PROLINNOVA
PROmoting Local INNOVAtion
in ecologically-oriented agriculture and natural resource management

PROLINNOVA Working Paper 33

"HAPID"

PARTICIPATORY INNOVATION DEVELOPMENT IN THE FACE OF HIV/AIDS:

SYNTHESIS OF FINDINGS AND OUTCOMES

Prepared by: Brigid Letty, Maxwell Mudhara, Nomaphelo Shezi, Romuald Rutazihana, Gilda Fafetine, Carolien Aantjes, Michael Loevinsohn and Ann Waters-Bayer

September 2011

Acknowledgements

We would like to thank all the partner organisations who participated in the various activities undertaken during this project in all participating countries.

Our sincere thanks also go to the farmers, innovators and community members who participated during the project, especially those who engaged in the various follow-up activities. Where sensitive, we have not mentioned the names of the innovators and community members. In other instances, in order to give recognition to their innovative capacity, we have included their names in this report.

We thank DGIS for making the funds available for the study and we thank the HAPID International Support Team, particularly Ann Waters-Bayer, Carolien Aantjes and Michael Loevinson, for providing backstopping support and guidance during the project.

Cover photo: Children receive goats as part of the process of strengthening a local innovation where women buy animals for the children with their government child support grants (Source: Gugu Mbatha, Mdukatshani Rural Development Trust

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Acronyms

ADCR	Associação para o Desenvolvimento das Comunidades Rurais / Association for Rural Community Development
ADECOSICRIO	Associação para o Desenvolvimento das Comunidades, Combate ao HIV/SIDA e Apoio as Crianças Órfãs e Vulneráveis / Association for Community Development, Fighting HIV/AIDS and Support to Orphans and Vulnerable Children
AMIMO	Associação de Mineiros Mocambicanos / Association of Mozambican Miners in South Africa
ARV	antiretroviral
BSSP	Bekhuzulu Self-Sufficiency Project
CBO	community-based organisation
CCM	Conselho Cristão de Moçambique / Mozambique Christian Council
CINDI	Children in Distress Network
FONGA	Forum das Organisações Não-Governementais Nacionais de Gaza / Forum of NGOs in Gaza Province
FSG	Farmer Support Group
GFAR	Global Forum on Agricultural Research
HAPID	HIV/AIDS and Participatory Innovation Development
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome
IFPRI	International Food Policy Research Institute
KFO	Kwangwanase Farmers Organisation
KZN	KwaZulu-Natal (Province)
MDIC	Maputaland Development and Information Centre
MRDT	Mdukatshani Rural Development Trust
MTR	Mid-Term Review
NGO	non-governmental organisation
NRM	natural resource management
NSC	National Steering Committee
PID	Participatory Innovation Development
PROLINNOVA	**PRO**moting **L**ocal **INNOVA**tion in ecologically oriented agriculture and NRM
STI	sexually transmitted infection
UKZN	University of KwaZulu-Natal

1 BACKGROUND AND INTRODUCTION

In many countries in Africa and elsewhere, organisations working in agriculture and natural resource management (NRM) have discovered the strength of livelihood approaches that recognise the role of local innovative initiatives and that strengthen the capacities of farmers to adjust to changing conditions. They engage in and promote Participatory Innovation Development (PID), an approach that creatively combines local knowledge and innovativeness with expertise and knowledge from elsewhere. Many of these organisations have joined the international partnership called PROLINNOVA (**PRO**moting **L**ocal **INNOVA**tion in ecologically oriented agriculture and NRM) to learn from each other, to collaborate and to engage in policy dialogue to bring about institutional change in agricultural/NRM research, extension and education. Thus far, however, most of the organisations involved in PROLINNOVA have given relatively little attention to the impact of HIV/AIDS (Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome) on their work in agriculture and NRM, and to how their activities could also be of benefit to people affected by HIV/AIDS. As a result, their strategies and approaches, including PID, may be ignoring the realities on the ground and overlooking important opportunities to contribute to poverty alleviation. Reviewing and re-adjusting their strategies and approaches in light of HIV/AIDS would help these organisations become more effective, particularly in reaching the most vulnerable groups in society.

1.1 Introduction to PROLINNOVA

PROLINNOVA was conceived in December 1999, when Southern and Northern non-governmental organisations (NGOs), supported by the Global Forum for Agricultural Research (GFAR), the NGO Committee (NGOC) of the Consultative Group on International Agricultural Research (CGIAR) and the French Ministry of Foreign Affairs, met in Rambouillet, France, to consider how participatory approaches to agricultural research and development based on local initiatives could be scaled up. At this meeting ETC EcoCulture, a Netherlands-based NGO, was asked to facilitate the launching of an international PROLINNOVA programme (in GFAR terms: a “Global Partnership Programme”) built up from country level. NGOs in Africa and Asia facilitated multi-stakeholder design of country programmes that, in turn, designed international activities to reinforce their own activities.

The focus of the network is on recognising the dynamics of indigenous knowledge and enhancing capacities of smallholder farmers (including forest dwellers, pastoralists and fisherfolk) to adjust to change and to develop their own site-appropriate systems and institutions of resource management so as to gain food security, sustain their livelihoods and safeguard the environment. The essence of sustainability lies in the capacity to adapt. At annual meetings, the country-level partners define the international networking, learning and other mechanisms needed to support their work. The participatory planning at international level thus mirrors the approach taken at national and grassroots level: the partners develop and own a programme based on their self-defined needs and interests.

1.2 Introduction to HAPID

At the PROLINNOVA annual meeting in Senegal in March 2007, a small group of people from a few country programmes and members of the PROLINNOVA International Support Team discussed HIV/AIDS. They first looked at the impact of HIV/AIDS on rural communities and how research and development work needs to respond to this. During this discussion, a new aspect was raised: the fact that local innovation is occurring within households and communities affected by HIV/AIDS, as people develop coping mechanisms (a process we could refer to as "local innovation"). PID approaches that support this process could strengthen the impact made by organisations involved in HIV/AIDS work. A task team consisting of people from Ghana–South, Mozambique and South Africa subsequently developed a concept note for a PROLINNOVA study looking at HIV/AIDS-related matters. In January 2008, the "HAPID" (HIV/AIDS and PID) study was launched and it ran up to December 2010. It was funded by the Netherlands Directorate for International Cooperation (DGIS) under the Community-Led Natural Resource Management programme implemented jointly by PROLINNOVA and COMPAS (Comparing and Supporting Endogenous Development). The PROLINNOVA country programmes initially involved in HAPID were those in Ghana–South, Mozambique and South Africa.

An international team composed of Brigid Letty (PROLINNOVA–South Africa), Romuald Rutazihana (PROLINNOVA–Mozambique), Ann Waters-Bayer and Chesha Wettasinha (PROLINNOVA International Support Team, ETC EcoCulture), Carolien Aantjes (HIV/AIDS consultant, ETC Crystal) and Michael Loevinsohn (Applied Ecology Associates) guided the HAPID initiative (see http://www.prolinnova.net/hapid/team).

1.3 Proposed work

The HAPID proposal outlined the approach of working with and joint learning among organisations involved in the PROLINNOVA programme and local organisations supporting HIV/AIDS-affected households. The entry point was to be a joint study on how affected households and communities innovate and adapt as part of their coping mechanisms.

1.3.1 Objectives

The overall objective of HAPID was to strengthen and add value to the work of organisations currently involved in the Prolinnova network and other local organisations supporting HIV/AIDS-affected households, through joint exploration of the implications of the pandemic on PID and the potential contribution of PID in preventing HIV/AIDS and in mitigating its effects at household and community level. In this, we distinguished four specific objectives:

1) To build partnerships between organisations supporting HIV/AIDS-affected households and those working with PID in the PROLINNOVA network
2) To understand the existence, nature and relevance of coping strategies based on local innovation related to agriculture and NRM by HIV/AIDS-affected households and communities, with special attention to women's roles and decision-making abilities
3) To understand the implications of the existence of such coping strategies for organisations working with HIV/AIDS-affected communities and for organisations involved in PID, and to define appropriate strategies and approaches for integrating local

innovation and PID in agriculture and NRM into efforts to avoid/prevent HIV/AIDS and to mitigate its effects

4) To share the outcomes of the process more widely, particularly with a view to boosting local innovation by households and communities endangered or affected by HIV/AIDS.

1.3.2 Activities

In order to meet the above-stated objectives of the HAPID study, a number of activities took place during the period from March 2008 to December 2010. A short summary of these activities is given below. Further elaboration can be found in Sections 4 and 5 of this report.

- **Development of an inventory of organisations:** In each of the three countries involved in this study, an inventory was made of institutions – both within the existing PROLINNOVA Country Programme and beyond – that are supporting HIV/AIDS-affected households and are working in the area of agriculture and NRM. The inventories provided an overview of what institutions were already doing to support HIV/AIDS-affected households through agricultural and NRM-related activities and an overview of relevant projects and studies that were already carried out in the countries on this subject.
- **Inception meeting:** It was planned that, during a one-day meeting in each of the three countries, the results of the inventory would be presented to selected organisations that showed an interest in collaboration in the study. During the meetings, participants analysed the inventory results, reviewed the status of ongoing activities in the country and discussed the relevance of the activities proposed for the continuation of the study.
- **Capacity-building and planning workshop:** In a workshop of 4–5 days' duration that were organised in each country, the capacity of the participating organisations was built in: 1) understanding the implications of HIV/AIDS for farming communities, with special focus on gender issues; and 2) recognising the relevance of local innovation and the PID approach to strengthen resilience at household and community level so as to avoid HIV/AIDS or to mitigate its effects. During the workshop, agreements were made on how to roll out the activities in the country.
- **International review:** A member of the international HAPID team reviewed documents focused on local innovation in preventing infection or mitigating the impacts of HIV/AIDS and on participatory approaches to development related to work on HIV/AIDS, mainly in the field of agriculture and NRM. This document[1] was used in the preparation of the capacity-building and planning workshops and published on the PROLINNOVA website. A summary of the review is provided in Section 3 of this report.
- **Case studies on innovative coping mechanisms in agriculture and NRM in the face of HIV/AIDS:** The local organisations involved investigated innovations within their communities of reference. The focus was on innovations related to agriculture and NRM. The intention was to cover both technical innovations (e.g. to lighten the labour load) and social/institutional innovations (e.g. minimising labour inputs for herding through group agreements, or supporting the gardening activities of highly endangered or affected households by giving them priority access to land close to their homes). These innovations were then documented as case studies and presented in joint meetings.

[1] "Innovation in agriculture and NRM in communities confronting HIV/AIDS: a review of international experience" by Michael Loevinsohn (www.prolinnova.net/hapid/review-international-experiences-related-innovation-agriculture-and-nrm-communities)

- **Sharing and policy development:** In each of the three countries, the organisations involved in the study met with a selected group of other interested stakeholders during an in-country sharing workshop. The workshops were designed to: 1) share and analyse the results and findings of the cases, including reviewing which coping mechanisms could be called “innovations”; 2) analyse the implications of the existence of innovative coping mechanisms for working with families at risk or affected by HIV/AIDS and possible ways to build on these, using a PID approach; 3) analyse the implications of the study findings and of the HIV/AIDS pandemic in general for work on local innovation and PID in agriculture and NRM; 4) identify further strategies for media work, policy dialogue and institutional change to integrate PID into activities to prevent/mitigate the impact of HIV/AIDS, both within and beyond the realm of agriculture and NRM; and 5) make action plans for participants to internalise the findings and results in their organisations.
- **International-level sharing:** The publication of results of the HAPID study at country level as well as the sharing of the synthesis report at international fora and through relevant networks allowed findings to be shared.
- **Follow-up activities:** Although follow-up PID activities were not part of the original proposal, discussions about the exploratory study took place at the PROLINNOVA International Partners Workshop in the Netherlands in March 2010 and it was decided that follow-up activities should be carried out to take the identified innovations further. The HAPID work was then extended to December 2010 and funds were allocated to support activities to strengthen and /or share innovations identified through the study.

2 THE IMPACT OF HIV/AIDS ON AGRICULTURE AND THE RURAL COMMUNITY[2]

Smallholder agriculture in Africa has been severely impacted by HIV/AIDS at both household and community level. Many rural communities are already poor and thus not resilient to the impacts of HIV/AIDS. The impacts of the pandemic on agriculture are both direct and indirect. Direct impacts include those such as the loss of labour to undertake farming activities, while indirect effects can be the loss of remittances from people working in towns and sending money home. This source of income is important for agricultural activities: without it, households may not be able to purchase, e.g., agricultural inputs.

2.1 The impact of human loss

The most obvious impact of HIV/AIDS is the loss of labour to undertake agricultural activities. People are sick and not able to work efficiently, or they are busy with other non-agricultural tasks such as caring for those who are sick. The disease affects mainly those of the age who would normally provide the main work force. Elderly people and children thus have to absorb many of their tasks.

When people die from HIV/AIDS, there is a total loss of their labour input as well as the skills. When men die and leave widows and children, there are more complex challenges to be faced. Sometimes the land reverts to the family of the husband and the woman loses her access to land. Sometimes women cannot continue with the farming activities because certain farming operations (e.g. ploughing) are undertaken only by men and, culturally, cannot be taken over by the widow. Women are sometimes less able to access credit than men; this can also impact on the farming operations.

