



IMPACT OF HIV/AIDS ON NATURAL RESOURCE MANAGEMENT IN MALAWI

**DOCUMENT 55
APRIL 2003**



Community
Partnerships for
Sustainable
Resource
Management in
Malawi

The Impact of the HIV/AIDS Epidemic on the Ability of Malawian Communities to Manage their Natural Resources

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USAID Contract: 690-C-00-99-00116-00
Activity: 612-0248

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ACRONYMS

CBNRM	Community-Based Natural Resource Management
CBO	Community-Based Organisation
COMPASS	Community Partnerships for Sustainable Resource Management
DAI	Development Alternatives, Incorporated
HIV/AIDS	Human Immuno-Deficiency/Aquired Immune Deficiency Syndrome
GTZ	Dutsche Gesellschaft fur Technische Zusammenarbeit
IGA	Income-Generating Activity
MK	Malawi Kwacha
NGO	Non-Government Organisation
USAID	United States Agency for International Development
US\$	United States Dollar

Executive Summary

1. The impact of HIV/AIDS on community-level participants of COMPASS grants

a) Income-generating projects

Four out of six groups of community-level participants of COMPASS grants were moderately impacted by HIV/AIDS, in that some income generating projects involved married men or women who were caring for orphans or a sick relative, but excluded those who had little or no free time due to more severe impacts of the disease. Only the Ndirande and recently collapsed Songani briquette-making groups involved women who were severely impacted by HIV/AIDS.

b) Community-based natural resource management projects

All seven COMPASS CBNRM projects were in areas that contained large numbers of households that were severely and very severely impacted by HIV/AIDS. That is households that are headed by widows, grandmothers or children.

c) NGOs

All four NGOs surveyed were moderately to severely impacted by HIV/AIDS.

2. The impact of HIV/AIDS on the CBNRM project activities and outcomes

a) Income-generating projects

Four out of six income-generating projects that were visited were not significantly constrained by the impacts of HIV/AIDS, as they were being implemented by people only moderately affected by the disease. The Ndirande briquette makers were using the emotional strength that they had gained from their group activities to provide support to members who were suffering from the impacts of HIV/AIDS.

b) Community-based natural resource management projects

In five out of seven CBNRM projects, HIV/AIDS had not impacted on project activities or outcomes as households severely affected by this disease had been excluded. Only BERDO and Hope Humana had designed its activities to directly benefit vulnerable households.

3. The impact of the CBNRM activity on households' and communities' ability to respond to HIV/AIDS economically, socially, and nutritionally.

a) Income-generating projects

COMPASS-funded group IGAs were having little impact on the ability of participants to improve economically (raising an average income of US\$3.25 per person per month) compared with two individual income generating activities being carried out by women who were severely impacted by HIV/AIDS and were each able to earn more than US\$17.00 per month. Groups in which the majority of the participants are women have the potential of becoming support groups for members affected by the disease. None of the IGAs sampled were having any

effect on mitigating the impact of HIV/AIDS in the surrounding community in terms of economics, social support or improved nutrition.

b) Community-based natural resource management projects

In five out of seven CBNRM projects, households severely impacted by HIV/AIDS were effectively excluded from the benefits that accrue from activities that demand extra labour and regular attendance at meetings. Only the Hope Humana herb garden project and the BERDO afforestation, guinea fowl rearing, bee-keeping and clay stove production project were directly benefiting severely impacted, HIV/AIDS-affected households. In particular, BERDO was able to strengthen households' and communities' ability to respond to HIV/AIDS, through linking improvements in food security with CBNRM activities.

Introduction

In September 2002, the consultant was hired by the USAID-funded Community Partnerships for Sustainable Resource Management in Malawi (COMPASS) Activity to conduct an assessment of the impact of HIV/AIDS on community-based natural resource management grantees and their activities. The report below presents the findings of a survey of COMPASS grantees, focusing on three main topics:

1. The impact of HIV/AIDS on community-level participants of COMPASS grants
2. The impact of HIV/AIDS on the CBNRM project activities and outcomes
3. The impact of the CBNRM activity on households' and communities' ability to respond to HIV/AIDS economically, socially, and nutritionally.

In addition, the report will comment on the impact of HIV/AIDS on the COMPASS grantees' staff and ability to implement and monitor CBNRM programming at the community level.

Methodology

Use of questionnaires

COMPASS works with 38 grantees that are implementing a total of 50 small grant initiatives (10 grantees have received two grants and one has received three). Most of the grantees are

either local non-governmental organisations (NGOs) (11 of the 38) or community-based organisations (CBOs) (25 of the 38): COMPASS has also funded one Government Department and one private developer. COMPASS CBO grantees are either groups of less than 25 people who have come together in order to implement an income-generating activity (IGA) or community leaders who are implementing CBNRM amongst the community at large.

A series of formal questionnaires were developed for these different types of grantees. However, these questionnaires were found to be cumbersome in terms of dealing with the wide diversity of projects being supported by COMPASS and insensitive to the despair, fear and anger being felt by people seriously impacted by HIV/AIDS. Many of the respondents in the communities were sick and had not eaten for one or two days and this made the imposition of a formal, lengthy questionnaire inappropriate. Care also had to be taken not to raise people's hopes and give the impression that taking part in the survey would result in the provision of much needed aid. As a result the questionnaires were discarded in favour of "focus group" interviews and in-depth discussions with HIV/AIDS-affected individuals. Almost all the interviews were held in the local language, Chichewa and for the first five days of the survey translation services were very ably provided by Esther Chirombo of the Wildlife and Environmental Society of Malawi.

Data collection from Group Income-Generating Projects

In all cases, following a formal introduction by Mr Banda who was representing COMPASS, grantees were asked to explain their organisation's structure (in terms of their key decision-makers) state the main objectives of their project and describe (and sometimes enthusiastically demonstrate!) the activities in which the group is involved in order to achieve these objectives. Grantees were also asked about the impact of HIV/AIDS on their community and a question such as "How are you protecting yourself and your family from HIV/AIDS?" in order to gauge their understanding of the disease. In most cases the lead in question was "I have heard that there are many orphans in this area – are you looking after any orphans?" Invariably one or more of the group members was caring for orphaned children and those members who were willing, were asked to explain their situation.

Group members were asked specific questions regarding the financial outcomes of their IGAS (focusing on overhead costs and the income from the sale of their chosen product over the past month). These questions varied according to the type of IGA that was in place. Where possible, group members were asked to take us to households in their area where orphans were known to be living (which was a proxy for AIDS-affected households).

Data collection from Community-Based Natural Resource Management Projects

Following the introductions by Mr Banda, CBO grantees, who were also community leaders, were asked about their extension methods and the impact of their work on HIV/AIDS-affected households. Workers were then asked to take us to households in their project area where orphans were known to be living (again, a proxy for AIDS-affected households).

In the communities, the heads of orphan-encumbered households were asked informal questions concerning their family situation. They were also asked about their access to food and natural resources, particularly in terms of the objectives of the project that was being

implemented in their area. Where possible these same informal questions were asked in other HIV/AIDS-affected households chosen at random by local women that we met along the way.

Overall objectives of the COMPASS Small Grants Programme

These are as follows;

- To promote the sustainable use of natural resources
- To develop replicable models for promoting sustainable CBNRM initiatives
- To provide assistance to viable natural resource management proposals that are unlikely to be funded by other programmes

Projects selected for inclusion in the survey

Thirteen COMPASS grantees (representing 21 of the 50 grant projects) were selected from among districts with the highest prevalence of HIV/AIDS and the highest rates of environmental degradation (National AIDS Control Programme, 2001) and the links between this pandemic and CBNRM were investigated, see table one. As shown in parentheses, six groups have focussed on group income-generating activities (IGAs), and the other seven have focused on community-based natural resource management. The cases will be grouped by these categories in the discussion that follows.

**Table one:
COMPASS NRM projects visited between 30 October and 8 November 2002**

Date	Organisation visited	COMPASS project nos.
30.10.02	Matindi Youth Organisation, Blantyre North (Group IGA)	003 and 030
	Ndirande Women's Briquette making group, Blantyre (Group IGA)	001 and 031
01.11.02	Fruit processing enterprise at Magomero community (Group IGA)	040
	Chiwembe Dam Mushroom Producers, Blantyre (Group IGA)	027
02.11.02	Tsogolo la Ana Orphan care programme, Mwanzwa (CBNRM)	019, 036 and 049
04.11.02	Participatory Fish Farming Project, Kalino, Zomba (Group IGA)	023 and 050
	Lake Chilwa Boat Co-management, Zomba (CBNRM)	024
05.11.02	Eastern Boundary Fence at Nyafulu, Mangochi (CBNRM)	018 and 041
	Songani briquette making, Zomba (Group IGA)	020
06.11.02	Kam'mwamba juice extraction project, Mwanza (CBNRM)	-
	BERDO community based natural resource management (CBNRM)	005 and 028
07.11.02	Dedza community managing natural resources (CBNRM)	022 and 032

08.11.02	Hope Humana herb gardens, Mikolongwe, Chiradzulu (CBNRM)	016 and 048
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The Malawi 2002 Context: Poverty, Food Security, and HIV/AIDS

Before presenting the findings of this survey, some comments on the current Malawi context are needed. All of the activities examined took place in a larger context of significant and growing food insecurity, falling nutritional status, increasing poverty, and ever-increasing ill health due to HIV and AIDS.

The extent of poverty in Malawi

More than 65% of Malawi's population is considered to be "poor", that is they are unable to meet their basic needs. Ninety percent of the poorest people live in the rural areas, with almost 50% in the Southern Region, where average income in September 2000 was just MK15.33 (US\$21.00) per day (Poverty Monitoring System, 2000). Poverty is the driving force behind the HIV/AIDS pandemic: Poverty, boredom and lack of opportunity means that young people, in particular, have nothing to look forward to except sex, marriage and reproduction. While there is lack of hope of a better life, vulnerability to HIV is bound to be high.

The relationship between land holding size and food security

Over much of the Southern Region land holdings are less than 1 hectare (2.4acres), while the mean household size is between 4 and 5 people. Maize (both hybrid and traditional) is the basic food staple in Malawi and the average maize yield in the south is less than 500kg per ha (Benson et al, 2002). A family of two adults and two children requires 600kg of maize to subsist for one year, while a family of two adults and four children may need as much as 1,000 kg to guarantee survival during the same period¹. Apart from maize, the main food crops grown by Malawi's subsistence farmers are cassava, rice, sorghum, millet, sweet potato, pigeon pea, bean and groundnut. However, the limited size of land holdings and declining soil fertility in the Southern Region means that many households are unable to meet their basic food needs. Only 34% of all households have reported a daily calorie consumption at or above the level recommended (Poverty Monitoring System, 2000) and deficiency diseases such as pellagra, anaemia and night blindness are common (ref.?). Furthermore, land tillage in Malawi's smallholder sector is done almost entirely with simple hand hoes. Considering that some parcels of land are situated on steep slopes, remote from home, the amount of energy that is expended during land preparation on a daily basis is likely cause an increased deficit in terms of calorific intake, particularly in times of sickness and famine.

Small land holdings also mean that cash cropping is impossible for 90% of the population (Poverty Monitoring System, 2000). Therefore most people in this region have extreme difficulty in generating a cash income from agriculture. This situation often forces families turn to alternative methods of income generation, which may add to environmental degradation. Young people, in particular are known to relocate once the natural resources have been

¹ According to Iliffe (1990) the minimum annual maize requirement for a man is 250kg, for women and children over 10 years it is 200kg and for children under 10 years it is 150kg.

depleted to engage in occupations, which may make them more vulnerable to HIV/AIDS (Ngwira *et al*, 2001).

HIV/AIDS and food security in Malawi

More than one in seven of the 12 million people living in Malawi have HIV (UNAIDS/WHO, 2002). That is, more than one million adults are now HIV positive. Fifty-five percent of these unfortunate people are women. Meanwhile, a least 470,000 children under the age of 15 have already been orphaned by AIDS.

People living with HIV² as well as those with full-blown AIDS have increased nutritional requirements. This includes up to 50% more protein, 15% more energy-rich food and 100-fold increases in vitamins and minerals (Piwoz and Preble, 2000; Page, 2001). HIV/AIDS strains already meagre diets and pushes many into a vicious circle: failure to maintain nutritional status weakens immunity and increases susceptibility to opportunistic infections, which in turn undermine nutritional status. This means that people suffering from AIDS-related illness have reduced capacity to participate in productive activities (Ngwira *et al*, 2001). UNAIDS recently reported that one quarter of poor households have been switching their crop mixes, abandoning certain crops or leaving land fallow if household members are seriously ill³. This has been a powerful contributing factor to the famine that now threatens more than 3 million people in Malawi

² People are said to be living with HIV until the number of CD4 cells in their blood has dropped below 200/ml. Once these marker cells are depleted below this level, the onset of full-blown AIDS is said to have occurred (Chaitow, 1999).

³ See <http://news.bbc.co.uk/1/hi/health/2512315.stm>

Major Findings: Case Studies of the 13 Grantees

A. Group Income Generating Projects

This section provides the specific stories of six group income-generating efforts.

Project name: *Ndirande Women's Briquette-Making Group (001 & 031)*

Project Objective: To protect natural resources through briquette making and selling.

Project description: The project was set up in 1998 and initially involved 300 women. This number has now been reduced to 25. These women buy waste cardboard and sawdust from local companies at a cost of MK3,000 (US\$36.00⁴) per tonne. Basin-loads of cardboard are soaked in water, pounded for 10 minutes, mixed with sawdust and placed in moulds. The water is then squeezed out of the mixture by placing the moulds into a specially designed press, six at a time. The briquettes are then dried in the sun for 2 to 3 days. Other overhead costs include, water charges and the hiring of transport to carry the raw materials. Unfortunately, it is difficult to sell the briquettes as most people prefer to use natural wood for cooking. This means that the group have to spend a great deal of time doing public demonstrations to prove the effectiveness of the briquettes.

