

# PROFIT ZAMBIA IMPACT ASSESSMENT: BASELINE RESEARCH DESIGN

**RESEARCH PLAN** 

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## BACKGROUND AND HISTORY: PRIVATE SECTOR DEVELOPMENT IN ZAMBIA

Zambia is a landlocked low-income country in Southern Africa with a history of under-fulfilled development potential. The country has ample land for crops and livestock and a good endowment of water and other natural resources. With only 11 million people in an area slightly larger than Texas (which has 23 million people and is hardly over-populated), population pressure is not a problem. At independence in 1964, Zambia's per capita income was among the highest in Sub-Saharan Africa, owing largely to the development of copper mining since the 1920s. During the first three decades of independence, however, per capita income declined steadily as a result of falling copper prices, socialist ideology, poor resource management, drought, and heavy involvement in the freedom struggles of neighboring countries. According to World Bank figures, GDP per capita (expressed in 2000 \$US) dropped by nearly 50 percent—from \$613 in 1965 to \$318 in 1995.

Kenneth Kaunda, the founding President, presided over a system of one-party rule until 1991. The successor government of Frederic Chiluba, elected on a platform of political and economic reform, enacted limited but ultimately disappointing reforms and was replaced in 2001 by a government headed by Levy Mwanawansa, the current president. Presidential and legislative elections are scheduled for late 2006.

Zambia's economy is small and undiversified. Aggregate GDP in 2004 was equivalent to only \$6.8 billion. Agricultural productivity is extremely low, as reflected in the fact that the 85 percent of the labor force that works in that sector produces only 15 percent of GDP. Eight percent of GDP originated in mining in 2003, 57 percent in services, 11 percent in manufacturing, and 7 percent in construction. Commodity exports in 2005 amounted to 29 percent of GDP. After decades of socialism, the private sector is poorly developed and largely controlled by foreigners and ethnic minorities.

Poverty is pervasive but poorly measured. Various estimates put the proportion of the population that lives below the poverty line at around 80 percent. Annual population growth is approximately 2 percent. Fertility is high (the total fertility rate was six in 1990). The death rate is also relatively high and is rising because of HIV/AIDS, which is a major problem in Zambia. At least 20 percent of Zambians are HIV-positive or have full-blown AIDS. According to official records, HIV/AIDS has killed about 700,000 people and orphaned more that 800,000 children since the first case was reported in 1985. Life expectancy, reported as 49 years in 1990, is now thought to be 40 years or less. The infant mortality rate was estimated to have been 88 per thousand in 2005, slightly better than in prior years.

Economic growth has been achieved in Zambia recently. Following the long-delayed privatization of the copper mines in 2000, which led to the upgrading of existing mines and the opening of new ones, and IMF-bolstered efforts to improve the government's control of its finances, economic growth rates exceeding 5 percent were achieved in 2003-2005. This happened despite fuel shortages and industrial unrest in 2005. High copper prices have boosted economic growth. In 2005 agricultural growth slowed to 2.8 percent because of drought and disincentives to grow maize arising from plentiful provision of food aid. However, bumper crops are expected in 2006.

A three-year poverty reduction and growth facility (PRGF) was agreed to with the IMF in 2004. It aims to improve fiscal discipline and management, curb inflation, and eventually cut interest rates, leading to increased private-sector borrowing. The PRGF also provides for improved governance, a better business environment, and completion of the privatization program. Some backsliding is likely in 2006 because of the election, but cooperation with the IMF is expected to survive any such slips.

Zambia is a large recipient of food and other foreign aid. According to World Bank data, aid amounted to 26 percent of GNI in 2000, or \$80 per capita. Zambia experts express concern over the disincentive effects of aid on such a large scale, especially the discouraging effect of food aid on the cultivation of maize, the staple food crop. Low maize prices help to shift farmers' incentives in the direction of cotton and other commercial crops. More generally, aid dependency is thought by many observers to weaken development efforts.

Large aid inflows and recent high copper prices have led to over-valuation of Zambia's currency, the kwacha. This tendency, which has not been effectively dampened or offset by government policy, helps to make imports available at low prices but weakens incentives to export. Current record-high copper prices are expected to be temporary. Once all the recent mining investments come on line and growth in the volume of copper exports slows, lower prices would cause worsening of the balance of payments.

Other barriers to development include a lingering socialist mindset in some quarters and the high incidence of HIV/AIDS, which has reduced life expectancy and severely disrupted family life and economic activities while discouraging education and skill acquisition. Private sector development of the sort promoted by the PROFIT project offers Zambia opportunities for raising productivity and competitiveness and thus improving welfare for the poor, who make up the great majority of the population. The expansion and upgrading of smallholder agriculture are feasible if technical and incentive problems can be solved and suitable market linkages worked out. However, everything depends on good economic management, which has not previously characterized Zambia.

## THE PROFIT PROJECT

PROFIT is a five-year project that began in June 2005. It is funded at the level of \$15 million, including \$5 million for local grants. The Cooperative League of USA (CLUSA) implements the project on behalf of the United States Agency for International Development (USAID). International Development Enterprises (IDE) and the Emerging Markets Group (EMG) participate as subcontractors.

The project is part of USAID's Strategic Objective 5, which seeks to increase private sector competitiveness in agriculture and natural resources. Under SO 5, four intermediate results (IRs) are sought:

- Increased access to markets
- Enhanced value-added production and service technologies
- Increased access to financial and business development services
- Improved enabling environment for enterprise growth

The goals of the PROFIT project are to:

- Improve the competitiveness of selected industries in which large numbers of MSEs participate and might benefit
- Foster the sustainability of competitiveness to enable firms and industries to respond to market demands, both in the short and long run
- Increase the breadth and depth of benefits at the industry, MSE, and household levels

In pursuing these goals, PROFIT applies several intervention principles:

- **Goal:** Assure the competitiveness of the whole industry over time while assuring that growing numbers of MSEs contribute and benefit
- **Methodology:** Foster a greater role for the private sector and a more strategic role for governments, donors, and project implementers who should act as market facilitators, rather than players
- Facilitation: The project will:
  - Foster increased industry and firm capacity to learn, innovate, and change to compete effectively
  - Sequence intervention options that look first for "light touch" and progress to the last option of using PROFIT funds to buy down excessive risks
  - Adhere to a carefully planned exit strategy, so that impacts are sustainable

PROFIT's work plan calls for the following activities:

- Selection of sub-sectors or industries: Identify industries that:
  - Have good growth potential in the near, medium, and/or long term
  - Present opportunities for large-scale impact at the firm and industry levels in terms of income gains, asset development, and sustainability
  - Have interested and committed industry leaders who understand the key role of MSEs and are willing to work together to address industry-wide constraints
- Identification of competitive advantage: Determine whether an MSE-dominated industry can achieve competitive advantage in terms of efficiency, product differentiation, and ability to affect change in demand characteristics to better fit local capacities.
- Design of a commercial upgrading strategy for the value chain/industry to turn competitive advantage into competitiveness. These strategies will target constraints and opportunities in:
  - **The enabling environment:** MSE participation in many markets is affected by international standards and treaties, national policies and practices, and local norms and enforcement practices. This will not be a focus of PROFIT, but the program will work closely with the MATEP (Marketing, Trade and Enabling Policy) project to assure that a broad industry perspective is considered and emerging constraints are identified.
  - Vertical linkages: Linkages both up the value chain (e.g., between international buyers and national exporters) and down the value chain (backward linkages to small producers and/or producer groups) influence risk-sharing, the transmission of information and skills, and the ability to affect change in demand characteristics.
  - Horizontal linkages/cooperation: How like firms interact determines whether joint constraints such as high transaction costs, limited external economies, and limited innovation and learning are addressed.
  - Supporting markets: The functioning of markets for financial, sector-specific and nonsector specific services and products determines the extent to which they are able to contribute to and benefit from the competitiveness of an industry.

- Ensuring the sustainability of competitiveness. Achieving competitiveness over time requires an industry to respond to changing market demands efficiently and effectively. This requires that:
  - Relationships among firms in a chain become more transparent, longer-term, and focused on industry goals to enhance the ability to respond and adapt to the dynamic nature of demand.
  - Learning and innovation need to be valued.
  - Benefits must be broadened and deepened.

Using the criteria mentioned earlier, PROFIT analyzed several industries thought to have private sector development potential: cotton, tourism, livestock, non-timber forest products (NTFPs), high-value horticulture, and small-scale mining. The analysis showed that cotton and livestock provide the best potential returns. Non-timber forest products and tourism were judged to provide reasonable potential returns, while high-value horticulture and small-scale mining were considered less promising (because of poor industry leadership and inability to achieve scale, respectively). Based on this analysis, PROFIT initially targeted cotton, livestock, NTFP, and tourism activities. The project continues to scan market activities for possible intervention and is monitoring the paprika and horticulture sectors particularly closely.

For each industry in which it works, PROFIT identifies and carries out specific interventions intended to strengthen vertical and horizontal linkages as well as supporting markets. Another part of the project is an innovation grants program, which solicits proposals for innovative services and programs to foster private sector growth. Finally, the project works on several cross-cutting issues: information and communication technology (ICT), financial services, irrigation, and HIV/AIDS.

### PURPOSE AND DESIGN OF THE IMPACT ASSESSMENT

**Sponsorship:** This impact assessment of the PROFIT project is sponsored by USAID and jointly financed by PROFIT and the Washington-based Accelerated Microenterprise Advancement Project (AMAP). Responsibility for implementation of the study has been contracted to DAI, a consulting company based in Bethesda, Maryland, USA. DAI in turn has sub-contracted part of the work to RuralNet, a Zambian consulting company.

**Purpose:** Besides being an important project for private sector development in Zambia and Africa more generally, PROFIT is a good example of the new generation of private sector development (PSD) projects currently being implemented by USAID and other donors in developing and transition countries. Impact assessment of PROFIT's effectiveness in achieving its goals will generate information that can be used by USAID/Zambia, other African missions, USAID generally, and other donors to gauge the effectiveness of this approach and inform decisions about the design of future projects. In addition, the design of the impact assessment is being integrated with the project's performance monitoring system to ensure quick feedback of some findings to project management and may enable them to modify their approaches in ways that will improve project performance.

**Design:** Like similar studies being conducted in other countries under AMAP, the PROFIT impact assessment will employ a longitudinal, quasi-experimental design implemented through a mixedmethod approach. A sample of project clients and a comparable group of non-clients will be surveyed twice, with a two-year interval between surveys. Data from these surveys will be combined with qualitative information collected through interviews and focus group discussions. Impacts will be measured at the value chain, MSE, and household levels.

## **SELECTION OF AREAS FOR STUDY**

Because of budget constraints, the impact assessment will cover only three parts of the PROFIT project. After discussion with PROFIT staff, two industries were chosen for study: cotton and beef. (Beef is one part of the livestock industry; the other part, poultry development, will not be studied.) The third area of intervention to be included in the impact assessment is PROFIT's effort to build up the input supply network at the retail level for smallholders in a variety of sectors. Cotton and beef were selected because they are activities that involve large numbers of smallholders (200-300 thousand in each case) and because causal models for PROFIT's interventions are relatively well defined at this stage. Honey (a non-timber forest product) also met these criteria, but after discussion it was not included because input supply at the retail level, a PROFIT innovation, was preferred as a novel activity that will add variety to the body of findings of our impact assessments in various developing countries.

**Cotton** has good export potential and existing market linkages that can be further strengthened, but poor infrastructure, high transaction costs, and relatively low yields make the industry very inefficient. There is a good lead firm (Dunavant), which contracts with farmers and provides inputs, finance, extension services, and market outlets. PROFIT will work with Dunavant, the Conservation Farming Unit (CFU), and the Farmers' Union to train farmers in improved cultivation methods that could raise productivity and strengthen the supply response to the marketing opportunity offered by Dunavant. At the same time, the project will try to lessen farmers' dependence on the lead firm by facilitating commercial delivery of sector-specific services such as spraying, tillage, and weeding, and by improving market transparency. Cotton exports from Zambia remain economically viable at present, but further appreciation of the kwacha could threaten the industry's survival.

**Beef** production has weaker market linkages (Zambeef, the largest beef marketer, is only interested in acquiring beef; it does not provide services to farmers), is severely hampered by disease problems, and needs substantial upgrading. USAID's MATEP project is trying to help some of the larger commercial livestock operators gain access to the export market, from which they have been barred by disease problems. Leather also has export potential, but its realization of this potential depends on development of the beef industry. The small farmers with whom PROFIT is working are unlikely to be able to export in the foreseeable future, except for limited quantities that go to neighboring countries. Many small farmers regard cattle more as a source of prestige and store of value than as a commercial product. To induce them to take a more commercial view, attractive alternative savings vehicles may need to be devised. PROFIT's activities will emphasize strengthened veterinary services (critical for gaining acceptance in higher-value markets), improved distribution of veterinary drugs, and heightened market transparency.

**Retail input supply:** PROFIT will work with input dealers to facilitate expansion and improvement of the input distribution network at the retail level. It will promote alternative models such as the appointment of independent marketing agents/distributors, franchising arrangements, and buyer clubs and will facilitate training of retailers to help build their capacity to conduct profitable business with low-income customers.

## CAUSAL MODELS

Any good impact assessment is based on a causal model that clearly shows what activities the project to be evaluated is undertaking (mostly facilitating service provision by others in the case of PROFIT) and what impacts it hopes to achieve (in this case, a range of positive outcomes at the sub-sector, firm, and household levels). The causal model also indicates what project outputs (services delivered) and outcomes (immediate results of service delivery) are expected to intervene between project

activities and the expected impacts. Once we have specified what a project is trying to achieve, and if we can regard those achievements as plausible results of the activities, outputs, and outcomes specified, then the expected impacts can be used as standards against which to judge the impacts actually achieved over the period of study.

Working with PROFIT staff members, DAI devised causal models (also know as log frames) for the three cases to be included in the impact assessment. These models (shown in Tables 1-3, below) list planned project activities in the left-hand column of each table. Most of PROFIT's activities are facilitative and should lead to the project outputs (service delivery) listed in the second column of each table. Service delivery should then lead to a range of intended outcomes, shown in Column 3. These in turn should help to bring about the impacts shown in the last column of the table. While particular project activities should lead to specific outputs, project outcomes and impacts may be the combined result of various activities and outputs and cannot necessarily be associated with particular activities and outputs.

TABLE 1. PROFIT PROJE	CT CAUSAL CHAIN: CO	TTON	
Activities (Facilitation)	Outputs (Service Delivery)	Outcomes	Impacts
<ul> <li>CFU farmer training (conservation farming)</li> <li>TOT (lead farmers)</li> <li>Incentivized farmer extension</li> <li>Demo plots</li> </ul>	<ul> <li># of trainers &amp; farmers trained</li> <li># of demo plots</li> </ul>	<ul> <li>Rising percent of land under CFU</li> <li>Rising yield/acre in served areas</li> <li>Improved quality of cotton</li> <li>Rising percent of land receiving proper early preparation</li> <li>Increased secondary cropping</li> </ul>	<ul> <li>Sub-sector level</li> <li>Increased competitiveness</li> <li>Ability to sustain competitiveness</li> <li>Firm level</li> <li>Increased sales</li> <li>Increased revenue/ha. from cotton</li> <li>Increase in secondary crop yields</li> <li>Household level</li> <li>Rising income</li> </ul>
<ul> <li>Facilitating commercial delivery of sector-specific fee services (spraying, tillage, weeding)</li> <li>Identify potential suppliers</li> <li>Promotion</li> <li>Linkages</li> </ul>	<ul> <li>Number of commercial service providers</li> <li>Number of linkages</li> </ul>	<ul> <li>Decreased production cost/ha.</li> <li>Improved soil quality</li> <li>More land sprayed</li> <li>Increased diversification of services</li> <li>Increased revenue for service providers</li> </ul>	<ul> <li>Increased sales of secondary crops</li> <li>Increased assets</li> </ul>
Sector-specific market information & training provided by SMS (cell phone text message system) & radio	<ul> <li># of services available on system</li> <li># of people using service (dialing cell phone)</li> <li>Hours of radio programs on farming practices</li> </ul>	<ul> <li>Better farmer knowledge of market opportunities &amp; cultivation practices</li> <li>Increased use of appropriate tillage service</li> </ul>	

TABLE 2. PROFIT PROJEC	T CAUSAL CHAIN: BEEF		
Activities (Facilitation)	Outputs (Service Delivery)	Outcomes	Impacts
<ul> <li>Vet services</li> <li>Organize group payment mechanism for communities</li> <li>Facilitate service delivery structure based on herd plans</li> <li>Facilitate a vet networking</li> <li>Develop business expansion model (work with vet assistants)</li> <li>Facilitate develop- ment of livestock insurance (packages with services)</li> </ul>	<ul> <li># of private vets providing services</li> <li># of animals receiving health care (especially preventive)</li> <li># of vets organized into networks</li> <li># of vet assistants</li> <li># of vet assistants</li> <li># of insurance policies established</li> <li># of new bulls sold</li> <li># of stud service transactions/Al</li> <li>Sales volume of drugs sold through vets &amp; retail stores</li> <li># of vets given business training</li> </ul>	<ul> <li>Increased # of cattle under private vet schemes</li> <li>Decreased cattle mortality &amp; morbidity</li> <li>Increased value/animal</li> <li>Increased # of vet services provided (growth of vet industry)</li> <li>Increased # of smallholders accessing financial sector (decreased risk of loss)</li> <li>Improved margins</li> <li>New vet entrants &amp; vet</li> <li>assistants</li> </ul>	<ul> <li>Sub-sector level</li> <li>Output growth by value &amp; volume</li> <li>Growth (in volume &amp; value) of output going through formal structure</li> <li>Access to high-quality market</li> <li>Growth in smallholder output share</li> <li>Increased smallholder price relative to commercial price</li> <li>Improved ability to withstand shocks</li> <li>Firm level</li> <li>Increased sales</li> </ul>
<ul> <li>Market transparency activities</li> <li>Facilitate establishment of blind auctions with scales</li> <li>Facilitate grade &amp; standard pricing at abattoirs</li> <li>Link smallholders to feed lot systems</li> <li>Develop artificial insemination (AI) &amp; breeding services through vets</li> <li>Facilitate wholesale distribution of vet drugs</li> <li>Develop savings alternatives for smallholders</li> <li>Link tanneries to abattoirs</li> </ul>	<ul> <li># of auctions established</li> <li># of scale services available</li> <li>Grades &amp; standards pricing structure established</li> <li># of feed lot outgrower systems established</li> <li># of cattle sold at feed lots</li> <li>Use of savings instruments</li> <li># of cattle sold through more transparent mechanisms</li> </ul>	<ul> <li>Improved animal quality</li> <li>Decreased mean age at slaughter (increased stock turnover)</li> <li>Differential pricing by</li> <li>quality</li> <li>Increased awareness of market requirements among vets</li> <li>Shift from cattle as a store of value</li> <li>New entrants into beef industry (more balanced market shares)</li> </ul>	<ul> <li>Increased profits</li> <li>Higher productivity</li> <li>Household level</li> <li>Rising income</li> <li>Declining poverty</li> <li>Increasing assets</li> </ul>

TABLE 5. FROITI FROJEC	T CAUSAL CHAIN. RETAIL		
Activities (Facilitation)	Outputs (Service Delivery)	Outcomes	Impacts
<ul> <li>Expansion model development using:</li> <li>Wholly owned stores</li> <li>Agent network</li> <li>Modified franchises (corner of store)</li> <li>Buyer clubs</li> <li>Create incentives to market inputs (according to model)</li> <li>Work with agents &amp; retailers on market research</li> <li>Work with larger retailers to ensure right input packaging and combinations are being distributed and right inventories kept</li> <li>Facilitate transparent contracts between wholesalers and retailers/ franchises (clear responsibilities regarding payments &amp; dispute resolution)</li> <li>Work with Farmers' Union on dispute resolution</li> <li>Work on marketing programs of retailers &amp; agents</li> <li>Facilitate agents' access to training (or provide directly in some cases)</li> <li>Promote dealer networking (horizontal linkage); may help dealers access financial services</li> <li>Monitoring</li> <li>Work with seed, chemical, etc. producers &amp; pushing them into the distribution network</li> </ul>	<ul> <li># of retailers signing Memorandum of Understanding</li> <li># of agents, franchise stores, wholly owned new stores &amp; buyer clubs</li> <li>Incentive scheme in place</li> <li>Agreements signed between retailers &amp; agents</li> <li>Marketing/inventory plans completed</li> <li>Market research conducted</li> <li>New dispute resolution mechanism in place</li> <li># of dealers in networks</li> <li>Linkages to wholesalers/ large producers established</li> <li># of outgrowers</li> </ul>	Increased sales at wholesale & retail levels: Among clients In the sector # of farmers accessing retail services Marketing activity launched by retailers # of retail outlets Decreased cost/unit of inventory Increased access to finance from seed companies &/or banks Smooth functioning of dispute resolution process Increased knowledge about business & markets Increased used of inputs on farms Increased production of inputs (seed, chemicals) Reduced cost of inputs Reduced transportation cost for farmers	Market/regional level <ul> <li>Increased farm productivity (multiple crops)</li> <li>Increased farm income</li> </ul> Firm level <ul> <li>Increased farm yields &amp; production</li> <li>Increased farmer income</li> </ul> Household level <ul> <li>Improved household welfare</li> </ul>

#### TABLE 3. PROFIT PROJECT CAUSAL CHAIN: RETAIL INPUT DISTRIBUTION

Activities (Facilitation)	Outputs (Service Delivery)	Outcomes	Impacts
Facilitate outgrower schemes for seeds			
Add layers of services into input supply chains (e.g., sprayers linked to input providers)			
Promote outgrower schemes for non- traditional crops			

These causal models provide a framework both for project monitoring, which is being undertaken by PROFIT staff (partly in response to USAID Mission requirements), and for impact assessment, which is being undertaken by DAI in cooperation with a RuralNet. Project monitoring is concerned with the first three columns of Tables 1-3: that is, with project activities, outputs, and outcomes. Impact assessment focuses on the final column of the table (impacts), but also tries to measure outcomes (Column 3) in some circumstances.

## **KEY QUESTIONS**

The key questions to be addressed in the impact assessment derive from the causal models shown in Tables 1-3. They concern whether the activities being studied have the impacts hypothesized in the project design. The impact assessment will also focus on expected outcomes, combining information received from quantitative and qualitative impact assessment with data from the project's performance monitoring system.

For the cotton and beef value chains, the study will try to measure impacts at three levels:

- The sub-sector itself: Do PROFIT interventions promote the growth and development of the subsector, as well as increased participation by MSEs in sub-sector activities and increased benefits received by MSEs as a result of their participation?
- Participating firms: Do MSEs served by the project (usually through facilitation of service provision by private sector entities) succeed in upgrading themselves and deriving enhanced benefit from their productive activities?
- Associated households: Do the households associated with participating MSEs derive benefits from the project?

Impact assessment of the project's efforts to improve retail input distribution will emphasize impacts on firms that are served by the project and their associated households. Do farm yields and production increase as a result of PROFIT's intervention? Does income from agriculture rise, both on farms served by the project and in the region generally? Does welfare improve at the household level?

More specifically, if the project has its intended impact, the following results are expected.

**The cotton sub-sector** should increase its competitiveness in world markets. This means that it will be able to sell a growing volume of cotton, of adequate and improving quality, at prices that cover the cost of production and earn a profit for growers, especially smallholders. The project's cotton activities will not succeed, however, unless smallholders benefit by increasing their productivity and sales. If these impacts are achieved at the firm level, there should be measurable impacts on

smallholder households, especially rising incomes and some accumulation of household assets. Especially since the great majority of households concerned are living below the poverty line (the great majority of cases), an important issue will be whether improved performance in cotton cultivation helps to boost household income and improve family welfare more generally. The key questions for the impact assessment in the cotton sub-sector are whether these impacts are attained at the sub-sector, firm, and household levels.

One basic intended impact of PROFIT's work in the cotton sub-sector will be difficult to measure: the sustainability of whatever level of competitiveness the sub-sector is able to achieve. The difficulty of measuring this impact arises from the obvious fact that sustainability, if it is achieved, would have to be observed over a timeframe much longer than the life either of the impact assessment or of the project itself.

Outcomes of PROFIT's interventions in the cotton sub-sector will be tracked through a combination of project monitoring and impact assessment. Important anticipated outcomes include better farmer knowledge, a rising area cultivated under conservation farming methods, rising yields, improved quality, increased secondary cropping, decreased production costs, and increased farm investment. If the study shows that these positive outcomes are being achieved, it will strengthen the case for attributing any measured improvements in impact variables to project activities.

In the **beef sub-sector**, the impacts aimed for at the sub-sector level are output growth by value and volume, increased channeling of production through the formal marketing structure, increased smallholder participation, a higher producer price relative to the commercial price, and improved ability to withstand shocks on the part of the smallholders. The impact assessment will ask whether these project goals are being achieved. At the firm level, the goals are higher productivity, increased sales, and higher profits for participating smallholders. If the firm-level impacts are achieved, they should result in improved welfare within smallholder households. As in the cotton sub-sector, this would be indicated by higher household income, asset accumulation, and the ability of participating households that are poor to climb above the poverty line.

As with cotton, outcomes of intervention in the beef sub-sector will be tracked through a combination of project monitoring and impact assessment. Hoped-for outcomes include improved veterinary services, better herd health, higher average value, improved margins, and new entrants into the packing industry.

The third case to be studied, **retail input distribution**, involves work with retailers who supply inputs to farmers. The impacts expected will occur at the market/regional, MSE, and household levels. They will take the form of increased farm yields and production as well as higher farm income, both for farmers who buy inputs through the improved distribution system and in the region generally. Again, outcomes will be measured through a combination of performance monitoring and impact assessment. Expected outcomes of this area of project activity include increased farmer knowledge about inputs and their use, increased input sales (both to clients and in the sector in general), a rising number of retail outlets, and increasing production of agricultural inputs.

## FRAMEWORK OF ANALYSIS

As indicated earlier, the impact assessments of cotton and beef activities will involve three different levels of impact: the sub-sector (or market/region in the case of retail input distribution); participating smallholder MSEs; and MSE households. They will also deal with selected outcomes of the project's activities in the three areas chosen. These levels of analysis are shown in Tables 4-6, along with the variables to be measured and the sources of information that will be utilized to obtain information on each variable.

Some of the hypothesized outcomes and impacts in Tables 4-6 are defined in terms that lend themselves readily and directly to empirical measurement, while others are not. The third column of each table gives an indicator of the outcome or impact in question that can be measured, at least in principle. The fourth column proposes one or more sources of data for each indicator. It will be observed that information on outcomes and impacts at the sub-sector or market/regional level will be derived primarily from qualitative research (interviews and focus group discussions), as well as secondary data where available. Some of this information will be taken from the PROFIT project's performance monitoring system.

To the extent possible, observed outcomes for intervention sectors or regions will be compared with outcomes for non-intervention sectors or regions. Nevertheless, conclusions about the project's impact at the sub-sector/regional level are likely to be more qualitative and depend more on the opinions of participants and experts than conclusions about impact at the firm or household level. Impacts at the latter two levels will be measured primarily through the longitudinal survey.

Level of Analysis	Outcome/Impact	Indicator of Change	Source of Information
	Spread of conservation farming	<ul> <li>percent of land under CFU</li> <li># of farmers under CFU</li> <li>Extent of crop diversification</li> </ul>	Interview (CFU)
	Better farmer knowledge of market opportunities & cultivation practices	Farmers' knowledge & attitudes	<ul><li>Interviews</li><li>FGDs</li></ul>
	Improved access to finance	# of financial providers	<ul><li>Interviews</li><li>FGDs</li></ul>
Sub-sector	Increased use of appropriate tillage service	percent of land served	<ul><li>Interviews</li><li>FGDs</li></ul>
	Output growth	Volume produced	Secondary data
	Increased competitiveness	<ul> <li>Quality of cotton</li> <li># of farmers using Dunavant seed</li> <li>percent of crop rejected</li> </ul>	Interviews
	Increased market participation by smallholders	percent of output from smallholders	<ul> <li>Secondary data?</li> <li>Interviews</li> </ul>
	Improved producer price	<ul> <li>FOB price in kwacha</li> <li>Producer price as percent of FOB price</li> </ul>	<ul> <li>Secondary data</li> <li>Interviews</li> </ul>
	Increased production		
	Increased sales	Value of sales	Survey
Smallholder	Increased profits	Sales minus cash costs	Survey
MSEs	Higher productivity	Output per ha.	Survey
	Investment in farm	Farm implements owned Draft animals owned	Survey Survey
MSE households	Higher income	Annual income from cotton sales Household consumption expenditure per capita	Survey Survey
	Increasing assets	Stocks of selected household assets	Survey

Level of Analysis	Outcome/Impact	Indicator of Change	Source of Information
	Improved animal health	Mortality & morbidity	<ul><li>Secondary data</li><li>Interviews</li></ul>
	Improved quality	Value/animal or per kg.	<ul><li>Interviews</li><li>FGDs</li></ul>
	Improved access to finance	# of financial providers	Interviews
	Development of vet industry	<ul> <li># of vet services provided</li> <li>Types of vet services provided</li> </ul>	<ul><li>Interviews</li><li>FGDs</li></ul>
	Growth of beef industry	Volume of production	Secondary data
Sub-sector	Increased participation of smallholders	percent of output from smallholders	<ul><li>Secondary data?</li><li>Interviews</li></ul>
	Improved quality of smallholder beef	<ul> <li># of animals sold at feed lots</li> <li>Mean weight at sale</li> <li>Calving rate</li> <li>Smallholder beef graded choice</li> </ul>	Interviews
	Improved price for smallholders	Producer price for smallholder as a percent of price received by commercial producers	Interviews
	Improved ability to withstand shocks	<ul> <li>Savings (preferably monetary, but also cattle)</li> <li>Uptake of insurance products</li> </ul>	Interviews
	Increased sales	# of animals sold	Survey
	Increased profits	Value of sales minus cash costs	Survey
Smallholder MSEs	Higher productivity	<ul> <li>Herd size</li> <li>Mortality</li> <li>Mean weight at sale</li> <li>Calving rate</li> <li>Quality (do any move up from standard to choice?)</li> </ul>	Survey
MSE households	Higher income	<ul> <li>Annual income from beef sales</li> <li>Household consumption expenditure per capita</li> </ul>	Survey
	Increasing assets	Stocks of selected household assets	Survey

## TABLE 5. OUTCOMES AND IMPACTS TO BE MEASURED: BEEF ACTIVITIES

TABLE 6. OUTCOMES AND IMPACTS TO BE MEASURED: RETAIL INPUT DISTRIBUTION			
Level of Analysis	Outcome/Impact	Indicator of Change	Source of Information
	Increased input sales at wholesale & retail levels	<ul><li>Wholesale sales value</li><li>Retail sales value</li></ul>	Interviews
	# of farmers accessing retail services	# of customers	<ul><li>Interviews</li><li>FGDs</li></ul>
Market/Region	Increased knowledge among retailers	<ul> <li># of promotional techniques learned &amp; used</li> <li>Establishment of direct links to spraying services</li> </ul>	Interviews
	# of retail outlets	# of retail outlets	<ul><li>Interviews</li><li>FGDs</li></ul>
	Reduced cost of inputs	Price trends for major inputs (retail and wholesale)	Interviews
	Increased access by retailers to finance from seed companies &/or banks	Volume of production	<ul><li>Interviews</li><li>FGDs</li></ul>
Smollholdor	Increased farmer income	Sales of top 4 crops/agricultural products	Survey
MSEs	Increased yields	Output per ha. for top 4 crops	Survey
MOLS	Increased production	Sales of top 4 crops/products minus cash costs	Survey
MSE households	Higher income	<ul> <li>Annual income from sales of relevant agricultural products</li> <li>Household consumption expenditure per capita</li> </ul>	Survey
	Increasing assets	Stocks of selected household assets	Survey

## **RESEARCH DESIGN**

The research design uses a mixture of quantitative and qualitative methods. The quantitative part of the study consists of a longitudinal panel survey of MSEs and the households that are associated with them. The baseline survey will generate descriptive information as well as data that will then be analyzed, together with data from the follow-up round, to determine whether various forms of impact are being achieved. The analysis will be "quasi-experimental" and use a "difference-in-difference" approach. Changes in the values of target variables for program participants between the two surveys will be compared to similar changes for control group members to see whether impact can be inferred.

