework/arrangement which will enhance creation of bulking and storage capacity of farmers while also allowing government, private companies and development organization to use their resources effectively by intervening at appropriate leverage points (SNV, 2007)

CHAPTER 2 THE RESEARCH DESIGN

This section elaborates on the problem statement which is the justification of the problem situation on the previous section one of this report. How to solve this problem an objective was developed. Then followed by a conceptual frame work which linked up the different concepts that were used to get generate the sub questions that were operationalized to generate answers to the main questions in order to attain the objective of the study.

2.1 The Research Problem

Farmers' marketing challenges stem out from various reasons: there are low crop volumes and scattered marketing since farmers sell their crops immediately at harvest, production of different type of crops at different times, lack of information on market price, poor leadership and mistrust. This resulting into farmers receiving paltry income from the sale of their crops in distorted market situation (Kajubi, 2004).

SNV (2007) also noted 'that there is opportunistic behaviours, low economic gains, wastage of resources and unequal distribution of benefits (profits) and risks among value chain actors'. Therefore, the situation in the market for oilseeds (sunflower) and its products can be described as volatile, unruly and uncompetitive especially for local producers.

The development partners and organizations in the pursue of rural development through Agriculture believe that the recently formed multi-stakeholder platform of the oilseed Sector of Uganda Producers (OSSUP) will be able to act as a steering instrument for constructing a viable, competitive and fair oilseed subsector in Uganda (SNV, 2007). However the platform is concern that its lack of better understanding of bulking practices may hindered its desired impact from being realised, hence subsector might deteriorate, leaving farmers to become the losers of the game, farmers' income from the sales of their produce will always remain very low if no appropriate market coordination system to support strategizing process which will aim to make oilseed subsector competitive, viable and beneficial to all stakeholders in the chain is developed.

2.2 The Research Objective

The objective of the research study was to get a better understanding of bulking in the sunflower oilseed chain in Lira district- northern Uganda

2.3 The Main Research Question

What are the bulking practices in the sunflower vegetable oilseed chain from farmer to processor, in Lira district, northern Uganda?

2.4 The Definition of concepts

In order to get a better understanding of bulking practices, there were few concept used in guiding the study and clarify the findings. These concepts included; Marketing, bulking, market information, transaction cost, collective marketing, and value chain.

Further, this section reviewed relevant literature that contains information which reflects on bulking such as example of bulking in developing countries, challenges faced by smallholders' farmers in regards to bulking.

a) Marketing

Marketing is the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchanges that satisfy individuals and organizational objectives (Kotler, 1999, cited in Soffe, 2003)

a) Bulking

Bulking comes from the word bulk. According to Oxford Dictionary (1976), bulk is defined as cargo, large quantity, large size, large magnitude, and large mass or voluminous. There is no one definite definition of bulking. Bulking as concept has been defined differently in different context. In some context, bulking is referred to as collective marketing. According to UOSPA (2004) bulking is defined as an activity which involved farmers bring their commercial produce or crop surplus into one place for storage waiting marketing

In this study bulking is referred to as storage of produce in central place in wait for sales or processing for not less than one week by oilseed producers, middlemen and processors.

c) Transaction cost

Eggertson (1990) defines transaction costs as costs that arise when individuals exchange ownership rights to economic assets and enforce their exclusive rights

Therefore, in this study, transaction cost is referred to as; cost associated with post harvest handling (storage), transportation and market information cost.

d) Market Information

Therefore in this study the market information include information about:

- *Information on production plan, which product needed at what quantity,*
- *Amount of produce being bought and sold on any particular market places that they may want to use,*
- *Cost and availability of transport, the names of the traders they can contact,*

e) Value Addition

According to Mundy Paul (2008), Added Value is the amount of value that each actor in the chain adds. It is the difference between the price the actor pays for the produce, and the price she or he sells it for. In most of the cases, this is equal to the actor's revenue minus the previous actor's revenue (Price received by actor – Price paid by actor)

At each stage in the chain, the price of the product goes up. That is because each actor in the chain adds to its value – by growing, harvesting, sorting, grading, packaging, processing, labeling, transporting, storing, and putting it on shelves for consumers. Each of these steps costs money, which the actor recoups by charging for the service (Mundy P. 2008). Mundy Paul. (2008) continue to note that, 'Farming can gain much in efficiency and value-adding if products are traded and marketed more effectively'. Therefore this calls for well developed and coordinated value chain with equal distribution of benefits and risk amongst the direct actors (producers, traders, processors, wholesalers/retailers)

Therefore in this study, value addition is as defined above that is; Price received by actor – Price paid by actor

f) Supply Chain

For development to take place various actors in the supply chain must invest in coordinated way (Stockbridge et al., 2003). For example, government investment in rural infrastructure are profitable if farmers organization invest in increase production, local business invest in processing and distributing, services providers invest in new technology and all these efforts if not well coordinated results in un development. This is why it is importance to understand the supply chain.

Supply chain can be defined as a set of linkages between actors where there are no binding or sought after formal relationships, except when the goods, services and agreements are actually transacted (Mundy P. 2006)

For this study the supply chain is defined as sequence of activities from harvesting of sunflower, transforming and marketing. This is from the farmer to the middleman to the processor.

g) Value Chain

According to Michael Van den Berg(n. d p11), value chain approach is mainly a descriptive tool to look at the interactions between different actors. As a descriptive tool it has various advantages in so far it forces the analyst at considering both the micro and macro aspects involved in the production and exchange activities. The commodity-based analysis can provide better insights into the organizational structures and strategies of different actors and an understanding of economic processes which are often studied only at the global level (often ignoring local differentiation of processes) or at the national/local levels (often downplaying the larger forces that shape socio-economic change and policy making).

Kaplinsky and Morris (2001) cited in Michael Van den et a l(n.d p11-12) stress that there is no "correct" way to conduct a value-chain analysis, rather the approach taken fundamentally rests upon the research question that is being answered. Nonetheless, four aspects of value-chain analysis as applied to agriculture are particularly noteworthy.

- I. Firstly, at its most basic level, a value-chain analysis **systematically maps the actors** participating in the production, distribution, marketing, and sales of a particular product (or products). This mapping assesses the characteristics of actors, profit and cost structures, and flows of goods throughout the chain, employment characteristics, and the destination and volumes of domestic and foreign sales (Kaplinsky and Morris 2001). Such details can be gathered from a combination of primary survey work, focus groups, PRAs, informal interviews, and secondary data.
- II. Second, value-chain analysis can play a key role in **identifying the distribution of benefits of actors in the chain**. That is, through the analysis of margins and profits within the chain, one can determine who benefits from participation in the chain and which actors could benefit from increased support or organization. This is particularly important in the context of developing countries (and agriculture in particular), given concerns that the poor in particular are vulnerable to the process of globalization (Kaplinsky and Morris 2001). One can supplement this analysis by determining the nature of participation within the chain to understand the characteristics of its participants.
- III. Third, value-chain analysis can be used to **examine the role of upgrading within the chain**.

Upgrading can involve improvements in quality and product design that enable producers to gain higher-value or through diversification in the product lines served. An analysis of the upgrading process includes an assessment of the profitability of actors within the chain as well as information on constraints that are currently present. Governance issues play a key role in defining how such upgrading occurs. In addition, the structure of regulations, entry barriers, trade restrictions, and standards can further shape and influence the environment in which upgrading can take place.

- IV. Finally, value-chain analysis can **highlight the role of governance** in the value-chain. Governance in a value-chain refers the structure of relationships and coordination mechanisms that exist between actors in the value-chain. Governance is important from a policy perspective by identifying the institutional arrangements that may need to be targeted to improve capabilities in the value-chain, remedy distributional distortions, and increase value-added in the sector.

But in this study, the mapping will assess the bulking practices of sunflower in the oil sector Lira district.

Bulking practices can never be in isolation without marketing information, transaction cost and therefore there are always challenges which oppose bulking. Therefore, this research study as much as it focused on bulking as the sole objective of the study, it also analyzed the how the chain actors bulking handles issues of transaction cost, quality and quantity assurance, market information/communication network,

Therefore in mapping bulking practices using the concepts above, the sub questions below were used to operationalised the main research question.

2.5 The Theoretical

2.5.1 Examples of bulking practices

Collective marketing plays a major role in farming throughout the world. In most countries farmers have found that they can increase their income and efficiency by joining with other farmers to market their goods, purchase their inputs and co-ordinate their farming techniques. In Bolivia 60% of chickens is marketed co-operatively. 87% of pyrethrum grown in Kenya is sold in this way and 40% of the cotton produced in Brazil is sold by farmers' associations. No fewer than 8 of the 10 largest Canadian firms are co-operatives (P. Robbins et al., 2005)

According to Jonathan (2006) Producers Organizations supported by APEP and primary societies belonging to Area Marketing Cooperatives supported by UCA altogether bulked 20,872 tonnes of commodities, of which sunflower and cotton seed constituted (15%) and (11%) respectively. All farmer groups surveyed reported that bulking of staple crops was a profitable activity. In the eastern region one of the main production areas for oilseeds, farmer, and groups mentioned the realization of profits ranging from \$16 to \$99 per tonne due to bulking. (Jonathan, 2006)

In Rakai district, Uganda, an organization called Community Enterprise Development Organization (CEDO) works with farmers to facilitate collective marketing. Farmers work together in groups of 10 up to 100 farmers particularly for sales of their produce. Farmers working with CEDO have found that when they sell their crops, such as maize or beans as lots of 1- 10 metric tons to known traders, they generally receive about 10-15% more income than when they individually sold to the local trader. When farmers are selling together, they make sure the produce is of the same standard and any poor quality produce is rejected and stones are removed. The difference in price that the farmers groups receive from selling larger amounts together, more than pays for the sorting that they do to the produce, before the sale

Another lesson learnt is from smallholders' farmer from northern Tanzania – Mwada, adopted collective marketing in order to survive. (Mundy P, 2006) cited that

'through the intervention of collective marketing, oilseed farmers were able to realise tremendous increased in sales of their sunflower produce and this lead to subsequent in-

crease in income because of better market and higher prices: Tsh 120(0.09 Euros) instead of prevailing price of Tsh 70 (0.05 Euros) per Kilogram. The group of 104 farmers were able to produce 137 tons of sunflowers, worth TSH 16.5 millions (12,000 Euros). The intervention even created jobs’.

All the above examples give impression that bulking is beneficial to rural farmers.

2.5. 2 Transaction Cost

Bulking involve various transaction which farmers and buyers incurred. This in one way or another has implication on bulking practices.

. Transaction cost economics, unlike the traditional neoclassical economic theory, recognizes that economic activity does not occur in an environment which is frictionless but instead it argues that there are costs to carrying out any exchange (Hobbs, 1997). These costs are associated with exchanging, including informational costs of finding out price and quality, service record, availability, durability record etc, of a product plus the cost of contracting and enforcing that contract (Besley, 1994; Nkhori, 2004).

According to Robin et al. (2002), bulking up small parcels of produce into truck –load of goods produce offers the possibility of selling their goods outside their immediate location. Traders want to make as large profit as possible. If farmers have large stock of produce to sell them can hire transport themselves and they can travel to more distance market to find traders with better price.

Gong et al (2007) was able to provide evidence that certain producer characteristics like level of education and transaction costs are critical in choice of marketing channels. Further, Nkhori (2004) carried out a study on the impact of transaction costs on the choice of cattle markets where he extended the analysis to relationship between producer characteristics and transaction costs.

2.5.3 Market information

For one to get market information should carry out market research, while seeking for market information, Robin et al (2002) noted that, ‘the information that farmers most need is the price of the product they wish to sell. Market information includes-

- Information about the amount of produce being bought and sold on any particular day in the different market places that they may want to use,
- Information about the cost and availability of transport, the names of the traders they can contact, what weather condition are like’.

In Africa it is difficult to get information of supply, demand and price of food products. It is equally difficult to get information on a reliable buyers and sellers. Even though there has been a revolution in telecommunications recently, farmers and traders normally find it difficult to make informed decisions about when to buy or sell, to whom, where and at what price. Formal systems of market are either weak or absent. Buyers and sellers normally get information they need through their personal networks (Mundy P. 2008).

Robin et al (2005) found that various agencies, usually run by government departments, are offering market information services in the region. This information is usually broadcast by radio or

in newspapers. In Uganda, FOODNET³ network is working with marketing and Agro-enterprise development. Robin et al (2005) identified that 'One of the main tasks of FOODNET is to develop business services that will assist producers, traders and processors to make more informed business decisions. To support this process FOODNET has developed three different models of market information services have been designed and implemented to service the marketing needs of traders, processors and small scale farmers in the agricultural sector. The services include:- (i) a localized market information service that aims to meet the specific needs of small-scale farmers and traders at the district or cluster of districts level; (ii) a national market information service, that provides a regular overview of the countrywide market status targeting Government, national traders and food security agencies, and (iii) a regional market information service that aims to support the needs of the formal and informal traders involved with cross border trade of high volume staple commodities.

