

CIET

www.ciet.org
building the community voice into planning

Project Report
PR-UG-sds-95

Uganda

Service delivery survey (SDS) on agriculture and health

CIETinternational

FINAL REPORT

BASELINE SERVICE DELIVERY SURVEY

**In support of Results Oriented Management
in the Uganda Institutional Capacity Building Project**

March 1996

**CIETinternational
in collaboration with
UNICEF Uganda**

CONTENTS

EXECUTIVE SUMMARY	4
Acknowledgments	8
INTRODUCTION	9
SELECTION OF PRIORITY SERVICES TO BE INCLUDED IN THE BASELINE SDS	10
REVIEW OF EXISTING DATA	12
AGRICULTURE	12
Agricultural Extension Programmes	12
Supply of farming chemicals and drugs	14
District Farm Institutes	14
HEALTH	15
METHODS	17
INTRODUCTION	17
SURVEY OF COMMUNITIES ON HEALTH, AGRICULTURE AND OTHER SERVICES	17
Site selection and sample weighting	17
Data collection	18
Data entry and analysis	19
SURVEY OF BUSINESSES ABOUT CUSTOMS SERVICES OF UGANDA REVENUE AUTHORITY	19
Data collection	19
Data entry and analysis	20
CAPACITY BUILDING	20
Central level	20
District level	20
RESULTS	
SURVEY OF COMMUNITIES ON HEALTH, AGRICULTURE AND OTHER SERVICES	22
Demographic data	22
HEALTH SERVICES	23
Use of health services	23
Performance of government health services	26
Payment for government health services	27
Opinions of government health services	29
AGRICULTURAL SERVICES	31
Contacts with agricultural extension services	31

Improving the agricultural extension service	33	
Payment for agricultural extension services	34	
Knowledge and use of District Farm Institutes	36	
Farming chemicals and drugs	37	
OTHER GOVERNMENT SERVICES	39	
VIEWS OF SERVICE PROVIDERS	40	
Health services	40	
Agricultural services	40	
District services	41	
SURVEY OF BUSINESSES ABOUT CUSTOMS SERVICES OF UGANDA REVENUE AUTHORITY	43	
CONCLUSIONS	46	
REFERENCES	49	
ANNEXES		
ANNEX 1	Selection of sites for the baseline SDS	1(i)-1(iii)
ANNEX 2	Weighting of SDS sample to give figure to represent all Regions of Uganda	2(i)-2(ii)
ANNEX 3	Instruments for the baseline Service Delivery Survey	3(i)-3(xi)
ANNEX 4	Risk analysis tables	4(i)-4(vi)
ANNEX 5	Figures of District-level data	5(i)-5(xxi)
ANNEX 6	People participating in planning and executing the baseline Service Delivery Survey	6(i)-6(iv)

LIST OF TABLES AND FIGURES

TABLES

Table 1.	Populations studied in the baseline SDS	22
Table 2.	Household use of health services in the last month	23
Table 3.	Type of government health service used in the last month	24
Table 4.	Type of other health services used in the last month	25
Table 5.	Performance of government health services used in the last month	26
Table 6.	Payment for government health services	28
Table 7.	Household opinions of government health services	29
Table 8.	Reported visits from agricultural extension workers	32
Table 9.	Willingness to pay for agricultural extension services	35
Table 10.	Knowledge about the presence of District Farm Institutes	36
Table 11.	Knowledge about functions of District Farm Institutes and attendance at courses	37
Table 12.	Sources of farming chemicals and drugs	38
Table 13.	Costs of importing	43
Table 14.	Delays in importing process	43
Table 15.	Business ratings of other government services	44
Table A1.1	Selection of Districts in Eastern Region (Annex 1)	1(i)
Table A1.2	Selection of Districts in Northern Region (Annex 1)	1(ii)
Table A1.3	Selection of Districts in Central Region (Annex 1)	1(ii)
Table A2.1	Derivation of weights for SDS sample Districts (Annex 2)	2(ii)
Table A4.1.	Education of household head and use of government health services in the last month	4(i)
Table A4.2.	Occupation of household head (peasant or other) and use of government health services in the last month	4(ii)
Table A4.3.	Use of government health services in the last month and willingness to pay for improved government health services	4(iii)
Table A4.4.	Presence of the Agricultural Extension Project and whether ever visited by an agricultural extension worker	4(iv)
Table A4.5.	Whether ever visited by agricultural extension worker and willingness to pay for improved extension services	4(v)
Table A4.6.	Willingness to pay for improved government health services and willingness to pay for improved agricultural extension services	4(vi)

FIGURES

Figure 1.	Purpose of using health services (a)Central Reg (b)Eastern Reg (c)Northern Reg (d)Western Reg	5(i)-5(iv)
Figure 2.	Perceived problems with govt health services (a)Central Reg (b)Eastern Reg (c)Northern Reg (d)Western Reg	5(v)-5(viii)
Figure 3.	Suggested improvements to Govt health services (a)Central Reg (b)Eastern Reg (c)Northern Reg (d)Western Reg	5(ix)-5(xii)
Figure 4.	Suggestions for improving agricultural services (a)Central Reg (b)Eastern Reg (c)Northern Reg (d)West Reg	5(xiii)-5(xvi)
Figure 5.	Knowledge and opinions of other govt services (a)Central Reg (b)Eastern Reg (c)Northern Reg (d)West Reg	5(xvii)-5(xxi)

EXECUTIVE SUMMARY

As part of the Uganda Institutional Capacity Building Project (UICBP), the Government of Uganda is planning to introduce Results Oriented Management (ROM) into its public services at all levels. As a first step in initiating ROM, the Government, through the Administrative Reform Commission of the Ministry of Public Service, commissioned a Baseline Service Delivery Survey (SDS), with the support of the World Bank. The purposes of this baseline SDS were: to develop a suitable methodology and establish a framework of sample sites throughout Uganda; to gather baseline data on key services that could form the basis for producing performance criteria for these services; and to build evaluative capacities within central and local Government in Uganda.

The services selected for the baseline SDS were the services provided to rural communities by the Ministry of Health (MoH) and those provided by the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), especially Agricultural Extension Services and District Farm Institutes. In addition, the customs services provided by the Uganda Revenue Authority (URA) were selected to be assessed in a survey of businesses.

Existing relevant data on the selected services was reviewed. Then users and potential users of the services were asked about their use of and views about the services to give data not usually included in routine data collection systems. This was achieved by a cross-design of methods:

1. a household survey of 40 representative communities in 9 Districts throughout Uganda covering a total of 5,564 households and 27,196 people
2. in each of the sites, focus group discussions, key informant interviews and institutional reviews to obtain qualitative data about local conditions and views of services
3. interviews with District Administrations in the sample Districts to seek their views about support for their services from central Government
4. a postal questionnaire to 53 medium and large businesses inside and outside Kampala

About a quarter of households had used Government health services in the last month, whereas nearly a third had used some other health service during the same period. Households whose head had some education were one and a half times more likely to have used Government health services, and those where the head was not a peasant were 1.3 times more likely to have used these services. For contacts with Government health services, a health worker was available in 96%, 8% had to wait for longer than three hours, and all drugs were available in 80%. There was variation between Districts in these figures: from 94%-99% for availability of health worker, from 2%-15% for waiting more than three hours, and from 65%-90% for availability of all drugs.

The mean amount paid for a contact with Government health services was 1702 Ush (median 577 Ush). Only one sub-dispensary in the sample reported not raising user charges. Overall, 67% of households would be willing to pay for improved health services, with a mean payment of 725 Ush (median 502 Ush) for a clinic visit. Households who had used Government services in the last month were one and a half times more likely to be willing to pay. Asked to rate the Government health service in their area, 38% thought it was good, 22% average (neither good nor bad) and 22% bad. Main problems identified with the service were lack of drugs and poor access to facilities.

Only 11% of households reported that they had ever had a visit from an Agricultural Extension Worker. This proportion was no higher in those Districts where the Agricultural Extension Project was operating than in those without the project. It was higher in Districts with a high density of livestock (Moroto 24%, Mbarara 21% and Rukungiri 15%). About half the visits were reported to be group sessions; again this proportion was no higher in Districts with the Extension Project operating. All information was available in 80% of visits and in 9% the extension worker requested payment. About half the households would be willing to pay for an improved extension service; households who had ever had a visit were one and a half times more likely to be willing to pay for visits. The amount households said they were willing to pay for livestock advice was slightly higher than they were willing to pay for general farming advice (893 Ush vs 857 Ush). The main complaint about the service was that it simply was not available. Yet focus group discussions and the willingness to pay indicate that people want an agricultural advisory service. These results indicate a large 'market' for agricultural extension services and could guide a review of the present methods of delivering the service, and of the functioning of the Agricultural Extension Project. Action could be taken at central level to review policies and at District level to review management of the service and identify obstacles to its successful operation.

The MAAIF were interested to find out about awareness of District Farm Institutes (DFIs). Only 40% of households in Districts with DFI knew that there was one; 12% of those in Districts without a DFI thought there was one. In Districts with a DFI 21% thought there was not one and 39% did not know if there was one; the corresponding figures for Districts without a DFI were 44% and 44%. Less than a third of households were able to give at least one function of a DFI and only 2% had ever been on a course at a DFI.

Although farming chemicals and drugs are now obtained by farmers from private outlets, the MAAIF were interested to know about the experience with this system, because of the possible need to increase regulation of this system. Most (79%) of households who bought farming drugs and chemicals bought them from shops. They were reported to be available at the last attempt to buy in 80% of cases. Safety advice when buying pesticides or acaricides was only given in 8% of cases. Focus group discussions confirmed the difficulty of obtaining drugs from shops and lack of advice on their use.

District Administrations were generally positive about the effects of decentralization on their services and about the support they received from central Government, with a number of suggestions for improving this support, especially through offering training to increase skills to cope with increased responsibilities.

Only 27 questionnaires were returned from the business survey, despite repeated attempts to get replies, including personal contacts. Among this small number, there was a spread of satisfaction with the customs service of the URA, with 30% rating it as bad or very bad, 44% rating it as adequate, and 26% rating it as good. The mean delay between goods arriving in the country and taking possession was 32 days. Few people admitted to paying inducements to customs officers, but some of this may have been included in their reported payments to clearing agents. The main causes of delays identified were paperwork and bureaucracy.

Several baseline indicators arise from these studies that could be used by the participating ministries to assess the effectiveness of actions they take to improve their services. The intention

would be to repeat the survey in perhaps a year, including key questions to produce a repeat measure of these indicators.