The qualitative part consists of interviews and focus group discussions (FGDs) with several types of subjects (e.g., farmers, lead firms, traders, and industry experts) to identify impacts that may not emerge from the quantitative analysis as well as to help discover the reasons for the impacts measured there.

#### SURVEY OF SMALLHOLDERS

Panels of participating MSEs and the households to which they are related will be surveyed in two rounds. The first or baseline round will take place in May/June 2006, while the follow-up round will be scheduled for two years later. The sample frame for the survey is shown in Table 7.

TABLE 7. SAMPLING FRAME FOR SURVEY				
Intervention area	Participant sample	Control sample		
Cotton	Dunavant farmers	Continental farmers		
Beef	Communities with vet contracts (actual or anticipated)	List obtained from district livestock officer or community leaders		
Retail	Communities where retailers have established relationships	Farmer population (2 stages: villages first, then individual farmers within selected villages)		

From the populations defined in Table 7, samples of program participants and matched nonparticipating smallholders will be drawn. Where possible, participants will be drawn from lists of participants provided by PROFIT or its implementation partners. Non-participants will be drawn from separate districts that are matched to the districts of participants in terms of agricultural activities and size of smallholdings. The control cells (in districts that PROFIT will not enter in the coming two years) will be geographically separated from the participant cells so as to minimize "spillover" of project benefits to non-participants (although it will not be possible to preclude spillover). Nonparticipants will be matched to participants on a limited set of variables including type of agricultural activity, size of landholding, gender of farmer, location, and (to the extent possible) poverty level.

The follow-up survey will revisit as many of the respondents from the baseline round as possible. Accordingly, information must be collected in the baseline that will facilitate finding and identifying respondents for the repeat interviews. Another implication of the panel approach is that some oversampling in the baseline round is advisable, since there inevitably will be some attrition between survey rounds as respondents from the baseline round die, move away, change their lines of business, or decline to participate. To obtain results at a meaningful level of significance, the sample should include at least 1,200 smallholder MSEs at the end line. Anticipating attrition of 20 percent, the baseline survey should cover at least 1,500 respondents.

To facilitate surveying, respondents in the participant and comparison group samples will be concentrated in pre-selected districts. The participant samples will be drawn in selected districts served by PROFIT. The comparison samples will be drawn in different districts regarded as similar in significant ways (for example, in the same ecological zone) to the intervention districts. Since cotton growing, livestock rearing, and retail input supply are all widespread activities in Zambia, an abundance of potential control groups is available. PROFIT cotton interventions will take place in Central and Southern Provinces initially, and later in Eastern Province. Beef interventions will also be in Central and Southern Provinces initially, and later in Western Province. Retail service interventions will take place in Central and Northwest Provinces. Table 8 shows the districts that have been selected as appropriate sites for participant and control surveys. The numbers to be surveyed in each cell in the baseline round are shown in Annex Table B-1, below.

TABLE 8. DISTRICTS PROPOSED FOR SURVEYING					
Sub-Sector/Region Participant Sample Site Control Sample Site					
Cotton	Choma (Southern)	Monze (Southern)			
Beef	Kalomo (Southern)	Choma (Southern)			
Retail input supply	Mkushi (Central)	Chibombo (Central)			

In principle, each of these samples should consist of randomly selected representatives of their respective populations (e.g., participating cotton growers in Choma District). Lists of program participants can be used to draw participant samples where such lists exist. There may be no such list for some participants, and censuses of control groups are unlikely to exist. Accordingly, means must be devised to draw up lists from which the survey samples will be drawn. One possibility is to use the "walking method," which involves selecting control group respondents located in some predefined geographic relationship to participant group sample members (e. g, the third farm to the west of a participant respondent's farm). Small deviations from strict randomness are, however, permitted for practical reasons. For example, enumerators need not travel several miles to interview a single respondent. Care must be taken, however, to ensure that significant bias is not introduced in this way. It is NOT acceptable to select a sample purely on the basis of interviewing convenience, since this might introduce a "main road bias" as only the relatively better-off farmers near the main arteries are included in the survey.

In the baseline round, each of the three participant samples should consist of 300 respondents. The control group sample size in the baseline round will be 200 in each district, for a total of 1,500 respondents in all in the baseline survey.

In picking districts for inclusion in the survey, attention was paid to the potential cost of field operations, as well as to the need to avoid having to work in too many languages. According to local intelligence, the selections proposed above will require the use of three languages: English, Bemba, and Tonga. Questionnaires will be written in English, translated into Bemba and Tonga, and then back-translated to ensure accuracy.

As indicated in Tables 4-6 (above), the survey will be the primary means of measuring impacts at the firm and household levels. It will therefore collect data on:

- Enterprise sales and profits
- Productivity
- Household income
- Household assets
- Household poverty status

Because of anticipated difficulty in obtaining direct measures of enterprise profits and household income, proxies will be used. In the case of profits, identifiable purchases of inputs and services as well as payments for hired labor and taxes (if relevant) will be deducted from reported sales to obtain a figure for gross profits. No deduction will be made for household labor or depreciation on any equipment that may be used. Instead of asking sensitive questions about household income, consumption data will be collected. We will also collect information on household assets and investigate the possibility of using this information as a proxy for income.

The baseline survey will provide information about the values of the impact variables in sampled enterprises and households that prevailed early the project's implementation history. Comparison of the results for the participant and control samples will also afford an opportunity to analyze potential mediating variables – influences on individual values of the impact variables other than program participation. The findings of this analysis will be used to make appropriate allowances for mediating variables when the time comes to measure the program's impact through the interventions studied.

Basic descriptive tables will be assembled from the data obtained in each survey round. These tables will contain three types of information:

- Descriptive information on the respondents (managers of smallholder MSEs)
- Information on the smallholder MSEs included in the survey
- Information on the households associated with the samples smallholder MSEs

A detailed analysis plan has been prepared, describing the tabulations to be performed in each of these categories (see Annex D). Grouped data displayed in the tables will be backed up by raw counts that show the full (ungrouped) frequency distributions so that alternative analyses can be performed if indicated.

Following tabulation of the survey data and examination of the pre-defined tables, additional crosstabulations and correlations will be specified, for example to determine the relationship between personal or household-level variables and enterprise-level impact variables. The database will be organized to make such inquiries easy to perform.

## QUALITATIVE STUDY OF THE COTTON AND BEEF VALUE CHAINS AND RETAIL INPUT DISTRIBUTION

The smallholder survey will be complemented by qualitative research to improve understanding of: (1) the dynamics of smallholder participation in the cotton and beef value chains; (2) factors that affect the responsiveness of smallholders to changing demand; (3) how supporting markets (for inputs, services, and finance) support firm competitiveness; and (4) how PROFIT addresses these issues in the development of interventions intended to further the integration of smallholders into competitive value chains.

This part of the study will involve in-depth interviews and focus group discussions (FGDs) with approximately 60 participants in the cotton and beef value chains as well as those involved with input distribution in the areas studied for that intervention. Subjects to be interviewed or asked to participate in FGDs include smallholder producers, lead firm buyers, input suppliers, veterinarians, and other providers of commercially viable extension, advisory, and information services.

The qualitative study will address these questions:

- What are the incentives and risks for smallholders, input suppliers, and exporters associated with upgrading and accessing new or different cotton and beef marketing channels?
- What is the nature of inter-firm cooperation in the value chain among smallholder MSEs and among smallholder MSEs, suppliers of inputs and services (extension, veterinary, etc.), and buyers? How do issues of trust, power asymmetries, and cultural biases affect inter-firm cooperation? How can interventions promote inter-firm cooperation in ways that help ensure that smallholders are able to contribute to and benefit from increased competitiveness in the cotton and beef industries?

The research will focus on:

• Factors that influence the upgrading of MSEs in response to changing market demand in both the domestic and export markets. Upgrading might involve, for example: supplying better quality and higher grades of cotton and beef; supplying larger volumes; producing improved varieties of different types of product; accessing a new market (by entering into a direct supply contract with a lead firm, selling through a producer group, or otherwise); obtaining a new type of input (e.g., seed,

fertilizer, or feed) or service (e.g., assembly and grading, training, extension, crop or herd protection) through embedded arrangements, commercial extension agents or veterinarians, producer groups, or otherwise. Factors such as profitability, risks, transaction costs, and the sustainability of inputs and services as they relate to the upgrading of smallholder MSEs will be explored through interviews with smallholders, leaders of producer groups, input suppliers, service providers, and lead firms/exporters.

- Factors that enhance or constrain market access within the value chain, with a focus on smallholder MSE linkages to buyers (lead firms, agents, and others). We will explore:
  - Smallholder views on attributes that characterize each category of buyer
  - Risks, transaction costs, and profitability associated with each market outlet
  - Lead firm views on the attributes that characterize each category of seller
  - Risks, transaction costs, and profitability associated with each seller
  - Decision processes, issues of trust, cultural biases, and other factors that may affect smallholder linkages to different market outlets
  - Smallholder and lead firm perspectives on embedded services and how they relate to price, profitability, risk, and transaction costs

The role of producer groups in linking smallholders to markets

- Issues related to inter-firm cooperation within the cotton and beef value chains. The study will address horizontal linkages among smallholders and ways that cooperation and coordination enable them to benefit from and contribute to the competitiveness of their industries. It will also address vertical linkages between: smallholders and input suppliers; extension, veterinary service and training providers; and buyers. We will seek examples of cooperation and coordination and try learn how it can contribute to efficiencies, improved competitiveness, and increased benefits to smallholders in the value chain. Issues such as trust, power asymmetries, cultural biases, and information flows between smallholder MSEs and those to whom they are linked in the value chain will be explored.
- The role of cotton and beef production in smallholder household economic portfolios (the relative importance of these income sources and who within the household decides how to use the income received) and how decision processes and incentives or constraints at the household level may affect value chain participation and upgrading (e.g., increasing production, adding a new crop, adopting a new husbandry practice, switching from one product to another, selling to a new market outlet, taking on new functions, joining a producer group).

Preliminary draft guides for the qualitative study are included in Annex A, below. Analysis matrices will be used to document and organize key findings. The findings will be summarized and analyzed in a report describing the value chain and findings from the interviews and FGDs. The qualitative research will complement the baseline survey data in addressing the key questions and providing a base of information that can be referred to after the second round of data collection in interpreting the quantitative impact findings.

Qualitative work will also include focus group discussions with PROFIT staff and RuralNet researchers at the start of the baseline phase to get their input on outstanding sample definition questions, definitions of appropriate variables, and other outstanding issues, such as the ability of smallholders to recall their income from cotton and beef (What is an appropriate recall period?) and

seasonal issues that might be important to consider. The questionnaire will be vetted with project staff for their review and input.

## **IMPLEMENTATION OF THE IMPACT ASSESSMENT**

The impact assessment will be carried out by DAI under a contract with USAID. Donald Snodgrass and Gary Woller will lead the study on behalf of DAI. Much of the work will be done by RuralNet under a sub-contract with DAI. Snodgrass and Woller are responsible for:

- Designing the study
- Providing overall direction of the fieldwork and consultation on problems encountered in its implementation
- Participating in the qualitative study (Woller)
- Analyzing the quantitative and qualitative data collected
- Preparing the baseline report

RuralNet's responsibilities are to:

- Assist DAI in the development of the baseline survey and sampling frame
- Recruit and train enumerators
- Pilot test survey
- Implement survey, including quality control of data collection, data entry, and data cleaning
- Implement qualitative research methods (focus group discussions and key informant interviews) in cooperation with DAI
- Prepare and submit to DAI:
  - Complete set of data in SPSS format
  - Report on conduct of the sample survey
  - Notes summarizing each focus group discussion and interview
  - Overall analysis of results of qualitative research

Table 9 gives the work schedule for the impact assessment that was developed in meetings between DAI and RuralNet that took place in Lusaka during the week of April 17. Topics discussed at that time included: the nature and workings of the DAI-RuralNet partnership; construction of a sampling frame; drawing the participant and comparison samples; content of the questionnaire; supervision and implementation of the survey; and the design of the qualitative research. Following these discussions, RuralNet will design and field test the questionnaire and, after correcting any problems encountered, carry out the survey. Once the survey is completed, RuralNet is responsible for entering, cleaning, and tabulating the survey results. Descriptive tables will be prepared following the formats specified in Annex D. The tables and a complete data set in SPSS format will then be sent to DAI, which will complete the baseline report using the quantitative and qualitative information collected.

In September, Gary Woller will return to Zambia and, together with researchers from RuralNet, carry out the interviews and FGDs specified as part of the qualitative research. This will be followed by a jointly authored report on the qualitative research.

TABLE 9. IMPLEMENTATION SCHEDULE FOR PROFIT IMPACT ASSESSMENT				
Activity	Responsibility	Start date	Completion date	
Write research plan	DAI, in consultation with PROFIT and RuralNet	February 6, 2006	April 28, 2006	
Draft survey questionnaire	RuralNet, in consultation with DAI	April 24, 2006	May 5, 2006	
Pilot test questionnaire; report	RuralNet	May 8, 2006	May 15,2006	
Draw sample; plan field work; hire and train enumerators	RuralNet	May 8, 2006	May 25,2006	
Field survey	RuralNet	May 26, 2006	June 16, 2006	
Complete cleaned survey data set in SPSS format	RuralNet	June 19, 2006	July 7, 2006	
Management report on conduct of the sample survey and process used including quality control	RuralNet	July 10, 2006	July 14, 2006	
Draft guidelines for qualitative research	DAI and RuralNet	July 17,2006	July 31, 2006	
Conduct interviews and FGDs; prepare notes	RuralNet and DAI	September 4, 2006	September 15, 2006	
Overall analysis of results of qualitative research	DAI and RuralNet	September 25, 2006	October 6, 2006	
Baseline research report	DAI	October 9, 2006	October 27, 2006	

Primary data collection instruments will include:

- Survey questionnaire including enterprise and household level questions
- Guide for in-depth interviews with smallholders
- Guide for in-depth interviews with lead firm buyers.
- Guide for in-depth interviews with input suppliers
- Guide for in-depth interviews with service providers (training, extension, veterinary)

Available secondary data sources (for example, district-level agricultural statistics) will also be consulted.

## ANNEX A. QUALITATIVE RESEARCH PLAN

DAI is conducting a study of the Production, Finance and Technology Project (PROFIT) to assess its impact on:

- Improving the competitiveness of the cotton and beef sub-sectors in Zambia
- Increasing the integration of micro and small enterprises, especially smallholder farmers, into these value chains so that they increase their contributions to the competitiveness of the sub-sectors and receive greater benefits from their participation
- Improving the delivery of business services (e.g., veterinary and extension) to smallholders in these value chains
- Improving the sustainable distribution of agricultural inputs to smallholders
- Raising rural household incomes and helping to lift smallholder households out of poverty

The study design is based on a causal model of impact that shows how project facilitation activities can address constraints to smallholder participation and the competitiveness of the value chain. These activities, in turn, lead to project outputs and outcomes that contribute to realization of the above objectives.

The quantitative component of the study will involve (1) a longitudinal survey of smallholder MSE producers with data collection at two stages with a two-year interval between them and (2) a review of secondary market level information on the production and sale of cotton and beef.

The qualitative research will include in-depth interviews with a small sample of value chain actors: smallholder MSEs, input suppliers, service providers, lead firms, other buyers, and producer group leaders. The design of the qualitative research, described below, builds on previous project reports, an earlier baseline study of tree fruit value chains in Kenya, and value chain research designs developed under Components A and C of USAID's AMAP/BDS project.

#### BACKGROUND

To be competitive in global and domestic markets, actors in the cotton and beef value chains need to be responsive to changing market demand. There is strong global demand for cotton, beef, and leather. There is growing domestic market for beef. Domestic demand for cotton is limited at present and depends on the development of the spinning, weaving, and garment industries in the future. In the near term, it is expected that domestic cotton production will go primarily to the export market while domestic beef production is destined mainly for local consumption. Detailed value chain maps for cotton and beef are not yet available but need to be drawn up as part of the qualitative research if they cannot be obtained elsewhere.

PROFIT has identified a number of constraints to competitiveness in the cotton and beef value chains. Subject to further research, these include, for cotton:

- Low yields
- Shortage of draft animals
- Weak technical knowledge
- Reluctance to adopt conservation farming

- Weak microfinance
- Strong kwacha creates disincentive to export

For beef:

- Low quality
- Severe disease problems
- Treating cattle as a store of value, not as a commercial production item
- Sale of animals at advanced ages
- Competition between uses of cattle: Beef vs. draft animals
- Lack of interest from lead firm in smallholder upgrading
- Distance between farms and abbatoirs
- Inadequacy of veterinary services
- Weak technical knowledge
- Weak microfinance
- Failure to use hides

Through a longitudinal quantitative survey, the impact assessment will generate information on smallholder MSEs involved in cotton and beef production related to: changes in sources of market information; use of capital, labor, and material inputs; participation in training; use of extension services; use of veterinary services; inter-firm cooperation; market linkages; productivity; employment; and income. At the household level, it will also collect data on changes in income and well-being.

The qualitative research, described below, is intended to generate information to help understand the context of impacts in these areas. It will focus on incentives and risks for smallholders associated with upgrading and accessing new markets. It will also look at incentives and risks for lead firms and input and service providers and the extent to which the project is helping them develop and/or improve these activities. It will consider the nature of cooperation and coordination among actors within the value chain as it relates to smallholder participation and competitiveness. Factors to be explored will include, for example, incentives such as increased profitability or reduced transaction costs and risks associated with lack of trust, power asymmetries, and cultural biases. Finally, the study will explore how incentives or constraints at the household level may affect smallholder participation in the two value chains.

#### SOURCES OF INFORMATION

Qualitative data will be collected through in-depth interviews and focus group discussions with a small sample of actors in the cotton and beef value chains. This will include interviews and discussions with smallholder MSE producers, leaders of producer groups, input suppliers, veterinarians, extension workers, lead firm buyers, and brokers.

A preliminary sample design is presented below. We will maintain good communication with PROFIT staff to identify study participants who match the criteria and schedule interviews.

The sample will include smallholders, input suppliers, veterinarians, buyers, and others who have participated in facilitated activities. Non-participant buyers will also be included. The following criteria will guide the selection of study participants.

- Smallholders who have changed a process, product, or function
- Smallholders who have established a new market linkage
- Smallholders who have not participated in previous interviews
- Leaders of producer groups
- Extension workers and veterinarians who charge for their services
- Agents/collectors/brokers who are not involved in the project
- Buyers who provide embedded services
- Input suppliers who provide embedded services

A tentative sample design is proposed in Table A-1, below.

#### **ORGANIZATION OF THE QUALITATIVE RESEARCH**

Gary Woller and members of the RuralNet research team will carry out the qualitative field work in September 2006. The team will draft preliminary findings in bullet points immediately following the field work. RuralNet will type up the field notes and transcripts by June 9, 2006. The team will analyze the results and complete a summary report on the qualitative research findings by June 30, 2006.

#### SCHEDULE FOR DATA COLLECTION [SEPTEMBER 4-15]

Day 1 [Lusaka]	• Field team meets to review objectives and organization of the research				
	• Meet with PROFIT staff to review objectives of the research and discuss criteria for selecting participants and questions that will guide the interviews and FGDs				
	• Review and finalize the interview guides				
	• Review and finalize interview and FGD group schedule and appointments				
Days 2-4 [Choma, Kalomo, Mkushi]	• Individual interviews with smallholder MSE producers (6 interviews)				
	• Focus group discussions with smallholder MSE producers (3 FGDs, 21 participants)				
	• Individual interviews with input suppliers (8 interviews)				
	• Individual interviews with veterinarians (4 interviews)				
	• Individual interviews with agents/brokers (4 interviews)				

• Individual interviews with leaders of producer groups (4 interviews)

Day 5 [Lusaka]	• Individual interviews with beef retailers (2 interviews)			
	• Individual interviews with lead firms (4 interviews)			
Days 6-7 [Lusaka]	• Field team meets to review results, agree on preliminary findings, and d			

- Field team meets to review results, agree on preliminary findings, and draft bullet points to share with stakeholders
  - Field team draws up detailed outline of report

#### SCHEDULE FOR ANALYSIS AND WRITE-UP

- Write up notes/transcripts from field interviews [September 15]
- Complete analysis of data and draft report; circulate draft report for review [October 2]
- Finalize report [October 6]

TADLE A-1. QUALIT								
Participant	Cotton Value Chain	Beef Value chain	Retail Input Distribution	Total				
Smallholder farmers	1 focus group w/ 7 farmers + 2 individual interviews	1 focus group w/ 7 farmers + 2 individual interviews	1 focus group w/ 7 farmers + 2 individual interviews	28 (21 in focus groups + 6 individual interviews)				
Input suppliers	2 interviews	2 interviews	4 interviews	8 interviews				
Service providers	2 interviews with sprayers			2 interviews				
Extension workers	2 interviews	2 interviews		4 interviews				
Feed lot		1 interview (one that serves smallholders)		1 interview				
Veterinarians		4 interviews		4 interviews				
Agents/brokers	2 interviews (distributors)	2 interviews		4 interviews				
Retailers		2 interviews (1 up- market + 1 ordinary kiosk)		2 interviews				
Leaders of producer groups	2 interviews	2 interviews	2 interviews with head of buying club/agent	6 interviews				
Lead firm	2 (Dunavant + Great Lakes)	2 (Zambeef + Kembe)		4 interviews				
Input wholesaler or manufacturer			2 interviews	2 interviews				

#### TABLE A-1. QUALITATIVE SAMPLE DESIGN

#### EXPECTED OUTPUTS

The qualitative findings will be summarized in a report describing the objectives of the research, the methodology used, key findings, and conclusions. Annexes will include interview guides, interview lists, and relevant analysis tables/matrices. The findings will complement the baseline survey data in addressing the key research questions and provide a base of information that can be referred to in the second round of data collection in interpreting the quantitative impact findings.

#### GUIDELINES FOR INTERVIEWS AND FOCUS GROUP DISCUSSIONS WITH SMALLHOLDER COTTON AND BEEF PRODUCERS

Two separate guidelines are provided below: one for cotton and beef producers and another for farmers in areas where PROFIT is working to improve retail input provision.

#### **GUIDELINES FOR COTTON AND BEEF PRODUCERS**

*Objective: To deepen our understanding of the incentives and risks that affect the responsiveness of farmers to changing market demand in the cotton and beef value chains.* 

Introductions and discussion of the purpose of the in-depth research.

#### **Background Information**

Describe your agricultural activities, especially livestock rearing and cotton cultivation. How large is your herd? Area planted to cotton?

How much cotton did you harvest last season? How many head of beef did you sell or slaughter?

Approximately how much did you earn from sales of beef, cotton, and other products?

#### Market linkages

To whom do you sell your beef/cotton?

What are the ways producers can sell their products?

How do these different buyers/marketing channels differ in terms of:

- Profitability.
- Risk of suffering a loss.
- Marketing or transaction costs (the time it takes to gather information about the marketing alternative, travel to the place of sale, time spent meeting with buyers, time it takes to collect payment, etc.).

Nature of producers' relationship with the buyer. Do they have a close relationship? Are there repeat transactions? Which of the following do they receive from the buyer:

- Inputs.
- Extension services.
- Information.
- Training.
- Credit.

Level of trust that producers have with this type of buyer.

#### Upgrading (improvements in business practices made either alone or with support from others)

Please describe any changes you have made in the past two years in the production or sale of cotton, beef, and other products.

- Change in type or variety of beef or cotton.
- Change in animal and crop husbandry practices,
- Change in harvest method (cotton).
- Change in post-harvest activity.

Did you use an embedded service or other type of commercial service? If so,

- Did you pay anyone to help you make these changes?
- Did you receive support from your buyer(s) and/or input supplier(s) to make these changes?
- Did you receive support from government, development projects, NGOs, etc, to make these changes?

Please describe the main reasons motivating you to make these changes.

Describe how it worked out. How, if at all, have you benefited from these changes?

Please describe any disadvantages or risks that you faced in making these changes.

Please describe the disadvantages or risks of NOT making these changes.

#### Inter-firm cooperation/coordination - horizontal

*Objective: To explore how trust, power asymmetries, and cultural biases may affect horizontal cooperation through examples of how producers cooperate with each other and what motivates them to do so.* 

#### Nature of cooperation

To you sell to the same buyers as your neighbors who sell similar products?

Do you discuss prices?

Do you discuss when to sell the products (cotton, beef, etc.)?

Do you share transport of products with your neighbors?

Do you share labor related to beef or cotton production with your neighbors?

Do you share information about cotton cultivation or animal husbandry with your neighbors?

Do you participate in farmer groups? If so, are you in the same groups as your neighbors?

#### **Role of producer groups**

Are you a member of a producer group? If so, who initiated the formation of this group? What is the role of the producer group? What economic activities does it participate in (joint procurement of inputs, joint collection/transportation/sale of products)? Advocacy? Joint access to finance?

How does this group differ from other farmers' or women's groups?

Describe similarities and differences among members of the group.

How much time do you spend attending meetings?

How do you travel to the meeting place and how long does it take you?

How would you describe differences between members and non-members?

How do you feel about communication within the group (transparency and information flows)?

Can you give an example of how decisions are made within the group (e.g., on prices or payment systems)?

Can you give an example of how disputes are resolved within the group?

Does the group deal (as a common entity) directly with buyers, input suppliers, financial institutions, and/or government? Do leaders negotiate contracts and make agreements on behalf of the group? If not, why not? If so, how do you know you can trust your leaders?

Describe any problems the group has had.

Describe the main benefits of being a member of this group.

#### **Inter-firm cooperation – vertical**

*Objective: To explore how trust, power asymmetries, and cultural biases may affect competition between producers, buyers, input suppliers, and service providers through examples of how they cooperate with each other and what motivates them to do so.* 

#### **Embedded services**

Describe the different kinds of support or assistance (services) you receive from your buyer or input supplier. Ask separately for each buyer or input supplier. Ask specifically about: inputs, finance, training/technical assistance, introduction of new/improved products, group organization support, access to markets and market information, tools/equipment.

Could you get this kind of support/assistance from someone other than your buyer or input supplier?

How does this kind of support benefit you? Probe risks, transaction cost, profitability.

How does it benefit those who provide it to you? Probe risks, transaction cost, profitability.

Has this kind of support helped you earn more from cotton/beef? Explain why or why not.

Are you confident that this kind of support will continue in the future (sustainability)?

Are you confident that the buyer you contract with (and who provides you various kinds of support) will uphold agreements to buy your products in the future? Explain why or why not (trust).

#### Negotiating power (power asymmetries, cultural biases, information flows)

Describe how terms or agreements with different types of buyers are negotiated (either individual agreements or agreements made through producer groups).

How do these agreements affect your flexibility to sell products through other outlets?

Describe how disputes, if any, with buyers are handled.

Give other examples of how you have cooperated (recently or in the past) with a buyer or input supplier.

Give examples of 'missed opportunities' for cooperation.

Give examples of any problems you have experienced through lack of cooperation with buyers, input suppliers, or service providers.

#### **GUIDELINES FOR FARMERS IN INPUT PROVISION AREAS**

*Objective: To deepen our understanding of the incentives and risks that influence the acquisition of production inputs by farmers in areas where PROFIT is working to improve input distribution.* 

Introductions and discussion of the purpose of the in-depth research.

#### **Background Information**

Describe your agricultural activities, including livestock, crops that you grow for sale, and crops that you grow for use by your family. How large is your herd? Areas planted to cotton, maize, other major crops?

Approximately how much did you earn last year from sales of beef, cotton, and other products?

#### Input acquisition and use

What inputs did you purchase last year for use on your crops/livestock? What quantity of each input was purchased?

What inputs did you acquire through individual purchase? For each input purchased, state the type of source utilized (kiosk, itinerant seller, buyer of outputs, etc.).

Why did you purchase inputs from these sources? What are the advantages and disadvantages, compared to other possible sources (cost, delivery, distance, accompanying advice, etc.)?

Do you belong to any group that buys inputs on behalf of its members? If so, did you buy any inputs via group purchase with others? What were they and why did you select this method of input acquisition?

How did you pay for the inputs that you purchased (cash, credit, deducted from sale price of output)?

Were the type, quantity, quality, and timeliness of the inputs purchased suitable for your needs? Please explain any problems encountered with any of these aspects. [Ask separately for each type of input purchased and each source.]

Did anyone provide you with information/advice/training on how to use the inputs you acquired? If so, who was it? How helpful was the information/advice/training received?

Besides the productive inputs that you did acquire, were there other inputs that would have liked to purchase, but did not? If so, what are they and what was your reason for not purchasing them?

What improvements in input supply would be most useful to you to raise the income that you earn from your farm?

## ANNEX B. SMALLHOLDER SURVEY SAMPLE

TABLE B-1. STRUCTURE OF SMALLHOLDER SURVEY SAMPLE						
Sub-Sector/Region	Participant Sample	Control Sample	Total			
Cotton			500			
Choma (Southern)	300					
Monze (Southern)		200				
Beef			500			
Kalomo (Southern)	300					
Choma (Southern)		200				
Retail input supply			500			
Mkushi (Central)	300					
Chibombo (Central)		200				
TOTAL	900	600	1,500			
## ANNEX C. SURVEY QUESTIONNAIRES

Separate questionnaires have been designed for use with cotton, beef, and retail input respondents. Each of these questionnaires is reproduced below.

#### PROFIT BASELINE SURVEY COTTON SUB-SECTOR QUESTIONNAIRE FOR USE IN CHOMA, SINAZONGWE, GWEMBE AND MONZE DISTRICTS OF ZAMBIA USAID / DAI / PROFIT MAY/JUNE 2006

FIRST, MAKE SURE YOU HAVE THE RIGHT RESPONDENT. YOU MUST INTERVIEW THE OWNER/PROPRIETOR OF THE COTTON PART OF THE FARM. THE RESPONDENT SHOULD BE THE PERSON IN CHARGE AND ABLE TO SPEAK AUTHORITATIVELY ABOUT FARM ACTIVITIES. DO NOT INTERVIEW FARM LABORERS OR YOUNG BOYS OR GIRLS.

Introduction: "My name is..... I'm currently working on a study of the PROFIT programme. We're interviewing people here in [name of community & village] in order to get information about Cotton related issues. The information obtained will be used to assess the impact of the implementation of PROFIT as a programme. All answers will be seen only by the research team and will be kept fully confidential.

Have you been interviewed in the last five days for this study? IF THE RESPONDENT HAS BEEN INTERVIEWED BEFORE, DO NOT INTERVIEW THIS PERSON AGAIN. Tell them you cannot interview them a second time, thank them, and end the interview. If they have not been interviewed before, conduct the interview.

Always **politely ask the interviewee for permission** to interview him/her. Only after they have consented to be interviewed should you begin to ask questions.

001 Questionnaire Identification Number |\_\_\_|\_\_|\_\_|

002 Team Code |\_\_|\_|

003 District Code | [11 Choma] [12 Gwembe] [13 Monze] [14 Sinazongwe]

004 Area/ Community Code |\_\_\_|\_\_| and Area Name \_\_\_

005 Household Code [\_\_\_\_\_\_

006 Respondent Code |\_\_|\_|\_|\_|

#### IMPORTANT DETAILS

Interviewer's name and ID number	
Farmer's name	
Contact address	
Telephone number	
Interview date	
Indicate whether participant or control	
If participant, date began participating	
Location: district; community; village	
Person who showed you where to go with	
telephone number or address	

Description of how to reach the farm from the nearest well-known town or point, so that a stranger	can find it.
Include nearest churches, schools or other landmarks.	