2.5.4 Challenges farmers faced in bulking

I. Difficulty in meeting required volume

According to WFP (2004), it was reported that farmers themselves often only produce a few bags of produce on their own. Farmer's groups interested in supplying WFP with maize or beans is required to have a minimum of 50mt before it may attempt to bid for buyer tender. This quantity must be located in a single storage facility, or spread out among several stores easily accessible by buyer transport tracks. The reason for this is that the buyer bears the responsibility for transporting supplies from the farmers' group location, as opposed to requiring the farmers 'group to deliver to buyer's stores. If the amount being picked is too little, or is not centrally located it becomes too costly for buyer to transport the supplies. Unless farmers grow on commercial scale, they may not meet the minimum quality requirement of the potential buyer. This might require a very large number of farmers.

II. Instant Payment

According to WFP (2004) reported that farmer groups find the task of bulking food very difficult. Because individual farmers are accustomed to being paid directly for produce once their bags leave their premises. They fear not being paid properly once the delivery has been made. In addition, WFP is not able to pay cash directly on delivery. It's likely that between the time of bulking to time of picking up produce and the payment by the buyer, the farmers will have been without their bags for several months, this is unacceptable by many farmers; who would prefer receiving a lesser amount of cash for their products, as long as it is paid in cash so that the farmers can then pay other bills such as school fees and medical bills. In some cases, farmers or associations are able to come up with the funds required to pay farmers as they bulk their produce, prior to collection and payment by WFP

III. Bulking difficulties and access to storage

Archambault (2004) cited that poor group leadership or little involvement of members in decision making created mistrust amongst farmers. This caused farmers not to bulk their produce in a centralised location for collective marketing. Furthermore, Archambault (2004) noted that poor 'access to storage facilities and warehouse management strategy also another limited factor to bulking'. This was a case when WFP requires that the supply is centralised so it can be picked easily.

³FOODNET- Is an organization which collect market information from different regions for different Agricultural commodities and then avail it farmers through MTN sms on code 198

2.6 The Research Sub questions

1. What are the different ways the chain actors bulk their produce?
2. What institutional support is in place to promote bulking by the actors in the chain?
3. How is quantity and quality assurance implemented?
4. What market information/communication system/network do farmers use?
5. How are financial transaction organized and where is working capital sourced from?
6. What are the challenges to bulking in the sunflower oilseed supply chain

CHAPTER 3 THE METHODOLOGY

This chapter present the research approach which was used in the study and the different data collection methods which was employed to generate answers to the research questions. The first section of this chapter discusses the research strategy, followed by methods used for data collection, description of research area, limitations to the study and then concluded by discussing data analysis' tools.

This research employed a survey approach although the number of respondents did not make to the required level of a survey research. On the other hand it also employed the case study approach because it zero down to only one crop. This was because the researcher wanted to explore and map out bulking practices along the sunflower oilseed chain in order to get a better understanding of its arrangement. Check list for open ended interviews was developed to collect the qualitative data.

3. 1: The Research Area

The study was conducted in Lira district from 21st July 2008 – 18th August 2008. The rational for selection was based on the fact that Lira district has the highest potential production for sunflower vegetable seeds and for that matter the three major chain actor (farmer, middlemen and processor) are within the same district given the fact that time for carrying out field study was limited to only 5 weeks. Therefore the researcher was able to reach farmers in their fields/home, middlemen in the trading centres in the villages and produce dealers, millers/processors within the town suburbs in their operational areas and the key informants in their respective offices within the same district.

3. 2: The Sampling procedure

From the field, the different categories of interviewee took another twist but not as previously proposed. Formerly the researcher planned to interview 14 individual farmers, have 2 focus group discussions, interview 2 middlemen, 3 oilseed processors and 5 key informants. But this changed (see table 1). This was because majority of the farmers work in groups hence would make more sense to conduct FGD to find more on bulking practices than conducting individual interviews although not all groups do bulk produce.

Table 1: Category of interviewees

	Category of interviewees	Number of resp.	Type of expected information provided	Research Tool
A	Farmer groups Bulking	4	Post harvest handling Challenges of bulking, market information, quality control, type of support, payment,	Interview FGD Observation
B	Farmer groups Not bulking	4	Ways of bulking, challenges, supports, quality	Interview FGD Observation
C	Individual farmers bulking	3	Why in group & not bulking. How market their produce, market information, quality	Interview
D	Individual farmers not bulking	3	Market information, why not bulk, transaction cost	Interview
E	Middlemen	4	Ways of bulking, transaction cost handling, & quality, capital	Interview Observation
F	Small millers Medium millers Large processor	2 2 1	Storage capacity, Supply & demand, quality & quantity, contracting, payment, working capital,	Interview observation
G	UOSPA office	2	Type of groups Number of farmers/millers List of farmers names, opinion about bulking.	Interview/ Literature re- view
H	Agriculture Dept- Lira district	1	Production projection, District profile Cross check information from UOSPA	Interview/ lit- erature review
F	Finance institution	1	Category of farmers supported, collateral	interview

A list of farmer groups from UOSPA, Local Government (Department of Agriculture) and Mukwano offices were used to select sunflower oilseed producers since these three organizations are more involved in oilseed crop production. The names of farmers were then purposefully selected taking into consideration farmers in area which is more potential in sunflower production, and farmers who have been producing sunflower for not less than 5 years and have land of not less than 2 acreages. This is because their experience in the production is paramount in giving the data and also the acreages under sunflower cultivation determines how much quantity a farmer can push into market.

The study was structured in a comparative way. The researcher had several focus groups discussion with the two category of farmers; Groups bulking and groups not bulking. The purpose was to compare notes between the two in terms of value (revenue) so as to analyse the significances of bulking.

Sample units were selected through convenience and judgment of the interviewer. These included farmer, middlemen at collection points in trading centres/villages and urban produce dealers, millers' depots and Mukwano depot.

Gender distribution within the sample was taken into consideration. This is so because of the importance of gender in Agriculture. However there were two groups found to be single sex.

3.3: Methods of Data Collection

3.3.1 Literature review

The literature review method was used to collect the secondary information related to the study. It consisted of reviewing documents such as annual monitoring and evaluation reports of UOSPA pre seasoning report, VODP progress report and production report from the department of production and Agriculture – Lira district. The demographic and economic information were extracted from the district fact sheet. More information related to bulking was sourced from internet web documents.

These are elaborated further in sub section 3.4 of this same section. All these tools were used for the purpose of generating detail information and cross checking data (triangulation). For example one two interviews with the middlemen I was mentioned that farmers are given advance to help in production, but during FGD discussion all the members denied that the statement is not true.

The individual interviews were conducted face to face (personally) by the researcher without translation since the researcher knew the local language. More generally physical present in the field to make observation as well was an important reason. Individual interviews took 30 to 45 minutes per respondents

3.3.2 Open ended interview

Primary data was collected by conducting open ended interviews to individual farmers, middlemen, millers and key informants and in the Focus groups with two categories of farmers groups as mentioned earlier on in subsection 3.3 above. It provided opportunity for detail exploration on how farmers bulk sunflower crop, handle quality issues and market information and transaction cost, working capital. The checklist was developed with relevant questions which can answer the research question and sub questions, and modified accordingly. The questions were pre-tested and after which some questions reformulated and some were removed because it was realised to be repetition.

a) Individual Interviews

Field visit was made to a few individual farmers. Most of the interviews were conducted either at the farmer' homes or in the field. This also gave opportunity for the researcher to directly observe the storage facilities which were in existence and how they were being maintained. Also ask how they get market information and choice of marketing channel. And also visit trading centre to analyze into detail its role in influencing bulking.

The District Agricultural Officer (DAO) of Lira was also interviewed. He gave information about production level, VODP project progress, acreages and register groups of farmers and millers.

Two key informants from UOSPPA were also be interviewed to find out what support the association offers to promote bulking of sunflower crop long the supply chain, and other challenging issues affecting the competitiveness and viability of oilseed subsector.

The researcher also interviewed another one informants from financial institutions. It is important to know what trigger finance institution to lend farmers/traders money to facilitate them bulk. What is the collateral required.

Middlemen were interviewed to find out how they carry out businesses with the farmers and processors. The interviews took place in the various trading centres where the middlemen operate

through discussion, the researcher tried to probe to find how they get working capital, handle quality, handle advance payment, how they determine and set the price. And what related challenges they experience in bulking and marketing.

Millers and a large processor (Mukwano Company) were visited at their mills and factory. The interviews sought to find out how the millers source raw material and how it ensures that enough stock (quantity) is secured, and how quality is controlled. During the interview the researcher continue to probe how the company handles payment with the farmers and middlemen/agent who supply the sunflower grains to the factory

b) Focus Group Discussion

FGD was conducted with farmers groups bulking and groups which are not bulking to get insight on how bulking is one, why the group bulk, how they search for market information, source working capital, organize for transaction cost and handle quality issues and with groups not bulking were asked why do not bulk produce? All the findings from FGD were summarised as shown in Annex 4. An average member present in each FGD was 18. The discussion mostly took place under the tree on the compound, in the field and in the house when there was rain down pour.

FGD took approximately 1 hr to 1:30hr. In some instances the interviews took was shorter when disruption was encountered and was long when respondents gave appropriate answers which did not need a lot of probing

3.4: Method for Data Analysis

The data collected from individual interviews and focus group discussion and field observation was rearranged, and summarized according to the sub-questions (see Annex 4). The data organised was by use of word document and excel programs accordingly to compute graphs and chart. Tables are used in demonstrating comparative findings between farmers who are bulking crop and those who are not bulking (see Annex 3). Issues extracted from the review of documents were afterwards incorporated in the final document.

3.5: Limitation

- Some key informant especially millers were so reserved to give information about the source of working capital, and their revenue, they thought that the data may be used to asses their business so that the Government Tax them more. Despite the effort made to explanations that the purpose of the data collection was for academic purpose, still little was achieved.
- Most farmers did not have records so getting complete information especially figure (transaction cost) were not easy. In some incidents the researcher was referred to more than two persons for data confirmation.
- More generally the time given for the research was so little to process a quality and concrete report. There was no time to cross check data collected before the researcher could come to t school.

3.6: Critical Incident

- Being chased away by on key informant who never wishes to attend to a mere student who can not solve his problem of low production
- Took opportunity and made use of other community function / gathering which brought people (farmers inclusive).
- Conducting more FGD than planned before because it was not easy to get individual farmers- majority of the farmers are in groups

CHAPTER 4 THE RESULTS OF THE RESEARCH

This chapter describe on the findings got from the interviews and focus group discussion carried out in oilseed subsector in reference to bulking practices amongst farmers, middlemen, processors, and institutional support to sunflower oilseed supply chain in Lira district – northern Uganda. The findings are related to the sub questions of the research which sought answers on category of bulking practices from farmers, the groups to middlemen, millers and processors. How the different categories of bulkers source for working capital, manage transaction cost, handle issues of quantity and quality of the produce, how the middlemen and processors handle the issues of advance payment. The institutions supporting bulking were identified and also interviewed on what they do to support bulking of sunflower.

FGD was more helpful in generating diverse opinion/ information because group members would discuss and clarify issues. Although is some cases the active members like chairperson or secretaries dominated the discussion, the researcher tried to facilitate the FGD and made sure that every member got involved by asking those who talked less or not talking at all during the discussion.

Because the study was conducted during peak season when farmers were busy harvesting crops and more so during raining season, it affected the time for conducting the interviews and FGD. In two occasions the researcher was forced to take shelter with the respondents into a small house to during down pour, but because time would also be rushing, the researcher could continue with the session in the fear that respondent would become impatient. Therefore this forced the researcher to continue with the discussion in such small rooms where by some members would be far off and cannot participated well. This promoted one- sided participation from members who were seated nearer.

4.1: The different categories of bulking practices

From the research done it is noted that bulking practice by six different categories or levels. These are; at the individual farmers' category, farmers in groups' category, cluster⁴ category, middlemen in the villages/trading centres category, produce dealers⁵ in the urban areas and then processor/millers category. The different bulking categories are elaborated below. And all these different categories have channels which they follow within the chain and this is presented below.