Ministry/Authority	Indicators	Baseline values
Ministry of Health	1. Proportion of households using Government health services in a one month period	25% (18%-43%)
	2. Proportion of contacts where health worker was available	96% (94%-99%)
	3. Proportion of contact waiting more than three hours	8% (2%-15%)
	4. Proportion of contact where all drugs were available	80% (64%-90%)
	5. Proportion scoring service as good, average or bad	38%, 22% and 22%
Ministry of Agriculture, Animal Industry and Fisheries	1. Proportion of households who have been visited by an extension worker	11% (3%-24%)
	2. Proportion of visits giving all required information	80% (68%-92%)
	3. Proportion in Districts with a DFI knowing of presence and functions	40% and 29%
	4. Availability of farming drugs and chemicals from commercial sources	80% (60%-90%)
	5. Proportion of chemical and drug sales accompanied by safety advice	8% (2%-22%)
Uganda Revenue Authority	1. Mean delay before imports can be taken possession of	32 days
	2. Proportion of businesses scoring service as good, adequate or bad	26%, 44% and 30%

While general guidelines for service performance indicators can be set by central Government, these will need to be set in detail locally, having regard to the local conditions and present levels of service delivery. Levels of service delivery clearly vary considerably between Districts at

present and it would be unrealistic to expect them all to reach the same level at a given time, given their different starting points. Thus the setting of performance criteria for services will require a dialogue between central Government and Districts.

The results of the baseline SDS provide a quantitative and qualitative baseline for programme managers in these ministries and authority to use in planning and to measure impact and coverage in the future. While District staff in the analysis workshop found some of the results disappointing, it is easier to make progress from a relatively modest baseline. The priorities set by the ministries were their own, rather than externally imposed. It is proposed to begin ROM on a pilot basis within the next year and the MAAIF is likely to be one of the pilot ministries. These results should help them in setting targets for their service as part of the ROM process. If they are able to demonstrate progress against these targets, this should enhance their service within the ROM framework. The design of the baseline SDS and the format of the results mean that they can be used for both District level planning and at central ministry level; the Districts are responsible for the actual service delivery, with the support and policy guidance of the central ministry.

When using the results of the baseline SDS (and future cycles of the SDS) in the ROM process, it will be important to link these data on service coverage and perceptions to data about expenditure on services in different Districts and internal service data on level of service provision. This will allow the output of a service to be related to the input into the service in different areas, and serve as a guide for effective resource management. Data on expenditure on services are being accumulated through, for example, the Expenditure Tracking Project.

As well as producing actionable results, the baseline SDS has contributed to the building of evaluative capacities at national and District level and has introduced many people to the concept and practice of critically examining the functioning of their services from the viewpoint of service users. The resulting skills and attitudes will be important to the process of introducing ROM in Uganda.

Acknowledgments

This Baseline Service Delivery Survey would not have been possible without the help and support of many people. Particular thanks go to the Ministry of Agriculture, Animal Industry and Fisheries, especially Mrs Fortunate Sewankambo, the Ministry of Health, especially Dr Francis Mwesige, and the Uganda Revenue Authority, especially Mr Opila, for their enthusiastic support.

Thanks are also due to all those in the Ministry of Public Service who provided much help and support, including Mrs PK Nshangano, Ms Deborah Katuramu, Mr Richard Hooper and Mr George Okutho. Special thanks are due to counterparts in the Directorate of Inspectorate for their help throughout, especially Mr John Opolot and Mr Patrick Langoya-Oddo.

The generous collaboration of UNICEF Uganda is gratefully acknowledged, in particular the invaluable and unfailing help and support of Grace Ekudu. The District teams deserve many thanks for their hard work in collecting data for the field survey, as do the communities in the survey for giving their time to answer the questionnaire and participate in focus group discussions.

INTRODUCTION

The Uganda Government has recently embarked on an Institutional Capacity Building Project (UICBP) to strengthen capacities of personnel and improve processes within central and local Government. The UICBP is supported by IDA of the World Bank. The official launch took place at a workshop held in Kampala on 2-3 November 1995. The overall aim of the project, which has many aspects, is to improve the efficiency and efficacy of services delivered by central and local Government. One important element of the UICBP is the phased introduction of Results Oriented Management (ROM) into Government ministries at all levels. To support ROM it is intended to develop a Service Delivery Survey (SDS) that can provide actionable data on coverage, impact and perceptions of Government services. Repeated at intervals of, say, six months, it will be a source of information about all key services in turn, as well as offering the opportunity to assess improvements in service delivery associated with the introduction of ROM in different sectors.

The baseline SDS is the first step in developing the on-going SDS. It is intended as a pilot exercise to set a framework for the future SDS by: establishing a group of representative survey sites throughout Uganda (that can be revisited at intervals); developing suitable data collection instruments that can be modified as necessary in future cycles of the SDS; identifying methodological issues to be addressed before future cycles of the SDS and resolving them; and building evaluative capacities in personnel in both central and local Government by involving appropriate counterparts in the survey processes. It is also the intention that the baseline SDS should provide some initial data on coverage, impact and perceptions of one or two key Government services and on some potential performance indicators for these services. It should provide brief data about perceptions of a range of services and some more detailed information about a small number of priority services, to be used in the ROM process in these sectors.

This report describes the selection of services to be included in the baseline SDS, reviews relevant existing data on the key services, describes the methods of collecting and analysing the data and the results obtained, and comments on the results and the process.

SELECTION OF PRIORITY SERVICES TO BE INCLUDED IN THE BASELINE SDS

In early discussions, it was agreed that a T-shaped design should be used for the baseline SDS. That is, brief information about use and views of a range of services should be sought, and more detailed information on a few priority services. Principles of selecting the priority ministries for the baseline SDS should be that they were high-spending/high-priority ministries, ROM was likely to be introduced into them at an early stage, and at that there should be a spread to include a ministry providing a service of production, one providing a social service and one providing a service to industry and institutions rather than to individuals in rural or urban communities. In addition, as far as possible views of users of the services of central ministries should be elicited as well as those of the end customers of the service. Decentralisation means that very few services are now provided directly from central ministries to end-users. The main 'users' of the services of central ministries (such as health, education and agriculture) are the District administrations. A provisional selection of ministries to be included in the baseline SDS was made, comprising: Agriculture, Health, and Finance & Economic Planning. These key ministries were then visited to elicit their views about inclusion in the baseline SDS and about what specific aspects of their service they felt should be evaluated.

Ministry of Finance & Economic Planning (F&EP)

It was thought that the customs activities of the Uganda Revenue Authority should be included as they were an area that affected businesses very much and could often lead to dissatisfaction. The possibility of assessing the services that F&EP provides to other ministries, especially regarding budgeting and planning information and advice and the service F&EP gives regarding handling training fellowships was considered. In the event, it was necessary to postpone this evaluation to a later round of the SDS.

Uganda Revenue Authority

It was agreed that customs services would be a good initial area to assess. The timing of a survey of businesses was very suitable as the URA was carrying out an internal review of its customs services imminently, in order to identify problem points and rate-limiting steps and to plan remedial action.

Ministry of Health

At the time of beginning the baseline SDS, there was a threat of industrial action by health workers. The Ministry of Health did not feel this would be a problem for undertaking the survey, including health services. It was agreed that the survey should: (1) ask communities about their use and perceptions of health services and (2) ask District level health workers about their perceptions of the support they received from the central Ministry of Health. A design to ask people about their most recent experience with the health services for any member of the household was agreed as the most suitable for the community questionnaire.

Ministry of Agriculture, Animal Industry and Fisheries

The role, functioning and perceptions of agricultural extension workers were of particular interest. The level of payment that farmers might be prepared to make was important to know. A second area was the level of awareness of District Farm Institutes among farmers, the number of farmers who attended courses at the DFIs and their satisfaction with such courses. Thirdly, since

farmers now obtain agricultural chemicals and drugs from commercial outlets, it would be useful to assess availability, cost and level of information and advice given about the use and safety of the materials.

It was recognised that the central Ministry now played an advisory and supportive role to the District providers of services so that it would be useful to seek the views of Districts about their service from the Ministry. Similarly, the views of extension workers about the support from their District Administration would be of interest.

REVIEW OF EXISTING DATA

AGRICULTURE

The agricultural sector in Uganda is vital to the country's economy. It is estimated that there are 2.6 million small scale farm families in Uganda, with an average holding of 2-3 hectares. The agricultural sector accounts for 60% of the GDP and 91% of total exports, and employs over 80% of the workforce. The services provided by the central Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and by the agricultural sections of District administrations are thus very important. They have the potential to assist the Ugandan economy by improving farming production and they affect most of the population.

Agricultural extension programmes

The Agricultural Extension Project

A major project in the agricultural sector began in Uganda in July 1993. The Agricultural Extension Project (AEP) is sponsored by IDA (World Bank) and the Government of Uganda and aims to address the issues of disease control, yield improvement and capacity building to deliver and support effective extension services¹. In project Districts a Unified Extension approach is adopted (rather than having number of different extension workers for different special areas) together with a Training and Visit methodology to reach the maximum number of farmers. Farmers are seen in groups as far as possible, to increase coverage with farming advice and offer peer support.

The project began as a pilot in July 1992, in selected parishes of four Districts: Kabarole, Iganga, Bushenyi and Tororo. In January 1993 it was extended to cover all counties of the initial four Districts and three further Districts were added: Kisoro, Jinja and Hoima. In July 1993 five more Districts joined the project: Mbale, Mukono, Rukungiri, Kibale and Gulu. Four more Districts joined in January 1994: Masaka, Kumi, Apac and Nebbi. And in July 1994, the originally planned 16 Districts were joined by three more: Mbarara, Kabale and Ntungamo. Further Districts were funded from other sources to join the project: Pallisa, Soroti, Lira, Kitgum, Rakai, Kamuli, Kasese and Arua. Since June 1995 the Unified Extension Programme has been operating into 27 Districts in all. Six of these Districts are represented in the baseline SDS. They cover different phases of joining the AEP programme: Tororo from the early pilot phase; Rukungiri and Kibale from July 1993; Mbarara from July 1994; and Lira and Rakai from the recently joined group of Districts. The other 3 Districts in the SDS are not in the AEP, so allowing a comparison with the 6 that are in the AEP.

As part of the AEP, two surveys of farmers in the Project Districts have been carried out: one in 1992 before the Project began² and one in early 1995 as a follow-up to assess effects of the Project³. For the baseline survey in 1992 a random sample of 767 households from 192 parishes in the 16 Districts designated to join the AEP programme was interviewed. For the follow up survey a sample of 205 households was interviewed. These households were randomly selected from 63 parishes in the seven districts who joined the AEP programme in its early phase. In addition, in 1995 extension staff were surveyed to seek their views of the AEP⁴. A questionnaire survey was undertaken of 152 field extension workers, 38 subject matter specialists, seven District Extension Co-ordinators and 13 HQ staff.