2.2 The increased costs associated with AIDS

While household members are sick from AIDS, there are also medical expenses that must be covered. These include transportation of these individuals to traditional healers, clinics and hospitals, and consultation fees and costs for medicines, provided either by traditional healers or western medical practitioners. Households with little free cash often have to sell assets to cover these costs, which weakens their position further. When the situation deteriorates to a point that they sell productive farm assets such as livestock or tools, or even land where this is possible, it reduces their capacity to engage in agricultural activities.

2.3 Changes in farming systems

With reduced labour available to work the land, less time available to engage in farming activities, fewer resources available to purchase inputs and – where this is practised – less animal traction available because of the sale of draught animals, farming families reduce the area of production and often leave more distant fields to lie fallow. Another impact of the loss of labour is that key farming operations cannot be done on time (i.e. delays in planting or harvesting), which results in further declines in yield.

[2] This section is based primarily on the following sources: United Nations (2004), Slater & Wiggins (2005) and Kormawa (2008).

Besides the reduction in area of production, other changes in the farming system also take place. There may be a shift to less labour-intensive crops. Frequently, there is a reduction in the range of crops grown, because people seek less labour-intensive options (such adaptations or changes in practices are discussed further in the next section of the report). This, in turn, affects people's nutritional status. Sometimes there is a shift away from cash crops towards more subsistence crops and also towards perennial / tree crops that do not require annual ploughing and sowing. The species of livestock that households keep also change: there may be not only a decline in numbers of large stock (e.g. cattle), but sometimes a shift towards smaller stock such as goats and chickens, which can be sold more readily and allow for smaller amounts of cash to be generated as required.

Some more unexpected impacts may relate to the loss of certain key individuals. For example, the death of a person who has links with a market outside the community can mean the loss of a market opportunity and further loss of income. This may force households to stop farming certain crops or keeping certain types of livestock.

2.4 The impact on the broader community

The HIV/AIDS pandemic also has impacts on the broader farming community. The loss of adults leads to larger dependence on those who remain. Older people often have to care for large numbers of children. Child-headed households become a responsibility for the broader community. Children drop out of school, either to care for younger siblings or to help their mothers or grandmothers with household chores or farming activities. People who have been working away from the farm and have contracted the virus return home when they are too sick to continue working. This places an additional strain on the rural households.

There can also be a breakdown of social structures that leads to a loss of local control and decision-making capacity. An indirect impact on the broader community is the deterioration of government services as researchers and extension staff also fall victim to the virus.

2.5 Conclusion and outlook

The effects of reduced areas of production and declining yields are reduced household income and less food security, which in turn impacts on the health of household members. The ultimate impact of HIV/AIDS is this downward spiral, where families become more and more vulnerable and less able to sustain themselves through farming. Yet, while these very negative impacts of HIV/AIDS are recognised, there are cases where individuals, households and even communities have found innovative ways to prevent infection or to mitigate the impacts of HIV/AIDS, thus making people less vulnerable. Such innovation in the face of HIV/AIDS is discussed in more detail in the next section of the report.

3 LINKING HIV/AIDS, INNOVATION AND AGRICULTURE

3.1 Introduction

In most countries, the first cases of AIDS were observed in cities in the early to mid-1980s. During the course of the epidemic, the proportion of people infected with HIV has generally remained higher in urban than in rural areas. However, the rate of infection in the rural areas has tended to increase faster and – in some places, including parts of Ghana, Mozambique and Malawi – now exceeds that in towns and cities. Similarly, in the early years, infection rates were higher in men than in women. In every region of the world, the difference has reduced over time and, currently in sub-Saharan Africa, where the greatest number of infections is found, more than 60% are among women. Young women under 20 years old bear an even more unequal share of infection, often several times that of men their age. These are general features of HIV/AIDS epidemics but what is striking is the variability of these epidemics. Rates of infection vary greatly between countries and between regions in the same country, and these differences appear to be stable. It is increasingly clear that a wide range of cultural, social, natural, economic and political factors influence people's risk of being exposed and then of becoming infected with HIV. The risks one faces of progressing from infection to full-blown AIDS and then of dying and the consequences of illness and death for the household, community, region and country are affected by these same factors and, in turn, affect them (Auvert *et al* 2001).

3.2 Understanding key concepts and terminology

3.2.1 Terminology related to HIV/AIDS

There is some terminology that is specifically used in relation to pandemics such as HIV/AIDS, notably *susceptibility, vulnerability, resistance* and *resilience*. In this, we apply the following definitions.

Susceptibility	The likelihood of a person becoming infected by HIV
Vulnerability	The likelihood of a person suffering significant impact as a consequence of HIV infection and AIDS-linked illness or death
Resistance	The ability of a person to escape or avoid HIV infection
Resilience	The ability of a person to avoid the worst impacts of HIV and AIDS or to recover to a level accepted as normal

People vary in their likelihood of becoming infected with HIV, that is to say their *susceptibility.* Infection with another sexually transmitted infection (STI) such as syphilis, herpes and gonorrhoea facilitates the entry of HIV and is among the most important of the immediate causes of infection. Malnutrition, particularly vitamin A deficiency, favours a number of STIs and, together with chronic malnutrition and parasite burden, weakens a person's immune function, making HIV infection more likely. Transmission of the HIV infection from mother to child is also affected by the mother's nutritional and immune status. There are often

important seasonal patterns to maternal nutrition in rural areas, linked with the hungry period before harvest and to times of heavy work in the field. HIV being an STI, sexual behaviour – sex with whom and under what conditions – is central. There are many influences on these decisions. Culture is one, influencing, for example, the age at which one initiates sex and with whom, the age at which one expects to marry and – later in life – whether and with whom widows remarry. Knowledge of HIV and AIDS is also crucial: knowledge about how one becomes infected, the ways in which one can avoid infection, how HIV relates to AIDS and the consequences of the disease.

However, one's ability to act on what one knows is often constrained. In particular, poverty (notably hunger and lack of opportunity) and inequalities (especially those between men and women, among social groups and between rural and urban areas) can force people into situations where they are at heightened risk of becoming infected with HIV. Several of these situations of risk have a seasonal character in rural areas. "Survival sex" may be more common in the hungry season and when there is no work in the field, and migration in many areas is highly seasonal. What is striking is that factors acting indirectly on susceptibility to HIV, notably ill-considered policy decisions that affected the price and availability of maize, exerted such a large and rapid impact on HIV infection rates (Loevinsohn 2007). More positively, experience also suggests that actions which reduce rather than increase food insecurity and vulnerability to climatic variability can help people avoid situations of risk and thus make an important contribution to HIV prevention (Loevinsohn 2006).

3.2.2 Terminology related to supporting local innovation

Local innovation is the process by which people develop new and better ways of doing things – using their own resources and on their own initiative. In so doing, they may be exploring new possibilities simply out of curiosity, or may be responding and adapting to changes in the condition of natural resources, availability of assets, markets and other socio-economic and institutional contexts brought about by demographic trends, higher-level policies, disasters, climate change and other external influences, positive or negative. Local innovation often occurs in the face of new challenges or opportunities and often involves informal experimentation by the resource users. Such locally specific innovation has been taking place across the world since time immemorial, but is still often ignored in formal research and development interventions.

The outcomes or products of this local process of innovation are local innovations that have been developed and are understood and owned by local people. These innovations may be developed by individuals or groups or entire communities. They may be changes in behaviour, new farming techniques or new ways of organising farming (including production, processing or distribution/marketing aspects) or other resource-management activities. In other words, they may be technical and socio-institutional innovations**,** including policy change at local level, e.g. bylaws for using natural resources. A successful process of local innovation leads to local innovations that improve the lives of people in the area. In the case of PROLINNOVA, emphasis is given to innovations that are of particular relevance to disadvantaged people such as the poor and marginalised – a segment of the local population that, in many societies, includes women and youth.

Participatory innovation development (PID) is an approach to agricultural development that is based on farmers' motivations and ideas about how to solve a local challenge or capture an opportunity to improve livelihoods (i.e. local innovation) and involves partnerships between farmers and development agents. It expands the Participatory Technology Development (PTD) approach to include not only hard technologies but also socio-institutional and -cultural innovations. These can include changes in the roles of men and women (e.g. women taking on ploughing responsibilities because of a shortage of men being available to do this). At the heart of PID is farmer-led participatory research or joint experimentation, in which farmers together with other stakeholders investigate ways to improve the livelihoods of local people.

The identification of local innovations is an entry point to PID. Development agents start by looking at how farmers are already trying to solve problems or grasp opportunities they perceive. Looking at these concrete local examples can lead to a situation analysis with farmer innovators and community members, as a starting point for planning joint research and development activities. The local community and the scientists and/or development workers jointly assess the current and likely future impacts of an innovation, in order to judge whether it will indeed be beneficial for a large number of families in the area, particularly for the poorer or otherwise less advantaged ones, and whether it might lead to negative environmental or social consequences. PID is an approach to research, extension and – above all – development.

3.3 Links between livelihoods, hunger and HIV/AIDS

As explained in the previous section, nutrition plays a crucial role in the progression of HIV infection to full-blown AIDS and death. HIV infection itself provokes a higher human energy demand. Protein and micronutrient needs are not necessarily increased by HIV infection, but immune function can be further compromised if these needs are not met. People who are malnourished when they become infected or who become malnourished thereafter are at risk of progressing more rapidly to AIDS: they can be said to be more *vulnerable* to rapid progression. People who are malnourished are also vulnerable to poor outcomes if and when they begin antiretroviral (ARV) therapy. Particular drug regimes have specific and sometimes complicated requirements in terms of the type of foods that can be eaten and the timing of meals. For the household, the illness and subsequent death of an adult member has a suite of consequences. Not only is the labour that the infected person contributed to the household's enterprises initially much reduced and then lost entirely. Of equal importance is the diversion of especially women's time to caring for the ill. Households are also often confronted by formidable expenses for treatment, hospital care and eventually for the funeral and attendant rites. Further demands are placed on a household when members or other relatives who had been living in town or city return ill: beyond the additional time and expense for the rural household, remittances they previously sent are now lost.

Rural households respond in a variety of ways to these developments. Savings are mobilised and assets sold to meet the expenses. As mentioned above, households often cultivate smaller areas and less intensively, and concentrate on crop or livestock species needing less attention and fewer inputs, producing less for the market and more for their own subsistence. Households may also increase their reliance on daily labour to meet immediate needs.

Children may be kept home from school both to reduce expenses and to provide additional labour. For many, the consequences of AIDS are devastating, and recovery to a decent level must seem at best a distant prospect. Families are all too aware that some of their responses push that prospect back further, for example, when they take their children out of school or sell land. Similarly, "tuberisation" – expanding the area planted to root crops like cassava and sweet potato at the expense of grains and legumes – can help people meet their energy requirements and reduce peak labour demand but, if relied on to excess for subsistence, can undermine nutrition.

The impact of AIDS is generally greater among individuals and households confronting other threats as well. Individuals infected with tuberculosis or malaria respond poorly to treatment and suffer worse outcomes when co-infected with HIV. Households initially poor are more affected by an AIDS-related illness or death than are wealthier households. The functioning of community-level institutions may be imperilled by the rising prevalence of illness and death among their members and leaders. This may affect the community-level safety nets of orphan care and support to the ill, as well as those charged with the management of natural resources. Support institutions providing credit, transport, information and education can also be weakened, negatively affecting the community.

3.4 The role of innovation in making people more resistant to HIV/AIDS infection

Being aware of HIV/AIDS and recognising one's personal risks do not mean one is able to alter or avoid them. Responding effectively requires breaking out of the hazardous situation. It demands innovation, of which we will cite a few examples from communities that have undertaken (or were assisted in) various activities to increase their *resistance* to HIV infection. There are communities that, in order to reduce HIV infection risks, have altered cultural practices including the way the young are socialised around sexuality and specific initiation rites. A number of agencies employ adult education approaches to promote awareness and recognition of personal infection risks that especially young adults face. ActionAid's Stepping Stones and Reflect are examples. The final step of these processes is a list of priority actions the participants will undertake. Often they relate to livelihood. Some HIV/AIDS education programmes have taken a further step. In rural Limpopo Province, South Africa, one such effort aimed in particular at enhancing women's ability to resist gender-based violence and its HIV risks by integrating a micro-credit initiative with the training. There are also "Famer Life Schools" programmes that, in their design, specifically address agriculture and NRM issues relating to HIV prevention and AIDS mitigation (Vuthang 2003, Ou 2004, White & Morton 2005, FAO 2007). Their curricula usually include "life skills", an appreciation of the disease environment and an emphasis on experimentation. Some rural development programmes (e.g. Oxfam and CARE) have tried, by applying a so-called "HIV/AIDS lens", to assess how HIV/AIDS is affecting their efforts and the communities they work with and how they should adapt their efforts to the new realities (CARE 2004). Nonetheless, there are few examples of locally led resistance to HIV/AIDS involving innovation in agriculture or NRM.

3.5 The role of innovation in increasing people's resilience

In some cases, local innovations in agriculture and NRM have enabled individuals living with HIV/AIDS and households enduring the consequences of AIDS-related illness and death to improve their situation. These are responses that go beyond the typical ones that are captured by "coping": they hold out a realistic prospect of people avoiding the worst consequences of AIDS or recovering faster to a level they would see as normal. This is what is meant by *resilience*. Like resistance, resilience refers to active and conscious responses. Resilience is more widely discussed in the literature than resistance, but there is still surprisingly little documented evidence regarding the specific innovations that make it possible. Examples include technical options that save labour or that spread it more evenly (e.g. growing cassava), making efficient use of remaining labour and other resources (e.g. using of donkeys instead of oxen), focusing effort on parts of landholdings and diversifying crops, exchanging labour to overcome peak labour demands (e.g. widows exchanging labour) and expanding opportunities by adapting new or existing technologies (e.g. adapting homegardens to grow new crops) (Du Guerny 2002). Innovation by rural communities has been critical in the struggle with HIV/AIDS and has often emerged long before outside agencies have appeared on the scene.