⁴ Grouping of farming groups from different neighboring parish into a big bulking unit

⁵ Produce dealers are traders dealing with Agricultural commodities and commonly operate within urban areas

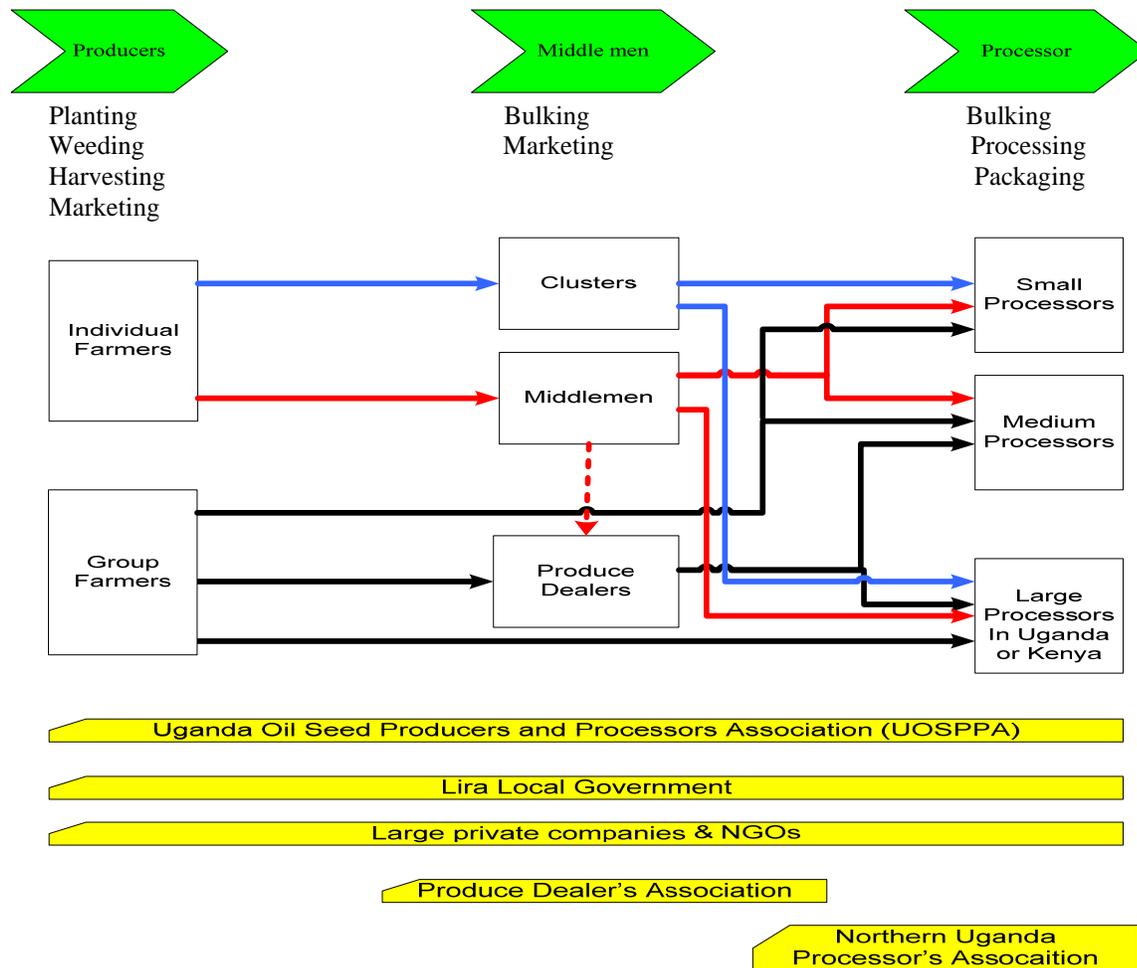


Figure 1 Value Chain of the Vegetable Oil Seed subsector in Lira District.
Source: Own Document

4.1.1: Individual bulking Practice

From the interviews carried out it was found that there are some few individual farmers who bulk their produce. This kind of bulkers are scattered deep in the villages. They cultivate an average of 2 acres of sunflowers. Yield average of 13 bags of 60 kg/bag (780kg/acre). A few of them hoard the produce for 2- 4 months before it is marketed. Majority of them lack working capital. A farmer bulks an average of 10 bags - 22 bags of the sunflower grains and store within a house with an average storage capacity of 12 bags - 150 bags. Majority of the farmers cultivate hybrid variety commonly called sunfola variety although they wish to plant PAN 7315⁶ which farmers commended it for high yielding and also having high oil content of 40-45%. This category of bulkers market their produce through two channels as showed in the figure 3 above. The choice of channel is influenced by the quantity of grains available/wanted, the present domestic needs and price offered by the buyer. The farmers' sales at farm gate price;

- Ushs 400/kg for local variety to middlemen,
- Ushs 550/kg for PAN 7531 to middlemen and
- Ushs 400/kg Sunfola to cluster

⁶PAN 7531- Is a sunflower Hybrid variety commonly imported from South African by Mukwano Company

4.1.2: Farmer Groups bulking practice

Out of the 9 interviewed groups only 4 groups do bulk their produce for collective marketing. Each group consist of average of 26 members and in most groups majority are men (see FGD summary sheet –Annex 4). Each member in a group cultivates an average of 2 acres of sunflower and an acre yields average of 750kg of sunflower. Out of the 4 bulking groups interviewed, only 2 groups do production and marketing together while in the other 2 groups, production is carried out individually and marketing is done collectively. The majority of the bulking groups have some group by-laws which enforce them to bulk as shown in Box 1 below.

Box1- Common group by-laws to enforce bulking

- Planting of crops same time/ season
- Planting same crop variety
- No selling individually, otherwise a culprit pays a fine of Ushs 25,000 or refund in kind equivalent of 3 bags for each 1 bag sold.
- Must be a registered member & honor monthly contribution to the group.
- Keeping up with the quality standard

Source: Farmers' FGD – Lira district (2008)

Majority of the group don't have storage facility so they commonly use the house chairperson to bulk produce, and a few hired the store house within the trading centre⁷ within a distance not > 5km where it can easily be accessed by any buyer and also centrally located to group members. The store is monitored and maintained by "Askari"⁸ who also receive the produce from each group member, write name on each bag belonging to a particular member and record how many bags each member has delivered to the store. On the day of marketing, All the bags are weighed and recorded accordingly to tally with the amount of money each member received from the sales. This is done by elected marketing committee. When the market is sourced the produce is either transported by the group member to the buyer or the buyer collect from the storage point. The common buyers are the processor, produce dealer or to UOSPPA as shown in 3 above.

Produce is sold at;

Ushs 450/kg of Sunfola variety to UOSPA

Ushs 600/kg of hybrid variety PAN 5351 to produce dealers or miller

Ushs 500/kg to Mukwano farm gate price, 520 factory price

It is clear that different buyers offer different prices, direct link with millers offered better price.

The study also revealed that farmers' working in group is not a gate way to bulking because majority of the groups' priority is labour force accessibility.

The study also found out that all the group bulking does not have their own weighing scale except one group (women group). The weighing is done at the time when buyers come with the scale. Never the less two groups says sometimes they hire a weighing scale in case it is very necessary.

⁷ Are small commercial centers found in the sub counties, parishes or villages where buying and selling take place

⁸ Someone who is acting as a watch man/woman(monitoring, guarding) a premise

4.1.3: Cluster bulking practices

The research also revealed that bulking is done at cluster level. Different farmer groups merged into a cluster. One cluster called Alito Christian farmer is composed of 54 different groups of which each group comprised of 30 registered members to the cluster. Each member from each group pays a registration fee of Ushs 500 to the cluster. It was very interesting to find out that group members sell to the cluster as individual and then the cluster source for the market from processors or external buyer, for example a new company call mount Mweru from Tanzania and BIDCO company from Kenya are beneficiaries of this arrangement. Have a storage capacity of 2000 tons of sunflower but the quantity receive from the members is yet little since majority of the farmers cultivate 1.5 to 2 acreages only and mostly cultivate in the 2nd season yielding an average of 785kg /acre. The bulking at cluster level is not only for sunflower but also soybean oilseeds. The cluster is intending to bulk cereal produce in the near by future. They have acquired their own milling machine and already installed but not yet operational.

Cluster has direct linked with the millers and large processors from Uganda, Kenya and Tanzania. Last year sold at Ushs 400/kg to millers and Ushs 450/kg to UOSPA and to BIDCO

Cluster is managed and governed by board members who are elected by the group member. It has bank account and various committees for each of management.

Cluster bulking is probably another form of cooperative. The purpose of groups clustering is to up scale bulking and attain economies of scale, acquire bargaining power, eliminate middlemen, negotiate for better price and get higher income by selling directly to the processor. What might also happen is the cluster bulking may turn to be a middleman in a long run if they don't start processing their own produce. By processing their own produce the farmers will get better profit from the sell of oil plus the cake which the farmers have for long gave out to the processors. Cluster bulking can also be strengthening into another value chain by incorporating other indirect actor. For example, inputs suppliers,

4.1.4: Middlemen/ Village Agent bulking practice

The middlemen mostly bulk at the trading centres. They have small stores with a varying capacity ranging from 100 bags – 200 bags of produce. The quantity of stock they have depend on the capital that a middleman has. But also they accept any quantity a farmer can bring.

These middlemen who are commonly referred to as Agents have been tagged as exploiters of farmers, and yet their roles in marketing in the oilseed vegetable sub sector seemed significant as a result of the collapse of cooperative in the present era of liberalized economy.

The study showed that there are about three types of agents;

- Agent (called site coordinator) deployed by Mukwano Company buys sunflower produce from farmers contracted by Mukwano. The site coordinators are located within all the parishes the sub counties where Mukwano Agro- project is operational. The store has sign post in front of it written on Mukwano Agent. Farmers bring their produce and either paid cash on delivery or later after deducting the credit for seeds farmers were provided. Buy from farmers at Ushs 500 / kg and get commission of Ushs 30 / kg. (current price August 2008, for PAN7351)
- Agent employed by urban produce dealers or millers. Buys Ushs 20 /kg more than amount Mukwano offers Mukwano and get a commission of Ushs 30 /kg from the produce dealer. This agent is more operational during the scarcity period.

- A farmer who is an Agent within their villages and are more operational during peak harvest when the supply is more than demand.

The study also showed that sunflower grains are kept in storage for less than 4 weeks with exception of millers/processor.

4.1.5: Produce dealers’ bulking practice

Another bulking takes place with produce dealers. They bulk so many different types of produce, buy from middlemen and/ or directly from farmers from various districts. Can only collect direct from framers if the farmers’ produce is not less than 2 tons because of transport cost implication. Advanced money to middle men during scarcity and sell produce as raw materials to miller/processor. The produce dealers operate in a different way from the middlemen. Majority of them advance money to the middlemen and sign contract. Then the middlemen buy from farmers and market to produce dealers. Negotiation takes place in case the market price change

4.1.6: Small, medium and large processor bulking practice

More pronounced bulking existed with the processors. From the study, it was evident that the processors are categorized into three; small, medium and big processor according to the milling capacity of the machine as mentioned in figure 1 of chapter one.

Table 3: Crashing and Storage capacity of the different categories of processors

	Crashing capacity	Storage capacity (Tons)
Small processor (millers)	2.5 – 3 Tons /day	1000
Medium processor	7-8 Tons/day	2000 - 8000
Large processor	80 Tons/day	50,000

The processors are located within suburb of urban area in order to have easy access to electricity.

4.2: Institutional arrangement supporting bulking in sunflower oilseed chain

Table 3: Summary of institutions supporting bulking practices

Institution	Support render
a) Uganda Oilseed Producer and Processor Association	<ul style="list-style-type: none"> • Training of Farmers on business development, post harvest handling and quality management. • Institutional development • Market and input supply (improved seed) • Linking farmers with the buyers • Sourcing for credit from lending institution • Provision of the small scale milling machine to a cluster •
b) Large Private Company (Mukwano)	<ul style="list-style-type: none"> • Mobilised, sensitised, and trained 30,000 farmers • Provided input like hybrid sunflower seeds on credit to farmers • Annual Sunflower produces price setting. • Provide guaranteed market through contract farming.
c) Production and Marketing Department/ VODP Project.	<ul style="list-style-type: none"> • Provide extension services • Research to develop variety of improve sunflower seed
d) Lira district produce dealers association	<ul style="list-style-type: none"> • Handle conflict amongst produce dealers and farmers • Negotiating for fair contract between farmers and produce dealers • Mediate fair contract between association and exporter • Advocating for favourable taxation and favourable policy of oilseed production. • Training farmers on post-harvest handling, storage, quality of seed for planting • Encourage Farmers to sell in bulk
e) Northern Uganda Millers and Processors' Association	<ul style="list-style-type: none"> • created market opportunity and outlet route for sunflower oilseed grain • monitor the activities and general hygiene of the mills and factory • Strengthen the relationship between millers/processor and farmers & produce. • Advocating for favourable Policy that support oilseed Production. • Purchase of Farmers produced
f) Block farming by group members	<ul style="list-style-type: none"> • Providing large chunk of land Oil seed production • Providing Labour Force for production • Storage of Farmers produce • Purchase of produce • Marketing members' produce • Providing Credit to group member.

4.2.1: Uganda Oilseed Producer and Processor Association

4.2.2: Large Private Company (Mukwano)

Mukwano uses contract⁹ farming approach in oilseed production. It provided PAN 7531 seeds to farmers on credit to farmers at Ushs 1050 per kilogram (kg). In signing the contract the price is set

⁹ Contract farming can be defined as an arrangement between farmer and processing and/or marketing firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices. The arrangement also invariably involves the purchaser in the providing a degree of production inputs, technical skills(Eaton C & Shepherd A, 2001)

without the farmers taking part in decision making and negotiation of the price. Farmers are guaranteed of the market although not contented with the price Mukwano company offers to them. Interestingly enough, the farmers are swayed into a contract upon acceptance of the seed. After the harvest of the produce the farmers are to sell the oilseed grains to Mukwano A.K Company through the company's site coordinators¹⁰. The money is deducted from the sales of the produce.

Mukwano Company also extends the distribution of hybrid sunflower seeds to farmers through an organization called Uganda National Agro input Dealers Association (UNADA). The farmers who buy from UNADA have the liberty to sell the sunflower grains to any processor or middleman. Some Processors and agencies also buy hybrid seeds from UNADA at Ushs 10500 and sell to farmers at Ushs 11500 or Ushs 12000.