Detailed sketch map of the location of the farm

#### Incomplete Interviews Log

	Visit 1	Visit 2	Visit 3	Visit 4
Date				
Interviewer				
Comment				

Comment codes: Appointment made for later today 1; Appointment made for another day 2; Refused to continue and no appointment made 3; Other (Specify) 4.

#### Questionnaire Summary Information

Section	Name of Section	Number of Questions
Section 0	Questionnaire Identification Data	06
Section 1	Household Characteristics	40
Section 2	Cotton Production Background Data	08
Section 3	Input Usage for Cotton Production	44
Section 4	Cotton Sales	5
Section 5	Group Dynamics	11
Section 6	Availability, Access And Use Of Information/Communication Services	7
Section 7	Farming Technology, Practices and Farmer Groups	4

Section 8	Other Crops Background Data	6
Section 8	Livestock and Farm Asset Ownership	4
Total number of	135	

INTERVIEW START TIME: \_\_\_\_\_

INTERVIEW END TIME:
---------------------

SUPERVISOR'S SIGNATURE: \_\_\_\_\_

## SECTION 1: HOUSEHOLD CHARACTERISTICS

Now I am going to ask you a number of things about your household.

## [TELL THE RESPONDENT THAT THE HOUSEHOLD IS DEFINED AS ALL THE RELATED PEOPLE, INCLUDING BABIES BUT EXCLUDING SERVANTS, ETC.) WHO USUALLY LIVE TOGETHER AND EAT FROM THE SAME POT].

No.	Questions and filters	Coding categories	Skip to	
Q101	Are you the head of the household?	Yes	1	
	Hena ndunywe bamukamwini munzi na?	No	2	
Q102	Record Sex Of The Respondent	Male	1	
		Female	2	
		Month		
Q103	In what month and year were you born?	Don't Know Month	88	
		No Response	99	
	Ino mwakazyalwa lili? Mwezi amwaka nzi?	Year		
		Don't Know Year	88	
		No Response	99	
Q104	How old were you at your last birthday?	Age In Completed Years		
	Ino kuciindi cino mwakakwanisya myaka yongaye yakuzyalwa?	Don't Know	88	
	(Compare & Correct Q103 OR 104 If Needed)	No Response	99	
		Estimate Best Answer		
Q105	Have you ever attended formal school?	Yes	1	IF 'NO' GO
	Hena kuli nomwakanjide cikolo na?	No	2	TO Q108
	(Ensure You Probe Adequately)	Don't Know	88	
		No Response	99	
Q106	What is the highest level of school you attended: primary,	<ol> <li>Lower Primary(sub A to Standard 2 or</li> </ol>		
	secondary or higher?	Grade 1 - 4)		
		<ol><li>Upper Primary (Standard 3-5 or Grade5-7)</li></ol>		
	Circle One	<ol><li>Junior Secondary (up to Grade 9 or Form 3)</li></ol>		
	Ino mwakagolela mubbuku nzi?	<ol><li>Senior secondary (up to Grade 12 or Form</li></ol>		
		5)		
		5. Higher		
		888. Don't Know		
		999. No Response		
Q107	How many total years of education did you attend?	# Years Completed		
	Ino mwakaiya myaka yongaye kucikolo?	Don't Know	88	
		No Response	99	

QUESTIONS & FILTERS							SKIP
				TO			
Please	fill in the following details						
Member ID	Q108 Name of Household member Izina iya omwe, omwe mbomukkala limwi	Q109 Sex of HH member 1 = Male 2 = Female <i>Mbasankwa na bakaintu?</i>	Q110 Age in completed years bali amwaka na Mwezi yongaye?	Q111 Occupation of HH member Babeleka mulimo nzi [USE OCCUPATION RESPONSE CODES PROVIDED OVERLEAF]			
1			, , , ,		888	999	
2					888	999	
3					888	999	
5					888	999	
6					888	999	
7					888	999	
8					888	999	
9					888	999	
10					888	999	
11					888	999	
12					888	999	

13			888	999	
14			888	999	
15			888	999	
16			888	999	
17			888	999	
18			888	999	
19			888	999	
20			888	999	

OCCUPATION RESPONSE CODES							
	1	WORK ON A FAMILY FARM	6	EMPLOYED OUTSIDE THE FAMILY FARM			
	2	RUNNING A BUSINESS/SELF EMPLOYED	7	FULLTIME HOUSEWIFE			
	3	FULLTIME STUDENT	9	OTHER (SPECIFY)			
	4	TOO YOUNG TO WORK					
	5	TOO OLD TO WORK					

## SECTION 1: HOUSEHOLD CHARACTERISTICS (CONTINUED)

INCOME	& SOURCES									٦
Q112	What are the three major sources of HOUSEHOLD income, starting with the	1						888	999	1
	most important?	2						888	999	1
	Ninzila nzi nzyomubelesya kapati, zyotatwe kuti mujane mali akubelesya	3						888	999	
	amukwasyi wanu?									7
Q113	Do you have a bank account?	$\square$								1
			1. YES	2. NO	)					
F000 0	CUDITY.						L		<u> </u>	<u> </u>
F00D 5	ECORITY What were the major find errors that the HOUSEHOLD readward and error		in the 200	14/05 4	-		000		900	
Q114	ILIST LIP TO FOUR1	nea	in the 200	J4/UJ 1	arming	eason?	000		555	
	Ino zvisvango nzi zipati pati zvomwakatebula akubelesva kulva mubutebuzi b	vam	u 2005?				888		999	
	WPITE ANSWED HEI	2E					+	-+		
	FOOD ITEM QUANTITY ON	SUM	ED	COS		CHASED				
	1.	1		1		1	888		999	
	2	1		[]		i	888		999	
	3			[]		]	888		999	
	4			[]		]	888		999	
Q115	How many whole/square meals did you eat yesterday?				,					
	ino mwakaiya ziindi zyongaye jilo?				l					
Q116	How long did the food crops that you harvested in the past year	ESS	THAN 12	2 MON	THS		888	9	999	IF '2'
	last?	2 M(	NTHS							GO
	ino cakuiya ncomwakatebude mwaka wainda mwakaiya ciindi cilamfu buti ncoivakumana?									0118
Q117	If the food you harvested lasted less than 12 months, what was	oual	t with ow	n mone	ev		888	9	99	4110
	your MAIN source of food after your harvest ran out? 2	Give	n food by		-	[]				
		elati	ves or nei	ighbou	rs					
	Na cakulya ncomwakatebude ticakamana mwaka, ino cakulya 3	Exch	anged ca	sh						
	mwakalikucijanakuli nocakamana ncomwakatebude?	crops	; for food							
	4	Give	n food by							
		tood	aid progr	am						
		ola/e	xchanged	a da far fi	and a					
UOLIECI		Juse	noiu good	as tor t	JUU					
0118	How much did your household shend on education in the last 12 months (1VE		2			[ ]	888		999	
QIIU	Ino mumukwasyi wanu mwakabelesya mali ongaye kucikolo mwezi wamana?	AN	:				000		333	
Q119	How much did your household spend on food and groceries in the last 12 mor	nths	(1YEAR)?	lno		[ ]	888		999	
	mumukwasyi wanu mwakabelesya mali ongaye kucakulya mwezi wamana?									

Q120	How much did your household spend on housing in the last 12 months (1YEAR)?	[]	888	999	
	ino mumukwasyi wanu mwakabelesya mali ongaye kubbadelela ng'anda mwezi wamana?				
Q121	How much did your household spend on water and electricity in the last 12 months (1YEAR)?	[]	888	999	
	Ino mumukwasyi wanu mwakabelesya mali ongaye kubbadelela meenda amalayiti mwezi wamana?				
Q122	How much did your household spend on paraffin in the last 12 months (1YEAR)? Ino mumukwasyi wanu	[]	888	999	
	mwakabelesya mali ongaye kuula palafini mwezi wamana?				
Q123	How much did your household spend on clothing in the last 12 months (1YEAR)?Ino mumukwasyi wanu	[]	888	999	
	mwakabelesya mali ongaye kuula zisani mwezi wamana?				
Q124	How much did your household spend on medicines and hospital in the last 12 months (1YEAR)?	[]	888	999	
	lno mumukwasyi wanu mwakabelesya mali ongaye kubbadelela misamu akubbadela kucibbadela				
	mwezi wamana?				
Q125	How much did your household spend on transport in the last 12 months (1YEAR)? Ino mumukwasyi		888	999	
	wanu mwakabelesya mali ongaye munyendo zyanu mwezi wamana?				

HOUSI	NG								
Q126	[ OBSERVE AND WRITE ANSWER, ONLY ASK IF Y	'OU CAN'T	1	Mud or cow dung					
	TELL BY LOOKING ]		2	Concrete brinks			1		
	What is the wall material of the hest house among the	houses/hute	3	Iron sheets			1		
	occupied by the members of your household?	nouscarnuta	4	Stone			1		
			5	Tiles			-		
	Ino ng'anda itegwa nimbotu akati kamaanda abeleseg	6	Wood		1				
	bamumukwasyi wanu ayakidwe aanzi?		7	Grass/poles					
		8	Other( specify)						
Q127	OBSERVE AND WRITE ANSWER, ONLY ASK IF Y	1	Grass/Straw/thatch			888	999		
_	TELL BY LOOKING ]	2	Iron sheets	888	999				
	What is the roofing material of the best house among	the	3	Tiles			888	999	
	houses/huts occupied by the members of your househ	iold?	4	Slates/concrete/cement			888	999	
	Ino ciluli citegwa ncibotu akati kamaanda abelesegwa	abantu	5	Wood/planks			888	999	
	bamumukwasyi wanu ciyakidwe aanzi?		6			888	999		
				Other (specify)			888	999	
Q128	How many rooms or huts are occupied by all the mem	bers of your h	ousehold?				888	999	
	lno maanda abelesegwa abantu bamumukwasyi wanu	amunzi aano	ali ongaye?						
Q129	Does this house have a kitchen inside the house?				1	YES	888	999	
	Ino ng'anda yanu iligisi nkikini mukati na?				2	NO			
Q130	How many chairs with backs are in this house? (Ino mujis	i mipaando yo	ngaye mung'a	anda yanu?)			888	999	
Q131	How many sofa sets are in this house? (Ino mujisi mase	eeti ongaye mu	ing'anda yanı	(?)			888	999	
Q132	How many tables are in this house? Ino mujisi matebule	ongaye mung	anda yanu?				888	999	
Q133	Do you have a domestic worker who is not related to the Hope multiisi mubalasi waang'anda utali bhukuku wanu na	head of the ho	usehold?				888	999	
COLIRC	E OF DRINKING WATER	:							<u> </u>
0134	What is your main source of drinking water in the dry	CODE	SOURCE						
0,104	season?	1	Piped water	within the communal			888	999	
		2	2 Piped outside this community				888	999	
	Ino muteka kuli meenda akubelesya ang'anda	3	3 A private well in the community				888	999	
	muciindi cacilimo?	4	Water tank in	the community			888	999	
		5	Pond/river/ca	anal			888	999	
		6	Public well in	the community		_	888	999	
		7	Other (speci	y)					

Q135	How far is the source of drinking	water in the dry	1	Less than a km					
	season?	,	2	1 – 3 Km					
			3	Above 3 km					
Q136	What is your main source of drinking	ng water in the wet	1	Piped water within	the communal		888	999	
	season?		2	Piped outside this	community		888	999	
			3	A private well in the	e community		888	999	
	Ino muteka kuli meenda akubelesy	/a ang'anda	4	Water tank in the c	ommunity		888	999	
	muciindi camainza?		5	Pond/river/canal			888	999	
			6	Public well in the c	ommunity		888	999	
			7	Other (specify)		_	888	999	
			1	Piped water within	the communal				
Q137	How far is the source of drinking	water in the wet	1	Less than a km					
	season?		2	1-3Km					
			3	Above 3 km					
TYPE									
D129	What is the time of tailet facility in t	this house?	Eluck Inter-	autoida		4			,
Q138	what is the type of tollet facility in t Bushe isimbusu mushwata cana a	inis nouse?	Fluck latrine	incide the residence	<u> </u>	1			
	camusanno shani?	rganda	Ordinary Dit	inside the residenc	e	2			
	camusaligu snam:		VID (Ventilated Improved Dit latrine) 4						
			VIP (ventilated improved Pit latrine) 4						
			Other (speci	ry)	699	999			
SOURCE	OF LIGHTING/INFORMATION ACC	FCC	NONE			0	000	555	
0139	What is the type of lighting in this h	ouse?	Candle			1	888	999	
4155	what is the type of lighting in this in	0080:	Paraffin lam	n		2	888	999	
	ino mubelesva nzi kumunika muna	anda?	Pressure lan	nn		3	888	999	
			Generator	n p		4	888	999	
			Solar			5	888	999	
			Battery syste	em		6	888	999	
			Electricity			7	888	999	
			Firewood/Gr	225		8	888	999	
			Other (speci	fy)					
COOKING	UTENSILS								
Q140	What cooking/kitchen utensils do y	ou have? (Ino mu	ujisi zyakujikila	zyamusyobonzi?)					
	1.Metal pots/kettles			[	]	888	999		
	2.Charcoal stove			[	J	888	999		
	3.Paraffin stove			[	]	888	999		
	4.Gas/electric stove			[	]	888	999		
	5.Gas/electric oven				]	888	999		
	6.Free standing deep freezer			[	]	888	999		
HOUSEH	OLD GOODS								
Q141	Do you have the following goods in	your household?		Write	Number	DK	NR	SKIP	TO
	Hena mulijisi mpansya eezyi mung	anda yanu na?	N.		,	000	000		
	2 Padio	1. Tes 2	L NO		1	000	999		
	A Radio cassette slaver	1.105 Z	No.		1	888	000		
	5 Video recorder	1 Vec 2	No.		1	888	000		
	6 Cell phone	1 Yes 2	No		1	888	999		
	7 Fixed telephone line	1 Yes 2	No	1	1	888	999		
	8.Still camera	1. Yes 2	. No	1	1	888	999		
	9.Cassette player	1. Yes 2	. No	1	i	888	999		
	10.CD player	1. Yes 2	. No	1	j l	888	999		
	11.Hi-fi music center	1. Yes 2	2. No	1	1	888	999		
	12.Video camera	1. Yes 2	. No		j	888	999		
	13.Sewing machine	1. Yes 2	. No		]	888	999		
	14.Vacuum cleaner	1. Yes 2	. No	[]	]	888	999		
	15.Electric iron	1. Yes 2	2. No	[]	j	888	999		
	16.Car/pick-up	1. Yes 2	. No	[	1	888	999		
	17.Motorcycle	1. Yes 2	. No	[	]	888	999		
	18.Bicvcle	1. Yes 2	. No	1	1	888	999		

	19.Truck/lorry	1. Yes 2. No	888	999	
Q142	How many motor vehicles do you h	nave? Ino mujisi myoota yongaye?	888	999	

#### SECTION 2: COTTON PRODUCTION BACKGROUND DATA

### (INSTRUCTIONS TO THE INTERVIEWER: LET RESPONDENT USE THE UNIT OF AREA/ VOLUME THEY ARE MOST FAMILIAR WITH, THEN USE THE CONVERSION TABLE PROVIDED TO CONVERT TO HECTARES/ APPROPRIATE VOLUME)

Q.NO	QUESTIONS AND FILTERS	WRITE IN	CODE	ES .	SKIP TO
			DK (circle)	NR	1
				(circle)	
Q201	What is the total area of the farm?		888	888	
	Ino nyika yampulazi yanu eeyi njimpati buti?	[]			
Q202	How much of the total area of the farm was used to plant cotton last farming season				
	(2004/05)?				
	Ino nyika njomwakasyangide buluba mainza amu 2004/05 yakali mpati buti?	[]	888	999	
Q203	How much cotton did you harvest last farming season (2005)?				
	Ino mwakatebula buluba bunji buti mubutebuzi bwamu 2005?	[]	888	999	
Q204	How much money did you get from cotton sales last farming season (2004/2005)?				
	Ino buluba bwanu bwakamupa mali ongaye mubutebezi bwamu 2004/2005?	[]	888	999	
Q205	How much was a kg of cotton? Ino mwakali kusambala malinzi akilo lyabuluba?				
		lr 1	888	999	

#### SECTION 3: INPUT USAGE FOR COTTON PRODUCTION

	FERTILIZERS, CHEMICALS & SEEDS	-	DK	NR	SKIP TO
Q301	Did you use any FERTILIZERS and CHEMICALS in cotton production in the 2004/05 farming	1. Yes	888	999	IF 'NO' GO TO
	season?	2. No			Q307
	Hena mwakabelesya camutunzya mubuluba mumainza amu 2004/05?				
Q302	If YES, how much?		888	999	
	Kuti na mwakabelesya, ino wakali munji buti?	[]			
Q303	Who was the major supplier of the FERTILIZERS and CHEMICALS you used on cotton?				
	SUPPLIER S (MAXIMUM OF TWO)				
	2		888	999	
	Ino mbabani bakamusambalide camutunzya ngomwakabikka mubuluba bwanu?				
Q304	How much did you spend on buying FERTILIZERS and CHEMICALS?	-			
	Ino mwakabelesya mali ongaye kuula camutunzya?				
Q305	Did any of the suppliers of FERTILIZERS and CHEMICALS that you used also buy cotton from	1. Yes			
	you?	2. No			
Q306	If YES, which ones?				
	SUPPLIERS				
	1 2				

Q307	Did you use any PURCHASED COTTON SEED in cotton production in the 2004/05 farming	1.	Yes	888	999	IF 'NO' GO TO
	season?	2.	No			Q313
	Hena mwakabelesya musamu ukwabilila malwazi kubuluba mumainza amu 2004/05?					
Q308	If YES, how much seed did you buy?			888	999	
	Kuti na mwakabelesya, ino wakali munji buti?	L	]			
Q309	Who was the major supplier of the COTTON SEED you used?	1		888	999	
		1				
	SUPPLIER S (MAXIMUM OF TWO)	1				
	1 2	ł.				
	Ino mbabani bakamusambalide musamu ukwabilila malwazi ngomwakabikka mubuluba bwanu?	1				
Q310	How much did you spend on buying COTTON SEED?					
	Ino mwakabelesya mali ongaye kuula musamu ukwabilila malwazi kubuluba ooyu?	ίĹ				
Q311	Did any of the suppliers of COTTON SEED that you used also buy cotton from you?					
Q312	If YES, which ones?					

SUPPLIERS		
1 2		

I	CEDUICES		<del></del>		1
0313	Did you use any TILLACE SERVICES in action production in the 2004/05 farming access?	1 VES	000	999	IE 'NO' CO TO
4515	Use any TILLAGE SERVICES in collon production in the 2004/05 familing season?	2 NO	000	555	0216
031/	When was the major examples of the TILLAGE SEDVICES, you used 2	2.110	888	999	4310
Q314	Inc. mbaani bakamubalakala mulima couu kanati?		000	333	
		ir i			
		L			
Q315	How much did you spend on paying for TILLAGE SERVICES?	-			
	Ino mwakabbadela mali ongaye kuli basikumulimina aaba?				
Q316	Did you use any CROP SPRAYING SERVICES in cotton production in the 2004/05 farming	1.			IF 'NO' GO TO
	season? Hena kuli nimwakapompela mubuluba bwanu mainza amu 2004/2005 na?				Q319
Q317	Who was the major supplier of the CROP SPRAYING SERVICES you used ?	2.			
	Ino mbaani bakamugwasya kumilimo yakupompela buluba?				
	SUPPLIER S (MAXIMUM OF TWO)				
	2				
Q318	How much did you spend on on paying for CROP SPRAYING SERVICES?		888	999	
	Ino mwakabbadela mali ongaye kuli basikumupompela mubuluba bwanu?	[]			
Q319	Did you use any WEEDING SERVICES in cotton production in the 2004/05 farming season?	1			IF 'NO' GOTO
	Hena mwakagwasigwa mukulimina buluba mubulimi bwamu 2004/2005 na?	1			Q322
Q320	Who was the major supplier of the WEEDING SERVICES you used ?				
	Ino mbaani bakabeleka mulimo ooyu kapati?				
	SUPPLIER S (MAXIMUM OF TWO)				
	1 2				
Q321	How much did you spend on on paying for WEEDING SERVICES?		888	999	
	Ino mwakabbadela mali ongaye kuli basikumugwasya kulimina aaba?	-			
Q322	Did you use any HARVESTING SERVICES in cotton production in the 2004/05 farming season?	1. YES			IF 'NO' GOTO
	Hena mwakagwasigwa kutebula na mubutebuzi bwamu 2005?	2. NO			Q325
Q323	Who was the major supplier of the HARVESTING SERVICES you used ?				
	Ino mbaani bakabeleka mulimo ooyu kapati?				
	SUPPLIER S (MAXIMUM OF TWO)				
	2				
		-			
Q324	How much did you spend on on paying for HARVESTING SERVICES?		888	999	
	Ino mwakabbadela mali ongaye kuli basikutebula aaba?				
Q325	Did you use any BANKING SERVICES in cotton production in the 2004/05 farming season?	I. YES			IF 'NO' GOTO
	Hena mwakagwasigwa munzila zyakubelesya bbanki na mubulimi bwamu 2004/2005?	2. NO	<u> </u>		Q328
Q326	Who was the major supplier of the BANKING SERVICES you used ?				
	Ino mbaani bakamugwasya kapati mukubelesya bbanki mubulimi bwanu?				
	SUPPLIERS (MAXIMUM OF TWO)				
	2				
0207			000	000	
Q327	what type of BANKING SERVICES did you use?		000	333	
	[IT MAY BE WORE THAN ONE CIRCLE ALL THAT IS WENTIONED]				
	1 Borrowing				
	2 Paving for imports				
	3 Savings				
	4. Security of assets				
	5. Other (specify)		1	1	

Q328	Did you bo Hena kuli	prrow money or got inputs on credit for nkumwakweletede mali na kubweza lo	1. Y 2. N	les 88 lo	38 999	IF 'N Q33	10' GO TO 0		
Q329	Please tel Ndalomba	Ime where you got your credit and how mundambile nkomwakabweza chikwe	w much. [ASK FOR TWO MAJOR elete eeci alimwi ino mwakabweza	SOURCES] malinzi.			•		
	Code	Source of Credit	Amount of credit						
	1	Bank or Micro Finance institution	[ [ ] ] [ ]	1 1 1	1 1		888	999	
	2	Buvers of outputs		<u>i i i</u>	1 1		888	999	
	3	Sellers of inputs		1 1 1	1 1		888	999	
	4	Informal sources		1 1 1	1 1		888	999	
Q330	Did you g Hena mw	et any INSURANCE POLICY in cottor vakabelesya nzila zyakukwabilila eezyi	production in the 2004/05 farming mukulima buluba na mubulimi bw	season? amu 2004/0	)5?				IF 'NO' GOTO
									Q333
Q331	Who was	the supplier of the INSURANCE SER	VICES you used ?						
	SUPPLIE	R S (MAXIMUM OF TWO) ino mbaar	ni bakamugwasilizya munzila eeyi k	apati?					
	1	2							
Q332	What typ	e of INSURANCE POLICY did you ha	ve? Ino bwakali bukwabilizi bwamu	syoobonzi?	,		888	999	
	1 5								
	2 Thefty					[]			
	2. Theny 3. Cron f	ailura					_		
	4 Other	(specify)							
0333	Did you b	any farm implements and equipr	nents for cotton production in the	2004/05 fan	mina			-	IF 'NO' GO
	season?	Hena mwakaliulide zyakubelesya na r	nukulima buluba mu 2004/2005?						TO Q336
Q334	Who was	the major supplier of the FARM IMPL	EMENTS AND EQUIPMENTS you	ubought?					
	SUPPLIE	R S (MAXIMUM OF TWO) Ino mbaar	ni bakamuletela zyibelesyo eezyi ka	ipati?					
	1	2							
Q335	How muc	h did you spend on buying farm imple	ements and equipments?				888	999	
	lno mwai	kabelesya mali ongaye mukuula zyibel	esyo eezyi?			_			
Q336	Did you p	bay for any farm implements and equ	ipments repair services in cotto	n productio	n in the				IF 'NO' GO
	2004/05	farming season?		000 405	~				TO Q339
0007	Hena kul	i nimwakabbadelede kumilimo yakuba	mba zibelesyo mukulima buluba m	u 2004/05 n	a?		_		
Q33/	SUDDU R	the major supplier of the repair servic	es you bought? vibakalikubamba kanat?						
	1		ii Dakalikubarriba kapali :						
		2							
0338	How mus	h did you nay for renair centices? Inc	mwakabbadela mali ongave kuli ba	eikuhamha	2	-	1 888	999	
0339	Did you u	ise any DRAFT ANIMALS in cotton no	nduction the 2004/05 farming seas	nnn nn?	-	1 YES	888	999	IF 'NO' GO
4000	Hena my	vakabelesva ng'ombe na mbongolo mi	ikulima buluba mumainza amu 200	4/052		2 NO	0000	0000	TO 0341
Q340	If YES, w	hose draft animals were thev?	name barabe mamanea ama eve	100.		1	1 888	999	10 4011
	Kuti na n	wakabelesva, ino ng'ombe na mbong	olo zvakali zvabani?			·			
	1 OV	VNED 2 BORROWED 3 HI	RED/LEASED 4 SHARED						
	HIRE OF	LABOUR	· · · · ·				1	-1	
Q341	Did you h	ire any people to do any kind of wor	k for cotton production in 2004/05?	?  1	. YES		888	999	IF 'NO' GO
	Hena mv	rakalitambide Bantu bamugwasya kulii	na muunda wabuluba na?	2	2. NO				TO Q401
Q342	If YES, h	ow many? (Kuti na inzya, bakali bor	ngaye?)				888	999	
Q343	How mar	y days did they work all together? (	Ino bakabeleka mazuba ongaye?)				888	999	
Q344	How muc	h did you pay them all (total)? (Inon	nwakababbadela mali ongaye?)	[					

#### SECTION 4: COTTON SALES

Q.NO	QUESTIONS AND FILTERS	WRITE ANSWER HERE					CO	DES	SKIP TO
							DK	NR	1
			NAME	OF COTTO	N BU	/ER	(circle)	(circle)	
Q401	Who were the major buyers of your cotton in	1					888	999	
	2005?	2					888	999	
	Ino mbaani bakaula buluba bwanu mubutebuzi	3					888	999	
	bwamu 2005?	4					888	999	
			1	WRITE COI	DE FO	R TYPE OF			
	CODE	s	E	BUYER					
Q402	What type of buyer is this? [ASK FOR 1] Th	e lead firm	1	Buyer 1:			888	999	
	BUYER LISTED IN Q401] 2 Ap	rocessor		Buyer 2:			888	999	
	Jac has iterate and a star in her to have be the figure of the star	proker		Buyer 3:			888	999	
	ino basikuula aaba mbantu bali buti? 4 A j	ocal trade	r	Buyer 4:			888	999	
0.400		BUY	ER	QU/	ANTITY		000	000	
Q403	How much cotton did you sell to each of the buyers	Buye	erl: L				888	999	
	mentioned in Q401? (WRITE AMOUNT)	Buye	er Z:				000	999	
	ino mwakasambala buluba bunji buti kuli omwe, omv	ve Buye	er 5: [				000	333	
0404	Skuua buluba?	Buye	er 4: [				000	333	
Q404	How much cotton was rejected by each of the buyers	s Buye	eri: [				000	333	
	Ine mbunii buti buluba bwakakakwa poikuula omwa	Buye	er 2: [				000	333	
	mo mbunji buu buuba bwakakakwa asikuula omwe,	Buye	er 5: L				000	333	
0405	Unwe akaambo kakubija kwabuluba?	Buye	er 4: [				000	333	
Q405	the huvers mentioned in O4012	Duye	eri: [	<u> </u>			000	333	
	Ine buyers mentioned in Q401?	Duye	er Z: [	Ļ			000	999	
	sikuula huluha?	Duye	ar J. [	<u> </u>		<u> </u>	000	000	
0406	What kind of navment amegment was made with ear	- Duye	:r4.  [			EDE	888	999	┼───┤
0400	of the buyers mentioned in 04012	Buw	w 1.	WINEC		1	000	333	
	Ino kuulana ooku kwakali kwamusvonzi asikuula	Duy	2 I.			<u> </u>	000	000	
	omwe. omwe?	Buye	er Z:				000	333	
	CODES	Buye	er 5:	_ <u> </u>			000	333	
	1 Spot 2 Contract 3 Both	Buye	er 4:				000	222	
	Payment Sale								
Q407	How satisfied are you with the buyer of your cotton?	Buye	er 1:	[		]	888	999	
	Ino mwakakkutila buti mumakwebo aanu asikuula	Buye	er 2:				888	999	
	buluba mupati?	Buye	er 3:	[]		]	888	999	
	CODES	Buye	er 4:				888	999	
	1 VERY SATISFIED			L		]			
	2 MODERATELY SATISFIED								
	3 NOT SATISFIED								

#### SECTION 5: GROUP DYNAMICS

Q501	Are there farmer groups in this community?	GROUP		CC	DES	SKIP TO
			1. YES	DK	NR	
	Hena kuli tubunga twabalimi kucibaka kuno		2. NO	(circle)	(circle)	IF 'NO'
	na?					GO TO
						Q307
Q502	If so, what are their names?	Group 1:		888	999	
		Group 2:		888	999	
	Na inzya, ino twiitwa kuti nzi tubunga ootu?	Group 3:		888	999	
		Group 4:		888	999	
Q503	What type of group is [NAME OF GROUP]	?		888	999	
	[ASK FOR EACH GROUP MENTIOED IN Q501]		Group 1: []			
	Ino nkabunga kamusyoobonzi (zina lyakabun	ino nkahunga kamusyoohonzi (zina lyakahunga)		000	999	
	ODES			000	555	
	1. A marketing cooperative		Group 2: []			

	A buyer cooperative     A marketing/buyer cooperative     A monducer association		Group 3: []	888	9	999	
	6. Other (specify)		Group 4: []	888	9	999	
Q504	Are you a member of [NAME OF GROUP] ? [ASK FOR EACH GROUP MENTIONED IN Q501]	Group 1: Group 2: Group 3: Group 4:		888 888 888 888		999 999 999 999	IF 'NO FOR ALL, GOTO Q509
Q505	What benefits are you currently getting from being a member of [NAME OF GROUP]?[ASK FOR EACH GROUP MENTIONED IN Q504]	Group 1:		888		999	
	Ino mbubotunzi mbomujana mukuba memba? [MAY BE MORE THAN ONE - WRITE ALL THAT APPLY] 1. Easy access to inputs 2. Easy access to credit 3. Easy access to extension services	Group 2:		888	}	999	
	Easier to sell farm produce     Source of production and market information     Easier to negotiate for good price     Easier to Organize transport     Organize transport	Group 3:		888		999	
		Group 4:		888		999	
Q506	What benefits would you like to get from being a member	Group 1:	[ ]		888	999	
	of [NAME OF GROUP]? [ASK FOR EACH GROUP MENTIONED IN Q504]	Group 2:			888	999	
		Group 3:	[]		888	999	
	[MAY BE MORE THAN ONE - WRITE ALL THAT APPLY] Ino mbubotunzi mbomuyanda kujana mukuba memba?				888	999	

1	OROUP MENTIONED IN Q304			1	1	I I
		Group 3:	[ ]	888	999	
	[MAY BE MORE THAN ONE - WRITE ALL THAT APPLY] Ino mbubotunzi mbomuyanda kujana mukuba memba? 1. Easy access to inputs 2. Easy access to credit 3. Easy access to extension services 4. Easier to sell farm produce 5. Source of production and/or market information 6. Easier to negotiate for good price 7. Easier to Organize transport 8. Other (specify):	Group 4:		888	999	
Q507	As a member of [NAME OF GROUP], how oftern	Group 1:	[]	888	999	
	have you attended group meetings in the past 6 months?	Group 2:		888	999	
	[ASK FOR EACH GROUP MENTIONED IN Q504]	Group 3:		888	999	
	Mbuli memba, ino mwakaunka kumiswaangano yongaye myezi 6 yainda? 1. Always 2. Sometimes 3. Rarely	Group 4:	[ ]	888	999	
Q508	Why are you not a member of [NAME OF GROUP]	Group 1:		888	999	
	,?[ASK FOR EACH GROUP NOT MENTIONED	Group 2:		888	999	
	IN Q504]	Group 3:		888	999	
	Ino nkaambonzi ncomutali bamemba bakabunga aaka? 1. Too busy to attend meetings 2. I see no reason to join 3. Too many restrictions on membership 4. Short of money to pay for what they need 5. Lack of info or not knowing how to begin. 6. Other (specify)	Group 4:	[]	888	999	

Q509	Did you put resources together with one or more other farmers in order to buy agricultural inputs?			
	1 YES 2 NO			
Q510	Did you jointly acquire any services with one or more other farmers in the 2004/5 farming season?           1         YES         2         NO           Hena kuli nimwakatambide basikumugwasya antoomwe abalinyoko na mu mainza amu 2004/2005?	888	999	
Q511	Did you join up with one or more other farmers for the sake of selling your produce in the 2004/05 farming season? <i>Hena mwakajatizyanya abamwi mukusambala butebuzi bwanu mu</i> 2005 na?			

