MWINILUNGA DISTRICT POVERTY MONITORING REPORT

COMMISSIONED BY

THE CIVIL SOCIETY FOR POVERTY REDUCTION (CSPR)

RESEARCH TEAM

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21 JUNE 2003

ACRONYMS

CDE Classified daily employee

CHW Community health worker

CSO Central Statistics Office

CSPR Civil Society for Poverty Reduction

DACO District Agricultural Coordinator

DHMT District Heal Management Team

FGD Focus group discussion

HIPC Highly Indebted Poor Countries

PAM Progamme Against Malnutrition

PTA Parents Teachers Association

PRSP Poverty Reduction Strategic Paper

RHC Rural Health Centre

SAO Senior Agricultural Officer

SSI Semi structured interviewing

STD Sexually transmitted disease

TBA Traditional Birth Attendant

ZAMSIF Zambia Social Investment Programme

ZEN Zambia Enrolled Nurse.

1. BACKGROUND

1.1 Introduction

The Civil Society for Poverty Reduction (CSPR) in May 2003 commissioned a Rapid Poverty Assessment Survey in Mwinilunga District following the Poverty Assessment Baseline Survey which was jointly undertaken by Civil Society for Poverty Reduction (CSPR) and the Government of the Republic of Zambia through Zambia Social Investment Fund (ZAMSIF) in October, 2002. The purpose of the 2002 study was to establish baseline data on which to base monitoring exercises like the one being reported in this document.

1.2 Study Objectives

The May 2002 study was a follow-up of the October one and it was intended to find identify developments that had taken place since then thereby assessing poverty levels and monitoring the impact of the Poverty Reduction Strategy Paper (PRSP) interventions. In particular the study being reported here sought to:

- Monitor the impacts of the PRSP interventions on people's lives;
- Come up with information and data for updating the PRSP; and
- Generate and assess community participation and perceptions of the poverty situation in the relation to HIPC resources and the PRSP.

1.3 Study Methods used

Qualitative participatory research methods have been used in generating the data being analysed and reported in this document. The table below lists the participatory tools used and the issues they explored.

Table 1: List of PRA techniques used in the PRSP monitoring

PRA technique	Group	Poverty Issues
Semi-Structured Interviews (SSIs)	Health personnel, Teachers, Traditional leaders, Heads of government departments, ward councilors	General poverty issues according to specific PRSP sector
Social maps	Men, women and youth groups	Child headed households, female headed households, number of widows, households headed by the aged
 Ranking and scoring 	Men, women and youth groups	Crops grown, prevalent diseases
Gender Analysis matrix	Men, women and youth groups	Crops grown, access to land, control of productive natural resources, control of household incomes, access to credit facilities and agricultural extension services
 Seasonality analysis 	Men, women and youth groups	Diseases, food security
Wealth ranking	Men, women and youth groups	Perceptions of poverty and categorizing poverty levels in respective communities

PRA technique	Group	Poverty Issues
Trend analysis	Men, women and youth groups	Income levels, crop yields, rainfall, agricultural input provision, food security
• Flow charts	Men and women	Poor farming, water and sanitation
Sequence ranking	Men and women	Disease treatment

1.3 Research Sites

Prior to giving a brief profile of the three study sites a brief description of Mwinilunga district is first given.

Mwinilunga district lies in the extreme north west of North Western Province. It covers an area of 20 910 square kilometres. The district shares boundaries with Solwezi in the east, Mufumbwe and Kabompo to the South. The district has two international borders, Angola to the north and Congo DR to the north-east. It lies between longitudes 24 degrees east and 25 degrees east and latitudes 10 degrees and 13 degrees. The distance between Lusaka the capital of Zambia and Mwinilunga is about 872 km and about 290 km from Solwezi the provincial headquarters of North Western Province.

Topography

Kaleni Hills which rises to a peak of about 1524m above sea level is the highest point in the district. The altitude faces to a level of 458 meters above sea level in the southern parts. There is a watershed to the north separating the Zambezi and the Congo river. There are various escarpments where the watersheds between the streams fall away into deep valleys. The watershed is flat with wide expanses of plains. West Lunga and Kabompo rivers have steep escarpment and deep valleys in the southern part, with characteristic river gorge vegetation and have minor rapids that make them unsuitable for navigation.

The Soils

The District Agriculture Officer described the soils in the district as being of two distinct groups; those derived from the Kalahari sands and those derived from ancient soil geology. Most of the Kalahari soils are found in the valleys. The area in the northern part of Mwinilunga has a lower PH which makes the soil acidic, primarily because it receives more rain than the rest of Mwinilunga. Whereas the southern part has a normal PH, and makes it more suitable for crops like maize. Mwinilunga soils range from sand to pour clay. The district has all the soil types these are Pure sand, Laamy sand, Sand loam, Heavy sand day loam, Silt, Silt day ,and Clay. Areas laying in the northern part of the district are sandy ,these are Ikelenge, Jimbe, Nyakasaseya , Mwininyilamba, Kanyama and part of Kanongesha. The northern part of the district is highly acidic with 3.5-5.0 ph levels . This is due to high rainfall and excessive leaching. The southern part of the district which is in the maize belt , Soils are heavy sandy loam, sand day loam and clay. These soils are found in Siachunga, Chibwika, part of Kanongesha , Ntambu and Nyileba.Others are Chiwaona and Kansense.