In this kind of contract marketing the farmers cannot bulk because each farmer signed the contract as an individual. The farmers are not allowed to sell to any middleman or processor whether the market price is booming higher than price contracted. This is one of the constraints to bulking which has been identified during the study.

4.2.3: Lira District Produce Dealers Association.

The association consist of 50 members of whom 15 are females. The association handlers several obligations pertaining to purchase of produce and also give support to the farmers

4.2.4: Northern Uganda Millers and Processors' Association

From the discussion held with one key informant(chairperson for the Association), he mentioned that there are over 30 oilseed mills within the district of Lira, 27 active despite the fact that only 13 of them has registered with the association. The presence of oilseed mills created market opportunity and outlet route for sunflower oilseed grain which is the prominent raw material feeding the oil mills after economical setback of cotton oilseed industry which resulted from the introduction of structural adjustment, hence giving birth to market liberalization and eventual collapse of cooperatives.

The chairperson mentioned that as an Association, they have achieved what will benefit both millers and farmers to have a healthy competition. He proudly said that,

"At least one thing we managed to fight and broke through was a monopoly of Mukwano Company over hybrid seed. Mukwano had prohibited all millers and middlemen from purchasing the hybrid sunflower grains from farmers. Mukwano claimed that since the company is the one responsible for importation of hybrid seeds from South Africa, so farmers must only market the grains to Mukwano Company. So what we did was to write a petition to the Parliament of Uganda signed against by 480 names of farmers, millers and middle men. Eventually a break through was made and now the farmers and small and medium processors enjoy the little liberty to buy or sell hybrid sunflower oilseed grains to any miller at prevailing market price".

4.2.5: Block farming by group members

During the interview with the farmer groups, it was realised that few groups are doing block farming where by one group member who has big acreages of land offers to the group to farm on it. Other way was by each member finding land in the same area. Here each group member acquires

¹⁰Site coordinator- Is employed by Mukwano Company, stationed at parish or village level to receive produce from farmers on contract production of sunflower

same acreages, cultivate, harvest and market as a block. This is one strong institutional horizontal arrangement which promote bulking of sunflower amongst farmers.

4.3: How the Quantity and the quality assurance implemented

4.3.1: The Quantity (volume of raw material)

Inability to meet and sustain the required quantity (volume) to supply and feed the mills and factory was mentioned over and over during interviews and FGD sessions by all the chain actors except Mukwano Company. Mukwano is able to maintain the quantity by computing the production projection from processing capacity of machine to get the required tonnage of sunflower grains which can last for a year. This is done at the beginning of the year. Mukwano this year 2008 contracted 30.000 farmers to plant 100T of hybrid seeds in the 1st and 2nd season. 80T was given to UNADA¹¹ to sell to other farmers. In case of unavoidable eventuality like prolong drought which could affect the yield, then Mukwano can source for raw material from other farmers who cultivated Sunfola.

Farmers themselves cannot tell how much quantity produced in terms of Tonnages or kilograms. The farmers are acquainted by measuring quantity in terms of number of filled bags(sacks). Not until a buyer comes and weigh the produce, farmers will not know. Farmers don't believe in the weighing scale the middle men used. They think is it not genuine or weigh less because farmers think middlemen are cheats. Farmers first test the weighing scale before they use it (measure 2 mug full of beans is equivalent 1kg), then calibrate the scale.

Other millers buy in big quantity at harvest time and try to stock the sunflower grains as much as the money can allow them to buy but still quantity supply of produce has remain the greatest huddler in this sub sector. This was confirmed by the chair person to the processors' Association who said it is sad that most mills remain dormant and idle during the months of April , May and June due to scarce sunflower grains for processing. Hence machines are not utilised to their full crashing capacities.

On the same note, The District Agricultural Officer- Lira also confirmed that this is the greatest challenge being faced by the sub sector. He said that 'there has never been a year where raw material production equals processing demands, production and productivity has always been inadequate'. He actually acknowledged that last year the yield was even lower than the previous year (see figure 1)- production trend. As a district and VODP project, they realised that farmers cannot attain the set production target.

4.3.2: The Quality Assurance

After the interviews with farmers, middlemen, produce dealers and processors (chain actors), it came out clearly that there are conflicting and varying concern about what is meant by quality. Two categories indentified. The farmers contracted by Mukwano and the farmers' group working with UOSPA under seed multiplication scheme, have reasonably taken into consideration the importance of good quality¹² and are implementing it. But the farmers who took initiative to go into farming and middlemen within the villages and trading centres are not keen on quality issues, (see figure 4). This was confirmed through observation while visiting the collecting points in the trading centres, the middlemen don't take obligation of screening to ensure that the sunflower grains are

¹¹ Is an Agro input dealers having one of its distribution outlet in Lira. Mukwano Company is also using it as an out let for PAN 7531hybrid seeds.

¹² Is defined as " fitness for use" , conformance to requirements and freedom from variation (Kotler et al 2005),

sorted out according to variety and quality standard is met. One middleman actually affirmed by saying that “for us we don’t mind about quality, all we want is sunflower oilseed grains to deliver to the processing mills or factory”.

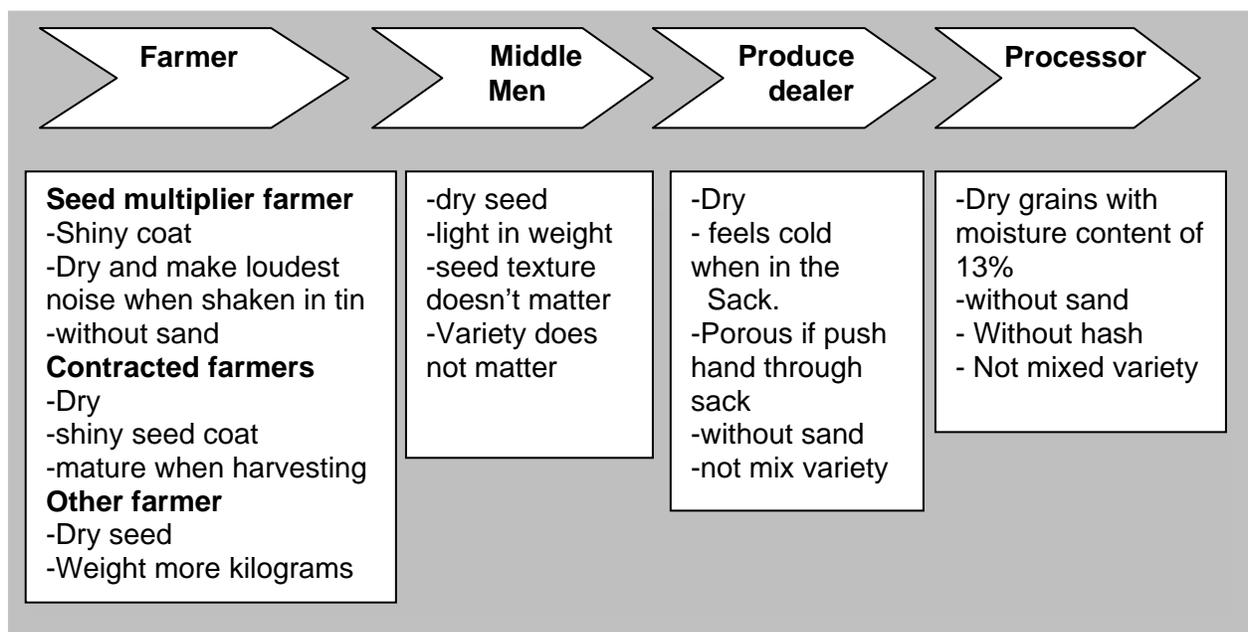


Fig. 4: what the chain actors considered as good quality in sunflower oilseed grains

From the discussion held with the millers (small and medium), there is a “big cry” pertaining quality. The majority of millers except Mukwano complaint that the sunflower grains delivered to the mills is of poor quality with 5% particles of impurity, more so not well dried, some harvested immaturely. One miller who was bitter said that:

“This has led to more cost of re-drying and cleaning the grains again before it could be milled and some times we get little oil because the grains are not crushable enough, hence increased cost of frequent cleansing of the machine “

From the above statement one can say that poor quality is still a big issue and it is obvious that the pain is more felt by the millers/processor than the middlemen or the farmers.

It was also realised that the different chain actors had particular activities which would be done to ensure that certain quality is attained. (See table 3 below)

Table 4: The different Activities done by the Chain Actors to ensure quality control.

Chain Actors	Activities done to ensure quality control
Farmer	<ul style="list-style-type: none"> -Group members plant crops same time and same crop variety -Harvest only when matured well -dry proper, for > 2 weeks (on tarpaulin or from the field and tested by putting the dry seeds in the Tin container then shaken, when it makes the loudest noise it means the grain is properly dried) and thresh, sorted and stored in dry house which is guarded against rat by use of rat poisoning -Those with poor quality are fine (punish) so that next time don't repeat the same thing -Follow up of members by group leader -storing in dry, pest protected house
Middlemen	<ul style="list-style-type: none"> - few of them offer low price to farmers for low quality sunflower grains -store in dry house
Produce dealer	<ul style="list-style-type: none"> -storage in a well dry room and pile the sacks on stuck -Re-drying the improperly dried grains
Processor	<ul style="list-style-type: none"> - Train farmers about quality control, -drying the grains, windowing, and proper storage facility. - The management actually acknowledge that they never had any problem with about quality especially from the farmers the company contracted. This was confirmed from the farmers who dry the sunflower while in the field. The crop is cut and again stacked the sunflower head onto the stem and dry while on the stand before it is threshed.

4.4: Financial transaction and source of working capital

4.4.1: The Transaction Cost

From the study it is discovered that financial cost incurred during bulking and collective marketing of oilseed crop include transportation cost, telephone call bill, hiring weighing scale, buying empty bags, loading and off- loading cost and storage house rent. These costs vary from one actor to another depending on the season, place and distance.

Storage cost ranges from Ushs 20,000 to Ushs 30,000 per month. This applies to the bulking groups and middlemen with the renting store houses in trading centres although middlemen incurred more cost on the rent by 3% of what the farmer pay, this is because of more space which is required and all year round duration. Transport cost also varies according to the distance. Averagely from the field to home cost Ushs 2000 per bag, then from home to storage place cost Ushs 1,500 per bag and then from trading centre to the miller/produce dealer cost Ushs 3,000 per bag. Communication cost is an average of Ushs 10,000 per season and movement to access market is an average of Ushs 20,000.

4.4.2: The source of the Working Capital

All the farmers interviewed never got any loan with the exception of one who got a loan from the Micro finance called FINCA) as working capital once and never went back because one group member defaulted rules and regulation of the bank and all the rest were interdicted. The farmer complaint that, FINCA offers small loans with a short pay back period of only two weeks' interval, the farmers said this is not applicable to Agricultural venture.

The sources of the working capital of the farmers are commonly from their fellow farmers, their own capital, or from the group (revolving fund and some monthly contribution), more are mentioned in the box 2 below

Box 2
How farmers source working capital

- Borrow money from group account which consolidated from
- Monthly contribution from members Ushs 1500 – 5000
- Some group 1000 per two weeks
- Ushs 2000 fine charge per event for a member missing group activity
- 5% deduction from each member after collective marketing
- 10% interest charge for borrowed money from group account
- 30% savings of the revenue from group block sales
- Revolving fund system within the group

A farmer requires close to UGX 223,000 to UGX 250,000 equivalent of €92.41 to €103.60(exchange rate; Ushs 2410 to 1 euro as of may 2008) for only production cost per acre and per season. This is visualised in the chart below.

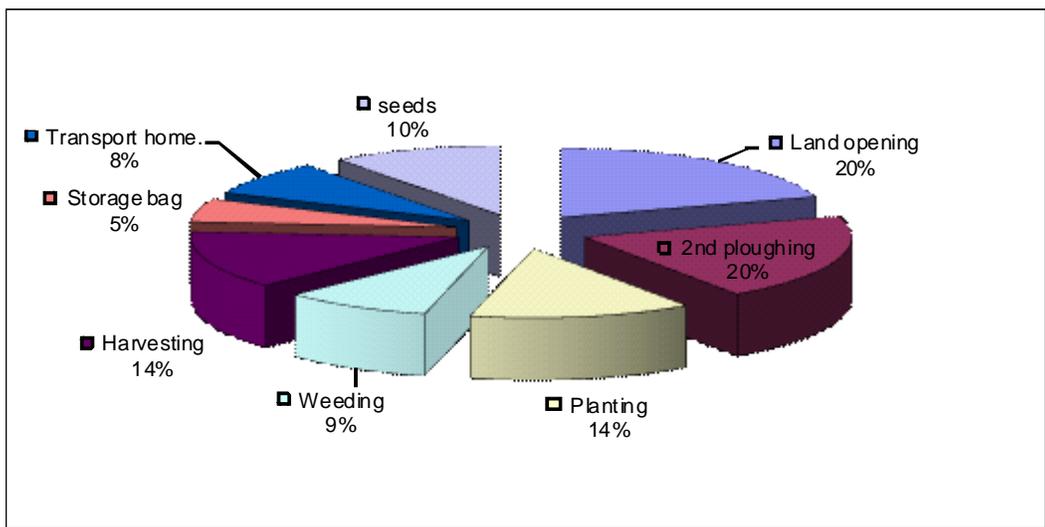


Figure 5: Pie Chart indicating Farmer spending allocation for each of the production activities

From the chart above, it shows that land cultivation, planting and harvesting cost took higher percentages and transport from field to home and storage sacks were lower. On the other hand, middlemen get advances from the produce dealers or millers (the trusted). This also binds them to sell to those very people who advance money to them. The middlemen said this quiet common during the peak season.

