

Value Chain/Cluster Scan for Creating Sustainable Employment for Poor Households

Value Chain/Cluster Report

March 2008



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1.0 INTRODUCTION

The adage “Give a man a fish and you will feed him for a day. But, teach a man to fish and you will feed him for a lifetime” is a losing proposition in the modern age. The man who is taught how to fish simply ends up making the middleman wealthy while he sees little improved return for himself or his family. Perhaps then the adage needs to be revised:

Give a family a fish, and you will feed them for a day;
Teach a family to fish, and you will feed them for a lifetime;
Show a family how to process and market the fish and you will increase their income and change their lives.

Agro-processing is not a new concept and large amounts of donor funding have been spent in recent years to develop this sector. Most of the initiatives have failed for the following reasons:

- Activities have been donor driven, not demand driven
- Initiatives are too large for the existing markets to sustain, especially in terms of input supply, which tends to be sporadic for many products
- Working capital needs of these initiatives are not accounted for, and donor funding of the start-up costs is not enough to ensure sustainability
- Programs have only marginal impact on the households at the grassroots level since these ventures are focused on exports and/or geared to impact the macroeconomic earnings of the country rather than the microeconomic earnings of the targeted clients

Agro-processing is only one sector among many that offer potential benefits for the struggling countries of the developing world. The question becomes how can you identify the sectors that can unlock the potential? And, secondly, how can they be structured to maximize the benefits for both a nation and its citizens? The purpose of the following study was to first develop a ‘Value Chain/Cluster Scan Model’ (VCCS) that could be used to identify the true economic potential of any business sector or geographical region and guide the development of that potential, and to then test that model in the Republic of Uganda.

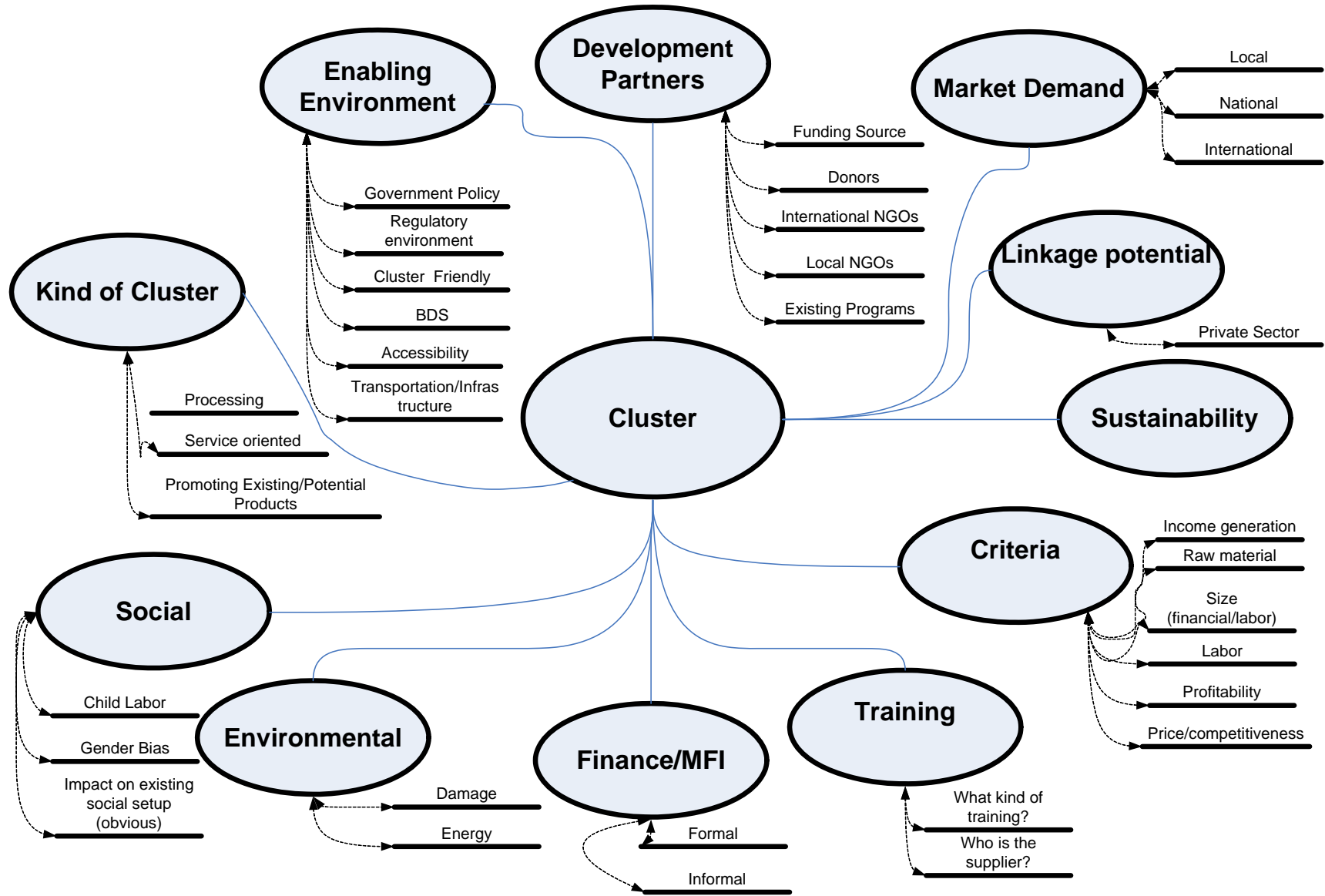
A value chain is the full range of activities and participants necessary to bring a product or service from the point of being an idea through to delivery to the final consumer¹ while a cluster can be found at any of the various steps within the value chain. A grass-roots level, raw material gathering unit composed of numerous farmers which collectively bargain and supply to a buyer is a “cluster”. Similarly, at any step of the value chain, various actors can be “clustered” for training, collective production, bargaining and/or selling to the next step of the value chain. In either case, myriad actors are involved in and influence the development of the value chain or cluster (diagram, next page). The VCCS is a method by which the value chain or cluster development process can be structured to best include each of these important players/concepts at the appropriate point in order to positively inform the activity and allow for a methodical approach to incorporating a vast number of influences into the intervention.