Organisational structure: The women elect a committee of eighteen. This includes a co-ordinator, chairperson, secretary, treasurer and 2 discipline officers.

Mrs Margaret Kazembe is a Committee member for the Ndirande Women's Briquette Making Group. She is also taking care of nine children, five orphaned grand-children, her daughter who is chronically sick and her husband who has recently suffered a stroke. Thanks to the government's free primary school policy all these children are going to school, but affording clothes and sufficient food are a problem. She said that she was finding it difficult to spare the time to contribute towards the briquette-making group, but was grateful for the visits of the group members to her house and the way they shared food and other material goods with her. Although Mrs Kazembe has a small garden, she does not have time to cultivate it.

Mrs Jean Kunchezela is the chairperson of Ndirande Women's Briquette Group. She has seven children and is currently taking care of six orphaned grand children whose ages range from 4 to 13 years. All the children are attending primary school, except the four year-old who is attending a nursery school that is run by the local Church. Mai Kunchezela told us that she has difficulty in coping when one or more of the children is sick. She cannot afford either sufficient clothes or food for the children and is worried that they do not have a balanced diet. She does not have a garden and thus has to buy everything. They eat *nsima* and pumpkin leaves most days and fish occasionally (less than once a week) but she does try to ensure that they eat seasonal fruit such as mangoes, guavas or oranges as often as possible. Mrs Kunchezela told us that she was very grateful for the financial and spiritual support that she receives from the other group members.

HIV/AIDS awareness: The women said that no-one had ever come to talk to them about HIV/AIDS and emphasised the need for more information. Their biggest fear was the danger of becoming infected through nursing HIV-positive relatives.

Impact of HIV/AIDS on project participants: Ten out of the thirteen women present were caring for orphans in addition to their own children, five of the women were widows and several of them were caring for sick relatives in their homes.

⁴ 83.50 Malawi Kwacha was equivalent to 1 US dollar in November, 2002.

Impact of HIV/AIDS on project activities: These women have many conflicting demands on their time, due to the added burden of orphan care and the nursing of sick relatives. Activities for this project are said to take up three days a week, Monday, Wednesday and Friday, while demand for the briquettes is said to be seasonal, with the greatest demand during the rainy season. However, it was clear from the discussion that these women have a strong sense of community and support each other when one or other of them have domestic problems that prevent them from taking part in project activities. The main enjoyment that these women get seems to be from the number of visitors that they receive and the opportunity to show off their product in and around the township. It is not surprising therefore that they are prepared to save some of their hard-earned cash to buy uniforms. Nevertheless, food and nutrition security was said to be a problem. The women told us that although they did not have time for gardening they would love to have fruit trees around their houses.

It should be added that the large drop-out rate from this project can be attributed to the reduced profit margins that resulted from the increasing costs of raw materials rather than the impact of HIV/AIDS.

Impact of the project activity on participants' ability to respond to HIV/AIDS: The women stressed the enjoyment that they get from group activities and the companionship and support that they receive when they have "problems at home" (as described by Mrs Kunchezela). It was noticeable how the mood of the group changed from one of fun and laughter to one of sadness and fear once the discussion began to focus on domestic issues.

Suggestions for the way forward: Considering that the group income was MK6,000⁵ (US\$71.86) (i.e. MK240 or US\$2.87 per woman) last month and part of this income is being used to pay off the cost of the press and saved for future purchase of uniforms, it is likely that this group is primarily a women's support group, rather than an income-generating activity. This valuable community spirit could be enhanced by providing appropriate training for these women in "positive living" and home-based care. This would enable them to be a focus of support for other women similarly affected by HIV/AIDS throughout Ndirande township.

Project name: *Chiwembe Dam Mushroom Producers (027)*

Project Objective: To generate income for members through mushroom production and sale.

Project description: This project involves a group of eight women and two men who grow oyster mushrooms in a purpose-built timber and plastic shed for sale to supermarkets and hotels. The spores are purchased from Chancellor College and the mushrooms take three months to mature. The money raised is shared equally amongst all group members. Last time they each received MK1,000 (US\$11.98) from

Lucy Chawinga is 27 years old and unmarried. She is the treasurer of the Chiwembe Dam Mushroom Producers project. Last year her elder sister died of AIDS, following the deaths of her husband and their young baby. Lucy gave up work to take care of her sister. She was responsible for feeding, bathing and changing her sister's soiled clothes without any outside help. Lucy is now taking care of her late sister's first-born who is now 10. When asked how this child had reacted to being orphaned at such a young age, she said "Oh she is happy enough – after all it is only the lucky few who have parents beyond the age of 10 years these days..." Lucy says that she will protect herself from AIDS by keeping the fate of her sister in mind and by abstaining from sex until she is married.

⁵ These women also benefit from utilising some of the briquettes in their own households (Andrew Watson, pers. Com.)

the mushroom sales. We were only able to interview the treasurer for this project, as all other members were said to be out "looking for markets".

Organisational structure: This group is composed of a chairperson, a secretary and a treasurer.

HIV/AIDS awareness: The treasurer was profoundly aware of the issues raised by HIV/AIDS as she nursed her sister who subsequently died of AIDS and is now responsible for the care of her orphaned niece (see box). It was not possible to judge the awareness of the rest of the group members.

Impact of HIV/AIDS on project participants: One of the group members is a widow and another is a TB patient. Members were said to be caring for orphans and sick relatives.

Impact of HIV/AIDS on project activities: Once the spores have been established in crushed sterilised maize straw and dried water-hyacinth, the main activity is providing water for the growing fungi (using briquettes from the Ndirande women's group as fuel). We were told that if a member of the group is sick, then they send another family member to carry out this work.

Impact of the project activity on participants ability to respond to HIV/AIDS. It is not known whether this project has been able to mitigate the impact of HIV/AIDS amongst the members of the group. At the time we visited their project, the shed was completely empty and the group members were said to be "out, looking for markets".

Suggestions for the way forward: Chancellor College has recently been given funds by COMPASS to improve the quality of its mushroom spore production. This means that the group should be able to increase production up to 3-4 harvests per year and thus provide useful on-going income for the group.

Project name: *Fruit Processing Enterprise at Magomera Community (040)*

Project Objective: To increase women's incomes through fruit processing.

Project description: This project began earlier this year and involves a group of 10 mainly young women who have come together to learn how to do fruit processing. So far they have had experience in making jams, solar drying fruits and extracting juice. At the moment they are selling their products locally but once they have obtained a certificate from the Malawi Bureau of Standards they are planning to sell the fruit juice to supermarkets in Blantyre. The total income last month for this group was MK2,500.00 (US\$29.94). This money is being used to pay rent for the kitchen and to buy equipment and uniforms

Organisational structure: The group consists of a six-member executive and four committee members, although day-to-day decision-making seemed to be the responsibility of government-sponsored community worker.

HIV/AIDS awareness: Groups of three unmarried and three older married women were interviewed separately in an adjoining room. Two of the unmarried women were orphans and both had already given birth to a first child. These young women agreed that AIDS is a killer disease and confirmed that there are already many orphans in their villages. They were aware

of the need to abstain, be faithful to one partner or to use a condom. Gertrude admitted that she had been foolish in having a child when she was so young, but said that she doesn't want him to be an orphan. She has already had an AIDS test and would expect any future partner to do the same. All of the young women seemed genuinely afraid of the future and one of them admitted that she was afraid to be tested because if she was found to be positive she would commit suicide.

The older married women discussed the impact of AIDS on the immune system and were also aware of the need for fidelity as well as the need for their sons and daughters to use condoms. They wanted information on the length of time it was safe nurse an AIDS patient and how they could protect themselves from infection. They all talked of the support they received from the group and the need for more information.

Impact of HIV/AIDS on project participants: Two of the married women are already caring for orphans and one of them is nursing her aunt, who has been sick for two years.

Impact of HIV/AIDS on project activities: No impacts were reported.

Impact of the project activity on participants' ability to respond to HIV/AIDS: Many of the women in this project have been affected by HIV/AIDS in terms of being widowed, orphaned or caring for sick relatives. These women are hoping that the future income that is earned from this project will help pay for the extra expenses that are required for this increased responsibility.

Suggestions for the way forward: The overheads for this project seem high in terms of the rent and equipment required for hygienic fruit processing. It may prove difficult to sustain the taste and price of fruit juices that are destined for the supermarket in Blantyre with a competitive edge over with other commercially-produced juices. Solar drying fruit may be a less risky venture as overhead costs are less and the potential market is much wider and could be accessible to poorer people for whom fruit would make a valuable addition to their diet. Furthermore, dried fruit, which has retained its full complement of vitamins and minerals, is needed by families throughout Malawi, particularly those affected by HIV/AIDS and in areas where there is an absence of vegetable gardens and orchards. The technology required for this process should be made more widely available to reduce wastage and enable communities to deal with the gluts of fruits, such as mangoes, that are occurring at certain times of the year.

Project name: *Matindi Youth Organisation Fruit Tree Production (003 & 030)*

Project Objectives:

- To promote civic education and human rights
- To encourage the community in the planting of fruit trees as an alternative way of procuring food security.
- To disseminate information on HIV/AIDS and gender among the youth.

Project description: Matindi Youth Organisation was formed in 1988. COMPASS is funding these young people to raise fruit tree seedlings for use in the community and for sale to other NGOs. They advertise in newspapers and on the radio, as well as through the local Presbyterian Church. Fruit tree sales raised MK85,000.00 (US\$1,017.96) last year. Most of the trees were bought by other NGOs, including some as far away as Mozambique. This

money is being used to pay overhead costs and tree nursery workers according to the number of hours they have worked.

Organisational structure: A committee of 25 young people (10 women and 15 men) coordinate 15 clubs, one in each of 13 villages and 2 schools. "Anyone can join so long as they support the spirit of youth". Committee members take on responsibilities for environment, food security and health and the Project Officer ensures that members carry out their share of the work in the tree nursery. The whole organisation is headed by a well-educated, charismatic and dynamic young man.

HIV/AIDS awareness: Some of the project staff have been trained as community reproductive health agents by a local family planning organisation known as Banja la Mtsogolo. The women that had been trained had learnt that HIV is a virus that causes AIDS by weakening the immune system. However, none of them knew the meaning of either a "virus" or "immune system". The Matindi Youth Organisation has just been awarded K1.4million by the Malawi government to mobilise local youth in the fight against HIV/AIDS.

Impact of HIV/AIDS on project participants: The youthful youth staff did not report any sickness, deaths, or orphans in their care. However, they were only able to take us to one family that was affected by HIV/AIDS and although this family was living next door to the project office, they have not yet been reached by the program (see box). Unfortunately, the elderly Mrs Nsibeko cannot join the Mtiindi Youth Organisation as she is unable to attend meetings and has no labour to offer.

Mary Nsibeko thinks she is about 87 years old. She and her two grandchildren live close by the offices of the Matindi Youth Organisation. Four of Mrs Nsibeko's children have already died. She has been looking after Gift who is now 10 and Catherine who is 12 since they were babies. Both children are said to be attending school, although they were not at school when we visited and seemed sad and listless. She says that her 0.5acre plot is too small to provide sufficient food for them and she is relying on the small pension that was left by her late son. The government is providing this family with a 50kg bag of flour every month for the next three months. Last week someone broke into her house and stole all their possessions, including the radio that had been left to Catherine by her father.

Impact of HIV/AIDS on project activities: None observed.

Impact of the project activity on participants' ability to respond to HIV/AIDS: It is only large organisations that can afford to buy to the fruit tree seedlings. Project participants are unable to meet the demand for fruit trees from within the surrounding community, including those affected by HIV/AIDS, as the selling price is too high.

Suggestions for the way forward: With the limited land holdings and the absence of water for vegetable production during the dry season over most parts of Malawi, there is a general lack of nutrition security in the country. Fast growing fruit trees such as papaya, banana, mulberry and guava could provide a range of vitamins and minerals that are deficient in the wider population and are urgently required in large quantities by the more one million people who are currently living with HIV (see section C). Strenuous efforts should be made to raise awareness of the value of fruit trees to all those who are who concerned with mitigating the impact of HIV/AIDS in Malawi. It should also be recognised that with a concerted effort from donors, seedlings such as those produced by Mitindi Youth could be distributed to every village in Malawi and with well planned community action, could be planted in every homestead in the

country. Matindi Youth are well placed to pilot this approach to improving nutrition security for households affected by HIV/AIDS, what is lacking is an integrated approach from donors.

Project name: *Participatory Fish Farming Group, Kalino (023 & 050)*

Project Objective: To harvest fresh fish for consumption and sale.

Project description: This activity was started in 2000 in order to encourage household level aquaculture in 10 villages around Kalino. The community were mobilised to dig three ponds and in February 2001, group members obtained 1,300 fingerlings of *Tilapia shiranus* from the National Aquaculture Centre of the Fisheries Department. These fingerlings were fed every day for 6 months and then sold to the local community at a cost of MK80 (US96c) per kg. Last time the fish were sold the group made a profit of MK9,000 (US\$107.78) which they shared equally amongst six people, giving an income of US\$17.96 per person. Following thefts of their equipment and to allow expansion of their agricultural programme, COMPASS recently provided a second grant to the group to allow them to construct a security fence at a cost of MK285,000 (US\$3,413.00).

Organisational structure: The group began with 45 people but now consists of four men and two women. The decline in numbers was due to the fact that the original project implementers from Blantyre dropped out when the grant conditions changed. It was also said to be associated with the need to provide labour on a regular basis. The fact that the level of financial return is constrained by the capacity of the fish ponds may also have been a factor. The small committee consists of a chairman, a secretary and a treasurer.

