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 sub-contractors.

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 non-sector 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 mixed-method 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 PROJECT CAUSAL CHAIN: COTTON

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

TABLE 2. PROFIT PROJECT CAUSAL CHAIN: BEEF

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

TABLE 3. PROFIT PROJECT CAUSAL CHAIN: RETAIL INPUT DISTRIBUTION

Activities (Facilitation)	Outputs (Service Delivery)	Outcomes	Impacts
Expansion model development using: • Wholly owned stores • Agent network • Modified franchises (corner of store) • Buyer clubs Create incentives to market inputs (according to model) Work with agents & retailers on market research Work with larger retailers to ensure right input packaging and combinations are being distributed and right inventories kept Facilitate transparent contracts between wholesalers and retailers/ franchises (clear responsibilities regarding payments & dispute resolution) Work with Farmers' Union on dispute resolution Work on marketing programs of retailers & agents Facilitate agents' access to training (or provide directly in some cases) Promote dealer networking (horizontal linkage); may help dealers access financial services Monitoring Work with seed, chemical, etc. producers & pushing them into the distribution network	# of retailers signing Memorandum of Understanding # of agents, franchise stores, wholly owned new stores & buyer clubs Incentive scheme in place Agreements signed between retailers & agents Marketing/inventory plans completed Market research conducted New dispute resolution mechanism in place # of dealers in networks Linkages to wholesalers/ large producers established # of outgrowers	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 • Increased farm productivity (multiple crops) • Increased farm income Firm level • Increased farm yields & production • Increased farmer income Household level • Improved household welfare

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 sub-sector, 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.

TABLE 4. OUTCOMES AND IMPACTS TO BE MEASURED: COTTON ACTIVITIES

Level of Analysis	Outcome/Impact	Indicator of Change	Source of Information
Sub-sector	Spread of conservation farming	• percent of land under CFU • # of farmers under CFU • Extent of crop diversification	Interview (CFU)
	Better farmer knowledge of market opportunities & cultivation practices	Farmers' knowledge & attitudes	• Interviews • FGDs
	Improved access to finance	# of financial providers	• Interviews • FGDs
	Increased use of appropriate tillage service	percent of land served	• Interviews • FGDs
	Output growth	Volume produced	Secondary data
	Increased competitiveness	• Quality of cotton • # of farmers using Dunavant seed • percent of crop rejected	Interviews
	Increased market participation by smallholders	percent of output from smallholders	• Secondary data? • Interviews
	Improved producer price	• FOB price in kwacha • Producer price as percent of FOB price	• Secondary data • Interviews
Smallholder MSEs	Increased production		
	Increased sales	Value of sales	Survey
	Increased profits	Sales minus cash costs	Survey
	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

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

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

TABLE 6. OUTCOMES AND IMPACTS TO BE MEASURED: RETAIL INPUT DISTRIBUTION

Level of Analysis	Outcome/Impact	Indicator of Change	Source of Information
Market/Region	Increased input sales at wholesale & retail levels	• Wholesale sales value • Retail sales value	Interviews
	# of farmers accessing retail services	# of customers	• Interviews • FGDs
	Increased knowledge among retailers	• # of promotional techniques learned & used • Establishment of direct links to spraying services	Interviews
	# of retail outlets	# of retail outlets	• Interviews • FGDs
	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	• Interviews • FGDs
Smallholder MSEs	Increased farmer income	Sales of top 4 crops/agricultural products	Survey
	Increased yields	Output per ha. for top 4 crops	Survey
	Increased production	Sales of top 4 crops/products minus cash costs	Survey
MSE households	Higher income	• Annual income from sales of relevant agricultural products • Household consumption expenditure per capita	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 non-participating 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). Non-participants 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 over-sampling 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 cross-tabulations 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 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]

TABLE A-1. QUALITATIVE SAMPLE DESIGN

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

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

QUESTIONS & FILTERS					**DK**	**NR**	**SKIP TO**
Please fill in the following details							
Member ID	Q108 Name of Household member *Izina lya omwe, omwe mbomukkala limwi*	Q109 Sex of HH member 1 = Male 2 = Female *Mbasankwa na bakaintu?*	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						
Q112	What are the three major sources of HOUSEHOLD income, starting with the most important? *Ninzila nzi nzyomubelesya kapati, zyotatwe kuti mujane mali akubelesya amukwasyi wanu?*	1	_____	888	999	
		2	_____	888	999	
		3	_____	888	999	
Q113	Do you have a bank account?		1. YES 2. NO [__]			

FOOD SECURITY						
Q114	What were the major food crops that the HOUSEHOLD produced and consumed in the 2004/05 farming season? **[LIST UP TO FOUR]** *Ino zyisyango nzi zipati pati zyomwakatebula akubelesya kulya mubutebuzi bwamu 2005?*			888 888	999 999	
	WRITE ANSWER HERE					
	FOOD ITEM	QUANTITY ONSUMED	COST IF PURCHASED			
	1._____ 2._____ 3._____ 4._____	[_____] [_____] [_____] [_____]	[_____] [_____] [_____] [_____]	888 888 888 888	999 999 999 999	
Q115	How many whole/square meals did you eat yesterday? *Ino mwakalya ziindi zyongaye jilo?*		[_____			

Q116	How long did the food crops that you harvested in the past year last? *Ino cakulya ncomwakatebude mwaka wainda mwakalya ciindi cilamfu buti nociyakumana?*	1 LESS THAN 12 MONTHS 2 12 MONTHS	[_____]	888	999	**IF '2' GO TO Q118**
Q117	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?*	1 Bought with own money 2 Given food by relatives or neighbours 3 Exchanged cash crops for food 4 Given food by food aid program 5 Sold/exchanged household goods for food	[_____]	888	999	

HOUSEHOLD EXPENDITURE [IF NOTHING, RECORD ZERO]					
Q118	How much did your household spend on education in the last 12 months (1YEAR)? *Ino mumukwasyi wanu mwakabelesya mali ongaye kucikolo mwezi wamana?*	[_____]	888	999	
Q119	How much did your household spend on food and groceries in the last 12 months (1YEAR)?*Ino mumukwasyi wanu mwakabelesya mali ongaye kucakulya mwezi wamana?*	[_____]	888	999	

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

HOUSING

Q126	**[OBSERVE AND WRITE ANSWER, ONLY ASK IF YOU CAN'T TELL BY LOOKING]** What is the wall material of the best house among the houses/huts occupied by the members of your household? *Ino ng'anda itegwa nimbotu akati kamaanda abelesegwa abantu bamumukwasyi wanu ayakidwe aanzi?*	1	Mud or cow dung			
		2	Concrete brinks			
		3	Iron sheets			
		4	Stone			
		5	Tiles			
		6	Wood			
		7	Grass/poles			
		8	Other(specify) _____			
Q127	**[OBSERVE AND WRITE ANSWER, ONLY ASK IF YOU CAN'T TELL BY LOOKING]** What is the roofing material of the best house among the houses/huts occupied by the members of your household? Ino ciluli citegwa ncibotu akati kamaanda abelesegwa abantu bamumukwasyi wanu ciyakidwe aanzi?	1	Grass/Straw/thatch	888	999	
		2	Iron sheets	888	999	
		3	Tiles	888	999	
		4	Slates/concrete/cement	888	999	
		5	Wood/planks	888	999	
		6	Other (specify) _____	888	999	
				888	999	
Q128	How many rooms or huts are occupied by all the members of your household? *Ino maanda abelesegwa abantu bamumukwasyi wanu amunzi aano ali ongaye?*		_____	888	999	
Q129	Does this house have a kitchen inside the house? *Ino ng'anda yanu iligisi nkikini mukati na?*	1	YES	888	999	
		2	NO			
Q130	How many chairs with backs are in this house? (*Ino mujisi mipaando yongaye mung'anda yanu?)*			888	999	
Q131	How many sofa sets are in this house? (*Ino mujisi maseeti ongaye mung'anda yanu?)*			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 head of the household? *Hena mulijisi mubelesi waang'anda utali bbululu wanu na?*			888	999	

SOURCE OF DRINKING WATER

Q134	What is your main source of drinking water in the dry season? *Ino muteka kuli meenda akubelesya ang'anda muciindi cacilimo?*	**CODE**	**SOURCE**			
		1	Piped water within the communal	888	999	
		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) _____			

Q135	How far is the source of drinking water in the dry season?	1 2 3	Less than a km 1 – 3 Km Above 3 km			
Q136	What is your main source of drinking water in the wet season? *Ino muteka kuli meenda akubelesya ang'anda muciindi camainza?*	1	Piped water within the communal	888	999	
		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)_____	888	999	
		1	Piped water within the communal			
Q137	How far is the source of drinking water in the wet season?	1 2 3	Less than a km 1 – 3 Km Above 3 km			

TYPE OF TOILET FACILITY

Q138	What is the type of toilet facility in this house? *Bushe icimbusu mwakwata pano n'ganda camusango shani?*	Flush latrine outside	1			
		Flush latrine inside the residence	2			
		Ordinary Pit latrine	3			
		VIP (Ventilated Improved Pit latrine)	4			
		Other (specify)	5			
		None	6	888	999	

SOURCE OF LIGHTING/INFORMATION ACCESS

Q139	What is the type of lighting in this house? *Ino mubelesya nzi kumunika mung'anda?*	Candle	1	888	999	
		Paraffin lamp	2	888	999	
		Pressure lamp	3	888	999	
		Generator	4	888	999	
		Solar	5	888	999	
		Battery system	6	888	999	
		Electricity	7	888	999	
		Firewood/Grass	8	888	999	
		Other (specify) _____				

COOKING UTENSILS

Q140	What cooking/kitchen utensils do you have? (*Ino mujisi zyakujikila zyamusyobonzi?*)				
	1.Metal pots/kettles	[_____]	888	999	
	2.Charcoal stove	[_____]	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	