Support to households caring for the sick, burying the dead and raising orphans has generally built on existing practices and community institutions, formal and informal. An interesting case was found in the Southern Province of Zambia involving innovation at both household and community level (Connolly 2003). Pit farming, a form of conservation agriculture, is spreading rapidly there from farmer to farmer. This entails planting crops in pits about 120–180 cm in diameter and 60 cm deep filled with topsoil, compost and crop residues. The pits demand a large initial input of labour but much less than conventional approaches in subsequent seasons, and they conserve fertility and moisture. To enable HIV/AIDS-affected households to adopt the practice, villages have pooled labour, including that of unemployed youths, for the onerous tasks of digging and filling the pits. In central Malawi, many villages established funeral maize banks. Each household was expected to contribute a certain amount of maize to the bank each year, on which they were then entitled to draw in case of a funeral. Households unable to contribute were not eligible for support (Shah *et al* 2002).

There are synergies between mitigation and prevention that are important to recognise. For example, orphans who are well cared for and enabled to continue their education are less likely to fall into situations of infection risk such as survival sex. Innovations that enable them and those who care for them to surmount the immediate challenges can help them escape the downward spiral of infection-impoverishment-infection. The same may be true of innovations supporting widows who head households and often face hazardous choices.

3.6 Recognising and supporting local innovation

What marks an innovation as one that supports resistance to HIV infection or resilience to AIDS's effects are the intention and the effort made to adapt a certain practice or technology to a person's capabilities and particular situation. Some innovations may be more attractive to people especially susceptible to HIV infection and others to people especially vulnerable to

AIDS' worst consequences: young men and women, usually single, will clearly be seeking different kinds of opportunities than will heavily burdened widows and grandmothers.

But why do we not then see more innovation in agriculture and NRM by people and communities confronting HIV/AIDS? Firstly, there may well be local innovations that have emerged and been taken up, without much fanfare, in NGO or government programmes. Secondly, there may be local innovations "out there" that have not come to light because few people are looking or have an eye for them. Thirdly, local innovation may be stifled because of the atmosphere prevailing in the household or community. People may have wanted to innovate in a manner that could help them avoid a situation of HIV infection risk or deal better with the effects of AIDS-related illness and death, but may be thwarted from realising the innovation or talking about it. The opposite may also occur. There may be resentment about the priority that is given by some programmes to people affected or threatened by HIV/AIDS at the expense of those confronting other hazards to health and livelihood.

How does one, coming from the outside, support the innovation processes that are visible? We suggest that a workable response – one that advances the rights of people at risk – can be developed only by people and organisations that are committed to making a difference locally. The elements of that response may well be found in the diverse experiences of people and organisations that come to the problem from different sides, notably agriculture/NRM and health/AIDS. Hence, we laid out an approach that assisted our country teams in organising capacity-building and planning workshops to help people from these different backgrounds develop a common understanding of the relevance of agriculture and NRM to HIV/AIDS, and the place of local innovation. To this effect, we made use of the HIV/AIDS lens intended to aid practitioners and programme developers to re-view situations or actions in the light of HIV/AIDS, helping them to reflect on how the situation may be affecting (positively or negatively) HIV/AIDS-related risks and how the action might contribute to these effects.

To this effect, we assisted local partners in recognising and further developing local innovations in South Africa and Mozambique. The PROLINNOVA country programme in Ghana–South was involved in the initial activities of HAPID in the first year but, because of changes within the coordinating organisation, could not continue into the next phase of case studies. The following case studies therefore come only from South Africa and Mozambique.

4 CASE STUDY 1: SOUTH AFRICA

4.1 HAPID partners and locality

In South Africa, the HAPID study was implemented by Farmer Support Group (FSG), the outreach arm of the University KwaZulu-Natal (UKZN), in cooperation with a number of other NGOs and government departments, in particular Bhekuzulu Self-Sufficiency Project (BSSP) and the Department of Health in Dundee. These organisations were involved in mobilising and inviting other organisations to participate in the study. They were also involved in the identification of cases of innovation related to HIV/AIDS and follow-up work pertaining to selected cases.

FSG is based at the Pietermaritzburg campus of UKZN, which is within uMgungundlovu District Municipality, while its partners are located in various communities within KwaZulu-Natal Province, including Okhahlamba Local Municipality (uThukela District Municipality), Mtshezi Local Municipality (uThukela District Municipality), Jozini and uMhlabuyalingana Local Municipalities (uMkhanyakude District Municipality) and Msinga Local Municipality (uMzinyathi District Municipality). These sites are between 150 and 600km from Pietermaritzburg, with uMkhanyakude being the farthest away.

These four areas were targeted for the study for different reasons: Okhahlamba and Msinga Local Municipalities were selected because FSG was already working in these areas, while uMkhanyakude District Municipality and Mtshezi Local Municipality were selected because interested organisations that could mobilise farmers and community members on behalf of FSG were identified at these locations. Another reason why uMkhanyakude was selected was the existence of the linkage between FSG and Oxfam Australia around PID.

The HAPID study focused on rural communities in each of the municipalities. At all sites, the households have multiple livelihood strategies, with varying levels of involvement in agricultural activities, including homestead gardening, but much reliance on government social grants for pensioners and people with disabilities and on child-support grants.
In Okhahlamba Local Municipality, the organisations that partnered with FSG were more focused on agricultural development, while in Mtshezi the organisations had more of a focus on HIV/AIDS. Msinga is a poverty-stricken area and support is more integrated in terms of addressing both agricultural needs and HIV/AIDS, while uMkhanyakude sees a greater focus by organisations on food security and HIV/AIDS.

4.2 Activities undertaken

The various activities undertaken as part of the implementation of the HAPID study in South Africa are described in the sections below.

4.2.1 Inventory

An inventory of 70 organisations within KwaZulu-Natal (KZN) Province whose work related to HIV/AIDS was compiled, based mainly on Internet searches. In many cases, the information

on their websites suggested that the organisations were involved in some agricultural support activities.

In trying to use the inventory of organisations with information obtained from the Internet, it emerged that most of the organisations listed there could not be contacted. This could have been because they no longer existed or because incorrect contact details were given. Another strategy was therefore adopted: the names of relevant organisations were continuously sourced through personal contacts and were then included in the inventory.

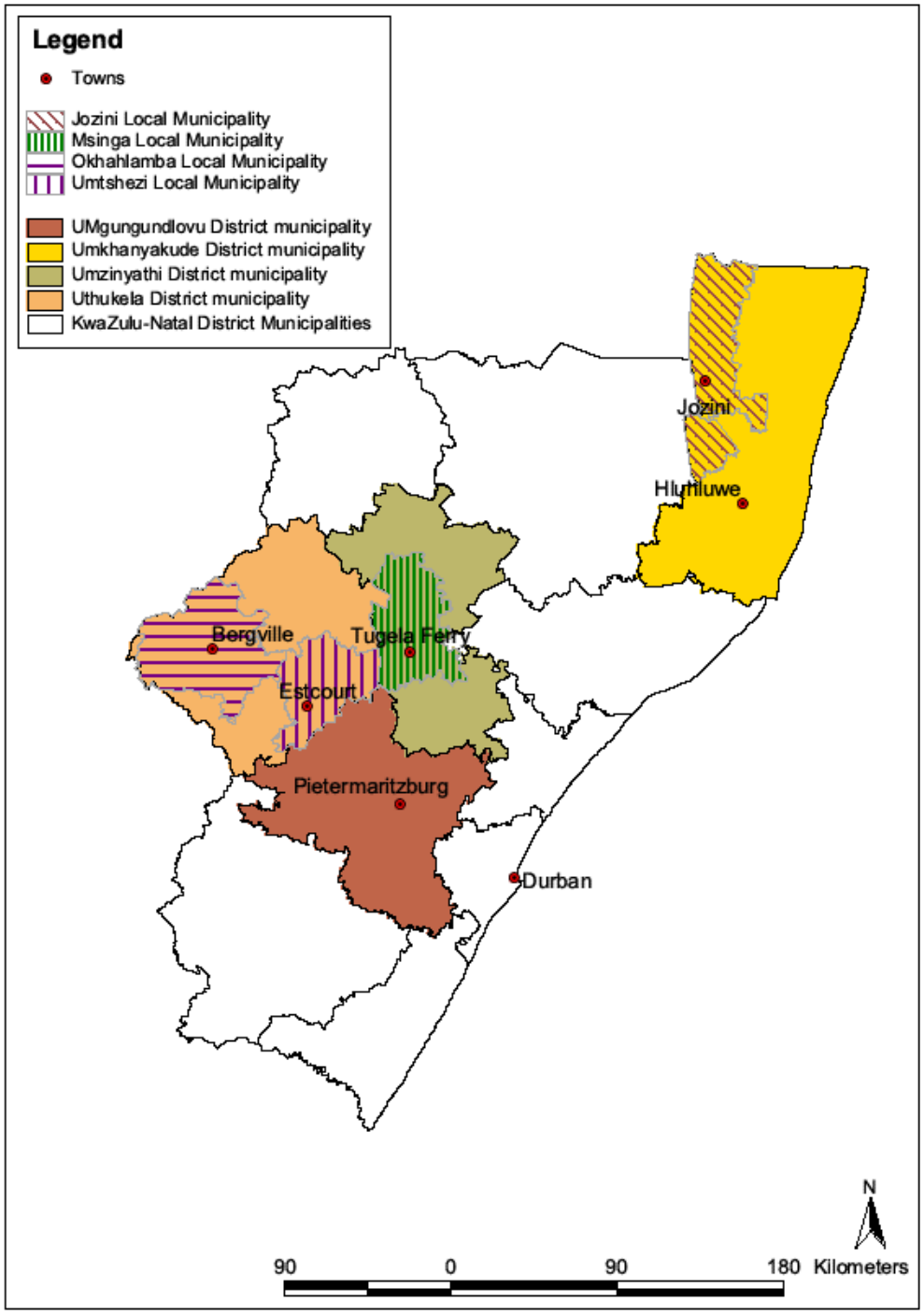

Figure 1: Map of KZN Province showing location of HAPID sites

4.2.2 Literature review

The FSG team involved in the HAPID study then made a review of relevant literature, in particular, any studies that might have been undertaken previously. It emerged that a small number of studies had been done on how households and communities change their practices or patterns in response to HIV/AIDS. Some of these adaptations could be regarded as innovative coping strategies (both social and technical), such as changing to less labour-intensive crops and establishing support networks, but most were seen as reflecting negative impacts of HIV/AIDS rather than as positive coping strategies. The lack of clear examples of how people are innovating in order to cope emphasised the critical void that the HAPID study was embarking to fill.

4.2.3 Inception meetings

Having identified organisations involved in HIV/AIDS work that had not been involved in PROLINNOVA-related activities, the next step was to hold an inception meeting to introduce the HAPID study. The initial idea has been to bring all relevant and interested organisations together for a one-day inception meeting in early June 2008 in Pietermaritzburg. Based on the inventory, organisations were invited to attend the inception meeting but attendance was very poor. The FSG then decided to hold separate inception meetings in each of the districts where they were already working or where interested partners had been identified (uThukela, uMzinyathi and uMgungundlovu and uMkhanyakude District Municipalities).

The Bekhuzulu Self-Sufficiency Project (BSSP), an NGO working on HIV/AIDS issues, organised a district-level inception meeting for uThukela District in Estcourt on 26 June 2008. It was attended by 21 participants from a range of governmental and non-governmental organisations.

The HAPID study was introduced to members of the Food Security Cluster of CINDI (Children in Distress Network) on 24 July 2008 in Pietermaritzburg. This meeting was attended by approximately ten organisations. CINDI brings together NGOs working on HIV/AIDS and children in uMgungundlovu District Municipality, which is the broad area around Pietermaritzburg.

The Provincial Department of Health organised an inception meeting for uMzinyathi District on 31 July 2008 in Dundee. Representatives from ten organisations (governmental – agriculture, health and municipalities – and NGOs) attended the meeting and agreed to take part in the HAPID study.

After FSG had established links with the Oxfam Food Security Cluster in uMkhanyakude, a meeting was held in Hluhluwe in August 2008 and was attended by representatives from seven organisations.

Most of the organisations that took part in these inception meetings had not previously been involved in PROLINNOVA activities. Of those working on HIV/AIDS-related matters, a number

of them were already involved in food security and agricultural/gardening activities, as agriculture is seen as an integral part of rural people's livelihood strategies.

All the inception meetings were organised in the following format:

- A presentation was given on PROLINNOVA and its activities.
- Participants were exposed to the concepts of local innovation and PID, discussed in the context of the HIV/AIDS pandemic.
- The relationships between HIV/AIDS and the livelihoods of people practising agriculture/NRM were discussed, including the potential contribution of local innovation and PID to preventing or mitigating the impact of HIV/AIDS.
- A background to the study was provided, including activities planned to be undertaken and accompanying timeframes.
- The manner in which institutions could engage in the study was discussed (e.g. in identifying cases of local innovation in the face of HIV/AIDS).
- At the end of the workshop, participants were asked to indicate whether they would:
    - Engage in the initiative
    - Attend the 3-day capacity-building and planning workshop (and decide on dates and suggest possible venues for this workshop).