HIV/AIDS awareness: A European-based organisation called Inter Aide has given the group information on the cause of AIDS and how to avoid infection. They advised young people to have an AIDS test before agreeing to marry. One of the group members has already been counselled and tested.

Impact of HIV/AIDS on project participants: The group Chairman is looking after two of his grandchildren after his son-in-law died. He said that his daughter is too poor to take care of them. No other impacts were reported directly on the members of this group, however they were aware of the large numbers of orphans within their community.

Impact of HIV/AIDS on project activities: We were told that each of the six villages in the area has more than 100 orphans, and their families are unable to subsist on infertile land holdings of 2 acres or less. Many of the households in this area were further impoverished when the nearby Sable Estates expropriated their land. These families are now being forced to rent small arable plots from others. The chairman of the Kalino Fish Farming Group admitted that these poor families could not afford to buy their fish (see

Ines Taombe is 19. Three of her older sisters and their husbands have died leaving their mother to take care of five orphans, whose ages range from 4 to 10 years. Ines is illiterate and has already given birth to her first child, but the father has just divorced her. None of the orphans are attending school because "they don't have proper clothes to wear". The family have 2 acres of land and hope to plant maize, sorghum, cassava, sweet potato, beans and pigeon peas. In the meantime Ines' mother is labouring on the nearby Sable Estate in order to get cash to buy food. At the moment they are able to eat *nsima* and vegetables twice a day, but they say that they cannot afford to buy fish. Ines says that AIDS are small animals that enter your body to suck your blood until you die and is caused by having more than one sexual partner.

box). Indeed, the reported incidents of theft indicate there is a high demand for these fish.

The fish-ponds are situated in a dambo area and now that the group has a security fence they are planning to grow vegetables, which they will be able to sell, in addition to fish. These activities will increase the income of the group but run the risk of further alienating the impoverished community situated outside the fence.

Impact of the project activity on participants ability to respond to HIV/AIDS: It is clear that the regular input of labour required by the activities associated with this fish farming group would exclude people from households affected by HIV/AIDS.

Suggestions for the way forward: A huge investment has been made into this project while the benefits to the community as a whole appear to be low. Furthermore, it can no longer be regarded as a "participatory" project, since the main participation appears to have been restricted to the pond-digging phase and the fish-farming group now consists of just six people. The Chairman of the group admitted that poor people cannot afford to buy their fish, therefore ways should be found of making the fish produced by this group more accessible to the whole community. Possibly this could be done by stocking the ponds with smaller fish, such as *Usipa*.

Overall productivity of the ponds could be improved by introducing diversity into the system. This could be achieved by planting shade trees and rearing ducks to fertilise the water for increased growth of aquatic plants. These birds could also be used to raise direct income for the group, through the sale of eggs and meat.

Project name: *Songani Sawdust Briquette Making (037)*

Project Objective: To generate income for orphans' caregivers through production and sale of sawdust briquettes.

Project description: It was set up as an income-generating enterprise in 2000 for 25 women who were guardians of orphans. This project utilised sawdust from a local mill and waste paper that was also obtained locally to make fire briquettes, using techniques similar to those

Mrs Adam is 60 years old. She is caring for four grandchildren. Two of these children were orphaned when her daughter and son-in-law died and the other two when her son and daughter-in-law died. Her son had been working in Zimbabwe and returned home when he was sick. His sister nursed him for several months before he died of "body pains". The three youngest children go to school, while the 12 year old boy is learning carpentry as part of the orphan care project. Mrs Adam has sold all her livestock to pay for food and is now totally dependent on handouts from Bishop's project. She and her surviving daughters have hoed their 4 acre plot and are planning to plant maize, cassava, beans and groundnuts.

described for the Ndirande group. Funds were provided for training in business management and for the construction of a spacious working area and storage sheds. The women were able to produce 350 briquettes a day. However, despite the fact that all the inputs were free and that the finished briquettes were much cheaper than the equivalent amount of firewood, the women were unable to sell them, as the local people still prefer to use natural wood for cooking. As a result this project has now collapsed and the storage sheds are now being used to shelter food aid.

Organisational structure: The briquette-making project was supervised by Bishop Mpoyo a well-educated philanthropist who is advised by various expatriates from the US and Europe.

HIV/AIDS awareness: The project leader, Bishop Mpoyo was previously an HIV/AIDS counsellor in the local hospital and is now actively supporting AIDS orphans through the provision of food aid and skills training for young people. Bishop says that he talks about AIDS at youth meetings and advises people to be tested, but so far no one has heeded this advice.

To date, 410 orphans have been registered within this area. Bishop has obtained funds from private donors to purchase maize-meal and rice. Each orphan who he has registered receives 5kg of either of these commodities every month. New donors are currently being sought as the project's food supplies will only last until January 2003.

Mrs Mkwanda is 29 and has 4 children, ranging from 2 to 10 years. Three of them were orphaned after their father died almost three years ago. Mrs. Mkwanda's fourth child was born following a brief liaison with a man who came to "comfort" her. She said that she used to make scones to sell when her husband was alive but she can no longer afford the ingredients. She was involved in the briquette-making project and is disappointed that it has now stopped. Mrs Mkwanda has 2.5 acres of land, which she has managed to hoe by herself and is waiting for the rains so that she can sow maize, groundnuts, beans and pigeon peas. In the meantime she is depending on handouts of maize-meal or rice from the Orphan Care Project.

Impact of HIV/AIDS on project participants: The briquette-making project was composed entirely of widows and grandmothers who were caring for orphans, see boxes. Therefore, by design, all participants are heavily impacted by HIV/AIDS.

Impact of HIV/AIDS on project activities: The failure of the project appears less related to HIV/AIDS than to preferences of consumers. Even the women who were involved in the project are reluctant to use

these briquettes. Bishop reported that the women had worked very hard on the briquette-making project and are now "very much discouraged" by its failure. This is a tragedy, considering that these widows and grandmothers have insufficient land for self-sufficiency for themselves and their orphaned children.

Impact of the project activity on participants' ability to respond to HIV/AIDS: Without financial success, the project has not been able to help participants respond to HIV/AIDS. Furthermore the failure of this project has undermined the confidence of these women in their ability to achieve self-reliance and they have now become totally dependent on handouts, see boxes.

Suggestions for the way forward: Bishop is now looking for alternative employment for the orphans' guardians, who are now all utterly dependent on free food aid. This may prove to be extremely difficult as these women are poorly educated and already working hard taking care of orphans, cultivating crops and, in some cases also caring for sick relatives. Such women should not be expected to do additional work in income-generating projects, especially when there are so many unemployed young people in the area. It was suggested that these young people be mobilised and provided with meaningful work so that they can contribute to the development of their community. A possible way forward would be for Bishop to use his many connections with overseas clergy to come up with a product that can be made locally and exported to affluent western consumers.

B. Community Based Natural Resource Management Projects

Project name: *Tsogolo La Ana CBNRM (019, 036 & 049)*

Project Objective: To raise awareness of the interdependence of the community and natural resources.

Project description: The Tsogolo La Ana Orphan Care project takes in 44 villages, accommodating 1,200 households. It is staffed by volunteers, led by Mr Oscar Chilemba, who was previously employed as a field officer for the Evangelical Lutheran Church when this organisation was active in the area.

Changoima is part of extremely deprived district, with no regular contact with the wider world. Extreme poverty is causing people to depend entirely on diminishing natural resources in order to sustain their livelihoods. Average land holdings are less than one acre. Considering the average household size in this area is 5 - 6 people, it is impossible for these people to be self-sufficient in grain. Indeed it is said that it is entirely normal in this area for almost everyone to survive on just one meal of plain *nsima* each day. The only significant addition to this diet is mangoes, which are in abundance between September and January and tangerines, which are available from May to August.

The COMPASS project is promoting the establishment of a community wood-lot, together with wood conserving, clay stoves to reduce de-afforestation and guinea fowl rearing and bee-keeping for income generation. COMPASS funds are also being used to pay for treadle pumps for vegetable gardens and the excavation of fish ponds in the wet-land as a means of improving the nutritional status of the community.

Samwani Dafuleni is 16 years old. His father died in 1998 and his mother is said to be showing signs of HIV. His two elder brothers are helping their mother to farm less than one acre of land but are unable to grow sufficient food to last the whole year. Samwani says that he eats *nsima* every evening and fills up with mangoes during the rest of the day. This young man is illiterate as he has never been to school, however, he is learning carpentry thanks to the voluntary trainers in the project. Samwani told us that he hopes that he will be able to set up his own workshop one day to make furniture and coffins - if he can source the tools.

Organisational structure: This project is headed by a five member executive committee. This committee is assisted by six other volunteers with specific skills, such as mat-weaving, carpentry and knitting, that they are willing to share with some of the 4,016 orphans that have been identified within the community, see box. Each of the forty-four villages has its own village orphan committee and the whole area has been divided into four zones. Each zone has two zone secretaries who report to the executive committee.

HIV/AIDS awareness: The committee members told us that the District AIDS Co-ordinator had given them some general information on country-wide infection rates. They said that they could not get tested because they are too far from the hospital. The members said that the disease is spread through promiscuous sex and through the use of contaminated needles and blades. They also knew that HIV is a virus but were not sure about the nature of a virus. There was a lack of understanding on the risks of contracting HIV from normal contact with AIDS patients, how to reduce vulnerability to opportunistic infections and on the need for "positive living" for those living with HIV.

Project members complained that when people die of AIDS, the hospital authorities are deliberately concealing the cause of death from relatives. This means that widows and widowers from AIDS do not know their status and often re-marry thereby passing on the infection.

Impact of HIV/AIDS on project participants:

Despite its remoteness, HIV/AIDS has hit this area hard: there are now more than 4,000 children in the project area who have lost one or both parents to the epidemic. These orphans are being cared for mainly by relatives, including mothers (who may be HIV positive) grandmothers and older siblings. In one case a young woman with full-blown AIDS was being assisted by two young children, see box alongside. Several young people were showing symptoms of facial herpes, one of the first opportunistic infections to strike an HIV positive person. There is no clinic in the area and the nearest hospital is more than 20km away. The risk of opportunist infections, such as cholera, dysentery and typhoid is extremely high, due to poor sanitation and contaminated water. Most households take their drinking water directly from the river, 40% of households are said to be without toilets and a faint odour of human excrement pervaded the arable lands. Parasitic worms are also likely to be a problem as many households keep pigs which are known consume human waste. There is a poor understanding of the need for hygiene in this community and many of the children appeared to have skin infections including chronic ringworm.

Jesse Ndafera emerged slowly from her tumble-down shack, dressed in a dirty, torn frock, looking extremely thin, frail and depressed. She appeared to be suffering from full-blown AIDS. She told us that she is 28 years old and is taking care of her late sister's children who are aged 4 and 5 years. She is now too weak to do anything for herself and is relying on her disabled uncle who lives close by to provide food for all three of them, while the oldest child is responsible for fetching the water from the river. She told us that neither she nor the children had eaten anything for the past two days.

The Tsogolo La Ana Orphan Care project was set up to care for children that have been orphaned due to the HIV/AIDS pandemic. The COMPASS project has been implemented by leaders of the orphan care project in an effort to reduce environmental degradation in their area.

Impact of HIV/AIDS on project activities: It was difficult to determine the impact of HIV/AIDS on activities related to the COMPASS project as this project was being implemented separately from the orphan care project.

Impact of the project activity on participants ability to respond to HIV/AIDS: Several of the households that we were taken to were using the wood-conserving, clay stove. However, none of the three HIV/AIDS-affected households that we visited at random had either the improved clay stove or any guinea fowls. A community wood-lot is being established and COMPASS is currently paying for the excavation of a large fish-pond although it is unclear how this will benefit families affected by HIV/AIDS.

The orphan care project is struggling for support. The assistance that has been received so far has only been sufficient to help a small number of the orphans. This support has been in the form of blankets and second-hand clothes for 500 children obtained from Hope Humana and a single meal of fortified *likuni* porridge for 50 elderly people and 200 orphans, thanks to the Freedom Foundation. There is said to be a home-based care programme that is run by a group of volunteers who have neither funds nor gloves. Clearly much more needs to be done

to help these orphans as well as those who are HIV positive or dying of AIDS, as indicated by Jesse Ndafera's tragic circumstances.

Suggestions for the way forward: Currently, families heavily impacted by HIV/AIDS are excluded from the COMPASS project because of the additional labour required to participate. Modifications could be made to this project that would support the promotion of group activities to assist families within the community who are affected by HIV/AIDS. For example, community action to ensure that every household has a wood-conserving, clay stove, a wood-lot, guinea fowls and a nutrition orchard. However, it would be necessary to change the project objectives and use "the number of HIV/AIDS-affected households that benefited" as a key indicator during the evaluation process.

Food insecurity is the most serious problem in this area and it is difficult to expect households to participate in natural resource management while they are malnourished. There is need to find ways of integrating a programme to improve food security, through the provision of fruit trees and enhanced soil fertility, into the current COMPASS-funded CBNRM project. Vegetable gardening could also be encouraged in the dambo area. Wood-lots should be established around every homestead to improve the availability of the firewood at household level.

Project name: *Community Based Management of Natural Resources in Mwanza East*

Note: This project is funded by the German Agency for Technical Co-operation (GTZ), under the auspices of the Southern African Development Community (SADC) and the Forestry Sector Co-ordination Unit (FSTCU) and implemented by the Wildlife and Environmental Society of Malawi, which is partially funded by COMPASS in other areas.

Project Objective: To manage natural resources sustainably to ensure better living standards, and to build capacity to ensure sustainable, communally-based management of natural resources in Mwanza East.