HOUSEHOLD GOODS

Q141	Do you have the following goods in your household? *Hena muljisi mpansya eezyi mung'anda yanu na?*			**Write Number**	**DK**	**NR**	**SKIP 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	[_____]	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	
Q142	How many motor vehicles do you have? 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	CODES		SKIP TO
			DK (circle)	NR (circle)	
Q201	What is the total area of the farm? *Ino nyika yampulazi yanu eeyi njimpati buti?*	[_____]	888	888	
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?*	[_____]	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 season? *Hena mwakabelesya camutunzya mubuluba mumainza amu 2004/05?*	1. Yes 2. No	888	999	**IF 'NO' GO TO Q307**
Q302	If YES, how much? *Kuti na mwakabelesya, ino wakali munji buti?*	[_____]	888	999	
Q303	Who was the major supplier of the **FERTILIZERS and CHEMICALS** you used on cotton? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____ *Ino mbabani bakamusambalide camutunzya ngomwakabikka mubuluba bwanu?*		888	999	
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 you?	1. Yes 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 season? *Hena mwakabelesya musamu ukwabilila malwazi kubuluba mumainza amu 2004/05?*	1. Yes 2. No	888	999	**IF 'NO' GO TO Q313**
Q308	If YES, how much seed did you buy? *Kuti na mwakabelesya, ino wakali munji buti?*	[_____]	888	999	
Q309	Who was the major supplier of the COTTON SEED you used? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____ *Ino mbabani bakamusambalide musamu ukwabilila malwazi ngomwakabikka mubuluba bwanu?*		888	999	
Q310	How much did you spend on buying COTTON SEED? *Ino mwakabelesya mali ongaye kuula musamu ukwabilila malwazi kubuluba ooyu?*	[_____]			
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 _____				

	SERVICES				
Q313	Did you use any **TILLAGE** SERVICES in cotton production in the 2004/05 farming season? *Hena kuli bakamulimina mumuunda wabuluba bwanu mainza amu 2004/2005 na?*	1. YES 2. NO	888	999	**IF 'NO' GO TO Q316**
Q314	Who was the major supplier of the TILLAGE SERVICES you used ? *Ino mbaani bakamubelekela mulimo ooyu kapati?* **SUPPLIERS (MAXIMUM OF TWO)** 1 _____ 2 _____	[_____]	888	999	
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 season? *Hena kuli nimwakapompela mubuluba bwanu mainza amu 2004/2005 na?*	1.			**IF 'NO' GO TO Q319**
Q317	Who was the major supplier of the CROP SPRAYING SERVICES you used ? *Ino mbaani bakamugwasya kumilimo yakupompela buluba?* **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____	2.			
Q318	How much did you spend on on paying for CROP SPRAYING SERVICES? *Ino mwakabbadela mali ongaye kuli basikumupompela mubuluba bwanu?*	[_____]	888	999	

Q319	Did you use any WEEDING SERVICES in cotton production in the 2004/05 farming season? *Hena mwakagwasigwa mukulimina buluba mubulimi bwamu 2004/2005 na?*				**IF 'NO' GOTO 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? *Ino mwakabbadela mali ongaye kuli basikumugwasya kulimina aaba?*	_____]	888	999	
Q322	Did you use any HARVESTING SERVICES in cotton production in the 2004/05 farming season? *Hena mwakagwasigwa kutebula na mubutebuzi bwamu 2005?*	1. YES 2. NO			**IF 'NO' GOTO Q325**
Q323	Who was the major supplier of the HARVESTING SERVICES you used ? *Ino mbaani bakabeleka mulimo ooyu kapati?* **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____				
Q324	How much did you spend on on paying for HARVESTING SERVICES? *Ino mwakabbadela mali ongaye kuli basikutebula aaba?*	_____]	888	999	
Q325	Did you use any BANKING SERVICES in cotton production in the 2004/05 farming season? *Hena mwakagwasigwa munzila zyakubelesya bbanki na mubulimi bwamu 2004/2005?*	1. YES 2. NO			**IF 'NO' GOTO 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)** 1 _____ 2 _____				
Q327	What type of BANKING SERVICES did you use? *no bbanki mwakiibelesya munzila) yamusyoobon?* **[IT MAY BE MORE THAN ONE -- CIRCLE ALL THAT IS MENTIONED]** 1. Borrowing 2. Paying for imports 3. Savings 4. Security of assets 5. Other (specify) _____	_____]	888	999	

Q328	Did you borrow money or got inputs on credit for growing cotton last farming season? *Hena kuli nkumwakweletede mali na kubweza loan kutegwa mulime buluba?*	1. Yes 2. No	888	999	**IF 'NO' GO TO Q330**
Q329	Please tell me where you got your credit and how much. **[ASK FOR TWO MAJOR SOURCES]** *Ndalomba mundambile nkomwakabweza chikwelete eeci alimwi ino mwakabweza malinzi.*				

Code	Source of Credit	Amount of credit			
1	Bank or Micro Finance institution	[_____]	888	999	
2	Buyers of outputs	[_____]	888	999	
3	Sellers of inputs	[_____]	888	999	
4	Informal sources	[_____]	888	999	

Q330	Did you get any INSURANCE POLICY in cotton production in the 2004/05 farming season? Hena mwakabelesya nzila zyakukwabilila eezyi mukulima buluba na mubulimi bwamu 2004/05?				**IF 'NO' GOTO Q333**
Q331	Who was the supplier of the INSURANCE SERVICES you used ? **SUPPLIER S (MAXIMUM OF TWO)** *Ino mbaani bakamugwasilizya munzila eeyi kapati?* 1 _____ 2 _____				
Q332	What type of INSURANCE POLICY did you have? *Ino bwakali bukwabilizi bwamusyoobonzi?* 1. Fire 2. Thefty 3. Crop failure 4. Other (specify) _____	[_____]	888	999	
Q333	Did you buy any **farm implements and equipments** for cotton production in the 2004/05 farming season? *Hena mwakaliulide zyakubelesya na mukulima buluba mu 2004/2005?*				**IF 'NO' GO TO Q336**
Q334	Who was the major supplier of the FARM IMPLEMENTS AND EQUIPMENTS you bought? **SUPPLIER S (MAXIMUM OF TWO)** *Ino mbaani bakamuletela zyibelesyo eezyi kapati?* 1 _____ 2 _____				
Q335	How much did you spend on buying **farm implements and equipments**? *Ino mwakabelesya mali ongaye mukuula zyibelesyo eezyi?*	[_____]	888	999	
Q336	Did you pay for any **farm implements and equipments repair services** in cotton production in the 2004/05 farming season? *Hena kuli nimwakabbadelede kumilimo yakubamba zibelesyo mukulima buluba mu 2004/05 na?*				**IF 'NO' GO TO Q339**
Q337	Who was the major supplier of the repair services you bought? **SUPPLIER S (MAXIMUM OF TWO)** *Ino mbaani bakalikubamba kapati?* 1 _____ 2 _____				
Q338	How much did you pay for repair services? *Ino mwakabbadela mali ongaye kuli basikubamba?*	[_____]	888	999	
Q339	Did you use any DRAFT ANIMALS in cotton production the 2004/05 farming season? *Hena mwakabelesya ng'ombe na mbongolo mukulima buluba mumainza amu 2004/05?*	1. YES 2. NO	888	999	**IF 'NO' GO TO Q341**
Q340	If YES, whose draft animals were they? *Kuti na mwakabelesya, ino ng'ombe na mbongolo zyakali zyabani?* 1 OWNED 2 BORROWED 3 HIRED/LEASED 4 SHARED	[_____]	888	999	
	HIRE OF LABOUR				
Q341	Did you hire any people to **do any kind of work** for cotton production in 2004/05? *Hena mwakalitambide Bantu bamugwasya kulima muunda wabuluba na?*	1. YES 2. NO	888	999	**IF 'NO' GO TO Q401**
Q342	If YES, how many? (*Kuti na inzya, bakali bongaye?*)	[_____]	888	999	
Q343	How many days did they work all together? (*Ino bakabeleka mazuba ongaye?*)	[_____]	888	999	
Q344	How much did you pay them all (total)? (*Ino mwakababbadela mali ongaye?*)	[_____]			

SECTION 4: COTTON SALES

Q.NO	QUESTIONS AND FILTERS		WRITE ANSWER HERE	CODES		SKIP TO
			NAME OF COTTON BUYER	DK (circle)	NR (circle)	
Q401	Who were the major buyers of your cotton in 2005? *Ino mbaani bakaula buluba bwanu mubutebuzi bwamu 2005?*	1	_____	888	999	
		2	_____	888	999	
		3	_____	888	999	
		4	_____	888	999	
		CODES	WRITE CODE FOR TYPE OF BUYER			
Q402	What type of buyer is this? **[ASK FOR BUYER LISTED IN Q401]** *Ino basikuula aaba mbantu bali buti?*	1 The lead firm	Buyer 1: [___]	888	999	
		2 A processor	Buyer 2: [___]	888	999	
		3 A broker	Buyer 3: [___]	888	999	
		4 A local trader	Buyer 4: [___]	888	999	
		BUYER	QUANTITY			
Q403	How much cotton did you sell to each of the buyers mentioned in Q401? (WRITE AMOUNT) *Ino mwakasambala buluba bunji buti kuli omwe, omwe sikuula buluba?*	Buyer 1:	[_____]	888	999	
		Buyer 2:	[_____]	888	999	
		Buyer 3:	[_____]	888	999	
		Buyer 4:	[_____]	888	999	
Q404	How much cotton was rejected by each of the buyers mentioned Q401 due to poor quality? *Ino mbunji buti buluba bwakakakwa asikuula omwe, omwe akaambo kakubija kwabuluba?*	Buyer 1:	[_____]	888	999	
		Buyer 2:	[_____]	888	999	
		Buyer 3:	[_____]	888	999	
		Buyer 4:	[_____]	888	999	
Q405	How much money did you get from sales to each of the buyers mentioned in Q401? *Ino mwakasambala mali ongaye kuli omwe, omwe sikuula buluba?*	Buyer 1:	[_____]	888	999	
		Buyer 2:	[_____]	888	999	
		Buyer 3:	[_____]	888	999	
		Buyer 4:	[_____]	888	999	
Q406	What kind of payment agreement was made with each of the buyers mentioned in Q401? *Ino kuulana ooku kwakali kwamusyonzi asikuula omwe, omwe?* **CODES** 1 Spot Payment; 2 Contract Sale; 3 Both		WRITE CODE HERE	888	999	
		Buyer 1:	[_____]			
		Buyer 2:	[_____]	888	999	
		Buyer 3:	[_____]	888	999	
		Buyer 4:	[_____]	888	999	
Q407	How satisfied are you with the buyer of your cotton? *Ino mwakakkutila buti mumakwebo aanu asikuula buluba mupati?* **CODES** 1 VERY SATISFIED; 2 MODERATELY SATISFIED; 3 NOT SATISFIED	Buyer 1:	[_____]	888	999	
		Buyer 2:	[_____]	888	999	
		Buyer 3:	[_____]	888	999	
		Buyer 4:	[_____]	888	999	