In the 1992 survey, about 50% of the households had no knowledge of the Extension Worker; of those that knew the Extension Worker about 40% had never discussed production matters with him or her. Households close (within 3 miles) to the residence of the Extension worker were more likely to have had contact with him or her. Few of the farmers were in Farmers' Groups, few had participated in demonstrations of field days, and few had attended training courses arranged by the Extension Worker. Few farmers were aware of production recommendations and most got their information from other farmers.

In the follow-up survey, about 70% of the farmers were aware of the Extension Worker and the proportion of these who had discussed production matters with him or her was 75%. There were more farmers who reported belonging to groups, although in some areas they did not belong because there were no groups in existence. More had attended demonstrations and field days and about half those who had discussed production with the Extension Worker had attended a training course organised by him or her, mostly in local farm buildings, stores or schools. There was more awareness of recommended production techniques but implementation was still relatively low, often due to financial constraints. Most (70%) of the farmers were positive about the unified extension service, finding it an appropriate approach. More farmers reported getting their farming information from Extension Workers, or handouts, newspapers or radio/TV than before. Reported crop and milk yields were higher than those reported in 1992.

The survey of extension staff found that field extension workers (FEWs) needed more support, especially transport, to be able to visit all their farming families. Although they had established groups, the numbers of these needed to be increased. Most (86%) of the FEWs felt that the extension system was now better than before 1993, and nearly all felt that farmers had benefitted from the new system.

The data from the SDS, an independent survey covering Districts with and without the AEP and joining at different times, complements these previous studies of the effects of the AEP. The SDS covers a larger number of households and supplements the information from the household questionnaire with data from focus groups, key informants and institutional reviews from the same communities.

Effects of decentralisation

There has been some concern expressed about the effects of decentralisation on the Agricultural Extension Service. Provision of this service is now the responsibility of District Administrations. A recent discussion document from the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)⁵ commented that decentralisation has led, in most Districts, to big staff reductions. The numbers of front line staff especially have been reduced and the staffing structure has been changed from that recommended by the Unified Extension Programme. Extension officers at county level are being eliminated and the lowest staffing level is the sub-county. It may be difficult for District administrations to supervise all their sub-counties effectively. The number of farmers per extension worker has increased and the area the extension workers have to cover has increased. The discussion document fears that this may lead to a less effective service and thus poorer agricultural yield.

On the positive side, it is recognised that decentralisation may lead to more effective supervision as the workers answer directly to the District. Action in case of poor performance is more likely. And release of funds should be quicker and more regular since they are on-site.

The baseline SDS covers Districts with a range of financial decentralisation dates, thus allowing the effects of decentralisation to be examined. Key informant interviews with relevant District staff include enquiry about the positive and negative effects of decentralisation on their service.

Supply of farming chemicals and drugs

Until recently, farming chemicals (pesticides, herbicides, fertilizers etc) and drugs for treating animals were supplied by outlets of MAAIF. Since 1993 the supply of these materials has been privatised and farmers now need to buy them from commercial outlets. There is anecdotal evidence (personal communication, MAAIF) that supplies are irregular, prices are high and there is a lack of relevant advice about the use of these materials at the point of sale. It is also suggested that they may sometimes be adulterated with inactive constituents, rendering them less effective in use. The magnitude of these problems nationally and within different Districts is not known as they have not been systematically studied before. Part of the baseline SDS was deliberately designed to investigate these problems across Uganda. Confirmation of widespread problems could be an indication for reviewing the system so as to put more controls on the operation of commercial outlets. Not only are farming chemicals less effective if used incorrectly, some of them can be seriously toxic to humans if adequate precautions to prevent exposure are not taken.

District Farm Institutes

District Farm Institutes exist in 17 Districts. Their functions⁶ include:

- >Offer short term residential and non-residential training programmes to farmers and staff
- >Demonstrate improved husbandry practices in agriculture, livestock and fisheries
- >Provide facilities and liaise with agricultural research centres
- >Produce information materials and visual aids through media resource centres
- >Multiply and distribute improved breeds and species of crops and livestock to farmers at a cost
- >participate in identifying farmers' training needs
- >Evaluate and follow-up trainees
- >provide extension services within a specified area in neighbourhood of the DFIs
- >Offer facilities to other interested training organisations

The profile of DFIs is not high in many areas and there is thought to be a lack of awareness among farmers about what they have to offer. The future plan for DFIs under decentralisation is that they will become devolved to the Districts where they are sited. Each of these districts, after transfer of an appropriate budget, will become responsible for staffing and financing their DFI. If they are to function under District management, Districts will need to review the services they offer and may need to introduce a system of partial cost-recovery for their courses and other activities. The baseline SDS will provide some initial data for those Districts included on the awareness and use of DFI facilities by farmers.

HEALTH

Uganda has health services provided through a network of facilities at different levels. The hospital service includes the teaching hospital at Mulago in Kampala and other hospitals in the country. Although hospital services are delegated to each District, hospital management remains directly under the Ministry of Health, to whom the hospital Medical Superintendents are accountable, rather than under the District Medical Officers. All other health services in each District are under the management of the DMO as part of the District management team. Other facilities are health centres, dispensaries and sub-dispensaries (or aid-posts). In addition, there are mobile clinics in many areas and outreach services from health facilities, for example for immunisation.

User charges for health services have been under discussion in Uganda since 1988. Although a policy of user charges has not been officially implemented, charges are widespread. They may be a fixed fee per attendance, or fees per item of service, or charges for drugs and materials. The aim of user charges is to raise funds to sustain and improve the services offered. A recent, mainly qualitative, study⁷ in several areas of Uganda found that quality of health services was not improved by the presence of user charges and the revenue from the charges was not sufficient to purchase items needed to improve service quality or improve the performance of staff. A proportion of service users resented having to pay for services, feeling they had already paid in their taxes. Some remembered the 'good old days' when health care was provided free of charge.

The same Ugandan study⁷ found that many people chose to use non-Government health services, on grounds of cost and quality of service. Other options ranged from self-medication, through visiting traditional healers, to use of private practitioners or clinics or use of NGO or religious facilities. Since there are multiple source of health care in operation, any study of service delivery by Government health services must also assess the use of alternative services.

Most information about health services in Uganda is service based. Information routinely collected about immunisation rates, for example, tends to report the number of doses of vaccine given in relation to a targeted or programmed population. This service-based information is supplemented by, for example, census data on infant mortality. Other schemes of data collection in Uganda have provided community based data about health indicators. One such scheme is Sentinel Community Surveillance⁸. This is sponsored by UNICEF and has collected data from representative communities in the West of Uganda for the last two years. More recently it has been extended to cover all Regions of Uganda. Not all health indicators are a measure of performance of health services specifically but some, such as community based immunisation rates, clearly are.

The baseline Service Delivery Survey used the data collection methodology of Sentinel Community Surveillance and data were collected from the same representative community sites. This has allowed some limited linkage of data from Districts included in both surveys. Linking the two schemes directly in the future will allow impact data (for example immunisation rates, diarrhoea incidence and duration) to be related to service delivery data. Since health outcome is the final common pathway of the processes of health service delivery, this will be an important enrichment of the information about internal performance indicators for the service.

The data collected about Government health services in the baseline SDS related to use of the service by households, costs of using the service, and views of the service and willingness to pay for improved services. In addition, baseline data on possible performance indicators for the service were collected.

METHODS

INTRODUCTION

The underlying methodology used in the baseline SDS, particularly the community survey, is known as Sentinel Community Surveillance (SCS). Initially developed in Mexico and Central America with the support of UNICEF and IDRC, this community based information management system has been applied in more than 30 countries worldwide in a wide variety of situations. UNICEF has funded SCS systems in a number of countries including Costa Rica, Nepal, Ethiopia, Bolivia and Mexico. SCS provides a cost effective way of collecting community data on impact, coverage and costs of services in a form that can be used for planning at local, regional and national levels. The method has been described in detail elsewhere^{9,10,11}. It focuses on the use of community-based data in local and national planning by stimulating informed dialogue on the design and results, which are framed to be as accessible as possible^{12,13}. The logistics of the SCS methodology are designed to facilitate repeated measurement in the same sites, thereby reducing sampling error, to facilitate estimation of change over time. The ability to revisit the same place makes impact estimation straightforward¹⁴.

The SCS methodology has been used to conduct Service Delivery Surveys in other countries recently: Nicaragua, Costa Rica and Mali. In Nicaragua and Mali it was an initial step in World Bank sponsored action to rationalise Government services and improve the service they delivered to their customers. Lessons learned from the experience of undertaking these Service Delivery Surveys were used during the development of the baseline SDS in Uganda.

An important advantage in Uganda was that an SCS system had already been established, sponsored by UNICEF and with technical support from CIETinternational. This system was initially operational in the Southwest and Central Regions. By the time of the fourth cycle of the Uganda SCS, the fieldwork for which took place just before the baseline SDS, the system had already been extended to include representative sites throughout the country. The baseline SDS built on the existing SCS system, using the same sites and many of the District personnel who had experience of the SCS system as well as several highly-experienced and skilled local counterparts from the public and private sector.

SURVEY OF COMMUNITIES ON HEALTH, AGRICULTURE AND OTHER SERVICES

Site selection and sample weighting

A purposive sampling technique was used after stratification by Regions. In each of the four Regions, two or three Districts were selected to represent the situation in the Region with regard to a number of factors. The process is described in more detail in Annex 1, which also lists the chosen Districts. Within each District, 4 or 5 sites were selected, to represent the District with regard to important factors. This process of site selection was undertaken in conjunction with people from the District who knew the area well. The total resulting sample consisted in 40 representative sites from 9 Districts, with 120-150 households per site.

Results were initially calculated for each District individually. When combining the results from the 9 Districts, those for each Regional group of Districts were weighted depending on the relative sample population of that group compared with the relative population of that Region in the 1991 census. The derivation of the weights and the weighting procedure is described in more detail in Annex 2.

Data collection

Logistics

Nine teams of interviewers and supervisors - one team per District - were recruited. The supervisors (District focal points) were mainly members of District Administration teams in the sample Districts. In all but one District, they had previous experience of similar survey methodology because of participation in the Sentinel Community Surveillance scheme supported by UNICEF. The District focal points attended a two day Training Workshop in Kampala in November 1995. They subsequently trained their teams of eight interviewers in their own Districts and began fieldwork immediately after this training.

Each interviewer recorded responses to the household questions in an exercise book with the questionnaire pasted inside the front and back covers, the pages folded to make the questionnaire always visible, and using one numbered page per record. These are the Bhopal books of the SCS methodology¹⁵, allowing data to be collected and stored safely and in a relatively compact form in field conditions. The book of each interviewer was checked each evening by the District supervisor (focal point) to ensure quality control of the data.

The household questionnaire

Households in the 40 representative sites in 9 Districts throughout Uganda were interviewed using a structured questionnaire. The questionnaire and other data collection instruments are shown in Annex 3. The household questionnaire enquired into demographic details such as the age and sex of the household head, the level of education and occupation of the household head, and the number of household members.