In applying the VCCS to Uganda, it was acknowledged that targeting the rich, global markets was where everyone wanted to be. However, very often poor producers lack the necessary capacity to access these higher value markets, and sustainable linkages must be established in a phased approach dependent on the capacity of the producers, establishing links first with local, then regional and national, and then finally international markets as capacity increases. Findings from the VCCS field test indicated that the target population, the majority of

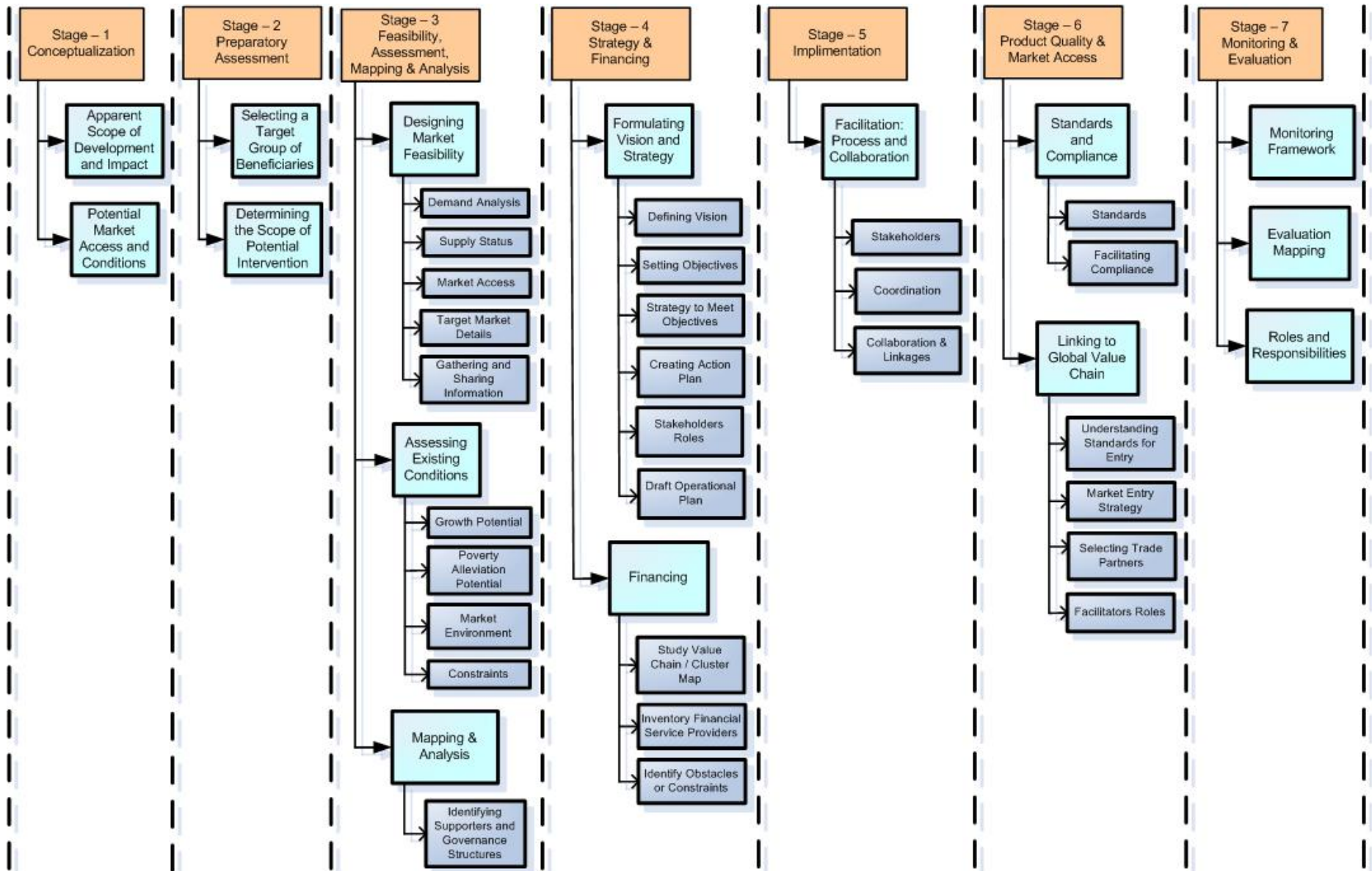
¹ Kaplinsky, Raphael and Morris, Michael (2000), *A Handbook for Value Chain Research*

Uganda's farmers, fishermen, and other grass-root level producers, are not ready to access global markets – yet. Utilizing the VCCS findings, a three phased approach was developed that will, over a period of 24 months, develop clusters and value chains that would put Uganda in the global marketplace and provide sustainable livelihood options for her citizens.

Cluster Model



Value Chain / Cluster Scan Model



2.0 MODEL: VALUE CHAIN / CLUSTER SCAN

The Value Chain / Cluster Scan Model as presented on the preceding page provides the structure by which a value chain or cluster development project can be designed. The entire process is presented in seven stages, each stage consisting of a number of tasks. Section 2.0 offers a brief introduction to each of the stages and tasks in order to better understand the information that is being sought and the objectives to be met for that particular step in the process.

2.1 Stage 1 - Conceptualization

The brainstorming stage; researching the target region or business sector, throwing out ideas based on that research and assessing their value per the guidelines below.

Task 1: *Apparent Scope of Development and Impact* – Process by which you identify, consider, and research potential value chains or clusters in different regions/sectors; two important questions must be answered at this point:

- Is there potential for promoting a value chain or cluster in a particular region or sector?
- Will the poor or marginalized benefit from the proposed activity?

Task 2: *Potential Market Access and Conditions* – Identifying the level of market access within which target value chains or clusters currently exist – household, local, national, international – which phase could be targeted for growth, and when. In order to further assess the feasibility of any potential intervention, two questions lead the discussion of conditions of the market environment:

- Are all stakeholders supportive of the intervention? (Who are the stakeholders?)
- Are required inputs for the target value chain or cluster locally available?

2.2 Stage 2 – Preparatory Assessment

At this point you take the findings from Stage 1 and start framing those targets that have made the shortlist, identifying your target population and defining the scope of the intervention.