SECTION 5: GROUP DYNAMICS

				CODES		SKIP TO
Q501	Are there farmer groups in this community? *Hena kuli tubunga twabalimi kucibaka kuno na?*	GROUP	1. YES 2. NO	DK (circle)	NR (circle)	IF 'NO' GO TO Q507
Q502	If so, what are their names? *Na inzya, ino twiitwa kuti nzi tubunga ootu?*	Group 1:	_____	888	999	
		Group 2:	_____	888	999	
		Group 3:	_____	888	999	
		Group 4:	_____	888	999	
Q503	What type of group is [NAME OF GROUP] _____ ? **[ASK FOR EACH GROUP MENTIOED IN Q501]** *Ino nkabunga kamusyoobonzi (zina lyakabunga)* **CODES** 1. A marketing cooperative		Group 1: [___]	888	999	
			Group 2: [___]	888	999	

	2. A buyer cooperative 3. A marketing/buyer cooperative 4. A producer association 6. Other (specify) _____	Group 3:	[___]	888	999	
		Group 4:	[___]	888	999	
Q504	Are you a member of [NAME OF GROUP] _____? **[ASK FOR EACH GROUP MENTIONED IN Q501]** *Hena munjide mukabunga aaka na?(zina lyakabunga)*	Group 1:	[___]	888	999	**IF 'NO FOR ALL, GOTO Q509**
		Group 2:	[___]	888	999	
		Group 3:	[___]	888	999	
		Group 4:	[___]	888	999	
Q505	What benefits are you currently getting from being a member of [NAME OF GROUP] _____?**[ASK FOR EACH GROUP MENTIONED IN Q504]** *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 4. Easier to sell farm produce 5. Source of production and market information 6. Easier to negotiate for good price 7. Easier to Organize transport 8. Other (specify): _____	Group 1:	[___]	888	999	
		Group 2:	[___]	888	999	
		Group 3:	[___]	888	999	
		Group 4:	[___]	888	999	

Q506	What benefits *would you like* to get from being a member of [NAME OF GROUP] _____? **[ASK FOR EACH GROUP MENTIONED IN Q504]** [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 1:	[___]	888	999	
		Group 2:	[___]	888	999	
		Group 3:	[___]	888	999	
		Group 4:	[___]	888	999	
Q507	As a member of [NAME OF GROUP] _____, how oftern have you attended group meetings in the past 6 months? **[ASK FOR EACH GROUP MENTIONED IN Q504]** *Mbuli memba, ino mwakaunka kumiswaangano yongaye myezi 6 yainda?* 1. Always 2. Sometimes 3. Rarely	Group 1:	[___]	888	999	
		Group 2:	[___]	888	999	
		Group 3:	[___]	888	999	
		Group 4:	[___]	888	999	
Q508	Why are you not a member of [NAME OF GROUP] _____?**[ASK FOR EACH GROUP NOT MENTIONED IN Q504]** *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 1:	[___]	888	999	
		Group 2:	[___]	888	999	
		Group 3:	[___]	888	999	
		Group 4:	[___]	888	999	

Q509	Did you put resources together with one or more other farmers in order to buy agricultural inputs? *Hena mwakabikka mali antoomwe nobalimi kutegwa muule zyakubelesya mubulimi?* 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? *Hena mwakajatizyanya abamwi mukusambala butebuzi bwanu mu 2005 na?* 1 YES 2 NO			

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? 1 YES 2 NO *Hena mulijisi busena kuno na munsimunsi akokuno nkomujana twaambo tujatikizya zyabulimi?*		888	999	**IF 'NO' GO TO 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?* 1. Information on new or better methods of farming 2. Information on better methods of managing farm enterprises 3. Information on input markets 4. Information on output markets 5. Other (specify) _____				
Q606	How is the information deseminated? (*Ino twaambo ootu batupandulula buti?*) [**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		888	999	
Q607	Has the information been helpful to you? *Ino twaaambo ootu twakamugwasya na?* 1 YES 2 NO	[_____]	888	999	

SECTION 7: FARMING TECHNOLOGY & PRACTICES

Q.NO	QUESTIONS, FILTERS AND CODES	DK	NR	SKIP TO
Q701	Did you use any CFU (Conservation Farming Unit) recommended farming practice for cotton growing last farming season? *Hena mwakabelesyako nzila zyakulima nzyobayiisya ba CFU mukulima buluba mainza amu 2004/05?* 1 YES 2 NO	888	999	**IF 'NO' GO TO Q703**
Q702	Please tell me which CFU recommended farming practice you used for cotton growing last season. *Ndalomba mundaambile ino mba CFU nzi bakamukulwayizya kubelesya nzila eeyi kulima 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 you received any advice or training or information in cotton farming in the last one year? *Hena mwakatambula malailile antela lwiiyo na mulumbe kujatikizya bulimi bwabuluba na?* 1 YES 2 NO				888	999	**IF 'NO' GO TO Q801**
Q704	Please tell me the sources of t training received in the last one year and how useful the advice, training, or information that you received was *Ino lwiiyo lwayinoyino awa mwakalujana kuli alimwi mbubotunzi mbumwajana kumalailile aayo, mulwiiyo na mumulumbe ngomwatambula.*						
	Code	**Source of Training, Advice or Information**	**Usefulness of TA** 1 VERY USEFUL 2 MODERATELY USEFUL 3 NOT 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 A) CASH CROP B) FOOD CROP	A/ B	WRITE IN	CODES DK (circle)	NR (circle)	SKIP TO
Q801	How much of the total area of the farm was used to plant the major crops last farming season? *Ino mwakabelesya nyika ipati buti kusyanga zyisyango zyipati pati mumainza amu 2004/05?*	1. Maize		[_____]	888	999	
		2. Groundnuts		[_____]	888	999	
		3. Beans		[_____]	888	999	
		4. Sunflower		[_____]	888	999	
		5. Cassava		[_____]	888	999	
		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 farming season(2005)? *Ino butebuzi bwakali buti kuzwa kuzyisyango zyipati pati mubutebuzi bwamu 2005?*	1. Maize		[_____]	888	999	
		2. Groundnuts		[_____]	888	999	
		3. Beans		[_____]	888	999	
		4. Sunflower		[_____]	888	999	
		5. Cassava		[_____]	888	999	
		6. Tobacco		[_____]	888	999	

		7. Rice		[_____]	888	999	
		8. Sorghum		[_____]	888	999	
		9. Millet		[_____]	888	999	
		10 Other (specify)_____		[_____]	888	999	
Q803	How much money did you get from the major crop sales last farming season? *Ino mwakajana mali ongaye nomwakasambala butebuzi bwanu bwa zyisyango zyipati pati mu 2005?*	1. Maize		[_____]	888	999	
		2. Groundnuts		[_____]	888	999	
		3. Beans		[_____]	888	999	
		4. Sunflower		[_____]	888	999	
		5. Cassava		[_____]	888	999	
		6. Tobacco		[_____]	888	999	
		7. Rice		[_____]	888	999	
		8. Sorghum		_____]	888	999	
		9. Millet		_____]	888	999	
		10 Other (specify)_____		[_____]	888	999	
Q804	Did you use any irrigation on any of the crops in the 2004/2005 farming season? *Hena kuli nomwabelesyede kutilaila cisyango cilicoonse mubulimi bwamu 2004/2005 na?*		**0 = NO**	**1 = YES**			**IF 'NO' GO TO Q901**
		1. Maize			888	999	
		2. Groundnuts			888	999	
		3. Beans			888	999	
		4. Sunflower			888	999	
		5. Cassava			888	999	
		6. Tobacco			888	999	
		7. Rice			888	999	
		8. Sorghum			888	999	
		9. Millet			888	999	
		10 Other specify)_____					

Q805	If you used irrigation last year, what was the main irrigation type that you used FOR EACH crop you irrigated? *Kuti na mwakatilaila mwaka wamana, ino ninzila nzi njomwakabelesya kapati kusyango comwe, comwe?*		**WRITE CODE**			
		1. Maize		888	999	
		2. Groundnuts		888	999	
		3. Beans		888	999	
		4. Sunflower		888	999	
		5. Cassava		888	999	
		6. Tobacco		888	999	
		7. Rice		888	999	
		8. Sorghum		888	999	
		9. Millet		888	999	
		10 Other (specify)_____				

CODES

1	Bucket	2	Treadle pump	3	Electric motor driven pump	4	Diesel pump	5	Other

……..CONTINUED……

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

CODES

1	River/stream	2	Dam/weir	3	Well/borehole	4	Other

SECTION 9: LIVESTOCK AND FARM ASSET OWNERSHIP

		DK	NR	SKIP TO
Q901	Do you own any livestock? 1. Yes; 2. No *Hena mulijisi banyama bavubidwe na?*	888	999	IF 'NO' GO TO Q903
Q902	If yes, please tell me the types and numbers of livestock you own *(Na inzya, ndalomba kuti mundaambile misyobo amweelwe wabanyama banu)*			

	Livestock	Number owned	DK	NR		Livestock	Number owned			
1	Cattle		888	999	7	Chickens		888	999	
2	Donkey		888	999	8	Guinea fowls		888	999	
3	Sheep		888	999	9	Ducks		888	999	
4	Goats		888	999	10	Pigeons		888	999	
5	Pigs		888	999	11	Other [specify] _____		888	999	
6	Rabbits		888	999						

		DK	NR	
Q903	Do you own any farm assets? 1. Yes; 2. No *Hena mulijisi zyikubelesyo zyomubelesya mubulimi bwanu na?*	888	999	
Q904	If yes, please tell me the types and numbers of farm assets you own *Na inzya, ndalomba mundaambile misyobo alimwi amweelwe wazyibelesyo zyanu?*			