The Climate

The district has a relatively moderate climate that is determined by the humid Congo air that brings rain from October to April.

Rainfall Patterns

Mwinilunga experiences rainfall from October through April , although the number of rainfall days are more between November and March . The average annual rainfall in Mwinilunga District is 1386m. On the average they are 119 rain days which is usually from October to April, this makes Mwinilunga one of the wettest districts in Zambia. Such amounts of rain has negative and positive implications on the district. The abundance of water means enough resources for streams and rivers but it has effects on the texture of the soil. The rains begin in September and reach intensity between December and March.

Information for the period 2002/2003 rain patterns could not be obtained as the Data is not yet ready.

The Temperature

The mean monthly temperature varies from 15.7 to 27.2 degrees Celsius . The annual mean maximum temperature is 27.2 degrees Celsius while the annual mean minimum temperature is 12.8 degrees Celsius

Humidity

The mean annual relative humidity is 68 per cent. It varies from a monthly minimum of 46 per cent in September to a monthly maximum of 84 per cent in December and January.

Demography

The Mwinilunga district office of the Central Statistics Office (CSO) estimated the population of the district to be 124,485. The males comprise 59,753 (48%) of the population and females comprise the remaining 52 per cent (64732). The population is concentrated between the age of 15 years and 49 years which constitute 43 per cent of the population. The district has a population density of 6 people per square kilometre. The current growth rate is 3 per cent per yea.

The main population centres are the district centres, around the chiefs capitals, along the main roads and areas with the potential for production. Specific areas of high population are those along the Solwezi road, Mwinilunga -Jimbe road and Mwinilunga Kabompo. About 10 per cent (12000) of the population live in Mwinilunga town, i.e., the district headquarters.

Ethnic composition

The main ethnic group found in Mwinilunga are the Lunda. Other tribes such Luvale and Kaonde are also found mainly in Mwinilunga town.. One of the defining cultural features of the Lunda people is Mukanda ceremony which is a boys' initiation ceremony.

Site selection

Three sites were sampled in Mwinilunga. These were the same sites as those of the October 2002 Baseline Study. They were: Kabanda, Kanongesha and Kakoma.

Kabanda is a pre-urban area situated within the boma of Mwinlunga whilst Kangesha and Kakoma are rural parts of the district. Kanongesha is 52 kilometres (kms) away from Mwinilunga boma while the distance between Kakoma and Mwinilunga Boma is 150 kms. Kanongesha

shares international boundaries with Angola whilst Kakoma is bordering the Democratic Republic of Congo.

Kanongisha was chosen due to:

- a) Proximity to the Boma
- b) Residence of senior chief of the Lunda people
- c) Precived Catholic mission influence

Kakoma was chosen due to:

- a) stance from the Boma 154 KM
- b) shares boundaries with Congo DR
- c) experiences high rainfall

Kabanda was selected based on the following criteria:

- a) location in the Boma
- b) lacks social services
- c) mode of livelihood beyond subsistence farming

The sectors that were monitored were agriculture, health, education.

2. FINDINGS

2.1 Sources of Livelihoods

According to the information gathered during the study, the inhabitants of Mwinilunga seem to have uniform sources of livelihood. The major source of livelihood for the people of Mwinilunga is subsistence farming. Crops grown are maize, cassava, beans, pineapple, millet and sweet potatoes. Others are groundnuts and rice grown, especially in Kakoma. What has just been said is also true of the Kabanda township community whose residents largely depend on farming.

In addition to substance farming people living in Kabanda are also engaged in charcoal burning, an activity dominated by men, though selling of charcoal is by both gender. The returns to this activity are very low. Others earn their livelihood through low paying part-time jobs, small scale trading at local markets and brewing beer. Kabanda has high levels of youths dependant on parents and relatives for their livielihood.

Crops grown are Maize, Rice, Finger-millet, sorghum, sun flower, beans, groundnuts, cassava, pineapples and sweet potatoes.

Cassava is allocated more land than others . This is because it is the main staple food for the rural community. This was confirmed by farmers talked to in Kanongesha and Kakoma, who stated that they eat mainly Cassava.

A Senior Agriculture Officer (SAO) stated that there was no gender difference between women and men. The only difference was that men till separate fields from those of their spouses According to information obtained through Focus Group Discussions (FGD,s) it is preferable

for men and women having separate fields as a safeguard in case one field belonging either husband or wife fails they are able to subsist from the field not affected.

Crop diversification programme in the district is in the form of seed multiplication and distribution. This program is sponsored by the government and Program Against Malnutrition (PAM). The support involves promoting seed growing locally. Crops promoted include beans, i.e., *chambeshi* variety; Groundnuts and cassava i.e., Bangweulu, Nalumino, and Mweru varieties. The program is relatively new and has not reached some areas. For example farmers in the sites visited Kanongesha, Lwau and Kakoma in the northern part of Mwinilunga have never heard of the program. This could be due to the inadequate supply of Agriculture Extension Officers.

The crops grown vary according to the rainfall and soil. Cassava is grown in all areas. Maize growing depends on the availability of fertilizers and lime, especially in the area lying in the northern side of Mwinilunga e.g Kakoma area.