Task 1: *Selecting a Target Group of Beneficiaries* – The following considerations are taken into account when selecting your target population:

- Are there specific groups of people that could benefit from the promotion/formation of selected value chains or clusters?
- Does the potential intervention allow for the participation of poor or otherwise marginalized groups?
- What are the direct and indirect benefits for the target population, short and long term?
- Is any additional supportive component required to meet the needs of the target group(s)?

Task 2: *Determining the Scope of Potential Intervention* – The process by which the product/service or group of products/services are selected, thereby allowing you to identify the specific stakeholders involved in the value chain or cluster development intervention.

2.3 Stage 3 – Feasibility, Assessment, Mapping, & Analysis

Time to take things out of the office and into the field; up until now much of the process has been internal, based on desk research and theory. Stage 3 puts all of that to the test. What is the reality on the ground? Can the proposed intervention work, given that reality?

Task 1: Designing Market Feasibility Study – Allows for identification of market potential and specific market opportunities. With this understanding, intervention specifics can be altered to maximize impact. The market feasibility study incorporates five distinct areas:

- Demand Analysis – Types of products in demand; seasonality; market size and trends; prices and pricing trends; buyer requirements
- Supply Status – Competition (products, value chains, clusters, performance), competitive advantage
- Market Access – Distribution channels, infrastructure, standards, tax and tariff regimes, market access services available
- Target Market Details – Proximity, socio-, political and cultural conditions, economic climate, level of technology available²
- Gathering and Sharing Information – desk research (internet, library, review of existing, market studies, subscriptions to research journals and industrial periodicals), surveys, interviews, association memberships, attend conferences and trade shows.

Task 2: Assessing Existing Conditions – Based on information collected in Task 1, above, a four-step assessment is now carried out considering:

- Growth potential
- Poverty alleviation potential,
- Market environment, and
- Existing constraints or barriers to entry.

This process provides for the final tasks in Stage 3, Mapping and Analysis.

Task 3: Mapping and Analysis – Mapping is the process of using diagrams to show the flow of transformations and transactions, from the sourcing of raw material and inputs, through production and processing, to marketing and final sale. Mapping also helps to identify all of the stakeholders in the value chain or cluster, including important supporting actors, such as business associations, training institutes, or specialized government agencies. A clear understanding of all the players, throughout the full business cycle, helps to structure the coordination or “governance” that is necessary for the success of value chain or cluster interventions.

The final step in the mapping process is to quantify as many of the steps as possible, that is attach numbers to the different steps of the process, e.g. number of employees, prices paid, volume of turnover, etc.

2.4 Stage 4 – Strategy & Finance

Having now established a picture of the situation on the ground and identified all the various stakeholders, Stage 4 is the point at which you look forward and define where you want to go, how you think you can get there, and what resources you will need to make it a success.

Task 1: Formulating Vision and Strategy – The process can be broken down as follows:

- Defining vision – What do you want the value chain or cluster to look like or accomplish?
- Setting objectives – What are the desired results from your work toward this vision?
- Strategy to meet objectives – How will you do the work to get those results?

² Centre for the Promotion of Imports from Developing Countries – CBI (2004); *Export Planner – Export Manual 2004*

- Creating action plan – The discreet, detailed actions that will lead to the fulfillment of the objectives.
- Stakeholder roles – Who will do what parts of the work?
- Draft operational plan – A record of the above process, outlining the objectives, which parts of the value chain or cluster process these objectives impact, who is responsible for what actions, a corresponding timeline, including milestones, and all resource requirements identified.

Task 2: Finance – In order to meet identified fiscal resource requirements it is necessary to look at three different areas to better understand the entire financial picture:

- Study the value chain or cluster map (developed in Stage 3 – Task 3) to identify stakeholders requiring financial support
- Inventory all financial service providers including microfinance agencies and the range and level of financial services they are currently providing in your region or business sector
- Identify obstacles or constraints in access to finance and develop a comprehensive plan for addressing these difficulties

Various participants may expect financial support from the government or donors. It is crucial that all stakeholders recognize the fact that donors or government are not sustainable sources of funding and thus the importance of eligibility to obtain commercial credit.

2.5 Stage 5 – Implementation

Task 1: Facilitation: Process and Collaboration – Facilitation is the process by which a party, through their own actions, makes something easier for themselves and/or others. In this case the facilitator acts in concert with all stakeholders in the value chain or cluster intervention to enhance the cooperative, collaborative nature of the work, providing assistance and support as needed to keep the process moving and all participants informed.

- Stakeholders – As many of the stakeholders as is possible, from all points along the value chain, should be incorporated into the intervention. Each group must understand their role; some will take places as leaders while others may be content as followers. All participants will act upon their own interests, individually and collectively, and the intervention should benefit all participants in some way.
- Assign Roles – Depending on the various, specific interests of different stakeholders, some may fill the roles of leaders in the change process, taking over some of the facilitation activity themselves. Leading firms or larger companies may act as benefactors, where their actions positively impact other stakeholders as well as themselves.
- Coordination – Value chain or cluster development is a joint activity requiring a high degree of coordination. Mapping and strategy formulation should be undertaken in a group context where possible to encourage joint planning and decision making. Working group meetings throughout the implementation stage can also provide a good means of coordinating activity.
- Collaboration and Linkages – Collaboration offers opportunities for mutual learning and joint access to support services such as information sharing, training and lobbying activities; business associations fall in this arena. Business linkages can be defined as the commercial transactions between enterprises and focuses more on individual enterprises and not the business community at large. Linkages can be divided as follows: Vertical linkages take place between participants at different stages of the value chain and mainly

involve buying or selling activities; Horizontal linkages are transactions between participants at the same stage in the value chain and usually involve joint activities (purchase / sales or use of equipment).

2.6 Stage 6 – Product Quality and Global Market Access

Task 1: Standards and Compliance – Standards are the means by which products and product quality are defined and regulated. There are multiple levels of standards-setting bodies for various business sectors and they cover various aspects from governing the production process (environmental and social) to the product itself (safety and health).