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

QUESTIONS & FILTERS					**DK**	**NR**	**SKIP TO**
Please fill in the following details							
Member ID	Q150 Name of Household member *Izina lya 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 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

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		

INCOME & SOURCES			[WRITE SOURCE OF INCOME]				
Q154	What are the three major sources of HOUSEHOLD income, starting with the most important? *Ninzila nzi nzyomubelesya kapati, zyotatwe kuti mujane mali akubelesya amukwasyi wanu?*	1	_____	[_____]	888	999	
		2	_____	[_____]	888	999	
		3	_____	[_____]	888	999	
			CODES: 1 First, 2 Second, 3 Third				
Q155	Do you have a bank account?		1. YES 2. NO				

FOOD SECURITY						
Q156	What were the major food crops that the HOUSEHOLD produced and consumed in the 2004/05 farming season? **[LIST UP TO FOUR]** *Ino zyisyango nzi zipati pati zyomwakatebula akubelesya kulya mubutebuzi bwamu 2005?*			888	999	……
				888	999	
	WRITE ANSWER HERE					
	FOOD ITEM	QUANTITY ONSUMED	COST IF PURCHASED			
	1._____	[_____]	[_____]	888	999	
	2._____	[_____]	[_____]	888	999	
	3._____	[_____]	[_____]	888	999	
	4._____	[_____]	[_____]	888	999	
Q157	How many whole/square meals did you eat yesterday? *Ino mwakalya ziindi zyongaye jilo?*		[_____]	888	999	

Q158	How long did the food crops that you harvested in the past year last? *Ino cakulya ncomwakatebude mwaka wainda mwakalya ciindi cilamfu buti nociyakumana?*	1 LESS THAN 12 MONTHS 2 12 MONTHS	[_____]	888	999	IF '2' SKIP TO Q118
Q159	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?*	1 Bought with own money 2 Given food by relatives or neighbours 3 Exchanged cash crops for food 4 Given food by food aid program 5 Sold/exchanged household goods for food	[_____]	888	999	

HOUSEHOLD EXPENDITURE					
Q160	How much did your household spend on education in the last 12 months (1YEAR)? *Ino mumukwasyi wanu mwakabelesya mali ongaye kucikolo mwaka wamana?*	[_____]	888	999	
Q161	How much did your household spend on food and groceries in the last month 12 months? *Ino mumukwasyi wanu mwakabelesya mali ongaye kucakulya mwaka wamana?*	[_____]	888	999	
Q162	How much did your household spend on housing in the last 12 months (1YEAR)?? *Ino mumukwasyi wanu mwakabelesya mali ongaye kubbadelela ng'anda mwaka wamana?*	[_____]	888	999	
Q163	How much did your household spend on water and electricity in the last 12 months (1YEAR)?? *Ino mumukwasyi wanu mwakabelesya mali ongaye kubbadelela meenda amalayiti mwaka wamana?*	[_____]	888	999	
Q164	How much did your household spend on paraffin in the last 12 months (1YEAR)?? *Ino mumukwasyi wanu mwakabelesya mali ongaye kuula palafini mwaka wamana?*	[_____]	888	999	
Q165	How much did your household spend on clothing in the last 12 months (1YEAR)?? *Ino mumukwasyi wanu mwakabelesya mali ongaye kuula zisani mwaka wamana?*	[_____]	888	999	

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

HOUSING						
Q168	**[OBSERVE AND WRITE ANSWER, ONLY ASK IF YOU CAN'T TELL BY LOOKING]** What is the wall material of the best house among the houses/huts occupied by the members of your household?	1	Mud or cow dung	888	999	
		2	Concrete brinks			
		3	Iron sheets			
		4	Stone			
		5	Tiles			
		6	Wood			
		7	Grass/poles			
		8	Other(specify) _____			
Q169	**[OBSERVE AND WRITE ANSWER, ONLY ASK IF YOU CAN'T TELL BY LOOKING]** What is the roofing material of the best house among the houses/huts occupied by the members of your household?	1	Grass/Straw/thatch	888	999	
		2	Iron sheets	888	999	
		3	Tiles	888	999	
		4	Slates/concrete/cement	888	999	
		5	Wood/planks	888	999	
		6	Other (specify) _____	888	999	
				888	999	
Q170	How many rooms or huts are occupied by all the members of your household? *Ino maanda abelesegwa abantu bamumukwasyi wanu amunzi aano ali ongaye?*		_____	888	999	
Q171	Does this house have a kitchen inside the house? *Ino ng'anda yanu iligisi nkikini mukati na?*	1	YES	888	999	
		2	NO			
Q172	How many chairs with backs are in this house? (*Ino mujisi mipaando yongaye mung'anda yanu?)*			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	

SOURCE OF DRINKING WATER						
Q176	What is your main source of drinking water in the dry season? *Ino muteka kuli meenda akubelesya ang'anda muciindi cacilimo?*	CODE	SOURCE			
		1	Piped water within the communal	888	999	
		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 2 3	Less than a km 1 – 3 Km 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			
Q179	How far is the source of drinking water in the wet season?	1 2 3	Less than a km 1 – 3 Km Above 3 km			

SECTION 1 CONTINUES >>>>>.

TYPE OF TOILET FACILITY						
Q180	What is the type of toilet facility in this house? *Bushe icimbusu mwakwata pano n'ganda camusango shani?*	Flush latrine outside	1			
		Flush latrine inside the residence	2			
		Ordinary Pit latrine	3			
		VIP (Ventilated Improved Pit latrine)	4			
		Other (specify)	5			
		None	6	888	999	
SOURCE OF LIGHTING/INFORMATION ACCESS						
Q181	What is the type of lighting in this house? *Ino mubelesya nzi kumunika mung'anda?*	Candle	1	888	999	
		Paraffin lamp	2	888	999	
		Pressure lamp	3	888	999	
		Generator	4	888	999	
		Solar	5	888	999	
		Battery system	6	888	999	
		Electricity	7	888	999	
		Firewood/Grass	8	888	999	
		Other (specify) _____				

COOKING UTENSILS					
Q182	What cooking/kitchen utensils do you have? (*Ino mujisi zyakujikila zyamusyobonzi?*)				
	1.Metal pots/kettles	[_____]	888	999	
	2.Charcoal stove	[_____]	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	

HOUSEHOLD GOODS							
Q183	Do you have the following goods in your household? *Hena mulijisi mpansya eezyi mung'anda yanu na?*			**Write Number**	**DK**	**NR**	**SKIP 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	[_____]	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	
Q184	How many motor vehicles do you 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	Number		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 NAME OF CATTLE BUYER	CO DES DK (circle)	 NR (circle)	SKIP TO
Q345	Who were the major buyers of your cattle in the past 12 months? *Mbaani bakali kuula kapati ng'ombe zyanu mu 2005?*	1	_____	888	999	
		2	_____	888	999	
		3	_____	888	999	
		4	_____	888	999	
Q346	What type of buyer is this? **[ASK FOR EACH BUYER LISTED ABOVE]** *(Ino mbasikuula bamusyonzi?)* **CODES** 1 THE LEAD FIRM 2 A PROCESSOR 3 A BROKER 4 A LOCAL TRADER	Buyer 1: [___]		888	999	
		Buyer 2: [___]		888	999	
		Buyer 3: [___]		888	999	
		Buyer 4: [___]		888	999	
Q347	How much cattle did you sell to each of the buyers mentioned in Q301 in the past 12 months? *Ino mwakasambala ng'ombe zyongaye kuli sikuula omwe, omwe?*	Buyer 1:	[_____]	888	999	
		Buyer 2:	[_____]	888	999	
		Buyer 3:	[_____]	888	999	
		Buyer 4:	[_____]	888	999	
Q348	How many cattle were rejected by each of the buyers mentioned in Q301 due to poor quality in the past 12 months? *(Ino ng'ombe zyongaye zyakakakwa kuli basikuula akaambo kakutabakabotu?)*	Buyer 1:	[_____]	888	999	
		Buyer 2:	[_____]	888	999	
		Buyer 3:	[_____]	888	999	
		Buyer 4:	[_____]	888	999	
Q349	How much money did you get from sales to each of the buyers mentioned in Q301 in the past 12 months? *Ino mwakasambala mali ongaye kuli omwe, omwe wabasikuula?*	Buyer 1:	[_____]	888	999	
		Buyer 2:	[_____]	888	999	
		Buyer 3:	[_____]	888	999	
		Buyer 4:	[_____]	888	999	
Q350	What kind of payment agreement was made with each of the buyers mentioned in Q301? **CODES** 1 Spot Payment 2 Contract Sale 3 Both *Ino mwakali kuulana buti aomwe, omwe wabasikuula?*	Buyer 1:	[_____]	888	999	
		Buyer 2:	[_____]	888	999	
		Buyer 3:	[_____]	888	999	
		Buyer 4:	[_____]	888	999	
Q351	What was the major reason for selling? *Ino ncinzi cipati cakapa kuti musambale ng'ombe?* **CODES** 1 Commercial 2 Emergency 3 Raise cash for school fees 4 Raise cash for medicals 5 Raise cash for dowry 6 Other (specify) _____	1st Sale:	[_____]	888	999	
		2 nd Sale:	[_____]	888	999	
		3 rd Sale:	[_____]	888	999	
		4 th Sale:	[_____]	888	999	
Q352	*For the major buyer mentioned in Q301, what was the usual place where the cattle sales took place?* *(Ino nkukuli nkomwakali kusambalila ng'ombe zyanu?)* **CODES** 1 At the farm trader/agent 2 At abattoir 3 At feed lot 4 At auction 5 Butchery 6 Market	Buyer 1:	[_____]	888	999	
		Buyer 2:	[_____]	888	999	
		Buyer 3:	[_____]	888	999	
		Buyer 4:	[_____]	888	999	
Q353	For each buyer mentioned in Q301, what was the average price per animal and the usual method you used to determine the price of an	Buyer 1:	METHOD [_____] AVE. PRICE [_____]	888	999	

	animal? *(Ino myuulo mwakali kwiipanga buti?)* **CODES** 1 Visual inspection; 2 By weight; 3 String measurement of girth; 4 Sex; 5 Off-take (Dressed weight); 6 Grades and standards; 7 Other (specify) _____	Buyer 2:	[_____]	[_____]	888	999	
		Buyer 3:	[_____]	[_____]	888	999	
		Buyer 4:	[_____]	[_____]	888	999	
Q354	How satisfied are you with the major buyers of your cattle? *Hena mwakakkutila but asikuula mupati?* **CODES** 1 VERY SATISFIED 2 MODERATELY SATISFIED 3 NOT SATISFIED	Buyer 1:	[_____]		888	999	
		Buyer 2:	[_____]		888	999	
		Buyer 3:	[_____]		888	999	
		Buyer 4:	[_____]		888	999	