Fishing

The area is very suitable for fish farming because of its several rivers, streams and abundance of ground water. However, the rivers do not offer a wide variety of fish species. In order to compliment the fish stocks in rivers, the community has engaged in fish farming with the help of government and other agencies.

The District has had a long history of culturing fish in fish ponds. When a large number of refugees first settled in the district, the government and other stakeholders saw the need to support them by teaching them the art of fish-culture. The impact of this was the spill-over to the rest of the indigenous community which has adopted it as a source of livelihood.

According to the Provincial fisheries office the district has 1,420 fish farmers owning 2,536 fish ponds. The larger portion of the ponds were constructed and stocked between 1992-1996 by AFRICARE and International Fund for Agriculture and Development (IFAD).

HIPIC funds have been used, more recently, to construct fish ponds in Kweseka, Mukoma, Kambombu, Kamakanga, Kamukembi, Kutenga, Kalezu, Kabanga, Chingazi and Kawiko. These funds have been managed through the Rural Investment Fund (RIF).

A great number of fishponds are, however, not functioning due to technical problems. The community attributed this to the lack of extension services.

We are willing to engage in fish farming, but the problem is that the other people catch fish in our ponds. We also have a problem of transport; we can't take fish for sell at the Boma. The Fisheries Extension Officer left the area several years ago fearing witchcraft said an interviewee at Kahan'u Village.

The clergy at a Lwawu Catholic Mission confirmed that in spite of all these problems the communities were eager to engage in fish farming if supported by government according to a SSI with a Catholic Clergy at Lwawu Mission. The dam at the mission which once was well stocked with fish, was not any more. The community had harvested the fish illegally!

We do not blame the community entirely because the local streams and rivers did not contain sufficient fish to assist them. It was impossible to secure the dam against theft at night. The solution was to encourage more modern fish farming in the community advised a Catholic Brother.

Bee keeping

Mwinilunga has a good climate and vegetation for honey and wax production. The Forestry Department plays an advisory and supervisory role in the exploitation of the forests for Honey production. The Forestry Department in Mwinilunga estimates that the District has the potential of producing honey and wax amounting to 900,000 tones and 102 tones per year respectively. The district produces about 300,000 tones of honey and 85 tones of wax every year.

The communities were being helped to engage in bee keeping by Forestry Fruits and North Western Bee Products companies. These two companies buy honey and wax from the local people at an agreed price.

Crop growing is not doing fine we need to engage in other activities like bee keeping to raise money to pay for the Hospital and School fees. We don't grow enough maize to sell an informant at Jendo Kamboyi-ulazhi Village

A Daily Calendar with a group of women in Chinkonja Village revealed that bee keeping is the men's role. The main constraint in Bee Keeping according to an FGD with a group of men in Sakapoti village was insufficient market for the Honey produce and the bad road network to transport the Honey to the Boma.

Both the FGD and SSI with a group of men and a Forestry Officer revealed that the two companies did not have the capacity to buy all the honey and wax. The community and the Forestry Department acknowledged the need for a bigger market and good road network to attract buyers.

In order to enhance technical assistance to the community, the Government has launched the Forestry Resources Management Project which is being administered by Keepers (Zambia) Foundation. The aim of the project is to create linkages for the local community with Honey Markets. The project has been running since 2002 and shall end in the year 2008. The project shall also build the capacity of local bee keepers on the best practices of bee keeping in order to achieve quality honey and wax production.

The Mwinilunga Forestry Officer was optimistic that the project will eventually improve the livelihoods of the communities in the areas

Food Security

Discussions and exercises conducted with different groups indicated that cassava is the main crop grown for consumption followed by beans and maize. Other supplementary crops are sunflower, sweet potatoes and vegetables. Despite bad yields due to exhaustion of land most households still have enough reserves of cassava which is the staple food.

As for the seasonality of food security and it was generally agreed that most households have food throughout the year. The problem was however, experienced in the rain season. Cassava is said to be difficult to process during rain season because drying of cassava becomes difficult. This, therefore, creates temporary food shortages.

Apart from residents in the townships who depend on maize as the food staple, the rest of the population depend on cassava. Food insecurity is prevalent during floods as this damages the cassava crop fields. The insecurity has been exacerbated by pest attacks on the food staple.

Generally households depending on cassava have only problems of processing cassava during the rain season. Households depending on maize for consumption have shortages from December to March and have to depend buying maize or cassava to sustain themselves.

Other types of food stuff on which people depend are millet, rice, vegetables, meat, fish and mushrooms.

Credit Facilities

Most farmers in Mwinilunga do not access credit facilities either financially or in form of stock. The few that receive agriculture inputs on credit have difficulties in paying back due to bad yields attributed to mainly to poor soils especially in the Kakoma area. In addition, a group of farmers co-operative members revealed through an FGD that the communities needed lime to mix in the soils due the acidic levels of soils in the area for them to improve the yields of maize. The Program Against Malnutrition (PAM) did not deliver farm inputs on time . This has affected this years maize yields.

Availability of Markets

Inadequate market for agriculture produce has been cited as one of the major constraints in the agriculture sector. The problem is also caused by poor roads and poor public transport to and from the villages to the town of Mwinilunga. There are no organised markets for both wholesale and retail businesses. Farmers, therefore, depend on brief-case businessmen who determine the price of produce. Lack of organisation on the part of the farmers does not enable them to bargain for better prices. A number of farmers have realised the need of working together by forming co-operatives.