In all meetings, participants agreed to participate in the study, although in some cases they indicated that they needed to confirm this with their superiors. A briefing note on HAPID was distributed at the inception meetings, so that the participants would share it with their colleagues and superiors in order to obtain their buy-in and support. In addition, each participant was given a copy of the organisational survey questionnaire, which they were asked to complete and return to FSG.

4.2.4 Organisational survey questionnaire

At the start of the study, a questionnaire was developed to obtain a better understanding of the organisations involved. The questionnaire was circulated to the organisations listed on the inventory. Because response was poor, FSG decided to circulate the questionnaire again at the individual inception meetings, accompanied by an explanation about how to complete it. The questionnaires were then sent back to FSG by fax, email and post.

The questionnaire survey served to provide a baseline regarding organisations' awareness of innovation as well as their profile and key activities. From the questionnaire, some knowledge was also obtained about what people do in order to cope with HIV/AIDS effects, particularly in using innovative coping mechanisms related to agriculture and NRM. Organisations also indicated their willingness to take part in the sharing and learning process about HIV/AIDS and PID. Most of the respondents were NGOs. It was found that many of them already had some understanding of participatory approaches and had used them in their work (e.g. action research, Farmer Life Schools, asset-based approaches etc), but that their understanding of the term "participatory" diverged. Approximately a quarter of the organisations were already able to give examples of innovative coping mechanisms. A large proportion of the respondents recognised the interconnectedness of gender inequality and poverty in limiting the effectiveness of HIV/AIDS prevention efforts.

4.2.5 Capacity-building and planning workshop

In order to create a more common understanding of the concepts associated with the HAPID study, FSG hosted a two-day workshop on 11–12 September 2008 at Fernhill Hotel at Midmar, which is outside Pietermaritzburg. Participants in the workshop were from the four districts (uThukela, uMzinyathi, uMgungundlovu and uMkhanyakude). Most participants had attended HAPID inception meetings held in their respective districts. They had also returned the questionnaire they were requested to complete. Returning of the questionnaire informed the decision on the number of organisations to invite to the workshop, as it suggested the eagerness of organisations to participate in the HAPID study. The workshop was attended by 27 persons (12 men and 15 women) from 22 out of the 25 development institutions that had confirmed attendance. The main purpose of the workshop was to plan and build the capacity of stakeholder organisations to take part in the HAPID study.

The capacity-building and planning workshop allowed for refinement of the criteria discussed at the inception workshops for identifying innovation cases:

- New or improved practices or systems
- Benefits accrue to the communities or households
- Should be locally developed.

In addition, the participants proposed that innovations should be environmentally friendly. Another outcome of the workshop was the recognition that rural households have multiple livelihood strategies and that the study should widen its focus beyond agriculture.

4.2.6 Identification and documentation of innovations

The next phase in the study involved identification and documentation of cases of local innovation (or local coping strategies) that could prevent infection or mitigate the impacts of HIV/AIDS. Workshop participants at the inception meetings and later at the capacity-building and planning workshop identified various cases of innovation related to HIV/AIDS. While it was initially foreseen that the study would focus on innovations related to agriculture and NRM, it was found that many of the organisations were not directly involved in agriculture and, when looking for local strategies to cope with HIV/AIDS, they tended to look more broadly than agriculture-related cases.

Identification of cases was largely the task of the different organisations participating in the HAPID study, while documentation of the cases was largely undertaken by FSG in collaboration with the organisations involved.

Three Mid-Term Review (MTR) workshops were organised in three areas where organisations taking part in the study were based. This was not done in UMgungundlovu District as there was a lack of a critical mass of organisations participating in the project. A workshop for uMzinyathi District was held at Dundee on 28 April 2009, one for uMkhanyakude District at Hluhluwe on 7 May 2009 and one for uThukela District at Estcourt on 26 May 2009. The aims of the workshops were to review the progress that the

participating organisations were making in identifying innovations and to define the implementation plan for the remainder of the study.

During the MTR workshops, a week was allocated for visiting identified innovations with which FSG was not familiar. The field trip was made to uThukela and uMzinyathi Districts between 9 and 12 June 2009. The two districts were selected because of their proximity to Pietermaritzburg and to allow pursuit of selected innovations. The visits to the innovations were specifically to fulfil the following objectives:

- To understand the broader context within which the innovations took place
- To consult the innovators and probe further on innovations, particularly where information was missing in the documentation
- To verify the information that had been provided about the innovations
- To identify more innovations, where possible
- To explore the linkages between the innovations and HIV/AIDS
- To identify and develop specific ways forward following the study.

The cases identified are described below. They are divided into those of a social nature, those of a technical nature and those that had very unclear links to HIV/AIDS. For those cases that were taken forward in some way during the later phase of the study, more in-depth information has been provided.

Social innovations related to HIV/AIDS

Child protection committees
Staff members of the Nqutu AIDS Committee in uMzinyathi District took part in the inception meeting at Dundee. They gave examples to illustrate how the communities they work with cope or deal with HIV/AIDS-related problems. They reported that children in the area are sometimes assaulted sexually by both strangers and relatives and that there are also many orphaned children as a result of HIV/AIDS. The community has elected a Child Protection Committee to whom children can report the problems, including HIV/AIDS-related matters, as one strategy for addressing the social problems. The committee liaises with the schools to create accommodation at schools that can be used by children so that they can avoid being abused on their way to distant homes.

Social support groups
Another strategy mentioned during the inception meetings was the development of social groups where children perform drama and poetry on HIV/AIDS-related issues. Participants in those groups have an opportunity to open up about HIV/AIDS through interaction with their peers. The involvement of development organisations in initiating these coping mechanisms was noted during the discussions; however, workshop participants felt that these examples could be used as starting points for identifying local innovations rather than being taken as innovations in their own right. Through these discussions, it emerged that some innovations go unnoticed by the HIV/AIDS workers, for example, the fencing of homestead gardens using innovative materials.

Family insurance

At one of the inception meetings, one of the groups presented an example of members of an extended family who started their own insurance as a family. Each member contributes a certain amount of money monthly to the family. The money is saved in a commercial bank under the family name and it is used to cover expenses associated with illness and death among family members. Even the family members who cannot afford to contribute are covered by the family money. The amounts that each individual contributes are different and depend on the individual's income. However, expenditure during crisis is the same for all individuals. This idea is new and locally developed at household level and it is of benefit to the family members concerned. It was therefore identified as an innovation, although it was not pursued later as one of the case studies, because the focus of these was on innovations that could be further developed through PID.

Ukonga savings club

Ukonga is a savings network in the Bhekuzulu area of Mtshezi Local Municipality. It comprises six clubs of 15 members each. Community members were made aware of the possibility of this savings approach by an official from the Department of Agriculture who had encountered this practice elsewhere. First of all, members of the community visited a savings club in a neighbouring community where the approach was already in practice. The community became interested in the idea and then formed its own savings groups. In the community visited, the number of members varied across groups, and this created problems when resources had to be shared amongst the groups. Ukonga members therefore modified the idea by setting the number of members in each savings group to 15. Every group member contributes R60 each month, which is used to generate interest through buying tickets for a competition that is hosted by the groups. The groups take turns in hosting the competition. The host group collects all the money for tickets and the fines for late arrivals and that money forms part of the interest.

Over and above the R60 monthly contributions, members additionally save money for the whole year. A member can save any amount of money. The money from surplus savings is loaned to group members and community members, who return it with 30% interest per month. The borrower can keep the money for more than one month, but must pay the interest on a monthly basis. The interest generated by each group is shared equally among all group members at the end of the year. Thus, the practice benefits both the poor and the better-off who can afford to save more. It benefits even the community members that are not part of the savings club, in that it improves their access to money without having to follow the bank procedures. The activities that take place during the savings days serve as a social benefit, whereby members can relax their minds and can interact with people with whom they can share their problems and find potential solutions.

Savings group members are keen to spread the practice to other neighbouring communities. If a community is interested, its members join an already existing Ukonga club. Once they have grasped the idea, they form their own club.

Purchase of goats for children

Another social innovation was identified in the Ncunjane area of Msinga Local Municipality (uMzinyathi District Municipality). The area is largely known for livestock keeping and is covered with thorny shrub vegetation, which is good for goats. HIV/AIDS-related deaths are prevalent in Msinga and people are looking for ways of dealing with the needs of children after their parents have died. An innovation that has emerged involves young mothers buying goats for their children so that they start acquiring some wealth to be a cushion in the event of death of the parents. Many young married women receive child-support grants from the government and some of them have been using the first payment, which is often an accumulated sum because of delays in processing their applications, to buy goats for their children. (In 2003, when the grant was about R100 per child per month, the first payment usually amounted to about R500 per child. At that time, goats costs R350.) This is an adaptation of a previous practice, where women used remittances from their husbands to buy goats that then belonged to the households.

The innovation that identifies children as owners of specific goats within the flock has increased the children's interest in goat keeping. In the area, there are families where parents have passed away but the children continue attending school because they have been able to sell goats, for which there is a fairly high local demand.

Art-making innovation

A young man from Nqutu who is HIV positive makes wood-carving pictures and also other kinds of handwork (see Figure 2). He was motivated by a need to keep himself busy and to stay away from crime and drugs that he had been involved with in the past. While this idea is creative, the benefits that it has for the community and for the innovator himself are very limited (due to limited market opportunities), though it does have therapeutic benefits to the innovator. The innovator has not yet thought about how he could improve the innovation. He has tried to pass on his talent to other youngsters in the community, but they have shown limited interest. In terms of being able to support innovative behaviour, there is a possibility that NGOs or other development agents could link up such people to viable markets. This would support HIV/AIDS-affected people by generating income. It is particularly useful for them because it is not a strenuous activity.

Figure 2: The innovator engaging in handwork

Mahongoza luncheon club

This is an informal structure that exists in Hluhluwe, uMkhanyakude District Municipality, to support elderly people who are affected by the impacts of HIV/AIDS. Pensioners often form social clubs called luncheon clubs, but this group of pensioners has been involved in income-generating craft activities and also uses the activity as a way of coping emotionally with the impacts of HIV/AIDS in their community. The activities they are undertaking are not strenuous and allow them to work whilst having their conversations.

The group consists of 20 members (7 males and 13 females) and meets three days a week. It was formed in 2003 as an Adult Basic Education Class. The group then engaged in other activities that could be of benefit. Candle-making was identified at the beginning and later they also added the making of shoe bags and school bags. The candles are sold at pension points and to the neighbouring resorts. A home-based carer from the Advent Creche Organisation visits members every week in their households to motivate them and see how they are. The activities of the project do not generate much income for the group and the small amount of money is also spent in buying inputs, though some materials (fabric) are donated by the neighbouring textile industries. The group is severely hampered by the lack of a market for its products.

The members started to engage in social issues affecting individual households, with HIV/AIDS being the most significant issue on the agenda. Members started sharing their experiences on how it has affected their households (some members have been taking care of sick family members but initially they did not know the cause of sickness). Through sharing of stories, members began to be aware of HIV/AIDS and some members were also reminded of the family members who had passed on. Members decided to go for voluntary testing and further received HIV/AIDS counselling. They are now also encouraging others to know their HIV status and are raising awareness about preventive measures (e.g. using gloves). Members emphasised that the club helps them to release stress because they talk about a number of issues affecting households; sometimes they sing, dance and pray together.

Technical innovations related to HIV/AIDS

Making chicken nests

The innovation of making chicken nests was documented using the survey questionnaire. Additional information was obtained from a local home-based carer (a person employed by NGOs to care for sick people) about the context in which the innovation took place. The information suggested that people around the area have become more open to discuss HIV/AIDS-related issues, but very few individuals or households are open about the effect that the disease has on them.

Members of the HAPID team visited the homestead of the elderly woman who makes the chicken nests. It was evident that there had been a change in the household's economic status in recent times (seemingly as a result of HIV/AIDS), particularly seen in the dilapidated state of the kraals and buildings. The woman looks after four orphaned grandchildren. Her main source of income is from selling the chicken nests she makes. Recently, she also

started receiving a government social pension. The main motive behind her innovation is a need to feed the household. The elderly woman sells the nests to community members for cash or exchanges them for food because the community members sometimes do not have money to pay for the nests. The woman used to make nests using grass only, but the community stopped buying the nests, complaining that they did not last for long. The woman then decided to use thin branches to make the nests stronger (see Figure 3).

Figure 3: The innovator with her chicken nests, being visited during a field trip

Using grass to construct a fence to protect a garden

An elderly woman in Bhekuzulu village within Mtshezi Local Municipality protects her garden using tall thatch grass instead of conventional (but expensive) wire fence. The woman came up with this idea after chickens damaged her vegetables. She had seen a fenced garden elsewhere in the community and then developed her own method of constructing the fence, using both wire and grass. Shortage of money to buy fencing material was a reason why the woman decided to use locally available grass. She takes care of her grandchildren and wanted to grow vegetables for them in her garden. The innovator is willing to share her experience with people who are interested in knowing about her practice. BSSP workers indicated that there are women who are on ARV drugs. They need better diets and would like to have vegetable gardens but are constrained by a lack of conventional fencing material. Therefore, there is a chance of spreading benefits of this idea to the larger community.

Figure 4: An elderly woman making a fence with thatch grass and wire to protect her garden (left) and vegetables grown in the garden (right)

Indigenous chicken weaning

Ms Thabede in Jozini Local Municipality in uMkhanyakude District Municipality uses an indigenous "weaning" practice that involves dipping a hen in cold water two weeks after her eggs have hatched. This procedure is said to make the hens forget their chicks immediately. This is a new practice to the community and was judged by the inception workshop participants to have the potential to promote faster reproduction of chickens. When this innovation was mentioned at one of the HAPID workshops, it emerged that some other communities also practise this.