## SECTION 6: AVAILABILITY, ACCESS AND USE OF INFORMATION/COMMUNICATION SERVICES

Q601	How often do you use a cell phone, whether yours or someone else's, to receive or send information,			
	whether SMS or voice, that is useful in the farming business?			
	ino zinji buti ziindi zyomubelesya selo fooni na yanu antela yamuntu biyo kujatikizya bulimi?			
	1 Never 2 Occasionally 4 often			
Q602	How often do you use the Internet to send or receive information in your cotton farming business?			
	Ino mubelesya ziindi zyongaye internet mubulimi bwanu?			
	1 Never 2 Sometime 4 often			
Q603	Have you listened to radio programmes broadcasted on agriculture in the past two weeks? Hena kuli			
	nomwa teelelede kuwailesi twaambo tujatikizya bulimi kuli makwabo mvwiki zyobilo zyainda na?			
	1 YES 2 NO			
Q604	Are there farmer information centres in this or nearby community?	888	999	IF
	1 YES 2 NO			'NO'
	Hena mulijisi busena kuno na munsimunsi akokuno nkomujana twaambo tujatikizya zyabulimi?			GO
	, , , , , ,			то
				Q701
Q605	What type of information is provided by the information centre(s)? [MAY BE MORE THAN ONE - WRITE ALL			
	THAT APPLY]			
	Ino twaambo twamusyobonzi tomujana kuzibaka eezyi?			
	<ol> <li>Information on new or better methods of farming</li> </ol>			
	<ol><li>Information on better methods of managing farm enterprises</li></ol>			
	3. Information on input markets			
	4. Information on output markets			
	5. Other (specify)			
Q606	How is the information deseminated? (Ino twaambo ootu batupandulula buti?)	888	999	
	[MAY BE MORE THAN ONE - WRITE ALL THAT APPLY]			
	1. By word of mouth			
	2. Through written material			
	3. Through radio			
	4. Through cell phones (SMS)			
	5. Through e-mail			
Q607	Has the information been helpful to you? Ino twaaambo ootu twakamugwasya na?	888	999	
	1 YES 2 NO			

## SECTION 7: FARMING TECHNOLOGY & PRACTICES

1	QUESTIC	DNS, FILTERS AND CODES			DK	NR	SKIP TO
Q.NO							
Q701	Did you u <i>Hena mw</i> 1 IYE	ise any CFU (Conservation Farming Unit) recommended farming p <u>rakabelesyako nzi</u> la zyakulima nzyobayiisya ba CFU mukulima bulu S 2 INO	ractice for co <i>iba mainza a</i>	viton growing last farming season? amu 2004/05?	888	999	IF 'NO' GO TO Q703
Q702	Please tell me which CFU recommended farming practice you used for cotton growing last season.						
	Ndalomb	a mundaambile ino mba CFU nzi bakamukulwayizya kubelesya nzi	la eeyi kulim	a buluba mainza amu 2004/05			
	Code	Farming Practice	Code	Farming Practice	DK	NR	SKIP TO
	1	Early land preparation	5	Crop rotation			

	2	Minimum tillage using hand hoes	6	Green manuring			
	3	Minimum tillage using animal power	7	Improved fallow			
	4	Minimum tillage using mechanized means			888	999	
Q703	Have yo <i>Hena m</i> 1 Y	u received any advice or training or information in cotton farming in wakatambula malailile antela lwiiyo na mulumbe kujatikizya bulimi b ES 2 NO	the last one wabuluba na	year? a?	888	999	IF 'NO' GO TO Q801
Q704	Please t Ino Iwiiy	ell me the sources of t training received in the last one year and how o lwayinoyino awa mwakalujana kuli alimwi mbubotunzi mbumwaja	v useful the na kumalailil	advice, training, or information that you le aayo, mulwiiyo na mumulumbe ngom	received was watambula.	3	
	Code	Source of Training, Advice or Information	Usefulne 1 VE 2 MC 3 NC	ess of TA ERY USEFUL DDERATELY USEFUL DT USEFUL	DK	NR	SKIP TO
	1	Ministry of Agriculture Extension officers			888	999	
	2	Other extension officers			888	999	
	3	Suppliers of chemicals and fertilizers			888	999	
	4	Shops supplying inputs			888	999	
	5	Seminars and meetings			888	999	
	6	Dunavant/ other agribusiness company			888	999	
	7	Radio, TV			888	999	
	8	PROFIT			888	999	
	9	Posters			888	999	
	10	News papers, magazines			888	999	
	11	Producer association			888	999	
	12	Buyers of crops			888	999	
	13	Other (Specify)			888	999	

#### SECTION 8: OTHER CROPS BACKGROUND DATA

(INSTRUCTIONS TO THE INTERVIEWER: LET RESPONDENT USE THE UNIT OF AREA/ VOLUME THEY ARE MOST FAMILIAR WITH, THEN USE THE CONVERSION TABLE PROVIDED TO CONVERT TO HECTARES/ APPROPRIATE VOLUME)

Q.NO	QUESTIONS AND FILTERS	CODES WRITE IN CODES			DES	SKIP	
		A) CASH CROP	A/		DK	NR	то
		B) FOOD CROP	В		(circle)	(circle	
0801	How much of the total area of the farm was used to plant	1 Maiza	-	r 1	888	) 000	
9001	the major crone last forming season?	1. Maize	<u> </u>		000	000	
	the major crops last laming season?	2. Groundhuis	<u> </u>		000	999	
		3. Beans		[]	888	999	
		4. Sunflower		[]	888	999	
	Ino mwakabelesya nyika ipati buti kusyanga zyisyango	5. Cassava		[]	888	999	
	zyipati pati mumainza amu 2004/05?	6. Tobacco			888	999	
		7. Rice		[]	888	999	
		8. Sorghum		[]	888	999	
		9. Millet		[]	888	999	
		10 Other (specify)		[]	888	999	
Q802	How much of the major crop(s) did you harvest last	1. Maize		[]	888	999	
	farming season(2005)?	2. Groundnuts		[]	888	999	
	Ino butebuzi bwakali buti kuzwa kuzyisyango zyipati pati	3. Beans		[]	888	999	
	mubutebuzi bwamu 2005?	4. Sunflower		[]	888	999	
		5. Cassava		[]	888	999	
		6. Tobacco		[]	888	999	

·		7.0	r	1 0	00	000	T
		7. Kice	L		00	333	
		o. Sorgnum			00	333	
		9. Millet			00	999	
0803	How much menous did you get from the project even color	1 Maire	L		00	000	
0005	lact farming season?	2 Groundauto		1 8	88	999	
	Ino mwakajana mali ongave nomwakasamhala hutehuzi	3 Reans		1 8	88	999	
	bwanu bwa zvisvango zvipati pati mu 2005?	J. Sunflower		1 8	88	999	
	shaha sha 29.99ango 29.9an pas ma 2000.	5 Cassava	1		88	999	
		6 Tobacco			88	999	
		7. Rice		1 8	88	999	
		8 Sorahum		1 8	88	999	
		9. Millet		1 8	88	999	
		10 Other (specify)		1 8	88	999	
Q804	Did you use any irrigation on any of the crops in the		0 = NO	1 = YES			IF 'NO'
	2004/2005 farming season?						GO TO
							Q901
	Hena kuli nomwabelesyede kutilaila cisyango cilicoonse	1. Maize		8	88	999	
	mubulimi bwamu 2004/2005 na?	2. Groundnuts		8	88	999	
		3. Beans		8	88	999	
		4. Sunflower		8	88	999	
		5. Cassava		8	88	999	<u> </u>
		6. Tobacco		8	88	999	
		7. Rice		8	88	999	<u> </u>
		8. Sorghum		8	88	999	
		9. Millet		5	88	333	
		10 Other					
0805	If you used irritation last year, what was the main irritation	specity)	┭ <u>−</u>	WRITE COD	F		
4005	FOR FACH crop you irrigated?	r type that you used	1 Maize	MALE COD	888	999	
	Kuti na mwakatilaila mwaka wamana, ino ninzila nzi niomy	vakabelesva kapati	2 Groundnuts		888	999	
	kusvango comwe, comwe?		3 Beans		888	999	<u> </u>
			4. Sunflower		888	999	
	CODES		5. Cassava		888	999	<u> </u>
	1 Bucket 2 Treadle 3 Electric 4 Die	sel 5 Other	6. Tobacco		888	999	<u> </u>
	pump motor pur	np	7. Rice		888	999	
	driven		8. Sorghum		888	999	
	pump		9. Millet		888	999	
			10 Other				
			(specify)				

.....CONTINUED.....

Q806	If you used irrigation last year, what was the main source of irrigation water		WRITE CODE			
	FOR EACH crop you irrigated?	1. Maize		888	999	
	Kuti na mwakatilaila mwaka wamana, ino meenda mwakali kwaajana kuli	2. Groundnuts		888	999	
	ngomwaalikubelesya kucisyango comwe, comwe?	3. Beans		888	999	
		<ol><li>Sunflower</li></ol>		888	999	
		5. Cassava		888	999	
	CODES	6. Tobacco		888	999	
	1 River/stream 2 Dam/weir 3 Well/borehole 4 Other	7. Rice		888	999	
		8. Sorghum		888	999	
		9. Millet		888	999	
		10 Other				
		(specify)				

	SECTIO	N 9: LIVESTOCK AND FARM A	SSET OWN	ERSHIP							
									DK	NR	SKIP TO
Q901	Do you own any livestock? 1. Yes; 2. No Hena muliiisi banyama bayubidwe na?								888	999	IF 'NO' GO TO Q903
Q902	If yes	s, please tell me the types and nu	imbers of live	stock you a	wn (Naii	nzya, nda	lomba kuti mundaambile misyobo a	amweelwe wabany	ama banu)		
]	Lives	stock	Number owned	DK	NR	Livest	Livestock Nur				
1	1	Cattle		888	999	7	Chickens		888	999	
1	2	Donkey		888	999	8	Guinea fowls		888	999	
]	3	Sheep		888	999	9	Ducks		888	999	
1	4	Goats		888	999	10	Pigeons		888	999	
]	5	Pigs		888	999	11	Other [specify]		888	999	
]	6	Rabbits		888	999						
Q903	Do y Hena	ou own any farm assets? a mulijisi zyikubelesyo zyomubele	sya mubulim	i bwanu na	?		1. Yes; 2. No		888	999	
Q904	lf yes Na in	s, please tell me the types and nu zya, ndalomba mundaambile mi	imbers of fari syobo alimwi	m assets yo <i>amweelwe</i>	ou own wazyibeles	yo zyanu	?		•		•
]	ASS	ET	Number owned	DK	NR	ASSET	Γ	Number owned			
1	1	Hoes		888	999	9	Crop sprayers		888	999	
]	2	Ploughs		888	999	10	Ox-carts		888	999	
]	3	Ridgers		888	999	11	Tractors		888	999	
]	4	Harrows		888	999	12	Rippers		888	999	
]	5	Cultivator		888	999	13	Other [specify]		888	999	
]	6	Shaka hoes		888	999	14	Hand grinding mill		888	999	
]	7	Farm motorcycle		888	999	15	Hammermill		888	999	
	8	Maize Sheller		888	999	16	Fishing boat		888	999	
	9	Treadle pump		888	999	17	Bicycle used for business		888	999	

#### PROFIT BASELINE SURVEY BEEF SUB-SECTOR QUESTIONNAIRE FOR USE IN KALOMO AND CHOMA DISTRICTS OF ZAMBIA USAID / DAI / PROFIT MAY/JUNE 2006

FIRST, MAKE SURE YOU HAVE THE RIGHT RESPONDENT. THE ENUMERATOR MUST
INTERVIEW THE PROPRIETOR/OWNER OF THE BEEF PART OF THE FARM. THE RESPONDENT
SHOULD BE THE PERSON IN CHARGE AND ABLE TO SPEAK AUTHORITATIVELY ABOUT FARM
ACTIVITIES. DO NOT INTERVIEW FARM LABORERS OR YOUNG BOYS OR GIRLS.
Introduction: "My name is I'm currently working on a study of the PROFIT programme. We're interviewing people here in [name of community & village] in order to get information about Cotton related issues. The
information obtained will be used to assess the impact of the implementation of PROFIT as a programme. All answers will be seen only by the research team and will be kept fully confidential.

Have you been interviewed in the last five days for this study? IF THE RESPONDENT HAS BEEN INTERVIEWED BEFORE, DO NOT INTERVIEW THIS PERSON AGAIN. Tell them you cannot interview them a second time, thank them, and end the interview. If they have not been interviewed before, conduct the interview.

Always politely ask the interviewee for permission to interview him/her. Only after they have consented to be interviewed should you begin to ask questions.

001 Questionnaire Identification Number

002 Team Code |\_\_\_\_

003 District |\_\_|\_| [21. Choma] [22. Kalomo]

004 Area/ Community Code |\_\_\_\_| and Area Name \_\_\_\_\_\_

005 Household Code |\_\_\_|\_\_|\_\_|

006 Respondent Code |\_\_\_\_\_

IMPORTANT DETAILS

Interviewer's name and ID number	
Farmer's name	
Contact address	
Telephone number	
Interview date	
Indicate whether participant or control	
If participant, date began participating	
Location: district; community; village	
Person who showed you where to go with telephone	
number or address	

Description of how to reach the farm from the nearest well-known town or point, so that a stranger can find it. Include nearest churches, schools or other landmarks
Detailed sketch man of the location of the farm
becauce sketch map of the location of the rank

#### Incomplete Interviews Log

	Visit 1	Visit 2	Visit 3	Visit 4
Date				
Interviewer				
Comment				

Comment codes: Appointment made for later today 1; Appointment made for another day 2; Refused to continue and no appointment made 3; Other (Specify) 4.

## Questionnaire Summary Information

Section	Name of Section	Number of Questions
Section 0	Questionnaire Identification Data	06
Section 1	Household Characteristics	42
Section 2	Cattle Rearing Background Data	11
Section 3	Cattle Sales	10
Section 4	Input Usage For Cattle Rearing	45
Section 6	Morbidity and Mortality	23
Section 7	Availability, Access and Use of Information/communication Services	7
Section 8	Technical Advice	02
Section 9	Group Dynamics	11
Section 10	Crops	06
Section 11	Livestock and Farm Asset Ownership	04
Total Number (	Of Questions	167

INTERVIEW START TIME: \_\_\_\_\_

INTERVIEW END TIME: \_\_\_\_\_

SUPERVISOR SIGNATURE: \_\_\_\_\_

## SECTION 1: HOUSEHOLD CHARACTERISTICS

Now I am going ask you a number of things about your household.

# [TELL THE RESPONDENT THAT THE HOUSEHOLD IS DEFINED AS ALL THE RELATED PEOPLE, INCLUDING BABIES BUT EXCLUDING SERVANTS, ETC.) WHO USUALLY LIVE TOGETHER AND EAT FROM THE SAME POT].

No.	Questions and filters	Coding categories		Skip to
Q143	Are you the head of the household?	Yes	1	
	Hena ndunywe bamukamwini munzi na?	No	2	
Q144	Record Sex Of The Respondent	Male	1	
	-	Female	2	
Q145		Month		
	In what month and year were you born?	Don't Know Month	88	
		No Response	99	
	Ino mwakazyalwa lili? Mwezi amwaka nzi?	Year		
		Don't Know Year	88	
		No Response	99	
Q146	How old were you at your last birthday?	Age In Completed Years		
	lno kuciindi cino mwakakwanisya myaka	Don't Know	88	
	yongaye yakuzyalwa?	No Response	99	
	(Compare & Correct Q103 OR 104 If Needed)	Estimate Best Answer		
Q147	Have you ever attended formal school?	Yes	1	IF 'NO' SKIP
	Hena kuli nomwakanjide cikolo na?	No	2	TO Q108
	(Ensure You Probe Adequately)	Don't Know	88	
		No Response	99	
Q148	What is the highest level of school you attended:	<ol> <li>Lower Primary(sub A to Standard 2 or Grade 1 - 4)</li> </ol>		
	primary, secondary or higher?	2. Upper Primary (Standard 3-5 or Grade5-7)		
		<ol><li>Junior Secondary (up to Grade 9 or Form 3)</li></ol>		
	Circle One	<ol><li>Senior secondary (up to Grade 12 or Form 5)</li></ol>		
	Ino mwakagolela mubbuku nzi?	5. Higher		
		888. Don't Know		
		999. No Response		
Q149	How many total years of education did you	# Years Completed		
	attend?	Don't Know	88	
	Ino mwakaiya myaka yongaye kucikolo?	No Response	99	

QUESTIO	NS & FILTERS				DK	NR	SKIP TO
Please fil	l in the following detail	s			•		
Member ID	Q150 Name of Household member Izina Iya omwe, omwe mbomukkala limwi	Q151 Sex of HH member 1 = Male 2 = Female Mbasankwa na mbakaintu?	Q152 Age in completed years bali amwaka na Mwezi yongaye?	Q153 Occupation of HH member Babeleka mulimo nzi [USE OCCUPATION RESPONSE CODES PROVIDED BELOWI			
1					888	999	
2					888	999	
3					888	999	
5					888	999	
6					888	999	
7					888	999	
8					888	999	
9					888	999	
10					888	999	
11					888	999	
12					888	999	
13					888	999	
14					888	999	
15					888	999	
16					888	999	

17							00	00	000		
10							00	00	333	-+	
10							00	20	333		
19							88	88	999		
20							88	88	999		
	OCCUPATION RESPONSE CODE	s									
	1 WORK ON A FAMILY	FARM		6	EMPLOYED C	UTSIDE THE FA	AMILY FAR	М			
	2 RUNNING A BUSINES	S/SELF EM	PLOYED	7	FULLTIME HO	USEWIFE					
	2 FULLTIME STUDENT			0	OTHER (SPEC				-		
				3		2017		_	_		
	4 100 YOUNG TO WOR	KK									
	5 TOO OLD TO WORK										
INCOME	& SOURCES		[W]	RITE S	OURCE OF INC	COME1					
0154 V	What are the three major sources of	1	1				[ ]	8	88	999	
	OUSEHOLD income starting with the m	nost 🖸	2				[ ]	8	88	999	
;	mortant?	1000	2					8	88 0	999	
	linzila nzi nzvomuhelesva kanati-zvotati	Ne kuti	·		0056					555	
	nuiane mali akuhelesva amukwasvi wani	u2		<u>. 1</u>		2 Thind					
	najano manakaborooya amakwabyi wan	<i>a</i> .		SL 4	2 Second	Jinira					
Q155 E	)o you have a bank account?		1. YES		2. NO						
FOOD S	SECURITY										
Q156	What were the major food crops th	at the HOUS	EHOLD produ	iced a	nd consumed in	the 2004/05 far	ming seaso	n?	888	999	
	[LIST UP TO FOUR]						-				
	Ino zvisvango nzi zipati pati zvomw	akatebula ak	ubelesya kuly	a mub	utebuzi bwamu i	2005?			888	999	
			WDITE A	Now							
	FOOD ITEM		WRITEA	NOVE						+	_
	FOODTIEM		QUA	YIIIY	ONSUMED	COSTIFPU	RCHASED		000	000	
	1		<u> </u>			<u> </u>			888	333	
	2		[			L			888	999	
	J		[			[			000	333	
0157	4					[			888	999	
Q157	4 How many whole/square meals	did you ea	t yesterday?			[ [			888 888 888	999 999 999	
Q157	4 How many whole/square meals Ino mwakaiya ziindi zyongaye j	ilo?	t yesterday?						888	999 999 999	
Q157 Q158	4. How many whole/square meals Ino mwakalya ziindi zyongaye j How long did the food crops that you	 s did you ea iilo?	t yesterday?				]	888	888 888	999 999	IF '2'
Q157 Q158	4. How many whole/square meals <i>Ino mwakalya ziindi zyongaye j</i> How long did the food crops that you harvested in the past year last?	did you ea iilo?	t yesterday?					888	888	999 999 999 999	IF '2' SKIP
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Q157 Q158	4. How many whole/square meals Ino mwakalya ziindi zyongaye j How long did the food crops that you harvested in the past year last? Ino cakulya ncomwakatebude mwaka wainda mwakalya ciindi cilamfu buti nociyakumana?	illo?	t yesterday? SS THAN 12 ONTHS MONTHS					888	888 888	999 999 999 999	IF '2' SKIP TO Q118
Q157 Q158 Q159	S. How many whole/square meals Ino mwakalya ziindi zyongaye j How long did the food crops that you harvested in the past year last? Ino cakulya ncomwakatebude mwaka wainda mwakalya ciindi cilamfu buti nociyakumana? If the food you harvested lasted less	illo?	t yesterday? SS THAN 12 DNTHS MONTHS	mone	]			888	888 888	999 999 999 999 999	IF '2' SKIP TO Q118
Q157 Q158 Q159	S	a did you eat illo? 1 LE 2 12 1 Bo 2 G	t yesterday? SS THAN 12 ONTHS MONTHS wught with own iven food by	mone				888	888 888	999 999 999 999 999	IF '2' SKIP TO Q118
Q157 Q158 Q159	J.     How many whole/square meals     Ino mwakalya ziindi zyongaye j     How long did the food crops that you     harvested in the past year last?     Ino cakulya ncomwakatebude     mwaka wainda mwakalya ciindi     cilamfu buti nociyakumana?     If the food you harvested lasted less     than 12 months, what was your main     source of food after your harvest ran	a did you ea illo? 2 12 1 Bo 2 G re	t yesterday? ISS THAN 12 ONTHS MONTHS Wought with own iven food by elatives or neig	mone				888	888 888 888 3	999 999 999 999 999	IF '2' SKIP TO Q118
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Q157 Q158 Q159	4	a did you eat illo? 1 LE M( 2 12 2 12 1 Bo 2 G re 3 E: cr	t yesterday? SS THAN 12 DNTHS MONTHS wught with own iven food by latives or neig xohanged cas rops for food	mone				888	3	999 999 999 999 999	IF '2' SKIP TO Q118
Q157 Q158 Q159	S	a did you eat illo? 1 LE 2 12 2 12 1 Bo 2 G re 3 Et 5 4 G	t yesterday? ESS THAN 12 DNTHS MONTHS MONTHS wught with own iven food by schanged cas xchanged cas iven food by iven food by	mone	]			888	888 888 888 3	999 999 999 999 999	IF '2' SKIP TO Q118
Q157 Q158 Q159	A. How many whole/square meals Ino mwakalya ziindi zyongaye j How long did the food crops that you harvested in the past year last? Ino cakulya ncomwakatebude mwaka wainda mwakalya ciindi cilamfu buti nociyakumana? If the food you harvested lasted less than 12 months, what was your main source of food after your harvest ran out? Na cakulya ncomwakatebude ticakamana mwaka, ino cakulya	a did you eat illo? 1 LE 2 12 2 G 7 re 3 E cr 4 G	t yesterday? ISS THAN 12 DNTHS MONTHS MONTHS wight with own iven food by elatives or neig xchanged cas rops for food iven food by iven food by cod aid progra	mone hbour h	]  y s			888	888 888 888 3	999 999 999 999	IF '2' SKIP TO Q118
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Q157 Q158 Q159 HOUSE Q160 Q161 Q161	A.     How many whole/square meals     Ino mwakalya ziindi zyongaye j     How long did the food crops that you     harvested in the past year last?     Ino cakulya ncomwakatebude     mwaka wainda mwakalya ciindi     cilamfu buti nociyakumana?     If the food you harvested lasted less     than 12 months, what was your main     source of food after your harvest ran     out?     Na cakulya ncomwakatebude     ticakamana mwaka, ino cakulya     mwakalikucijanakuli nocakamana     ncomwakatebude?     HOLD EXPENDITURE     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys	a did you eat illo? 1 LE MC 2 12 2 12 1 Bo 2 G 7 re 3 E: 0 re 3 E: 0 re 3 E: 0 re 3 E: 0 re 0 re 3 E: 0 re 3 E: 0 re 0 re 3 E: 0 re 0 re 0 re 0 re 0 re 0 re 0 re 0 re	t yesterday? SS THAN 12 ONTHS MONTHS MONTHS MONTHS MONTHS iven food by latives or neig xchanged cas rops for food iven food by ood aid progra old exchanged usehold good in the last 12 e kucikolo mw. groceries in the e kucakulya m in the last 12 in the last 13 in the last 12 in the last 12 in th	mone hbour h s for fo month aka wa e last u waka u	y s od s (1YEAR)? imana? month 12 month wamana? o (1YEAD)22	s?		888	888 888 3 3 888 888 888 888 888	999 999 999 999 999 999 999 999 999 99	IF '2' SKIP TO Q118
Q157 Q158 Q159 HOUSE Q160 Q161 Q162	A.     How many whole/square meals Ino mwakalya ziindi zyongaye j How long did the food crops that you harvested in the past year last? Ino cakulya ncomwakatebude mwaka wainda mwakalya ciindi cilanfu buti nociyakumana? If the food you harvested lasted less than 12 months, what was your main source of food after your harvest ran out? Na cakulya ncomwakatebude ticakamana mwaka, ino cakulya mwakalikucijanakuli nocakamana ncomwakatebude? HOLD EXPENDITURE How much did your household spend Ino mumukwasyi wanu mwakabelesys How much did your household spend Ino mumu	did you eat ilo? 1 LE M( 2 12 2 12 1 Bo 2 G 7 re 3 E: 3 Cr 4 G 1 So re 3 E: 5 So ho 5 So ho 0 n education a mali ongaye on food and g	t yesterday? SS THAN 12 ONTHS MONTHS MONTHS MONTHS MONTHS iven food by latives or neig xchanged cas rops for food jiven food by ood aid progra odd progra odd progra odd progra odd progra odd progra in the last 12 <i>e kucikolo mw</i> . groceries in the <i>e kucikolo mw</i> . groceries in the <i>e kucikolo mw</i> . groceries in the <i>e kucikolo mw</i> .	mone hbourn h s for fo month aka wa e last n waka v month	s (1YEAR)? month 12 month wamana? s (1YEAR)?	s?		888 888 	888 888 3 3 888 888 888 888 888	999 999 999 999 999 999 999 999 999 99	IF '2' SKIP TO Q118
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Q157 Q158 Q159 HOUSE Q160 Q161 Q162 Q163 Q163	S	did you eat iilo? 1 LE 2 12 2 12 1 Bo 2 G 2 G 7 re 3 E: or 4 G 5 So 5 So 6 ho 5 so 6 mali ongaye 6 mali ongaye 9 mali ongaye 9 mali ongaye 9 mali ongaye	t yesterday? ISS THAN 12 ONTHS MONTHS MONTHS MONTHS MONTHS iven food by latives or neig xchanged cas rops for food by cod aid progras ld/exchanged good aid progras usehold good iven food by cod aid progras usehold good iven food by in the last 12 e kucikolo mw. groceries in th e kuckadelefa I electricity in e kubbadelefa	mone hbour h s for fo month aka wa e last u waka u waka tu ng'ano the last meent	s s s s s s s s s s s s s s	s? EAR)?? aka wamana?		888 888 888 1	888 888 3 3 888 888 888 888 888 888	999 999 999 999 999 999 999 999 999 99	IF '2' SKIP TO Q118
Q157 Q158 Q159 Q159 Q160 Q161 Q162 Q163 Q164	A.     How many whole/square meals Ino mwakalya ziindi zyongaye j How long did the food crops that you harvested in the past year last? Ino cakulya ncomwakatebude mwaka wainda mwakalya ciindi cilamfu buti nociyakumana? If the food you harvested lasted less than 12 months, what was your main source of food after your harvest ran out? Na cakulya ncomwakatebude ticakamana mwaka, ino cakulya mwakalikucijanakuli nocakamana ncomwakatebude? HOLD EXPENDITURE How much did your household spend Ino mumukwasyi wanu mwakabelesya How much did your household spend Ino mumukwasyi wanu mwakabelesya	illo? illo? 1 LE MC 2 12 1 Bo 2 G 7 G 3 E: 7 G 4 G 5 So 1 Nousing 2 mali ongaye on housing 2 mali ongaye on water and 2 mali ongaye on water and 2 mali ongaye on water and	t yesterday? ISS THAN 12 ONTHS MONT	mone hbour h s for fo month <i>aka wa</i> e last t waka v month ng'anc months	s s s s s s s (1YEAR)? mana? month 12 month wamana? s (1YEAR)?? months (1Y months (1Y) months (1Y) mont	s? EAR)?? aka wamana?			888 888 3 3 3 888 888 888 888 888 888 8	999 999 999 999 999 999 999 999 999 99	IF '2' SKIP TO Q118
Q157 Q158 Q159 Q159 HOUSE Q160 Q161 Q162 Q163 Q164	S	c did you eat illo? 1 LE MC 2 12 2 G 7 F 3 E 7 G 4 G 5 So 6 mali ongaye on food and a 7 mali ongaye on housing 9 mali ongaye on paraffin in 9 mali ongaye	t yesterday? SS THAN 12 ONTHS MONTHS MONTHS MONTHS MONTHS iven food by jatives or neig xchanged cas rops for food jiven food by ood aid progra- old/exchanged usehold goode in the last 12 <i>e kubkadelela</i> n the last 12 m <i>e kubkadelela</i> n the last 12 m <i>e kubkadelela</i>	mone hbour h s for fo month aka wa e last i waka v month ng'anc the last months i mwal	s is (1YEAR)? imana? month 12 month wamana? is (1YEAR)?? it 12 months (1)? it a amalayiti mw. (1YEAR)?? ka wamana?	s? EAR)?? aka wamana?			888 888 3 3 888 888 888 888 888 888 888	999 999 999 999 999 999 999 999 999 99	IF '2' SKIP TO Q118
Q157 Q158 Q159 Q159 Q159 Q159 Q160 Q161 Q162 Q163 Q164 Q165	A     How many whole/square meals     Ino mwakalya ziindi zyongaye j     How long did the food crops that you     harvested in the past year last?     Ino cakulya ncomwakatebude     mwaka wainda mwakalya ciindi     cilamfu buti nociyakumana?     If the food you harvested lasted less     than 12 months, what was your main     source of food after your harvest ran     out?     Na cakulya ncomwakatebude     ticakamana mwaka, ino cakulya     mwakalebude?     HOLD EXPENDITURE     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys     How much did your household spend     Ino mumukwasyi wanu mwakabelesys	c did you eat illo? 1 LE 2 12 2 12 1 Bo 2 G 7 re 3 E: 0 re 4 G 5 So 0 hou 0 no education 2 mali ongaye 0 no housing 0 mali ongaye 0 no paraffin ir 0 mali ongaye 0 no paraffin ir	t yesterday? t yesterday? SS THAN 12 DNTHS MONTHS MONTHS wight with own iven food by elatives or neig xchanged cas rops for food yelatives or neig xchanged cas rops for food good aid progra old/exchanged usehold good in the last 12 e kucakulya m in the last 12 e kubbadelela t e kubbadelela t e kubbadelela t the last 12 n e kucala palafin n the last 12 n	mone hbour h s for fo month <i>s for fo</i> month <i>s for fo</i> <i>s for fo</i> <i>s for fo</i>	s intervention of the second	s?			888 888 3 3 888 888 888 888 888 888 888	999 999 999 999 999 999 999 999 999 99	IF '2' SKIP TO Q118