Project description: According to the project leader, this part of Mwanza East is inhabited by approximately 9,000 people in 1,900 households distributed among 13 villages and poverty has been recognised as the main cause of deforestation and environmental degradation in this district. As a result, several income-generating activities have been set up to try to alleviate poverty in the area. These involve the establishment of guinea fowl rearing, bee-keeping and the harvesting of *malambe* (baobab fruit) and *bwemba* (tamarind fruit). Local people are able to market guinea fowl, honey, *malambe* and *bwemba* through the "Malambe Natural Resource Management and Development Centre" in Mwanza. The fruits are bought at MK6.50 (US\$0.08) per kg and processed into juice by a team of six specially-trained local staff. The bottled fruit juice is then sold to supermarkets and the five star, Mount Soche Hotel in Blantyre. The GTZ staff told us that all these enterprises are highly successful.

Organisational structure: This project is supported by GTZ-funded staff employing five local people to process the fruit juice. These people must be able to demonstrate that they do not have domestic responsibilities before they can be considered for employment.

HIV/AIDS awareness: Project staff have attended a workshop on HIV/AIDS and have access to free condoms. 5% of project funds are being used on "awareness-raising". One of the staff who attended the workshop said that she had been told to protect herself from AIDS by using a condom, however, she did not know how married women would be able to do this, especially if they wanted more children. She said that she would like to be tested but there was nowhere that could do this locally.

Impact of HIV/AIDS on project participants: The people interviewed suspected case of HIV in a staff member with a supervisory role in the project and the AIDS-related death of the husband of a village-based worker was reported. Two of the juice-makers said that they were supporting orphans due to the deaths of close relatives.

Louis Gobede is 19 years old and doing Form 4. He is the oldest of 6 orphans. Their father passed away when Louis was 8 and their mother died three years later. Since then their grandmother had been caring for them and been able to send Louis to secondary school by raising cash through selling goats.

Just last month their grandmother died, leaving the family without food. At the moment the children are still able to go to school and are labouring on other peoples land at weekends in order to buy food. Although the family has 11 acres of land, they have only been able to cultivate 2 acres. The rest has been grabbed and utilised by their neighbours, without payment. They have no seed to plant and no fruit trees. When asked about the guinea fowl, bee-keeping and fruit selling, Louis admitted that they had sold their guinea fowl to raise money for food. He said that they were not allowed to harvest *malambe* or *bwemba* as certain members of the community had laid claim to the trees and would chase them away. However, he said that he would like to learn about bee-keeping but did not know how to go about it. "What I would really like to do" he announced, "Is learn to drive"...

Impact of HIV/AIDS on project activities: So far the numbers of orphans and female-headed households have not been determined in this area and project leaders assume that all households can benefit equally from the income-generating activities.

Impact of the project activity on participants ability to respond to HIV/AIDS: All three of the HIV/AIDS-affected participating households had sold the guinea fowls that they had

Agnes Chipanga is 58 years old. She is taking care of four grandchildren following the deaths of two of her daughters. The ages of the children range from 18 months to 12 years. She says her biggest problem is lack of food. The three older children have go to school on empty stomachs. At the moment they are only able to eat one meal of maize meal porridge in the evening. They will be able to buy more food when Agnes feels strong enough to do more labouring work. So far she has only been able to cultivate one third of her 6 acre plot and has only enough seed for 1 acre (thanks to the "starter pack" that she has just received from the government). She said their last cow was eaten by a crocodile last year and now she has only 2 chickens. Agnes has already sold the guinea fowl provided by the project and does not have a bee-hive. When asked about *malambe* and *bwemba* harvesting she said she had tried but was threatened with a beating by the "owners" of the trees.

obtained from the project in order to raise cash for either food or school fees. Therefore, they had not been able to keep these birds long enough to breed offspring to be used for future income generation. None of the households interviewed had been included in the bee-keeping programme and all said that they had been denied access to the *malambe* and *bwembe* harvesting enterprise due to unequal power relations within the community. In fact people from the HIV/AIDS-affected households that were interviewed reported that the baobab

and tamarind trees are no longer regarded as a common resource but as personal possessions of the most powerful members of the community, see boxes.

Everyone that we spoke to (including the neighbours of the HIV/AIDS-affected households that were interviewed) expressed interest in growing fruit trees. It should be noted that *malambe*

Liness Rabson was born in 1959. She was widowed 2 years ago, shortly after the death of her last child. Her other seven children are still going to school – she sold the guinea fowls that she was given by the project to pay secondary school fees for the three older children. Liness has cultivated 2.5 of her 4 acres of land and plans to plant maize and groundnuts. She knows that it will not be enough to guarantee food security and she will have to do more labouring to earn cash. This won't be enough to pay secondary school fees so John, Jackson and Simon will soon have to drop out. They are able to eat one meal of *nsima* and beans each day. When asked about bee-keeping, Agnes said that she does not know anyone with a bee-hive, but she is afraid of bees, neither has she been able to harvest any of the *malambe* or *bwembe* fruits as the "owners" are too harsh.

are indigenous fruits that are extremely rich in vitamin C, calcium and iron⁶. - nutrients that are lacking from the average diet in this area, as it is too dry for vegetable gardening.

Suggestions for the way forward: There is an urgent need to determine the numbers of households affected by HIV/AIDS in this area and to empower community to ensure that the poor and dispossessed can participate actively and equally in all community-based NRM activities.

Project name: *Lake Chilwa Boat Co-Management (024)*

Project Objective: To protect the natural resources found in Lake Chilwa.

Project description: The local community creates rules concerning the banning of fishing during the breeding season (1st December to 31st March) in order to conserve fish stocks in the lake and surrounding pools. A committee elected by the community enforces these rules through the use of fines and the confiscation of fishing nets. The boat is used by members of the committee to guard the lake from illegal fishing. Fuel and maintenance for the boat is paid for out of membership fees and fines imposed on poachers that are raised from the fishermen. Fishermen are also able to hire the boat for transport purposes.

Organisational structure: The Mwaiwathu Fisheries Management Committee consists of 10 paid members, elected by representatives of the Beach Committees in Zomba District. The first Management Committee was set up by COMPASS more than three years ago. The committee members are keen to see a new committee elected but have said they have been told that they must wait until after the project finishes. The current committee is composed entirely of men because fishing is considered to be a male occupation, however, we were told that women are being encouraged to join in. Meetings are held twice a month and members are transported to the venue by boat.

HIV/AIDS awareness: Committee members knew that HIV is a virus that causes AIDS and that they could protect themselves by being faithful to one partner. They also expressed interest in getting more information on this subject.

Impact of HIV/AIDS on project participants: There was one widower on the committee and he died recently. So far the committee has not met to decide how to replace him.

⁶ See the Wildlife and Environmental Society of Malawi's leaflet on *Malambe fruit juice – a new drink from Malawi!*

It was noted that there was a small settlement of shacks at the landing site not far from the Management Committee Office. Further enquires indicated that these dwellings were home to women engaged in income-generating projects, which included selling sex to fishermen. Chief Kachoka said that he was aware of the fishermen's use of sex workers was a source of AIDS, but said that there was nothing he could do about it as the land that is occupied by the single women's shacks is on land which the responsibility of a different chief.

Impact of HIV/AIDS on project activities: Besides the committee member's death, there was said to be no direct impact of HIV/AIDS on the project's current activities. However, it

should be noted that HIV- positive fishermen are put at increased risk of the early onset of full-blown AIDS, due to the high incidence of schistosomiasis and malaria in the area. Committee members reported the deaths of several fishermen due to malaria and the breakdown of the health service that used to screen their urine for schistosoma. These men now have to wait

Edna Matchaya was born in 1940. She is taking care of six grandchildren whose ages range from 4 to 17. These children were orphaned following the death of their mother last June. Mrs Matchaya nursed her daughter at home, where she died of "coughing and headache". None of the children are going to school and Mrs Matchaya is eager to get the two oldest children married off as soon as possible. "I can't hoe enough land to feed them all", she explained. Yesterday they were able to eat *nsima*, fish and pigeon peas. She is not sure what they will eat today – she is trying to find some flour to buy.

Lucy Wyson is 40 years' old and divorced. She is caring for nine children, including six orphans – three from her late brother and three from her late sister. Back in her home village she had just 1.5 acres, which was insufficient to maintain food security for 10 people. She left the four oldest children to farm the land and came to Lake Chilwa with the other five in order to make money to buy food. She buys maize flour to fry donuts for sale and buys and sells fish. The profit from these activities generates about MK50 (US\$0.60) per day or MK1,500 (US\$17.96) per month. She showed us her tiny, one roomed shack that she shares with five of her children at a cost of MK150 (US\$1.80) per month. Her friend Annie Manyumba who is 45 is looking after five of her own children and two orphans. Annie also came to the Lake-side because of land pressure in her home area. She is raising cash from buying and selling tomatoes in the surrounding villages. Both women admitted that some of the women in the shacks resort to prostitution with the fishermen to buy food. However, Lucy and Annie claimed to be "abstaining" because of the fear of AIDS. These women said that they could improve their income if they could raise funds to buy equipment for drying fish.

until there is blood visible in their urine before walking to the nearest hospital for treatment. Furthermore, fishermen are highly vulnerable to HIV/AIDS because fishing is a nocturnal activity providing them with a regular cash income to allow indulgence in casual sex during the day. This activity contributes to the income of the unfortunate women who inhabit the shacks alongside the lake, see Lucy Wyman's and Annie Manyumba's stories in the box above. Therefore, it is expected that in the longer term there will be a reduction in fishing activities due to the sickness and deaths of the fishermen and this will impact directly on the project activities.

Impact of the project activity on participants' ability to respond to HIV/AIDS: Committee members reported that there were many orphans in the area and that they were facing severe food shortages. Orphan-encumbered households were invariably headed by women and as fishing is currently a male occupation, the boat co-management project was having little or no impact on the households affected by HIV/AIDS.

Suggestions for the way forward: Counselling services should be provided to the community's fishermen on the dangers of having unprotected casual sex with sex workers. Meanwhile, efforts should be made to find less hazardous income-generating activities for the reluctant female sex-workers. Impregnated mosquito nets should be made available through Population Services International to protect the local community from malaria. Annual mass

screening of urine samples should be re-introduced in order to provide early treatment of schistosomiasis. Project staff should be advised of the need to find ways of enabling female-headed households to benefit from the fishing industry. This could include the training of young women in artisanal fishing in anticipation of the decline in the number of able-bodied men who will be able to take part in this activity in future.

Project name: *Eastern Boundary fence at Nyafulu (018)*

Project Objective: To prevent elephants from eating our crops.

Project description: The inhabitants of Nyafulu came from Thyolo in 1981 because of land shortages in that area. They now number more than 400 households in two villages. These villages are situated alongside the Liwonde National Park, which contains many herbivorous wild animals and is one of Malawi's premier tourist attractions. The need for a game fence arose after the community experienced total crop losses for four consecutive years due to rampaging elephants. The elephants ate their maize, fruit from the trees and trampled their tobacco crops. The elephants have also killed more than twenty-five people over the past four years. This game fence is financed by COMPASS, Frankfurt Zoo, the German Embassy and the Malawi Environmental Trust.

Organisational structure: The community elects 10 committee members who are responsible for introducing measures to exclude elephants from their arable land.

HIV/AIDS awareness: The chairman knew that HIV is a virus and that AIDS occurs when there is a lack of immunity. He also admitted that he has been for an AIDS test. This indicated a high level of awareness, considering that the hospital is more than 10km away and there is no transport.

Impact of HIV/AIDS on project participants: No sickness or deaths amongst committee members were reported by the chairman.

Impact of HIV/AIDS on project activities: HIV/AIDS does not appear to be affecting the committee's work in any way.

General impact of the project: From our discussions with a group of women who gathered in the area it became clear that although the fence has significantly reduced the number of elephants that come onto their land, some of the elephants have learnt that they can by-pass the fence by going via a nearby river. Unfortunately, just one elephant can inflict huge losses on a smallholder farmer and the community complained that they never have any fruit or vegetables because these crops are always eaten by these animals. The farmers are planning to grow chilli pepper as a repellent, along the outside perimeter of the fence, however, it is difficult to imagine a fence that could keep out a herd of hungry elephants! Furthermore, production of tobacco, their only cash crop, is being constrained due to the lack of water for seedlings and the high cost of inputs together with the declining price paid for the crop. Farmers said that they can only manage to produce tobacco on 0.25 acres and this gives them an annual profit of just MK2,000 (US\$23.95). Raising livestock is also difficult in this area because of the high incidence of sleeping sickness.

Impact of the project activity on participants' ability to respond to HIV/AIDS: To the extent that the project protects smallholder farms, the project can have a significant impact on families supporting orphans, which are numerous in this area. However, if the fence proves ineffective, the impact will be inconsequential. We collected information from two AIDS-affected households, one headed by a widow and the other headed by an orphan. Both of these households were experiencing food shortages, see box alongside.

Edith Pendame is 52 and caring for five orphans. She as out labouring on a neighbour's land in an effort to raise money for food when we called. Her relative told us that three of the orphans came to stay with Mrs Pendame and her husband after their mother died of a "long illness". Then Mr Pendame also became ill. He was sick for two years with shingles and his wife cared for him until his death last year. Now Mrs Pendame is struggling by herself to find food for all the children.

Suggestions for the way forward: COMPASS staff seem confident that the fence will be effective in keeping the elephants out and pointed out that chilli pepper will also become a new cash crop for the local farmers. However, if it is found that farming continues to be affected by elephants, the community should try to view these animals not as pests, but as a valuable resource that attracts wealthy tourists into the area. They could then consider using other local natural resources, such as wood, straw and brightly coloured seeds, to make artefacts that could be bought by these tourists. Although this idea was enthusiastically received, the community would need a great deal of training in product design and determining market demand, as well as in traditional skills such as wood carving, basket weaving and pottery making before they could embark on this type of enterprise. However, with careful planning, the creation of a market for artefacts produced by people from AIDS-affected households who are supporting elephant conservation may also be of considerable interest to international tourists and other western consumers.