As with many of the practices encountered, this one may be closer to indigenous knowledge than recent innovation and is not directly related to coping with or mitigating HIV/AIDS, but it could be useful to resource-constrained households, including those affected by HIV/AIDS.

Growing crops under mulch

FSG had been working with a farmer in Potshini (Okhahlamba Local Municipality), Mr Madondo. They have been jointly experimenting on a labour-saving method of growing potatoes under a layer of mulch rather than burying the potatoes under soil and making ridges. The new practice requires less labour not only when the crop is established, but also when the potatoes are later harvested. It would not be appropriate for large-scale production, but Mr Madondo saw its potential to benefit women who are growing potatoes in home gardens, especially in view of the advanced age of many of the women who are involved in agricultural activities.

Other farmers who had heard about this practice through their participation in a local farmers' forum had shown interest in using the same technique to grow other crops. The farmers' forum is a regular gathering of farmers where they share farming and other ideas. Mr Mbhele, in particular, was interested in modifying the practice (including applying it in raised planting beds) for growing tomatoes.

Innovations with little linkage to HIV/AIDS

Some innovations identified at the various workshops had little or no linkage to HIV/AIDS but were considered relevant for HIV/AIDS-affected households by the authors of this report and have therefore been included here.

Grey-water harvesting

An example of a support group that engages in agricultural activities such as growing vegetables was presented at one of the HAPID workshops. The support group started a new way of saving water by collecting grey water for irrigation purposes. Members have a big container where they collect grey water from the households. They also ask neighbours who are not part of the group to put their grey water in the container so that even more water is saved. The group then uses the grey water to irrigate their crops. The normal practice within the community is to harvest rainwater from roof surfaces. The idea of collecting grey water was developed by group members themselves and it was completely new in the community. It benefits the members by decreasing the intensive labour of fetching water, which is located

some distance away from the homesteads. This practice could have benefits for people in households where labour is depleted by HIV/AIDS; the workshop participants therefore regarded it as a potentially useful innovation.

Seed-banking system

The Kwangwanase Farmers Organisation (KFO) in uMkhanyakude District comprises 12 farmer groups from different villages as well as individual farmers. In total, the organisation has 244 farmers that are storing and distributing seed. The KFO was initiated in the 1970s by the farmers themselves with the aim of achieving seed security by reviving the use of traditional seeds. Information about the traditional seeds was collected from the elders in the area. The seeds that were no longer common in the area were identified and this information was used for planning the establishment of a seed bank. Initially, the local initiative did not gain momentum because of funding constraints. In the year 2000, with assistance from a local NGO called MDIC (Maputaland Development and Information Centre), the groups started multiplying and storing traditional seeds. Farmers can borrow the seed of the crops they like. After harvesting, farmers return the seeds to the storage house; they are expected to return five times the quantity of seed they borrowed. To sensitise schoolchildren about the importance of traditional seeds, schools are now involved in the programme. In collaboration with clinics, the home-based carers encourage communities to grow the traditional crops, which have essential nutrients for people living with HIV/AIDS. The KFO organises seed fairs to promote the growing of traditional crops. At the fair, farmers cook traditional dishes so that people are able to taste them.

Although the seed-banking system was started by the farmers that formed the KFO, they needed the support of MDIC to become strong. Other communities could take a same approach, but would probably also need similar support.

Egg incubation practice

At the inception meeting in Dundee as well as at the capacity-building workshop in that area, participants spoke about a woman in Nqutu who came up with an idea of using blankets to hatch chicken eggs. The common practice in most communities and households is buying day-old broiler chicks, growing them and selling them. While the new practice was not fully understood by the workshop participants, the woman was said to have decided to buy eggs and keep them in folded blankets for incubation. She keeps on turning the eggs until they hatch. In this way, she produces chicks without paying the expensive price of buying them. The idea is new, developed locally and benefits the household, and the workshop participants therefore classified it as an innovation.

One participant raised the importance of analysing issue of costs versus benefits accruing to the innovators. For the egg-hatching innovation, one needs to consider whether the new idea does not cost more than the common practice of buying chicks. Costs are not only monetary; time consumed in implementing the new idea should also be considered. Inputs required such as blankets, electricity charges and time spent monitoring the hatching process might be equal to if not greater than the costs required for buying chicks. Based on this critique, it was agreed that a cost-benefit analysis should be carried out for all documented innovations, especially when it comes to considering whether the innovations should be developed further

in a PID process. Despite efforts by FSG to do so, this case was never verified on the ground and was thus not taken forward in follow-up PID activities.

Use of bathwater for encouraging free-grazing goats to return to the kraal
At Ingwavuma in the uMkhanyakude District Municipality, it was said that one man has a practice to ensure that his non-herded goats always return home after grazing. It was said that he takes a bath and then gives the goats the water left from the bath; this attracts the goats to return home at the end of the day, so no-one has to collect them from the *veld* ("bush"). This reduces the labour required for goat keeping, which was seen as having relevance for households affected by HIV/AIDS. After this practice was shared at a HAPID workshop, other participants confirmed that it is fairly widespread, also used for dogs, and is seen as indigenous knowledge. The HAPID team in FSG did not investigate this further because it appeared to be a common practice in other parts of the province rather than a local innovation.

4.2.7 In-country sharing workshop

Following the phase of identifying and documenting cases of innovation, a provincial workshop was held on 24–25 November 2009 for the organisations that took part in the HAPID study in 2008/09. Participants also came from organisations outside the province, including Limpopo Province and Mozambique. At the workshop, which was held again at Fernhill Hotel outside Pietermaritzburg, the participants analysed and synthesised what had been achieved and learnt. The organisations concerned presented the promising innovations they had documented, and workshop participants then identified ways of improving or developing them. These included technical improvements as well as cross-visits to share them more widely.

Table 1: Methods identified to take the innovations forward

Name of innovation	Possible way forward
Chicken nests	Cross-visit
Seed bank	Cross-visit; setting up a second seed bank
Mahongoza Luncheon Club	Cross-visit and follow-up workshop
Garden grass fence	Improvement on the existing innovation, including replication of the innovation with different materials (e.g. reeds)
Egg incubation method	Test the innovation and improve elements of it
Buying goats for children	Cross-visit by groups Workshop on use of traditional veterinary medicines to strengthen the innovation (possible for MRDT[3] to facilitate it)
Innovative savings initiative	Cross-visit
Indigenous chicken "weaning"	Adoption and replication of the innovation in new locations Sharing the idea with other farmers

4.2.8 Follow-up activities

In December 2009, members of the HAPID international support team met with FSG, the NGO coordinating the HAPID study in South Africa, to reflect on the implementation. They

[3] Mdukatshani Rural Development Trust

decided to divert funds from a proposed regional sharing workshop in southern Africa to make resources available so that organisations that took part in the first phase of the HAPID study could work with innovators whose innovations were likely to have the greatest impact on their communities.

FSG developed a workplan at the beginning of 2010 and invited 17 participating organisations to indicate their desire to develop and submit proposals by 30 April 2010. The invitation asked organisations to identify the innovations (technical or social) they wanted to either improve or share more widely within rural communities. The organisations were also given the opportunity to identify new innovations and suggest how they proposed to take them forward. Interested organisations were provided with a template to assist them to develop proposals.

Each proposal submitted included activities to be undertaken which sought to address specific objectives in the proposal. The FSG team assisted the organisations in shaping and finalising their ideas into suitable proposals for activities that involved PID, demonstrating innovations and/or cross-visits. Each proposal had an accompanying budget and was submitted by the participating organisation to the FSG for review. Seven proposals were approved. Four proposals were for cross-visits to learn about the innovations (two social and two technical):

- Ways of creating livestock assets for children (women who use social grants to buy goats for their children)
- Alternative savings models
- Indigenous method of chicken weaning
- Alternative ways of making garden fences.

Another three proposals were for joint investigation or PID and these were also approved and implemented:

- Testing of different materials for constructing fences around home gardens with the Bhekuzulu community in Mtshezi Local Municipality
- Goat-keeping initiative for children in Msinga – to explore matters of decision-making and ownership
- Planting of tomatoes in raised beds under mulch.

Information pertaining to the follow-up activities supported by the HAPID team at FSG and other partner organisations is provided in the sections below.

Fencing for home gardens

The innovation by the elderly woman from Bhekuzulu Village to use thatch grass, wire and poles to fence her garden had been identified by BSSP, which saw an opportunity to spread the innovation in the community so that more households could produce their own vegetables. Most individual households (who can afford to) have tried fencing with wire and other means, but these failed to curb crop destruction by livestock, particularly goats and chickens. BSSP regarded the poor fencing as having a negative effect on food production in homestead gardens. It proposed to work with 12 women from HIV/AIDS-affected

households, including the original innovator, in constructing garden fences and planting vegetables. BSSP saw the proposal as linking well with the government-promoted “one home one garden” programme.

These follow-up activities started with a cross-visit and then went on to include some experimentation with the idea by the 12 households. BSSP arranged a cross-visit for farmers from Bhekuzulu to visit farmers in Okhombe (Okhahlamba Local Municipality) who use reeds and twigs for constructing fence, so that the Okhombe and Bhekuzulu farmers could learn from each other. The experimentation phase involved making resources available to the 12 women to allow them to try out and possibly adapt the fencing innovation. The purpose of this was to have more cases that would allow for assessing the impact that such practices can have on the livelihoods of a wider cross-section of households affected by HIV/AIDS.

To start the work, BSSP organised a workshop on 11 August 2010 with potential participants to discuss the concept of innovation as well as to brief them about HAPID. Participants were identified based on the following criteria:

- Households already involved in food production in home gardens
- Households willing to participate in the initiative and to inspire other community members.

After the workshop, the 12 women from Bhekuzulu visited the Siyawela Household Garden Group in Okhombe Village on 2 September 2010. Besides exchanging experiences with different fencing materials (e.g. reeds, twigs and grass) and the related implications for maintenance, the groups also shared other farming technologies (soil fertility maintenance, moisture conservation, intercropping, composting, etc.) practised by Siyawela members.

Figure 5: Crops in a garden protected with a fence made of locally available materials

From September to October 2010, BSSP facilitated the construction of the home garden fences by the 12 households. With technical support from BSSP, the women planted vegetables in November, although planting had to be delayed because of late rains.

FSG facilitated a self-evaluation with the women in January 2011. This revealed that ten had constructed fences, using poles, wire and grass rather than other materials, as only grass was available in their area. This showed that they were interested in the fencing innovation

but had difficulties in obtaining some materials such a wire fencing and/or thin branches that are not locally available. The self-evaluation also revealed that the farmers in this area are not knowledgeable about farming and there is a need to strengthen their knowledge of farming practices.

BSSP felt positive about being able to promote food security by supporting primary production and saw support to local innovation (e.g. providing fencing materials such as poles and wire) as a way of doing so. BSSP plans to introduce a vegetable market day, aligned with savings sessions that will allow farmers to share information. It also plans to organise nutritional sessions with the Department of Agriculture's Home Economics Division for the ten households that actually took up the innovation.

Raised beds for growing tomatoes

Mr Madondo, a farmer in Potshini Village in Okhahlamba Local Municipality, has been experimenting with a new labour-saving method of growing potatoes under a layer of grass mulch. Mr Mbhele, a farmer in Busingatha Village in the same municipality, heard about this innovation through the local farmers' forum and adapted it, working with raised planting beds. This practice could be suitable for HIV/AIDS-affected households, particularly those with a depleted labour force.

Mr Mbhele used a variety of materials such as gum-tree leaves, weeds, old animal hides, kraal manure, and tins to make raised planting beds and then placed the mulch on the beds rather than on the natural soil surface. He uses this technique for growing tomatoes. During the farmers' forum, other farmers raised several questions about this new practice. For instance, farmers wanted to know whether the practice saves labour, increases yield and protects the crops from birds, frost, heat etc. This innovation was developed further through a joint experiment involving Mr Mbhele, Mr Madondo, FSG and other farmers.

Figure 6: Tomatoes on the raised bed and harvesting of tomatoes on a raised bed

The tomatoes under the conventional treatment grew better than those on the raised bed during the first week. This was attributed to the higher fertility in the flat-bed treatment, compared to the materials on the raised bed, which allowed early establishment. From two weeks after the seedlings were transplanted, tomatoes on the raised bed picked up and grew faster and were healthy.

Indigenous chicken weaning

Mrs Thabede from Jozini Local Municipality in uMkhanyakude developed an innovation for weaning her hens from their chicks and encouraging them to start laying eggs again. This innovation has the potential to improve the livelihoods of people infected and households affected by HIV/AIDS, since chickens are an important resource for women and children. This method allows for quicker multiplication of the flock and can thus provide both more protein and more income with little financial or labour input.

FSG works in partnership with local community-based organisations (CBOs) providing support to six community groups in Msinga around improving food security. Some constraints have been encountered in farming, especially scarcity of water, prevalence of drought and limited land suitable for farming. As a result, gardens proved unviable in meeting household needs, and other ways of achieving food security had to be sought. This led to a decision by FSG to use the chicken weaning innovations from uMkhanyakude and expose two groups from Mkhuphula and Machunwini, both in Msinga Local Municipality, so that they could experiment with the innovation.