The absence of an agriculture commodity exchange whose function would be to assist farmers with information on produce price and availability of markets has resulted into failure by farmers to make rational decisions. Farmers in Kakoma which a boarder area between Zambia and Congo DR engage in cross-border barter trading. They mainly exchange farm produce with items such as soap and sugar from Congo DR.

Feeder Roads

Most of the feeder roads are in a very poor condition and require extensive rehabilitation. Those requiring urgent attention are Mukingi, Ntambu, Kakoma -Kanyama - Lumwana west. Farmers in the areas cited face severe transport problems as transporters do not reach the areas due to bad state of the road. A Road Contractor who was awarded the tender to rehabilitate the feeder roads has had his contract terminated because the poor quality of the road work construction.

Farmers Groups

The district has 51 registered co-operatives. Most of the inputs from the Food Reserve Agency (FRA) are channelled through these organisations. Farmers who are not members cannot access these inputs. A large number of the farmers are, however, not aware of these co-operatives and can not therefore access farm inputs. In Kakoma there are two registered co-operatives whilst in Kanongesha the farmers expressed total ignorance of the existence of the co-operatives.

Extension Services

The district has eight Agricultural Blocks; three of these have Block Supervisors. There are 31 agriculture camps and only 10 Camp Extension Officers (CEOs). All the 10 officers are males.

The only female is stationed in the Boma and is responsible for youths and women programs. The farmers attributed the lack of agriculture information to the unavailability of extension officers in their communities and expressed need for CEOs in the communities.

Livestock

Livestock kept by the farmers in the area include cattle, goats, sheep, rabbits, guinea fowls, ducks and chickens. Cattle account for the highest number of livestock followed by goats and then sheep. Rabbits are very few. The population of chickens is higher than that of ducks and guinea fowls put together. Sheep is mainly found in Kanongesha area

Livestock Diseases

Cattle are more prone to diseases than other animals like sheep and goat. Among the diseases prevalent in cattle are senkobo (skin diseases) and contagious bovine, preura-pneumonia (CBPPP). CBPP is a relatively new diseases in the district. According to the staff of the Animal Health and Production section of the Ministry of Agriculture and Cooperatives, the diseases come from Zambezi district through uncontrolled cattle movements. New Castle disease is common among chickens.

Control of the diseases is by vaccination and dipping. The district has three dip tanks built by government in Kanongesha, Kanyama and Ikelenge. The government has handed over the control of these dip tanks to farmers. The cost of veterinary service is bone by the farmers only, however, veterinary services are free during outbreak of diseases. The costs for veterinary services include K10,000 for transport, They is no fee if a farmer provides his or her own transport to her or his farm.

Commercial Farming

The district has one Commercial farmer. His farming enterprises include coffee production, dairy farming and game ranching. The farm offers employment to residents of the surrounding villages.. The residents of Mwinilunga looked forward to a time when the area shall have investors more especially in agriculture. The residents complained over the lack of employment. The need for investors was seen as the only solutions to the financial problems affecting the people.

Land Issues

Most of the agricultural land in Mwinilunga is under Traditional Authorities who through their representatives allocate land to community members. Both women and men are eligible to own land which is currently under customary law. There are no gender considerations when allocating land. Men and women, however, cultivate separate fields. This is seen as a safe guard in times of crop failure for when fields from are field are low there may be chances of getting better fields from another field. Despite couples having different fields control of food is by women. Men are perceived to be wasteful. Nevertheless, consultation between wife and husband on how to manage yields are regular.

Only land belong missionaries and land allocated by the council has Title deeds. Those who would want to obtain title deeds on traditional land are allowed to do so upon the approval of the traditional authorities However this has proven difficult due to the fact that most villagers do not have money to process title deeds. Most women usually get land close to their brothers and

sons because of difficulties in land clearing. Most of the land near the villages has lost its fertility. Farm land is, therefore, situated far away from the settlements.

Constraints

There are number of constraints which affect agriculture in the study sites. Below is a Ranking and Scoring Matrix conducted with a mixed group of men and women which indicate the constraints faced by the farmers in Kanongesha. The more the stones, here represented by stars, the participants put against a constraint the bigger the latter was and vice versa.

CONSTRAINTS	SCORES	RANKING
Lack of farm implements	****	3
Lack of markets	**** **	4
Lack of extension services	****	5
Lack of credit facilities	**** ****	1
Lack of inputs	**** ****	2

Inadequate credit facilities were identified as the biggest constraint to farming. It was followed by lack of inputs, then lack of farm implements, inadequate marks and lastly poor extension services. Another important constraint which were mentioned during the focus group discussions was lack of a storage shed. They stated that in view of lack of market there was need to have a market storage shed where they could store farm produce before being sold...

2.2 The Health Sector

The provision of health services in Mwinilunga district is very poor. Health services are provided by the Ministry of Health through the District Health Management Board (DHMT). The current records at DHMT revealed that the district has two hospitals, twenty four Rural Health Centres, five Sub-Health Centres, one hundred and twenty four Community Health Workers (CHWs) and several Traditional Birth Attendants (TBAs) located in all the villages of the district (DHMT could not provide the actual number of TBAs in the Area). In additional to the above institutions the district has a good number of traditional healers providing traditional medical services. The institutions cited comprise the health sector in Mwinilunga. There were, however, no Home Based Care groups.