Project name: *Bwanje Environmental Rural Development Organisation (BERDO) CBNRM Programme (005 & 028)*

Project Objective: BERDO was registered as an NGO in 1998 and works with rural communities by facilitating community participation in natural resource management activities as well as agriculture, food security and community health. Donors include COMPASS and Oxfam.

Project description: COMPASS is supporting the provision of equipment, materials and training for activities including re-forestation, guinea fowl rearing, bee-keeping and wood-conserving, clay stove production in 30 out of 300 villages within the BERDO project area.

Food security did not seem to be an issue in this area and during the time of our visit, two of the HIV/AIDS-affected households reported selling food (cassava and mangoes) to raise income (see boxes). This was the only project area visited during this survey in which food aid was being linked to CBNRM activities: maize obtained from the World Food Programme was being distributed to the community in return for raising of hundreds of tree seedlings. These trees will be used to provide firewood, timber, fruit, soil-improving leaf-litter and nitrogen fixation. As a result almost every household has its own wood-lot and collection of fruit trees. It was also observed that there was a high take up of other recommended NRM practises, such as guinea fowl rearing and bee-keeping throughout the area. We were told that each household that receives a guinea fowl is obliged to give ten neighbours six eggs each. They

are then allowed to keep the rest. As a result of these and other innovative ways of motivating the community, participation in NRM activities is said to have increased from 650 to 2,500 farmers in the second phase of the COMPASS project, with each of the 30 villages having elected its own village natural resource management committee.

Organisational structure: The executive committee is composed of six paid members, including the leader of the “high powered” women, who have each had professional experience in agriculturally-based disciplines as government workers. The executive committee reports to a fully constituted board of trustees. The whole project has a membership of 4,000 smallholders (75-80% of them are women) who are organised into 246 groups, each paying a membership fee of MK200 (US\$2.40) per year. There are also 35 founding members (including the current committee members) who have each paid a registration fee of MK260 (US\$3.11) and annual fees of MK400 per year (US\$4.80). Each of the three focus activities, i.e. natural resource management; agriculture and food security; community health, have village based organising and monitoring committees. BERDO has trained a number of field assistants who go into the community to “supplement” the government extension service.

HIV/AIDS awareness: Project staff have recently been trained by Oxfam in aspects of HIV/AIDS, including: what is HIV; what is AIDS; how to avoid being infected; what to do if you are infected; and home-based care. So far 30 needy orphans have been identified as recipients of second-hand clothes. A maize mill has been installed close to the project offices and part of the income from this venture is being used to help orphans.

Gift and his sister were orphaned 10 years ago as a result of the deaths of both parents. At first they were looked after by their aunt, but then she died. His sister was then sent to live with another aunt, while Gift came to live with his grandmother. Gift is now 17 and his grandmother is able to pay for him to attend secondary school by selling surplus crops from her 10 acre plot. Gift and his grandmother recently received some second-hand clothes from BERDO.

Impact of HIV/AIDS on project participants: No sickness or deaths were reported from amongst the committee members, though several of them reported having orphans in their care. There were reported to be many orphans in the project area.

Mr Winiford Majawa is 35 and he and his wife are caring for three orphans, in addition to their own four children. He said that his two-acre plot is too small to grow sufficient maize for all the family so he makes money by doing casual labouring and raising tomatoes for sale. Last year his tomato crop sold for MK2,000 (US\$23.95). Mr Majawa's house is surrounded by fruit trees, including mango, masaw, papaya and banana, he also has a wood-lot, goats, rabbits, chickens and a large compost pile.

Impact of HIV/AIDS on project activities: No negative HIV/AIDS impact was reported on BERDO's ability to get people to get involved in the CBNRM. Widows that we spoke to seemed keen to attend meetings and take part in village NRM activities. No doubt, this is because project has been designed so that participation in these activities leads to direct benefits.

Impact of the project activity on participants' ability to respond to HIV/AIDS: All three HIV/AIDS-affected households had benefited from the CBNRM project in terms of wood-lots, seed, fruit-trees or guinea fowl, see boxes. The household headed by Elembia Billy's mother was benefiting from all four of these NRM-based interventions, see box below. The most significant impact of this project was the fact that project participants are able to achieve household food security by getting involved in CBNRM activities in return for food, seed and fruit trees. In addition, natural resources such as leaf litter from *Casuarina sp.*, domestic fowl and goat droppings, crop residues and kitchen waste are

being composted and used to improve soil fertility in the arable lands. This is leading to valuable improvements in crop yields.

Suggestions for the way forward: By addressing the problems of declining soil fertility and food insecurity, BERDO has demonstrated that communities can be motivated to get involved with CBNRM activities. This project should be used as a blueprint for all other promoters of CBNRM in Malawi.

Elembia Billy is 14 and doing standard 5. His father died six years ago and he and his four brothers and sisters are being brought up by their mother and grandmother. Both women are active in the BERDO project. They have planted a wood-lot and several fruit trees, including papaya, orange, banana and *masau*. Elembia's mother also keeps chickens, ducks and guinea fowl. She gets seed from the project in return for making compost out of kitchen waste, *Casuarina* leaves, chicken manure and ash. By putting two handfuls of compost into each planting hole she can raise her maize yield from 200 to 400 kg per acre. Mrs Billy is also planning to grow cassava, pigeon pea and groundnut in her 2.5 acre plot. Her grain store is low at the moment and they are only able to eat one meal of *nsima* each day and fill up with mangoes the rest of the time

Project name: *Dedza Environmental Advocacy (022 & 032)*

Project Objective: To raise awareness on environmental issues.

Project description: The National Initiative for Civic Education (NICE) is being funded by the European Union to promote human rights and democracy. NICE staff are also using advocacy methods, such as panel discussions, rallies, workshops and debates, to raise awareness on environmental issues and encourage the community to become involved in CBNRM and IGAs to reduce environmental degradation. Community leaders have been identified throughout the district and are responsible for mobilising the people in their village to plant tree nurseries, establish wood-lots, practise conservation ridging, make wood-conserving, clay stoves, keep bees and raise guinea fowls.

Coledeta Amos is 88 years old. She is caring for two grandchildren, aged 9 and 12 years. They are both attending primary school. Their mothers died of AIDS at her home four years ago. Mrs Amos knows that it was AIDS because the doctor said that her daughter had TB. She says her main problems are lack of food and clothing. She and the children only eat when the neighbours can give them food. Mrs Amos' house was completely empty save for a few burnt twigs. She didn't have a wood-conserving, clay stove or any guinea fowl. She was too old and infirm to attend meetings or hoe her two-acre garden and is relying on her last-born son to plant her food crops.

Organisational structure: The COMPASS project is concentrated in areas covered by three traditional authorities and has reached sixteen villages so far, through the use of volunteer village-based trainers. The communities are encouraged to form clubs in order to promote each of the NRM-based activities.

HIV/AIDS awareness: Project staff are aware that there are a high percentage of orphans and female-headed households in their area. The NICE is attempting to set up village resource centres containing information on HIV/AIDS but so far they do not have any appropriate literature. However, they have conducted a participatory workshop involving traditional leaders, traditional counsellors and health personnel to look at the problems associated with HIV/AIDS. They identified poverty, hunger and unemployment as the leading causes of vulnerability to the epidemic. They also identified a number of traditional practises which could potentially expose

young people to infection and it was decided that these practises should be discouraged as far as possible, see Appendix two.

Impact of HIV/AIDS on project participants:

Several key participants have been lost due to AIDS over the past few months. One of the club chairmen had died two months previously and several active women have become sick recently. It was reported that in one family four women have already passed away due to AIDS. One of the village-based voluntary trainers was heavily impacted by

Glerecia Nedi is 60 years old. She has been looking after her sick husband for the past two years. She can't hoe her land because her husband needs constant attention and neither of them have eaten anything for the past two days. Their son is too sick to help – he has "ulcers" and is being nursed by his wife. She says that the project can't help her either.

HIV/AIDS, see Gloria Malunga's box below.

Gloria Malunga is 20 years old and has been schooled to Form 4. Her mother passed away this year and her father died in 1999. She said her mother had TB. As the first-born child she is now responsible for eleven brothers and sisters – the youngest is 5 years. Every week she travels to Lilongwe to buy second-hand clothes which she sells locally. With this trade she is able to earn K2,000 (US\$23.95) per month. She says that this is not enough and would like to expand her business. Her and her brothers and sisters have managed to hoe their 2.5 acre plot. They have enough maize seed but will have to beg for seed for groundnut, beans and irish potato. In her spare time Gloria is a volunteer on the Environmental Advocacy Project.

From our discussions with HIV/AIDS-affected family members from six households, it was evident that many widows and grandmothers are finding it extremely difficult to join in the NRM activities, particularly if they are required to attend meetings and carry out daily watering chores. Ten out of twelve HIV/AIDS affected households that were visited were suffering severe food shortages, ranging from eating only one meal of *nsima* per day to being completely reliant on occasional hand-outs from neighbours, see boxes. It was of concern that grandmothers who are too frail to collect fire-wood had neither wood-conserving stoves nor wood-lots. Most of the widows that

were interviewed said that they could not hoe sufficient land, nor plant sufficient seed to guarantee food security for themselves and the orphans in their care, see boxes.

Project staff who accompanied us on our survey of HIV/AIDS-affected households were genuinely shocked at the extent of the poverty and starvation in their area.

Impact of HIV/AIDS on project activities:

The project has lost several key people over the past few months. A club chairman died in August and several active women have become sick recently. This is said to have seriously affected the NICE programme.

Alieta Daveson is 43 years old. She was widowed seven years ago. She said that her husband died of AIDS. He was sent home from the South African mines when he was sick and she nursed him for three months. Mrs Daveson was bitter about the lack of support from the local hospital. She said that they should tell people the truth – "we have a right to know, so that we can take care of ourselves". She said that she did not know anything about "positive living" and in any case she and her four children do not have enough food. Her eldest son is married and cannot help. "He doesn't even have enough for his own family – but at least I have one less mouth to feed". She and her children have hoed their 1.5 acre plot but have no seed. She has joined the project and attends meetings, but her despair was reflected in her once fine, painted brick house, which is now dilapidated and devoid of all possessions.

Impact of the project activity on participants' ability to respond to HIV/AIDS:

None of the HIV/AIDS-affected households that were sampled reported being involved in bee-keeping or guinea fowl raising. One widow said that she was using the wood-conserving, clay stove and that a bundle of wood is now lasting almost twice as long (6-7 days, instead of 4). All of the women that were interviewed said that would like to grow more fruit trees.

Suggestions for the way forward: Project leaders should become aware of the difficulties being faced by households affected by HIV/AIDS and adapt their programme to meet their needs. For example in cases where members cannot attend meetings, project requirements or methods may shift, or workers can go “house to house” to spread the message. Participation at meetings can also be encouraged through the provision of a nutritious meal for all participants and their children. The program can also identify those interventions that are most valuable to AIDS-affected households and motivate the community to ensure that these benefits are shared with the most vulnerable people. Local youth should be motivated to provide labour to make wood-conserving, clay stoves and plant wood lots for female-headed households. Lessons could be learned from the BERDO example on the need to provide positive incentives to motivate communities for NRM.

Forty-five year old Ester Masanga strained her already hoarse voice to get our attention. Her husband had also worked in the South African mines. First she received a message that he was sick and then she heard he had died. Now Ester has TB. She has been getting treatment from the hospital for the past eight months. She is still too weak to work and her children have had to drop out of secondary school. She said “When I was healthy I tried to be self-reliant but now I am too weak, my children do not have enough food, we are only eating porridge, please help me”.

Project name: Hope Humana People to People Communal Herb Gardens (016 & 048)

Project Objective:

- To sensitise communities on the availability of common herbal plants thereby gaining knowledge and applicability of their usefulness
- To be able to identify and promote the use of indigenous plants for the management of AIDS related conditions
- To complement the existing conventional treatment and, to assist communities and homes to develop their own herbal gardens

Project description: Hope Humana is helping to implement a national policy for mitigating the impacts of HIV/AIDS, as determined by the National AIDS Control Programme and other key players in the field⁷ by creating herb gardens for HIV/AIDS patients in the rural areas. COMPASS has contributed to this process by funding the raising of 3,400 herb and fruit tree seedlings, which have been used to create fourteen herb gardens in the Mikolongwe area of Chiradzulu District. Mikolongwe consists of approximately 2,500 households. The plots are cultivated by groups of women, in land made available by local chiefs and the herbs are sold to patients for a small sum or given free of charge those who are “poor”. The two gardens that we visited contained very small plants due to age of the garden and the pressure of regular cropping. The women reported that *Aloe vera* and neem, *Azadirachta indica* are the most popular remedies. They are both being used to treat abdominal pains and shingles, which are common ailments for HIV/AIDS patients.

Organisational structure: Each herb garden is administered by a local committee of mainly women and supervised by the local Hope Humana extension officer. Community empowerment is said to be lacking in this project.

⁷ See Home Based Care Herbal Treatment Guideline by the National AIDS control programme and sponsored by UNICEF.

HIV/AIDS awareness: Hope Humana is a leading NGO that is providing awareness raising, counselling, home-based care and orphan support to communities affected by HIV/AIDS in Malawi. It supports and an extension worker in Mikolongwe who is providing home-based care and emotional support to twenty-nine HIV/AIDS patients, the majority of whom have TB. As a result of this work there is a high level of AIDS awareness within this community.

Impact of HIV/AIDS on project participants: The majority of women in this project are widows and single mothers.

Impact of HIV/AIDS on project activities: The high incidence of HIV/AIDS in the area means that the demand for herbs could easily outstrip supply. It appeared that this problem is being overcome by keeping the gardens secret and allowing committee members, including the chiefs to choose who should benefit.