In order to access global markets, global standards will need to be met and value chain or cluster participants must be able to fully demonstrate compliance. A significant amount of support will be required of the facilitators as follows:

- Research, dissemination and adaptation of existing standards and required compliance and development of new standards as required
- Overseeing the implementation of standards and capacity building for quality management in the value chain or cluster
- Developing the capacity for verification of compliance, i.e. institutions for quality control, certification and accreditation

Task 2: Linking to Global Value Chain – In starting the process to link to the global market there are three essential areas of focus: understanding the requirements/standards necessary for entry; developing a market entry strategy; selecting trade partners. Again, this is where the role of the facilitator is essential to success and the following activities provide a brief look at some of the ways facilitators can assist in global market access:

- Facilitate participation in trade fairs and organizing exhibitions
- Organize business delegations to importing countries
- Create business directories and web sites
- Initiate/support business associations
- Develop advocacy strategies
- Arrange training and skill development programs for value chain or cluster participants

2.7 Stage 7 – Monitoring and Evaluation Mapping

Monitoring and Evaluation Mapping is most effective if started in parallel with the initial assessment in Stage 3. This process can be institutionalized at the earliest stages and provide yet another tool to assess progress at any point in time and thus inform any changes that may be required along the way.

Task 1: Monitoring Framework – Building on the Operational Plan (Stage 4 – Task 1), where responsibilities were assigned, resources applied, and a timeline for accomplishment set, this provides a framework for the program to measure progress against the initial action plan.

Task 2: Evaluation Mapping – This step of the process allows for the collection of in-depth information on progress against the initial objectives and captures the impact on the target group(s). Usually done according to an Evaluation Plan, the information is gathered through document review, interviews, surveys, discussion groups and case studies.

Task 3: Who is responsible for Monitoring and Evaluation? A specific person or team should be assigned this responsibility. A Monitoring Framework and Evaluation Plan should

be formulated concurrently with Stage 4 as a part of the implementation strategy and information gathering should commence with Stage 5.

3.0 VALUE CHAIN/CLUSTER SCAN TEST: UGANDA

The following are the results of a field test of the Value Chain / Cluster Scan (VCCS) which was carried out in Uganda in February 2008. Testing was carried out by JOBS International with the assistance of Save the Children US in Uganda, and the goals of the test were two fold: 1) to test the utility of the VCCS; and 2) to develop a work plan for one or two export oriented clusters. In order to maximize the effectiveness of the test period and any subsequent proposed interventions it was decided to focus on Save the Children US' current working area, located in the central region of Uganda. The test case employed the VCCS model up to Stage 5 – Implementation; if using these findings to support any proposed interventions, some modifications may be necessary in order to best leverage Save the Children's existing activities and resources. A detailed work plan is attached in Annex 1.

3.1 Conceptualization

Task 1: Apparent Scope and Development Impact

- Is there potential for promoting a value chain or cluster in a particular region or sector?
- Will the poor or marginalized benefit from the proposed activity?

Agriculture is by far the most important sector of the economy of Uganda, employing over 80% of the work force (95% in rural areas). However, this sector has an average growth rate of only 0.6%, compared with the growth rate of the economy as a whole at 6.0%.³ Because of the importance of agriculture in contributing to the livelihoods of the poor and the relatively slow growth rate of the sector, the development of export oriented clusters in this sector holds significant potential for poverty reduction. Due to the potential for development of export oriented clusters in the agricultural sector and the potential benefits of doing so for the rural poor, it was decided that the main focus of the VCCS would be on the agricultural sector.

Task 2: Potential Market Access and Conditions

The four potential markets for products are self-consumption (within the household), local (including regional), national, and international.

Most poor farmers in Uganda are only able to access the first two markets directly because they lack the capacity to access the higher value national and international markets as those markets require more sophisticated production, processing, and packaging techniques.

The main crops produced in Uganda include fruits such as pineapples, mangos and bananas, cassava, potatoes, honey, and maize, most of which are produced for local consumption. Most areas of Uganda usually receive plenty of rain, which helps to produce many varieties of food crops, vegetables, fruits, spices and flowers. Cut flowers are emerging as a potential exportable item. Horticultural production for export, such as the production of cut flowers for sale in Europe, takes place in the southern parts of the central region, nearer to Entebbe and the international airport. A list of exportable fruit, fresh vegetables, spice and crop is given below⁴

1. ***Cereals and pulses:*** Beans, maize, rice, and wheat

³ 6th Presidential Investors Roundtable; Speke Resort, Kampala; 28 February 2008

⁴ Uganda Export Promotion Bureau (UEPB), <http://www.ugandaexportsonline.com>

2. **Fruits (fresh/dried):** Bananas, apple, bananas, plantains, pineapples, avocado, passion fruit, mango, jack fruit, pawpaw, and sugarcane
3. **Vegetables (fresh/dried):** Okra, dudhi, onion, mushrooms, french beans, eggplant, tomatoes, asparagus, potatoes, and Asian vegetables
4. **Spices:** Chili (birds eye, scotch bonnet, cayenne, bullet), vanilla, ginger, and papain
5. **Cut flowers:** Roses, chrysanthemums, and plant cuttings
6. **Oil seeds:** Soya beans, sorghum, sunflower, groundnuts, mustard, sesame, Timothy grass, and sugar beet
7. **Essential oils:** Citronella, eucalyptus, ginger, peppermint, and geranium

Another important source of rural economic activity in Uganda is animal husbandry, which is more common in the northern areas. The country's natural environment provides good grazing for cattle, sheep, and goats, with indigenous breeds dominating. Small-holding farmers own about 95% of all cattle, although several hundred modern commercial ranches have been established. In the late 1980s, the poultry industry was growing rapidly, relying in part on imported baby chicks from Britain and Zambia and several private companies operate feed mills and incubators. Uganda has ample grazing area and an unrealized capacity for livestock development. Major exportable items from livestock are:

1. **Live animals:** Sheep, goats, chickens (day old chicks)
2. **Honey and beeswax**
3. **Cattle by-products:** cow gallstones, horns, Ox gall
4. **Silk cocoons**

Aquaculture represents the third most important economic activity in this area, both for local consumption and for processing and export. Lakes, rivers, and swamps cover 44,000 square kilometers, about 20 percent of Uganda's land surface. Fish is the second most important agricultural product for export, after coffee, representing \$142.7 million or 17.6% of total exports.⁵ Fishing is an important rural industry for the country and exports items like chilled, frozen and dried whole fish (Tilapia, Nile Perch, live ornamental fish, and more). Most fish processing companies buy their fish from middlemen; however some processing companies have begun dealing directly with fishermen. Save the Children's working area includes parts of Lake Victoria and Lake Kyoga which represent the two largest sources of fish in the country.