Two of the interviewed middlemen said that they also give advance to farmers to help the farmers in weeding and harvesting, however, during the FGD and interviews, farmers disputed this statement that it had never happened.

A few millers get loan from dfcu Bank with an interest of 26% and a pay back period of 3 years. Majority of millers are Muslim, therefore they do not borrow from where interest is charged. However majority expressed their disappointment over the banks principles which are not favourable to Agriculture.

4.4.3: The Price Setting and The Bargaining

The price setting starts from the large processor (Mukwano), who actually announces over the FM Radio at the on set of the harvesting season. All other small and medium millers wait for Mukwano to first set the price and then the rest set a little above what Mukwano has put so that to attract the farmers to sell to them.

Mukwano cost the production which include; seed cost, transport, training, services, and others to get the total cost before the price is determine.

4.4.4 Value Addition

Others wait for Mukwano to set the price because Mukwano has the higher production and monopoly. Whenever Mukwano set the price, the middlemen set Ushs 30/kg above the one Mukwano has set or by Ushs 50/kg during scarcity. This is to attract the farmers to the middlemen and other millers to break the monopoly of Mukwano.

Farm gate price of PAN7531 is Ushs 500/kg to site coordinator

Site coordinator sell to Mukwano at Ushs 530/kg,

Farmer selling to factory at Ushs 520/kg

If middleman buys from farmers at 550/kg to miller ushs 600/kg

Farmers sell to millers Ushs 600/kg

Miller needs 4kg of sunflower grain to get 1 Litre of oil.

1 litre pack by Mukwano sold at 5500/litre whole sale price and 6000/litre retail price

While millers who don't pack sell at 4000 whole sale price and 5000 /litre retail price

Therefore from the above figure, Mukwano needs 2080 Ushs to get 1 litre of oil

6000- 2080= 3920 Ushs difference

The another miller needs 2200 to get 1 litre of oil

5000- 2200= 2800 Ushs difference

The Chart Below shows the variation in Market prices for sunflower in the last three years as revealed by the focus group discussion groups.

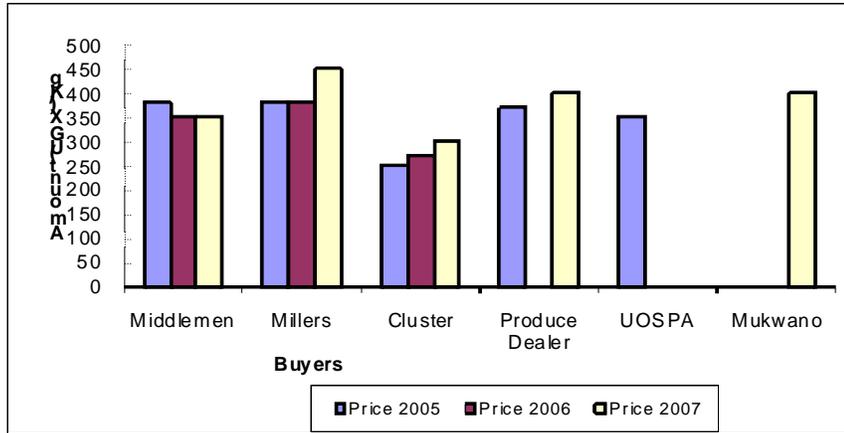


Figure 6: Indication Variation in Market prices of sunflower according to different buyers

4.5: Market information/communication system /network farmers use

From the interviews conducted, 90% of the Individual farmers obtain the market information from the middlemen at loading points in the trading centres whereas the farmers who bulk as a group acquire information from about three different sources (Millers/processors, produce line and organization like UOSPA) and from also over the radio(commonly by Mukwano).

The common communication system is through the telephone calls made by the farmers looking for the buyers while the middlemen looking for the produce go physically to the farmers' villages except for those few farmers who have the mobile telephones.

Generally the study also revealed that the groups that bulk have got the marketing committee comprising of chairperson, secretary and "Askar". The committee is responsible for searching for the market and bring feed back to the rest of the group members. The group then bargain and agree to who should buy the produce and at what price. The group facilitate marketing committee with transport money and telephone call fare.

During a discussion with the chairperson of the produce dealers, he mentioned that about 10% of the farmers go personally to dealers to look for market information and about 30% use telephone call to inquire about market price and market availability but this is done during harvest period.

4.6: The comparison farmers bulking and those not bulking.

It was worth to comparing the value difference between these two categories of farmers (those bulking produce and those not bulking). It is evident that from the figure 5 below that the farmers who are bulking are earning little more than the farmers who are not bulking.

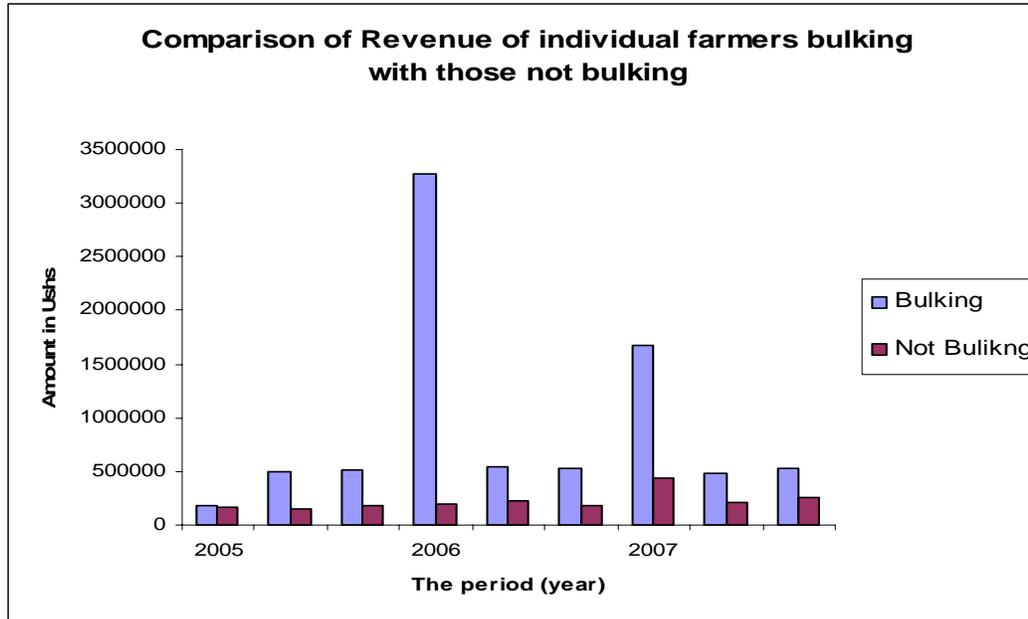


Figure 5: Comparison of Revenue of those bulking and those not bulking.

It is evident from the above graph that farmers who are bulking got little more revenue than those not bulking. It also shows that few farmers above the bulkers get higher than the rest probably of the differences in the buyers. This was also revealed in figure 6 above and Annex 3 of this report that millers tend to offer fairly higher price than Mukwano or produce dealers or middlemen. and year 2006 farmers got as higher as > Ushs 3,000,000 than 2007 or 2005. This might have been caused by flood which hit northern region in 2007.

4.7: The challenges/ constraints to bulking practices of sunflower oilseed crop

4.7.1: Lack of working capital

Lack of working capital is a big hindrance to bulking. According to the finding from the study, majority of the farmers do not have working capital and more so they don't have other sources of income for working capital. Actually it was noted that the purpose of most groups formed is to work in other farmers groups and then later are paid when the crop is marketed. This has become another prime reason for group existence- offering labor for loan.

4.7.2: Lack of Storage facility

From the study carried out, it is revealed that lack of storage is one of the serious constrains to bulking of the sunflower grains. Majority of the farmers store their produce in the same house/ they sleep in. It is because of this problem farmer cannot hoard for a longer period to wait for a higher and better market price. So immediately after harvest majority of the farmers just sell off the produce at a giveaway price because the farmers found it difficult to keep the produce.

4.7.3: Lack of market access/ bad roads

Most feeder roads are impassable during raining season. This has caused fear to those buyers who want to buy in big volume. The truck get stuck in the mud and hence more cost of transport.

So the farmers find it difficult to convince the buyer without them (farmers shouldering part of the transport cost). So at the end of the day, the farmers incur more cost than the middlemen or the millers. Therefore some farmers found it easy to carry the a bag one by one to middleman who is situated along the main road than selling in bulk yet incur more transport coat. More generally, this problem touched all the actors in the chain, in the sense that it affect means of bring the produce together and raise transaction cost. According to the study, lack of transport is attributed to bad roads during raining season and also lack of capital

4.7.4: Low selling price

Farmers did complaint that there is a big difference between production cost and revenue got from the selling of their produce. From interviews carried out, this was an issue which kept on coming over and over again. Farmers complain that they are cheated by the middlemen and the millers. On the other hand when the farmers were asked “how do you know that you are cheated or how do you tell the right price?” The farmers do not know how to determine the price for the produce. Both the individual farmers interviewed only 2 groups and 1 individual kept record of the cost of all the production and post harvest activities. But majority do not know how much was spent in production and postharvest handling.

4.7.5: Poor Relationship amongst the chain actors

Majority of the middlemen are not in good terms with the large processor (Mukwano Company) because of the monopoly on hybrid seeds. Last year there arouse an scenario where by a middleman was confronted and arrested because for buying sunflower grains from a farmer who was contracted by Mukwano company. Another was middleman was confronted and made to give back hybrid sunflower grains he bought from the farmer contracted by Mukwano company.

4.7.6: The Contract farming

The result of the discussion with the farmers on contract farming revealed that this kind of system does not favor bulking. The farmers operate on a well stipulated procedure. The price is pre- determined and the expected quantity from each farmer is calculated earlier on. Immediately after the harvest, the farmers are supposed to take the sunflower grains to the side coordinators who are located within the parish or village. Therefore the farmers have no choice /freedom to bulk or hoard their produce and wait or bargain for a better –higher price.

4.7.7: Late payment of farmers

Majority of the farmers put it clear that late payment is a big hindrance to bulking. This was revealed mostly during FGD sessions. Farmers said that:

“When the produce dealers come for the produce, they use “sweet words” but after taking the produce, they seem to forget very quickly about us. Sometimes it takes more than 4 weeks before we could get our money. This ‘ties’ up our working capital, and that is why grouping members bring so little grains for collective marketing. The rest is held back for sales to middlemen at the trading centers’ “.

4.7.8: Misunderstanding and lack of trust

This study revealed that majority of farmers does not have trust on the buyers, especially buyers that are new in the market or come from a distance area outside the farmers’ village. From the

FGD held, farmers showed concern about buyers who disappear before paying them. In one of the FGD, a group member emphasized by saying that:

“Let me tell you why we can never trust these buyers; two years ago we lost Ushs 1.8 Millions to one who after buying our produce disappeared from the town. We failed to trace his whereabouts despite the fact that we had all his contact. So what the group finally decided was to stop the business of collective marketing but we still continue to do other activities together”

From the above state it is clear that there exist mistrust, opportunism and high risk in the oilseed sub sector. It thus shows that farmers are being exploited by the middlemen and produce dealers

4.7.9: Lack of volume

Majority of the farmers who are not bulking gave this as one of the main constraints to bulking of the sunflower produce. From the discussion with the farmers, it showed that farmers get involved in production of so many other food crops, hence they cannot grow sunflower as pure stand. In most case the farmers practice inter cropping to save labor and resource problem. But at the end of the season they get very little harvest (quantity) from the intercropped sunflower. Therefore this does not warrantee bulking.

4.7.10: Lack of market information

This was mostly gathered from farmers, they complaint that in most cases the information about the market price is availed late after harvest is completed. And because of many other problems they farmers have, they are not motivated to wait.

4.7.12: Unstable market prices

This was a general cry of farmers; middlemen produce dealers and millers/ processors. It was noted that, because of open market, they price is determine by supple and demand and there fore no one is certain of the future. The chain actors are seemed to be full of fear, fear of making a lost incase the market price drop. As a result, majority sell immediately at a giveaway price.

4.7.13: Lack of support from the Government

Although this is a challenge to the processors and farmers and majority of them (Farmers & processors) blame the Government for her reluctance to control the market, on the other hand some processors and farmers are appreciative of the freedom in the open market. This made them to sell their produce to any buyer at any price.

4.7.14 : Piece meal sales

Due to other domestic problems majority of the farmers sell their produce little by little to solve that immediate problem.

CHAPTER 5 THE DISCUSSION OF THE RESULTS

This chapter analyses the results of the study which were described in the previous section. The analysis are based on the findings mentioned in section four, in relations to other information put forward by other people as referred mentioned in literature review. Some of interrelated results are condensed and discuss holistically. For example categories of bulking and the challenges to bulking practices.