Impact of the project activity on participants' ability to respond to HIV/AIDS: We were able to visit three patients who were receiving treatment for TB from the local hospital. The first patient was living alongside one of the herb gardens. This woman complained of a sore throat and coughing. When asked whether she had used any of the herbs from the garden next door to relieve these symptoms she said that she did not know about them. The extension worker explained that they had to keep the gardens secret otherwise people would come and steal the herbs. The second TB patient had used herbs from the communal herb garden to soothe his cough, as recommended by the local chief who had visited him recently. The third patient was in an extremely weak condition, lying on the floor of her mother's hut. She said that she did not know about the herb gardens but would very much like to try the herbal remedies as she was too sick to walk to the nearest hospital.

The Hope Humana extension officer stated that his organisation hoped to provide herb gardens for every household within the next three years.

Suggestions for the way forward: According to COMPASS, Hope Humana field staff are under constant pressure from chiefs in neighbouring villages requesting the introduction of herb gardens into their areas. Funds should be provided to ensure that every household in Malawi has access to a herb garden. Herbs gardens could be included in CBNRM strategies for all HIV/AIDS-affected areas.

It should be noted that marijuana, *Cannabis sativa* is an extremely useful herbal remedy for HIV/AIDS patients as it can reduce nausea and vomiting, improve the appetite and increase the feeling of well-being (see Jackson, 2002). Unfortunately, the use of this drug for medicinal purposes is banned in most African countries.

C. Case Study implications on the ability of HIV/AIDS-affected communities to manage their natural resources

Comparative Impacts of HIV/AIDS

HIV/AIDS impacts households in terms of increasing poverty and labour constraints at different levels, i.e. moderately, severely or very severely, depending on the number of healthy adults and their financial circumstances. For example, households in which two or more adults are caring for either orphans or nursing a sick relative, are only moderately affected by the pandemic. Households consisting of one adult nursing a sick relative or caring for orphans, or households where the main bread-winner is suffering from AIDS-related infections are severely affected by HIV/AIDS. Very severely affected households are those in which an HIV positive wife is caring for orphans and/or nursing a sick relative (often her husband) and in extreme situations where children are nursing sick parents or relatives, or orphans who are left to fend for themselves, see table two. In the absence of a national welfare system or other social support networks, the situation of households that are moderately impacted by HIV/AIDS can quickly deteriorate into one that is severe or very severe.

Table two:
Impacts of HIV/AIDS on African households in terms of increasing poverty and labour constraints, in the absence of a national social welfare system

Moderate	Two adults caring for orphans
	Two adults nursing a sick relative
Severe	Widow caring for orphans
	One adult nursing a sick relative
	Grandmother caring for orphans
Very severe	Main bread-winner suffering from AIDS-Related infections
	HIV+ widow caring for orphans
	HIV+ wife nursing her sick husband/relative
	Children nursing a sick parent/relative
	Orphans fending for themselves

The Effects of Group IGAs on HIV/AIDS-affected households

Group IGAs have the potential for providing income and a support network for HIV/AIDS-affected participants. The activities are also supposed to deliver services, which are demanded from the community in an equitable and gender sensitive manner, according to the COMPASS evaluation form. This suggests that although people from HIV/AIDS-affected households may not take part in the income-generating activities they should definitely be amongst the beneficiaries of the goods and services that they provide.

Discussions with group IGA participants indeed indicated that although many of them were affected by HIV/AIDS, the impact was not severe, see table two. This is because severely impacted people do not have time to take part in IGAs. Only the Songani group consisted of women who were all severely impacted by HIV/AIDS, but this group had already collapsed apparently due to a lack of interest in their product from the community and the women are now totally dependent on free food aid. The Ndirande briquette-making group was also experiencing financial difficulties and in this case, the group seemed to be acting more as a "support group" for members to share the problems that they are experiencing as a result of the AIDS epidemic. These women, in common with all other participants in COMPASS projects, should be given information on AIDS prevention, positive living with HIV and good hygiene for home-based care, in order to promote wider community action in the fight against HIV/AIDS.

Unfortunately, the capacity to generate income from COMPASS IGAs was invariably restricted to a small number of people, moderately impacted by HIV/AIDS. Although many group IGAs began with 100 or more members, the numbers soon decreased to 25 or less. This was said to be because group IGAs are easier to manage when they are composed of a small numbers of "like-minded" people. Profits can also be maximised when there are fewer people to share the income. The highest monthly income from a group IGA was realised by the Chiwembe Dam Mushroom Producers, whose individual members had an income of MK333.00 (US\$4.00) per month following the sale of their mushroom crop. Whilst the lowest monthly income of MK240.00 (US\$2.87) was being earned by the Ndirande Women's Briquette-making Group. All five Group IGAs sampled generated monthly incomes that were more than the MK167.00 (US\$2.00) being generated by farmers growing cash crops such as tobacco or tomatoes. However, none of the group IGAs sampled had a income, when shared amongst individual group members, that approached the income of either Lucy Wyson, who earns MK1,500.00 (US\$17.96) per month from selling fried do-nuts to fishermen near Lake Chilwa, or 19 year old Gloria Malunga who trades in second-hand clothes in Dedza bringing home MK2,000.00 (US\$23.95) per month to support her orphaned brothers and sisters (see table three). It is worth noting that both of these women were severely impacted by HIV/AIDS.

Clearly people who are severely/very severely impacted by HIV/AIDS do not have sufficient time to attend the regular meetings that are required for group activities. Any free time that they do have occurs at irregular times during the day and night. Therefore, only employment as individuals, rather than employment in groups, offers the flexibility that is required by these people. Furthermore, Lucy and Gloria have demonstrated that they are able to earn far more money as individual businesswomen, than they could if they were part of a group. This is because they are not constrained by the need for group democracy or by the problems caused by other group members who may not "pull their weight". COMPASS has already highlighted the fact that a lack of mutual trust in financial management causes quick evaporation of participants' dedication to work in many of their projects⁸. This means that COMPASS should

⁸ See COMPASS Grantee Performance Report: 2001, page vii.

look into the possibility of providing small grants or loans to individuals (especially women) who are severely impacted by HIV/AIDS. Division of labour should be encouraged and activities should be developed which allow participants to work at home, under the supervision of people trained in marketing.

Table three:
Comparative income generation from individual and group activities in COMPASS project areas

Name of individual/project	Location	Activity	Monthly income per person
Gloria Malunga	Dedza	Buying and selling second hand clothes	MK2,000 (US\$23.95)
Lucy Wyman	Lake Chilwa	Buying flour and making donuts	MK1,500 (US\$17.96)
Chiwembe Dam Mushroom Producers	Chiwembe dam	Growing oyster mushrooms	MK333 (US\$4.00)
Matindi Youth	Matindi	Raising fruit trees	MK283 (US\$3.39)
Participatory Fish Farming	Kalino	Fish farming	MK250 (US\$3.00)
Fruit Processing Enterprise	Magomera	Fruit processing	MK250 (US\$3.00)
Ndirande Women's Briquette Making Group	Ndirande	Making briquettes	MK240 (US\$2.87)
Winiford Majawa	Bwanje Valley	Growing tomatoes	MK167 (US\$2.00)
Chairman, Eastern Boundary Fence	Liwonde	Growing and processing tobacco	MK167 (US\$2.00)

The benefits of the goods and services provided by group IGAs on HIV/AIDS-affected households in the wider community was extremely low mainly because these families have little or no cash income and thus cannot buy them. This problem could be overcome by reducing the prices of products, such as processed fruits or fish, by selling smaller packages of less valuable items, i.e. sun-dried fruit, rather than fruit juice or *Usipa* rather than *Talapia* and subsidising larger items such as fruit trees. More work needs to be done on determining the reasons why consumers still prefer searching for and utilising natural firewood to the use of the apparently cheaper recycled card and sawdust, fuel briquettes.

Currently the objectives for the COMPASS small grants programme focus on the need for sustainable use of natural resources and do not mention the need to improve livelihoods or mitigate the impacts of HIV/AIDS, see page 5. Additional objectives will be required if COMPASS IGAs and CBNRM activities are to mitigate the impacts of HIV/AIDS amongst all

stakeholders in the NRM process. Indicators that measure the number of severely impacted HIV/AIDS households which benefit from the NRM activities should also be developed.

Effects of CBNRM on HIV/AIDS-affected households

In five out of seven CBNRM project areas, the benefits from CBNRM activities were completely by-passing HIV/AIDS-affected families: In Mwanza East, the GTZ-funded CBNRM project was actively excluding all severely impacted, HIV/AIDS-affected households, while at the same time eroding their access to highly nutritious indigenous fruits. While in Changoima and Dedza the benefits of NRM activities did not include severely impacted households containing orphans headed by widows or grandmothers, because they were too sick, too old, too busy or too powerless to either attend meetings or get involved in the prescribed activities. Although the Liwonde game fence was benefiting all households equally, it is doubtful whether it can prevent elephants from continuing to impoverish the community in the long term. The co-boat management project will be unable to benefit severely impacted HIV/AIDS-affected households while fishing remains a male occupation.

Only two projects were able to mitigate the impacts of HIV/AIDS through CBNRM activities: Hope Humana's herb gardens involved widows in the gardening activities, and the herbs that they produce provide direct benefit to albeit small numbers of HIV/AIDS patients. The Bwanje Valley Environmental Rural Development Organisation's NRM programme was able to both involve and directly benefit large numbers of households severely impacted by HIV/AIDS. This NGO has proved that by linking NRM activities such as composting, tree planting and guinea fowl rearing with improvements in food security, even households that are severely impacted by HIV/AIDS can be motivated to participate. They have also proved that by adding compost and planting leguminous trees it is possible to increase soil fertility significantly, thus increasing the possibility of self-reliance. The ample food supply together with the widespread uptake of conservation measures within the Bwanje community bears testament to the fact that communities will begin to conserve their environment once their access to food and other basic necessities has been assured. This innovative approach to CBNRM could be used with immediate effect in Mwanza East, Changoima and Dedza and in several other areas that are hosting COMPASS projects.

Good Practise in CBNRM in HIV/AIDS-affected areas

In Malawi, households that are severely impacted by HIV/AIDS are suffering from food insecurity and extreme poverty, together with the stress associated with these conditions. Such households are no longer able to be self-reliant due to fatigue, reduced access to land, declining soil fertility, lack of appropriate seed and an inability to generate income. Good CBNRM practise must address all these problems at no cost and without increasing labour requirements. Good CBNRM practise also relies on an empowered community to provide emotional support, shared labour and shared responsibility for the orphans within its midst. Positive interventions from outside should be in the form of food supplements, opportunity for home-based IGAs, information on AIDS prevention, positive living, home-based care for AIDS patients and sustainable agriculture, as well as free education and training for orphans, see table four. COMPASS already has sufficient expertise amongst its grantees to implement an integrated "good practice" CBNRM programme in all Malawi's HIV/AIDS-affected areas.

Community empowerment

This is an on-going process, which utilises participatory methods, such as “training for transformation” and “discovery learning” to empower the community to make informed choices and take positive action to solve common problems. The empowerment process begins with meetings that, ideally, should involve the whole community. This means that all participants should be provided with nutritious meals during the course of these meetings to facilitate involvement of the most severely impacted HIV/AIDS-affected households and their dependents. Activities should be planned amongst peer groups, according to their vulnerability to HIV/AIDS, such as youth, young women, older women, young men and older men. Within these peer groups, the following topics can be introduced;

- Healthy living - including AIDS prevention
- Positive living for people living with HIV
- Sustainable agriculture for food security
- Community action for survival – including orphan care and support

These topics are all covered by a new training manual that is being prepared by the author of this report⁹ and will be piloted at the COMPASS workshop to mitigate the impacts of HIV/AIDS, planned for early in 2003. Practitioners of participatory methods, including “training for transformation” can be found at NICE.

Table four:
Minimum needs of households severely impacted by HIV/AIDS

Vulnerable Households	Minimum Needs	
	From within the community	From outside the community
Women caring for orphans	Emotional support, shared labour	Food, IGAs, AIDS prevention info.
Women caring for sick relatives	Emotional support, shared labour	Food supplements, patient care kit ¹⁰ , counselling
Widows with young children	Emotional support, shared labour	Counselling and testing, IGAs
HIV+ widows with young children	Emotional support, shared labour	Information on positive living, food supplements, IGAs
Children caring for sick relatives	Emotional support, shared responsibility and labour	Food, patient care kit, education/training
Orphans caring for siblings	Emotional support, shared responsibility and labour	Food, education/training, AIDS prevention info.

⁹ This training manual draws on experience gained by *AfFOResT* in Zimbabwe and is being sponsored by CABI Bioscience from funding provided to the Technical Support Group of the Global IPM Programme. It is designed to support the Farmer Life Schools that have been developed in Cambodia, to be used in by farming communities in all HIV/AIDS-affected areas.

¹⁰ See Appendix 1 in *Assessment of Home Based Care Services in Malawi* by Elizabeth Marum *et al*, Umoyo

Healthy Living

Healthy living includes information on food and nutrition security, the underlying causes of human diseases and ways of reducing vulnerability to infection. These topics will also be covered by the new training manual.

Sustainable agriculture for improved food security

Sustainable agriculture in HIV/AIDS-affected areas should be based on risk-free, zero-external input food and cash cropping. The most urgent requirement for most households is information on ways of building soil fertility through the use of soil amendments, green manuring, composts, nitrogen-fixing trees and soil conservation measures. BERDO field staff have valuable experience in extending many of these methods to resource-poor farmers.

Low risk survival crops for HIV/AIDS-affected households include cassava, sweet potato, taro, bambara and cowpea. These crops are low labour-requiring, can grow in poor soil and have no serious pest problems. While cassava, sweet potato and taro are energy crops, bambara and cowpea are rich in calcium, iron, B vitamins and protein, see table five.