During the field test of market access, it was discovered that most producers in the target area are operating at the household consumption or local market level and need facilitation to access the national markets as well as the international markets. In this context they would be an ideal candidate for Phase 1 development, where clusters will be established and linked to the local and urban markets as the first step towards establishing links with export markets. The individuals interviewed as part of the VCCS including farmers and fishermen as well as traders and middlemen were interested in receiving help to access these markets.

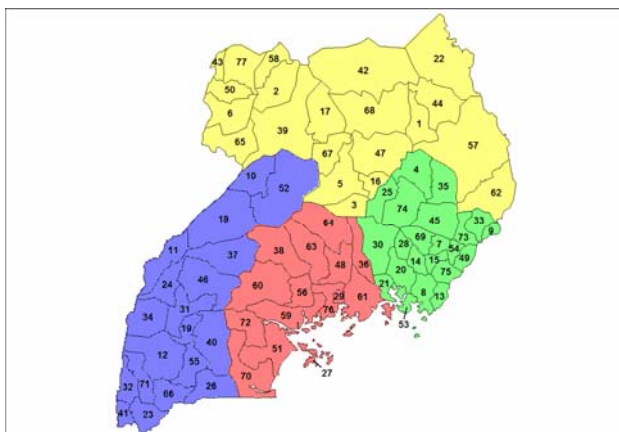
The value chain for agricultural products currently relies mostly on local resources, including locally available raw materials, labor, and entrepreneurs. The key to successfully linking the local actors in this sector with the global value chain will be to facilitate the enhancement of local resources in order to ensure the rural poor are able to capture a significant portion of the extra value available in these larger markets.

⁵ Economist Intelligence Unit - Uganda Country Profile, 2007

3.2 Preparatory Assessment

Task 1: Selecting a Target Group

In order to leverage existing activities and resources, the geographical area under consideration was limited to Save the Children's current areas of operation, the Nakasongola, Luwero, Nakaseke and Wakiso districts of central Uganda, represented in the map (right) as districts 64, 48, 63, and 76.⁶ This working area is bordered by Lake Kyoga in the north, the Victoria Nile and Kampala in the east, and Lake Victoria in the south.



In field testing, the village-based agro-processing sector shows the potential to create significant economic and social benefits for poor households in Uganda, the vast majority of which, as stated above, are engaged in the agricultural sector. However, it is important to address some specific considerations in order to ensure that the approach does indeed result in pro-poor growth.

Large amounts of donor funding have been spent in recent years to develop this sector and, for numerous reasons, most of the initiatives have failed. These initiatives have been donor driven, not demand driven, and are too large for the existing markets to sustain, especially in terms of input supply, which tends to be sporadic for many products. Additionally the working capital needs of these initiatives are often not accounted for, and donor funding of the start-up costs is not enough to ensure longer term sustainability. A final problem with these large-scale initiatives is that they often have only marginal impact on the households at the grassroots level. Instead these are ventures with some inclination towards establishing backward linkages, but the focus and rationale is often on the macroeconomic earnings of the country as a whole rather than on the microeconomic impact on the targeted clients.

Rather than initially focusing on large-scale processing operations, small-scale processing capacity, such as simple hygienic drying and frying, should be developed within the country. These small-scale processing operations will allow the intervention to facilitate pro-poor economic growth. As the capacity of these small-scale initiatives increases they can grow and be linked together until they reach the level of quantity and quality necessary for exporting their product. To facilitate this process a three-phased approach can be introduced. During Phase 1, food processing clusters will be established in Central Uganda to supply the local market and links will be established between the clusters and stores in Kampala and Entebbe. As demand increases, Phase 2 will introduce production clusters in other regions of the country, while work will be undertaken to increase the sophistication in processing and packaging. Only after the production clusters have achieved the necessary capacity and stability of input-supply increases will the clusters be linked to the global value chain or international markets, in Phase 3.

While the main goal of the proposed intervention is to link the poor producers to the global value chain to increase their income generating potential, the initial introduction of small scale agro-processing will provide a number of additional benefits to the clients including:

⁶ From <http://www.savethechildren.org/countries/africa/uganda.html>

1. Adding shelf life to the produce and thus minimizing wastage;
2. Added shelf life leads to better nutritional outcomes in the local communities;
3. Eliminate the influence of buyers and middlemen which take advantage of oversupply during peak seasons;
4. Processed food leads to income generation of both the producers as well as the individuals (including youth) involved in the processing; and
5. Post harvest losses are reduced.

Task 2: Determining the Scope of Intervention

Village Based Agro-Processing: 'Agro-processing' describes the transformation of agricultural produce into a different physical state. It describes the numerous activities that take place between harvest or slaughter of the raw product and production of the final product. Agro-processing businesses play an important role in the economy of all countries. It is a dynamic and fast growing sector and therefore has the potential to provide opportunities for income generation and employment. This is particularly important because agriculture and the formal sector are unable to absorb growing labor forces in many countries. The UN Food and Agriculture Organization has pointed out that value added through marketing and processing raw products can be much greater than the value of primary production itself. More than 60% of the labor force of Sub-Saharan Africa finds work in small-scale food processing⁷ and between one and two thirds of value added manufacturing is based on agricultural raw materials.

Agro-processing plays a number of vital roles beyond income generation. It can reduce the food insecurity of the poor who do not have enough to eat by reducing losses, increasing the range of food products, making food safe to eat, and preserving food for 'lean periods' when food is not readily available in the marketplace. Processing can preserve food for longer than its fresh shelf-life, and can salvage waste food. Small-scale agro-processing is particularly suited to poverty eradication as it builds on the assets of poor women and men (such as indigenous knowledge and skills as well as local natural resources) and is not dependant on assets that are in short supply such as finance. The further advantages of smaller processing units have been discussed in the previous section.



⁷ The status of the agro-processing industry in Zimbabwe; Norman Mhazo, Brighton m. Mvumi, Raymond m. Nazare and Elijah Nyakudya

The following food security calendar developed by Save the Children of the Farming Communities in Nakasongola District defines the scope of a potential village based agro-processing unit.