SECTION 4: INPUT USAGE FOR CATTLE REARING

Q401	Did you use any **DIP CHEMICALS** in cattle rearing in the past 12 months? *Hena mwakabelesya camutunzya mubuluba mumainza amu 2004/05?*	3. Yes 4. No	888	999	**IF 'NO' GO TO Q405**
Q402	If YES, how much? *(Kuti na mwakabelesya, ino wakali munji buti?)*	[_____]	888	999	
Q403	Who was the major supplier of the Dip chemicals you used on cattle rearing? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____ *Ino mbabani bakamusambalide camutunzya ngomwakabikka mubuluba bwanu?*	[_____]	888	999	
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? *Hena mwakabelesya misamu yakupompezya buuka mubuluba mumainza amu 2004/05?*	1. Yes 2 No	888	999	**IF 'NO' GO TO Q409**
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? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____ *Ino mbabani bakamusambalide musamu wabuuka ngomwakabikka mubuluba bwanu?*	[_____]	888	999	
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? *Hena mwakabelesya musamu ujaya bwizu mubuluba bwanu mumainza amu 2004/05?*	1. Yes 2. No	888	999	**IF 'NO' GO TO Q413**
Q410	If YES, how much? *(Kuti na mwakabelesya, ino wakali munji buti?)*	[_____]	888	999	
Q411	Who was the major supplier of the vaccines you used on cattle rearing? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____ *Ino mbabani bakamusambalide musamu ujaya bwizu ngomwakabikka mubuluba bwanu?*	[_____]	888	999	
Q412	How much did you spend on buying vaccines? *Ino mwakabelesya mali ongaye kuula musamu ujaya bwizu mubuluba ooyu?*	[_____]			
Q413	Did you use any **HERDING** SERVICES in cattle rearing in the past 12 months?	1. Yes 2. No	888	999	**IF 'NO' GO TO Q416**
Q414	Who was the major supplier of the HERDING SERVICES you used ? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____	[_____]	888	999	
Q415	How much did you spend on on HERDING SERVICES?	[_____]			
Q416	Did you use any **CATTLE** SPRAYING SERVICES in cattle rearing in the past 12 months?	1. Yes 2. No			**IF 'NO' GO TO Q419**

Q417	Who was the major supplier of the **CATTLE** SPRAYING SERVICES you used ? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____				
Q418	How much did you spend on on paying for **CATTLE** SPRAYING SERVICES? ----------		888	999	
Q419	Did you use any **CATTLE** TRANSPORTATION SERVICES in cattle rearing in the past 12 months?	1. YES 2. NO	888	999	
Q420	Who was the major supplier of the TRANSPORTATION SERVICES you used ? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____		888	999	
Q421	How much did you spend on paying for TRANSPORTATION SERVICES? ----------		888	999	
Q422	Did you use any **FEED LOT SERVICES** in cattle rearing in the past one year?	1. YES 2. NO			**IF 'NO' GO TO Q425**
Q423	Who was the major supplier of the FEED LOT SERVICES you used ? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____				
Q424	How much did you spend on paying for FEED LOT SERVICES? ----------		888	999	
Q425	Did you use any **STUD SERVICES** in cattle rearing in the past one year?	1. Yes 2. No			**IF 'NO' GO TO Q428**
Q426	Who was the major supplier of the **STUD SERVICES** you used ? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____				
Q427	How much did you spend on paying for STUD SERVICES?	[_____]	888	999	
Q428	Did you use any **ARTIFICIAL INSEMINATION SERVICES** in cattle rearing in the past one year?	1. Yes 2. No			**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 _____				
Q430	How much did you spend on paying for ARTIFICIAL INSEMINATION SERVICES?	[_____]	888	999	
Q431	Did you use any **BANKING SERVICES** in cattle rearing in the past 12 months?	1. Yes 2. No			**IF 'NO' GO TO Q434**
Q432	Who was the major supplier of the BANKING SERVICES you used ? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____				
Q433	What type of BANKING SERVICES did you use? **[IT MAY BE MORE THAN ONE - CIRCLE ALL THAT IS MENTIONED]** 1. Borrowing 2. Paying for imports 3. Savings 4. Security of assets 5. Other (specify) _____	[_____]	888	999	
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 me where you got your credit and how much. **[ASK FOR TWO MAJOR SOURCES]** *Ndalomba mundambile nkomwakabweza chikwelete eeci alimwi ino mwakabweza malinzi.*				
	Code	**Source of Credit**	**Amount of credit**		
	1	Bank or Micro Finance institution	[__]__]__]__]__]__]__]__]	888	999
	2	Buyers of outputs	[__]__]__]__]__]__]__]__]	888	999
	3	Sellers of inputs	[__]__]__]__]__]__]__]__]	888	999
	4	Informal sources	[__]__]__]__]__]__]__]__]	888	999
Q436	Did you use any INSURANCE POLICY in cattle rearing in the past 12 months?		1. Yes 2. No		**IF 'NO' GO TO Q436**
Q437	Who was the major supplier of the INSURANCE SERVICES you used ? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____				
Q438	What type of INSURANCE POLICY did you have? 1. Fire 2. Thefty 3. Crop failure 4. Other (specify) _____		[_____]	888	999
Q439	Did you use any **PRIVATE VERTERINARY services** in the past 12 months?		1.YES 2.NO		**IF 'NO' GO TO Q442**
Q440	Who was the major supplier of the PRIVATE VERTERINARY SERVICES you bought? **SUPPLIER S (MAXIMUM OF TWO)** 1 _____ 2 _____				
Q441	How much did you spend on buying **private verterinary services**?		[_____]	888	999
	HIRE OF LABOUR				**SKIP TO**
Q442	Did you hire any people to do any work related to cattle rearing the past 12 months? 1 YES 2 NO *Hena kuli nimwaka njizide Bantu kumugwasya mumilimo yakubamba ng'ombe na?*		[_____]	888	999
Q443	If YES, how many? (*Na inzya, bakali bongaye?)*		[_____]	888	999
Q444	How many days did they work in TOTAL? (*Ino bakabeleka mazuba ongaye?)*		[_____]	888	999
Q445	How much did you pay them in TOTAL? (*Ino mwakababbadela mali ongaye?)*				

IF 'NO' GO TO Q442

IF 'NO', GO TO Q501

SECTION 5: MORBIDITY AND MORTALITY

	MORBIDITY & MORTALITY		DK	NR	SKIP TO
Q501	How 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?)*	[__]__[__]__]	888	999	IF 'ZERO' GO TO Q504
Q502	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)	[___]	888	999	
Q503	How many cattle died of foot and mouth disease in the past 12 months? *Ino ng'ombe zyongaye zyakafwa kubulwazi bwamulomo amaulu mumwaka omwe wainda?*		888	999	
Q504	How many cattle suffered from corridor disease in the past 12 months? *Ino ng'ombe zyongaye zyakaciswa bulwazi bwakudenkete mwaka omwe wainda?*	[__]__[__]__]			IF ZERO' GO TO Q507

Q505	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	[_____]	888	999	
Q506	How many cattle died of corridor disease in the past 12 months? *Ino ng'ombe zyongaye zyakafwa kubulwazi bwadenkete mumwaka omwe wainda?*	[_____]	888	999	
Q507	How many cattle suffered from anthrax in the past 12 months? Ino ng'ombe zyongaye zyakaciswa bulwazi bwa kuzuzuma akuzwa bulowa mumwaka omwe wainda?	[__][__][__]			**IF ZERO' GO TO Q510**
Q508	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	[___]	888	999	
Q509	How many cattle died of anthrax disease in the past 12 months? *Ino ng'ombe zyongaye zyakafwa kubulwazi* kuzuzuma akuzwa bulowa *mumwaka omwe wainda?*		888	999	
Q510	How many cattle suffered from lumpy skin disease in the past 12 months? the past 12 months? *Ino ng'ombe zyongaye zyakaciswa bulwazi bwa cinkwankwa mumwaka omwe wainda?*	[__][__][__]			**IF ZERO' GO TO Q513**
Q511	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	[___]	888	999	
Q512	How many cattle died of lumpy skin disease in the past 1 year? *Ino ng'ombe zyongaye zyakafwa kubulwazi bwacinkwankwa mumwaka omwe wainda?*		888	999	
Q513	How many cattle suffered from liver fluke in the past 12 months? *Ino ng'ombe zyongaye zyakaciswa bulwazi bwamuni mumwaka omwe wainda?*	[__][__][__]			**IF 'ZERO' GO TO Q616**
Q514	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	[___]	888	999	
Q515	How many cattle died of liver fluke disease in the past 12 months? *Ino ng'ombe zyongaye zyakafwa kubulwazi bwamuni mumwaka omwe wainda?*		888	999	
Q516	How many cattle suffered from CBPP disease in the past 12 months? *Ino ng'ombe zyongaye zyakaciswa bulwazi bwaCBPPmumwaka omwe wainda?*	[__][__][__]			**IF 'ZERO' GO TO Q619**
Q517	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	[___]	888	999	
Q518	How many cattle died of CBPP disease in the past 12 months? *Ino ng'ombe zyongaye zyakafwa kubulwazi bwaCBPPmumwaka omwe wainda?*	[_____]	888	999	
Q519	How many cattle suffered from OTHER disease in the past 12 months? Ino ng'ombe zyongaye zyakaciswa bulwazi bwaCBPPmumwaka omwe wainda?	[__][__][__]			**IF 'ZERO' GO TO Q601**
Q520	What are the names of these OTHER diseases your cattle suffered from?	**WRITE NAMES OF DISEASES** _____ _____ _____ _____ ___	888	999	