As a way of exposing the groups to the innovation, workshops were arranged in each village where the practice was to be demonstrated. Two FSG staff members facilitated a discussion with the groups on the concept of innovation. In each village, FSG identified two households with hens and three-week old chicks for the demonstration. Before being shown the new practice, each household set up a shelter for chicks and secured the feed to be provided to the chicks for a month following the weaning. In the period from 30 August to 1 September 2010, Mrs Thabede visited the two communities in Msinga. The visits allowed for sharing not only about the weaning practice but also about general care of the chicks after weaning.

Figure 7: A hen being immersed in water as part of the chicken-weaning practice

After Mrs Thabede demonstrated her practice at the two households in Machunwini and after further sharing of the innovation with other groups at monthly meetings of FSG partners, an additional three households in Machunwini and a third household in Mkhuphula experimented with it. In late 2010, they built shelters, weaned chicks and fed them with local

feed. The only factor limiting the application of the practice is the need to provide supplementary feed to the young chicks, which might be problematic for those households who cannot afford it. The small chicks also need some form of housing where they can be fed.

It also proved important to include a monitoring and reflection process that involves the community members taking part in the activities. It was clear that a critical mass of farmers is needed to allow for meaningful evaluation of innovations and joint experimentation processes. Each innovation must be tried by at least three farmers with similar circumstances.

Goats for children

Mdukatshani Rural Development Trust (MRDT) is an NGO that works with rural communities in Msinga Local Municipality. Like many other rural communities in South Africa, Msinga is faced with poverty and has prevalence of HIV/AIDS coupled with limited agricultural potential, since the area is prone to drought. This area does, however, have trees and shrubs on which goats can browse. The community relies heavily on government social grants (pensions and child-support grants) and some households receive remittances from family members working in urban areas such as Johannesburg and Pretoria.

MRDT came across a social innovation in an area of Msinga called Ncunjane, where young women have been buying goats for their children with the child-support grants that they receive from government. This innovation seeks to secure the future of their children, and is highly relevant in the context of HIV/AIDS, where many young people are dying and leaving orphaned children that the community must find ways to support. The women indicated that they were not sure of the sustainability of the social grants, hence the decision to purchase goats as a long-term investment.

MRDT supports goat production in the Ncunjane area, and submitted a proposal to the HAPID team to support this innovation. MRDT hosted a farmers' day to launch the support initiative. Three additional goats were supplied to children in three households, with the funds from HAPID, to encourage discussion about the decision-making, ownership and responsibility for care of the goats. In addition, a system will be initiated where the offspring of the goats will be passed on to other children within those three households. The farmers' day was also used to make the broader community aware of the innovation and the support initiative, and lessons will be continuously learnt throughout the process. MRDT committed itself to support goat production (i.e. building the capacity of people to treat the goats for diseases and experimenting with and educating the communities on good animal husbandry practices). This ensures that the initiative is of maximum benefit to the communities in general, and the children in particular.

In addition to the support initiative by MRDT, six groups working with FSG in Msinga were taken on a cross-visit to Ncunjane on 13 October 2010 to learn about the innovation. It was anticipated that elements of the support given by MRDT could be replicated with the six groups. The objectives of the day were to share the innovation, to stimulate innovativeness amongst the groups as a way of increasing their options and to create awareness about livestock management in general: weather conditions, type of feed, water scarcity and

disease management – including the importance of proper use of medication for prevention or treatment (reading of instructions for the correct usage). The farmers were also introduced to and encouraged to make use of the Animal Health Technician from the Department of Agriculture. The goats-for-children innovation offers the opportunity to reduce the vulnerability of communities to the impacts of HIV/AIDS, although the challenges of raising livestock under these difficult conditions, especially the food scarcity during winter, should not be overlooked. Support to innovative processes of improving food availability for goats could also be key to the success of this innovation in the longer term.

Savings and credit model

The above-mentioned Ukonga Club is an informal savings network of six groups in Bhekuzulu in Mtshezi Local Municipality. In order to allow for wider sharing of their experiences, plans were made for two groups (Siyawela Household Group Okhombe from Okhahlamba Local Municipality and Fabeni Group from Msinga Local Municipality) to visit the Ukonga Club to learn from them and to see whether the Ukonga model is something they could adopt (and adapt, if necessary).

As part of community-strengthening activities of FSG, the Siyawela Household Group and the Fabeni Group are involved in homestead and communal gardening to improve food production. Both groups had previously been exposed to appropriate technologies in farming and use these technologies to address their problems. Members of these groups are participating in community *stokvels* (traditional savings groups, the members of which make monthly contributions that are shared between the members at the end of the year) that were set up for different purposes. They realised that farming activities has never been catered for in such initiatives, even though they have to buy inputs for farming. Therefore, during the visioning exercises conducted by FSG in 2008 and 2009, the groups expressed an interest to engage in savings activities.

The model that is used by the community in Bhekuzulu was then introduced to the Siyawela and Fabeni Groups, which went to visit Bhekuzulu to learn from the group there. The objectives of the visit were for the Siyawela and Fabeni Groups to explore other savings models managed locally and to learn about processes and systems applied in running the savings model. Though the two groups were not part of the Bhekuzulu saving structure, the model allowed them the opportunity to engage in the process of managing savings on the day of the exposure visit. Upon return to their respective areas, both groups held reflection sessions to review the lessons and decide on the way forward. Both groups noticed that the Ukonga Club has no bank account, and rather keeps the capital at a supermarket in the nearby town of Estcourt. They had advised the Bhekuzulu group to open a bank account so that the capital is safe and will accumulate interest.

The Siyawela Group adopted some aspects of the Bhekuzulu saving model, i.e., making the saving activity more of a social event where there is sharing also of other knowledge. In addition, it plans to start making jam for sale to raise funds for farming inputs, an idea gained at a farmers' forum. The Siyawela group also shared information about the Bhekuzulu saving model with other forum members. The Fabeni Group decided not to adopt the Bhekuzulu

approach to group saving, but rather to apply the savings-and-credit group model used by other groups in Msinga. They found the Bhekuzulu model too complicated and felt that they had not obtained sufficient understanding from the visit. The exposure visit, while interesting, perhaps did not capacitate them sufficiently to actually implement the innovation. From this experience, one sees that models cannot be imposed on others; this is fully in line with the philosophy of promoting local innovation. It also became clear that the duration of a cross-visit needs to be given consideration during the planning phase. In addition, while the Fabeni Group did not adopt the new model, their concept of saving was encouraged through the cross-visit. The group had already started the local savings approach and decided to continue with it, rather than adopting what they had experienced in Bhekuzulu. Thus, exposure to new ideas need not oblige people to adopt what they have seen, but can nevertheless give encouragement to what they are already doing.

4.3 Conclusion

The HAPID study and follow-up activities in South Africa encouraged the involvement of a new group of organisations and communities in activities that recognise the role that local innovation processes can play. By focusing on HIV/AIDS, it also broadened the cases of local innovation that had previously been identified through PROLINNOVA. There has been increased awareness about the potential benefit of supporting local innovation processes amongst the organisations that took part in the HAPID activities, and they have seen it as an additional tool that can strengthen their work. It is hoped that sharing of the outcomes of the study will lead to changes in the ways that organisations, beyond those directly involved in the study, support HIV-infected people and affected households,.

5 CASE STUDY 2: MOZAMBIQUE

5.1 Study partners and locality

In the case of HAPID-Mozambique, the implementing agency was initially the UK-funded NGO VETAID but, when this organisation ceased to work in Mozambique in 2008, the role was taken over by the Association for Rural Community Development (ADCR), an NGO based in Xai-Xai in Gaza Province about 250 km north of Maputo, the capital of Mozambique.

When the HAPID initiative started, the then members of the PROLINNOVA–Mozambique National Steering Committee (NSC) and the host organisation VETAID decided that the focus should be on Gaza Province, where all partners have offices, and which is the province with the highest incidence of HIV/AIDS.

The study covered four districts in the south-eastern part of Gaza Province, namely Chokwé, Chibuto, Guijá and Xai-Xai, which were said to be the worst hit in terms of HIV/AIDS in the whole province. In Gaza Province, 25% of people ages 15 to 49 are said to be HIV-positive[4], compared to a national average of 11.5% estimated adult HIV prevalence rate (aged 15–49) in 2009. Among women in Gaza, the prevalence is even higher: 30% are infected with HIV[5].

5.2 Activities undertaken

The activities undertaken in Mozambique as part of the HAPID initiative are described below.

5.2.1 Inventory

About 30 organisations, including CBOs, local and international NGOs, networks, government institutions and education institutions, were covered by the survey that led to the compilation of an inventory. Organisations on the inventory were then invited to participate in the HAPID initiative.

5.2.2 Inception meeting

On 17 December 2008, the inception meeting was held in the town of Xai-Xai by ADCR, the PROLINNOVA-Mozambique host organisation. It aimed, among other things, to:

- Present the results of the inventory
- Analyse the inventory results and the status of ongoing activities in the country
- Create a common understanding on the HAPID objectives, its activities, and the expected key outputs
- Raise awareness on the concepts of local innovation and PID among new organisations
- Start building partnerships for exploring possibilities of using a PID approach in HIV/AIDS prevention and mitigation work.

[4] http://www.npr.org/2011/07/06/137536170/in-mozambique-a-fight-to-keep-babies-hiv-free
[5] http://www.unicef.org/infobycountry/mozambique_statistics.html#76

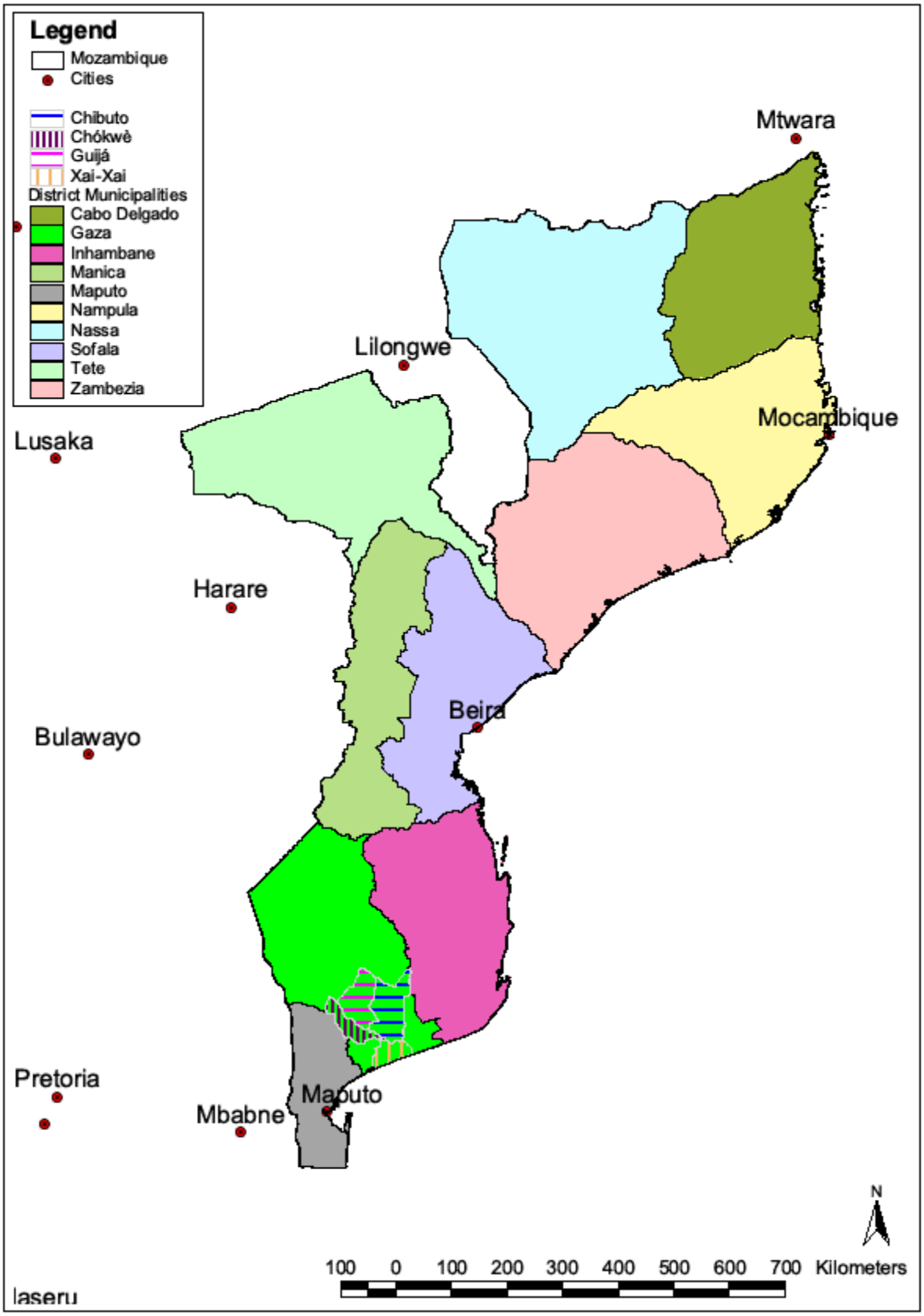

Figure 8: Map of Mozambique showing the province and districts where the HAPID study was made

The event brought together 34 representatives (19 men, 15 women) of organisations and institutions working with HIV/AIDS-affected communities in five districts of Gaza Province: Xai-Xai, Chokwé, Guijá, Chibuto and Manjacaze (although the last-mentioned had not been covered by the survey questionnaire). The neighbouring Inhambane Province sent one representative from the government livestock services. Five of the organisations that had answered the questionnaire did not send representatives, while six organisations that had not answered the questionnaire were represented at the workshop.