Summary of Food Security Calendar, Farming Communities in Nakasongola District							
Month	Availability						Comment
	<i>Cassava</i>	<i>Maize</i>	<i>Sweet Potato</i>	<i>Vegetables</i>	<i>Mango</i>	<i>Coping Mechanisms*</i>	
Jan	Plenty		Plenty			X	Sweet potato chips, cassava in plenty during the dry season
Feb	Less		Plenty			X	Declining trend in both cassava and sweet potato
Mar	Less	Planting	Less	Available			Rains
Apr	Less	Planting	Less	Available		X	Rains
May	Scarce	Planting	Less	Available			Rains - Sweet potato reserves affected by rains, cassava available in fresh form
Jun	Less	Plenty	Plenty		Harvest	X	
Jul	Less	Plenty	Plenty		Plenty		
Aug	Less	Planting	Scarce	Available	Less		Rains
Sep	Less	Planting (Scarce)		Available			Rains
Oct	Less	Planting (Less)		Available	2nd Harvest (Smaller)		Rains
Nov	Less	Plenty	Less		Plenty (Smaller)	X	
Dec	Plenty		Plenty			X	Start of dry season and harvest there is plenty
*Note: Coping mechanisms include the following 1) Buying food from shops; 2) visiting wealthy relatives; and 3) temporary out-migration							

Household Processing Using Solar Dryers: In addition to establishing small scale village level processing plants, many products can also be processed at a household level using solar dryers, (picture below). During a field visit to Nakasongola the JOBS team observed cassava and sweet potato drying in the traditional manner which consists of drying the produce on the ground which has been mopped and swept and covered in a layer of cow dung and is thus very unhygienic and unhealthy (pictures below). These products are intended for their own consumption and sale to the local market.

Drying in the traditional manner is unhygienic



JOBS International is planning to introduce a low cost solar dryer (Designed and developed by the FAO) for the hygienic drying of fruits and vegetables. While many of the solar dryers will be linked to village level processing plants, due to their lower investment costs solar dryers may be more widely distributed as well. Large numbers of the households in Nakasongola are at the marginal level, thus the relatively low investment cost for these solar dryers make them appropriate technology given the constraints. Particular groups which may benefit from solar dryers include fruit producers and fishermen, many of whom lose potential profits due to surplus production during the harvest season.



Following the VCCS field test the matrix below captures opportunities which have been identified as having significant potential in the focus area:

Matrix of Potential Opportunities			
Sl.	Activity	Sub-Sector	Product
1	Village based agro-processing	Cassava/Sweet Potato	Dried Fried (Chips)
2		Pineapple	Dried
3		Banana	Dried Fried (Chips)
4		Mango	Pulp/Juice Bar
5		Fish	Frozen (Nile Perch) Smoked (Tilapia) Dried (Tilapia)
6	Ensure input supply for agro-processing	Nursery	High quality fruit tree seedlings

The above is an illustrative list of activities. Following a detailed assessment of ongoing livelihood activities as well as potential opportunities more detailed information as to cost and timelines can be given, and other potential activities may be identified.

This matrix followed focus group discussions including Save the Children staff and beneficiaries, the Food Science and Technology Department of Makerere University, the National Organic Agricultural Movement of Uganda (NOGAMU), and the Fish Processors and Export Association (UFPEA).

3.3 Feasibility, Assessment, Mapping, and Analysis

Task 1: Designing and Supporting Market Feasibility Study

Due to limited time and funds available for the VCCS test, a comprehensive market study was not carried out. However, much relevant information was gathered by conducting interviews with sector specialists, processors and buyers. According to these interviews there is significant demand for processed food products from Uganda in the local, national, and international markets.

In the local market some small scale processing is going on, including the drying of cassava and the drying and smoking of fish. However, most of the processed foods at the national level are imported, despite the widespread availability of locally available raw materials. Lack of local processing and packaging capacity as well as the lack of established distribution channels and poor infrastructure were the main reasons given for the lack of locally produced processed foods available in the national market. In fact the imported processed foods were often many times more expensive than the locally produced equivalent, which means there is significant potential in the national market for locally produced processed foods.

Accessing the international markets, especially the high value European market, requires much more sophistication in terms of supply chain management, processing, and packaging. There are a number of trade groups and business associations which may be engaged to assist poor producers in accessing these markets including the National Organic Agricultural Movement of Uganda (NOGAMU) and the Uganda Fish Processors and Exporters Association (UFPEA). However, in these situations, it is often the association and the processing companies which end up capturing most of the export earnings. For that reason, engagement with these associations should be delayed until the poor producers' capacity increases to a level where they can engage in significant value addition of their produce in order to capture a greater share of the earnings through being able to engage the exporters on more equal footing.

Task 2: Assessing Existing Conditions

The major criteria which are considered at this stage, and thus inform any decision, include the following:

1. Growth Potential
2. Poverty Alleviation Potential
3. Market Conditions
4. Constraints

The **growth potential** of village based agro-processing units is determined both by demand of the outputs and supply of inputs available. At present imported processed foods are available in supermarkets in major urban areas including Kampala indicating demand for these products at the national level. Due to the abundance of fruit and vegetable cultivation in Uganda and the fact that villagers are already processing cassava, sweet potato, and fish, they hold a competitive advantage in the processing potential of these foods. Significant potential for growth exists due to the relatively low level of processing capacity currently available and the scope for product improvement and innovation.

A value chain has **poverty alleviation potential** if it is a major source of livelihoods for the poor, generates employment, offers business opportunities for poor entrepreneurs or, at least, delivers products consumed by poor people. In addition to the benefits already described

above in relation to food security, village based agro-processing units in Uganda will help relieve poverty in three different ways:

1. Provide an additional market for poor producers;
2. Reduce the influence of buyers and middlemen which take advantage of oversupply during peak production seasons;
3. Improve the current distribution of benefits along the value chain and across income groups at the village level, including to the poor;

Any intervention undertaken should be demand driven, and so must take into account of the prevailing **market conditions**. Most processed foods available at the national level in Uganda are imported, despite the widespread availability of local raw materials. Lack of local processing and packaging capacity as well as the lack of established distribution channels and poor infrastructure are the main market conditions which have constrained local supplies of processed food despite a fairly large demand. Imported processed foods are often much more expensive than locally produced equivalents demonstrating a significant potential in the national market for locally produced processed foods.