Q521	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	[___]	888	999	
Q522	How many cattle died of OTHER diseases in the past 12 months? *Ino ng'ombe zyongaye zyakafwa kubulwazi bwaCBPPmumwaka omwe wainda?*	[_____]	888	999	
Q523	What are the names of these OTHER diseases your cattle died of?	**WRITE NAMES OF DISEASES** _____ _____ _____ _____ ___	888	999	

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 information, whether SMS or voice, that is useful in cattle rearing? 1 Never 2 Sometime 4 often				
Q602	How often do you use the Internet to send or receive information useful in cattle rearing? 1 Never 2 Occasionally 4 often	[___]	888	999	
Q603	Have you listened to radio programmes broadcasted on agriculture in the past two weeks? 1 YES 2 NO	[___]	888	999	
Q604	Are there farmer information centres in this or nearby community? 1 YES 2 NO	[___]	888	999	**IF 'NO' GOTO Q701**
Q605	What type of information is provided by the information centre(s)? **[MAY BE MORE THAN ONE – WRITE ALL THAT APPLY]** 1. Information on new or better methods of farming 2. Information on better methods of managing farm enterprises 3. Information on input markets 4. Information on output markets 5. Other (specify) _____	[___]	888	999	
Q606	How is the information deseminated? **[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 5. Through e-mail		888	999	
Q607	Has the information been helpful to you? 1 YES 2 NO	[___]	888	999	

SECTION 7: TECHNICAL ADVICE

TECHNICAL 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 tell me the sources of the training you have received in the past 12 months and how useful the advice training or information that you received *Ndalomba mundaambile nkomwakajana lwiiyo lwainoino awa abubotu bwa malailile, mulumbe a lwiiyo ndomwakatambula?*			888	999	
	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**	**1. YES** **2. NO**	**CODES** **DK**	**NR**	**SKIP TO** **IF 'NO' GO TO Q909**
Q802	If so, what are their names?	Group 1:	_____	888	999	
		Group 2:	_____	888	999	
		Group 3:	_____	888	999	
		Group 4:	_____	888	999	
Q803	What type of group is [NAME OF GROUP] _____ ? [**ASK FOR EACH GROUP MENTIONED IN Q901**] **CODES** 1. A marketing cooperative 2. A buyer cooperative 3. A marketing/buyer cooperative 4. A producer association 5. Other (specify) _____		Group 1: [____]	888	999	
			Group 2: [____]	888	999	
			Group 3: [____]	888	999	
			Group 4: [____]	888	999	
		GROUP				
Q804	Are you a member of [NAME OF GROUP] _____? **ASK FOR EACH GROUP MENTIONED IN Q801**	Group 1:	[____]	888	999	
		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 MENTIONED IN Q804] [MAY BE MORE THAN ONE – WRITE ALL THAT APPLY] 9. Easy access to inputs 10. Easy access to credit 11. Easy access to extension services 12. Easier to sell farm produce 13. Source of production and market information 14. Easier to negotiate for good price 15. Easier to Organize transport 16. Other (specify): _____	Group 1:	[____]	888	999	
		Group 2:	[____]	888	999	
		Group 3:	[____]	888	999	
		Group 4:	[____]	888	999	
Q806	What benefits *would you like* to get from being a member of [NAME OF GROUP] _____? [ASK FOR EACH GROUP MENTIONED IN Q804] [MAY BE MORE THAN ONE – WRITE ALL THAT APPLY] 9. Easy access to inputs 10. Easy access to credit 11. Easy access to extension services 12. Easier to sell farm produce 13. Source of production and/or market information 14. Easier to negotiate for good price 15. Easier to Organize transport 16. Other (specify): _____	Group 1:	[____]	888	999	
		Group 2:	[____]	888	999	
		Group 3:	[____]	888	999	
		Group 4:	[____]	888	999	
Q807	As a member of [NAME OF GROUP] _____, how oftern have you attended group meetings in the past 6 months? [ASK FOR EACH GROUP MENTIONED IN Q804] 4. Always 5. Sometimes 6. Rarely	Group 1:	[____]	888	999	
		Group 2:	[____]	888	999	
		Group 3:	[____]	888	999	
		Group 4:	[____]	888	999	
Q808	Why are you not a member of [NAME OF GROUP] _____,? [ASK FOR EACH GROUP NOT MENTIONED IN Q804] 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 1:	[____]	888	999	
		Group 2:	[____]	888	999	
		Group 3:	[____]	888	999	
		Group 4:	[____]	888	999	
Q809	Did you put resources together with one or more other farmers in order to buy agricultural inputs? 1 YES 2 NO		[____]			
Q810	Did you jointly acquire any services with one or more other farmers in the 2004/5 farming season? 1 YES 2 NO		[____]	888	999	
Q811	Did you join up with one or more other farmers for the sake of selling your produce in the 2004/05 farming season? 1 YES 2 NO		[____]	888	999	

SECTION 9: CROPS

STARTS NEXT PAGE. >>>>

Q.NO	QUESTIONS AND FILTERS	CODES		WRITE IN	CODES		SKIP TO
		A) CASH CROP B) FOOD CROP	A/B		DK	NR	
Q901	How much of the total area of the farm was used to plant the major crops last farming season? *Ino mwakabelesya nyika ipati buti kusyanga zyisyango zyipati pati mumainza amu 2004/05?*	1. Maize		[_____]	888	999	
		2. Groundnuts		[_____]	888	999	
		3. Beans		[_____]	888	999	
		4. Sunflower		[_____]	888	999	
		5. Cassava		[_____]	888	999	
		6. Tobacco		[_____]	888	999	
		7. Rice		[_____]	888	999	
		8. Sorghum		[_____]	888	999	
		9. Millet		[_____]	888	999	
		10 Other (specify)_____		[_____]	888	999	
Q902	How much of the major crop(s) did you harvest last farming season (2005)? *Ino butebuzi bwakali buti kuzwa kuzyisyango zyipati pati mubutebuzi bwamu 2005?*	1. Maize		[_____]	888	999	
		2. Groundnuts		[_____]	888	999	
		3. Beans		[_____]	888	999	
		4. Sunflower		[_____]	888	999	
		5. Cassava		[_____]	888	999	
		6. Tobacco		[_____]	888	999	
		7. Rice		[_____]	888	999	
		8. Sorghum		[_____]	888	999	
		9. Millet		[_____]	888	999	
		10 Other (specify)_____		[_____]	888	999	
Q903	How much money did you get from the major crop sales last farming season? *Ino mwakajana mali ongaye nomwakasambala butebuzi bwanu bwa zyisyango zyipati pati mu 2005?*	1. Maize		[_____]	888	999	
		2. Groundnuts		[_____]	888	999	
		3. Beans		[_____]	888	999	
		4. Sunflower		[_____]	888	999	
		5. Cassava		[_____]	888	999	
		6. Tobacco		[_____]	888	999	
		7. Rice		[_____]	888	999	
		8. Sorghum		[_____]	888	999	
		9. Millet		[_____]	888	999	
		10 Other (specify)_____		[_____]			
Q904	Did you use any irrigation on any of the crops in the 2004/2005 farming season?		0 = NO	1 = YES			IF 'NO' GO Q1001
		1. Maize			888	999	
		2. Groundnuts			888	999	
		3. Beans			888	999	
		4. Sunflower			888	999	
		5. Cassava			888	999	
		6. Tobacco			888	999	
		7. Rice			888	999	
		8. Sorghum			888	999	
		9. Millet			888	999	
		10 Other (specify)_____					

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

			WRITE CODE		
Q906	If you used irrigation last year, what was the main source of irrigation water FOR EACH crop you irrigated? **CODES** 1 River/stream; 2 Dam/weir; 3 Well/borehole; 4 Other	1. Maize		888	999
		2. Groundnuts		888	999
		3. Beans		888	999
		4. Sunflower		888	999
		5. Cassava		888	999
		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 you own any OTHER livestock? 1. Yes; 2. No *Hena mulijisi misyobo imbi yabanyama bavubidwe na?*	888	999	IF 'NO' GO TO Q1004
Q1002	If yes, please tell me the types and numbers of livestock you own *Na inzya, ndalomba kuti mundaambile misyobo amweelwe wabanyama banu*			

	Livestock	Number owned	DK	NR		Livestock	Number owned	DK	NR	SKIP TO
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 you own any farm assets? 1. Yes; 2. No *Hena mulijisi zyibelesyo zyomubelesya mubulimi bwanu na?*	888	999	
Q1004	If yes, please tell me the types and numbers of farm assets you own *Na inzya, ndalomba mundaambile misyobo alimwi amweelwe wazyibelesyo zyanu?*			

	Asset	Number owned	DK	NR		Asset	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	

**********THE END **********

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]

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	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 number of questions		

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? *Hena ndunywe bamukamwini munzi na?*	Yes No	1 2	
Q186	**Record Sex Of The Respondent**	Male Female	1 2	
Q187	In what month and year were you born? *Ino mwakazyalwa lili? Mwezi amwaka nzi?*	Month Don't Know Month No Response Year Don't Know Year No Response	[__|__] 88 99 [__|__] 88 99	
Q188	How old were you at your last birthday? *Ino kuciindi cino mwakakwanisya myaka yongaye yakuzyalwa?* **(Compare & Correct Q103 OR 104 If Needed)**	Age In Completed Years Don't Know No Response **Estimate Best Answer**	[__|__] 88 99	
Q189	Have you ever attended formal school? *Hena kuli nomwakanjide cikolo na?* **(Ensure You Probe Adequately)**	Yes No Don't Know No Response	1 2 88 99	**IF 'NO' GO TO Q108**
Q190	What is the highest level of school you attended: primary, secondary or higher? **Circle One** *Ino mwakagolela mubbuku nzi?*	1. Lower Primary(sub A to Standard 2 or Grade 1 - 4) 2. Upper Primary (Standard 3-5 or Grade5- 7) 3. Junior Secondary (up to Grade 9 or Form 3) 4. Senior secondary (up to Grade 12 or Form 5) 5. Higher 888. Don't Know 999. No Response		
Q191	How many total years of education did you attend? *Ino mwakaiya myaka yongaye kucikolo?*	# Years Completed Don't Know No Response	[__|__] 88 99	