Questions about health services asked about use of Government and other health services in the last month, with details of the purposes of using the services. Costs of using the Government services were recorded and households were asked whether they were willing to pay for improved health services and how much. Information was gathered about possible performance indicators for the health services, including availability of the health worker, availability of the drugs required and waiting time. Households were asked to rate the Government health services in their area on a 1-3 scale and about what they thought was the problem with the services and how they could be improved.

Questions about agricultural services asked about when the household had last had a visit from an agricultural extension worker, and about the details of that visit. Households were asked how they thought extension services could be improved. They were asked if they would be willing to pay for improved services: how much for livestock advice and how much for general farming advice. Further questions asked about knowledge of the presence of a DFI in the district and of the functions of a DFI. Respondents were asked about attendance at course in DFIs or organised by the extension worker. Finally, they were asked where they bought their farming chemicals

and drugs, about availability from this source, and about what advice they were given when buying pesticides or acaricides.

A final section asked about what other Government services the respondent knew of and their opinion of each one on a 1-3 scale.

Qualitative data from communities and Districts

The instruments for qualitative data collection are shown in Annex 3. Focus group discussions about health and agricultural services were held in each community (site), institutional reviews of the nearest Government health facility were undertaken, and community key informants were interviewed. The Chief Administrative Officer, the District Medical Officer and the District Extension Coordinator were interviewed in each of the 9 Districts. They were asked about their views of the effects of decentralisation the services they provided, about their view of the support they received from central Government, and about which services they thought they delivered well and less well in their District.

Data entry and analysis

Data from the Bhopal books were entered onto computer using the Epi Info¹⁶ software package. It was initially planned to undertake the majority of data entry while in the field sites. This proved impossible, mainly due to problems with electrical power supply in outlying areas, and so much of the data entry was undertaken on return from the field. Epi Info was used to undertake analysis of the collected data. Values of indicators for each District were initially calculated separately; they were combined, where appropriate, to give a national figure, using the weighting procedure described in Annex 2. Risk analysis, where performed, used the Mantel-Haenszel¹⁷ and Mantel-Extension¹⁸ techniques to test for significance of associations and to calculate odds ratio (OR) as a measure of relative risk.

SURVEY OF BUSINESSES ABOUT CUSTOMS SERVICES OF UGANDA REVENUE AUTHORITY

Data collection

A postal questionnaire was sent to 53 large and medium sized businesses identified from a listing supplied by the Uganda Manufacturers Association. The questionnaire enquired about the size of the business and the business sector to which it belonged. Businesses were asked about imports during the last year: the payments associated with processing them and the time involved. They were asked their views about the causes of delays to imports in the customs services and asked to rate the customs services of the URA on a 1-5 scale. Similar questions were asked about exports during the last year. Finally they were asked about other services their business had contact with and their views of these services. The postal questionnaire is shown in Annex 3.

Efforts were made to encourage businesses to return the questionnaire through telephone and personal contacts, aided by the staff of the URA. Nevertheless, only 27 replies out of the 53 questionnaires sent out were received; a response rate of 51%.

Data entry and analysis

The data from the questionnaires were entered onto computer and analysed using the Epi Info¹⁶ software package.

CAPACITY BUILDING

Central level

Building measurement and analytic capacities at central and District level was an explicit aim of the work. The key Government counterparts for capacity building at the central level were identified as the staff of the Ministry of Public Service Directorate of Inspectorate. It is envisaged that they will be involved in supporting the process of Results Oriented Management in the future and therefore will need measurement and analysis capacities to look at service delivery indicators. None of the four staff concerned had any prior computing or quantitative data analysis experience and they had very limited access to computers within the MPS, although there are plans to provide a computer for their section.

The four staff were brought into the process of planning, implementing and analysing the survey. One of them attended the meetings with the Ministries to decide on the topics to be covered in the household survey and postal survey. They assisted in design and piloting of the household questionnaire and postal questionnaire. They attended the two day Training Workshop for District focal points prior to commencing the fieldwork. And they were each attached to one of the 4 teams facilitating the fieldwork. This allowed them to get hands-on experience of field data collection and the steps that need to be taken to ensure quality control in data collection and data entry. They had the opportunity to practise data entry using the pre-set programme for data entry prepared in Epi Info. They attended the feedback presentation of results to the Ministry of Public Service and had a brief session to familiarise them with the analysis functions of Epi Info.

The Epi Info software package was loaded onto a computer in the MPS, together with the data file of the community survey. The counterparts were instructed about how to access the Tutorial function of Epi Info so that they can get further experience with this software.

District level

Two focal points from the District Administration of the 9 sample Districts attended a two day Training Workshop in Kampala. This reviewed the methodology relatively briefly since these focal points were already somewhat familiar with the principles of the methodology through their participation in previous cycles of Sentinel Community Surveillance. The workshop focused on the questionnaire and its application and interpretation; it included a field practice with the questionnaire. Practice focus groups were run to build skills in this technique.

The focal points returned to their Districts and proceeded to train teams of 8 interviewers to undertake the household survey. Teams of facilitators from Kampala attended most of these training sessions to support the focal points.

After the fieldwork, the District focal points had the opportunity to participate in a four day Analysis Workshop. This was arranged by UNICEF to consider the results of their latest cycle of SCS but the data from the SDS were also considered, focusing on their analysis and interpretation. Each District team undertook an exercise in interpretation of data from the SDS from their District. This was useful as capacity building and their input also enriched the interpretation of the data.

RESULTS

SURVEY OF COMMUNITIES ON HEALTH, AGRICULTURE AND OTHER SERVICES

Demographic data

The nine Districts included in the baseline SDS are Mpigi and Rakai from the Central Region; Kapchorwa and Tororo from the Eastern Region; Lira and Moroto from the Northern Region; and Kibaale, Mbarara and Rukungiri from the Western Region. The basic demographic data of the sample population from the Districts are shown in Table 1. The Uganda mean household size of 4.8 people is close to that found in the 1991 census. The great majority of household heads were described as peasants. Other relatively common occupations were trader, builder/craftsman and labourer. Just under a third of the households, on average, are headed by someone with no education. Most of the others have completed part of primary education; progression beyond primary education is very rare. In Moroto, it is notable that more than 90% of the household heads have had no education.

Table 1. Populations studied in the baseline SDS

Region	District	No. of households	No. of people	No. per household	hh head 'peasant'		hh head no education	
					No.	%	No.	%
Central	Mpigi	481	2362	4.9	334	70	95	20
	Rakai	766	3594	4.7	672	88	196	26
Eastern	Kapchorwa	444	2173	4.9	368	83	110	25
	Tororo	643	2779	4.3	458	71	200	31
Northern	Lira	713	3321	4.6	597	84	187	26
	Moroto	605	3211	5.3	431	71	566	94
Western	Kibaale	572	2696	4.7	350	61	115	20
	Mbarara	817	4284	5.2	702	86	223	27
	Rukungiri	523	2776	5.3	371	71	119	23
Weighted mean (Uganda)		636	3078	4.8	492	77	198	31

HEALTH SERVICES

Use of health services

The proportions of households with at least one member using Government health services or using other health services during the last month are shown in Table 2. The numbers of people using the two types of service for each District are also shown in Table 2. The proportion of households with at least one member using Government health services in the last month varied from 43% in Kapchorwa to 18% in Mbarara and Lira, with a mean for Uganda of 25%. The equivalent figure for other health services varied from 53% in Moroto to 15% in Rakai, with a Uganda mean of 31%. In all Districts except Rakai and Kapchorwa more households had used other health services than used Government health services in the last month.

Table 2. Household use of health services in the last month

Region	District	hh using govt service*		hh using other service*		No. people# using govt service	No. people# using other service
		No.	%	No.	%		
Central	Mpigi	107	22	140	29	126	199
	Rakai	177	23	112	15	208	132
Eastern	Kapchorwa	192	43	124	28	318	178
	Tororo	172	25	158	25	220	209
Northern	Lira	131	18	233	33	146	354
	Moroto	119	20	320	53	147	391
Western	Kibaale	143	25	276	48	169	482
	Mbarara	148	18	258	36	176	358
	Rukungiri	134	26	198	38	162	274
Weighted mean (Uganda)		158	25	195	31	203	273

*Households often reported using both government and other health services.

#The counting unit was a health service contact. One individual could contribute more than one contact.

Households with a head who had some education were about one and a half times more likely to have used Government health services in the last month than households where the head had no education. This was true, to a variable extent, in all 9 Districts (Mantel-Haenszel combined OR 1.47, 95% Confidence Interval 1.25-1.72). The figures for this risk analysis are shown in Annex 4, Table A4.1. Households where the head was a peasant were less likely to have used

Government health services in the last month than those where the head had some other occupation (Mantel-Haenszel combined OR 0.77, 95% CI 0.66-0.89). The tabulation is shown in Annex 4, Table A4.2. These associations may be because occupation and education of the household head are some indicator of economic status of the household or more awareness of the need to seek help in more educated households. They are unlikely to be due to more illness in the households with an educated head.

The decision whether to use Government or other health services did not seem to be based mainly on the purpose of using the service. Generally, the same health problems and other purposes were quoted as reasons for using both Government and other services. The sensitivity of this comparison is not very great, since in many cases it was not possible to specify the diagnosis for which the service was used. The purposes for using one or the other type of service are shown for each of the 9 Districts in Annex 5, figures 1(a)-1(d). There was some variation by Region, for example in the proportions of health service contacts due to malaria.

Contacts with Government health services can be divided into those that were with hospitals, those with health centres, those with dispensaries, those with sub-dispensaries and those with outreach services. The proportions of the contacts that were with each level of service are shown in Table 3. Discussions with District personnel suggest that the main reason for the large variation in pattern of Government health service usage between Districts is access: households will normally use the facility nearest to them, whatever level it happens to be.

They probably also make judgements based on how ill they are and therefore what level of facilities they believe they require.

Table 3. Type of government service used in the last month

Region	District	No. using services	hospital		health centre		dispensary		sub-dispensary		outreach	
			No.	%	No.	%	No.	%	No.	%	No.	%
Central	Mpigi	126	16	13	34	27	60	48	15	12	1	1
	Rakai	207	17	8	37	18	69	33	73	35	11	5
Eastern	Kapchorwa	316	65	21	78	25	167	53	5	2	1	0
	Tororo	220	82	37	62	28	13	6	61	28	2	1
Northern	Lira	147	74	50	47	32	18	12	0	0	8	5
	Moroto	147	24	16	2	1	64	44	52	35	5	3
Western	Kibaale	169	47	28	100	59	11	7	8	5	3	2
	Mbarara	176	32	18	58	33	8	5	42	24	36	21
	Rukungiri	162	11	7	65	40	23	14	56	35	7	4
Weighted mean (Uganda)		203	52	25	56	28	58	28	37	18	7	4

The types of other health service used are shown in Table 4. Again, there is variation between Districts and discussion with District personnel suggests that this is also mainly an issue of availability and access. It is notable that the use of NGO and religious facilities was low overall, except in Moroto where much of the health service is provided by such facilities. The main other service used was private clinics and private practitioners. The Uganda mean of 15% for traditional treatment covers considerable variation. The figure may be an underestimate as it has been suggested that people may be reticent about admitting they use traditional treatment.