An initial “Strength Weakness Opportunities and Threat” (SWOT) analysis identified several important **constraints** that must be addressed prior to the implementation of any proposed activity. The main deficiencies which must be addressed prior to accessing international markets include the identification of consistent sources of input supply and the improvement of production and processing techniques in terms of quantity, quality, and hygiene.

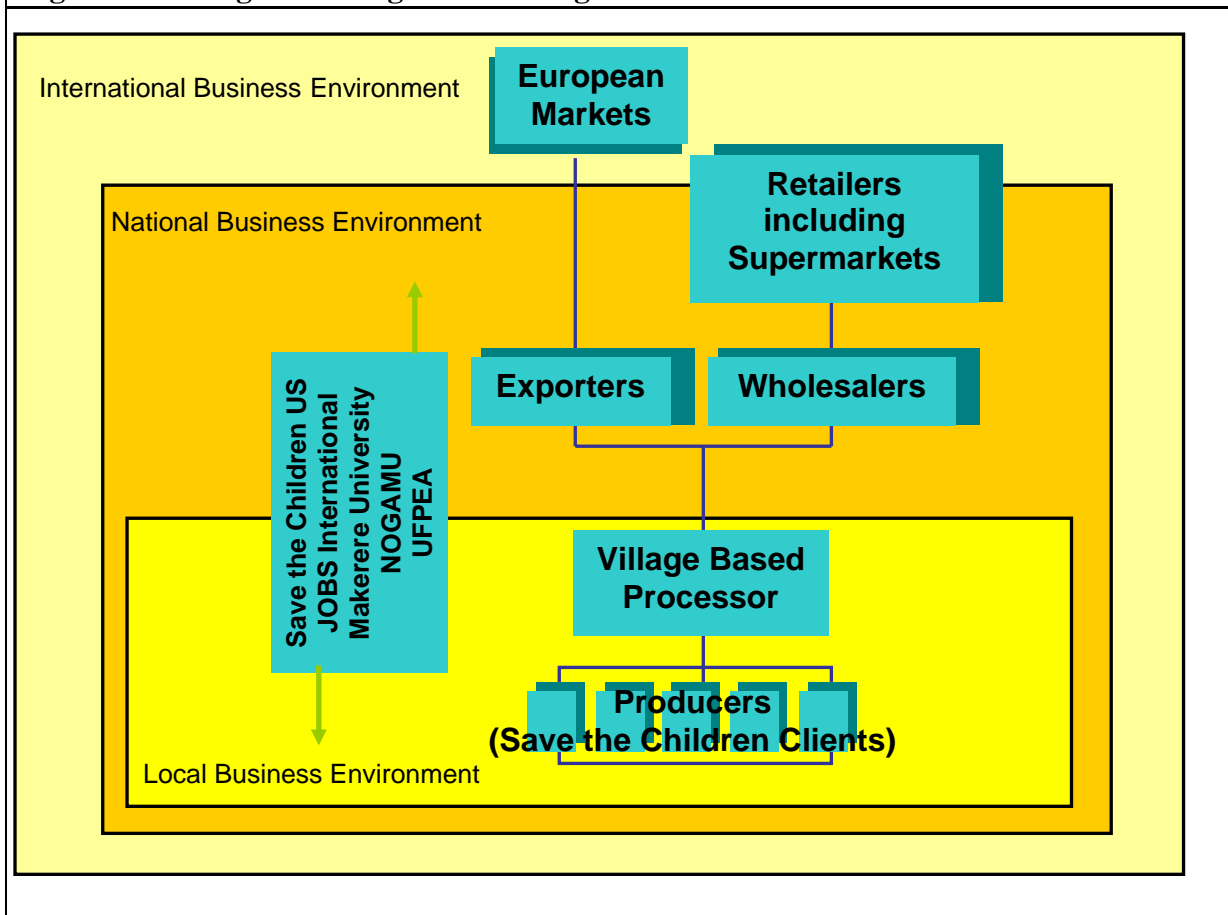
Task 3: Value Chain / Cluster Mapping and Analyses

Mapping is a central element of value chain analysis and it is important to include chain supporters in the picture. Chain supporters are the actors engaging in the facilitation process.

In the case of village based agro-processing in Uganda, two groups of chain supporters have been identified. The first group includes Save the Children US, JOBS International, and Makerere University, and this group will be involved in improving the capacity of the producers to reach the higher value markets. The second group includes industry groups such as NOGAMU and UFPEA. This group will facilitate access to international markets once the capacity of the producers has increased to the necessary level for export.

A simple map of the village based agro-processing value chain in Uganda developed as a result of the field test can be seen below:

Figure 11: Village Based Agro-Processing Value Chain



3.4 Strategies and Finance

Task 1: Formulating Vision and Building Promotion / Upgrading Strategies

Viability of the business in the long term is the basic condition of success of value chain or cluster promotion/development. However, it is important to remember that one of main reasons that many of these activities fail is that they immediately target the export market, despite the capacity of the producers being too weak to participate fully at this level. Instead, a phased approach should be taken to help break down strategic objectives in order to allow the capacity of the producers to increase to a level where their participation in the global value chain will be sustainable. In the case of village level processing units the 3 relevant phases include:

1. **Phase I:** Establish pilot food processing clusters at the local level in central regions which will supply to the local market, as well as be linked to stores in Kampala and Entebbe. During this phase, financial resources (perhaps linked to the Youth Savings Groups) will be lined up to provide capital for the processing units (possible partners include: Department of Food Science and Technology, Department of Women and Gender; Department of Computer and Information Technology; Business and Marketing students and staff at Makerere University, as well as Save the Children US in Uganda's current program partners and clients including local Youth Clubs).
2. **Phase II:** As the demand increases (1-1.5 years), production clusters will be introduced in other regions of the country, while work will be undertaken to increase

sophistication in processing and packaging. Towards this end, involvement of other international organizations, such as CBI and ITC who provide expertise in production as well as European market linkages, will be sought. Local groups may also be involved including the Uganda Small Scale Industries Association as well as the National Organic Agricultural Movement of Uganda both of whom are potential private sector partners that can support capacity-building.

3. **Phase III:** As the supply increases, demand will be created in the international markets and the cluster will be linked into the global value chain.