5.2.3 Capacity-building and planning workshop

The capacity-building and planning workshop was held on 28–30 January 2009, a month after the inception meeting. The workshop was attended by 30 people (16 men, 14 women) from NGOs, CBOs and the Provincial Government Department of Agriculture (two participants). Many of the organisations that had attended the inception meeting were again represented. Five main points were on the workshop agenda:

- Implications of HIV/AIDS in agriculture and NRM (in the livelihoods of individuals, households and communities)
- Introducing PROLINNOVA, PID and local innovation(s)
- Relevance of PID in the face of HIV/AIDS
- Documenting local innovations
- The way forward.

5.2.4 Identification of cases

Participants in the capacity-building and planning workshop agreed on which PROLINNOVA partner organisations would identify and document innovations in each district:

- CCM (Mozambique Christian Council) and AMIMO (Associação de Mineiros Mocambicanos /Association of Mozambican Miners in South Africa) in Chibuto;
- ADCR (Association for Development of Rural Communities) and FONGA (Forum of NGOs in Gaza Province) in Xai-Xai;
- World Relief International, PEDELAR (which works for the welfare of the elderly, widows, single mothers, people living with HIV/AIDS and orphans) and ADECOSICRIO (Association for Community Development, Fighting HIV/AIDS and Support to Orphans and Vulnerable Children) in Chokwé; and
- Kulima, Nupuwele and Save the Children in Guijá.

HAPID study team leaders (also called “HAPID district focal points”) were also named for each district: CCM for Chibuto, FONGA for Xai-Xai, World Relief International[6] for Chokwé, and Kulima for Guijá.

The next activity was the identification of cases of local innovation related to HIV/AIDS. By the end of December 2009, a total of seven cases had been documented. Two of them had been identified and documented outside the target area for the study through other partners, without using HAPID funds: one innovation in Chigubo District in Northern Gaza Province

[6] Later, World Relief International was replaced by PEDELAR as HAPID district focal point.

and another in Moamba District in Maputo Province. The seven cases were later presented at the in-country sharing workshop.

Homemade car using scrap metal

Mr Felizardo Baloi, 32 years old, from Cumba Village in Chokwé District, made a car using an electric power generator, scrap metal from an old motorcycle and corrugated iron. This car is very useful in the area, especially in emergency cases to carry seriously ill people, including people infected with HIV/AIDS, for medical care. There is no public or private transport in this remote village, mainly because of the bad condition of the access roads. The homemade car can carry up to 500 kg, and fuel consumption is 1 litre per 10 km.

Figure 9: Mr Baloi's homemade car

Ox-cart with wooden wheels

Mr Franscico from Tomanine Village, Guijá District, has constructed an ox-cart using only wood and other locally available materials. It is used for transportation of crop products, charcoal, fuel wood, etc.

Health syrup

Another innovation identified at the workshops was a medicinal syrup that is made from the following ingredients: *Aloe vera*, *Aloe liso*, *Moringa oleifera*, garlic, ginger, honey, African potato juice, yellow "*dema*[7]" and brandy or gin (for preservation). The innovation was presented by Ms Rebeca Gomes on behalf of the Chiluva Farmers Association from Goane 1 Village in Moamba District.

Figure 10: The ingredients used to make the medicinal syrup

[7] The Ronga name for a type of an indigenous tuberous root

Use of rapé in protecting vegetable gardens against pests
Mr Sebastião João Tivane from Chongoene Village, Xai-Xai District places *rapé* (ground tobacco leaves) around his garden to deter pests from entering his field. This idea came as an attempt to find a solution to the problem of pests in vegetable gardens so as to increase production and provide adequate food for the innovator's HIV-infected relatives and friends. Horticulture is being promoted by support organisations to improve the diet of people living with HIV/AIDS. The biopesticide is being used by many infected / affected farmers in Gaza Province, as it is an inexpensive alternative to conventional chemicals used as pesticides.

Use of biopesticides in vegetable gardens
Another local innovation identified through the HAPID initiative was a biological pesticide made from a mixture of different plants that is used to control various pests in vegetable gardens. Homestead vegetable gardens are an effective way of improving household nutrition, which is a key component of HIV/AIDS support. The innovation was developed by Mr Domingos Joaquim Nguenha. He uses the following locally available plants: parts of the *Dinda* tree that is locally used as a natural shampoo (Latin name unknown), r*apé* and leaves of the syringa *(Melia azedarach)* tree. He adds soap to the mixture to increase its adhesive capacity.

Making tree-nursery bags from grass
ADCR promotes vegetable and fruit production in Zinhane Village, Chigubo District, to diversify people's diets. In commercial nurseries, plastic bags are used for tree seedlings, and the bags have to be "imported" from Chokwé, which is more than 300 km away. Local communities have realised how important vegetable and fruit production is in improving the livelihoods of vulnerable people (for both nutrition and income generation through sales). They feared that, after the ADCR-supported project was over, it would be very difficult for them to continue to obtain plastic bags, but bags for the seedlings are required for good production. They started trying out bags made from local materials. Firstly, they made bags using palm-tree leaves, but were not satisfied with the results. Then they tried using bags made of grass. This innovation proved to have many advantages compared to the plastic bags or to the bags made from palm-tree leaves. During transplanting, the plant does not have to be removed from the bag. With their rapid decomposition, the grass bags improve soil fertility, while decomposition of the ones made from palm-tree leaves took much longer.

Bark of chanfuta *(*Afzelia quarensis *or pod mahogany) tree used as soap*
In Chibuto District, community members use the bark of the pod mahogany tree (*chanfuta*) as soap. This could be seen as an indigenous knowledge rather than a local innovation, as its use is quite widely known.

5.2.5 In-country sharing workshop

Nearly one year after PROLINNOVA–Mozambique started identifying and documenting local innovations with relevance to HIV/AIDS, it held a two-day sharing workshop in the ADCR meeting hall in Xai-Xai on 27–28 January 2010. Twenty-eight participants (18 men and 10 women) attended the workshop. There were 17 participants from NGOs and CBOs, six from government institutions, four local innovators and one resource person from FSG who was

involved in the HAPID study in South Africa. Other than FSG, these were largely the organisations that had been involved in previous HAPID-related activities in Mozambique.

The local innovations that had been identified through the HAPID initiative were shared at the workshop by those participants who had come across them.

Table 2: Summary of the cases presented at the HAPID sharing workshop

Organisation / Innovator	District	Cases presented
FONGA (Forum of NGOs in Gaza Province) & AREPACHO (Associação para a Redução da Pobreza Absoluta de Chongoene / Association for Absolute Poverty Reduction in Chongoene)	Xai-Xai	Use of tobacco as pesticide in horticultural nurseries
Save the Children, Kulima, Nupuwele + Mr Francisco (innovator)	Guijá	Oxcart with wooden wheels
CCM (Mozambique Christian Council) & AMIMO (Association of Mozambican Miners)	Chibuto	Soap from the bark of *chanfuta* tree
PEDELAR (an organisation that works for the welfare of the elderly, widows, single mothers, people living with HIV/AIDS and orphans) + Mr Baloi (innovator)	Chokwé	Homemade car using scrap metal
PEDELAR & ADECOSICRIO (Association for Development of Communities, Combating AIDS and for Orphans and Vulnerable Children) + Mr Domingos (innovator)	Chokwé	Biopesticide
ADCR (Association for Development of Rural Communities)	Chigubo	Making tree-nursery bags out of grass
Chiluva Farmer Association, Moamba District, Goane (represented by its chairperson Ms Rebecca Gomes)	Maputo	Syrup for treating various diseases, produced using mixture of indigenous plants

At the workshop, participants worked in groups to suggest steps for improving and supporting the cases of local innovation. The following steps were suggested and presented in the plenary:

- Capacitate innovators in issues of local innovation and the value of his/her innovation in community development
- Carry out functional study on local innovations
- Identify partners for possible financial or material support, including training
- Advocacy for local innovation, involving famers, community leadership, NGOs, government institutions, mass media, national and international cooperation partners
- Multiplication of indigenous plants for easy access to ingredients used in producing the medicinal syrup; most of the plants used are collected from the bush but, in the dry season, bushfire often destroys them, people have to travel long distances to collect them, and women – who make this syrup – are always at risk of being bitten by snakes
- Joint experimentation with much emphasis on validation and eventual determination of dosage, composition, quantification of ingredients, preservation and collateral effects of the medicinal syrup

- Sensitisation of some communities on the importance of fruits in the diet of people, particularly of persons living with HIV/AIDS; currently, in some communities in southern Mozambique, cultural beliefs prohibit the eating of fruits
- Joint experimentation on biopesticides and fertilisers, with much emphasis on validation and concentration and effects in different crops
- Involvement of community members, farmer associations, media and other stakeholders in the whole process.

5.2.6 Follow-up activities

In late March 2010, a HAPID team was set up in Mozambique to oversee and monitor the implementation of the follow-up activities in the two selected districts of Guijà and Chokwé. It was made up of the HAPID–Mozambique study coordinator, the PROLINNOVA–Mozambique NSC chairperson, the PROLINNOVA–Mozambique national coordinator, one representative of the partner NGOs, and one representative of institutions of higher education. The team was chaired by the HAPID–Mozambique study coordinator.

The main follow-up activities undertaken in Mozambique after the initial HAPID study were:

- Analysing the surroundings / context of each of the seven identified innovation cases
- Selecting two cases for improving / strengthening the local innovation (one social and one technical) through a PID process
- Joint experimentation (PID) on the two selected cases
- Preparing the final report on the joint experimentation process.

In April and May 2010, the HAPID–Mozambique coordinator and district team leaders visited four of the identified local innovations (the ones that were either easier to reach or fairly similar to other innovations). During these field visits, they tried to better understand the context of each local innovation.

Based on their findings, they selected two cases for further experimentation: i) the oxcart with wooden wheels (its method of usage was chosen as a social innovation) in Guijá District; and ii) the biopesticide in Chokwé District (chosen as a technical innovation).

In each of the two districts, a HAPID working team (also called “PID team”) was established, made up of the district team leader and one lecturer/consultant (an agronomist in Chokwé District and a social scientist in Guijá) from the Higher Polytechnic Institute of Gaza. The PID teams reported directly to the HAPID–Mozambique coordinator.

The type of research undertaken differed for the two cases. In the case of the oxcart, the research was focused on understanding how the oxcart is used and the benefits it provides for the community. Ways of improving the oxcart and the system by which it is used were identified through discussion with various stakeholders. In the case of the biopesticide, it was the intention to engage in joint experiments that would verify the effectiveness of the pesticide and confirm the dilution rate to be used.

Investigation of the oxcart innovation

Background

This innovation was identified by Mr Benedito Magaia (from Save the Children) in Tomanine, which is situated in Guijá District in Gaza Province, 7 km from the district town Canicado. Tomanine does not have substantial natural resources, except agricultural lands and wild-growing medicinal plants. Crop farming and cattle-raising constitute the main activities of the community. Secondary activities include building houses of wattle and daub, selling forest products (firewood, charcoal and stakes) and producing/harvesting straw for house roofing. The locality does not have any health centre. People have to walk to reach the nearest health centre, which is situated in Canicado town. When Mr Magaia observed the oxcart in the village, he regarded it as a local innovation with direct relevance to HIV/AIDS, as it allows for transportation of sick people to the health centre. Because Tomanine has no other form of transportation, the oxcart is a valuable resource for the village.

Methodology

Before started the research work, the HAPID–Mozambique coordinator briefed the hired social scientist on PROLINNOVA in general, and on HAPID and joint experimentation in particular, so that he could understand the objectives of the study. He was also provided with documentation about the network, the HAPID proposal, and the initial documentation about the identified oxcart with wooden wheels.

The researcher's tasks were to lead the study on the social impact of the innovation in the community of Tomanine, Guijá District, and to identify opportunities for strengthening the local innovation.

As methodology, the scientist chose to conduct interviews and to make a survey among members of the Tomanine community. For this purpose, he developed a short questionnaire, which he shared with the HAPID team. The scientist then met PROLINNOVA partner NGOs operating in Guijá District (Save the Children, Nupuwele and Kulima) and trained them in applying the questionnaire. He also collected secondary information from local administrative and community authorities. Forty people were interviewed: 30 by people from the partner organisation and 10 by the scientist himself. They consisted of 14 men and 26 women and their ages ranged between 20 and 70 years. The process of information collection, which started in late October 2010, took about 15 days.

Figure 11: Photograph of the oxcart with wooden wheels

Findings from the research

Some of the key findings from the social impact study are summarised below. All the people interviewed knew of the existence of the oxcart and many of them had made use of it. Some only knew of it through comments made in the community, while a few knew of it through talking with the manufacturer.

In terms of purposes for which it is used:

- Most of the beneficiaries had used the oxcart to carry agricultural products and forest products (firewood, wood, charcoal etc), and almost half had used it for transporting sick people. It had also been used by a large number of people to carry coffins.
- To a lesser extent, it had been used to carry water, to transport (able-bodied) people and to carry other goods.

While beneficiaries used the oxcart for different activities, the main use is the transportation of agricultural and forest products.

The use of the oxcart is free of charge in situations such as the transportation of a coffin during a funeral. This shows that there exists a clear solidarity between the members of the community, and that the oxcart is thus of great importance at a social level.

The amount of money paid for transporting sick persons and pregnant women to the health centre is less than that paid for using the oxcart for other purposes. Sometimes, the owner will agree to receive payment at a later point in time, which suggests that communities have found internal mechanisms to overcome certain financial constraints.