Table 4. Type of other health services used in the last month

Region	District	No. using services	self-medication		traditional treatment		private clinics/workers		NGO/religious facility	
			No.	%	No.	%	No.	%	No.	%
Central	Mpigi	199	29	15	12	6	157	79	1	1
	Rakai	130	17	13	44	34	68	52	1	1
Eastern	Kapchorwa	173	114	66	54	31	5	3	0	0
	Tororo	204	74	37	28	14	96	47	6	3
Northern	Lira	342	41	11	16	5	265	78	20	6
	Moroto	387	58	15	121	31	111	29	97	25
Western	Kibaale	456	67	15	26	6	361	79	2	0
	Mbarara	353	90	25	23	7	234	66	6	2
	Rukungiri	273	44	16	24	9	198	73	7	3
Weighted mean (Uganda)		267	63	23	40	15	152	57	13	5

Focus group discussions threw some light on the reasons why people choose Government or other health services. It was explained that for some illnesses it was more appropriate to visit traditional healers. Often, traditional healers were used because people were too poor to afford the charges for Government health services (see below). Others explained that services other than Government services were used (such as private clinics) in order to get "proper treatment". Sometimes this meant the necessary medical care and sometimes it meant being more kindly and professionally dealt with. There was a perception that the "majority of trained doctors are found in the private clinics so a correct service is given there". People may go to the Government service and then move to another if they do not get satisfactory treatment from the Government facility. One group mentioned that "if people don't improve then they consult traditional practitioners". Sometimes it is simply a matter of access; people use alternatives if there are no Government services nearby. A common complaint about Government services was the lack of drugs and inadequate examination (see below). In view of this, some people felt that you might as well just buy the drugs yourself from elsewhere: "In the Government clinic you sometimes pay

but don't get any treatment so it is better to spend that money on drugs alone". This suggests little faith in the diagnostic abilities of staff of Government facilities and a belief that it is only worth paying for the service if it includes being given a drug for treatment. Experience with the service alternatives locally can dictate choice: "someone went there and got cured quickly"

Performance of Government health services

Several measures of 'performance' can be derived from the results of the survey. These are summarised in Table 5. They are: the proportion of visits to the service that found a health worker available; the proportion of visits when the patient had to wait more than 3 hours to be seen; and the proportion of visits when all the drugs or other materials needed for the treatment were available. In all Districts there was nearly always a health worker available. Waiting for more than 3 hours was relatively uncommon; the highest percentage was in Mbarara where about one in seven patients had to wait more than 3 hours to be seen. The availability of drugs and other treatment materials was less good than availability of health workers. The best performance in this aspect was in Rakai and Rukungiri (both 90%) and the lowest was in Lira, where drugs were available in less than 2/3 cases (64%).

Table 5. Performance of government health services used in the last month

Region	District	No. using service	Health worker available		Wait <3 hours		All drugs etc available	
			No.	%	No.	%	No.	%
Central	Mpigi	125	121	97	9/121	7	106	85
	Rakai	207	204	99	5	2	186	90
Eastern	Kapchorwa	318	301	96	29	9	263	83
	Tororo	220	210	96	29	13	152	69
Northern	Lira	147	138	94	15/138	11	94	64
	Moroto	147	142	97	7	5	121	82
Western	Kibaale	169	161	95	13/147	9	129	76
	Mbarara	176	165	94	21/144	15	137	78
	Rukungiri	162	161	99	5/144	3	146	90
Weighted mean (Uganda)		203	195	96	16	8	162	80

The reported availability of health workers is encouraging but should be interpreted with some caution. Focus group discussions indicated that health workers were by no means always available but that people got used to going to the local health facility when they knew from experience that the worker was likely to be there. Most waiting was associated with late arrival

of health workers. Availability 'out of hours' was very limited and even when an out of hours service was technically provided it was not always possible to get in practice. For example "the askari does not want to call the health workers".

Relatively small numbers reported waiting more than 3 hours. However, quite a number of people were unable to say how long they had waited and estimation of waiting time may well be conservative. Nevertheless, the error in this estimation is likely to be constant over time, so a future SDS cycle could reliably compare the waiting times with those reported in this baseline SDS.

The least good performance was in the reported availability of drugs. This ties in with the problems with the Government health services reported by households (see below) and in the focus groups. In the focus groups people expressed anger at having to pay for the consultation, only to find that no drugs were available and they had to go and buy them elsewhere. There was a fairly widespread belief that one reason for non-availability of drugs was that they were taken by the health workers to sell in order to supplement their meagre incomes. Some groups reported that even when drugs were present in the health facility patients could only get them if they paid the health worker for them.

Payment for Government health services

Most people reported paying something for their contacts with Government health services during the last month. The mean amount paid and the proportion of patients paying more than 1000 Ush are shown for all the Districts in Table 6. The level of payment clearly varied considerably between Districts, from a mean of 6971 Ush in Lira to a mean of 616 Ush in Moroto. The lowest proportion who paid more than 1000 Ush was in Moroto, at 7%. Some of the variation in mean amount paid was due to a few people paying very high amounts in some Districts; comparison of median values avoids this distortion (Table 6).

Table 6 also shows the response of households when asked if they would be willing to pay for an improved Government health service and, if so, how much for a visit to a health centre (or similar facility). In most Districts a high proportion of households indicated a willingness to pay (except in Lira where only 28% said they were willing). The mean for Uganda was about two thirds willing to pay for improved services (67%). The amount they felt willing to pay was *less* than they had paid for their contact during the last month in all Districts except Kibaale. The difference was more apparent when comparing mean than median values. Similarly, the proportion willing to pay more than 1000 Ush for a visit was lower than the proportion who had had to pay at this level for their last contact.

Interestingly, households who reported using the Government health services in the last month were nearly one and a half times more likely to say they were willing to pay for improved health services than households who had not used Government health services in the last month. This association was found, to a variable extent, in all 9 Districts (Mantel-Haenszel combined OR= 1.36, 95% CI 1.17-1.58). The risk analysis tabulations are given in Table A4.3 in Annex 4. This may reflect that the Government health services are used by those who can afford to pay the charges or who think they are worth paying for.

Table 6. Payment for government health services

Region	District	No. using govt services	Amount paid for visit in last month			Prop who paid >1000 Ush		No. of hh	Willing to pay for service		Amount willing to pay for visit			Prop willing to pay >1000 Ush	
			No.	Mean	Median	No.	%		No.	%	No.	Mean	Median	No.	%
Central	Mpigi	125	81	1135	1000	27	33	481	372	77	344	1073	700	80	23
	Rakai	208	196	1450	500	26	13	766	542	71	535	633	500	20	4
Eastern	Kapchorwa	318	311	945	300	42	14	444	322	73	313	714	500	16	5
	Tororo	220	187	1585	700	74	40	643	377	60	360	371	300	4	1
Northern	Lira	154	126	6971	900	56	44	713	201	28	179	1153	500	24	13
	Moroto	156	137	616	400	9	7	605	445	74	344	311	300	0	0
Western	Kibaale	173	148	692	200	10	7	572	440	77	423	726	500	38	9
	Mbarara	174	158	1353	300	31	20	817	596	73	561	684	500	47	8
	Rukungiri	162	157	882	500	18	11	523	421	80	419	612	500	18	4
Weighted mean (Uganda)			182	1702	577	37	20	636	428	67	403	725	502	29	7

The issue of payment for Government health services was one that often arose in focus group discussions. There was division of opinion, with some groups giving as a main complaint about services now the fact that you had to pay *even if the service was poor*. Others complained that you could not get a service at all, however ill you were, if you were unable to pay: "People die of diseases which are curable because of lack of money". In some groups, one of the suggestions for improving services was to increase the user fee. This was in the context of the money being seen to be used to improve services, with a request to "show people what their money is used for". It was also felt that it would be better to have a fixed fee that was locally agreed rather than having to pay for all sorts of items of service: people should "pay the money fixed by the Management Committee but not any extra charges raised by health workers".

It seems likely that an official policy of cost sharing, probably in the form of a fixed fee for attendance at a health facility, would find favour with many people in Ugandan communities. However, this would only be widely acceptable if the level of the fee was modest (and probably lower in poorer areas) and if the payments led to some tangible improvements in the service the people received. Setting user fees too high and not accompanying them with efforts to improve the service delivered would probably lead to more people using other services and failure to collect fees.

Opinions of Government health services

Households were asked to rate the Government health services in their area on a three point scale of good, average (neither good nor bad), bad. Table 7 shows the household rating on this scale for each of the Districts. In most Districts a third or more of households rated the service as good; the highest was in Rukungiri with 51% rating the service as good. The Uganda mean was 38% rating the services as good. Lower proportions rated the service as bad, except in Kibaale and Moroto. The Uganda mean for rating the services as bad was 22% or about one in five people.

Table 7. Household opinions of government health services

Region	District	No. of households	Service 'good'		Service 'average'		Service 'bad'		No opinion	
			No.	%	No.	%	No.	%	No.	%
Central	Mpigi	481	201	42	121	25	72	15	87	18
	Rakai	766	348	45	291	38	85	11	42	5
Eastern	Kapchorwa	444	164	37	198	45	48	11	34	8
	Tororo	643	227	35	146	23	214	33	56	9
Northern	Lira	713	228	32	172	24	232	33	81	11
	Moroto	605	154	25	151	25	236	39	64	11
Western	Kibaale	572	156	27	155	27	174	30	82	14
	Mbarara	817	360	44	222	27	141	17	94	12
	Rukungiri	523	269	51	171	33	52	10	31	6
Weighted mean (Uganda)		636	244	38	137	22	138	22	64	10

Households were asked what they thought was the main problem with the Government health services in their area. Their views are illustrated in Annex 5, figures 2(a)-2(d). The commonest problem raised was lack of drugs. It is notable that in most Districts a third or more of households were not able to say what they thought the main problem was.

Similarly, when asked for suggestions for how Government health services could be improved, around a third of households were not able to formulate any suggestions. The frequency of the commonest suggestions in each District is shown in Annex 5, figures 3(a)-3(d). Providing more drugs was usually the commonest suggestion.