Funding

The Mwinilunga District Health Management Team (DHMT) Office receives four types of funding, namely:

- Government grants,
- Donor funding
- HIPC funding
- User fees

The Rural Health Centres attends to patients with illnesses that are not serious and refer serious patients to the hospitals main hospital in Mwinilunga which is 152 KM away from the furthest Health Centre . The community heath workers are highly utilised in area by the communities . These CHWs are accessible by the communities as the reside within the community. The CHWs can only attend to minor diseases and refer cases which they are not competent to handle to Rural Health Centres. However owing to the long distance to the Health Centre , The CHWs

attend even to these serious patients despite not being competent to handle such cases. TBAs provide maternity and birth delivery services to the women in the communities. Both the CHWs and TBAs are trained community volunteers

Cost

The CHWs and TBAs do not charge anything for the services while patients have to pay medical fees amounting to K500.00 and K750.00 for admission at Lwawu Rural Health Centre which operates as a referral centre in the area. Medical services are free for children under the age of 5 and senior citizens above 65 years. Chronically ill patients are also exempted from paying medical fees

Diseases

The most common disease in the area is malaria. This is followed by sexually transmitted diseases (STD) which are very common among young people aged between 15 and 25 years. The other diseases are, diarrhoea, chest infections, swelling on the knees, coughing, knee infections, bilharzia and malnutrition.

HIV/AIDS

There are no screening facilities at Lwawu Health Centre for HIV/AIDS; hence there is no definite information regarding the magnitude of the problem. The clinical staff at the Health Centre, however, could not rule out the presence of HIV/AIDS because of the alarming increase in STDs cases in the area. The HIV/AIDS campaigners are reaching out to schools to create awareness on the scourge to pupils. In line with the Catholic policy on condoms, the distribution of condoms is not officially permitted at the health centre because the centre is owned by the Catholics. The staff seconded from the main hospital, however, distributes condoms contrary to the Catholic policy. Apart from the pupils, most of the people in the area are not conversant on the issues pertaining HIV/AIDS.

Availability of Drugs

Since the introduction of the medical kits system the Heath Centre and CHWs do not have a problem with the availability of drugs for minor illnesses. The health centre receives monthly allocations of drugs from DHMT. The health centre also distributes drugs to the community health workers and traditional birth attendants. Most of the people interviewed in the area stated that they do not have problems with drugs at the health centre.. The latter only has problems with availability of drugs with regards to serious illnesses that need to be attended at the hospital but due to lack of transport at the health centre to transfer serious patients to the main hospital the clinical staff is compelled to attend to such patients though without appropriate medical treatment. The same situation commonly applies with CHWs .

Staffing

Lwawu Mission Health Centre was initially managed by the Catholic nuns who were trained as nurses. Due to dispute between the local communities and the nuns the latter withdraw their services and temporally closed the centre until the DHMT took it over. At the moment the staff at the health centre is temporal. The centre is run by a male nurse who is assisted by an Environmental Health Technician. Both the male nurse and the technician are seconded from the main hospital. The Health Centre is supplemented by the services of the CHWs in the communities.

Barriers to Quality Health Services

The Kanongesha community has easy access to the Community Health Workers but the CHWs are not competent to attend to serious diseases. Patients have consequently to travel long distances to Lwawu Mission Health Centre. The health centre does not have sufficient medical equipment such as malaria slides and X-lays. Patients have to be refereed to the hospital for diagnosis of the diseases. In most cases most of the patients do not receive adequate medical attention. The people sited the following factors as barriers to quality heath service:

- a) Long distance to health facilities
- b) Lack of transport when refereed to the hospital
- c) High cost of medical services i.e., hospital

Constraints faced by Health Providers

Communication

Communication between the health centre and the main hospital in Mwinilunga Boma is very difficult. The health centre does not have communication facilities; it relies on radio message facility at the Catholic Mission in sending messages to the main hospital in Mwinlunga Boma.

Transport

The Health Centre has no vehicle to ferry patients that may need urgent attention at the hospital. Like on communication the Centre relies on the Catholic Mission in the provision of transport. There is no guaranty that the Catholic missionaries can provide transport all the time it is required. The two hospitals in Mwinilunga are refered to as 1st referral hospitals. Rural Health Centres refer serious patients to these hospitals. The community heath workers are highly utilised in Mwinilunga by the communities . These CHWs are accessible by the communities as the reside within the community. As already indicated the CHWs can only attend to minor diseases and refer serious patients to the rural health centres. However owing to the long distance to the RHC the CHWs attend to these serious patients despite not being competent to handle such cases. TBAs provide maternity and birth delivery services to the communities.

Cost

The cost of medical services varies in the district. The community Health Workers do not charge anything for the services while for the Hospitals and Rural Health Centre medical fees from K500.000 to K1500.00. TBAs provide free services to the Pregnant women in the Communities.

Staffing

Staffing at both hospitals and RHC,s is very poor. The entire district relies on two Doctors who are stationed at the main Hospital in the Boma. Most of the Rural Health Centres (RHC) are manned by under-qualified staff. Only two health centres are manned by Clinical Officers, the rest are manned by either Zambia Enrolled Nurses (ZEN) nurses or classified Daily Employees (CDE).