Table five:

Low risk survival crops for HIV/AIDS-affected households

Crop	Essential nutrients
Bambara	Calcium, iron, vitamin B complex, protein
Cassava	Starch
Cowpea, inc.leaves	Calcium, iron, vitamin B complex, protein
Sweet potato	Starch, vitamin A
Taro	Starch

Nutrition orchards

Perennial tree crops are labour-saving and yield fruits and nuts that are highly nutritious. Many fruits are high in vitamin C, which is vital for maintaining a healthy immune system. This vitamin is actually deficient in many communities due to the absence of vegetable gardens (as a result of the destruction of wetland areas). Guava is particularly valuable as it contains 2-5 times the vitamin C content of fresh orange juice¹¹ (Purseglove, 1984). Perennials that yield fruits within two years are the most useful for people living with HIV. Other high nutrient perennials are listed in table six.

Avocado is the most nutritious of all fruits, being rich in vitamins A, E and B complex and an easily digestible oil, which is an important source of energy for HIV positive people. Unfortunately avocado, citrus and mango mature slowly and it is recommended that improved varieties of these fruit trees are grafted onto mature, established rootstocks to hasten fruiting. Matindi youth could assist with this. Improved varieties of all the fruit trees listed in table six would also make lucrative cash crops.

¹¹ Dehydrated, powdered guava juice could be used to fortify immune-boosting foodstuffs. This would make a useful home-based IGA if a progressive donor could be found to support it...

Table six : High nutrient perennials for HIV/AIDS-affected households

Tree/vine	No. of years to first fruits	Essential Nutrients
Avocado <i>Persea americana</i>	5 – 6	Vitamin A, E & B complex, unsaturated oil
Banana, <i>Musa spp.</i>	1	Vitamin B complex, potassium
Guava, <i>Psidium guajava</i>	2	Vitamin C
Mango <i>Mangifera indica</i>	4 – 5	Vitamin A
Mulberry <i>Morus nigra</i>	1	Vitamin C
Orange <i>Citrus sinensis</i>	3 – 5	Vitamin C
Oysternut, <i>Telfairia pedata</i>	1	Protein
Papaya, <i>Carica papaya</i>	1	Vitamin A
Pigeon pea <i>Cajanus cajan</i>	1	Protein, iron
Tree tomato <i>Cyphomandra betacea</i>	2	Vitamin C

High nutrient perennial tree crops should be planted in orchards around individual homesteads, rather than in the field, for ease of tree maintenance and fruit harvesting and also to guard against thieves.

Herb gardens

Every household in Malawi should have a small herb garden containing the most useful herbs for treating AIDS-related and other infections. Hope Humana could provide useful advice in this respect.

Wetland rehabilitation for vegetable production

Wetland areas, or dambos, occur throughout Malawi. Unfortunately these valuable natural resources have been over-exploited and denuded of their natural vegetation. This has caused a lowering of the water-table, rendering the areas unsuitable for dry season vegetable gardening. The wetlands in Changoima and Kalino should be rehabilitated without delay, through the planting of appropriate indigenous trees and in due course laid out to vegetable gardens. The production of highly nutritious, traditional, green leafy vegetables, rather than the less nutritious and pest-prone, European-type vegetables, should be encouraged in these gardens.

Vegetable gardening is also possible in dryland areas, close to the homestead if various low-input, water-harvesting technologies can be implemented. For example, the vegetable garden can be situated close to the area where bathing water is discarded. Swales can be constructed behind contours that have been reinforced by vetiver grass and leguminous trees, to collect run-off from sloping land. Vegetable beds can be mulched to retain moisture and clay pots and glass or plastic bottles full of water can be sunk into the soil to provide drip irrigation.

Linking improvements in food security with CBNRM

Smallholder farmers are often reluctant to risk trying out new technologies. BERDO has shown that it is possible to overcome this reluctance by linking farmer experimentation in NRM with interventions, such as the provision of seed, fruit trees or guinea fowl eggs, which contribute to self-reliance. This approach should be adopted by all COMPASS grantees.

Home-based Income generation

Donors prefer to support IGAs that are carried out by groups, as this is the most cost-effective way of using the minimum amount of resources to reach the maximum number of people. However, group IGAs have many drawbacks for those involved and do not offer the flexibility required by people from HIV/AIDS-affected households, as out-lined above. Severely impacted HIV/AIDS-affected households need IGAs that can be done at home. This means that there must be a division of labour between all the required activities, with a trained supervisor to act as co-ordinator. Furthermore, with the downward spiral of poverty and destitution that is afflicting communities and impoverishing the consumer base in HIV/AIDS-affected areas, it is becoming increasingly difficult for those taking part in IGAs to generate sufficient income to improve their lives. Therefore, overseas markets should be sought in order to bring in new money into the community and the country¹².

Indicators of good practise

Indicators of success in CBNRM can only be determined once they have been compared with base-line data. This means that base-line data must be collected from the community prior to project implementation. This base-line data should include the following;

- Number of female-headed households
- Number of child-headed households
- Number of orphans (father deceased)
- Number of orphans (both parents deceased)
- Number of primary school drop-outs
- Number of secondary school drop-outs
- Number of orphan encumbered households adopting CBNRM technologies
- Level of food security in terms of number of meals eaten per day and types of relish
- Level of crop diversity in the field, garden and orchard
- Number of people from moderately, severely and very severely impacted HIV/AIDS-affected households participating in the project

The following indicators can then be used to measure the success of the CBNRM project on the participants and the surrounding community;

- Reduced number of primary school drop-outs
- Reduced number of secondary school drop-outs
- Increasing numbers of orphan encumbered households adopting CBNRM technologies
- Increased food security, in terms of the number of meals and types of relish eaten each day
- Increased crop diversity, in the field, garden and orchard
- Increasing numbers of participants from severely impacted HIV/AIDS-affected households involved in the project

¹² Virginia Mathabire, Oxfam's Regional Fair Trade Co-ordinator, at vpmathabire@oxfam.org.uk may be a useful contact in this respect.

D. The impact of HIV/AIDS on NGOs involved in implementing NRM in Malawi

Senior officers from four NGOs that are based in Blantyre were interviewed regarding the impact of HIV/AIDS on staff members and their work on NRM projects. Three of these organisations, namely COMPASS, Oxfam and the International Eye Foundation are directly sponsored by international donors, while the Wildlife and Environment Society of Malawi is a local NGO or so-called "partner" that must compete for funds either directly or indirectly through international NGOs.

COMPASS Project/DAI

Impact of HIV/AIDS on COMPASS projects

So far two COMPASS projects are facing collapse due to the impact of HIV/AIDS¹³. The Chief of Party reported that this is because many grantees are community leaders that have special qualities due to their level of education and commitment to the development process. Therefore serious problems arise when these project leaders die. In one case, funds have been reported to have gone astray and in the other it is likely that the project will never be implemented unless a similarly well-educated and charismatic person can be found. This is unlikely considering the low level of literacy in Malawi. Changes have been made in COMPASS policy in order to address the labour constraints that have come about due to the AIDS crisis. For example, funds are being made available to Tsogolo La Ana for hiring workers to dig their fish-ponds in Changoima.

Impact of HIV/AIDS on COMPASS staff

COMPASS has lost 50% of its team in the last 12 months due to AIDS. As a result specialist skills in GIS and participatory methods have been lost. However, in future, COMPASS staff could benefit from interventions that have been developed by DAI, whereby all HIV-positive staff have access to anti-retroviral drug therapy upon medical confirmation of their status. This should serve to motivate staff to be counselled and tested. To date, however, none of the staff yet feel confident enough to openly discuss their HIV status and this has led to treatment being sought only during the advanced stage of the disease.

It was stated that, staff who require counselling will be referred to Hope Humana, a local NGO specialising in this service. COMPASS was the only organisation questioned that is not actively promoting an HIV/AIDS awareness campaign, although staff do receive regular up-to-date information on policy statements from DAI, USAID, Population Services International and National AIDS Council. In common with the other NGOs surveyed, COMPASS does not have a policy on work-sharing, paying school fees for orphans or providing diet advice for "positive living", see table seven. It was of major concern that some of the COMPASS staff are actively opting out of the recommended locally available medical aid system. The biggest problem was said to be the complexity of working with policies from two different US organisations (i.e. DAI and USAID) whilst also keeping within the policy framework set out by the host government.

¹³ Unfortunately neither of these projects could be visited in the time available, due to their remoteness from Blantyre.

Oxfam

Impact of HIV/AIDS on Oxfam projects

Oxfam has recognised shortage of labour as a major constraint and their development approach is being modified to accommodate this problem. Seeds are being distributed in famine-affected areas and projects on family planning, health, gender and HIV/AIDS are being promoted. Projects are now targeting the youth and the elderly, new technologies are being transferred to individuals, rather than via groups (where clients are unable to attend meetings) and committees are being established to include vulnerable people.

Oxfam is also working with the Malawian Ministry of Agriculture to mainstream HIV/AIDS into the agricultural extension service.

Impact of HIV/AIDS on Oxfam staff

Oxfam Malawi has been working with Dan Mullins, Oxfam's HIV/AIDS specialist, to raise awareness amongst local staff. The staff set aside 30 minutes on the first Monday of each month to discuss HIV/AIDS issues. It was reported that an office messenger has recently died of AIDS. The senior co-ordinator said that it would be difficult to implement a work-sharing scheme as the local Oxfam team consists of a small and specialist staff. HIV positive staff are able to access anti-retroviral drugs and funeral expenses are available. While it is not possible to pay school fees for the orphans of anyone who is deceased there is a small pension available for staff members who have worked for the organisation for more than two years. The co-ordinator called for a clear policy on dealing with staff who are HIV positive and for a counsellor to be available.

International Eye Foundation (rural health-delivery NGO)

Impact of HIV/AIDS on International Eye Foundation projects

This US-based organisation is directly concerned with promoting community health, family planning, and home-based care in Nsanje District. Problems with work performance due to AIDS-related sickness were reported.

Impact of HIV/AIDS on International Eye Foundation staff

Three men and two women are presumed to have died of AIDS within the past three years. One of these workers was a medical assistant, while another was a co-ordinator for primary eye care. The senior officer stated that staff are sensitised to HIV/AIDS issues through training and information that was obtained through the Umoyo network. Staff in this organisation are not yet open about their HIV status, but the need for anti-retroviral therapy to be freely available was stressed. The senior officer also called for a policy change to allow for work sharing. He said that NGOs cannot support sick people as it would cause a huge drain on their budgets.

Wildlife and Environment Society of Malawi

Impact of HIV/AIDS on Wildlife and Environment projects

The Acting Director of this local NGO reported that many of the youths in their Wildlife and Environment clubs were afraid of the disease. Meetings often had to be postponed because of funerals. Workers were targeting the vulnerable and visiting the homes of those affected. Specific IGAs are being designed for people who are house-bound.

Impact of HIV/AIDS on Wildlife and environment staff

GTZ has held a workshop for staff in the head office. It covered AIDS prevention and "positive living for people" with HIV. Banja la Mtsogolo has been providing family planning information for field staff. There have been five deaths owing to various causes in this organisation in recent years. Skills lost include those of a librarian, a shop assistant, nurserymen and an environmental educator who had gained much experience from overseas. While the need for work-sharing is recognised it is said to be difficult to put into practise. Counselling and medical insurance are not yet available to staff of this organisation, funeral costs are not covered by the government and the need to provide school fees for orphans is beyond the scope of the organisation. The Wildlife Society is currently drawing up an Action Plan to mainstream HIV/AIDS issues into the organisation and its project work and staff have been selected as focal points for dealing with these issues.

Comments on the way forward

In Malawi, as well as in other African countries where there is widespread poverty and only rudimentary health care, HIV positive people fear being stigmatised, becoming unemployed and bringing destitution upon their families due to sickness and death. In Malawi, government assistance in overcoming these fears is limited to ensuring that employers pay basic funeral costs for all employees. This means that an HIV positive employee will still fear that s/he may lose their job once their status is known, or when s/he becomes sick. S/he will also fear that his spouse will be left in poverty and his children forced to drop out of school after his passing. For most employed staff it is only their employer who is able to reduce these fears. By creating a safe environment, staff will be encouraged to be open about their status and this may lead to support groups being established amongst those who are infected or affected by the disease. It should be recognised that HIV positive people who are involved in positive living are a valuable resource to a development organisation, particularly if they are willing to use their experience to counsel the communities in which they are working.

While the level of awareness of HIV/AIDS issues and the degree of sympathy towards affected staff seemed to be high amongst senior staff of all four NRM NGOs that I visited, there is a great deal more that could be done to mitigate the impacts of this disease. This includes advice on diet and food supplements and other aspects of positive living, medical insurance, work sharing, help with school fees for orphans and on-going emotional support. Furthermore, there is clear disparity between the way donors treat their own staff and those of partner organisations with respect to HIV/AIDS. In particular, medical insurance and access to anti-retroviral drug therapy was only available to staff who work directly for international NGOs¹⁴. In the absence of these positive incentives, there is no motivation for the staff of local NGOs to

¹⁴ This was also the author's experience in Zimbabwe.

know their status, see table seven. Without this knowledge HIV-infected people will fail to seek out the most appropriate treatment and will inevitably face premature death. This means that there is a need for donors to ensure that funds are made available to local NGO's to enable them to assist HIV positive staff access medical care and possible anti-retroviral drug therapy. In the absence of this type of support there is a very real risk that many local NGO's will collapse.

Table seven:

Comparison between the ability of NGOs to mitigate the impact of HIV/AIDS amongst staff members

Organisation	AIDS awareness programme	AIDS-rel deaths	Motivation to be tested	Openness re-status	Work-sharing	Counselling	Diet advice	Medical ins.	Funeral costs	School fees	Donor support
COMPASS	No	2	Access to ART	1	Not officially	Referral	No	Yes	Yes	No	Yes
Oxfam	Yes	1	Access to ART	0	No	No	No	Yes	Yes	No	Yes
Int. Eye Foundation.	Yes	5	None	0	No	No	No	No	Yes	No	No
Wildlife Society	Yes	5	None	0	No	Yes	No	No	Yes	No	?