5.1: The different bulking practices

5.1.1: The Individual Bulking Practice

From the result it is noted that the individual farmers have only two channel of marketing (see figure 3). The reason could be that quantity from an individual farmer is little and if the farmer is to market produce to produce dealers or millers who are far a way, the transaction cost incurred may be higher than the revenue. Therefore this justifies their choice of marketing channels. On another hand the farmer may hoard for 2- 4 weeks so that they can use the opportunity of lean season when produce/supply is scarce and demand is higher. However individual farmer can fetch higher income if the price of sunflower grains per kilograms shoots as high as Ushs 700.

Jeff and Paul (2002) noted that 'small holders dominate marketing. The marketing of surplus by the farmers was found to be done individually and mostly during peak harvest season of various crops. Lack of collective marketing initiative and storage facility as well as viable market outlets contributes to the gluts of production immediately after the harvest'

Therefore one can say that individual bulking limit the farmer to few marketing channels. However for individual farmers to benefit, must take advantage when supply is scare as much as a trader may also take advantage of a situation of few market channels

5.1.2: The Group Bulking Practice

The study result of sub section 4.1.2 in chapter 4 shows that farmer groups have more buyers than the individual buyers. This means that the group stands a better chance than individual farmers because they have wider range of market choices and also linked to final produce buyer. In this case, millers offer Ushs 600/kg while others are lower. It also saves the buyer from the hurdle of transport hence a buyer can offer to collect bulk of produce when is 2 tons or more and this could be advantageous to the farmers, not because it offer higher price but, because bulk selling bring wholesome cash and the farmer can plan for the money and use it effectively. On the other hand it is profitable to the buyer because risk and cost is reduced. Although both individual farmers and group farmers can be linked to chain supporter, but farmers in group stand a higher chance because the group has a marketing committee who can create that social link. Further more, Robin et al (2002 pg 59) emphasized that;

'Farmers' groups which decide to market their goods collectively are much likely to succeed if they can link themselves to useful organization. These includes; sources of credit, transport companies, suppliers of inputs, market mangers, market information providers, seed suppliers, NGOs, schools, local Government, other farmers groups, the farmers union and trading companies.'

This means that there is need to strengthen the farmers group to have linkages with many other institutions so that it can register success.

The group farmers also have some by laws which governs their bulking activity (see box1). This means that there are some farmers who are not only bulking but also practicing collective marketing. This was noted by Mundy Paul (2006) that, collective marketing is a technique used by interested farmers to gain and benefit from an economy of scale by organizing themselves into groups so that they could market their produce collectively to a potential buyer.

P. Robbins et al., (2005) cited that in this concept of collective marketing, farmers have to agree on the following; pooling of resources, pattern of crop production, post production systems and the collective sale of the group's crop surplus. The successful adoption of collective marketing techniques depends more than anything on the willingness of farmers to adopt decision-making and management systems based on trust and common goals. The building of trust and the adoption of transparent and fair systems must be addressed and agreed from the outset. This benefit would be even greater if farmers can bulk a 'quality' product. From the statement of the above references, and given the fact that some groups have are well developed with strong by – laws as mentioned in box 1 in sub section 4.1.2 of the previous section, it is evident that findings are in line with literature.

5.1.3; The Clustering bulking Practice

Jeff and Wagubi (2002) described that; “there are four different categories of participant in the oil-seed chain. These are farmers, agents, produce dealers and processors. They continued to say that market cannot exist without these four categories of participant”. More similar, the result in sector 4.1 has one exception category of bulking. That is clustering bulking is found to be a new category. This is farmers' own initiative to merge together in effort to shorten the gap between the farmers and the processors by eliminating the middleman. By doing this it is hoped that farmers will have more bargaining power and be in position to get better price hence increase their income. This is also noted by KIT and IIR (2008 pg 99-100) that;

‘By negotiating collectively through collection centres, farmers have been able to secure better prices and more assured outlet for their produce. They have taken advantage of the economies of scales and reduce their cost. The farmers are now organized, have developed communication channels that help solve joint problems and learned to plan together as a group’.

Although the farmers groups are merging into clusters with the aim of eliminating the middleman and attain economies of scale to enhance bargaining power, this may not result into any better income if the cluster members do not put consideration on choosing the right marketing channel and better pricing system. This must be coupled with transparency and commitment of leaders and involvement of other cluster members in decision making. As much as farmers are marketing collectively, their effort alone may not be a tangible if they have not yet consolidated other resources and inputs necessary for sunflower production and marketing. These may include seed source, storage facility / warehouse, transport, farming equipment, milling machine and etc. Therefore there is need to strengthen this system so that it can develop into a holistic self sustaining farmers organization with value addition activity. Otherwise without proper management, cluster system may end up being middlemen in disguise.

5.1.4: The Agents/Middlemen Bulking Practice

5.1.5: The Produce Dealers Bulking Practice

5.1.6: The Millers and Processor Bulking Practice

5.2: The Institutional support to promote bulking Practices

Mukwano used contract farming approach to source for raw material for processing oil. However farmers are not contented with the price offer and more to that limited input of only Hybrid seed is provided on credit at very high cost as mentioned earlier on. Although Mukwano approach guaranteed market to farmers, contract does not offer all the preconditioned needed. Farmers are not given farming tools, credit for land opening etc. This is not in line with what Sheperd A & Charles (2001 p14) cited that;

'The intensity of the contractual arrangement varies according to the depth and complexity of the provision in each of the following three areas.

- Market provision: The grower and the buyer agree to term and conditions for the future sale and purchase of a crop product
- Resource provision: In conjunction with the marketing arrangement the buyer agrees to supply selected inputs, including land preparation and technical advice.
- Management, specification: The growers agree to follow recommended production methods, input regimes, cultivation and harvesting specifications:
- With effective management, contract farming can be a means to develop market and to bring about the transfer of technical skill in a way that is profitable for both the sponsors and farmers'.

In analysing the situation in the field in reference to the above given statement, one can conclude that, contract farming approach employed by Mukwano company not been profitable to farmers but to the company.

Therefore from the point of view, for contract arrangement to be profiting for both sponsor and the farmer, pricing arrangement must be flexible so that it can be changed according to the market prevailing price. In this way risk and uncertainty can be reduced.

According to UOSPA (2006) Hybrid seeds PAN 7531 cost Ushs 7500/kg but the finding showed that currently PAN is costing Ushs 12000/kg of which cannot plant one acre. This an indicator that cost of production has shot high as indicated in Annex 1 of this report. And yet the company itself offer lesser price for PAN 7531 than other millers. In other words this question the support of the company in promoting bulking as well as farming as a business if farmers cannot realise profit

In block farming all members' work together starting from land opening up to selling of the produced. The groups have an account in the bank where they deposit their monthly contribution. When the produce is sold, 5 % of the revenue from each member is retained as contribution to the group. Group member can borrow the money from the group account and by back with 10% interest. The funds generated from within the group help members to solve problems of school fees and meet medical bills. Hence by so doing farmers are able to bulk their produce and wait for period when price is fairly higher so that they can bargain better and have better income. This practice was recommended by P. Robbins et al (2005) in this concept of collective marketing that;

'farmers have to agree on the following; pooling of resources, pattern of crop production, post production systems and the collective sale of the group's crop surplus. The successful adoption of collective marketing techniques depends more than anything on the willingness of farmers to adopt decision-making and management systems based on trust and common goals. The building of trust and the adoption of transparent and fair systems must be addressed and agreed from the outset. This benefit would be even greater if farmers can bulk a 'quality' product.

unsatisfied demand in the market may be met by chain partnership that integrates good chain relations and strong market institutions to the benefit of all actors in the chain where both market institutions and chain relationships are strong. Farmers, traders and processors engage in long-term relationships with formal contracts to jointly work on, and invest in, up-scaling, quality improvement, market development, value-adding, service provision, risk reduction, prices negotiation, profit shares and where chain actors develop business alliances in which they acknowledge their specialized roles and together look for synergy (Mundy P.2008). This may result in competitiveness and sustainability

From figure 3 above, it shows that UOSPA, Lira local Government and private companies and NGOs are the major support of the chain. However the key role player in the sub sector is UOSPA by providing the services which were mentioned earlier on in chapter 4 sub section remained a key player in the sub sector by organizing farmers and processors group while the Lira district produce dealers association

5.3: The Quantity and The Quality assurance

5.3.1: The Quantity (volume) assurance

Quantity assurance failed although there was no figure to show that demand and supply do not match. But from the interview results described in section 4.2 in chapter 4, the general expression confirms that quantity (volume) assurance still remains a big issue of concern and this has become a dominant challenge to the oilseed sub sector as a whole. This could probably be due to the fact that majority of farmers cultivate in only one season (2nd season) and more so amount of harvest still little due to small acreages planted. Drawing from the characteristic of the farmer as shown in figure 2 in chapter 1, and also from a summary sheet for FGD on appendix 4, one realise that such farmers cannot afford to engage in commercial production because of growing so many crops which demand same labour and working capital, little can be expected from the farmers. This was also highlighted earlier in the chapter 1 by Kajubi (2004) that;

'there are low crop volumes and scattered marketing since farmers sell their crops immediately at harvest, production of different type of crops at different times, lack of information on market price, poor leadership and mistrust. This resulting into farmers receiving paltry income from the sale of their crops in distorted market situation'

More generally the issue of the soil fertility causing low production and productivity should not be undermined.

Furthermore it could be that farmers do not know exactly how much quantity is expected of them. It is very possible that farmers operate in a vacuum without prior knowledge of production tonnage per season or per year. In relation to this, the chairperson to the produce dealer looked ignorant about the expected produce tonnages to be supplied to the mills in year 2008. But on the other hand on the same issue DAO Lira said every year the Department of Production and Market estimate sunflower production but he was not sure whether this same information reached the farmers. This is an indication that there is a missing link between value chain and chain supporter.

Therefore, the development organizations and Lira district production and marketing department must endeavour to inform farmers on how much tonnage of sunflower is expected of them and this information should be translated into the language of the farmers (that is tonnage converted into number of bags) and acreage each farmers can cultivate to achieve the required quantity, and train farmers on planning farming if they are to be transformed from subsistence farming into

5.3.2: The Quality assurance

The result of the study showed that there is a problem of quality of the sunflower grains which are supply to the mills. As much as there are various activities implemented by the chain actors in order to ensure good quality, the fact of low knowledge about what exactly is meant by quality amongst the individuals in the different categories of the chain actors cannot be undermined, (See figure 4 and table 4) in the previous chapter. The information shows that middlemen are not concerned about the quality seeds and seems to be the major culprit in this area. And yet majority of the farmers market through them and also majority of the millers buy sunflower grain from them, hence their lack of concern can be a big trouble to the chain. The negligence could attribute to poor relationship amongst the chain actors, lack of common set quality standard and rules to enforce the actor and more so middlemen, who re said to be profit minded only.

Jeff and Wagubi (2002) noted that ‘the current marketing arrangement do not favour improvement in quality of product. This is attributed to lack of standard and the failure to pay premium prices to farmers who produce superior quality products’. This statement is in agreement with the findings. Because the middlemen acknowledged that for them they do not mind about quality, all they want is sunflower grains to be delivered to the mills. This means that there is no premium price for best quality. Hence farmers may find it not worth considering quality as a requirement for better price. It is also likely that those who actually have the knowledge and put into practice are the minority. Another reason could be that because of high demand for raw material, millers are left with no choice except to whatever produce is deliver so as to keep their mills operational.

On the other hand farmers who have obligation to multiply seeds for UOSPA and those farmers who are contracted sunflower production with Mukwano Company are found to be mindful of the quality of the produce and seeds marketed. This could have been because of institutional arrangement in place for such kind of contract enforcement. Mundy Paul (2008) noted that ‘in any business transaction, breach of contract is an important risk. Buyers may not pay the sellers for produce they took on credit; sellers may not supply the promised produce. Disputes may arise about the quality of produce, the exact amount, or possible contamination’. Therefore it is possible that this category of farmers were following stipulated rules of agreement which enforces supply of quality produce. It could have been also efficient monitoring and follow up of the farmers by the organization and the company field staffs to ensure that farmers deliver what exactly required of them. This kind of follow up coupled with guaranteed market in a way boosted the moral of the farmers to keep with the standard. Furthermore, since most of the seed multipliers and contract farmers are women, this attributed to good quality since women are so keen on quality issue.

Therefore there is need for giving more knowledge on quality to farmers and middlemen and also farmers should be motivated for to deliver quality produce by offering premium price by millers or middlemen.

5.4: The Financial transaction and source of working capital

From the results in sub section 4.4, showed that there is high transaction cost and majority of the farmers, middlemen and a few millers also acknowledged that lack of working capital is a big hindrance to bulking. According to the finding from the study, majority of the farmers do not have working capital and more so they don't have other sources of income for working capital. Actually it was noted that the purpose of most groups formed is to work in other farmers groups and then later are paid when the crop is marketed. This has become another prime reason for group existence- offering labor for loan.