One of the most important activities to take place during Phase I is to ensure proper and sustainable input supply and linkages with producers. Small scale nurseries, particularly for vegetables, should be developed to facilitate backward linkages in the value chain for the clusters. This will ensure high quality inputs including seeds and saplings of cassava, tomato, papaya, sweet potato, pineapple, and mango trees so that producer groups can ensure sustainable production and successfully link with the global value chain. Within a relatively short time a nursery can generate revenue sufficient not only to repay the initial capital inputs but also generate profit while simultaneously benefiting its operators through livelihood diversification.

In the short term, Phase I awareness raising and the provision of technical support to producers of fruits and vegetables suffering from diseases begin the process of building trust between facilitators and producers and establishing relationships with suppliers, producers, and wholesalers. This trust and these relationships create the success of improved production as well as any value-added fruit processing activities. Beneficiary households will benefit from livelihood diversification as well as increased consumption of fruits and vegetables.

During Phase I and Phase II, participating households will be organized and trained about production processes, creating linkages with reliable input sources and establishing backward and forward linkages between the producer groups, villagers, association members, packaging management, transportation agencies, nurseries and other suppliers, and customers.

During each stage partnerships, collaboration and business linkages will be focused to increase the capacity of producers in order to access new markets. In order to ensure the success and sustainability of this initiative multiple partners can be engaged during the course of each phase. Save the Children's current activities in Central Uganda should be linked into this project during Phase I in order to build on the successes already achieved in the area of livelihoods. As a first step towards creating these linkages a detailed review of current activities should be carried out in order to identify the efficacy of current activities as well as the areas of potential synergy.

Concurrently JOBS International can engage various international experts in food processing and organic production to create links with Makerere University's Department of Food

Tomatoes suffering from disease grown by Save the Children clients in Irima, Nakasongalo, Uganda



Science and Technology during Phase I and II. Students from this department can be engaged as technical advisors for the clusters, conduct technical and basic business and entrepreneurship trainings in partnership with JOBS International, and undertake monitoring of the production process in order to increase the capacity of the producers. Furthermore the Computer and Information Technology Department at Makerere University can be engaged to incorporate sustainable information technology into the production and monitoring processes.

Links can also be created between international experts from Thailand and the University of Liberal Arts Bangladesh (ULAB) and Makerere University in association with JOBS International. Village-based food processing experts can provide training of trainers (ToT) to students at Makerere University, after which those students can provide training to cluster members or village level producers groups.

Task 2: Financing the Value Chain

Although large amounts of donor funding have been spent in recent years to develop this sector most of the initiatives have failed for numerous reasons. Donor funding is unreliable, and, unfortunately, the financial sector in Uganda, is not very developed. Microfinance is rarely available in the rural areas, and where it is available it is often very expensive. In fact, effective rates of interest for a microcredit loan can be more than twice the interest rate of a loan from the formal banking sector.

Because of the relatively weak financial system in Uganda, identifying appropriate financial resources will require significant creativity for facilitating clusters, especially in the initial stages. Some possible sources of financial support for the producers include the following:

- During the initial phase, savings groups (perhaps linked to the proposed Youth Savings Groups facilitated by Save the Children) may be identified to provide the necessary capital for the processing units. These savings groups may eventually be linked to banks in order to facilitate group financing
- Negotiate MOUs between progressive financial institutions, such as Centenary Rural Development Bank Ltd and Micro Enterprises Development Network to create easy access to bank finance at lower interest rates
- Create a Loan Facilitation Handbook for Uganda to provide guidelines on how to access loans from financial institutions
- Provide training to bank loan officers on how banks can finance high growth potential clusters against stocks, receivables, and steady income flow instead of against traditional fixed assets
- Provide training to entrepreneurs on creating business and financial proposals and marketing development plans (could also fall under youth employment – provision of business start-up services through YEF). Banks are often especially willing to consider business proposals on agro-processing due to its high growth potential

It is important to note that providing access to finance is not enough to ensure sustainability; producers also need to be able to use that finance effectively. For this reason training must be provided for the clients to improve their capacity to manage businesses and finances including possibly Entrepreneurial Development and Business Management (EDBM) training and Basic Business Management (BBM) training in addition to technical skill development.

Annex 1: Detailed 24 Month Work Plan

SL	Activities	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter			5th Quarter			6th Quarter			7th Quarter			8th Quarter		
		Month 1	Month 2	Month 3	Mon. 4	Mon. 5	Mon 6	Mon 7	Mon 8	Mon 9	Mon 10	Mon 11	Mon 12	Mon 13	Mon 14	Mon 15	Mon 16	Mon 17	Mon 18	Mon 19	Mon 20	Mon 21	Mon 22	Mon 23	Mon 24
Stage 1	Conceptual - ization																								
<i>Task 1</i>	Apparent scope of development																								
<i>Task 2</i>	Potential market access and condition																								
Stage 2	Preparatory Assessment																								
<i>Task 1</i>	Selecting a target group																								
<i>Task 2</i>	Determining the scope of intervention																								
Stage 3	Feasibility, Assessment, Mapping, Analysis																								
<i>Task 1</i>	Market feasibility study																								
<i>Task 2</i>	Assessing existing conditions																								
<i>Task 3</i>	Mapping and analysis																								
Stage 4	Strategy & Finance																								
<i>Task 1</i>	Formulating vision and strategy																								

SL	Activities	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter			5th Quarter			6th Quarter			7th Quarter			8th Quarter		
		Month 1	Month 2	Month 3	Mon. 4	Mon. 5	Mon 6	Mon 7	Mon 8	Mon 9	Mon 10	Mon 11	Mon 12	Mon 13	Mon 14	Mon 15	Mon 16	Mon 17	Mon 18	Mon 19	Mon 20	Mon 21	Mon 22	Mon 23	Mon 24
Stage 4	Strategy & Finance																								
<i>Task 2</i>	Financing																								
Stage 5	Implementation																								
<i>Task 1</i>	Facilitation of chain/cluster development																								
Stage 6	Product Quality & Global Market Access																								
<i>Task 1</i>	Introducing standards and compliance																								
<i>Task 2</i>	Linking to global value chain																								
Stage 7	Monitoring & Evaluation																								
	Monitoring framework																								
	Evaluation mapping																								