QUESTIONS & FILTERS					**DK**	**NR**	**SKIP TO**
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

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		

INCOME & SOURCES			WRITE ANSWER HERE				
Q196	What are the three major sources of HOUSEHOLD income, starting with the most important?	1	_____	[_____]	888	999	
		2	_____	[_____]	888	999	
		3	_____	[_____]	888	999	
			CODES: 1 First, 2 Second, 3 Third				
Q197	Do you have a bank account?		1. YES 2. NO				

FOOD SECURITY						
Q198	What were the major food crops that the HOUSEHOLD produced and consumed in the 2004/05 farming season? **[LIST UP TO FOUR]** *Ino zyisyango nzi zipati pati zyomwakatebula akubelesya kulya mubutebuzi bwamu 2005?*			888	999	
				888	999	
	FOOD ITEM	QUANTITY CONSUMED	COST IF PURCHASE			
	1._____	[_____]	[_____]	888	999	
	2._____	[_____]	[_____]	888	999	
	3._____	[_____]	[_____]	888	999	
	4._____	[_____]	[_____]	888	999	
Q199	How many whole/square meals did you eat yesterday? *Bushe mwalile imiku inga mailo?*		[_____]			
Q200	How long did the food crops that you harvested in the past year last? *Ino cakulya ncomwakatebude mwaka wainda mwakalya ciindi cilamfu buti nociyakumana?*	1 LESS THAN 12 MONTHS 2 12 MONTHS	[_____]	888	999	IF '2' GO Q118
Q201	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?*	1 Bought with own money 2 Given food by relatives or neighbors 3 Exchanged cash crops for food 4 Given food by food aid program 5 Sold/exchanged household goods for food	[_____]	888	999	

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

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

HOUSING						
Q210	**[OBSERVE AND WRITE ANSWER, ONLY ASK IF YOU CAN'T TELL BY LOOKING]** What is the wall material of the best house among the houses/huts occupied by the members of your household? *Bushe icibumba ca n'ganda intu mutila eisuma sana muli uno mushi bakulila nenshi?*	1	Mud or cow dung	888	999	
		2	Concrete brinks			
		3	Iron sheets			
		4	Stone			
		5	Tiles			
		6	Wood			
		7	Grass/poles			
		8	Other (specify) _____			
Q211	**[OBSERVE AND WRITE ANSWER, ONLY ASK IF YOU CAN'T TELL BY LOOKING]** What is the roofing material of the best house among the houses/huts occupied by the members of your household? *Bushe umutenge wa n'ganda intu mutila eisuma sana muli uno mushi fimbila nenshi?*	1	Grass/Straw/thatch	888	999	
		2	Iron sheets	888	999	
		3	Tiles	888	999	
		4	Slates/concrete/cement	888	999	
		5	Wood/planks	888	999	
		6	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*		_____	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 yamasofa 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

SOURCE OF DRINKING WATER						
Q218	What is your main source of drinking water in the dry season?	**CODE**	**SOURCE**			

	Bushe mufumyakwi amenshi yakunwa mulusuba?	1	Piped water within the community *Amenshi yakumupompi muno mwine mumushi*	888	999	
		2	Piped outside this community *Amenshi yakumupompi uushili wamuno mushi*	888	999	
		3	A private well in the community *Pacishima cakuimbila fye muno mwine mumushi*	888	999	
		4	Water tank in the community *Pe Tanki lyamenshi muno mwine mumushi*	888	999	
		5	Pond/river/canal *Mumumana/ mumufolo*	888	999	
		6	Public well in the community *Pa cishima ca muli uno wine mushi*	888	999	
		7	Other (specify) _____			
Q219	How far is the source of drinking water in the dry season?	1 2 3	Less than a km 1 – 3 Km Above 3 km			
Q220	What is your main source of drinking water in the wet season? *Bushe mufumyakwi amenshi yakunwa mumainsa?*	1	Piped water within the community *Amenshi yakumupompi muno mwine mumushi*	888	999	
		2	Piped water outside this community *Amenshi yakumupompi uushili wamuno mushi*	888	999	
		3	A private/borehole well in the community *Pacishima cakuimbila fye muno mwine mumushi*	888	999	
		4	Water tank in the community *Pe Tanki lyamenshi muno mwine mumushi*	888	999	
		5	Pond/river/canal *Mumumana/ mumufolo*	888	999	
		6	Public well in the community *Pa cishima ca muli uno wine mushi*	888	999	
		7	Other (specify)_____	888	999	
Q221	How far is the source of drinking water in the wet season?	1 2 3	Less than a km 1 – 3 Km Above 3 km			

TYPE OF TOILET FACILITY						
Q222	What is the type of toilet facility in this house? *Bushe icimbusu mwakwata pano n'ganda camusango shani?*	Flush latrine outside	1			
		Flush latrine inside the residence	2			
		Ordinary Pit latrine	3			
		VIP (Ventilated Improved Pit latrine)	4			
		Other (specify)	5			
		None	6	888	999	
SOURCE OF LIGHTING/INFORMATION ACCESS						
Q223	What is the type of lighting in this house? *Bushe musangoshi mubofya uwakusanikilamo mun'ganda yenu?*	Candle	1	888	999	
		Paraffin lamp	2	888	999	
		Pressure lamp	3	888	999	
		Generator	4	888	999	
		Solar	5	888	999	
		Battery system	6	888	999	
		Electricity	7	888	999	
		Firewood/Grass	8	888	999	
		Other (specify) _____				
COOKING UTENSILS						

Q224	What cooking/kitchen utensils do you have?					
	1.Metal pots/kettles		[_____]	888	999	
	2.Charcoal stove		[_____]	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	
HOUSEHOLD GOODS						
Q225	Do you have the following goods in your household?		**Write Number**	**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	[_____]	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 you have?		[_____]	888	999	

SECTION 2: RETAILER PROMOTIONAL ACTIVITIES INPUT SUPPLY

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

	6 Other (specify) *Fimbi(londolola)*_____				
Q214	How far is the nearest agricultural input shop? *Palepa shani apebela ituka ilyaba mupepi naimwe?*	1. Less than 500 m	888	999	
		2. 500m to less than 1 km	888	999	
		3. From 1 km to less than 3 km	888	999	
		4. From 3 km to less than 5 km	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? *Nishilanshi mwishibilamo ukuti kuli imisango iyipya iyakubombelamo nangu tutile ishila ishakumyafwilishamo mumibombele yenu?*	1. Camp extension officer	888	999	
		2. Village extension group	888	999	
		3. Input supplier	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 mwingalashita ifintu mumatuka yabo? RESPONSE OPTIONS 1 YES 2 NO	[__]			
Q217	What factors are most important to you when deciding where to buy? *Finshi filenga ukuti mwingatotonkanya no kusanga ati kuti mwashita uku nangu kulya?* **[MAY BE MORE THAN ONE, CIRCLE ALL THAT IS MENTIONED]**	1. Price	888	999	
		2. Location	888	999	
		3. Quality	888	999	
		4. Relationship/trust with owner	888	999	
		5. Recommendation from someone	888	999	
		6. Other (specify)	888	999	
		2. Word of mouth	888	999	
		3. Print adverts	888	999	
		4. Live promotional adverts	888	999	
		5. Other (specify)	888	999	
Q218	How often do you use a cell phone, whether yours or someone else's, to receive information, whether through SMS or voice, that is useful in the farming business? *Bushe mulabofya libili libili ka lamya kakuminwe, kuti ni kalamya kenu nango ka kwashima fye, mukupokelelapo amashiwi ayo angamwafwilishako bunonshi bwabulimi?* 1 Never 2 Sometime 4 often	[____]	888	999	
Q219	How often do you use the Internet to send or receive information in your farming business? *Bushe mulabomfya libili libili internet pakutuma nangu ukupokelelapo amashiwi ya pabunonshi bwamu bulimi* 1 Never 2 Sometime 4 often	[____]	888	999	
Q220	Have you listened to radio programmes broadcasted on agriculture as a business in the past two weeks? *Pamilungu yapitapo ibili iyi mwalumfwa ko cilimba pe lyashi lya kuti ubulimi bukwebo?* 1 YES 2 NO	[____]	888	999	
Q221	Are there farmer information centres in this or nearby community? *Bushe kwaliba ko incende mumushi wenu eko mwingatila eko musanga ilyashi pafyabulimi?* 1 YES 2 NO	[____]	888	999	**IF 'NO' GO TO Q214**
Q222	What type of information is provided by the information centre(s)? *Lyashi lyamusangoshi musangako nango tutile lyashi lyamusangoshi lisangwa mucende ine iyi?* 1. Information on new or better methods of farming 2. Information on better methods of managing farm enterprises 3. Information on input markets 4. Information on output markets 5. Other (specify) _____		888	999	
Q223	How is the information deseminated? *Ilyashi lisabankanishiwa mumusango nshi?* 1. By word of mouth 2. Through written material 3. Through radio		888	999	

	4. Through cell phones 5. Through e-mail				
Q224	Has the information been helpful to you? *Bushe ilyashi musangako kuncende ine iyi lyalibapo ilyakumyafulisha?* 1 YES 2 NO	[_____]	888	999	

INPUT: FERTILIZERS					
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?* 1 From an agent at farm **Kubaletela ba shima farm** 2 A store outside the community **Kwituuka naile ko** 3 A buying group/association *Ku kabungwe akashitisha ifyabulimi mumushi* 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	
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?* 1 Less than 3 Km 2 Between 3 and 6 km 3 Between 7 & 10 km 4 11km and above	[_____]	888	999	

INPUT: PESTICIDES					
Q229	How much pesticide did you buy in the past farming season? *Bushe mwalishitilepo umuti wakwipaya utushishi mumabala yenu?. Mwashitile amabotolo(ifipaketi) yanga (finga)?*	[_____]	888	999	IF 'ZERO' GO TO Q222
Q230	How much did you spend on pesticides in the past farming season (2004/05)? *Mwaposelepo indalama shinga mukushita umuti wakipaya utushishi mumabalayenu.*	[_____]	888	999	
Q231	Where did you buy most of the pesticides (More than 1 response expected)? *Nikwisa mwashitile umuti wine uyu?* 1 From an agent at farm **Kubaletela ba shima farm** 2 A store outside the community **Kwituuka naile ko** 3 A buying group/association *Ku kabungwe akashitisha ifyabulimi mumushi* 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	
Q232	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?* 1 Less than 3 Km 2 Between 3 and 6 km 3 Between 7 & 10 km 4 11km and above	[_____]	888	999	

INPUT: HERBICIDES					
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 *Kubaletela ba shima farm* 2 A store outside the community **Kwituuka naile ko** 3 A buying group/association *Ku kabungwe akashitisha ifyabulimi mumushi* 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 3 Km; 2 Between 3 and 6 km; 3 Between 7 & 10 km; 4 11km and above	[_____]	888	999	

INPUT: VETERINARY DRUGS					
Q237	How much VETERINARY DRUGS did you buy in the past farming season? **Umuti mwashitile uwakucingilila ifilimwa fyenu kumalwele wafulileshani?**	[_____]	888	999	IF 'ZERO' GO TO Q230
Q238	How much did you spend on VETERINARY DRUGS in the past farming season (2004/05)? *Nindalama shinga mwaposelepo pali uyu wine muti mwashitile uwakucingilila ifilimwa fyenu kumalwele?*	[_____]	888	999	

INPUT: VETERINARY DRUGS CONTINUED ...