Due to high interest rate charged on loan, 23% annually and 120% annually by the Commercial and micro-finance institution respectively operating within the district. Most farmers are discouraged from taking loan for agricultural investment. Therefore they cannot operate at a commercial level this affects their ability to bulk the required Volume required by the Millers and big company who offers better prices subsequently yielding more income.

However Robin P(2002) recommended that, 'in order to probably lower the transaction costs, smallholders farmers should Bulking up small parcels of produce into truck-loads of goods offers farmers the possibility of selling their goods outside their immediate location. Traders want to make as large a profit as possible. If farmers have access to very few traders and they do not know the true, market price, they are at a disadvantage. In some countries traders will sometimes collaborate with each other to offer the same low price to local farmers. If farmers have a large stock of goods to sell they can hire transport for themselves and they can travel to more distant markets to find traders who pay better prices than local traders'. This therefore calls for collective marketing by smallholders if some increase in income is to be realized.

5.5: The Market information/communication system /network farmers do use

The market information is so crucial in promoting bulking and in influencing decision making on which marketing channel to choose especially amongst the farmers. The result shows that market information is available mostly at the harvest period. They don't seek for information earlier to help them plan and this could be the reason why the farmers mostly produce little quantity because market information sourcing begins at harvest. This is not in line with what, Robin et al (2002) noted that, for one to get market information should carry out market research, while seeking for market information 'the information that farmers most need is the price of the product they wish to sell. Market information includes-

- Information on production plan, which product needed at what quantity,
- Information about the amount of produce being bought and sold on any particular day in the different market places that they may want to use,
- Information about the cost and availability of transport, the names of the traders they can contact, what weather condition are like'.

To some extent farmers are not to be blamed because the production projections is not availed to them as mentioned before in chapter 4 and also discussed later on in this chapter under sub section 5.3

Farmers get information from two common sources: Produce dealers and middlemen. This is probably because the produce dealers are the common source of information for the farmers bulking while those not bulking access market information from the middlemen. This may be because middlemen are more accessible or it is more costly to travel for to look for market information. F

The farmers as earlier discuss lack vital information to enable them take decision as when to sell at what price This was also noted by Mwesigye (2006) that 'the majority of the rural producers depend on the buyers for market information which is in counterproductive'

5.6: The Comparison of farmers bulking and farmers not bulking

It is evident that from the figure 5 above that the farmers who are bulking are earning little more than the farmers who are not bulking. This is as a result of good price offer by the Millers and big company who buys large quantity of produce to feed into the mills; farmers are able to negotiate for better price from the buyer. It is clear that while farmers who are bulking meet the cost of storage, they are able to hoard their produce when price are low due to influx of produce in the market

and wait for better season to sell enabling them to negotiating for a fair price instead of selling at farm gate price.

5.7: The Challenges/constraints to bulking practices

The challenges identified during the studied are interlinked with one another. Some of the challenges are casual effects problems and some have indirect effect on the bulking practices. For example lack of transport is tied to poor roads. Lack of volume is tied to piece meal and lack of capital and lack of farming tools and equipment.

The research shows that majority of the farmers groups don not bulk although they work in groups. The root cause for this scenario is that groups are engaged in working for other farmers and as a result they have little time for their fields. This was mentioned in previous chapter in sub section 4.4.2 that many group source their capital from loan farming. Still less volume is linked to lack of farming tools which result into late planting and yet one of the by- law for enforcing bulking as mentioned in section 4 (see box 1) is that a group members must plant early and on time so if a farmer does not succumbed to this by – law, he or she must fall out of the group. Furthermore, late plating leads to spread harvest which does not favour bulking and hence the group end up missing the buyer or fail to meet the required quantity agreed upon by buyer. Hence at the end of it all the group sell to the middleman or end up selling individually for much lower price than a miller could have offered.

This similar findings was also reported by WFP (2004 b) that,

'Farmers themselves often only produce a few bags of produce on their own. Farmer's groups interested in supplying WFP with maize or beans is required to have a minimum of 50mt before it may attempt to bid for buyer tender .This quantity must be located in a single storage facility, or spread out among several stores easily accessible by buyer transport tracks. The reason for this is that the buyer bears the responsibility for transporting supplies from the farmers' group location, as opposed to requiring the farmers 'group to deliver to buyer's stores. If the amount being picked is too little, or is not centrally located it becomes too costly for buyer to transport the supplies. Unless farmers grow on commercial scale, they may not meet the minimum quality requirement of the potential buyer. This might require a very large number of farmers'

While on the other hand it could be possible that spread harvest will favour farmers who have small storage facility in that as one member harvest, another member will be selling off. This could again solve a problem of lack of storage facility but high demand for the produce.

From sub section FGD revealed that even farmers who have bulked their produced then to get low income because of inaccessible roads during raining season. That when a vehicle gets stacked on the muddy road, it consumed more fuel because sometime can take more than a day to get out of the muddy road. At the end of it all when the road is bad the buyers tend to lower the price by Ushs 50/kg or 100 /kg. or buyer opt for 'cost sharing' of the transport cost. Hence the farmers will have no choice if the farmers urgently need money or don't have a store for the produce.

Mundy Paul (2008 pg 20) states that; 'the overwhelming majority of traders have no motorizes transport, so they need to hire it from others. They continue to say that, the physical transport of the produce can account for 40 – 60% of the marketing margin'. This is in line with the findings of the study has mentioned in chapter 4 sub sector 4.7.9. As mention earlier on in the previous chapter that lack of transport is attributed to by poor infrastructure leading to high transaction coat. This is still emphasized by(Mundy P. 2008 pg 15) that ' poor roads , and rural infrastructure raise the costs and risks of transport, increase post harvest losses and margin that is needed for marketing

and lowers the price that the producer gets at the farm gate. This leaves a lot to be desired that as much as farmers are trying their level best to bulk, still their effort is undermined if this challenge is not taken care of. Therefore improving transport means will mean increasing farmer gate price hence increase income.

Sub section 4.7.4 of the previous chapter shows that farmers are not happy/ contented with the price they are offered. From the discussion it shows that farmers do not cost their activities for possible reasons that they do not know how to do it, or they lack the record or they lack the business culture. However, on the other hand this is a big hurdle to the farmers since selling price is solely determined by the demand, availability of the grains and the prevailing market price, of which the farmers have no control over them.

CHAPTER 6 GENERAL CONCLUSIONS AND RECOMMENDATIONS

There are six different categories of bulking in the oilseed subsector. These categories fall within the chain. The categories include: Individual farmers bulking, Group of farmers bulking, Middlemen bulking (farmers who is middleman, site coordinator and ordinary middleman), bulking at cluster level, bulking with produce dealers and lastly millers.

6.1: The conclusions

More generally although market information is crucial in production, it seems to carry little weight as far as pre –season planning is concern. Farmers only search for market information during harvesting period. This must have resulted into poor decision making which lead to consequent choice of market channel less profitable

Millers twice as much as the farmer get from the sales of the sunflower grains. This is evidence that farmers are cheated.

6.2: The recommendations

REFERENCES

Archambault, S. (2004b). WFP agriculture and marketing support farmers group Kampala-Uganda

SNV 2008, The Netherlands Development Organization
<http://www.snvworld.org/en/regions/esa/ourwork/Pages/Oilseeds.aspx> ACCESSED 13/4/2008

James Okoth, Arnold Braun, Robert Delve, Habakkuk Khamaala, Godrick Khisa, and Julianus, Thomas 2006; the emergence of Farmer Field Schools Networks in Eastern Africa. Research Workshop on Collective Action and Market Access for Smallholders, 2-5 October, Cali, Colombia

Jonathan Coulter, 2006; Farmer Groups Enterprises and the Marketing of System, Uganda Commodity Exchange Research Workshop on Collective Action and Market Access for Smallholders .October 2-5, - Cali, Colombia

Ministry of Agriculture, Animal Industry and Fishery, and Ministry of Finance, Planning and Economic Development (2000), Plan for Modernization of Agriculture; Eradicating Poverty in Uganda, Government strategy and operational framework, Kampala, Uganda

Tiffany Piper. 1998, Small-scale Rural Oilseed Processing in Africa
International Development Research Centre, Ottawa, Canada

Agricord – online publication (2005), weaving the Food Web for Innovation in Farming System
http://www.agricord.org/?menu_class_id=3&menu=missions&view=mission&mission_id=24340#
Accessed 20 MAY 2008

P. Robbins, F. Bikande, S. Ferris, U. Kleih, G. Okoboi, and T. Wandschneider (2005) Collective Marketing for Smallholder farmers. Manual 4: The Territorial Approach to Rural Agro-enterprise Development
http://www.ciat.cgiar.org/agroempresas/pdf/manual4_collectivemarketing.pdf Accessed 18 may 2008

Kajubi Elijah (2004), Broker Oriented Agriculture Marketing for exploring the economic potentials in dry lands; Uganda Cooperative Alliance Ltd

Jeff D and P Wagubi (June 2002) Potential Agricultural Market Opportunities and Enterprise Development for the Teso and Lango Regions, Uganda

Poulton, C., Davies, R., Matshe, I., & Urey, I. (2002). A review of Zimbabwe's agricultural economic policies: 1980–2000. Working paper, Institutions and Economic Policies for Pro-Poor Agricultural Growth. London: Imperial College

Dorward, A. R., Kydd, J. G., Morrison, J. A., & Urey, I. (2003). A policy agenda for pro-poor agricultural growth. Paper presented at the Agricultural Economics Society conference, Aberystwyth, April 8–10

Chipeta. S . (2007) Regional Institutionalisation and scaling up of Farmer Study Group (FSG) activities, Phase 2 . An initiative to scale up and institutionalise farmer driven study groups in Eastern

and Southern Africa, with a particular focus on commercialisation and market access Institutional analysis. Draft Discussion Paper

Richard Helmer and Ivanildo Hespanhol (1997) *Water Pollution Control - A Guide to the Use of Water Quality Management Principles* Published on behalf of the United Nations Environment Programme, the Water Supply & Sanitation Collaborative Council and the World Health Organization by E. & F. Spon © WHO/UNEP ISBN 0 419 22910

KIT and IIRR (2008) *Trading up: Building cooperation between farmers and traders in Africa*. Royal Tropical Institute, Amsterdam; and International Institute of Rural Reconstruction, Nairobi.

Vegetable oil development project Annual Report 2006

Makhura M.T., (2001). *Overcoming transaction cost barriers to participation of smallholder farmers in the North Province of South Africa*. Unpublished PhD thesis, University of Pretoria, South Africa.

Eaton, C. and A. W. Shepherd (2001). *Contract Farming: Partnerships for Growth. A Guide*. FAO Agricultural Services Bulletin No. 145. Rome, Food and Agriculture Organization of the United Nations.

Kaplinsky, R. and M. Morris (2001). *A Handbook for Value Chain Research*. Brighton, United Kingdom, Institute of Development Studies, University of Sussex.

Philip Kotler, Verinica Woong Jon Sauters Gary Armstrong *The Principle of marketing 4th European edition* Pearson Education Limited , 2005 Edinburgh Gate Harlow

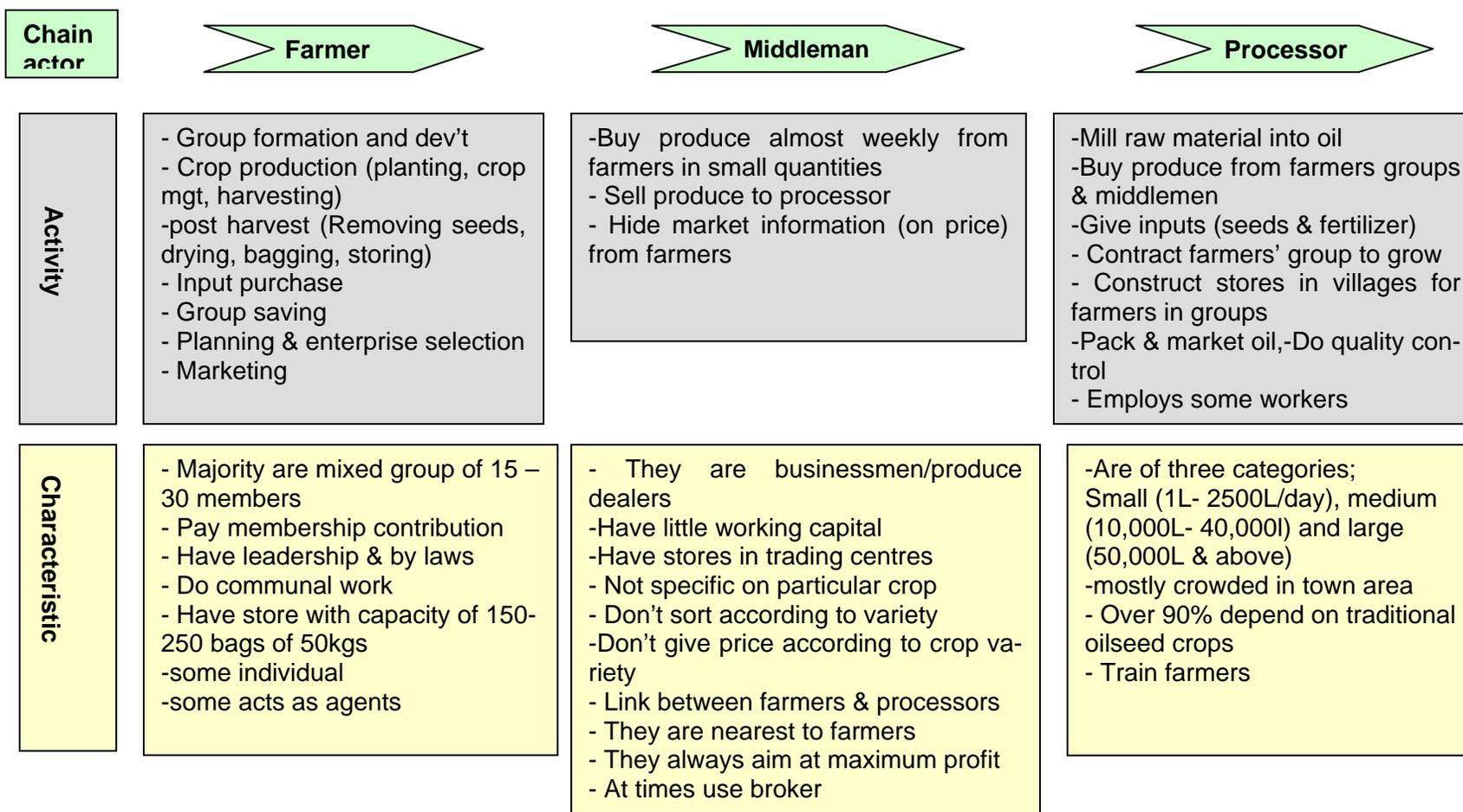
Gideon E. Onumah, Junior R. Davis, Ulrich Kleih and Felicity J. Proctor (2007) *Brief of ESFIM Working Paper* , Empowering Smallholder Farmers in Markets: Changing Agricultural Marketing Systems and Innovative Responses by Producers' Economic Organizations, NRI-CIRAD-WUR