The household responses about the problems of the Government health services and how to improve the services are supplemented by the focus group discussions about health services. Lack of drugs was the commonest complaint, as mentioned above. People also complained in some areas about the attitudes and practices of the health workers. For example "Some workers work with the 'I don't care spirit' - they come late and demand money for immunisation". And "some are rude - they abuse patients and mothers". Health worker standards of practice were sometimes criticised: "There is a lot of beating in the maternity ward while mothers are delivering" or "The immunisers inject us as if they are injecting cows" or "Vaccinators come drunk - most children get injection abscesses". Issues of corruption, nepotism and tribalism were raised. Some groups complained that the workers were poorly trained and qualified and did not know when to take action: "In case of an outbreak - such as meningitis - they need people to die first before they take action".

Other complaints were about the facilities available being dirty or inadequate. In some areas a major complaint was that Government health facilities were not available nearby and transport to them was difficult: "People die in emergencies in the struggle to get them to the health facility - one man who was bitten by a snake died while trying to get him to the health facility on a bicycle".

Focus group suggestions for improving Government health services were similar to those from the household questionnaires. Again, providing more drugs featured prominently. Not surprisingly, both household and focus group suggestions for improvement were mainly for the improved end point of the delivery, rather than suggestions for how this might be achieved managerially. A few people suggested things like supervising staff better and paying them better to discourage them from selling off drugs and encourage them to attend for work.

AGRICULTURAL SERVICES

Contacts with agricultural extension services

Households were asked when they last had a visit from an agricultural extension worker. Such contacts were rare in most Districts (Table 8), with visits reported by 10% or less of households in six of the nine Districts; the Uganda mean figure was 11% of households who had ever been visited by an extension worker. About a quarter of households reported having a visit in Moroto (24%), about 1 in 5 in Mbarara (21%), and about 1 in 7 in Rukungiri (15%). This is probably related to the high numbers of livestock kept in these Districts and most of these visits will have been from veterinary services. In two of these Districts (Mbarara and Rukungiri) the Agricultural Extension project is in operation and in one (Moroto) it is not. In Moroto particularly, some of the veterinary visits may have been from NGOs rather than from Government services directly, but households had not made this distinction. The proportion of households who had been visited by an extension worker was no higher in those Districts where the Agricultural Extension Project was operating than in those without the project (Table 8). In fact, a household in a District with the Extension Project had only two thirds the chance of being visited of a household in a District without the project (OR 0.67, 95% CI 0.56-0.81). The risk analysis is shown in Annex 4, Table A4.4.

Information about the last visit of an Agricultural Extension Worker (AEW) was collected. This is also shown in Table 8. The proportion of the visits that were group sessions varied from 15% in Kapchorwa to 89% in Moroto, with a Uganda mean figure of 56%. Rather less visits were group sessions in Extension Project Districts than in non-project Districts (53% vs 70%). This is interesting, given that one part of the Extension Project is to form and support farmers' groups. A high proportion of visited households reported that they had been able to get all the information they needed from the visit (Uganda mean figure 80%). And the visiting AEW rarely requested payment (Uganda mean figure 9%), except in Mpigi where about one in five requested payment. Payment was requested slightly less often in Districts with the Extension Project than in Districts without it (7% vs 9%).

Table 8. Reported visits from agricultural extension workers

Region	District*	No. of households with info	Ever visited by AEW		No. of households visited	Last visit as group		All info available from last visit		AEW requested payment last visit	
			No.	%		No.	%	No.	%	No.	%
Central	Mpigi (X)	460	46	10	48	20	42	33	69	10	21
	Rakai (4)	755	69	9	71	31	44	55	78	11	16
Eastern	Kapchorwa (X)	441	27	6	26	4	15	22	85	3	12
	Tororo (1)	625	43	7	40	22	55	27	68	3	8
Northern	Lira (4)	689	22	3	25	13	52	18	75	0	0
	Moroto (X)	590	142	24	142	127	89	121	86	6	4
Western	Kibaale (2)	549	22	4	25	9	36	21	84	0	0
	Mbarara (3)	757	161	21	163	103	63	150	92	11	7
	Rukungiri (2)	516	79	15	78	37	47	55	71	3	4
Weighted mean (Uganda)		617	65	11	66	37	56	53	80	6	9
Mean for Districts with AEP		649	66	10	67	36	53	54	81	5	7
Mean for Districts without AEP		497	71	14	72	50	70	59	81	6	9

* (1)=Districts with Agricultural Extension Project starting in July 1992/January 1993
(2)=Districts with AEP starting in July 1993
(3)=Districts with AEP starting in July 1994
(4)=Districts with AEP starting in June 1995
(X)=Districts without AEP operating

Focus group discussions with farmers about agricultural services supplemented the replies to the household questionnaire. It was confirmed that in Moroto, Mbarara and Rukungiri the majority of the visits were indeed from veterinary workers to treat and immunise animals (rather than to give advice). In Moroto groups mentioned that some of the veterinary visits were from an NGO.

The lack of visits of extension workers reported in the household interviews was strongly confirmed in focus group discussions. Nearly all the groups claimed they had never seen an extension worker and received no technical advice about farming at all. One group had an argument about whether or not an extension worker was posted at the sub-county; no-one had seen him in the community. Communities felt abandoned: "There is no assistance whatsoever. We imagine Government is no longer interested in the community as far as agriculture is concerned" or "Where has the Government put these people?" The workers were sometimes seen passing through: "We don't see the extension workers at all, except when they pass going to ... to do their business". And occasionally the extension workers were known to visit, but only particular households. Sometimes they visited established groups: "Extension workers don't visit farmers individually at all and they also don't call any meetings to address farmers. Occasionally they visit women's or youth groups". Veterinary workers were said to visit sometimes, but only when specifically requested to do so by a farmer.

There was clearly a wish for more technical advice and many groups expressed the adverse effects on their farming of the lack of advice: "Since we have no technical advice, we have reverted to primitive ways of farming. As a result we have poor yields and livestock die." The wish for advice was often expressed: "We want to be taught about farming and farming methods" or "People feel they are missing a lot. Tobacco alone cannot solve the famine problem" (from a group who reported visits from BAT only).

Problems with extension services and with agriculture generally were expressed, often forcefully, by the focus groups. Many mentioned crop diseases and animal diseases that were threatening their livelihoods yet they did not know how to deal with. The main problem with the extension services was that they simply didn't exist but there were also some complaints that extension workers (especially veterinary workers) came for a specific problem when called but did not give other advice. One group complained that "the extension worker lacks seriousness".

Improving the agricultural extension service

The commonest suggestions for improving the extension services were for 'more extension workers', 'more visits from extension workers' and 'provide more farming inputs via the extension service (such as seeds, and farming equipment)'. A third or more of households in most Districts were unable to formulate suggestions for improving the service. The pattern of suggestions for improving the extension service in each District is shown in Annex 5, figures 4(a)-4(d).

Similar suggestions were made by the focus groups. Some gave quite detailed proposals: "Extension workers should visit home by home and send a detailed report of homes visited to head office and copy to RC II of that area. This will enable the RCs to cross-check with the alleged visited farmers". Some groups felt the situation of the extension workers should be improved to help them to visit, with provision of adequate and timely salaries and transport (such

as bicycles). Others felt that: "agricultural and veterinary workers who are incapable of working should be replaced".

Payment for agricultural extension services

Households were asked if they would be prepared to pay for an improved extension service and, if so, how much for a visit to give livestock advice or general farming advice. The responses are shown in Table 9. In six of the nine Districts more than half the households indicated they were willing to pay something and the Uganda mean figure is 52%. Generally, both the mean amount willing to pay and the proportion willing to pay more than 1000 Ush are higher for livestock advice than for general farming advice. The proportions willing to pay for agricultural services are lower than the proportions willing to pay for an improved health service (see Table 6). But the amount households are willing to pay (of those who were prepared to pay anything) is higher than the amount they are willing to pay for a visit to a health centre (see Table 6).

Households who reported ever having had a visit from an extension worker were about one and a half times more likely to be willing to pay for improved agricultural extension services than those who had never been visited. This overall association was not found in every District but was nevertheless statistically significant (Mantel-Haenszel combined OR=1.36, 95% CI 1.12-1.65). The figures for this risk analysis are shown in Annex 4, Table A4.5. This may suggest that they had taken the trouble to arrange their own visits previously and were perhaps better able to afford to pay for visits. Households who are willing to pay for improved extension services are much (seven times) more likely to be willing to pay for improved health services too (Mantel-Haenszel combined OR=7.47, 95% CI 6.41-8.70). The figures for this risk analysis are shown in Annex 4, Table A4.6. This suggests that the better off households are prepared to pay for both health and agricultural services.

Table 9. Willingness to pay for agricultural extension services

Region	District	No. of households	Willing to pay for improved service		Amount willing to pay for livestock advice (Ush)			Prop willing to pay >1000 Ush for livestock advice		Amount willing to pay for general farming advice (Ush)			Prop willing to pay >1000 Ush for gen farming advice	
			No.	%	No.	Mean	Median	No.	%	No.	Mean	Median	No.	%
Central	Mpigi	468	279	60	235	1018	500	41	17	231	974	500	38	16
	Rakai	764	451	59	416	877	500	62	15	384	944	500	74	19
Eastern	Kapchorwa	444	250	56	245	815	500	24	10	222	797	500	17	8
	Tororo	628	254	40	194	466	500	6	3	172	432	400	2	1
Northern	Lira	699	248	36	211	934	500	29	14	212	835	500	27	13
	Moroto	605	226	37	163	473	300	7	4	161	579	200	5	3
Western	Kibaale	572	311	54	286	1361	1000	61	21	291	1209	500	58	20
	Mbarara	817	547	67	468	1027	500	74	16	468	880	500	61	13
	Rukungiri	520	285	55	268	929	1000	40	15	267	874	500	35	13
Weighted mean (Uganda)		630	328	52	286	893	593	38	13	274	857	480	36	13

Knowledge and use of District Farm Institutes

Household responses to the question 'Is there a District Farm Institute in this District?' are shown in Table 10. Clearly, many people do not know if there is a DFI in their District or not. Table 10 also indicates where there are DFIs in reality. Households were more likely to say there was a DFI in Districts where there was one in reality but nevertheless, only 40% of households in Districts with a DFI know that there is one, 21% think there is not one and 39% do not know if there is one or not. On the other hand, some (12%) households in Districts without access to a DFI said there was one. They were presumably getting muddled with other sorts of farming facilities. These results suggest very poor awareness of DFIs.