Q166	How much did your household spend on medicines and hospital fees in the last 12 months (1YEAR)?	[]	888	999	
	lno mumukwasyi wanu mwakabelesya mali ongaye kubbadelela misamu akubbadela kucibbadela mwaka wamana?				
Q167	How much did your household spend on transport in the last 12 months (1YEAR)?? Ino mumukwasyi wanu mwakabelesya mali ongaye munyendo zyanumwaka wamana?	[]	888	999	

#### SECTION 1 CONTINUES NEXT PAGE>>>>

HOUSI	NG							
Q168	[ OBSERVE AND WRITE ANSWER, ONLY ASK IF YOU CAN'T TELL BY	1	Mud o	r cow d	ung	888	999	
	LOOKING ]	2	Concr	ete brin	ks	1		
	What is the wall material of the best house among the houses/buts occuried by	3	Iron s	heets		1		
	the members of your household?	4	Stone			1		
		5	Tiles			1		
		6	Wood			1		
		7	Grass	/poles				
		8	Other	(specify	)			
Q169	OBSERVE AND WRITE ANSWER, ONLY ASK IF YOU CAN'T TELL BY	1	Grass	/Straw/	hatch	888	999	
4,	LOOKING ] What is the roofing material of the best house among the houses/huts occupied			heets		888	999	
				Tiles Slates/concrete/cement			999	
							999	
	by the members of your household?	5	Wood/planks			888	999	
		6				888	999	
			Other	Other (specify)		888	999	
Q170	How many rooms or huts are occupied by all the members of your household?					888	999	
	Ino maanda abelesegwa abantu bamumukwasyi wanu amunzi aano ali ongaye?				_			
Q171	Does this house have a kitchen inside the house?			1	YES	888	999	
	lno ng'anda yanu iligisi nkikini mukati na?			2	NO	]		
Q172	How many chairs with backs are in this house? (Ino mujisi mipaando yongaye mung'anda vanu?)					888	999	
Q173	How many sofa sets are in this house? (Ino mujisi maseeti ongaye mung'anda yanu?)					888	999	
Q174	How many tables are in this house? Ino mujisi matebule ongaye mung'anda yanu?					888	999	
Q175	Do you have a domestic worker who is not related to the head of the household? Hena mulijisi mubelesi waang'anda utali bbululu wanu na?					888	999	

SOURC	E OF DRINKING WATER					
Q176	What is your main source of drinking water in the dry season?	CODE	SOURCE			
		1	Piped water within the communal	888	999	
	Ino muteka kuli meenda akubelesya ang'anda muciindi cacilimo?	2	Piped outside this community	888	999	
		3	A private well in the community	888	999	
		4	Water tank in the community	888	999	
		5	Pond/river/canal	888	999	
		6	Public well in the community	888	999	
		7	Other (specify)			
Q177	How far is the source of drinking water in the dry season?	1	Less than a km			
		2	1 – 3 Km			
		3	Above 3 km			
Q178	What is your main source of drinking water in the wet season?	1	Piped water within the communal	888	999	
		2	Piped outside this community	888	999	

		Ino muteka kuli meenda akubelesya ang'anda muciindi camainza?	3	A private well in the community	888	999	
			4	Water tank in the community	888	999	
			5	Pond/river/canal	888	999	
			6	Public well in the community	888	999	
			7	Other (specify)	888	999	
			1	Piped water within the communal			
1	Q179	How far is the source of drinking water in the wet season?	1	Less than a km			
			2	1 – 3 Km			
			3	Above 3 km			

#### SECTION 1 CONTINUES >>>>.

TYPE	OF TOILET FACILITY											
Q180	What is the type of toilet facility	in this house?	Flush lat	rine o	utside			1				
	Bushe icimbusu mwakwata pan	o n'ganda camusango	Flush lat	rine in	side the	e residence		2				
	shani?	2 2	Ordinary	Ordinary Pit latrine								
			VIP (Ven	P (Ventilated Improved Pit latrine)								
			Other (st	ecify)	)			5				
			None					6	888	9	399	
SOUR	E OF LIGHTING/INFORMATION	ACCESS										
Q181	What is the type of lighting in thi	is house?	Candle					1	888	99	99	
			Paraffin I	Paraffin lamp					888	99	99	
	lno mubelesya nzi kumunika mu	ung'anda?	Pressure	lamp				3	888	99	99	
	_		Generato	or .				4	888	99	99	
			Solar					5	888	99	99	
	Batter			ystem	ı			6	888	99	99	
	Electric			ý				7	888	99	99	
			Firewood	/Gras	s			8	888	99	99	
			Other (sp	ecify)	)							
COOK	NG UTENSILS											
Q182	What cooking/kitchen utensils d	oyou have? ( <i>Ino mujisi z</i> y	yakujikila zy	amus	yobonz	i?)						
	1.Metal pots/kettles			Ĺ			888		999			
	2.Charcoal stove			L_	]		888		999			
	3.Paraffin stove			Ĺ			888		999			
	4.Gas/electric stove			L_	]		888		999			
	5.Gas/electric oven			Ĺ			888		999			
	6.Free standing deep freezer			L_	]		888		999			
HOUSE	HOLD GOODS											
Q183	Do you have the following good:	s in your household?			Write N	umber		DK	NR		SKIP T	0
	Hena mulijisi mpansya eezyi mu	ing'anda yanu na?										
	1.TV	1. Yes 2. No		L_	]			888	999			
	3.Radio	1. Yes 2. No			]			888	999			
	4.Radio-cassette player	1. Yes 2. No		<u> [_</u>				888	999	_		
	5.Video recorder	1. Yes 2. No						888	999	_		
	6.Cell phone	1. Yes 2. No		<u> [_</u>	]			888	999	_		
	7.Fixed telephone line	1. Yes 2. No						888	999	_		
	8.Still camera	1. Yes 2. No		ļĻ_				888	999	_		
	9.Cassette player	1. Yes 2. No		L_				888	999			
	10.CD player	1. Yes 2. No		ļĻ_				888	999	_		
	11.Hi-ti music center	1. Yes Z. No			]			888	999	_		
	12.Video camera	1. Yes 2. No		<u>[</u>	]			888	999			
	13.Sewing machine	1. Yes 2. No		ļĻ_				888	999	_		
	14.Vacuum cleaner	1. Yes 2. No		ļĻ_	]			888	999			
	15.Electric iron	1. Yes 2. No		ļĻ_				888	999			
1	Tb.Car/pick-up	1. Yes 2. No		11	1			888	999			

	17.Motorcycle	1. Yes 2. No	[]	888	999	
	18.Bicycle	1. Yes 2. No		888	999	
	19.Truck/lorry	1. Yes 2. No		888	999	
Q184	How many motor vehicles do you	a have?		888	999	

## SECTION 2: CATTLE REARING BACKGROUND DATA

## (INSTRUCTIONS TO THE INTERVIEWER: LET RESPONDENT USE THE UNIT OF AREA/ VOLUME THEY ARE MOST FAMILIAR WITH, THEN USE THE CONVERSION TABLE PROVIDED TO CONVERT TO HECTARES/ APPROPRIATE VOLUME)

QN	QUESTIONS & FILTERS		WRITE HERE	DK	NR	SKIP TO
Q201	What is the total area of the farm? Ino nyika ampulazi yanu eeyi njimpati buti?		[]	888	999	
Q202	Do you graze cattle on your farm or you use communal grazing area?           1         Own farm         2         Communal land         3         Both           Hena ng'ombe zyanu zyicelela mumpulazi yanu antela mumacelelo acuundu coonse?			888	999	IF '2' GOTO Q204
Q203	If you use your own farm land, how big is your grazing farmland? Kuti na mubelesya mpulazi yanu, ino macelelo aaya mapati buti mumpulazi yanu?		[]	888	999	
	CATTLE INVENTORY	Nur	nber	DK	NR	SKIP TO
Q204	How many and what types of cattle did you own around this time last year? Ino mwakajisi ng'ombe zyongaye mbuli cecino ciindi mwaka wamana?	1.Heifers 2.Bulls 3.Steers 4.Cows		888 888 888	999 999 999	
Q205	How many calves were born in the past 12 months? Ino kwakazyalwa boombe bongaye mumyezi 12 yainda?	Males Females		888 888	999 999	
Q206	How many cattle died in the past 12 months? Ino kwakafwa ng'ombe zyongaye mumyezi 12 yainda?	1.Heifers 2.Bulls 3.Steers 4.Cows		888	999	
Q207	How many cattle did you purchase in the past 12 months? Ino mwakaula ng'ombe zyongaye mumyezi 12 yainda?	1.Heifers 2.Bulls 3.Steers 4.Cows		888	999	
Q208	Why did you buy cattle in the past 12 months? [MAY BE MORE THAN ONE - WRITE ALL THAT APPLY] 1. To increase the herd 2. To bring in new breeds 3. To meet sales demand/obligation 4. Other (specify)					
Q209	How many cattle were stolen in the past 12 months? Ino mwakabbidwa ng'ombe zyongaye mumyezi 12 yainda?	1.Heifers 2.Bulls 3.Steers 4.Cows		888	999	
Q210	How many cattle do you own now (including those you have hired out)? Ino mujisi ng'ombe zyongaye ono?	1.Heifers 2.Bulls 3.Steers 4.Cows		888	999	
Q211	How many cattle did you sell in the past 12 months (including those slaughtered & sold as meat)? Ino mwakasambala ng'ombe zyongaye mumyezi 12 yainda? [RECONCILE THE INVENTORY: STOCK A YEAR AGO, PLUS NET CHANGES, SHOULD EQUAL STOCK TODAY]	1.Heifers 2.Bulls 3.Steers 4.Cows		888	999	IF NONE, GO TO Q401

## SECTION 3: CATTLE SALES

Q.NO	QUESTIONS AND FILTERS		WRITE	ANSWER HERE	CO	DES	SKIP
					DK	NR	TO
			NAME O	E CATTLE BUYER	(circle)	(circle)	
Q345	Who were the major buyers of your cattle in the past 12	1	10.002.0		888	999	
	months?	2			888	999	
		3			888	999	
	Mbaani bakali kuula kapati ng'ombe zyanu mu 2005?	4			888	999	
0346	What type of buyer is this? [ASK FOR FACH BUYER		Buver 1: [	1	888	999	
40.0	LISTED ABOVE1		Buver 2: [	1	888	999	
	(Ino mbasikuula bamusvonzi?)	<b></b>	Buver 3: [		888	999	
	CODES		Buver 4: [		888	999	
	1 THE LEAD FIRM						
	2 A PROCESSOR						
	J A BRUKER						
0.017	4 A LOCAL TRADER				000	000	
Q347	How much cattle did you sell to each of the buyers	Buyer 1:	ļ		888	999	
	mentioned in Q301 in the past 12 months?	Buyer 2:	Ļ		666	999	
	las mustassantals as's arts announ luf situals same	Buyer 3:	ļ		888	999	
	ino mwakasambala ng ombe zyongaye kuli sikuula omwe, omwe?	Buyer 4:	L		888	999	
Q348	How many cattle were rejected by each of the buyers	Buyer 1:	1	1	888	999	
	mentioned in Q301 due to poor quality in the past 12	Buyer 2:	1	1	888	999	
	months?	Buyer 3:	[		888	999	
	(Ino ng'ombe zyongaye zyakakakwa kuli basikuula	Buyer 4:	1	1	888	999	
	akaambo kakutabakabotu?)						
Q349	How much money did you get from sales to each of the	Buyer 1:	L	]	888	999	
	buyers mentioned in Q301 in the past 12 months?	Buyer 2:	[]	]	888	999	
	Ino mwakasambala mali ongaye kuli omwe, omwe	Buyer 3:	[]		888	999	
	wabasikuula?	Buyer 4:	L		888	999	
Q350	What kind of payment agreement was made with each of	Buyer 1:	[]	]	888	999	
	the buyers mentioned in Q301?	Buyer 2:	L	]	888	999	
	CODES	Buyer 3:	[		888	999	
	1 Spot Payment 2 Contract Sale 3 Both	Buyer 4:	L		888	999	
	Ino mwakali kuulana buti aomwe, omwe wabasikuula?						
Q351	What was the major reason for selling?	1st Sale:	L		888	999	
	Ino ncinzi cipati cakapa kuti musambale ng'ombe?	2 nd	[		888	999	
	CODES	Sale:					
	1 Commercial 2 Emergency	3 rd Sale:	[		888	999	
	3 Raise cash for 4 Raise cash for medicals	4 th Sale:	[	]	888	999	
	school fees						
	5 Raise cash for 6 Other (specify)						
0.050	dowry	Ļ.,			000	000	
Q352	For the major buyer mentioned in Q301, what was the usual	place	Buyer 1:	ļ	888	999	
	where the cattle sales took place?		Buyer 2:	L	000	333	
	(no nkukui nkomwakali kusambalila ng ombe zyahu?)		Buyer 3:	ļ	000	999	
	1 At the form tradevision 2 At - L-their	<del></del>	Buyer 4:	L	000	323	
	3 At food lot						
	5 Dutekens 6 Madat						
0252	S Butchery 5 Market				000	000	
4333	For each puyer mentioned in QOUI, what was the average p	nce per	Burger 1:	METHOD AVE. PRICE	000	222	
	animal and the usual method you used to determine the pho	coran	Duyer I.				

	animal?				Buye	er 2:			888	999	
	(Ino myuulo mwakali kwiipanga buti?)						ſ	ir n			
	CODES				Buve	er 3:			888	999	
	1         Visual inspection         2         By weight           3         String measurement of girth         4         Sex						r .				
					_	4			000	000	+
	5 Off-take	6	Grades and standards Bu			er 4:			000	333	
	(Dressed weight)										
	7 Other (specify)							[]			
Q354	How satisfied are you with the major bu	iyers	of your cattle?	Buyer	1:	[]			888	999	
	Hena mwakakkutila but asikuula mupat	i?		Buyer	2:	[]			888	999	
	CODES			Buyer	3:	[		1	888	999	
	1 VERY SATISFIED			Buyer	4:	[			888	999	
	2 MODERATELY SATISFIED			Ĺ							
	3 NOT SATISFIED										

## SECTION 4: INPUT USAGE FOR CATTLE REARING

Q401	Did you use any DIP CHEMICALS in cattle rearing in the past 12 months?	3. Yes	888	999	IF 'NO' GO TO Q405
	Hena mwakabelesya camutunzya mubuluba mumainza amu 2004/05?	4. No			
Q402	If YES, how much? (Kuti na mwakabelesya, ino wakali munji buti?)	i[]	888	999	
Q403	Who was the major supplier of the Dip chemicals you used on cattle rearing?		888	999	
	SUPPLIER S (MAXIMUM OF TWO)	[]			
	1 2				
	Ino mbabani bakamusambalide camutunzya ngomwakabikka mubuluba bwanu?				
Q404	How much did you spend on buying DIP CHEMICALS?				
	Ino mwakabelesya mali ongaye kuula camutunzya?				
Q405	Did you use any SUPPLEMENTS/FEEDS in cattle rearing in the past 12 months?	1. Yes	888	999	IF 'NO' GO TO Q409
	Hena mwakabelesya misamu yakupompezya buuka mubuluba mumainza amu 2004/05?	2 No			
Q406	If YES, how much? (Kuti na mwakabelesya, ino wakali munji buti?)		888	999	
Q407	Who was the major supplier of the supplements/feeds you used on cattle rearing?		888	999	
	SUPPLIER S (MAXIMUM OF TWO)	[]			
	2				
- /0.0	Ino mbabani bakamusambalide musamu wabuuka ngomwakabikka mubuluba bwanu?				
Q408	How much did you spend on buying supplements/feeds?	·			
	Ino mwakabelesya mali ongaye kuula musamu wabuuka ooyu?				
Q409	Did you use any VACCINES in cattle rearing the past 12 months?	1. Yes	888	999	IF 'NO' GO TO Q413
0.440	Hena mwakabelesya musamu ujaya bwizu mubuluba bwanu mumainza amu 2004/05?	Z. NO	000	000	
Q410	If YES, how much? (Kuti na mwakabelesya, ino wakali munji buti?)	<u> </u>	888	999	
Q411	Who was the major supplier of the vaccines you used on cattle rearing?	L]	868	333	
	SUPPLIER'S (MAXIMUM OF TWO)				
	2				
0410	ino mbabani bakamusambalide musamu ujaya bwizu ngomwakabikka mubuluba bwanu?				
Q412	How much allo you spend on buying vaccines?	r 1			
	no mwakabelesya mali ongaye kuula musamu ujaya bwizu mubuluba ooyu?				
0/12	Did you use any HERDING SERVICES is settle reaction in the next 12 menths?	1 V	000	000	IE 'NO' CO TO OMA
Q415	Did you use any nervines in cattle rearing in the past 12 months?	1. Tes	000	555	IF NO GO TO Q410
0/1/	When was the major cumplice of the HEPDING SERVICES, you used 2	2. INU	888	999	
9414	SUDDUER S (MAXIMUM OF TWO)	1	500	333	
0415	How much did you spend on on HERDING SERVICES?	1		<u> </u>	
0416	Did you use any CATTLE SPRAYING SERVICES in cattle rearing in the past 12 months?		1 Yes	<u> </u>	IE 'NO' GO
3,110			2 No		TO 0419

Q417	Who was the major supplier of the CATTLE SPRAYING SERVICES you used ?					
Q418	How much did you spend on on paying for CATTLE SPRAYING SERVICES?		8	88	999	
Q419	Did you use any CATTLE TRANSPORTATION SERVICES in cattle rearing in the past 12 months?	1. YES 2. NO	8	88	999	
Q420	Who was the major supplier of the TRANSPORTATION SERVICES you used ?		8	88	999	
Q421	How much did you spend on paying for TRANSPORTATION SERVICES?		8	88	999	
0.400		1 1/50				15 (1)(2) (20)
Q422	Did you use any FEED LOT SERVICES in cattle rearing in the past one year?	1. YES 2. NO				TO Q425
Q423	Who was the major supplier of the FEED LOT SERVICES you used ? SUPPLIER S (MAXIMUM OF TWO)					
Q424	How much did you spend on paying for FEED LOT SERVICES?					
0.405		.4	8	88	999	15 (1)(2) (20)
Q420	Did you use any STOD SERVICES in cattle rearing in the past one year?	2. No	s )			TO Q428
Q426	Who was the major supplier of the STUD SERVICES you used ? SUPPLIER S (MAXIMUM OF TWO)					
Q427	How much did you spend on paying for STUD SERVICES?	L	- 8	88	999	
Q428	Did you use any ARTIFICIAL INSEMINATION SERVICES in cattle rearing in the past one year?	1. Ye 2. No	s			IF 'NO' GO TO Q431
Q429	Who was the major supplier of the ARTIFICIAL INSEMINATION SERVICES you used? SUPPLIER S (MAXIMUM OF TWO)					
	1 2					
		l				
Q430	How much did you spend on paying for ARTIFICIAL INSEMINATION SERVICES?	L	- 8	88	999	
Q431	Did you use any BANKING SERVICES in cattle rearing in the past 12 months?	1. Ye	s		Τ	IF 'NO'
		Z. INC	,			Q434
Q432	Who was the major supplier of the BANKING SERVICES you used ? SUPPLIER S (MAXIMUM OF TWO)					
0422						
Q455	THAT IS MENTIONED]	[	]	888	999	
	1. Borrowing 2. Paving for imports					
	3. Savings					
	4. Security of dissets					
- 15 -	5. Other (specify)					
Q434	Did you borrow money or got inputs on credit for cattle rearing in thelast 12 months? Hena kuli nkumwakweletede mali na kubweza loan kutegwa mulime buluba?	1. Yes 2. No		888	999	IF 'NO' GO TO

																Q436
Q435	Please tell n	ne where you got you	r credit and how much. [ASK	FOR TWO	MAJ	ORS	500	RCE	S]							
	Ndalomba n	undambile nkomwak	abweza chikwelete eeci alimw	vi ino mwal	kabwe	eza n	nalin	zi.	•							
	Code	Source of Credit	t	Amou	nt of	cred	it									
	1	Bank or Micro Fina	nce institution		[	1 1	1	1	1	1	1 1	1		888	999	
	2	Buyers of outputs			ĺ	1		1	1		1 1			888	999	
	3	Sellers of inputs			[	1		1	1		1 1	1		888	999	
	4	Informal sources				1		1	1		11			888	999	
Q436	Did you use	any INSURANCE PC	DLICY in cattle rearing in the p	ast 12 mor	nths?							1. 2.	Yes No			IF 'NO' GO TO Q436
Q437	Who was the SUPPLIER	e major supplier of the S (MAXIMUM OF TW 2	e INSURANCE SERVICES yo /O) !	ou used ?												
Q438	What type o 1. Fire 2. Thefty 3. Crop failu 4. Other (sp	f INSURANCE POLIC	Y did you have?									[		] 888	999	
Q439	Did you use	any PRIVATE VERT	ERINARY services in the pa	st 12 mont	hs?							1.YI 2.N	ES O			IF 'NO' GO TO Q442
Q440	Who was the SUPPLIER	e major supplier of th S (MAXIMUM OF TW 2	e PRIVATE VERTERINARY S / <b>O)</b> !	ERVICES	you k	ougł	nt?									
Q441	How much o	id you spend on buyi	ng private verterinary servic	es?								[		888	999	
	HIRE OF LA	BOUR	×. ,											*		SKIP TO
Q442	Did you hire 1 YES Hena kuli ni	any people to do any 2 NO mwaka njizide Bantu	v work related to cattle rearing kumugwasya mumilimo yakub	the past 1 bamba ngʻo	2 mor ombe	nths? na?	)					[		888	999	IF 'NO', GO TO Q501
Q443	If YES, how	many? (Na inzya,	bakali bongaye?)									[		888	999	
Q444	How many o	lays did they work in	TOTAL? (Ino bakabeleka ma	nzuba onga	ye?)							[		888	999	
Q445	How much o	nuch did you pay them in TOTAL? (Ino mwakababbadela mali ongaye?)														

## SECTION 5: MORBIDITY AND MORTALITY

NOR	BIDITY & MORTALITY					DK	NR	SKIP TO
How	many cattle suffered from foot & mouth d	liseas	e in the past 12 months?			888	999	IF 'ZERO' GO
(Ino r	ng'ombe zyanu zyongaye zyakacisidwe b	ulwa	i bwa mulomo amaulu mumwaka omwe					TO Q504
waind	ta?)							
What	did you do about the sick animals? (Ino	mwa	kazicitanzi kung'ombe zyakalikuciswa?)			888	999	
ΟΡΤΙ	ON CODES							
0	Nothing	1	Sought treatment from a government		[]			
	-		veterinary clinic					
2	Sought treatment from a private	3	Bought medicines					
	veterinary clinic		-					
4	Other (specify)							
How	many cattle died of foot and mouth disea	se in	the past 12 months?			888	999	
Ino n	g'ombe zyongaye zyakafwa kubulwazi bi							
How	many cattle suffered from corridor diseas	e in t	he past 12 months?					IF ZERO' GO TO
lno n	g'ombe zyongaye zyakaciswa bulwazi bv	vakuo	lenkete mwaka omwe wainda?		[_]_[_]_]			Q507
	How I Ino r. What OPTI 0 2 4 How I no n.	Tow many cattle suffered from foot & mouth d           Ino ng'ombe zyanu zyongaye zyakacisidwe b           vainda?)           What did you do about the sick animals? (Ino           OPTION CODES           0           Nothing           2           Sought treatment from a private veterinary clinic           4         Other (specify)           How many cattle died of foot and mouth disea no ng'ombe zyongaye zyakafwa kubulwazi bi now ray cattle suffered from corridor diseas no ng'ombe zyongaye zyakaciswa bulwazi bi	Now many cattle suffered from foot & mouth diseas           Ino ng'ombe zyanu zyongaye zyakacisidwe bulwaz           vainda?)           What did you do about the sick animals? (Ino mwa           OPTION CODES           0           0           Nothing           1           2           Sought treatment from a private veterinary clinic           4           Other (specify)           How many cattle died of foot and mouth disease in no ng'ombe zyongaye zyakafwa kubulwazi bwamu now rany cattle suffered from corridor disease in ti no ng'ombe zyongaye zyakaciswa bulwazi bwakudowaku	Now many cattle suffered from foot & mouth disease in the past 12 months?         Ino ng'ombe zyanu zyongaye zyakacisidwe bulwazi bwa mulomo amaulu mumwaka omwe wainda?)         What did you do about the sick animals? (Ino mwakazicitanzi kung'ombe zyakalikuciswa?)         OPTION CODES         0       Nothing         1       Sought treatment from a government veterinary clinic         2       Sought treatment from a private veterinary clinic         4       Other (specify)         How many cattle died of foot and mouth disease in the past 12 months?         no ng'ombe zyongaye zyakafwa kubulwazi bwamulomo amaulu mumwaka omwe wainda?         How many cattle suffered from corridor disease in the past 12 months?         no ng'ombe zyongaye zyakafwa kubulwazi bwakudenkete mwaka omwe wainda?	Adv many cattle suffered from foot & mouth disease in the past 12 months?         Ino ng'ombe zyanu zyongaye zyakacisidwe bulwazi bwa mulomo amaulu mumwaka omwe wainda?)         What did you do about the sick animals? (Ino mwakazicitanzi kung'ombe zyakalikuciswa?)         OPTION CODES         0       Nothing         1       Sought treatment from a government veterinary clinic         2       Sought treatment from a private veterinary clinic         3       Bought medicines         4       Other (specify)         How many cattle died of foot and mouth disease in the past 12 months?         no ng'ombe zyongaye zyakafwa kubulwazi bwamulomo amaulu mumwaka omwe wainda?         How may cattle suffered from corridor disease in the past 12 months?         no ng'ombe zyongaye zyakafwa kubulwazi bwakudenkete mwaka omwe wainda?	Adv many cattle suffered from foot & mouth disease in the past 12 months?       []         Ino ng'ombe zyanu zyongaye zyakacisidwe bulwazi bwa mulomo amaulu mumwaka omwe wainda?)       []         What did you do about the sick animals? (Ino mwakazicitanzi kung'ombe zyakalikuciswa?)       []         OPTION CODES       1       Sought treatment from a government veterinary clinic         2       Sought treatment from a private 3       Bought medicines         4       Other (specify)	Adv many cattle suffered from foot & mouth disease in the past 12 months?       []       888         Ino ng'ombe zyanu zyongaye zyakacisidwe bulwazi bwa mulomo amaulu mumwaka omwe wainda?)       []       888         What did you do about the sick animals? (Ino mwakazicitanzi kung'ombe zyakalikuciswa?)       888         OPTION CODES       []       888         0       Nothing       1       Sought treatment from a government veterinary clinic       888         2       Sought treatment from a private veterinary clinic       3       Bought medicines       888         4       Other (specify)       1       sought medicines       888         no ng'ombe zyongaye zyakafwa kubulwazi bwamulomo amaulu mumwaka omwe wainda?       888       888         no ng'ombe zyongaye zyakafwa kubulwazi bwakudenkete mwaka omwe wainda?       []       []	Now many cattle suffered from foot & mouth disease in the past 12 months?       []       888       999         Ino ng'ombe zyanu zyongaye zyakacisidwe bulwazi bwa mulomo amaulu mumwaka omwe wainda?)       []       888       999         What did you do about the sick animals? (Ino mwakazicitanzi kung'ombe zyakalikuciswa?)       0       888       999         OPTION CODES       1       Sought treatment from a government veterinary clinic       888       999         2       Sought treatment from a private veterinary clinic       3       Bought medicines       []       888       999         4       Other (specify)       1       Sought treatments? mong'ombe zyakafwa kubulwazi bwamulomo amaulu mumwaka omwe wainda?       888       999         non g'ombe zyongaye zyakafwa kubulwazi bwamulomo amaulu mumwaka omwe wainda?       888       999

Q505	What did you do about the sick animals?			888	999	
	Ino mwakazicitanzi kung'ombe zyakalikucis	wa?				
	0 Nothing	1 Sought treatment from a government	[]			
	2 Sought treatment from a private veterinary clinic	3 Bought medicines				
Q506	How many cattle died of corridor disease in	the past 12 months?	[]	888	999	
0507	Ino ng'ombe zyongaye zyakafwa kubulwazi	i bwadenkete mumwaka omwe wainda?				IF 7500 00 TO
4907	Ino ng'ombe zyongaye zyakaciswa bulwazi wainda?	bwa kuzuzuma akuzwa bulowa mumwaka omwe				Q510
Q508	What did you do about the sick animals? () OPTION CODES	Ino mwakazicitanzi kung'ombe zyakalikuciswa?)		888	999	
	0 Nothing	<ol> <li>Sought treatment from a government veterinary clinic</li> </ol>	[]			
	2 Sought treatment from a private veterinary clinic	3 Bought medicines				
Q509	How many cattle died of anthrax disease in Ino ng'ombe zvongave zvakatwa kubulwazi	the past 12 months?		888	999	
Q510	How many cattle suffered from lumpy skin d	disease in the past 12 months?				IF ZERO' GO
	the past 12 months?					TO Q513
	Ino ng'ombe zyongaye zyakaciswa bulwazi	bwa cinkwankwa mumwaka omwe wainda?				
Q511	What did you do about the sick animals? (// OPTION CODES	no mwakazicitanzi kung'ombe zyakalikuciswa?)		888	999	
	0 Nothing	1 Sought treatment from a government veterinary clinic	[]			
	2 Sought treatment from a private veterinary clinic	3 Bought medicines				
Q512	How many cattle died of lumpy skin disease	e in the past 1 year?		888	999	
0.540	Ino ng'ombe zyongaye zyakafwa kubulwazi	bwacinkwankwa mumwaka omwe wainda?				15 (7500) 00
Q513	Ino ng'ombe zyongaye zyakaciswa bulwazi	the past 12 months? bwamuni mumwaka omwe wainda?				TO Q616
Q514	What did you do about the sick animals? (In OPTION CODES	no mwakazicitanzi kung'ombe zyakalikuciswa?)		888	999	
	0 Nothing 1	Sought treatment from a government veterinary clinic				
	2 Sought treatment from a 3 private veterinary clinic	Bought medicines				
Q515	How many cattle died of liver fluke disease	in the past 12 months?		888	999	
	Ino ng'ombe zyongaye zyakafwa kubulwazi	i bwamuni mumwaka omwe wainda?				
Q516	How many cattle suffered from CBPP disea Ino ng'ombe zyongaye zyakaciswa bulwazi	ise in the past 12 months? bwaCBPPmumwaka omwe wainda?				TO Q619
Q517	What did you do about the sick animals? (// OPTION CODES	no mwakazicitanzi kung'ombe zyakalikuciswa?)		888	999	
	0 Nothing 1	Sought treatment from a	[]			
	2 Sought treatment from a 3	Bought medicines				
Q518	How many cattle died of CBPP disease in th	he past 12 months?	[]	888	999	
	Ino ng'ombe zyongaye zyakafwa kubulwazi	bwaCBPPmumwaka omwe wainda?				15 (7550) 0.0
Q519	How many cattle suffered from OTHER dise Ino ng'ombe zyongaye zyakaciswa bulwazi	ease in the past 12 months? bwaCBPPmumwaka omwe wainda?				TO Q601
Q520	What are the names of these OTHER disea	ises your cattle suffered from?	VRITE NAMES OF DISEASES	888	999	
		-				
		-				