	Where did you buy most of the VETERINARY DRUGS? *Nikwisa mwashitile uyu wine muti uwakucingilila ifilimwa fyenu kumalwele?* 1 From an agent at farm *Kubaletela ba shima farm* 2 A store outside the community **Kwituuka naile ko** 3 A buying group/association *Ku kabungwe akashitisha ifyabulimi mumushi* 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)_____	[_____]	888	999	

Q239	If you bought VETERINARY DRUGS from a shop, how far a way was the shop? *(Ngamweleenda fye pakuya mukushita uyu wine muti uwakucingilila ifilimwa fyenu kumalwele, palepa shani petuuka mwaleshita uyu umuutio?)* 1 Less than 3 Km; 2 Between 3 and 6 km; 3 Between 7 & 10 km; 4 11km and above	[_____]	888	999	

Q240	COST OF PURCHASED SERVICES			DK	NR	GO TO
	How much money did you spend on paying suppliers of the various inputs and services? **Nindalama shinga mwaposele ukulipila abamuletela umufundo, imbuto nafimbi ififwaikwa mubilimi**					
	Purchased Service		Amount Spent			
	1	Spraying (*Ukubika umuti wa kusansa mwibala)*	[__]__]__]__]__]__]__]__]	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 fikongwani)*	[__]__]__]__]__]__]__]__]	888	999	
	11	Dipping (*Ukubika lfiteka(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

(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		GO TO
		A) CASH CROP B) FOOD CROP	A/B		DK (circle)	NR (circle)	
Q355	How much of the total area of the farm was used to plant the major crops last farming season? *Ino mwakabelesya nyika ipati buti kusyanga zyisyango zyipati pati mumainza amu 2004/05?*	1. Maize		[_____]	888	999	
		2. Groundnuts		[_____]	888	999	
		3. Beans		[_____]	888	999	
		4. Sunflower		[_____]	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	
Q356	How much of the major crop(s) did you harvest last farming season (2005)? *Ino butebuzi bwakali buti kuzwa kuzyisyango zyipati pati mubutebuzi bwamu 2005?*	1. Maize		[_____]	888	999	
		2. Groundnuts		[_____]	888	999	
		3. Beans		[_____]	888	999	
		4. Sunflower		[_____]	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 season? *Ino mwakajana mali ongaye nomwakasambala butebuzi bwanu bwa zyisyango zyipati pati mu 2005?*	1. Maize		[_____]	888	999	
		2. Groundnuts		[_____]	888	999	
		3. Beans		[_____]	888	999	
		4. Sunflower		[_____]	888	999	
		5. Cassava		[_____]	888	999	
		6. Tobacco		[_____]	888	999	
		7. Rice		[_____]	888	999	
		8. Sorghum		_____]	888	999	
		9. Millet		_____]	888	999	
		10 Other _____		[_____]			

Q358	*Did you use any irrigation on any of the crops in the 2004/2005 farming season?* *Bushe mwale tapilisha ifilimwa fimo efyo mwalimine mu mainsa ya 2004/2005*		0 = NO	1 = YES			IF 'NO' GO TO Q401
		1. Maize			888	999	
		2. G/Nuts			888	999	
		3. Beans			888	999	
		4. Sunflower			888	999	
		5. Cassava			888	999	
		6. Tobacco			888	999	
		7. Rice			888	999	
		8. Sorghum			888	999	
		9. Millet			888	999	
		10 Other___					

			WRITE CODE			
Q359	If you used irrigation last year, what was the main irrigation type that you used FOR EACH crop you irrigated? *Nga mwaletapilasha musango shi mwaletapilishishamo?*	1. Maize		888	999	
		2. Groundnuts		888	999	
		3. Beans		888	999	
		4. Sunflower		888	999	
		5. Cassava		888	999	
		6. Tobacco		888	999	
		7. Rice		888	999	
		8. Sorghum		888	999	
		9. Millet		888	999	
		10 Other _____				

CODES

1	Bucket	2	Treadle pump	3	Electric motor driven pump	4	Diesel pump	5	Other

			WRITE CODE			
Q360	*If you used irrigation last year, what was the main source of irrigation water FOR EACH crop you irrigated?* *Nga mwaletapilasha, Amenshi mwaletapilishisha mwalefumya kwi*	1. Maize		888	999	
		2. Groundnuts		888	999	
		3. Beans		888	999	
		4. Sunflower		888	999	
		5. Cassava		888	999	
		6. Tobacco		888	999	
		7. Rice		888	999	
		8. Sorghum		888	999	
		9. Millet		888	999	
		10 Other _____				

CODES

1	River/stream	2	Dam/weir	3	Well/borehole	4	Other

SECTION 4: FARMING TECHNOLOGY AND PRACTICES

Q446	Have you received any advice or training or information in farming the past one year? **Bushe mwalipanshiwako amano nango ukasambililako pa fyabulimi muli mwaka wapwile?** 1 : YES 2 : NO	888	999	IF 'NO' GO TO Q501
Q447	Please tell me the sources of training received in the last one year and how useful the advice, training, or information that you received was **Mukwai kuti mwanjebako ukomwasambilile elyo nefyo ayo masabililo nango amano bamu pandileko 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 kabakampanga)**		888	999	
	12	**Buyers of crops (Bakashita ba filimwa)**		888	999	
	13	Other (Specify) *Fimbi londolola*_____		888	999	

SECTION 5: GROUP DYNAMICS

Q524	Are there farmer groups in this community? *Mwalibako utubungwe twabalimi muli uno mushi*	GROUP	1. YES 2. NO	CODES DK	CODES NR	GO TO IF 'NO' GO TO 509
Q525	If so, what are their names? *Nge motwaba kuti mwanjebako amashina ya utu twine tubungwe*	Group 1:	_____	888	999	
		Group 2:	_____	888	999	
		Group 3:	_____	888	999	
		Group 4:	_____	888	999	
Q526	*What type of group is [NAME OF GROUP] _____ ?* ***[ASK FOR EACH GROUP MENTIONED IN Q501]*** **CODES** 1. A marketing cooperative 2. A buyer cooperative 3. A marketing/buyer cooperative 4. A producer association 5. Other (specify) _____		WRITE CODE FOR TYPE OF GROUP			
			Group 1: [___]	888	999	
			Group 2: [___]	888	999	
			Group 3: [___]	888	999	
			Group 4: [___]	888	999	
		GROUP				
Q527	*Are you a member of [NAME OF GROUP] _____?* ***[ASK FOR EACH GROUP MENTIONED IN Q501]*** 1. YES 2. NO	Group 1:	[___]	888	999	
		Group 2:	[___]	888	999	
		Group 3:	[___]	888	999	
		Group 4:	[___]	888	999	
Q528	What benefits are you currently getting from being a member of [NAME OF GROUP] _____? ***[ASK FOR EQACH 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 market information 22. Easier to negotiate for good price 23. Easier to Organize transport 24. Other (specify): _____	Group 1:	[___]	888	999	
		Group 2:	[___]	888	999	
		Group 3:	[___]	888	999	
		Group 4:	[___]	888	999	
Q529	What benefits *would you like* to get from being a member of [NAME OF GROUP] _____? ***[ASK FOR***	Group 1:	[___]	888	999	
		Group 2:	[___]	888	999	
		Group 3:	[___]	888	999	

	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. Other (specify): _____	Group 4:	[____]	888	999	
Q530	*As a member of [NAME OF GROUP] _____, how oftern have you attended group meetings in the past 6 months? [ASK FOR EACH GROUP MENTIONED IN Q504]* 7. Always 8. Sometimes 9. Rarely	Group 1: Group 2: Group 3: Group 4:	[____] [____] [____] [____]	888 888 888 888	999 999 999 999	
Q531	Why are you not a member of [NAME OF GROUP] _____? *[ASK FOR EACH GROUP NOT MENTIONED IN Q504]* 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 1: Group 2: Group 3: Group 4:	[____] [____] [____] [____]	888 888 888 888	999 999 999 999	
Q532	Did you put resources together with one or more other farmers in order to buy agricultural inputs? 1 YES 2 NO					
Q533	Did you jointly acquire any services with one or more other farmers in the 2004/5 farming season? 1 YES 2 NO			888	999	
Q534	Did you join up with one or more other farmers for the sake of selling your produce in the 2004/05 farming season? 1 YES 2 NO					

SECTION 6: LIVESTOCK AND FARM ASSET OWNERSHIP

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

Q602	If yes, please tell me the types and numbers of livestock you own **Ngabalikwata, mukwai kuti bajebako umutundu wafitekwa bakwata elyo ne pendwa.?**										
	Livestock		**No. owned**	**DK**	**NR**	**Livestock**		**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**	**Asset**		**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				

**********THE END**********

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 Agrciultural 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.