Table 10. Knowledge about the presence of District Farm Institutes

Region	District	No. of households	Presence of DFI	Think there is a DFI		Think there is not a DFI		Don't know if there is a DFI	
				No.	%	No.	%	No.	%
Central	Mpigi	481	NO	65	14	193	40	223	46
	Rakai	766	NO	102	13	294	38	370	48
Eastern	Kapchorwa	444	YES	270	61	69	16	105	24
	Tororo	643	YES	182	28	179	28	282	44
Northern	Lira	713	YES	259	36	132	19	322	45
	Moroto	605	NO	32	5	360	60	213	35
Western	Kibaale	572	NO	45	8	308	54	219	38
	Mbarara	817	NO	157	19	203	25	457	56
	Rukungiri	523	NO	60	11	303	58	160	31
Mean for Dists with DFI		600		237	40	127	21	236	39
Mean for Dists without DFI		627		77	12	277	44	274	44

Table 11 shows the proportion of households with some knowledge of the functions of a DFI. The most common functions mentioned were 'training farmers' or 'farming methods'. Knowledge tended to be higher in Districts where there was access to a DFI, where 29% of households know some function of a DFI. Very few farmers have attended a course at a DFI and not many more have attended courses arranged by the Agricultural Extension Worker. More people had been on a course from the Extension Worker in Mbarara (17%) and Rukungiri (11%), which ties in with the higher reported number of visits of extension workers in these Districts. Generally farmers do not know much about the functions of DFIs and almost none have benefitted from training there.

Table 11. Knowledge about functions of District Farm Institutes and attendance at courses

Region	District	No. of households	DFI in District	Know some function of DFI		Have attended a course at a DFI		Have attended course from AEW	
				No.	%	No.	%	No.	%
Central	Mpigi	481	NO	98	20	5	1	25	5
	Rakai	766	NO	164	21	23	3	72	9
Eastern	Kapchorwa	444	YES	153	34	20	5	9	2
	Tororo	643	YES	129	20	13	2	21	3
Northern	Lira	713	YES	242	34	4	1	17	2
	Moroto	605	NO	123	20	5	1	17	3
Western	Kibaale	572	NO	40	7	8	1	20	3
	Mbarara	817	NO	281	34	16	2	138	17
	Rukungiri	523	NO	140	27	17	3	56	11
Mean for Dists with DFI		600		175	29	12	2	16	3
Mean for Dists without DFI		627		141	22	12	2	55	9

Farming chemicals and drugs

Households reported buying their farming drugs and chemicals from a number of sources, most commonly local shops. Other sources included individuals (sometimes smugglers) and from District agricultural or veterinary services. The proportion of households who bought their supplies from shops is shown in Table 12. The Uganda mean figure for those who bought these materials was that 79% of them buy them from shops. In each District there were some households who reported never buying farming chemicals and drugs. Those who did buy them were asked whether they were available when they last went to buy them. They were also asked about what advice they were given when buying pesticides or acaricides, both active chemicals that can be dangerous to health if not used properly. Often no advice was given and the proportions given safety advice (eg protective clothing, keep away from children etc) were generally very low, with a Uganda mean figure of 8%. Safety advice in this case was anything, however basic, to do with using protective clothing or avoiding contact with the chemicals or keeping them away from children. The data are shown in Table 12.

Table 12. Sources of farming chemicals and drugs

Region	District	No. of hh	Supplies bought from shops		No. of hh buying	% buying from shops	Supplies available at last attempt to buy		Safety advice given for pesticides/acaricides	
			No.	% of hh			No.	%	No.	%
Central	Mpigi	481	213	44	259	82	202	78	23	9
	Rakai	766	283	37	296	96	194	66	12	4
Eastern	Kapchorwa	444	206	46	359	57	313	87	11	4
	Tororo	643	198	31	237	84	178	75	52	22
Northern	Lira	713	128	18	184	70	110	60	32	17
	Moroto	605	234	39	310	75	262	85	11	4
Western	Kibaale	572	87	15	133	65	114	86	3	2
	Mbarara	817	390	48	413	94	369	89	31	8
	Rukungiri	523	289	55	347	83	312	90	33	10
Weighted mean (Uganda)		636	235	37	296	79	237	80	25	8

Focus group discussions covered the problems, if any, people experienced in buying farming chemicals and drugs. Problems of having to travel a long way to get them, poor availability and expense were commonly noted. Some groups mentioned that the drugs might be out of date but people could not read the label to alert them to this because they are illiterate. Some unscrupulous traders produce fake or adulterated drugs or chemicals: "Some traders fake drugs, like selling baby soya saying it is Dithane". There is a general lack of advice about the use of farming chemicals and drugs. One group explained that because of lack of advice: "Most people these days inject animals at the nearest site of sickness, like near the ribs for lung disease. And sometimes the animal dies if the needle reaches other sensitive organs like the heart". At least the farming drugs were available to inject; in the same group a man admitted that he injected his wife with a cattle drug because he could not get her to a health facility. Another group complained that: "lack of advice or the wrong advice [about chemicals] leads to destruction of both food and cash crops". The lack of safety advice was not raised in the focus groups; perhaps people were not aware that it was needed.

OTHER GOVERNMENT SERVICES

Households mentioned a variety of other services when asked what other Government services they knew of that were available in their area. The most common services mentioned in each District and the opinions of each one are shown in Annex 5, figures 5(a)-5(d). A relatively small number of other services were mentioned by households, with some differences between Districts in the services they are most aware of. Some services like electricity, telephones and postal services were not mentioned at all, perhaps because they are largely confined to urban areas.

The most commonly mentioned four services are roads, education, water and security. Of these, education was usually scored quite positively by households (except in Moroto), opinions of roads were more mixed and poor in some Districts, water was scored positively in 6 Districts, and security was nearly always scored positively.

VIEWS OF SERVICE PROVIDERS

In each community, the nearest Government health facility was reviewed, including an interview with the health worker. Wherever possible, the Agricultural Extension Worker covering the community was also interviewed at the office at sub-county. In each District, the District Medical Officer, District Extension Coordinator and Chief Administrative Officer were interviewed.

Health services: views of service workers and DMOs

Health facilities were visited at most of the communities, some of them being several kilometres from the site itself. They were found to be in varying states of repair and cleanliness. In many the stock of drugs was limited or absent and some did not have a fridge in working order. All but one sub-dispensary reported that they made user charges for services, usually around 500 Ush for a first consultation, with some a little lower. The health workers who were interviewed expressed their views about the challenges facing them in providing a service. Most mentioned poor salaries and late or irregular payment of salaries as demotivating factors for staff. Some talked of inadequate transport provision and inadequate supply of drugs from the DMOs office. Most admitted to hearing complaints about their service from patients, mainly related to shortage of drugs and having to pay for the service. Some mentioned complaints about staff rudeness and inefficiency and staff selling drugs. When asked to rate the support service they received from the DMOs office, a few rated it as good but the majority rated it as average.

District Medical Officers interviewed were generally positive about the effects of decentralization on their services, feeling they meant better local control over their services and staff. Some mentioned the continuing problems of the delegated funding arrangements for hospitals in their Districts, with lack of clarity of areas of responsibility of the DMO and hospital Medical Superintendent. They mentioned challenges such as insufficient staffing levels, problems with personnel issues unresolved after decentralization, lack of a feeling of ownership by communities (and hence an unwillingness to contribute to costs), poor staff salaries and morale, and lack of a proper systematic approach to service provision at District level.

Most DMOs rated their support from the central Ministry of Health as adequate or good. One complaint was that visits to Districts were not coordinated so that they may have several visitors in a week all from the same Ministry; this was a waste of their time.

Agricultural services: views of service workers and DECs

Although it was intended to interview an Extension Worker at sub-county level for each community surveyed, in the event few were located and interviewed. Those who were interviewed were generally operating from offices in a poor state of repair. They complained of poor salaries, lack of transport and demotivation. Some mentioned their difficulties in operating under the Unified Extension Service because of lack of knowledge outside the subject area in which they had originally been trained and lack of retraining opportunities. They also mentioned lack of materials for training and visiting farmers. Many said that they charged for immunisation services and some said that they charged farmers for fuel to visit them. Some of them

complained about the farmers, saying they were unwilling to form groups and did not attend meetings called by the Extension Worker. Others said they had difficulties because farmers were illiterate or communities were uncooperative. Their suggestions for improving the Extension Service were mainly to increase the salaries of Extension Workers and to provide them with transport and materials necessary for their role.

District Extension Coordinators (or District Agricultural Officers in Districts with a DEC) were again generally positive about the effects of decentralization as a way of making decisions locally. However, many mentioned that the staff of their services had been greatly reduced in the last years and that this made it more difficult to run an adequate service. Some specifically stated that their service had less complete coverage now than previously.

They were reasonably satisfied with the support they received from MAAIF, especially in the area of technical advice. Again they mentioned lack of coordination of visits to Districts as a problem. In order to improve their service, they felt they needed more training and supervision of staff and better transport facilities.

District services: views of CAOs

The CAOs were interviewed to ask about their views of decentralization, their support from Kampala and their own District services. Overall, their view was that decentralization was a good thing although it had brought its own problems. It allowed them to make their own decisions, including on financial matters; salaries could be paid more promptly; there was local decision making; there was better control of staff; there was democratic control of funds; and people could take a pride in District services.

On the negative side, decentralization had tended to lead to problems of sectarianism in job appointments and job promotion; it had led to insecurity of tenure for administrators; control by local politicians without much experience was often rather uncomfortable; funding from the centre was insufficient and there were difficulties in raising revenue through local taxes.

They were reasonably satisfied with their support from the centre although some mentioned that there had been a tendency of central ministries to 'wash their hands' of problems in the Districts, having passed on to them problems, especially in the area of personnel and staff contracts and payment. They suggested that the service they received from the centre could be improved by regular release of funds, more consultation between Government and Districts and provision of more capacity-building training for District staff faced with new responsibilities.

The CAOs were asked which of their District services they were most satisfied with and which least. Not all were able to answer; for those that did it was possible to compare their views with views from the household questionnaire of services mentioned. There was considerable disagreement but some areas of concordance. For example, in Moroto the CAO was most satisfied with health services and least satisfied with roads; households were not very positive about either service but rated roads slightly worse (43% rated roads as 'bad' and 39% rated health services as 'bad'). In Tororo the CAO was also most satisfied with health services and least satisfied with roads; 35% of households rated health services as good and 33% rated roads as good. In Rukungiri the CAO was most satisfied with health and least with roads; 51% of households rated health services as good and roads were not mentioned by households. In

Kibaale the CAO was most satisfied with the Agricultural Extension Service because it was well-funded but only 4% of households in the District reported they had ever had a visit from an extension worker. In Lira the CAO was most satisfied with the supply of drugs, yet in Lira only 64% of contacts with Government health services in the last month were said to have had all the necessary drugs available (the lowest figure among the 9 Districts); on the other hand the Lira CAO was least satisfied with funding for schools but education was rated very positively by households.

SURVEY OF BUSINESSES ABOUT CUSTOMS SERVICES OF UGANDA REVENUE AUTHORITY

A total of 27 completed questionnaires was returned, giving a response rate of 51%. Most (16, 59%) of the respondents described their business as 'manufacturing'. Others mentioned they were import/export firms, food or drink manufacturers, or a pharmaceutical company. The mean number of employees was 160 (median 95).