Q521	Wha	t did you do about the sick animal	s? (h	no mwakazicitanzi kung'ombe zyakaliki	uciswa?)			888	999	
_				ι,	,					
			1.		1					
	0	Nothing	1	Sought treatment from a						
				government veterinary clinic						
	2	Sought treatment from a	3	Bought medicines						
		private veterinary clinic		-						
Q522	How	many cattle died of OTHER disea	ises i	n the past 12 months?			[]	888	999	
	Ino I	ng'ombe zyongaye zyakafwa kubu	lwazi	bwaCBPPmumwaka omwe wainda?						
Q523	Wha	t are the names of these OTHER	disea	ses your cattle died of?		W	RITE NAMES	888	999	
						OF	F DISEASES			
					Ť			1		
						_				
						_				
						-				
						_				
L						_				

## SECTION 6: AVAILABILITY, ACCESS AND USE OF INFORMATION/COMMUNICATION SERVICES

0601	How often do you use a cell abone, whether yours or someone also's to receive information, whether				
0,001	Ne voice i do you use a ceri prone, whether you's or someone elses, to receive mormation, whether				
	Swis of voice, that is useful in calle realing?				
	1 Never 2 Sometime 4 otten				
Q602	How often do you use the Internet to send or receive information useful in cattle rearing?	L]	888	999	
	1 Never 2 Occasionally 4 often				
Q603	Have you listened to radio programmes broadcasted on agriculture in the past two weeks?	[]	888	999	
	1 YES 2 NO				
Q604	Are there farmer information centres in this or nearby community?	[]	888	999	IF 'NO'
					GOTO Q701
	1 YES 2 NO				
Q605	What type of information is provided by the information centre(s)?	1	888	999	
	[MAY BE MORE THAN ONE - WRITE ALL THAT APPLY]	L1			
	1 Information on new or better methods of farming				
	2 Information on hetter methods of managing farm enterprises				
	3 Information on input markets				
	4 Information on output markets				
	5 Other (snecify)				
2020	How is the information deseminated?		888	999	
9000	[May be more than one - write all that apply]		000		
	1 By word of mouth				
	2 Through written material				
	3. Through radio				
	4 Through cell phones				
	5. Through c mail				
0607	U. milough e-mail Has the information been beleful to you?		000	000	
2007	has the miormation been helpful to you?		000	333	
		:L			

## SECTION 7: TECHNICAL ADVICE

TECHNIC	AL ADVICE	DK	NR	Skip to q
Q701	Have you received any advice or training or information in LIVESTOCK farming in the past 12 months?           1         YES         2         NO           Hena mwakatambula malailile, na lwiiyo antela mulumbe kujatikizya buvubi bwang'ombe?	888	999	IF 'NO' GO TO Q801

Q702	Please te	ell me the sources of the training you have received in the past 12 months and	how useful the advice	888	999	
	training of	or information that you received				
	Ndalomb	a mundaambile nkomwakajana lwiiyo lwainoino awa abubotu bwa malailile, m	ulumbe a lwiiyo			
	ndomwa	katambula?				
	Code	Source of Training, Advice or Information	Usefulness of TA			
			1 VERY			
			USEFUL			
			2 MODERATELY			
			USEFUL			
			3 NOT USEFUL			
	[1]	Ministry of Agriculture Extension officers		888	999	
	[2]	Other extension officers		888	999	
	[3]	Suppliers of chemicals and fertilizers		888	999	
	[4]	Shops supplying inputs		888	999	
	[5]	Seminars and meetings		888	999	
	[6]	ZAMBEEF/ Other Agribusiness company		888	999	
	[7]	Radio, TV		888	999	
	[8]	Phone		888	999	
	[9]	Internet		888	999	
	[10]	PROFIT		888	999	
	[11]	Posters		888	999	
	[12]	News papers, magazines		888	999	
	[13]	Producer association		888	999	
	[14]	Buyers of crops		888	999	
	[15]	Other (Specify)		888	999	

## SECTION 8: GROUP DYNAMICS

Q801	Are there farmer groups in this community?	GROUP				CO	DES	SKIP TO
				1. YES		DK	NR	
								IF 'NO' GO TO
				2. NO				Q909
0000	Kan what are their names 0	Crown 4:				000	000	
Q802	It so, what are their names?	Group 1:				 888	999	
		Group 2:	ļ			 888	999	
		Group 3:				 888	999	
		Group 4:				 888	999	
Q803	What type of group is [NAME OF GROUP]	? [ASK		Group 1:	[]	888	999	
				Group 2:	[]	888	999	
	FOR EACH GROUP MENTIONED IN Q901]			Group 3:	[ ]	888	999	
						888	999	
				Group 4:	[]			
	CODES							
	1 A marketing econorative							
	2. A huver econorative							
	2. A buyer cooperative							
	3. A marketing/buyer cooperative							
	4. A producer association							
	5. Other (specify)							
			GROUP					
Q804	Are you a member of [NAME OF GROUP]	? ASK	Group 1:			888	999	
	FOR EACH GROUP MENTIONED IN Q801		Group 2:			888	999	
			Group 3:			888	999	
			Group 4:		[]	888	999	

Q805	What benefits are you currently getting from being a member of [NAME OF GROUP]? ASK FOR EACH	Group 1:	1	888	999	
	GROUP MENTIONED IN Q804]			888	999	
	[WIAY BE MORE THAN ONE - WRITE ALL THAT APPLY]	Group 2:		000		
	3. Easy access to inputs	oroup 2.				
	10. Easy access to credit			888	999	
	12 Easy access to extension services	Group 3:				
	12. Easier to sell farm produce					
	14 Engine to production and market information			888	999	
	14. Easier to negotiate for good price	Group 4:				
	15. Edisler to Organize transport					
0.000	10. Other (specify):			000	000	
Q806	What benefits would you like to get from being a member of	0		000	222	
	[INAME OF GROUP]? [ASK FOR EACH GROUP	Group 1:	r 1			
	MENTIONED IN Q804]			888	999	
	[MAY BE MORE THAN ONE - WRITE ALL THAT APPLY]	Group 2:				
	3. Easy access to inputs	oroup 2.	[]			
	10. Easy access to credit			888	999	
	12 Easy access to extension services	Group 3:				
	12. Easier to sell farm produce					
	Source of production and/or market information			888	999	
	14. Easier to negotiate for good price	Group 4:				
	10. Easier to Organize transport					
	To. Other (specify):					
0907	As a member of [NAME OF GROUP] how often	Group 1:		888	999	
9001	have you attended group meetings in the past 6 months?	Group 7:		899	900	
	Lack FOR EACH OROUD MENTIONED IN OROUT	Group 2:		888	999	
	[ASK FOR EACH GROUP MENTIONED IN GOU4]	Group J.		000	999	
	4. Alwavs	Group 4.		000	555	
	5. Sometimes					
	6. Rarely					
Q808	Why are you not a member of [NAME OF GROUP] .?	1		888	999	
	[ASK FOR EACH GROUP NOT MENTIONED IN Q804]	Group 1:	r 1			
				888	999	
	<ol> <li>Too busy to attend meetings</li> </ol>	Group 2:	[ ] [			
	<ol><li>I see no reason to join</li></ol>			888	999	
	<ol><li>Too many restrictions on membership</li></ol>	Group 3:				
	<ol><li>Short of money to pay for what they need</li></ol>			888	999	
	<ol><li>Lack of info or not knowing how to begin.</li></ol>	Group 4:				
	<ol><li>Other (specify)</li></ol>					
Q809	Did you put resources together with one or more other farmer	s in order to bu	iy agricultural			
	inputs?					
					1	
	1 YES 2 NO					
Q810	Did you jointly acquire any services with one or more other fai	rmers in the 20	04/5 farming	888	999	
	season?		L			
					1	
	1 . YES 2 . NO					
Q811	Did you join up with one or more other farmers for the sake of	selling your pr	oduce in the	888	999	
	2004/05 farming season?		Ĺ			
	1 YES 2 NO				1	

#### SECTION 9: CROPS

STARTS	NEXT PAGE >>>>							
Q.NO	QUESTIONS AND FILTERS	CODES		WRITE	EIN	CO	DES	SKIP TO
4		A) CASH CROP	AV			DK	NR	
0901	How much of the total area of the farm was used to plant the major	1 Maiza	Б	r	1	888	900	
0,501	now much of the total area of the farm was used to plant the major	2. Conversion to		L	<u> </u>	000	000	
	crops last laming season?	2. Groundhuis	+	r		888	999	
		J. Deans	+	<u> </u>		888	900	
	lno mwakabelesva nvika ipati buti kusvanga zvisvango zvipati pati	4. Surnower	+	r		888	900	
	mumainza amu 2004/05?	6 Tohaooo	+	r		888	900	
		7 Rice	+	r		888	900	
		8 Sovahum	+	r		888	900	
		9 Millet	+	r		888	999	
		10 Other	+	<b>-</b>		888	999	
		(specify)		r	1	000		
0.902	How much of the major cron(s) did you harvest last farming season	1 Maize	+	[ [	<u></u> i	888	999	
9,002	(2005)?	2 Groundnuts	+	[ [		888	999	
	Ino butebuzi bwakali buti kuzwa kuzvisvango zvipati pati	3 Beans	+	[ [		888	999	
	mubutebuzi bwamu 2005?	4 Sunflower	+	r	<u></u> i	888	999	
		5 Cassava	+	[ [		888	999	
		6 Tobacco	+	[		888	999	
		7 Rice	+	[ ]		888	999	
		8 Sorahum	-	[		888	999	
		9 Millet	+	[ ]		888	999	
		10 Other	+	L		888	999	
		(specify)		ſ	1	000		
Q903	How much money did you get from the major crop sales last farming	1. Maize		[	<u></u> i	888	999	
	season?	2. Groundnuts	+	[	1	888	999	
	lno mwakajana mali ongaye nomwakasambala butebuzi bwanu bwa	3. Beans	1	[	1	888	999	
	zyisyango zyipati pati mu 2005?	<ol><li>Sunflower</li></ol>		[	1	888	999	
		5. Cassava		[	1	888	999	
		6. Tobacco		[		888	999	
		7. Rice		[	j	888	999	
		8. Sorghum		[	1	888	999	
		9. Millet		[	1	888	999	
		10 Other		[	1			
		(specify)						
Q904	Did you use any irrigation on any of the crops in the 2004/2005		0 = 1	10	1=			IF 'NO' GO
	farming season?				YES			Q1001
		1. Maize				888	999	
		2. Groundnuts				888	999	
		3. Beans				888	999	
		<ol><li>Sunflower</li></ol>				888	999	
		5. Cassava				888	999	
		6. Tobacco				888	999	
		7. Rice				888	999	
		8. Sorghum				888	999	
		9. Millet				888	999	
		10 Other	1					
		(specify)	1					

Q905 If you used irrig crop you irrigat CODES 1 Bucket	gation last year, what was the main irrigation type that you used FOR EACH ted?           2         Treadle         3         Electric         4         Diesel         5         Other           pump         motor         pump         driven         1         Diesel         5         Other	1. Maize 2. Groundnuts 3. Beans 4. Sunflower 5. Cassava 6. Tobacco	RITE CODE 888 888 888 888 888 888 888 8	999 999 999 999 999 999 999
	i pump i i	7. Rice 8. Sorghum 9. Millet 10 Other (specify)	888 888 888	999 999 999

Q906	If you used irrigation last year, what was the main source of irrigation water FOR EACH		WRITE CODE		
	crop you irrigated?	1. Maize		888	999
		2. Groundnuts		888	999
		3. Beans		888	999
		<ol><li>Sunflower</li></ol>		888	999
	CODES	<ol><li>Cassava</li></ol>		888	999
	1 River/stream 2 Dam/weir 3 Well/borehole 4 Other	6. Tobacco		888	999
		7. Rice		888	999
		8. Sorghum		888	999
		9. Millet		888	999
		10 Other			
		(specify)			

## SECTION 10: LIVESTOCK AND FARM ASSET OWNERSHIP

									DK	NR	SKIP TO	
Q1001	Do yo	u own any OTHER livest	ock?	ock? 1. Yes; 2. No				888	999	IF 'NO' GO		
	Hena	mulijisi misyobo imbi yab	panyama bayubidwe na?								TO Q1004	
Q1002	If yes,	please tell me the types	and numbers of live	estock y	ouown							
	Na in:	zya, ndalomba kuti mund	laambile misyobo an	ambile misvobo amweelwe wabanvama banu								
· ·	Lives	tock	Number owned	DK	DK NR Livestock Number			DK	NR	SKIP TO		
								owned				
	1	Chickens		888	999	7	Guinea fowls		888	999		
	2	Donkey		888	999	8	Ducks		888	999		
· ·	3	Sheep		888	999	9	Pigeons		888	999		
· ·	4	Goats		888	999	10	Other [specify]		888	999		
	5	Pigs		888	999							
	6	Rabbits										
Q1003	Do yo	u own any farm assets?	•				1. Yes	; 2. No	888	999		
	Hena	mulijisi zyibelesyo zyom	ubelesya mubulimi k	wanu n	a?							
Q1004	If yes,	please tell me the types	and numbers of far	m asset	s you ow	'n						
	Na in:	zya, ndalomba mundaam	ibile misyobo alimwi	amwee	lwe wazj	yibeles	yo zyanu?					
	Asset	1	Number owned	DK	NR	Asse	et	Number				
								owned				
	1	Dip Tank		888	999	5	Ox-carts		888	999		
	2	Sprayer		888	999	6	Tractors		888	999		
	3	Ridgers		888	999	7	Rippers		888	999		
	4	Harrows		888	999	8	Other [specify]		888	999		

#### PROFIT BASELINE SURVEY RETAIL SUB-SECTOR QUESTIONNAIRE FOR USE IN MUKUSHI AND CHIBOMBO DISTRICTS OF ZAMBIA USAID / DAI / PROFIT MAY/JUNE 2006 16.05.06

FIRST, MAKE SURE YOU HAVE THE RIGHT RESPONDENT. THE ENUMERATOR MUST INTERVIEW THE PERSON DEALING WITH INPUT PROCUREMENT. THE RESPONDENT SHOULD BE THE PERSON IN CHARGE AND ABLE TO SPEAK AUTHORITATIVELY ABOUT FARM ACTIVITIES. DO NOT INTERVIEW FARM LABORERS OR YOUNG BOYS OR GIRLS.

Introduction: "My name is..... I'm currently working on a study of the PROFIT programme. We're interviewing people here in [name of community & village] in order to get information about Cotton related issues. The information obtained will be used to assess the impact of the implementation of PROFIT as a programme. All answers will be seen only by the research team and will be kept fully confidential.

Have you been interviewed in the last five days for this study? IF THE RESPONDENT HAS BEEN INTERVIEWED BEFORE, DO NOT INTERVIEW THIS PERSON AGAIN. Tell them you cannot interview them a second time, thank them, and end the interview. If they have not been interviewed before, conduct the interview.

Always politely ask the interviewee for permission to interview him/her. Only after they have consented to be interviewed should you begin to ask questions.

001 Questionnaire Identification Number

002 Team Code |\_\_\_|\_\_|

003 District		[31 CHIBOMBO]	[32 MUKUSHI]
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004 Area/ Community Code |\_\_\_\_ | and Area Name \_\_\_\_\_

005 Household Code

006 Respondent Code |\_\_\_\_

### IMPORTANT DETAILS

Interviewer's name and ID number	
Farmer's name	
Contact address	
Telephone number	
Interview date	
Indicate whether participant or control	
If participant, date began participating	
---	---
Location: district; community; village	
Person who showed you where to go with telephone	
number or address	
Description of how to reach the farm from the nearest	well-known town or point, so that a stranger can find it. Include nearest
churches, schools or other landmarks.	, , , , , , , , , , , , , , , , , , , ,
Detailed skotch man of the location of the farm	
Detailed sketch map of the location of the farm	

#### Incomplete Interviews Log

	Visit 1	Visit 2	Visit 3	Visit 4
Date				
Interviewer				
Comment				

Comment codes: Appointment made for later today 1; Appointment made for another day 2; Refused to continue and no appointment made 3; Other (Specify) 4.

#### Questionnaire Summary Information

Section	Name of Section	Number of Questions
Section 0	Questionnaire Identification Data	06
Section 1	Household Characteristics	40
Section 2	Retailer Promotional Activities & Input Supply	34
Section 3	Other Crops Background Data	06
Section 4	Farming Technology, Practices	02
Section 5	Groups Dynamics	14
Section 6	Livestock and Farm Asset Ownership	04
Total numb		

INTERVIEW START TIME: \_\_\_\_\_

INTERVIEW END TIME: \_\_\_\_\_

SUPERVISOR SIGNATURE: \_\_\_\_\_

#### SECTION 1: HOUSEHOLD CHARACTERISTICS

Now I am going ask you a number of things about your household.

# [TELL THE RESPONDENT THAT THE HOUSEHOLD IS DEFINED AS ALL THE RELATED PEOPLE, INCLUDING BABIES BUT EXCLUDING SERVANTS, ETC.) WHO USUALLY LIVE TOGETHER AND EAT FROM THE SAME POT].

No.	Questions and filters	Coding categories		GO TO
Q185	Are you the head of the household?	Yes	1	
	Hena ndunywe bamukamwini munzi na?	No	2	
Q186	Record Sex Of The Respondent	Male	1	
		Female	2	
Q187		Month		
	In what month and year were you born?	Don't Know Month	88	
		No Response	99	
	Ino mwakazyalwa lili? Mwezi amwaka nzi?	Year	[   ]	
		Don't Know Year	88	
		No Response	99	
Q188	How old were you at your last birthday?	Age In Completed Years	[   ]	
	Ino kuciindi cino mwakakwanisya myaka yongaye	Don't Know	88	
	vakuzvalwa?	No Response	99	
	(Compare & Correct Q103 OR 104 If Needed)	Estimate Best Answer		
Q189	Have you ever attended formal school?	Yes	1	IF 'NO' GO TO
	Hena kuli nomwakaniide cikolo na?	No	2	Q108
	(Ensure You Probe Adequately)	Don't Know	88	
	(Enouro Four Fobo Audquatory)	No Response	99	
0190	What is the highest level of school you attended:	1 Lower Primary(sub A to Standard 2 or Grade 1 - 4)		
4,000	primary secondary or higher?	2 Unner Primary (Standard 3-5 or Grade5-7)		
	printery, occorriging in higher :	3 Junior Secondary (up to Grade 9 or Form 3)		
	Circle One	A Senior secondary (up to Grade 12 or Form 5)		
	Ino mwakacolela muhhuku nzi?	5 Higher		
	nio mwakagoicia musouku nzi:	888 Don't Know		
		999 No Dopponoo		
0191	How many total years of education did you attend?	# Verre Completed	[ ] ]	
9131	Inc. mwakajua mwaka wananya kwaikala?	# rears completed		
	no mwakarya myaka yongaye kucikolo?	No Response	99	

QUESTIONS & FILTERS							SKIP TO	
Please fill i	Please fill in the following details							
Member ID	Q192 Name of Household member	Q193 Sex of Household member 1 = Male 2 = Female	Q194 Age in completed years	Q195 Occupation of household member [USE OCCUPATION RESPONSE CODES PROVIDED BELOW]				
1					888	999		
2					888	999		
3					888	999		
5					888	999		
6					888	999		
7					888	999		
8					888	999		
9					888	999		
10					888	999		
11					888	999		
12					888	999		
13					888	999		
14					888	999		

15			888	999	
16			888	999	
17			888	999	
18			888	999	
19			888	999	
20			888	999	

	OCCUPATION RESPONSE CODES	8						
	1 WORK ON A FA	MILY FARM	6	EMPLOYED OUTSIDE	THE	FAMIL	/ FARM	
	2 RUNNING A BU	SINESS/SELF EMPLOYED	7	FULLTIME HOUSEWIN	E			
	3 FULLTIME STUD	DENT	9	OTHER (SPECIFY)				
	4 TOO YOUNG TO	0 WORK						7
	5 TOO OLD TO W	/ORK						
INCOM	E & SOURCES	WRITE ANSWER HER	RE					
Q196	What are the three major sources of 1				888	999		
	HOUSEHOLD income, starting with the most 2	2			888	999		
	important? 3	}			888	999		
		CODES						
		1 First 2 Second	3	3 Third				
Q197		4.1/50						
	Do you have a bank account?	1. YES 2	2. NU	)				
FOOD	er cupity					-		
0198	SECURITY What were the major food crone that the HOUS	SEHOLD produced and concurse	ad in	the 2004/05 farming cases	2 8	88	999	
0150	ILIST UP TO FOURI	SETTOED produced and consume	an in	une 2004/05 tarihing seaso	"	00	333	
	Ino zvisvando nzi zipati pati zvomwakatebula ak	kubelesva kulva mubutebuzi bwa	mu 2	2005?	8	88	999	1
		, , ,						<u> </u>
	FOOD ITEM	QUANTITY CONSUMED		COST IF PURCHASE				<u> </u>
	1.	[ ]			8	88	999	
	2	j			8	88	999	
	3	[]		L]	8	88	999	
	4				8	88	999	
Q199	How many whole/square meals did you ea	at yesterday?		, ,				
0200	Bushe mwalile imikil inga mallo?	AN 10 MONTHE				88	999	IE '2' GO
9200	you harvested in the nast year 2 12 MONTI			r ı	1	00	333	0118
	last?	пэ						4.10
	Ino cakulya ncomwakatebude							
	mwaka wainda mwakalya ciindi							
	cilamfu buti nociyakumana?							
Q201	If the food you harvested lasted 1 Bought with	ith own money			8	88	999	
	less than 12 months, what was 2 Given for	od by						
	your main source of food after relatives	or neighbors						
	your nervour on out: J Exchange	eu casn						
	Na cakulva ncomwakatebude 4 Given for	od by						
	ticakamana mwaka, ino cakulya food aid	program						
	mwakalikucijanakuli 5 Sold/exch	anged						
	nocakamana ncomwakatebude? household	d goods for food						
	· · · · · · · · · · · · · · · · · · ·							

HOUSEH	IOLD EXPENDITURE			
Q202	How much did your household spend on education in the last 12 months (1YEAR)??	888	999	
	Nindalama shinga shonse pamo ishomwabomfeshe ukulipila kumasukulu muli uyu mwaka wapwile?			
Q203	How much did your household spend on food and groceries in the last 12 months (1 year)?	888	999	
	Nindalama shinga shonse pamo esho mwabomfeshe mushita ifyakulya fya panganda mui uyui mwaka			
	wapwile?			

Q204	How much did your household spend on housing in the last 12 months (1 year)? Nindalama shinga shonse pamo ishomwabomfeshe mukusonkela in'ganda muli uyu mwaka wapwile?	[]	888	999	
Q205	How much did your household spend on water and electricity in the last 12 months (1 year)?		888	999	
	Nindalama shinga shonse pamo isnoriwabomiesne mukusonkela amalalii na menshi muli uyu mwaka wapwile?				
Q206	How much did your household spend on paraffin in the last 12 months (1 year)?		888	999	
	Nindalama shinga shonse pamo ishomwabomfeshe mushita paraffin wakusanikila mu n'ganda muli uyu				
	mwaka wapwile?				
Q207	How much did your household spend on clothing in the last 12 months (1 year)?		888	999	
	Nindalama shinga shonse pamo ishomwabomfeshe mukushita fyakufwala muli uyu mwaka wapwile?				
Q208	How much did your household spend on medicines and hospital fees in the last 12 months (1 year)?		888	999	
	Nindalama shinga shonse pamo ishomwabomfeshe mukuhita umuti no kulipila kufipatala muli uyu				
	mwaka wapwile?				
Q209	How much did your household spend on transport in the last 12 months (1 year)?		888	999	
	Nindalama shinga shonse pamo ishomwabomfeshe mukwendela muli uyu mwaka wapwile?				

HOUSI	NG					
Q210	OBSERVE AND WRITE ANSWER, ONLY ASK IF YOU CAN'T TELL BY	1	Mud or cow dung	888	999	
	What is the wall material of the best house among the houses/huts occupied by the members of your household?	Concrete brinks				
	What is the wall material of the best house among the houses/huts occupied by the	3	Iron sheets			
	members of your household?	4	Stone			
	-	5	Tiles			
	Bushe icibumba ca n'ganda intu mutila eisuma sana muli uno mushi bakulila	6	Wood			
	nensní?	7	Grass/poles			
		ð	Other (specify)			
Q211	211 [OBSERVE AND WRITE ANSWER, ONLY ASK IF YOU CAN'T TELL BY		Grass/Straw/thatch	888	999	
	LOOKING]	2	Iron sheets	888	999	
		3	Tiles	888	999	
	What is the rooting material of the best house among the houses/huts occupied by	4	Slates/concrete/cement	888	999	
	the members of your household?	5	Wood/planks	888	999	
	Bushe umutenge wa n'ganda intu mutila eisuma sana muli uno mushi fimbila nenshi?		Other (specify)	888	999	
Q212	How many rooms or huts are occupied by all the members of your household? Fipinda finga ifyo ebekashi bapano ngada bekalamo nagula tumyanda tunga eto bekalamo	2		888	999	
Q213	Does this house have a kitchen inside the house? Bushe iyi in'ganda yenu yakwatila icipinda cakwipikilamo mukati		1. YES 2. NO	888	999	
Q214	How many chairs with backs are in this house? Mipando inga iyaba mu n'ganda mumyenu			888	999	
Q215	How many sofa sets are in this house? Muli imapando vamasofa itundu inga mun'ganda?			888	999	
Q216	How many tables are in this house? Amatebulo yalimo yanga mun'ganda?			888	999	
Q217	Do you have a domestic worker who is not related to the head of the household? Bushe mwalikwata umubomfi wapanganda ushili lupwa lwenu?			888	999	

SECTION 1: HOUSEHOLD CHARACTERISTICS CONTINUED

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L			<b>1 1 1 1 1 1 1</b>			000	000	
		1	Piped water within the community			888	999	
	Bushe mufumyakwi amenshi yakunwa mulusuba?		Amenshi yakumupompi mun	o mwine	1	1		
			mumushi			1		
		2	Piped outside this community			888	999	
			Amenshi vakumupompi uush	ili wamı	ino			
			muchi					
			A activate well in the community			000	000	
		3	A private well in the community			866	333	
			Pacishima cakuimbila tye mu	no mwi	ne			
			mumushi					
		4	Water tank in the community			888	999	
			Pe Tanki Iyamenshi muno m	vine mu	mushi			
		5	Pond/river/canal			888	999	
		-	Mumumana/ mumufolo					
		6	Public well in the community			888	000	
		0	Re aishime as muli una wina	muchi		000	333	
			Ches (masik)	musm				
0040		1	Other (specify)	_				
Q219	How far is the source of drinking water in the dry season?	1	Less than a km					
		2	1 – 3 Km					
		3	Above 3 km					
Q220	What is your main source of drinking water in the wet season?	1	Piped water within the community			888	999	
			Amenshi yakumupompi mun	o mwine	1	1	1	
	Bushe mufumyakwi amenshi yakunwa mumainsa?		mumushi			1		
		2	Piped water outside this communit	v		888	999	
		-	Amonshi yakumunomni uush	u ili wamu	000			
			Amensin yakumupompi uusii	iii wanii	110			
		<u> </u>	musni					
		3	A private/borehole well in the com	munity		888	999	
			Pacishima cakuimbila fye mu	no mwi	ne			
			mumushi					
		4	Water tank in the community			888	999	
			Pe Tanki Ivamenshi muno m	vine mu	mushi			
		5	Pond/river/canal			888	999	
		ľ	Mumumana/ mumufolo					
		6	Dublic well in the community			999	000	
			Public weitin me community	munhi		000	555	
			Fa cisinna ca mun uno wine	musm		000	000	
		1	Other (specify)	_		888	999	
Q221	How far is the source of drinking water in the wet season?	1	Less than a km					
		2	1 – 3 Km					
		3	Above 3 km					
TYPE OF	TOILET FACILITY							
Q222	What is the type of toilet facility in this house?		Flush latrine outside	1				
	Bushe icimbusu mwakwata pano n'ganda camusango si	hani?	Flush latrine inside the residence	2				
			Ordinary Pit latrine	3				
			VIP (Ventilated Improved Pit	4				
			latrine)					
			Other (specify)	5				
			None	6	888	99	9	
SOURCE	OF LIGHTING/INFORMATION ACCESS		·					
Q223	What is the type of lighting in this house?		Candle	1	888	999	)	
-	Bushe musangoshi mubofya uwakusanikilamo mun'ganda venu?		Paraffin lamp	2	888	999	)	
			Pressure lamp	3	888	999	)	
			Generator	۵.	888	900	1	
			Solar	5	888	999		
			Battery system	e a	888	000		-
			Electricity	7	880	000	, 1	
			Eirewood/Qrace	0	000	993	,	
			Other (anosib)	0	000	333	7	
			other (specify)					
0001/01/2					I			
LCOOKING	JUIENSILS							

Q224	What cooking/kitchen utensils	do you have?				
	1.Metal pots/kettles			888	999	
	2.Charcoal stove		ii	888	999	
	3.Paraffin stove		[]	888	999	
	4.Gas/electric stove		[]	888	999	
	5.Gas/electric oven		ii	888	999	
	6.Free standing deep freezer		[]	888	999	
HOUSEH	IOLD GOODS					
Q225	Do you have the following good	ds in your household?	Write N	umber DK	NR	GO TO
	1.TV	1. Yes 2. No	[]	888	999	
	3.Radio	1. Yes 2. No	[]	888	999	
	4.Radio-cassette player	1. Yes 2. No	j	888	999	
	5.Video recorder	1. Yes 2. No	[]	888	999	
	6.Cell phone	1. Yes 2. No	[]	888	999	
	7.Fixed telephone line	1. Yes 2. No	[]	888	999	
	8.Still camera	1. Yes 2. No	[]	888	999	
	9.Cassette player	1. Yes 2. No	[]	888	999	
	10.CD player	1. Yes 2. No	[]	888	999	
	11.Hi-fi music center	1. Yes 2. No	[]	888	999	
	12.Video camera	1. Yes 2. No	[]	888	999	
	13.Sewing machine	1. Yes 2. No	[]	888	999	
	14.Vacuum cleaner	1. Yes 2. No	[]	888	999	
	15.Electric iron	1. Yes 2. No	[]	888	999	
	16.Car/pick-up	1. Yes 2. No	[]	888	999	
	17.Motorcycle	1. Yes 2. No	[]	888	999	
	18.Bicycle	1. Yes 2. No	[]	888	999	
	19.Truck/lorry	1. Yes 2. No	[]	888	999	
Q226	How many motor vehicles do y	ou have?	[]	888	999	

#### SECTION 2: RETAILER PROMOTIONAL ACTIVITIES INPUT SUPPLY

Q.NO	QUESTIONS AND FILTERS		WRITE IN	CODES		SKIP
				DK	NR	1
				(circle)	(circle)	
RETAILE	R PROMOTIONAL ACTIVITIES					
Q212	Have you heard of a shop that supp community?	ies agricultural inputs in this or nearby		888	999	IF 'NO' GO TO
	Bushe mwalishibako ituka ililily	onse umobashitisha umufundo, imbuto				Q205
	nafimbi ififwaikwa mu bulimi?					
	RESPONS	E OPTIONS				
Q213	If so, how did you come to learn abo	ut the shop?		888	999	
	Nga chakutila mwalishibako itul	a lyamusango uyu, calishani pakuti				
	-					
	mwishibe ili tuuka.					
			[]			
	RESPONSE OPTIONS					
	1 Through radio	2 Through mobile phone				
	Pa chilimba	Ukupitila mutumalamya twa				
		kuminwe				
	3 Through flyers	4 Through a community event				
	Ukupitila mutupepala twe	Ukupitila mukusefya				
	lyashi	kwamumushi				
	5 Through market day					
	Ubushiku bwa kushitisha					

	6 Other (specify)		Τ		
	Fimbi(londolola)			000	
Q214	How far is the nearest agricultural input shop?	1. Less than 500 m	666	393	
	Palepa snahl apebela ituka ilyaba mupepi naimwe?	2. 500m to less than 1 km	888	999	
		3. From 1 km to less than 3 km	888	999	
		<ol><li>From 3 km to less than 5 km</li></ol>	888	999	
		5. From 5 km to less than 10 km	888	999	
		6. More than 10 km	888	999	
Q215	How do you find information about available products/services?	1. Camp extension officer	888	999	
	Nishilanshi mwishibilamo ukuti kuli imisango iyipya iyakubombelamo nangu	2. Village extension group	888	999	
	tutile ishila ishakumyarwilishamo mumibombele yenu?	<ol><li>Input supplier</li></ol>	888	999	
		4. Community radio	888	999	
		5. Other (specify)	888	999	
Q216	Has any retailer of agricultural inputs done any thing to persuade you or	attract			
	you to buy from their shop?				
	Bushe bashi makwebo balacitapo fimo ifya kumoongola pakuti mwinga	lashita []			
	ifintu mumatuka yabo?				
0217	What factore are most important to you when deciding where to hum?	1 Price	888	999	+
54217	Finshi filenga ukuti mwingatotonkanya no kusanga ati kuti mwashita uku	2 Location	888	999	
	nangu kulya?	3 Quality	888	900	
		4 Relationship/bust with owner	000	000	
	[MAY BE MORE THAN ONE, CIRCLE ALL THAT IS MENTIONED]	5. Recommendation from comeone	000	999	
		5. Recommendation from someone	000	333	
		6. Other (specify)	000	333	
		2. Word of mouth	000	333	
		3. Print adverts	000	333	
		4. Live promotional advents	000	333	
0010	II	5. Other (specify)	000	333	
QZ10	How often do you use a cell phone, whether yours or someone e	farming husiness?	000	333	
	Bushe mulabofya libili libili ka lamva kakuminwe kuti ni kalam	va kenu nango ka			
	kwashima fye, mukupokelelapo amashiwi ayo angamwafwilisha	ko bunonshi bwabulimi?			
	1 Never 2 Sometime 4 often				
Q219	How often do you use the Internet to send or receive information	n in your farming []	888	999	
	business?				
	Bushe mulabomfya libili libili internet pakutuma nangu ukupoke	elelapo amashiwi ya			
	pabunonshi bwamu bulimi				
0220	1 Never 2 Sometime 4 often	- husiness in the next two [ ]	000	000	
9220	make you insteried to radio programmes producasted on agriculture as a weeks?		000	555	
	Pamilungu vapitano ibili ivi mwalumfwa ko cilimba ne lvashi lva kuti ubi	ulimi bukwebo?			
	1 YES 2 NO				
Q221	Are there farmer information centres in this or nearby community?	[]	888	999	IF 'NO'
	Bushe kwaliba ko incende mumushi wenu eko mwingatila eko musang	a ilyashi pafyabulimi?			GO TO
	1 YES 2 NO				Q214
Q222	What type of information is provided by the information centre(s)?		888	999	
	Lyashi Iyamusangoshi musangako nango tutile Iyashi Iyamusangoshi lisangwa i 1. Information, an nanya su battan mathada af familian	mucende ine iyi?			
	2 Information on hetter methods of managing farm enterprises				
	3. Information on input markets				
	<ol><li>Information on output markets</li></ol>				
	5. Other (specify)				
Q223	How is the information deseminated?		888	999	
	Ilyashi lisabankanishiwa mumusango nshi?				
	1. By word of mouth 2. Theough united material				
	2. Through written material 3. Through radio				
	5. Through tould				

	4. Through cell phones 5. Through e-mail	-			
Q224	Has the information been helpful to you?		888	999	
	Bushe ilyashi musangako kuncende ine iyi lyalibapo ilyakumyafulisha?				