Developing countries to reach global markets"
Organized by UNCTAD Commodities Branch

Frederick E. Mwesigye (2006); *The role of government in supporting small rural producers reach new markets and supply chains The experience of Uganda Commissioner/Registrar Cooperatives Development Department*. Ministry of Tourism, Trade and Industry Uganda

Annex 1

Figure 2: The summary of the main sunflower oilseed supply chain



Source: Own document

Annex 2

SWOT ANALYSIS OF FARMERS' GROUP.

<p><u>Strength</u> -Cluster formation -Acquired land for building the storage -Availability of both improve and local seeds</p>	<p><u>Opportunity</u> -Available market and more players offering "juicy price"</p>
<p><u>Weakness</u> -Many are not self motivated -lack of more knowledge on seed varieties -Reluctant to purchase weighing scale -Ignorance of using former cooperative stores lying idle within the sub counties</p>	<p><u>Threat</u> -Soil deteriorating - Unstable price in the market -Land becoming big issues - High production cost</p>

Annex 3

Production cost of sunflower per one acre of land..... Annex

Activity	Unit cost	Total cost (Ushs)
Land opening	45000	45000
2 nd ploughing	45000	45000
Planting	30000	30000
Weeding	20000	20000
Harvesting	30000	30000
Storage bag	1000*12	12000
Transport home.	1500*12	18000
seeds	11500/kg	23000
Total		223,000

Annex 4

The comparison of revenue of farmers bulking and the farmers not bulking

2005	Seed variety	Quantity (Kg)	Price/kg	Revenue	Buyer
<u>Bulking</u>					
Farmer 1	PAN 7351	4900	380/=	186200/=	middleman
Farmer 2	Sunfola	1300	380/=	494000/=	milller
Farmer3	PAN 7351	1400	370/=	518000/=	produce dealer
<u>Not bulking</u>					
Farmer 4	Sunfola	480	350/=	160,000/=	UOSPA
Farmer 5	Sunfola	600	250/=	150,000/=	cluster
Farmer 6	Sunfola	507	350/=	177,450/=	middleman

2006	Seed variety	Quantity (Kg)	Price /kg	Revenue	Buyer
<u>Bulking</u>					
Farmer 1	PAN 7351	4680	700/=	3276000/=	milller
Farmer 2	Sunfola	1540	350/=	539000/=	middleman
Farmer3	PAN 7351	1496	350/=	523600/=	middleman
<u>Not bulking</u>					
Farmer 4	Sunfola	500	380/=	190,000/=	milller
Farmer 5	Sunfola	812	270/=	219,240/=	cluster
Farmer 6	Sunfola	520	360/=	187,200/=	milller

2007	Seed variety	Quantity (Kg)	Price / kg	Revenue	Buyer
<u>Bulking</u>					
Farmer 1	PAN 7351	4400	350/=	1672000/=	middleman
Farmer 2	SUNFOLA	1190	400/=	476000/=	produce dealer
Farmer3	PAN 7351	1190	450/=	535500/=	milller
<u>Not Bulking</u>					
Farmer 4	PAN 7351	1100	400/=	440,000/=	Mukwano
Farmer 5	Sunfola	700	300/=	210,000/=	cluster
Farmer 6	Sunfola	656	380/=	249,280/=	middleman

Annex 5

Focus group discussion summary sheet

	N0. of members	Crops grown	Average acre of sunflower/season grown	Storage facility/capacity	Duration of storage	Source of market information	Who is responsible for marketing searching	Mode of payment	Source of working capital	Quality control measure	Market channel	Challenges
G1	0(22f)	-Sunflower (Sunfola) -Cassava - Groundnuts -Soybeans -Sweet potato	22acre 2 nd season	Store in house with in central place -150bags storage capacity	1 st season For 1 week 2 nd season for 2 month	-Produce dealers, -Middle men -millers -UOSPA	Chairperson Secretary storekeeper	Cash on delivery	Revolving fund from group, monthly contribution	-Planting early at same time - same variety -harvest when mature -dry proper Store in good store	- UOSP A - Millers	Lack of working capital
G2	20(7F)	Sunfola Soybean Simsim cassava	3acres each member 2 nd season	-Chairperson' house -200 bags	1-2 Weeks	UOSPA	Secretary and chairperson	cash in 1 week after delivery	Friends	-Field visit by chairperson -monitoring by UOSPA field staff -proper drying and sorting	UOSP A	-Lack farming tool - misunderstanding
G3	18(0f)	-Sunflower -Soybean -simsim	2.5 acres 2 nd season	Individually in the house. 12-15 bags	3 weeks to 1 month	Middlemen -Produce dealers -millers	Group treasurer	Cash after 2 weeks	-Group funds -Friends -own money	-By- laws & fine -Follow up	-Millers - produce dealers	-members selling before bulking (7/18 bulk) -delay payment misunderstanding

Summary sheet continues

G4	30(15f)	Sunflower(HB & Sunfola) Groundnuts Simsim Millet beans	Each member 1.5 acre 2 nd season	Rent a room in trading centre 300 bags	1-2 months	Ring or go to millers Produce dealers UOSPA	Chairperson & secretary	Cash & Cash on delivery	None		UOSPA Mukwano Produce dealers Soroti market	Lack Transport Unreliable rain Unstable price
G5	30(17f)	-Sunflower (HB, Sunfola) -Soybeans -Hot pepper	2acres (individually) 2 nd season	Store in a containers at chairperson' home 100 bags storage capacity	> a week	Side coordinator, radio	Sell individually	Cash after delivery	None	-Early planting & weeding -regular monitoring by contact farmer & meeting -harvesting when mature -proper drying -pest control	Side coordinator (Mukwano agency)	-Delay payment -Transport to centre - Operation equipment
G6	30(5f)	Simsim Sunfola	2 acres Both seasons	Each one house 12 bags	1-2 weeks	Cluster coordinator	Sell individually	Cash after delivery	Work for loan from others' field	-Drying well -mature well	cluster	-Lack Storage -delay payment -lack capital
G7												
G8												

Annex 6

The Interview Questions

List of questions

1. FARMER

District.....Sub county.....

Date----- Village.....

Name of Respondent----- Sex---M/F Age.....

1. Crops/ Area Planted/Used Quantity Harveste
2. How long have you been growing sunflowers?
3. Why you are still continuing growing it
4. How are financial transaction organized and were working capital sourced from
5. How many times do you harvest in a year?.....
6. Of the harvested quantity, how much is marketed, where (market outlets)when (peak harvest/ off harvest season)?
7. If Not marketed what do you do with the product?
8. How do you store your product? And why do you store it? Any challenges you face with stor- age?
9. For how long do you store your crop?
10. Which market outlet do you prefer, and why?
11. Establish the key market intermediaries for each marketing channel
12. Are there any special marketing arrangements between the market intermediaries and the farmer
- 13 How and when do you get paid for the marketed sunflower?
- 14 How is the quality been determined?
- 15 How do you get the market information about your product?.
- 16 How is your sold sunflower been transported? Do you transport your crops to the markets?
- 17 What is the distance travelled and prices obtained by crop for each market outlet?
- 18 Who determines the price obtained in the market?
- 19 Do you feel the price are fair?
- 20 What kind of weighing or measuring scales do the traders use to buy your crops?
- 21 Are you a member of any social group? Yes or NO? If yes! What are the benefits?
- 22 Are you willing to market your crops products in a group/collectively? If yes, for which crops products?
- 23 What advantages do you perceive to benefit from bulking/collective marketing?
- 24 What challenges do you experience in the marketing of your crops?
- 25 Can you suggest solutions to the above problems?

GROUP of farmers bulking

Type and Name of the group.....

sub countyVillage-----

1. When was your group formed?
2. How many members are in your group? Male ----- Female ---
3. Why was the group formed?
4. Does the group have a code of conduct or rules, by-laws?
5. Does the group have executive members? How many are males and females?
5. How are the leaders elected? Describe the procedure of the election
6. Does the executive regularly report and present accounts to the members?
7. What activities has the group (collectively) been carrying out in the past one year? If it is farm- ing, ask how many acres of land for each crop?

8. What other activities do you suggest that the group can do collectively?
9. What factors have contributed to holding of the group together and what could be their fears?
10. Do you think you can collectively market your commodities? Yes or No
11. What are the commodities and what would be the market you would be Targeting?
12. Under what arrangement would members accept collective marketing?
13. in case your produce is not bought what would you do?
14. Do you network or collaborate with other groups and in what areas?
16. Is the group linked to any NGO, has it been trained or supported by any NGO?
17. Identify areas for support for the group?
18. What is your plan for the group for the next 2 or 3 years without any external assistance to sustain it?
19. What constraints does the group face?
20. What suggestions can they make as a group to over come these constraints?

3. Small middle men

District.....Sub- county.....

Date-----Village.....

Name of Respondent----- Sex---M/F

1. What type of crop do you trade in?
2. How long have you been in this business?
3. Whom do you buy from? And how do you identify your trading partner?
4. Where do you buy produce from? Why?
5. And how far is the distance?
6. How and where do you store the produce after buying and for how long do you store the produce?
7. Why do you store the produce?
8. How do you control quality and quantity?
9. At what price do you buy and who determines the price?
10. At what price do you buy your produce? And who determine the price?
11. How do you feel about the price and how do you maintain the price?
12. Where then do you take the produce and how do you determine the choice of the channel?
13. How do you maintain the trade partner or the channel?
14. How much do you sell then you produce?
15. What motivate you to keep doing this work?
16. What challenges do you face and how do you overcome them?
17. What support do you get to facilitate bulking and trading this produce?
18. What type of support do you need then
19. How do you get the market information and how often do you get it?
20. Who inform you? And do you get the right information you need?

4. Processor/Factory

District..... Sub county.....

Date..... Village.....

Name of Respondent..... Sex---M/F

1. From where do you get the raw material?
2. Which one is your common channel and how do you choose the trading partners?
3. How do you get the raw material for processing?
4. How do you store it and for how long?
5. What is your processing capacity?
6. How do you ensure constant sufficient supply of the raw material into the factory?
7. How do you ensure quality and quantity for raw material into the factory?
8. What challenges do you meet as far as bulking is concern?
9. What do you do to meet the processing capacity of the factoring if you fail to get enough raw materials from producers?
10. Do you have some suppliers on contract basis? What were the criteria for choosing them?
11. How do you handle the payment?
12. What is your production output?
13. Does it match the consumption market demand?
14. What is your average revenue? And what about your Production cost?

5. UOSPA

Name of the key informant.....

1. How many groups of registered farmers do you have?
2. What is the role of UOSPA/ what is your opinion about bulking?
3. What are the ways in which farmers bulk there produce?
4. There has been this bad name given to middlemen that they exploit farmers what is your opinion about it? And what do you think is the role of the middlemen in market coordination?
5. What is the current oil production especially from sunflower?
6. There has been a problem of oil importation which was created an unhealthy competition with the local oil production, what is the situation now? What is the % reduction of the imported oil? And what is the production projection of oilseed, oil milled?
7. How many millers and processors do you have?
8. How do you coordinate the direct chain actor?
9. What type of farmers groups do you have?
10. What services do you give farmers?
11. What challenges are you facing now in your organization? And what strategy do you have to solve these problems?

6. Other key Informants

What has been their roles oilseed sub sector as far as bulking is concerned?