Costs

The amount paid for the last import and the estimated costs caused by customs delays are shown in Table 13.

Table 13. Costs of importing

Expenditure item	Amount spent (Ush)	
	Mean	Median
Customs tax for last import (n=23)	7,977,000	4,403,000
Clearing agent for last import (n=21)	955,510	500,000
Customs officers inducements for last import (n=24)	17,083	0
Estimated costs of customs delays during last year (n=16)	13,390,000	10,000,000

Delays and time spent

Table 14 shows the time delays at different points in the importing process.

Table 14. Delays in importing process

Point in process	Number of days	
	Mean	Median
Time between item into country and taking possession (n=27)	32	14
Time to get receipt for tax payment from bank (n=23)	5	2
Person-days spent on arranging import (n=22)	10	6

Respondents were asked their opinion of the causes of delay to imports. Their views are set out below:

Paperwork/bureaucracy	61%
Problems with the 'longroom'	33%
Incompetence	22%
Corruption	15%
Delay in valuation	11%
Congestion at customs centre	11%
Too few customs staff	7%
Problems with clearing agent	4%

Note that each respondent could suggest more than one cause of delay.

Other issues

Only three respondents thought that Uganda laws hindered their imports. They mentioned truck inspections delaying their convoys, having to pay taxes in cash rather than by cheque, and environmental protection laws forbidding import of freon.

Asked about the effect of the SGS on their imports, 11 (42%) said it caused delay, 3 (12%) said it added to expense, and 3 (12%) thought it improved quality. The remaining 10 respondents thought it had no effect.

Rating of URA customs import services

Of the 23 respondents who gave a rating, they rated as follows:

Very good	nil
Good	6 (26%)
Adequate	10 (44%)
Bad	4 (17%)
Very bad	3 (13%)

Export services

Only 7 of the respondents did any exporting and many of these did not fully complete this section of the questionnaire. These results have therefore not been analysed further.

Other Government services

More than half the respondents (16, 59%) did not mention any other Government services. The other services that were mentioned and the ratings given to them are shown in Table 15.

Table 15. Business ratings of other Government services

Other services	Ratings of services				
	very bad	bad	adequate	good	very good
URA	1				1
Electricity			2	1	1
Water			1	2	1
Telephones, fax etc	1	1			
Import/export licences	1	3	1	1	
Police				1	
Post office			2		
Kampala City Council			2		

CONCLUSIONS

This baseline SDS has demonstrated the feasibility of conducting large scale surveys to seek the views of communities in Uganda about the services they receive from Government and other sources. The Sentinel Community Surveillance (SCS) model works well for this sort of purpose, where local commitment and involvement are important. In this case, the existence of a framework of representative sites and of experienced District teams facilitated and expedited the work. The collaboration of UNICEF, who have been supporting the SCS system in Uganda, was an important factor in the success of the project. The active participation of the collaborating ministries centrally and of District administrations has been essential to the project. Their willingness to demonstrate responsiveness and transparency is creditable.

Households are willing to give information about their use of services and their views of those services. It is clear, however, that it is a new experience for many of them to be asked what is wrong and, especially, what can be done to put it right. They have been more used to accepting whatever they are offered in the way of service. This is highlighted by the relatively high proportions who were unable to give suggestions about improving health and agricultural services. People were sometimes less reticent about giving opinions, particularly opinions critical of service providers, in focus groups. The use of focus groups has given important insights to enrich the interpretation of the quantitative data from the household questionnaires.

The reported level of satisfaction with Government health services is quite good in most Districts, even though people perceive problems with them. The frequent use of alternative health services is, at least in some areas, an indication of lack of satisfaction with the Government health services. User charges are almost universal at present. It is encouraging that the majority of households would be prepared to pay for improved health services. Those who have used Government health services recently are more willing to pay for improved services than those who have not. This may indicate that some households have avoided using the services because of inability to pay and their situation will need to be considered when reviewing the policy of user charges. The amount households suggest paying is quite low and a little less than they are presently paying. The amount one is willing to pay when ill is perhaps higher than that suggested when one is well.

The suggestions for improving health services made by households and focus groups and the willingness of households to pay for services could be the basis for dialogue at District level between service providers and communities. This could involve the setting of performance criteria for services. This survey gives baseline values for several potential performance criteria that could be used for Government health services: the proportion of contacts where the health worker is available; the proportion of contacts where patients have to wait more than three hours (or whatever time is set); and the proportion of contacts where all the required drugs are available. In addition, the Ministry of Health could set targets for satisfaction with the service in different Districts, based on the opinions of households and taking the figures from this survey as the baseline. They could also set targets for service usage, again based on the figures for recent use of Government health services in this survey.

The coverage with agricultural extension services revealed in this survey is low. Concern about this was expressed by the MAAIF, especially at the lack of difference between Districts with and without the Agricultural Extension Project in operation. Only about one in ten households have

benefitted from the service. Of the small number of visits reported, most were able to provide all the information required by the farmer. There is clearly a perception of needing and wanting an agricultural advisory service, as indicated by households and in focus group discussions, and more than half the households would be willing to pay for an improved service (in most cases, to get the service at all). This indicates a large 'market' for agricultural extension services and could guide a review of the present methods of delivering the service, and of the functioning of the Agricultural Extension Project. Action could be taken at central level to review policies and at District level to review management of the service and identify obstacles to its successful operation. Performance criteria against which to gauge the success of actions to improve the service could be the proportion of households visited in a given time, the proportion of visits that were group sessions (if the policy of encouraging group sessions continues), and the proportion of visits where farmers were able to get all the information they needed. Baseline figures for these criteria are provided by the results of this survey.

There is a lack of knowledge about the presence and functions of District Farm Institutes and very few farmers have benefitted from training at them. If these Institutes are to be devolved to District level, much work will need to be done on increasing awareness about them and on marketing their services. The success of such actions could be assessed by measuring community knowledge about the Institutes and comparing with the baseline figure from this survey.

The system of buying farming drugs and chemicals from commercial outlets is shown to be less than satisfactory in this survey. They are not always available, they are perceived to be expensive and sometimes of poor quality, and advice about use and safety precautions is rarely given. In its regulatory role, the MAAIF could tighten the control over the sale of farming drugs and chemicals, perhaps making it compulsory to give adequate advice at the point of sale. The effectiveness of such a regulatory approach could be assessed by remeasuring the indicators produced from this survey: the proportion attempts to but when the materials were available; and the proportion of sales that were accompanied by safety and other advice.

The awareness of Government services other than health and agriculture is shown to be relatively low among rural communities. There is some indication that District Administrators do not share the perceptions of communities about which services are better than others in an area. This sort of community feedback can help administrators to review services and look for areas for improvement. In the context of ROM, these results can help to decide which services should be reviewed in detail in a future round of the SDS.

Most District Administrators are reasonably satisfied with the support services they receive from central Government, although some expressed a feeling of having been abandoned to deal with problems on their own. They clearly appreciate the local control and accountability afforded by decentralization. The role of District Administrations in setting performance criteria for services under ROM, using data from the SDS, will be very important. While general guidelines can be set by central Government, these will need to be set in detail locally, having regard to the local conditions and present levels of service delivery. Levels of service delivery clearly vary considerably between Districts at present and it would be unrealistic to expect them all to reach the same level at a given time, given their different starting points. Thus the setting of performance criteria for services will require a dialogue between central Government and Districts, something which several CAOs identified as being necessary for the successful operation of decentralization.

The results of this baseline SDS (and future cycles of the SDS) should help managers at central and District level in setting targets for their services as part of the ROM process that is soon to be introduced in Uganda public services. If they are able to demonstrate progress against these targets, this should enhance their service within the ROM framework. The design of the baseline SDS and the format of the results mean that they can be used for both District level planning and at central ministry level; the Districts are responsible for the actual service delivery, with the support and policy guidance of the central ministry. When using the results of the baseline SDS (and future cycles of the SDS) in the ROM process, it will be important to link these data on service coverage and perceptions to data about expenditure on services in different Districts and internal service data on level of service provision. This will allow the output of a service to be related to the input into the service in different areas, and serve as a guide for effective resource management. Data on expenditure on services are being accumulated through, for example, the Expenditure Tracking Project.

REFERENCES

1. Ministry of Agriculture,, Animal Industry and Fisheries. Agricultural Extension Project. Mid term review report. May 1995.
2. Monitoring and Evaluation Unit. Report on the baseline survey for the year 1992. Agricultural Extension Project. April 1995.
3. Monitoring and Evaluation Unit. Farmers follow up report. Agricultural Extension Project. May 1995.
4. Monitoring and Evaluation Unit. Extension staff: overview. Agricultural Extension Project. May 1995.
5. Ministry of Agriculture, Animal Industry and Fisheries. Discussion document. Effects of decentralisation on agricultural extension services. October 1995.
6. Ministry of Agriculture, Animal Industry and Fisheries. National Agricultural Training Plan 1994. District Farm Institutes (p29).
7. Mwesigye RF. Effects of user charges on quality of curative services in rural health units in Uganda. March 1995. Health Planning Unit, Ministry of Health, Uganda.
8. Ekudu G. Building capacities for District and community based management information systems for improved decision making and planning in the social services sectors: using Sentinel Community Surveillance (SCS) methodology. Submission to Government of Uganda/UNICEF country programme annual review. November 1995.
9. Andersson N. Four essays on community-based research in planning. CIETinternational. New York, 1995
10. Andersson N. An operational framework for monitoring child survival and development. UNICEF Central America. Guatemala 1985
11. Andersson N, Martinez E, Cerrato F, Morales E, Ledogar RJ. The use of community-based data in health planning in Mexico and Central America. *Health Policy and Planning* 1989; 4: 197-206
12. Andersson N. Social mobilization and community based research. UNICEF evaluation office, New York, 1992
13. Ruijter JM. Sentinel site experience in Angola. *Convergence* 1991, vol xxxiv, 4.
14. Ledogar RJ, Andersson N. Impact estimation through sentinel community surveillance: an affordable epidemiological approach. *Third World Planning Review*, August 1993.

15. Andersson N, Kerr Muir M, Mehra V, Salmon AG. Exposure and response to methyl isocyanate: results of a community-based survey in Bhopal. *British Journal of Industrial medicine* 1988; 45: 467-475
16. Epi Info. A word processing, database and statistics system for epidemiology on microcomputers. Epidemiology program office, Centers for Disease Control and Prevention, Atlanta, Georgia, USA. Version 6, 1994
17. Mantel N, Haenszel W. Statistical aspects of the analysis of data from retrospective studies of disease. *J Natl Cancer Inst* 1959; 22: 719-748
18. Mantel N. Chi-square tests with one degree of freedom: extensions of the Mantel-Haenszel procedure. *J Amer Stat Assoc* 1963; 58: 690-700