INPUT: F	ERTILIZERS		
Q225	How much fertilizer did you buy in the 2004/05 farming season? [] Bushe mwashitile amasaka yanga ayamufundo uyu mwaka wapwile.	888	999 IF 'ZERO' GO TO Q218
Q226	How much did you spend on fertilizers in the past farming season [] (2004/05)? Nishinga indalama mwaposelepo pali uyu wine mufundo.?	888	999
Q227	Where did you buy most of the fertilizer?       []         Nikwisa mwashitile umufundo wine yu?	888	999
	1         From an agent at farm         2         A store outside the community           Kubaletela ba shima farm         Kwituuka naile ko         Kuituuka naile ko		
	3         A buying group/association         4         From an agent for a known store in the community           Ku kabungwe akashitisha ifyabulimi mumushi         Kubaletela ba shimatuka bamumushi ifya kushitisha		
	From a store in the community     Mwituuka lya muno mushi     Other (specify)Fimbi(londolola		
Q228	If you bought fertilizer from a shop, how far a way was the shop? [] Ngamweleenda fye pakuya mukushita uyu mufundo, palepa shani petuuka mwaleshita uyu mufundo?	888	999
	1         Less than         2         Between 3 and         3         Between 7 &         11km and           3 Km         6 km         10 km         4         above		

INPUT: F	ESTIC	DES													
Q229	How Bush amai	much he mwa botolo(	pesti alishi ifipal	icide did you b tilepo umuti wa keti) yanga (fin	uyin akwip ga)?	the past fa aya utush	arming s <i>ishi mun</i>	easoi nabal	n? la yenu?. Mwashit	le	Ĺ	]	888	999	IF 'ZERO' GO TO Q222
Q230	How Mwa	much posele	did y po in	ou spend on p ndalama shinga	estic a <i>mu</i>	ides in the <i>kushita un</i>	past far nuti waki	ming paya	season (2004/05 utushishi mumab	? alayeni	ı.	]	888	999	
Q231	Where did you buy most of the pesticides (More than 1 response expected)?       Where did you buy most of the pesticides (More than 1 response expected)?       Nikwisa mwashitile umuti wine uyu?       1     From an agent at farm     2     A store outside the community       Kubaletela ba shima farm     2     A store outside the community       Kubaletela ba shima farm     4     From an agent for a known store in the community       S     From a store in the community     Kubaletela ba shimatuk bamunushi ifya kushitisha       5     From a store in the community     Kushitisha       6     Other (specify/Embiliondolola     Community							· · ·	888	999					
Q232	Conter (specify)-imbilionational     If you bought pesticides from a shop, how far a way was the shop?     Ngamweleenda fye pakuya mukushita umuti wa mumabala palepa shani petuuka mwaleshita uyu     umuutio?     I Less than 2 Between 3 and 3 Between 7 & 11km and     3 Km 6 km 10 km 4 above							888	999						

INPUT: I	IERBICIDES			
Q233	How much herbicide did you buy in the past farming season?           Bushe mwalishitilepo umuti wakucingilila ukusapa mumabala yenu?. Mwashitile           amabotolo(ifipaketi) yanga (finga)?	888	999	IF 'ZERO' GO TO Q226
Q234	How much did you spend on herbicides in the past farming season (2004/05)? Mwaposelepo indalama shinga mukushita umuti wakucingilila ukusapa mumabala yenu?.	888	999	
Q235	Where did you buy most of the herbicides?       []         Nikwisa mwashitile umuti wine uyu       1         From an agent at farm       2       A store outside the community         Kubaletela ba shima farm       2       A store outside the community         3       A buying group/association       4       From an agent for a known store in the community         Ku kabungwe akashitisha       4       From an agent for a known store in the community         Kubaletela ba shimatuka       bamumushi ifya kushitisha         5       From a store in the community         Mwituuka lya muno       mushi         6       Other (specify) Fimbi(londolola	888	999	
Q236	If you bought herbicides from a shop, how far a way was the shop?          Ngamweleenda fye pakuya mukushita umuti wakucingilila ukusapa mumabala yenu ,         palepa shani petuuka mwaleshita uyu umuutio?         1       Less than       2       Between 3 and       3       Between 7 &       11km and         3 Km       6 km       10 km       4       above	888	999	
Q237	How much VETERINARY DRUGS did you buy in the past farming season?	]	888 999	IF 'ZERO' GO TO Q230
Q238	How much did you spend on VETERINARY DRUGS in the past farming season (2004/05)? [	]	888 999	

#### INPUT: VETERINARY DRUGS CONTINUED ...

	Whe	re did you buy most of the VETERINARY DRUG	S?		Ĺ	888	999	
	Nikw	isa mwashitile  uyu wine muti uwakucingilila ifilin	nwa	a fyenu kumalwele?				
	1	From an agent at farm	2	A store outside the community				
		Kubaletela ba shima farm		Kwituuka naile ko				
	3	A buying group/association	4	From an agent for a known store in the				
		Ku kabungwe akashitisha ifyabulimi		community				
		mumushi		Kubaletela ba shimatuka bamumushi ifya				
				kushitisha				
	5	From a store in the community						
		Mwituuka lya muno mushi						
	6	Other (specify)						

Γ	Q239	If you bought VETERINARY DRUGS from a shop, how far a way was the shop?	888	999	
		(Ngamweleenda fye pakuya mukushita uyu wine muti uwakucingilila ifilimwa fyenu kumalwele, palepa			
		shani petuuka mwaleshita uyu umuutio?)			
		1 Loss them 1.2 Detucer 2 and 1.2 Detucer 7.9 1 11/m and			
		I Less than 2 Between 3 and 3 Between 7 & Tikm and			
L		JJKM JOKM JUKM 4 above			

Q240	COST OF PURCHASED SERVICES		DK	NR	GO TO
	How much money did you spend on paying suppliers of	of the various inputs and services?			
	Nindalama shinga mwaposele ukulipila abamu	uletela umufundo, imbuto nafimbi ififwaikwa			
	mubilimi			1	
	Purchased Service	Amount Spent			
	<ol> <li>Spraying (Ukubika umuti wa kusansa mwibala</li> </ol>	a) []]]	888	999	
	2 Oxen tillage (Ukulima ne N'gombe)		888	999	
	3 Motorized tillage (Ukulima na tractor)		888	999	
	5 Weeding (Ukusekwila)		888	999	
	6 Harvesting (Ukosombola)		888	999	
	8 Herding (Ukucema)		888	999	
	9 Transport		888	999	
	10 Hired labour (Kubo mwaleingisha icito ya fik	iongwani) []_]_]_]_]_]	888	999	
	11 Dipping (Ukubika Ifiteka(in'gombe)mu muti)		888	999	
	12 feed lot		888	999	
	13 Stud (hiring a bull)		888	999	
	14 Artificial insemination		888	999	
	15 Other (specify)				

#### SECTION 3: OTHER CROPS BACKGROUND DATA

(<u>INSTRUCTIONS TO THE INTERVIEWER</u>: LET RESPONDENT USE THE UNIT OF AREA/ VOLUME THEY ARE MOST FAMILIAR WITH, THEN USE THE CONVERSION TABLE PROVIDED TO CONVERT TO HECTARES/ APPROPRIATE VOLUME)

Q.NO	QUESTIONS AND FILTERS	CODES		WRITE IN	CODES		GO
		A) CASH CROP	A/	ſ	DK	NR	TO
		B) FOOD CROP	В		(circle)	(circle)	
Q355	How much of the total area of the farm was used to plant the major	1. Maize		[]	888	999	
	crops last farming season?	2. Groundnuts		[]	888	999	
		3. Beans		ii	888	999	
		4. Sunflower		ii	888	999	
	lno mwakabelesya nyika ipati buti kusyanga zyisyango zyipati pati	5. Cassava		[]	888	999	
	mumainza amu 2004/05?	6. Tobacco		ii	888	999	
		7. Rice		[]	888	999	
		8. Sorghum		[]	888	999	
		9. Millet		ii	888	999	
		10 Other		[]	888	999	
Q356	How much of the major crop(s) did you harvest last farming season	1. Maize		[]	888	999	
	(2005)?	2. Groundnuts		[]	888	999	
	Ino butebuzi bwakali buti kuzwa kuzyisyango zyipati pati mubutebuzi	3. Beans		[]	888	999	
	bwamu 2005?	<ol> <li>Sunflower</li> </ol>		[]	888	999	
		5. Cassava		[]	888	999	
		6. Tobacco		[]	888	999	
		7. Rice		[]	888	999	
		8. Sorghum		[]	888	999	
		9. Millet		[]	888	999	
		10 Other		[]	888	999	
Q357	How much money did you get from the major crop sales last farming	1. Maize		<u> </u>	888	999	
	season?	2. Groundnuts		ļ	888	999	
	no mwakajana maii ongaye nomwakasambara bulebuzi bwanu bwa zwisyango zwipati pati mu 20052	3. Beans		<u> </u>	000	333	
	zyisyango zyipau pau nu 2003?	4. Sunnower		<u> </u>	000	333	
		5. UdSSdVd		<u> </u>	000	333	
		7 Rice			888	999	
		8 Sorahum		<u>  </u>	888	999	
		9 Millet			888	999	
		10 Other		<u> </u>			
	1		-				

Q358	Did you use any irrigation on any of the crops in the 2004/2005		0 = NO	1 = YES			IF 'N	0° GO '	TO Q40	1
	farming season?	1. Maize			888	999				
	Bushe mwale tapilisha ifilimwa fimo efvo mwalimine mu mainsa ya	2. G/Nuts			888	999				
	2004/2005	3. Beans			888	999				
		4. Sunflower			888	999				
		5. Cassava			888	999				
		6. Tobacco			888	999				
		7. Rice			888	999				
		8. Sorahum			888	999				
	F	9. Millet			888	999		-		
	F	10 Other						-		
Q359	If you used irrigation last year, what was the main irrigation type that you use	d FOR	-		WRITE	CODE	<u> </u>			Т
	EACH crop you irrigated?	F	1. Maize					888	999	-
	Nga mwaletapilasha musango shi mwaletapilishishamo?	F	2. Groundnuts			-+	888	999	-	
		F	3. Beans				888	999	1	
		F	4. Sunflower					888	999	-
	CODES	t	5. Cassava					888	999	$\vdash$
	1 Bucket 2 Treadle 3 Electric 4 Diesel 5	Other	6. Tobacco					888	999	$\vdash$
	pump motor pump	7. Rice					-+	888	999	$\vdash$
	driven		8. Sorahum				-+	888	999	$\square$
	pump		9. Millet		1		-+	888	999	-
		F	10 Other				-+			-
Q360	If you used irritation last year what was the main source of irritation	n water			WRITE	CODE				-
	FOR EACH crop you irrigated?		1. Maize					888	999	-
	r on Enerrorp you inguide.	F	2. Groundnut	S				888	999	-
	Nna mwaletanilasha. Amenshi mwaletanilishisha, mwalefumva kwi	F	3. Beans					888	999	-
	CODES	F	4. Sunflower					888	999	-
	1 River/stream 2 Dam/weir 3 Well/borehole 4	Other	5. Cassava					888	999	-
			6. Tobacco					888	999	-
		F	7. Rice					888	999	$\vdash$
		F	8. Sorahum					888	999	-
		F	9. Millet					888	999	-
		F	10 Other							$\square$

## SECTION 4: FARMING TECHNOLOGY AND PRACTICES

Q446	Have you Bushe m 1 YES	received any advice or training or information in farming the walipanshiwako amano nango ukasambililako pa f S 2 NO	888	999	IF 'NO' GO TO Q501		
Q447	Please tel Mukwai	I me the sources of training received in the last one year and kuti mwanjebako ukomwasambilile elyo nefyo ayo	rmation that you received was andileko yali kuli imwe				
	Code	Source of Training, Advice or Information Lemba uko amasambililio , abakupansha amino bafumine	Usefulness of TA 1. VERY USEFUL Ayasuma ayangabomfiwa sana 2. MODERATELY USEFUL Yasuma kuti ya bomfiwa 3. NOT USEFUL Teti yabomfiwe nakalya	DK	NR	GO TO	
	1	Ministry of Agriculture Extension officers Iciputulwa ca kamfulumende icilolekesha pa fya bulimi		888	999		
	2	Other extension officers Ababomfi ba ciputulwa ca kamfulumende icilolekesha pa fya bulimi abendela abalimi		888	999		
	3	Suppliers of chemicals and fertilizers (Balya batwala umuti no mufundo kubalimi )		888	999		
	4	Shops supplying inputs Amatuuka ayo bashitishamo umufundo imbuto nafimbi ififwaikwa mu bulimi		888	999		
	5	Seminars and meetings (Ukumana pamo nokulanshana)		888	999		
	6	An agribusiness company		888	999		

7	Radio, TV (Cilimba, no mulabasa wafikope)	888	999	
8	PROFIT	888	999	
9	Posters (ifipampa)	888	999	
10	News papers, magazines (Amapela ye lyashi)	888	999	
11	Producer association (Akabungwe	888	999	
	kabakampanga)			
12	Buyers of crops (Bakashita ba filimwa)	888	999	
13	Other (Specify) Fimbi londolola	888	999	

#### SECTION 5: GROUP DYNAMICS

Mwalibako utubungwe twabalimi muli uno mushi     GROUP     2. NO     DK     NR     JF 'NO' GO TO 509       Q525     H so, what are their names? Nge motwaba kuli mwanjebako amashina ya ulu twine tubungwe     Group 1:	Q524	Are there farmer groups in this community?			1. YES			CO	DES	GO TO		
mushi       GROUP       2. NO       509         0.525       If so, what are their names? Mge molwabe kuit mwanjebako amashina ya ulu twine tubungwe       Group 1:		Mwalibako utubungwe twabalimi muli uno						DK	NR	IF 'NO' GO TO		
Q525         If so, what are their names? Noe motwaba kub mwanjebako amashina ya utu twine tubungwe         Group 1: Group 2: Group 2: Group 3: Group 4:         888         999           Q526         What type of group is [NAME OF GROUP]         ?         WRITE CODE FOR TYPE OF GROUP           Q526         What type of group is [NAME OF GROUP]         ?         WRITE CODE FOR TYPE OF GROUP           Q526         What type of group is [NAME OF GROUP]         ?         WRITE CODE FOR TYPE OF GROUP           Q526         What type of group is [NAME OF GROUP]         ?         WRITE CODE FOR TYPE OF GROUP           Q527         LA marketing cooperative 3. A marketingbuyer cooperative 3. A marketingbuyer cooperative 4. A producer association 5. Other (specify)         Group 4:         1           Q527         Are you a member of [NAME OF GROUP]         ?         Group 1:         888         999           Q528         What benefits are you currently getting from being a member of [NAME OF GROUP]         Group 1:         1         888         999           Q528         What benefits are you currently getting from being a member of [NAME OF GROUP]         ?         [Ask FOR Q504]         888         999         999           Q528         What benefits are you currently getting from being a member of [NAME OF GROUP]         ?         [Ask FOR Q504]         888         999         999 <tr< td=""><td></td><td>mushi</td><td>CROUR</td><td></td><td>2.</td><td>NO</td><td></td><td></td><td></td><td>509</td></tr<>		mushi	CROUR		2.	NO				509		
Q525         H so, what are their names? Nge motwabs kuß mwanjebsko amashina ya ulu twine tubungwe         Group 1: Group 2:         888         999           Q526         What type of group is [NAME OF GROUP]         ?         888         999           Q526         What type of group is [NAME OF GROUP]         ?         888         999           Q526         What type of group is [NAME OF GROUP]         ?         WRTE CODE FOR TVPE OF GROUP         888         999           Q526         What type of group is [NAME OF GROUP]         ?         WRTE CODE FOR TVPE OF GROUP         888         999           Q526         What type of group is [NAME OF GROUP]         ?         Group 1:         1         888         999           CODES         Group 3:         1         888         999         1           A marketing cooperative         4. A producer association         888         999         1           S. Other (specify)         Group 1:         1         888         999         1           Q527         Are you a member of [NAME OF GROUP]         ?         Group 1:         1         888         999           Q528         What benefits are you currently getting from being a member of [NAME OF GROUP]         ?         Group 2:         1         888         999 <td></td> <td></td> <td>GROUP</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			GROUP									
Q25       If so, what are their name? Nge motivaba kuit inwanjebako amashina ya utu imie tubungwe       Group 1: Group 2: Group 3: Group 4:       888       999         Q26       What type of group is [NAME OF GROUP]       ?       888       999         Q26       What type of group is [NAME OF GROUP]       ?       WRITE CODE FOR TYPE OF GROUP       888       999         Q26       What type of group is [NAME OF GROUP]       ?       WRITE CODE FOR TYPE OF GROUP       888       999         Q27       If an arketing cooperative 3. A marketing buyer cooperative 4. A producer association 5. Other (specify)       GROUP       888       999         Q27       Are you a member of [NAME OF GROUP]       ?       Group 1: Group 2: Group 3: Group 2: Group 3: Group 2: Group 3: Group 2: Group 3: Group 3: Group 2: Group 3: Group 4: Group 3: Group 3: Group 3: Group 3: Group 3: Group 4: Group 3: Group 3: Group 4: Group 4: G												
Nge motwaba kuti mwanjebako amashina ya utu twine tubungwe         Group 2: Group 3:         688         999           Q526         What type of group is [NAME OF GROUP]         ?         888         999           Q526         What type of group is [NAME OF GROUP]         ?         888         999           [Ask FOR EACH GROUP MENTIONED IN Q501]         Group 1:         1         888         999           CODES         Group 2:         888         999	Q525	If so, what are their names?	Group 1:					888	999			
twine tubungwe         Group 3: Group 4:         State         999           Q526         What type of group is [NAME OF GROUP]?         ?         WRITE CODE FOR TYPE OF GROUP         888         999           [Ask FOR EACH GROUP MENTIONED IN Q501]         Group 1:         888         999		Nge motwaba kuti mwanjebako amashina ya utu	Group 2:	i			_	888	999			
Group 4:		twine tubungwe	Group 3:					888	999			
Q526       What type of group is [NAME OF GROUP]?       WRITE CODE FOR TYPE OF GROUP         [Ask FOR EACH GROUP MENTIONED IN Q501]       Group 1: []       888       999         CODES       Group 2: []       888       999         1. A marketing cooperative       888       999       999         2. A buyer cooperative       888       999       999         3. A marketing/buyer cooperative       6roup 3: []       888       999         4. A producer association       6roup 4: []       6roup 4: []       6roup 4: []         Q527       Are you a member of [NAME OF GROUP]?       Group 1: [_]       888       999         [Ask FOR EACH GROUP MENTIONED IN Q501]       Group 2: []       888       999         Q528       What benefits are you currently getting from being a member of [NAME OF GROUP]?       Group 1: [_]       888       999         Q528       What benefits are you currently getting from being a member of [NAME OF GROUP]?       Group 2: []       888       999         Q528       What benefits are you currently getting from being a member of [NAME OF GROUP]?       Group 2: []       888       999         Q528       What benefits are you currently getting from being a member of [NAME OF GROUP]?       Group 2: []       888       999         Q529			Group 4:				_	888	999			
[ASK FOR EACH GROUP MENTIONED IN Q501]       Group 1:       888       999         CODES       Group 2:       888       999         1. A marketing cooperative       888       999       999         2. A buyer cooperative       888       999       999         3. A marketing/buyer cooperative       888       999       999         4. A producer association       Group 4:       999       999         5. Other (specify)       GROUP       999       999         Q527       Are you a member of [NAME OF GROUP]       ?       Group 1:       888       999         [Ask FOR EACH GROUP MENTIONED IN Q501]       Group 1:       888       999       999         Q528       What benefits are you currently getting from being a member of [NAME OF GROUP]       ?       Group 1:       888       999         Q528       What benefits are you currently getting from being a member of [NAME OF GROUP]       ?       [Ask FOR PACH GROUP MENTIONED IN Q504]       888       999         17. Easy access to inputs       888       999       888       999         17. Easy access to credit       888       999       888       999         18. Easy access to credit       888       999       888       999         17.	Q526	What type of group is [NAME OF GROUP] _	?		WRITE COL	DE FOR TY	PE OF GROUP					
CODES         Bits p :         Bits p : <t< td=""><td></td><td>[Ask for each group mentioned in Q501]</td><td></td><td></td><td>Group 1:</td><td>[ ]</td><td></td><td>888</td><td>999</td><td></td></t<>		[Ask for each group mentioned in Q501]			Group 1:	[ ]		888	999			
CODES         Order 2:         0:00		- ~ ·			Group 2:			888	999			
CODES       1. A marketing cooperative         2. A buyer cooperative       888         3. A marketing/buyer cooperative       6004 0.1 [1]         4. A producer association       6roup 4: [_]         5. Other (specify)       6roup 4: [_]         Q527       Are you a member of [NAME OF GROUP]         7       Are you a member of [NAME OF GROUP]         999       6roup 1:         6roup 2:       1         6roup 3:       1         6roup 4:       888         999         6roup 2:       888         999         6roup 3:       1         888       999         6roup 4:       888         999       6roup 1:         900       888         999       6roup 1:         900       888         999       6roup 2:         900       888         999       6roup 2:         900       888         999       99         900       6roup 1:         900       888         999       99         999       888         999       99         999       888 <td></td> <td>CODER</td> <td></td> <td></td> <td>Group 3:</td> <td></td> <td></td> <td>888</td> <td>999</td> <td></td>		CODER			Group 3:			888	999			
1. A marketing cooperative       2. A buyer cooperative         3. A marketing/buyer cooperative       4. A producer association         5. Other (specify)       Group 4: [_]         Q527       Are you a member of [NAME OF GROUP]?         Group 1:       []         Group 2:       []         Group 3:       []         Response       888         999       Group 3:         []       888         999       Group 4: [_]         0528       What benefits are you currently getting from being a member of [NAME OF GROUP]? [Ask FOR         Group 2:       []         0528       What benefits are you currently getting from being a member of [NAME OF GROUP]? [Ask FOR         Group 2:       [_]         0528       What benefits are you currently getting from being a member of [NAME OF GROUP]? [Ask FOR         FQ4CH GROUP MENTIONED IN Q504]       888         17. Easy access to inputs       888         18. Easy access to inputs       888		CODES			Oroup 5.			888	999			
2. A bayer cooperative       3. A marketing/buyer cooperative         4. A producer association		A marketing cooperative     A human operative						000	555			
3. A mathematical group 4: A producer association       Group 4: [_]         4. A producer association       Group 4: [_]         5. Other (specify)       GROUP         Q527       Are you a member of [NAME OF GROUP]       ?         [Ask FOR EACH GROUP MENTIONED IN Q501]       Group 1: []       888         [Ask FOR EACH GROUP MENTIONED IN Q501]       Group 2: []       888         [Ask FOR EACH GROUP MENTIONED IN Q501]       Group 1: []       888         [Ask FOR EACH GROUP MENTIONED IN Q501]       Group 1: []       888         [Ask FOR EACH GROUP MENTIONED IN Q501]       Group 1: []       888         [Ask FOR EACH GROUP MENTIONED IN Q504]       Group 1: []       888         [Ask FOR EACH GROUP MENTIONED IN Q504]       Group 2: []       888         [Ask FOR       Group 3: []       888       999         [Ask FOR       Group 3: []       888       999         [Ask FOR       Group 3: []       888       999         [Ask FOR       []       []       []       []         []       []       []       []       []       []         []       []       []       []       []       []       []         []       []       []       [] <t< td=""><td></td><td>2. A payketing/huwer econorative</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		2. A payketing/huwer econorative										
4. A produce association       Group 4: [_]		A marketing/buyer cooperative										
0.1 Other (spectry)		<ol> <li>A producer association</li> <li>Other (specify)</li> </ol>			Group A:	r 1						
Q527         Are you a member of [NAME OF GROUP]         ?         Group 1:         []         888         999           [ASK FOR EACH GROUP MENTIONED IN Q501]         Group 1:         []         888         999		5. Other (specify)		GROUD	Oroup 4.							
Goup 1:       Image: State of Control	0527	Are you a member of INAME OF GROUPI	2	Group 1:		1		888	999			
[ASK FOR EACH GROUP MENTIONED IN Q501]       Group 3:       0000 2:       0000	9.021	in e you a memoer of [initial of GROOI]	<u> </u>	Group 2:				888	999			
1. YES 2. NO     Group 4:		[Ask for each group mentioned in O501]		Group 3:				888	999			
1. YES 2. NO       Group 1:          Q528       What benefits are you currently getting from being a member of [NAME OF GROUP]? [.4sx FOR       Group 1:          6700 2:        888       999         Group 3:        888       999         17. Easy access to inputs       18. Easy access to credit       600       600		(····· 2···)		Group 4:				888	999			
1. YES 2. NO     Group 1:        Q528     What benefits are you currently getting from being a member of [NAME OF GROUP]? [ASK FOR     Group 2:        EQACH GROUP MENTIONED IN Q504]     888     999       17. Easy access to inputs     888     999       18. Easy access to credit     10     10				Oloup 4.				000				
Q528     What benefits are you currently getting from being a member of [NAME OF GROUP]     Group 1:     1       Q528     Group 1:     1       Group 2:     1     1       Base approximation     Group 3:     1       17. Easy access to inputs 18. Easy access to credit     18. Easy access to credit     17. Easy access to credit		1 1/50 0 110										
U328     What benefits are you currently getting from being a member of [NAME OF GROUP]? [Ask FOR     Group 1:      888     999       EQACH GROUP MENTIONED IN Q504]     17. Easy access to inputs     888     999	0500	1. YES Z. NO		<u> </u>	<b> </b>	, ,		000	000			
Group 2:         688         999           member of [NAME OF GROUP]         ? [Ask For         Group 3:         []         888         999           EQACH GROUP MENTIONED IN Q504]         888         999         888         999           17. Easy access to inputs         18. Easy access to credit         6         6         6         6	Q328	What benefits are you currently getting from (	being a	Group 1:		<u> </u>		000	333			
Imember of [NAME OF GROUP]     // [ASA FOR     Group 3:     066     999       EQACH GROUP MENTIONED IN Q504]     888     999       17. Easy access to inputs     18. Easy access to credit     19		mumber of DIAME OF CROUPI	400 000	Group 2:		Ļ_		888	999			
EQACH GROUP MENTIONED IN Q504]     886     999       17. Easy access to inputs     18. Easy access to credit		member of [NAME OF GROUP]? [	ASKFOR	Group 3:				888	333			
17. Easy access to inputs 18. Easy access to credit		FOACH CROUP VENTIONED IN OSAA						888	333			
17. Easy access to inputs 18. Easy access to credit		LUACH GROUP MENTIONED IN Q3045										
17. Easy access to inputs 18. Easy access to credit												
17. Easy access to inputs 18. Easy access to credit												
18. Easy access to credit		<ol><li>Easy access to inputs</li></ol>										
		<ol> <li>Easy access to credit</li> </ol>										
19. Easy access to extension services Group 4:		<ol><li>Easy access to extension services</li></ol>		Group 4:								
20. Easier to sell farm produce		20. Easier to sell farm produce		Oloup 4.								
21. Source of production and market information		<ol> <li>Source of production and market information</li> </ol>	า									
22. Easier to negotiate for good price		22. Easier to negotiate for good price										
2). Edster to Urganize transport		23. Easier to Organize transport				r 1						
24. Unter (specify).	0529	24. Uther (specify):		Group 1:				000	000			
G225 What denents would you like to get from being a Group 1:	Q329	what benefits would you like to get from bein	ga	Group 1:		[]		000	333			
member of [NAME OF GROUP]? [Ask FOR Group 2: [ ] 888 999		member of [NAME OF GROUP]? [A	SK FOR	Group 2:		[ ]		888	999			
Group 3: 888 999				Group 3:				888	999			

				000	000			
	EACH GROUP MENTIONED IN Q504]         17.       Easy access to inputs         18.       Easy access to credit         19.       Easy access to extension services         20.       Easier to sell farm produce         21.       Source of production and/or market information         22.       Easier to negotiate for good price         23.       Easier to Organize transport         24.       Others (mediate)	Group 4:		888	999			
	24. Other (specify).		1 1					
0530	As a member of INAME OF GROUPI how	Group 1:		888	999			
0,000	As a member of [IVAINE OF GROOF ], now	Group 2:		888	999			
	oftern have you attended grown meetings in the past 6	Group 3:		888	999			
	ojien naro jen anomeć 5.0 np moonings in mo pusi o	Oroup 5.		888	999			
	months? [ASK FOR EACH GROUP MENTIONED IN Q504]	Group 4:		000	355			
	7. Always 8. Sometimes 9. Rarely		[]					
Q531	Why are you not a member of [NAME OF GROUP]	Group 1.	r 1	888	999			
	? [Ask for each group NOT mentioned in	Group 1.		888	999			
		Group 2:	[]					
	Q504]	Group 3:		888	999			
		Group 4:		888	999			
	<ol> <li>Too busy to attend meetings</li> <li>I see no reason to join</li> <li>Too many restrictions on membership</li> <li>Short of money to pay for what they need</li> <li>Lack of info or not knowing how to begin.</li> <li>Other (specify)</li> </ol>		[]					
Q532	Did you put resources together with one or more other farmers in order to buy agricultural inputs?							
0533								
Q533	Did you jointly acquire any services with one or more other farmers in the 2004/5 farming 888 999 1. YES 2. NO							
Q534	Did you join up with one or more other farmers for the sake of selling your produce in the 2004/05 farming season?							
				-				

#### SECTION 6: LIVESTOCK AND FARM ASSET OWNERSHIP

		DK	NR	GO
				TO
Q601	Do you own any livestock?	888	999	IF NO
	Bushe mwalikwatapo ifitekwa ? 1. YES 2. NO			GO
				TO
				Q603

Q602	lf yes, p Ngaba	olease tell me the types an dikwata, mukwai kuti	d numbers of bajebako ur	livestock mutundu	you own 1 wafitek	wa bal	wata elvo ne pendwa.?				
	Livestock		No. owned	DK	NR	Livestock No.		No. owned			
	1	Cattle (In'gombe)		888	999	7	Chickens (nkoko)		888	999	
	2	Donkey (unda)		888	999	8	Guinea fowls (nkanga)		888	999	
	3	Sheep (mpanga)		888	999	9	Ducks (mbata)		888	999	
	4	Goats (mbushi)		888	999	10	Pigeons (nkunda)		888	999	
	5	Pigs (nkumba nangu Kapoli)		888	999	11	Other[specify ] Fimbi lonndolola		888	999	
	6	Rabbits (Ba kalulu)		888	999						
Q603	Do you	own any farm assets?					1. YES 2. NO		888	999	
Q604	If yes, please tell me the types and numbers of farm assets you own										
	Asset		No. owned	DK	NR	Asse	t	No. owned			
	1	Hoes		888	999	9	Crop sprayers		888	999	
	2	Ploughs		888	999	10	Ox-carts		888	999	
	3	Ridgers		888	999	11	Tractors		888	999	
	4	Harrows		888	999	12	Rippers				
	5	Cultivator		888	999	13	Other [specify]		888	999	
	6	Shaka hoes		888	999	14	Hand grinding mill				
	7	Farm motorcycle		888	999	15	Hammermill				
	8	Maize Sheller		888	999	16	Fishing boat				

## ANNEX D. ANALYSIS PLAN FOR BASELINE SURVEY

As its name suggests, the baseline survey is intended to collect information for the participant and control samples that can be compared with data to be collected two years later from the same panel of respondents to determine the impact of the PROFIT project. This Annex outlines a plan for tabulating and analyzing the data to be collected. Data analysis at the baseline stage is elementary, consisting purely of simple frequency distributions and cross-tabulations. More sophisticated data manipulation to plot relationships among variables and determine their statistical significance will follow the second round of data collection.