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Appendix one:

Informants who contributed to the survey of COMPASS projects

Name	Date	Organisation	Location
Jimmy Kutuma Julita Graziano	28.10.02	Hope Humana	Blantyre
William Chadza Ester Chirombo	28.10.02	Wildlife and Environment Society	Blantyre
Moses Mpezeni	29.10.02	NICE	Blantyre
Desmond Chavasse	29.10.02	Population Services International	Blantyre
Robert White	29.10.02	Oxfam	Blantyre
Lovemore Mvula	29.10.02	International Eye Foundation	Blantyre
William Chabwera Anex Nakonyopa Charles Kalonga Manes Mwarwanda Jane Kamwendo Henry Njirika	30.10.02	Matindi Youth	Matindi, Blantyre
Mary Nsibeko	30.10.02	-	Matindi, Blantyre
Patricia Ndaula Jean Kunchezela Lucy Zalanje Christina Chitala Felistas Mofolo Zelina Banda Edice Jaze Florence Kakhobwe Marie Benjamin Edith Zingwangwa Margaret Kazembe Ida Tumu Urita Malote	30.10.02	Ndirande briquette- making group	Ndirande, Blantyre
Carrie Osborne	31.10.02	Umoyo Network	Blantyre
Anne Mkumba	01.11.02	Community development worker	Magomera
Ellen Luka Ida Chapusa Gertrude Magumbol Chris Chibweza Lucy Makopa Violet Gomani Christina Moses Ethel Sitolo Elizabeth Suga Mavis Chagara	01.11.02	Fruit processing enterprise	Magomera
Lucy Chawinga	01.11.02	Chiwembe Dam Mushroom Producers	Chiwembe Dam, Limbe

Informants who contributed to the survey of COMPASS projects (cont.)

Name	Date	Organisation	Location
Oscar Chiremba Stazio Astala Annie Ntemba Jessie Chambuwa Loveness Mangiza Elizabeth Gemu Stanford Jamu Aaron Kdiva Rafik Ngirazi Damita Phuleni	02.11.02	Tsogolo la Ana CBNRM	Changoima
Samwani Dafuleni Jessie Ndafera Kaneni Diver Justine Zyudya	02.11.02	-	Changoima
Kundi Mbule Mr Majawa	04.11.02	Participatory Fish Farming Project	Kalino, Zomba
Ines Taombe	04.11.02	-	Kalino, Zomba
Godwin Wallace Chipanje Chiguduli Chipoka	04.11.02	Lake Chilwa co-boat management	Lake Chilwa, Zomba
Mercy Kawawa Edna Matchaya Chief Kachoka Margaret Sitolo	04.11.02	-	Kachoka Village, Lake Chilwa, Zomba
Lucy Wyson Annie Manyumba	04.11.02	-	Lake Chilwa, Zomba
Godfrey Mkwate	05.11.02	Eastern Boundary Fence Committee	Nyafulu, Mangochi
Zione Kafulusa Edith Pendame	05.11.02	-	Nyafulu, Mangochi
Bishop Mpoyo Mrs Mkwanda Mrs Adam	05.11.02	Songai briquette-making group	Zomba
Hans Christian Dohse	06.11.02	GTZ/Wildlife and Environment Society of Malawi	Mwanza East
John Nalivata Theresa Kalila Theresa Maruwasa Charles Gustino Texson Kameta	06.11.02	Kam'mwamba juice extractors	Mwanza East
Louis Gobede Agnes Chipanga Liness Rabson	06.11.02	-	Gobede village, Mwanza East
Jolly Mwawala Mrs Namacha May Majanda Lawrence Kauwa Ethel Mwicha Morlen Ntonda	06.11.02	BERDO	Bwanje Valley
Elisa Chikankeni Elembia Billy Winiford Majawa	06.11.02	-	Bwanje Valley

Informants who contributed to the survey of COMPASS projects (cont.)

Name	Date	Organisation	Location
Moses Mpezeni Gloria Malunga	07.11.02	NICE	Dedza
Coledeta Amos Elizabeth Nowa Glerecia Nedi Julia Amos Kenedy Chintengo Gertrude Kanduna Nali Tchowa Kaukhwani Nelly Ndau Alieti Daveson Ester Masanga	07.11.02	-	Khanganya village, Dedza
Jones Anisia Chikapa Lucy Billy	08.11.02	Hope Humana herb gardens	Nchoncholo, Mikalongwe, Chiradzulu
Lucias Gowaro Mary Mlonda Wilson Mpange Monica Kasenda	08.11.02	-	Mikalongwe, Chiradzulu
Andrew Watson	08.11.02	COMPASS	Blantyre

Appendix two:

Traditional practises which increase vulnerability to HIV/AIDS identified by communities in Dedza

Information provided by Moses Mpezeni of NICE

- *Jando*: This is traditional circumcision for boys. It is a risky practise because the same razor blade is used to circumcise all the boys¹⁵.
- *Chinamwali*: This is when girls as young as 11 and 12 are encouraged to practise sex with experienced men.
- In this practise parents arrange to have their teenage daughter raped by a "big" man in order to discourage her from having sex.
- *Fisi*: When the husband is suspected of being impotent the wife's parents arrange for another man to come (like a hyena) at night in order to impregnate their daughter.
- *Chokolo*: This occurs when a widow is 'inherited' by her brother-in-law or another man.

The communities have resolved that they should create awareness of the dangers of these practises through drama, songs and slogans and look for safe alternatives. It was noted that grandmothers are often the strongest adherents to these practises.

¹⁵ However, it should be emphasised that once circumcised, men are less susceptible to contracting HIV through sexual intercourse (Jackson, 2002).

COMPASS Publications

Document Number	Title	Author(s)	Date
Document 1	COMPASS Year 1 Work Plan	COMPASS	Jul-99
Document 2	COMPASS Small Grants Management Manual	Umphawi, A., Clausen, R., Watson, A.	Sep-99
Document 3	Year 2 Annual Work Plan	COMPASS	Dec-99
Document 4	July 1 – September 30, 1999: Quarterly Report	COMPASS	Oct-99
Document 5	Training Needs Assessment: Responsive Modules & Training Approach	Mwakanema, G.	Nov-99
Document 6	Guidelines and Tools for Community-Based Monitoring	Svensden, D.	Nov-99
Document 7	Policy Framework for CBNRM in Malawi: A Review of Laws, Policies and Practices	Trick, P.	Dec-99
Document 8	Performance Monitoring for COMPASS and for CBNRM in Malawi	Zador, M.	Feb-00
Document 9	October 1 – December 31, 1999: Quarterly Report	COMPASS	Jan-00
Document 10	Workshop on Principles and Approaches for CBNRM in Malawi: An assessment of needs for effective implementation of CBNRM	Watson, A.	Mar-00
Document 11	January 1 – March 31, 2000: Quarterly Report	COMPASS	Apr-00
Document 12	Thandizo la Ndalama za Kasamalidwe ka Zachilengedwe (Small Grants Manual in Chichewa)	Mphaka, P.	Apr-00
Document 13	Njira Zomwe Gulu Lingatsate Powunikira Limodzi Momwe Ntchito Ikuyendera (Guidelines and Tools for Community-based Monitoring in Chichewa)	Svensden, D. - Translated by Mphaka, P. and Umphawi, A.	May-00
Document 14	Grass-roots Advocacy for Policy Reform: The Institutional Mechanisms, Sectoral Issues and Key Agenda Items	Lowore, J. and Wilson, J.	Jun-00
Document 15	A Strategic Framework for CBNRM Media Campaigns in Malawi	Sneed, T.	Jul-00
Document 16	Training Activities for Community-based Monitoring	Svensden, D.	Jul-00
Document 17	April 1 – June 30, 2000: Quarterly Report	COMPASS	Jul-00
Document 18	Crocodile and Hippopotamus Management in the Lower Shire	Kalowekamo, F.	Sep-00
Document 19	Cost-Sharing Principles and Guidelines for CBNRM Activities	Moyo, N.	Sep-00
Document 20	Workplan: 2001	COMPASS	Nov-00
Document 21	July 1 – September 30, 2000: Quarterly Report	COMPASS	Oct-00

Document 22	Opportunities for Sustainable Financing of CBNRM in Malawi: A Discussion	Watson, A.	Nov-00
Document 23	Framework for Strategic Planning for CBNRM in Malawi	Simons, G.	Nov-00
Document 24	Kabuku Kakwandula Ndongomeko ya Thumba Lapadera la Wupu wa COMPASS (Chitumbuka version of the COMPASS Small-grant Manual)	Umphawi, A., Clausen, R. & Watson, A. Translated by Chirwa, T.H. & Kapila, M.	Dec-00
Document 25	COMPASS Performance and Impact: 1999/2000	COMPASS	Nov-00
Document 26	October 1 – December 31, 2000: Quarterly Report	COMPASS	Jan-01
Document 27	COMPASS Grantee Performance Report	Umphawi, A.	Mar-01
Document 28	January 1 – March 31, 2001: Quarterly Report	COMPASS	Apr-01
Document 29	Natural Resource Based Enterprises in Malawi: Study on the contribution of NRBEs to economic development and community-based natural resource management in Machinga District	Lowore, J.	Apr-01
Document 30	Proceedings of the First National Conference on CBNRM in Malawi	Kapila, M., Shaba, T., Chadza, W., Yassin, B. and Mikuwa, M.	Jun-01
Document 31	Natural Resource Based Enterprises in Malawi: Action Plans	Watson, A.	Jun-01
Document 32	Examples of CBNRM Best Practices in Malawi (3 rd Edition)	Moyo, N. & Epulani, F.	Jan-03
Document 33	Media Training for CBNRM Public Awareness	Kapila, M.	Jun-01
Document 34	April 1 - June 30, 2001: Quarterly Report	COMPASS	Jul-01
Document 35	Strategic Plan for CBNRM in Malawi	CBNRM Working Group	Sep-01
Document 36	Workplan: 2002	COMPASS	Oct-01
Document 37	July 1 - September 30, 2001: Quarterly Report	COMPASS	Oct-01
Document 38	COMPASS Performance and Impact: 2000/2001	COMPASS	Dec-01
Document 39	Coordination of CBNRM in Malawi: Financing Options	Watson, A.	Jan-02
Document 40	Performance Monitoring for CBNRM in Malawi	CBNRM Working Group	Oct-02
Document 41	October 1 – December 31, 2001: Quarterly Report	COMPASS	Jan-02
Document 42	COMPASS Field Level Training Impact Evaluation	Moyo, N.	Feb-02
Document 43	COMPASS Grantee Performance Report: 2001	Umphawi, U.	Apr-02
Document 44	COMPASS Assessment: 2001	Sambo, E., Carr, S., Omambia, D. & Moore, T.	Apr-02
Document 45	January 1 - March 31, 2002: Quarterly Report	COMPASS	Apr-02

Document 46	Community Tourism and Enterprise Training Manual	Kacal, S.	Jun-02
Document 47	Charcoal, Chiefs and Chambo: Status of CBNRM Policies in Malawi	Trick, P. & Manning, L.	Jun-02
Document 48	April 1 - June 30, 2002: Quarterly Report	COMPASS	Jul-02
Document 49	Business Development Services for Natural Resource Based Enterprises	Magai, G. & Nthambi, T.	Sep-02
Document 50	July 1 – September 30, 2002: Quarterly Report	COMPASS	Oct-02
Document 51	Workplan: 2003	COMPASS	Dec-02
Document 52	COMPASS Performance and Impact: 2001/2002	COMPASS	Oct-02
Document 53	GIS for Natural Resources Managers	Craven, D.	Nov-02
Document 54	Proceedings of the Second National Conference on CBNRM in Malawi	Luke Malembo, William Chadza, Steve Kamuloni and Rex Kanjedza	Dec-02
Document 55	Impact of HIV/AIDS on Natural Resource Management in Malawi	Page, S.	Dec-02
Document 56	October 1 – December 31, 2002: Quarterly Report	COMPASS	Jan-03
Document 57	The Role of the Private Sector in CBNRM in Malawi	Watson, A.	Jan-03
Internal Report 1	Building GIS Capabilities for the COMPASS Information System	Craven, D.	Nov-99
Internal Report 2	Reference Catalogue (4 th Edition)	COMPASS	Feb-03
Internal Report 3	Workshop on Strategic Planning for the Wildlife Society of Malawi	Quinlan, K.	Apr-00
Internal Report 4	Directory of CBNRM Organizations (4 th Edition)	COMPASS	Feb-03
Internal Report 5	Proceedings of Water Hyacinth Workshop for Mthunzi wa Malawi	Kapila, M. (editor)	Jun-00
Internal Report 6	COMPASS Grantee Performance Report	Umphawi, A.	Jun-00
Internal Report 7	Examples of CBNRM Best-Practices in Malawi	Moyo, N. and Epulani, F.	Jul-00
Internal Report 8	Software Application Training for COMPASS	Di Lorenzo, N.A.	Sep-00
Internal Report 9	Directory of COMPASS ListServ Members (3 rd Edition)	Watson, A.	Feb-03
Internal Report 10	Introductory Training in Applications of Geographic Information Systems and Remote Sensing	Kapila, M.	Feb-01
Internal Report 11	COMPASS TAMIS Grants Manual	Exo, S.	Mar-01
Internal Report 12	Review of Recommendations of the Lake Chilwa and Mpoto Lagoon Fisheries By-Laws Review Meeting	Nyirenda, K.	May-01
Internal Report 13	End-of-Term Evaluation of the Co-Ordination Unit for the Rehabilitation of the Environment (CURE)	Sambo, E.Y.	Sep-01