2.3. The Water and Sanitation Sector

2.3.1 Water

Sources of Water

Being in the equatorial region which is an extension of the rain forest off Congo, Mwinilunga is endowed with abundant water supplies. It receives high rainfall ranging from 120 to 1400mm a year. In addition the district has a good network of slow flowing perennial streams such as Kasampa, Chinkobolu, Kewumba, kaboli, Mantochi, Jobeka, Kachitochi, Kambulu, Kamwenji, Wandondo, Isongela and Lushiba. All these stream from Lwawu river and their sources are within Kanongesha. Many villages are located near streams. This enhances easy accessibility to water. Other villages are situated far away from the streams and draw water from their wells.

In most cases unprotected water from these wells found in the villages is used for domestic purposes. Drinking water is specially sourced from shallow wells dug along the banks off the streams. Despite the abundance of water in Kanongesha, accessibility to safe water still remains a nightmare. About 10 wells were sunk by Rural Water for Health Project three years ago to alleviate water problems the villagers were experiencing. However many more wells need to be constructed that are protected from foreign matters. The only set back is that these wells dry up between September and December every year. Waterborne diseases in the such of diarrhoea and Bilharzia are prevalent in the area because the inhabitants use streams for bathing, washing and soaking cassava which is the staple food in this region. The water fetched from these same streams is used for both drinking and cooking. The inhabitants access water from rivers and streams. Usually the streams are seasonal hence unreliable shallow scoop wells dug near the rivers or streams are also a source of water. They are locally called "ishima" and water drawn from these water points is taken to be safe and clean by the indigenous people in the area. The water is normally used for domestic purposes such as drinking, cooking, washing, bathing and watering their gardens along the river banks. Streams and rivers are commonly used as a source of water. This is a factor which causes waterborne diseases

2.3.2 Sanitation

A good number of villages have toilets and bathing shelters; the condition of these facilities, however, may not always be good. The toilets and bathing shelters are commonly thatched without roof tops on the toilets. Villages without toilets take to the bush to help themselves. The rains also sweep these human wastes into the streams thereby contaminating water. It is, therefore, obvious that polluted water in the streams could be a source of waterborne diseases. The three day survey are conducted in Lwawu, Kayeyi and villages around senior Chief Kanongesha revealed that very few refuse pits and dish racks were constructed. The situation is different in Kakoma where it was revealed during the focus group discussions with 15 women that toilet facilities are not common and that most of the people use the forest and bush for human waste disposal. They added that there were no refuse pits into which to throw garbage. The toilets and the rare bathing structures collapse during the rainy season forcing the population to use kitchens for bathing.

Environmental Health Education

Other than Lwawu and Kanongesha Health Centres, there are no other organisations that are dealing in health, water and sanitation matters. People in these areas desperately need health education so that they get released from diseases that are affecting them as a result of not observing hygiene. With the presence of the Environment Health Technicians, who has just

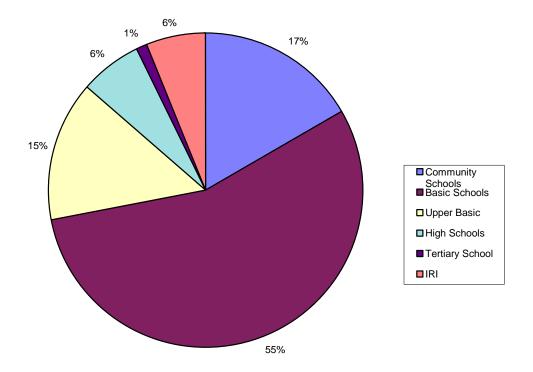
been posted to Lwawu Health Centre aggressive health education campaigns have to been mounted covering all the areas. Senior Chief Kanongesha is keen and ready to work with health institutions in his chiefdom in promoting hygiene.

2.4 The Education Sector

The provision of education services is very poor in Mwinilunga. These services are provided by the Ministries of Education, that of Technical Education and Vocational Training (TEVET), and the Ministry Community Development and Social Services as well as private entities.

The current records at the District Education Office revealed that the district has 69 middle and upper basic schools providing primary education, six high schools providing secondary education, 16 community schools, one nursery school, one tertiary institution and one international school.

The chart below indicates the categories and the percentage of the facilities in the education sector.



The community schools have been established mainly because of the inadequate number of public schools in the area and the long distance it takes for pupils to go to school.

In an effort to enhance the quality of education being delivered to the pupils and improve pupil enrolment levels the District Education Office has implemented various education intervention programs such as:

- a) Interactive Radio Instructions (IRI) programs.
- b) New Break Through To Literacy (NBTL)

- c) Program for the advancement of girl child (PAGE)
- d) Inclusive Schooling Program (INSPRO)

Enrolment levels and Gender

The school enrolment levels are generally very high in grade one eight and ten. The average enrolment rate for grade one and eight classes is about sixty (60) pupils in a class, whilst that of grade ten is about forty five pupils in class The numbers of pupils in grade one is normally gender balanced. The enrolment levels by gender in grade eight and ten are, however, not balanced. On average the girl child comprises about 25 peer cent of pupils enrolled in grade eight and ten.. The progression rate for the girl-child is very low compared to that of the boychild. The female pupils tend to drop out of school as the grades at school progress. The examination classes which are Grades Seven, Nine and Twelve comprise approximately 80 per cent male pupils and 20 per cent female pupils. A focus group discussion (FGS) conducted with the youth at Kayeyi village sited early marriage as the main cause of high school dropout rates among the girls, and hence the lower numbers of pupils in examination classes. The head teacher at Mulumbi Basic school in the same area stated that the girl child drops out of school normally during Grade Five, Six and Seven mostly because during this period most of females would have reached the adolescent stage, and therefore being attractive for marriage. A ranking and scoring matrix conducted with the same youths attributed long distances to school as one of the major factors which encourage the girl-child to drop out of school.