Drawing on the research plan and particularly the causal models shown in Tables 1-3 above, the baseline survey should measure potential impact variables for samples of participants and controls in the covered interventions:

- Sales, productivity, and trade in cotton, beef, and agricultural activities served by the improved retail input distribution system
- Household incomes and poverty status for those engaged in these agricultural activities

The baseline will provide information about the current levels of these variables in sampled enterprises and households and afford an opportunity to analyze some of their determinants (other than the effect of program participation, which can only be determined after the second survey round).

RuralNet will provide the database to DAI in easily accessible form (Excel and SPSS), permitting basic tabulations and calculations to be performed by DAI. RuralNet will retain the database from the baseline survey for further analytical use following the second-round survey.

The basic tables to be assembled from the data collected in the baseline survey are grouped into three sections: (1) descriptive information on the respondents; (2) information on the smallholder MSEs included in the sample; and (3) information on the households associated with the sampled smallholder MSEs. The remainder of this Annex describes the tabulations to be performed in each of these categories. Some of the information displayed in the tables described below is binary (e.g., yes/no, male/female), while other information is grouped data derived from frequency distributions. Grouped data displayed in tables should be backed up by raw counts that show the full (ungrouped) frequency distribution.

After the tables described below are examined, additional cross-tabulations may be specified. For example, we may want to determine the relationship between the educational attainment of the entrepreneur or the household's consumption or asset level on such activities as participation in producer groups and use of purchased inputs and business advice. The database should be organized to make such inquiries easy to perform.

Three groups of descriptive tables will be prepared:

- Basic descriptive information on respondents (common content for participants and controls in all three areas of project activity)
- Enterprise-level information (specific content for participants and controls in cotton, beef, and retail services)
- Household-level information (common content for participants and controls in all three areas of project activity)

## **BASIC DESCRIPTIVE INFORMATION ON RESPONDENTS**

- Table B-1. Distribution of sample by intervention. Shows the numbers of participant and control group members surveyed in each intervention area (cotton, beef, and retail input distribution), as well as the total number surveyed for each population.
- Table B-2. Demographic profile of respondents. Shows several types of personal information for respondents (individuals who manage smallholder MSEs):
  - Age and sex. Group men and women as young (up to 34), middle aged (35-54), or old (55+).
  - Relationship to head of beneficiary household: self; spouse; other.
  - Educational attainment (separately for male and female respondents): Never attended school; primary school only; some secondary school; some post-secondary school.

Prepare one table for each intervention area plus one for the total sample. Note: We do not necessarily need this information for heads of household, but rather for those who operate smallholder MSEs.

## **ENTERPRISE-LEVEL INFORMATION (COTTON)**

NOTE: The purpose of this section is to describe the smallholder MSEs covered by the survey. Numerous characteristics of the enterprise need to be measured: the land area devoted to the activity, the annual production level, cash sales, production and sales of improved varieties, marketing channels used, hired labor used, production inputs, technologies used, sources of business information and services, and producer group membership. This section describes some of the questions to be asked about cotton enterprises; the following two sections give the equivalent information for beef enterprises and small holders in retail input distribution areas. In both cases, additional and/or better formulations will become possible after we have consulted in the field once more and learned more about the two sub-sectors and the ways in which PROFIT will intervene in their operations.

- Table EC-1. Smallholder MSEs by Area Planted to Cotton. Prepare a table showing size distribution of cotton holdings for participants and controls in hectares. Size groups TBD. (Q202)
- Table EC-2. Smallholder MSEs by Total Farm Area. Prepare a table showing size distribution of farm area for participants and controls in hectares. Size groups TBD. (Q201)
- Table EC-3. Volume of Cotton Harvested Last Year. Prepare a table showing size distribution of cotton harvests for participants and controls. Size groups TBD. Volume measure used in questionnaire? Or kg.? (Q203)
- Table EC-4. Productivity: Volume of Cotton Harvested per Hectare Planted. Derived from Tables

   EC-3 and EC-1. Group the responses to give a reasonable idea of the range of variation.
- Table EC-5. Total Sales of Cotton in Past Year. Show value of cotton sold in past year for participants and controls. Group the responses to give a reasonable idea of the range of variation. (Q204)
- Table EC-6. Sale Price per kg. of Cotton. Show price realized by participants and controls. Group the responses to give a reasonable idea of the range of variation. (Q205)

- Table EC-7. Use of Fertilizer for Cotton Cultivation in Past Year. Tabulate answers to Q301 as yes/no. Tabulate yes answers by amount of fertilizer used (Q302).
- Table EC-8. Expenditure on Fertilizer and Chemicals for Cotton Cultivation. Group answers to Q304 to show distribution.
- Table EC-9. Use of Purchased Cotton Seed. Tabulate answers to Q307 as yes/no. Tabulate yes answers by amount of fertilizer used (Q308).
- Table EC-10. Expenditure on Purchased Cotton Seed. Group answers to Q310 to show distribution.
- Table EC-11. Use of Tillage Services for Cotton Cultivation. Tabulate answers to Q313 as yes/no.
- Table EC-12. Expenditure on Tillage Services. Group answers to Q315 to show distribution.
- Table EC-13. Use of Weeding Services for Cotton Cultivation. Tabulate answers to Q319 as yes/no.
- Table EC-14. Expenditure on Weeding Services. Group answers to Q321 to show distribution.
- Table EC-15. Use of Harvesting Services for Cotton Cultivation. Tabulate answers to Q322 as yes/no.
- Table EC-16. Expenditure on Harvesting Services. Group answers to Q324 to show distribution.
- Table EC-17. Use of Banking Services for Cotton Cultivation. Tabulate answers to Q325 as yes/no. For yes answers, indicate type of service used. (Q327)
- Table EC-18. Use of Insurance for Cotton Cultivation. Tabulate answers to Q330 as yes/no.
- Table EC-19. Purchase of Farm Implements and Equipment. Tabulate answers to Q333 as yes/no. For yes answers, indicate amount spent. (Q335)
- Table EC-20. Use of Repair Services. Tabulate answers to Q336 as yes/no. For yes answers, indicate amount spent. (Q338)
- Table EC-21 (cotton). Use of Draft Animals in Cotton Production. Tabulate answers to Q339 as yes/no.
- Table EC-22. Use of Hired Labor for Cotton Production. Tabulate answers to Q341 as yes/no. For yes answers, indicate number hired. (Q342), total days worked (Q343), and total amount paid (Q344).
- Table EC-23. Types of Cotton Buyers. Show distribution of total amount sold by type of borrower (lead firm, processor, broker, or local trader). Q402 and 403)
- Table EC-24. Percentage of Cotton Rejected. Show percent of cotton offered for sale that was rejected by the buyer. Get total from Q404.
- Table EC-25. Spot vs. Contract Sales. Show percent of cotton sold to buyers through spot sales, contracts, and a combination of the two. (Q403 and 406)
- Table EC-26. Satisfaction with Cotton Buyers. Show percent of buyers of each type (lead firm, processor, broker, and local trader) with whom producers are very satisfied, moderately satisfied, or not satisfied. (Q402 and 407)
- Table EC-27. Farmer Group Membership. Tabulate answers to Q504 as yes (any group)/no.
- Table EC-28. Benefits of Farmer Group Membership. Tabulate answers to Q505, showing frequency of mention for each of the benefits listed.

- Table EC-29. Frequency of Farmer Group Meeting Attendance. Tabulate answers to Q507 for group members (always, sometimes, rarely).
- Table EC-30. Shared Purchases of Agricultural Inputs. Tabulate answers to Q509 as yes/no.
- Table EC-31. Acquisition of Service from Other Farmers. Tabulate answers to Q510 as yes/no.
- Table EC-32. Shared Sales of Produce. Tabulate answers to Q511 as yes/no.
- Table EC-33. Cell Phone Use. Tabulate answers to Q601 as yes/no. For yes answers, indicate frequency of internet use. (Q602)
- Table EC-34. Use of Radio Programs on Agriculture. Tabulate answers to Q603 as yes/no.
- Table EC-35. Presence of Farmer Information Center. Tabulate answers to Q604 as yes/no.
- Table EC-36. Use of CFU-Recommended Farming Practices. Tabulate answers to Q701 as yes/no. Tabulate yes answers by type of practice used (early land preparation, minimum tillage using hand hoes, minimum tillage using animal power, minimum tillage using mechanical means). (Q702)
- Table EC-37. Use of Advice, Training, and/or Information. Tabulate answers to Q703 as yes/no. Tabulate yes answers by source. (Q704)
- Table EC-38. Satisfaction with Advice, Training, and/or Information Received. For each source listed in Q704, indicate how many respondents rated it as very useful, moderately useful, or not useful.

## **ENTERPRISE-LEVEL INFORMATION (BEEF)**

- Table EB-1. Smallholder MSEs by Total Farm Area. Prepare a table showing size distribution of owned cattle grazing areas for participants and controls in hectares. (Q201)
- Table EB-2. Type of Grazing Area. Tabulate answers to Q202 (own farm, communal land, both).
- Table EB-3. Farm Area Used for Grazing. Show size distribution of area reported. (Q203)
- Table EB-4. Size and Composition of Herd. Show total herd size and numbers of heifers, bulls, steers, and cows owned. (Q204)
- Table EB-5. Change in herd Size Over the Past Year. Show distribution of respondents by change in herd size over the past year in absolute numbers. (Q210, 204)
- Table EB-6. Total Sales of Beef in Past Year by Type of Animal. Show distribution of respondents by numbers of animals sold in past year. (Q211)
- Table EB-7. Beef Sales by Type of Buyer. percent of cattle sold to each type of buyer (lead firms, processors, brokers, local traders). (Q346, 347)
- Table EB-8. Beef Rejected for Poor Quality by Type of Buyer. Number of cattle rejected for poor quality by type of buyer. (Q348)
- Table EB-9. Payment Arrangements for Cattle Sales by Type of Buyer. percent of buyers to which respondent sells for spot sale, on contract, and both. (Q350)

- Table EB-10. Main Reasons for Selling Cattle. Tabulate answers to Q351 in terms of frequency of mention of each motive (commercial, emergency, raise cash for school fees, raise cash for medicals, raise cash for dowery, other) for first, second, third, or fourth sale.
- Table EB-11. Location of Cattle Sales. Tabulate answers to Q352 in terms of frequency of mention of each location (at the farm, at abattoir, at feed lot, at auction, butchery, market) for buyers 1-3.
- Table EB-12. Average Price per Animal by Type of Buyer. Classify buyers listed in Q345 by type (Q346), then calculate average price received for each type of buyer (lead firm, processor, broker, local trader), using price information provided in Q353.
- Table EB-13. Usual Method Used to Determine Price by Type of Buyer. For each type of buyer (lead firm, processor, broker, local trader), show distribution of pricing methods used (visual inspection, weight, string measurement of girth, sex, off-take (dressed weight), grades and standards, other). (Q353).
- Table EB-14. Level of Satisfaction with Buyers of Beef. Show distribution of responses (very satisfied, moderately satisfied, not satisfied) for each type of buyer (lead firm, processor, broket, local trader) (Q346, 354)
- Table EB-15. Use of Dip Chemicals. Tabulate answers to Q401 as yes/no.
- Table EB-16. Expenditure on Dip Chemicals. Group answers to Q304 to show distribution.
- Table EB-17. Use of Supplements/Feeds. Tabulate answers to Q405 as yes/no.
- Table EB-18. Expenditure on Supplements/Feeds. Group answers to Q408 to show distribution.
- Table EB-19. Use of Vaccines. Tabulate answers to Q405 as yes/no.
- Table EB-20. Expenditure on Vaccines. Group answers to Q412 to show distribution.
- Table EB-21. Use of Herding Services. Tabulate answers to Q413 as yes/no.
- Table EB-22. Expenditure on Herding Services. Group answers to Q415 to show distribution.
- Table EB-23. Use of Cattle Spraying Services. Tabulate answers to Q416 as yes/no.
- Table EB-24. Expenditure on Cattle Spraying Services. Group answers to Q418 to show distribution.
- Table EB-25. Use of Cattle Transportation Services. Tabulate answers to Q420 as yes/no.
- Table EB-26. Expenditure on Cattle Transportation Services. Group answers to Q421 to show distribution.
- Table EB-27. Use of Feed Lot Services. Tabulate answers to Q423 as yes/no.
- Table EB-28. Expenditure on Feed Lot Services. Group answers to Q424 to show distribution.
- Table EB-29. Use of Stud Services. Tabulate answers to Q426 as yes/no.
- Table EB-30. Expenditure on Stud Services. Group answers to Q427 to show distribution.
- Table EB-31. Use of Artificial Insemination Services. Tabulate answers to Q428 as yes/no.
- Table EB-32. Expenditure on Artificial Insemination Services. Group answers to Q430 to show distribution.

- Table EB-33 (beef). Use of Banking Services. Tabulate answers to Q431 as yes/no.
- Table EB-34. Types of Banking Services Used. Display frequency of mention of the different banking services (borrowing, paying for imports, savings, security of assets, other). (Q433)
- Table EB-35. Use of Insurance. Tabulate answers to Q437 as yes/no.
- Table EB-36. Use of Private Veterinary Services. Tabulate answers to Q439 as yes/no.
- Table EB-37. Expenditure on Private Veterinary Services. Group answers to Q441 to show distribution.
- Table EB-38. Use of Hired Labor for Cattle Rearing. Tabulate answers to Q442 as yes/no. For yes answers, indicate number hired (Q443), total days worked (Q444), and total amount paid (Q445).
- Table EB-39. Foot and Mouth Disease. Show distribution of respondents by number of cattle that suffered from foot and mouth disease in past year. (Q501)
- Table EB-40. Treatment of Foot and Mouth Disease. Show distribution of respondents with cattle that suffered from foot and mouth disease by action taken (did nothing, sought treatment from a government veterinary clinic, sought treatment from a private veterinary clinic, bought medicines, other). (Q502)
- Table EB-41. Deaths from Foot and Mouth Disease. Show distribution of respondents by number of cattle that died from foot and mouth disease in past year. (Q503)
- Table EB-42. Corridor Disease. Show distribution of respondents by number of cattle that suffered from corridor disease in past year. (Q504)
- Table EB-40. Treatment of Corridor Disease. Show distribution of respondents with cattle that suffered from corridor disease by action taken (did nothing, sought treatment from a government veterinary clinic, sought treatment from a private veterinary clinic, bought medicines, other). (Q505)
- Table EB-41. Deaths from Corridor Disease. Show distribution of respondents by number of cattle that died from corridor disease in past year. (Q506)
- Table EB-42. Anthrax. Show distribution of respondents by number of cattle that suffered from anthrax in past year. (Q507)
- Table EB-43. Treatment of Anthrasx. Show distribution of respondents with cattle that suffered from anthrax by action taken (did nothing, sought treatment from a government veterinary clinic, sought treatment from a private veterinary clinic, bought medicines, other). (Q508)
- Table EB-44. Deaths from Anthrax. Show distribution of respondents by number of cattle that died from anthrax in past year. (Q509)
- Table EB-45. Lumpy Skin Disease. Show distribution of respondents by number of cattle that suffered from lumpy skin disease in past year. (Q510)
- Table EB-46. Treatment of Lumpy Skin Disease. Show distribution of respondents with cattle that suffered from lumpy skin disease by action taken (did nothing, sought treatment from a government veterinary clinic, sought treatment from a private veterinary clinic, bought medicines, other). (Q511)

- Table EB-47. Deaths from Lumpy Skin Disease. Show distribution of respondents by number of cattle that died from lumpy skin disease in past year. (Q512)
- Table EB-48. Liveroot Fluke Disease. Show distribution of respondents by number of cattle that suffered from liver fluke disease in past year. (Q513)
- Table EB-49. Treatment of Liver Fluke Disease. Show distribution of respondents with cattle that suffered from liver fluke disease by action taken (did nothing, sought treatment from a government veterinary clinic, sought treatment from a private veterinary clinic, bought medicines, other). (Q514)
- Table EB-50. Deaths from Liver Fluke Disease. Show distribution of respondents by number of cattle that died from liver fluke mouth disease in past year. (Q515)
- Table EB-51. CBPP Disease. Show distribution of respondents by number of cattle that suffered from CBPP disease in past year. (Q516)
- Table EB-52. Treatment of CBPP Disease. Show distribution of respondents with cattle that suffered from CBPP disease by action taken (did nothing, sought treatment from a government veterinary clinic, sought treatment from a private veterinary clinic, bought medicines, other). (Q517)
- Table EB-53. Deaths from CBPPDisease. Show distribution of respondents by number of cattle that died from CBPP disease in past year. (Q518)
- Table EB-54. Other Diseases. Show distribution of respondents by number of cattle that suffered from other diseases in past year. (Q519)
- Table EB-55. Treatment of Other Diseases. Show distribution of respondents with cattle that suffered from other diseases by action taken (did nothing, sought treatment from a government veterinary clinic, sought treatment from a private veterinary clinic, bought medicines, other). (Q521)
- Table EB-56. Deaths from Other Diseases. Show distribution of respondents by number of cattle that died from other diseases in past year. (Q522)
- Table EB-57. Use of Cell Phone to Receive Information Useful in Cattle Rearing. Group respondents by never, sometimes, often. (Q601)
- Table EB-58. Use of Internet to Send or Receive Information Useful in Cattle Rearing. Group respondents by never, sometimes, often. (Q602)
- Table EB-59. Listening to Radio Programs on Agriculture in Past Two Weeks. Group respondents by yes, no. (Q603)
- Table EB-60. Presence of Farmer Information Centers in This or Nearby Community. Group respondents by yes, no. (Q604)
- Table EB-61. Types of Information Disseminated by Information Centers. Show frequence of mention for the types of information listed in Q605 by those who reported the presence of a farmer information center.
- Table EB-62. Dissemination Methods Used by Information Centers. Show frequence of mention for the dissemination methods listed in Q606 by those who reported the presence of a farmer information center.

- Table EB-63. Usefulness of Information Disseminated. Show frequency of yes/no answers for those who reported the presence of a farmer information center. (Q607)
- Table EB-64. Technical Advice/Training/Information Received in Past Year. Show frequency of yes/no answers. (Q701)
- Table EB-65. Sources of Technical Advice/Training/Information Received in Past Year. Show frequency of responses for sources listed in Q701.
- Table EB-66. Usefulness of Technical Advice/Training/Information Received in Past Year. For the 4-5 most frequently mentioned sources in Q701, show the distribution of evaluations (very useful, moderately useful, not useful).
- Table EB-67. Presence of Farmer Groups in Community. Show frequency of yes/no answers. (Q801)
- Table EB-68. Types of Farmer Groups Present in Community. For those who answered yes to Q801, should distribution of types (marketing cooperative, buyer cooperative, marketing/buyer cooperative, producer association, other) for groups mentioned. (Q803)
- Table EB-69. Farmer Group Membership. Show number of respondents reporting membership in any farmer group and number reporting no membership. (Q804)
- Table EB-70. Benefits of Farmer Group Membership. For those who report membership in any farmer group, show the frequency of mention of each type of benefit listed in Q805.
- Table EB-71. Desired Benefits of Farmer Group Membership. For those who report membership in any farmer group, show the frequency of mention of each type of benefit listed in Q806.
- Table EB-72. Attendance at Farmer Group Meetings. For those who report membership in any farmer group, show the frequency of mention of each attendance pattern listed in Q807 (always, sometimes, rarely).
- Table EB-73. Resource Pooling to Buy Agricultural Inputs. Show yes/no answers to Q809.
- Table EB-74. Resource Pooling to Acquire Services. Show yes/no answers to Q810.
- Table EB-75. Resource Pooling to Sell Produce. Show yes/no answers to Q811.

## ENTERPRISE-LEVEL INFORMATION (RETAIL SERVICES)

- Table ER-1. Awareness of Shop that Sells Agricultural Inputs in this or Nearby Community. Show numbers of yes/no answers. (Q212)
- Table ER-2. Source of Information on Shop that Sells Agricultural Inputs in this or Nearby Community. For those who are aware of a shop, show distribution of sources of information shown in Q213.
- Table ER-3. Distance to Nearest Shop. Show distribution of responses to Q214.
- Table ER-4. Source of Information on Available Products and Services. Show distribution of source of responses to Q215.
- Table ER-5. Retailer Efforts to Persuade Farmers to Buy from Them. Show yes/no responses to Q216.

- Table ER-6. Most Important Factors in Deciding Where to Buy Inputs. Show distribution of mentions for factors listed in Q217.
- Table ER-7. Frequency of Cell Phone Use to Obtain Information Useful in Farming. Show distribution of responses to Q218 (never, sometimes, often).
- Table ER-8. Frequency of Internet Use to Send or Received Information Useful in Farming. Show distribution of responses to Q219 (never, sometimes, often).
- Table ER-9. Listened to Radio Program on Agricultural Business in Past 2 Weeks. Show yes/no responses to Q220.
- Table ER-10. Presence of Farmer Information Centers in This or Nearby Community. Group respondents by yes, no. (Q221)
- Table ER-11. Types of Information Disseminated by Information Centers. Show frequence of mention for the types of information listed in Q222 by those who reported the presence of a farmer information center.
- Table ER-12. Dissemination Methods Used by Information Centers. Show frequence of mention for the dissemination methods listed in Q223 by those who reported the presence of a farmer information center.
- Table ER-13. Usefulness of Information Disseminated. Show frequency of yes/no answers for those who reported the presence of a farmer information center. (Q224)
- Table ER-14. Amount of Fertilizer Bought in Last Season. Show grouped distribution of amounts bought in kg. (Q225)
- Table ER-15. Expenditure on Fertilizer in Last Season. Show grouped distribution of amounts spent in kwacha. (Q226)
- Table ER-16. Main Source of Fertilizer. Show distribution of responses by the sources listed in Q227.
- Table ER-17. Distance to Shop Where Fertilizer was Purchased. For those who reported buying fertilizer from a shop (Q227), show distribution of distances as indicated in Q228.
- Table ER-18. Amount of Pesticides Bought in Last Season. Show grouped distribution of amounts bought (in kg.?). (Q229)
- Table ER-19. Expenditure on Pesticides in Last Season. Show grouped distribution of amounts spent in kwacha. (Q230)
- Table ER-20. Main Source of Pesticides. Show distribution of responses by the sources listed in Q231.
- Table ER-21. Distance to Shop Where Pesticides were Purchased. For those who reported buying pesticides from a shop (Q227), show distribution of distances as indicated in Q232.
- Table ER-22. Amount of Herbicides Bought in Last Season. Show grouped distribution of amounts bought (in kg.?) (Q233)
- Table ER-23. Expenditure on Herbicides in Last Season. Show grouped distribution of amounts spent in kwacha. (Q234)
- Table ER-24. Main Source of Herbicides. Show distribution of responses by the sources listed in Q235.

- Table ER-25. Distance to Shop Where Herbicides were Purchased. For those who reported buying herbicides from a shop (Q235), show distribution of distances as indicated in Q236.
- Table ER-26. Amount of Veterinary Drugs Bought in Last Season. Show grouped distribution of amounts bought (in kg.?) (Q237)
- Table ER-27. Expenditure on Veterinary Drugs in Last Season. Show grouped distribution of amounts spent in kwacha. (Q238)
- Table ER-28. Main Source of Veterinary Drugs. Show distribution of responses by the sources listed in Q238.
- Table ER-29. Distance to Shop Where Veterinary Drugs were Purchased. For those who reported buying veterinary drugs from a shop (Q238), show distribution of distances as indicated in Q239.
- Table ER-30. Expenditure on Purchase Services. Show numbers of respondents who reported any expenditure on each type of service listed in Q240.
- Table ER-31. Technical Advice/Training/Information Received in Past Year. Show frequency of yes/no answers. (Q446)
- Table ER-32. Sources of Technical Advice/Training/Information Received in Past Year. Show frequency of responses for sources listed in Q447.
- Table ER-33. Usefulness of Technical Advice/Training/Information Received in Past Year. For the 4-5 most frequently mentioned sources in Q447, show the distribution of evaluations (very useful, moderately useful, not useful).
- Table ER-34. Presence of Farmer Groups in Community. Show frequency of yes/no answers. (Q524)
- Table ER-35. Types of Farmer Groups Present in Community. For those who answered yes to Q801, should distribution of types (marketing cooperative, buyer cooperative, marketing/buyer cooperative, producer association, other) for groups mentioned. (Q526)
- Table ER-36. Farmer Group Membership. Show number of respondents reporting membership in any farmer group and number reporting no membership. (Q527)
- Table ER-37. Benefits of Farmer Group Membership. For those who report membership in any farmer group, show the frequency of mention of each type of benefit listed in Q528.
- Table ER-38. Desired Benefits of Farmer Group Membership. For those who report membership in any farmer group, show the frequency of mention of each type of benefit listed in Q529.
- Table ER-39. Attendance at Farmer Group Meetings. For those who report membership in any farmer group, show the frequency of mention of each attendance pattern listed in Q530 (always, sometimes, rarely).
- Table ER-40. Resource Pooling to Buy Agricultural Inputs. Show yes/no answers to Q532.
- Table ER-41. Resource Pooling to Acquire Services. Show yes/no answers to Q533.
- Table ER-42. Resource Pooling to Sell Produce. Show yes/no answers to Q534.

## **INFORMATION ON SMALLHOLDER MSE HOUSEHOLDS**

- Tables H-1 to H-3. Household Size and Economic Activity. Tabulate separately for each intervention area (cotton, beef, and retail). Cross-tabulate by participants and controls and male- and female-headed households. Show distribution of households by number of total members, number of members who engaged in business or informal labor in past year, and number who had salaried employment. (Q111)
- Tables H-4 to H-6. Major Household Income Sources. For each intervention, show distribution of income source rankings that is, for each source (numbered 1-10; see Q?), show how many households ranked it first, how many second, etc., as well as the number that did not receive income from that source. (Q112)
- Tables H-7 to H-9. Household Consumption Expenditure per Capita. Calculate total household consumption by adding totals from Q114, Q118 through Q115. Then divide by the number of household members (Q109) to obtain consumption expenditure per capita. Show distribution by appropriate size groups.
- Table H-10. Number of Whole/Aquare Meals Eaten Yesterday. Show responses to Q115.
- Table H-11. How Long Food Crops Harvested in the Past Year Lasted. Show responses to Q116 (less than 12 months, 12 months).
- Table H-12. If Food Harvested Lasted Less than 12 Months, What Was the Main Source of Food After the Harvest Ran Out? For those who reported that their harvested food lasted less than 12 months (Q116), show the distribution of responses on other sources of food utilized (bought, received gift, exchanged crops for food, food aid program, sold/ecchanges household goods). (Q117)
- Table H-13. Material of House Wall. Show array of answers to Q126.
- Table H-14. Material of House Roof. Show array of answers to Q127.
- Table H-15. Main Source of Drinking Water in Dry Season. Show array of answers to Q134.
- Table H-16. Distance to Main Source of Drinking Water in Dry Season. Show array of answers to Q135.
- Table H-17. Main Source of Drinking Water in Wet Season. Show array of answers to Q136.
- Table H-18. Distance to Main Source of Drinking Water in Wet Season. Show array of answers to Q137.
- Table H-19. Type of Toilet Facility. Show array of answers to Q138.
- Table H-20. Type of Lighting in House. Show array of answers to Q139.
- Table H-21. Ownership of Gas/Electric Stove. Show yes/no answers to Q140, Item 4.
- Table H-22. Ownership of TV. Show yes/no answers to Q141, Item 1.
- Table H-23. Ownership of Radio. Show yes/no answers to Q141, Item 2.
- Table H-24. Ownership of Cell Phone. Show yes/no answers to Q141, Item 6.
- Table H-25. Ownership of Fixed Telephone Line. Show yes/no answers to Q141, Item 7.

- Table H-26. Ownership of Sewing Machine. Show yes/no answers to Q141, Item 13.
- Table H-27. Ownership of Car/Pickup. Show yes/no answers to Q141, Item 16.
- Table H-28. Ownership of Motorcycle. Show yes/no answers to Q141, Item 17.
- Table H-29. Ownership of Bicycle. Show yes/no answers to Q141, Item 18.
- Table H-30. Ownership of Truck/Lorry. Show yes/no answers to Q141, Item 19.