Progression by Gender

The progression of pupils to high grades is generally very low among the pupils of both gender, however they are more girl-child pupils dropping out school in higher grades. The records reviewed at Mulimbi Basic School indicated that a Grade Five class that had 22 pupils comprising 13 boys and 9 girls in the year 2000 had 14 pupils in the year 2002 in grade seven comprising 11 boys and 3 girls. It was noted that at least 3-5 pupils dropped out of school per class every year at the school. It was further noted through record review that the girl child accounts for at least 75 per cent of the school drop out. The progression of the female pupils is very low in comparison to the boy child. A focus group discussion with pupils at Lwawu attributed the lower progression levels among the girls to early marriages and lack of role models.

With the exception for one school the staffing levels at the schools in Kanongesha are not gender balanced. The area has a high presence of male teachers compared to female teachers.

Infrastructure

Apart from the Secondary School, all the schools are in a deplorable state with regards their physical infrastructure. The classrooms neither have doors nor window pains. Sanitation is poor as they do not have proper toilets nor source of clean water. The schools lack accommodation for teachers. Except for the secondary school and Lwawu primary school other schools accommodate their teachers in grass thatched houses with pit latrines and without running water. A focus group discussion conducted with a group of teachers at Lwawu Day Secondary school revealed that the deplorable state of schools are demoralizing the teachers and consequently having a negative effect on the quality of education being provided to pupils. The respondents further revealed that their school lacked a staff room in which to prepare for lessons. All the teachers' houses in the area are not electrified though in the case of Lwawu Day Secondary School and Lwawu basic school the school premises are electrified leaving while the teachers' houses have been left out. The schools have very few desks for the pupils .

Teaching Materials

The schools in the area experience shortages of teaching materials. This problem was not as big in the primary schools as it was as at the secondary school level. The head teacher at Mulumbi Basic School stated that his school had received a lot of reading materials from the District Education Office but still had inadequate teachers' hand books and teaching aids. The teachers at Lwawu day secondary school stated that they had problems teaching because of lack of teaching materials and teaching aids. The science laboratory at the secondary school are not functional due to lack of laboratory apparatus.

Cost of Education

In line with government policy of free education all the primary schools do not charge any school fees to primary school pupils. The latter are, however, required to pay fees at secondary school levels. Lwawu Day Secondary School the only secondary school in the area charges a total of fifteen thousand Kwacha per term for school fees and Parents Teachers Association (PTA) fees. Most of the pupils cannot afford to pay this amount in cash. Hence the school has encouraged the parents who cannot afford to pay cash to pay in kind, especially in the form of stocks such as maize, cassava or any other farm produce that can easily be converted to cash by the school authorities. The brother in charge of the Catholic mission where the secondary school is situated provides some form of part time employment for pupils during weekends and holidays. The pupils engaged to work for the brother are not paid cash but instead the brother pays the school directly as school fees for the pupils.

According to both the pupils and the teachers at the school they are very few incidents of pupils dropping out school as the result of failure to pay school fees. However, most of the pupils have difficulties in paying for their examination fees at grade nine and grade twelve. This prevents some pupils from writing examinations despite having reached grade nine or twelve.

Pupils at primary schools in the area are not obliged to wear school uniforms. Hence, pupils who cant afford to buy uniforms can still attend school. The secondary school requires all its pupils to wear uniforms. It is, however, very tolerant of pupils who cannot afford to buy uniforms especially for the first term of the academic year and specifically for new entrants into the school.

HIV/AIDS

All the schools have incorporated HIV/AIDS education in their curricula. As a result of this most of the pupils are aware of the epidemic though the area has high levels sexually transmitted disease (STD). The secondary school which is situated in the Catholic mission is highly affected by this scourge. The distribution of condoms is not permissible at the local clinic which is situated in the same Catholic Mission premises as the secondary school. During the focus group discussion conducted with the students at the secondary school the students acknowledged receiving enough information on HIV/AIDS. They also pointed out that the use of condoms among the sexually active pupils was minimal.

School Committees

The communities in Chiefs Kanongesha and Kakoma's areas are highly involved in the school activities through the Parents Teachers Association (PTA) and school projects committees. The PTAs play an advisory role in the running of the schools whilst the School Projects Committees are involved in the maintenance of the school infrastructure, building new classrooms and

teachers accommodation. The gender composition of these committees is 50/50. The PTA as the Secondary School is inactive . The teachers interviewed on the PTA committee expressed ignorance on the latter's activities.

Factors limiting access to Education

The Matrix reproduced below was done by a group of pupils at Kakoma; it indicates the difficulties faced by the pupils in accessing quality education. The higher the score the bigger the constraint.

ISSUES	SCORES	MARKS	RANKING
Poor infrastructure	**** *'	6	2
Shortage of teachers	****	5	3
Poor Sanitation/No toilets and Drinking water	***	3	5
Pressure for marriage	****	5	3
House hold chores	****	4	4
Pregnancies		0	6
Long distance	*****	7	1
Lack of Secondary school in the area	****	5	3
Initiation ceremony	****	4	4
Physical work at	***	3	5

Source: Drawn by a group of pupils at Kakoma.

2.5 The Mining Sector

Mining activities in Mwinilunga district are confined mainly to exploration of minerals, especially gold and diamonds. The area has attracted mining investors both local and international. The District has no government department co-ordinating mining activities. The District Administrator's Office is currently responsible for the coordination these activities. A Semi - Structured interview with on of the explorers revealed that the area has some presence precious mineral deposits and explores have already discovered some minute deposits of gold and diamonds.

2.6 The Tourism Sector

Mwinilunga district has one major traditional ceremony that attracts tourists especially local tourists from within Zambia. The ceremony is referred to as the *Chisemva cha Lunda*. The Monitoring Team learnt that male adults make a lot of money during this ceremony. They go out into the bush and hills to hunt game for sale during the ceremony. Some wild game comes from across Angola and sold to visitors who attend this ceremony. The women said that they normally make very little money for their capacity to raise income is limited.

The preservation of the Lunda culture was said to be the most outstanding purpose and advantages of the Chisemwe Cha Lunda traditional ceremony. The ceremony serves the purpose of enabling people to learn more about their culture and helps the people to pass cultural traditions and values from one generation to another. The ceremony was said to provide an opportunity for the local people market their local produce. The people in the area pointed out that there were no disadvantages of the Chisemwa Cha Lunda Ceremony.

They are other potential tourist attractions in Mwinilunga such as

a) the source of the Zambezi River

- b) the Zambezi Rapids and
- c) Kabompo Gorge on the Kabompo River and
- d) the Chisemwa Chalunda Tradional Ceremony.

Lack of publicity has been the major constraint in the Tourism sector.

2.7 The Energy Sector

Wood and hydro-electricity are the main two sources of energy used in. The most widely used source of energy. It is used for cooking and lighting purposes. The wood is collected from the forest There was an awareness that long term effects of forest depletion were negative. These effects include increased incidents of wind, increased soil erosion and reduction in mushrooms.

It was also noted that there was not much commercial exploitation of trees for charcoal production. The respondents indicated that firewood collection is done by all irrespective of gender. However, female, argued that they collect wood more frequently than their male counterparts. The use of thermo electricity is localised at the Boma. only.

3. SUMMARY AND RECOMMENDATIONS

Mwinilunga district was one of the five that were selected for the first phase of the PRSP monitoring which took place in May 2003. The research exercise was a follow-up to the 0ctober 2002 Baseline Study which generated benchmark data on which to base subsequent monitoring exercises.

Except for the HIPC funds which were reported to have been used in the promotion of the fishing industry through fish pond farming not much else had taken place in the agricultural sector since October 2002. Cassava was still the main crop. Maize, rice, sorghum finger millet, pineapples and sweet potatoes were also grown. Major constraints being faced in the agricultural sector were inadequate farm implements, limited access to farm credit, markets, extension services and poor condition of the roads. In addition there is hardly any commercial farmer from whom the indigeneous subsistence farming community can learn from.

It is here recommended that the above mentioned constraints, particularly farm credit, markets, extension services be addressed. The credit could include a component which will enable farmers to access farm implements which were perceived to be their biggest constraint.

Malaria, diarrhoea, sexually transmitted diseases, chest pains, malnutrition, bilharzias and coughing were reported to be the main health problems in Mwinilunga district. The latter has two hospitals and a number of health centres. A number of trained community health workers, namely, TBAs, CHWs supplement qualified health personnel in the health centres.

One positive reality was that drugs were not problematic. The drug kit ensures adequate drug supplies in health centres. Distance to the health centres and consequent high costs of both the transport and the health centres were noted as barriers to quality health services in the two rural study sites. Another issue which has adverse effects on the health of the population is inadequate access to good quality and safe drinking water. Most of the water used is from rivers and streams.

There is, therefore, urgent need to address the water supply system in the district. PRSP interventions which were hardly heard of in the course of field work should be used in providing boreholes to the population.

The major findings on the education sector were:

- inadequate number of public schools in the district,
- high dropout rates of pupils, particularly female pupils in the high grades,
- poor and dilapidated school infrastructure,
- poor sanitation at school, i.e. very few or no toilets,
- Distance to school,
- Poor school infrastructure and shortage of qualified teachers

Factors responsible for the above should be addressed. Community sensitisation on early marriages and the value given to girl education which were said to be responsible for girl-pupil high dropout rate should be mounted. PRSP/HIPC interventions and funding should be seen and should be used to rehabilitated the dilapidated school infrastructure as well as build more schools, thereby reduce distances to school which were perceived to be the biggest constraint to quality education in the district.

Mwinilunga district has a number of tourist attractions which need development. They include the source of the mighty Zambezi river and the rapids on it, the Kabompo Gorge and the Chisemwa Chalunda Traditional Ceremony. These potential tourist attractions are hardly known by the rest of the country. An effort to publicise and develop them will go a long way in reducing poverty in the district since it will bring in employment and money..