Community members may hire the oxcart daily, weekly or monthly, depending on the purpose for which they want to use it. Normally, people hire it in the morning and return it at the end of the day. It is hired for only one activity at a time. If the user should wish to use it for an additional purpose, an additional amount of money must be paid. The demand for the oxcart is greater during the harvest time, when it is used to transport agricultural produce.

There are no cultural taboos that impede the use of the oxcart. The owner does, however, require that users return it to his home at night for the sake of controlling its use effectively.

The oxcart presents various advantages including the transportation of various goods from the town to the community and vice-versa. This is particularly important because of the lack of other means of transportation in this community. In addition, a great advantage of the oxcart is that it can be used to access places where a car cannot travel. The oxcart reduces the time that users must wait to transport their goods to the market, and is also cheaper than making use of a car. It is a suitable means of transportation for the resource-poor Tomanine community also because it does not require fuel to run.

The oxcart presents other technical advantages: it does not destroy tarred roads, it does not become stuck in the mud and it rarely breaks down. When it does break down, it is easy to replace the broken parts and the wheels.

Disadvantages of the oxcart include its limited size and capacity. To transport large loads of goods, several trips must be made, which takes time. Another disadvantage is the small size of the wheels and the lack of bearings. If the goods being transported are very heavy, the wheels become worn out since there is no metal support.

Way forward

The beneficiaries, local community authorities and the innovator himself suggested that, to maximise the use of this innovation so that a larger number of people can benefit from it, the innovator needs to be assisted with materials in order to make more oxcarts. It was also suggested that he should improve the dimensions of the cart and the size of wheels in order to facilitate the movement of goods and increase the lifespan of the cart. Possible improvements mentioned included the use of iron brackets, metal axes, bearings and better material. Numerous respondents mentioned the need to train other members of the community to make oxcarts, as a way to ensure that a greater number of people can benefit from using them.

Some respondents indicated that open talks should be held in order to inform public opinion about the oxcart, while others felt that the hire rate should be decreased. It was suggested that a permanent contact between the maker and the community might lead to the adoption of better practices in the use of an oxcart; this would allow it be more resistant to wear and longer lasting, especially if the type of material used to build the oxcart is also given consideration so as to reduce the constraints currently observed.

In terms of the system for hiring out the oxcart, especially during peak periods, it was suggested that it would be better to prioritise the use of the oxcart in terms of a programme that is well defined by the owner. This was seen as a mechanism to make sure that the owner is able to respond positively to a greater number of demands, though an increase in the number of oxcarts would also be required.

The partners that were involved in identifying and documenting this local innovation could work with the owner and the broader community to find ways to address some of the challenges they had encountered. An improvement in the system of hiring the cart could ensure that more people are able to benefit from it, especially those that have urgent needs, such as for transporting sick people. This impact study can be seen as the first step in the process of developing and strengthening the local innovation. The identification of mechanisms to improve it has drawn on the knowledge and experience of the local community. The involvement of an engineer could contribute useful knowledge to the process of improving the design of the cart, but it should be based on the experiences and needs of the local people.

The owner of the oxcart said that he would improve the oxcart if funds were made available but, at the time of the study, no source was identified that could fund either technical improvements or strengthening the system for hiring the oxcart. While technical improvements may require funding, strengthening the system for hiring the oxcart could be taken up by the community without funding, if a locally based organisation saw value in facilitating this process.

Biopesticide trial

The second activity to be undertaken as part of the follow-up to the identification and documentation of local innovation cases was a trial to verify the use of a locally made biopesticide. Vegetable production is seen as important for improving households' levels of nutrition, which is key to mitigating the impacts of HIV/AIDS. Many households headed by children or women would benefit from growing their own food, but do not have the resources to purchase conventional pesticides. The participants at the in-country sharing workshop regarded the biopesticide as a local innovation with relevance to HIV/AIDS, but felt it was necessary to verify the effectiveness of the mixture in repelling or killing pests.

As in the case of the oxcart, the hired agronomist was briefed on PROLINNOVA, HAPID, local innovation and joint experimentation, and provided with the necessary documentation, in an effort to ensure that he understood the objectives of the study. Before starting fieldwork, the agronomist drafted a research protocol, which he shared with the HAPID team. However, the team rejected the protocol, because the scientist had developed it in isolation and neither the role of the farmer innovator nor that of PROLINNOVA partners was mentioned anywhere in the document. The team judged that the innovation was being "highjacked" by the scientist. Subsequently, the agronomist developed another protocol, which he said had been developed together with the innovator and the local focal point. This second version showed some improvement on the first effort and was approved.

In late September 2010, in collaboration with the innovator, the agronomist established a nursery for tomatoes and cabbage on a plot of 374 m^2 in Chokwé District for experimentation purpose. The experiment aimed to investigate the effectiveness of the biopesticide at different concentrations on the two crops. Unfortunately, they could not complete the experiment on account of various constraints, the main one being heavy rains.

5.3 Challenges and lessons learnt in Mozambique

A number of challenges were encountered when planning and implementing the joint experimentation. This led to some useful lessons for the HAPID team:

- The network failed to identify researchers from within its active partners and only drew them in later, which meant that they lacked understanding of PROLINNOVA-related concepts. The two hired scientists were not well conversant with the concepts of local innovation and joint experimentation. That was one of the reasons why it was difficult to make them understand the objectives of the study, especially the active involvement of the farmer-innovator as a partner in the experiment. This explains to some extent the

delays observed with the biopesticide innovation. In the case of the oxcart, it was also the reason why there was not sufficient focus on putting into practice some of the community's suggestions to improve the use and functioning of the oxcart.

- The focal points did not play as active a role in supporting the researchers as had been foreseen. It seems that this was due to the fact that the partner organisations involved in the joint experimentation continued to see PROLINNOVA activities as additional to their own work programmes. Delays in disbursement of funds from PROLINNOVA International because of the time needed to finalise the administrative requirements also contributed to the delays in the implementation of these activities.
- The main problem in carrying out the biopesticide trial was that the researcher associated with it was not always available when other stakeholders were making monitoring and evaluation visits to the site. He preferred to communicate through Internet, but access to Internet was very limited for most of the other stakeholders.
- Despite the incomplete outcomes of the joint experimentation, the two scientists involved said that this activity added value to their regular work as lecturers and researchers and that they would like to be involved in other similar PROLINNOVA work in the future.

5.4 Conclusion

The implementation of the HAPID study in Mozambique raised much enthusiasm and interest among organisations already involved in PROLINNOVA as well as in previously non-involved organisations, including government institutions, on account of its original and novel approach to dealing with HIV/AIDS.

Communication between stakeholders proved very challenging because of the very limited access to e-mail and telephone, and difficult vehicle access to some areas when it rained – especially given the remote location of some of the partners. The distance between the communities where the partners work led to poor levels of interaction in Mozambique. This impacted negatively on the implementation of the planned HAPID activities. Future initiatives of this kind must either find ways to improve communication or must focus their activities around smaller geographic areas to ensure more frequent interaction.

The appointment of a fulltime HAPID coordinator, which was not possible within the limited budget for the study, might have improved the level of interaction and the outcomes of the study, as it would have seen the implementing team allocating more time to HAPID activities, especially to monitoring and evaluating the follow-up activities. On the other hand, this scenario may have only led to more responsibilities being allocated to the coordinator, rather than being integrated into the work programmes of the partner organisations. It may have been more effective to focus on supporting a PID process in close proximity to the coordinating organisation and then to allow other partner organisations to learn from the experiences of the stakeholders directly involved.

6 LESSONS LEARNT DURING THE HAPID STUDY

This section summarises a range of lessons learnt through the implementation of the HAPID study and follow-up activities in Mozambique and South Africa.

Types of innovation identified

- People in many development organisations in the two countries were not familiar with identifying cases of local innovation and this made the identification of cases directly related to HIV/AIDS challenging.
- Very few of the cases identified were directly related to HIV/AIDS, although many were relevant, since affected households are often resource-challenged and need to look for low-input ways to support their agricultural activities and try to achieve food security. Given the high incidence of households headed by women and children in the study areas, innovations that relate to chicken production have a fairly clear link, as chicken-raising is an activity that women and children can handle easily. Some cases of "innovation" seemed to be simply survival strategies and had little promise to improve the situation of HIV/AIDS-affected households.
- The cases of innovation encountered included both social and technical innovations. In organisations concerned with agriculture and NRM, technical innovations are often more readily identified, but the focus of the HAPID initiative on HIV/AIDS seemed to lend itself better to identifying cases of social / institutional / organisational / cultural innovation. From discussions at workshops, it emerged that a number of support programmes, such as for home-based care, have built on social innovations that have emerged from within communities and have then been adapted by NGOs and CBOs.
- The relevance of certain innovations to gender and youth also emerged from the study. Many of the innovations had been developed and/or were being practised by women who are responsible for caring for family members. The "goats-for-children" case had direct relevance to youth, and has some resemblance with child-protection committees elsewhere in South Africa.
- Some innovations make people less vulnerable (more resilient) to the impacts of the disease and could, in fact, also make people more resistant to infection. For example, girls who had, as young children, received goats through the social innovation mentioned above may be less likely to have to engage in risky sexual habits in order to gain some income when they become older, and could therefore be less likely to become infected by HIV. The goats can also play a key role in mitigating the impact of loss of a parent.
- Among the partners in development organisations, there was some overlap between their concepts of local innovation and indigenous knowledge, which was sometimes regarded as local innovation. While endogenous innovation processes have doubtless led to changes in indigenous knowledge over time, the improved techniques or ways of doing things that were developed generations ago and have become integrated widely into the communities would no longer be termed "local innovations" in the context of PROLINNOVA.
- In South Africa, because of the fact that the HAPID study was carried out only in KZN, there were possibly insufficient links with the broader PROLINNOVA–South Africa network, which is active also in Mpumalanga, Limpopo and Northern Provinces.

- It would seem that many people in the study areas in Mozambique and South Africa are not actively responding to the impacts of HIV/AIDS in a conscious way, which is probably why their responses are not clearly recognisable as innovations related to dealing with HIV/AIDS.
- The health system in South Africa seems to be focused on service delivery (e.g. through the provision of pills) rather than promoting self-help processes that stimulate people to address their own challenges. Most organisations working with people living with HIV/AIDS are used to working within this context, and this may be another reason why relatively few cases were recognised of local innovation directly related to dealing with the challenges of HIV/AIDS.

Involvement of partner organisations

- In South Africa, the HAPID initiative focused mainly on organisations working in KZN on HIV/AIDS-related issues that had not previously been involved with PROLINNOVA. This broadened the number of organisations in the province that have been exposed to the concepts of recognising and supporting local innovation. Most organisations in South Africa that work in the fields of agriculture and NRM, especially NGOs and CBOs, are already very much aware of the impacts of HIV/AIDS on their work, so the focus of HAPID was on introducing and exploring the possibilities of a PID approach within the context of HIV/AIDS. This was somewhat different from the original plans for HAPID, which included helping also the existing PROLINNOVA partners to understand better the implications of coping strategies in HIV/AIDS-affected communities for the partners' own work in promoting PID, Although one of the original aims of the HAPID initiative had been to build partnerships between organisations supporting HIV/AIDS-affected households and those working with PID in the PROLINNOVA network, in South Africa, HAPID served mainly to expose a new set of organisations to participatory research and development approaches and an appreciation of local innovation.
- In Mozambique, where the PROLINNOVA country network had started more recently than in South Africa (2008 as compared with 2005) and where the network had little funding before the HAPID study commenced, many of the new partners involved in HAPID did not already have knowledge of participatory research and development approaches.
- In both South Africa and Mozambique, informal networking proved to be more effective in identifying and involving potential partners than more formal and "neutral" approaches such as searching via the Internet.
- The initial inception meeting in South Africa proved challenging. The poor attendance by invited organisations led to the decision to have district-level meetings. These were better attended, possibly because they were more conveniently located or because they were hosted by local organisations with which other NGOs and CBOs had already established a relationship. It seemed to be effective to start locally and build interest and then bring organisations together to allow for learning and exchange between different districts.
- It proved difficult in Mozambique for partner organisations to see HAPID activities as a part of their work programmes rather than as an additional activity, but seemingly less so for some of the partner organisations in South Africa such as BSSP and MRDT, which saw the benefits of this approach in adding value to their work. The intention had indeed been that participating organisations would see the value that this could add to the work they were already doing and would therefore not expect "project" resources. It should

perhaps have been made clearer in both countries that HAPID was not intended to be a separate project but rather as something to enrich the ongoing process of the organisations' work: that they could take forward cases of local innovation identified through the study, and integrate these into their own programmes, without waiting for a next "HAPID project" phase.

Follow-up activities

- Some experimentation and some sharing activities took place as follow-up activities in both countries. The experimentation in Mozambique was largely driven by researchers rather than being truly farmer-led. The piecemeal nature of the HAPID initiative, with follow-up activities being an add-on at a later stage rather than having been planned from the outset, may have been the main reason for this. In South Africa, there was a combination of experimentation, informal investigation (e.g. with different methods of fencing homegardens in Bhekuzulu) and local innovators demonstrating their new practices in order to stimulate uptake and/or adaptation.
- The experience in both countries made it obvious that capacity building in facilitation skills (especially given the number of social innovations encountered in HIV/AIDS-affected households and communities) as well as in farmer-led participatory experimentation is needed for all parties, including researchers and farmers.
- Real buy-in from not only the local development organisations but also the researchers is essential to ensure effective support to innovators during joint investigation processes. It was interesting to note that, after having taken an innovative approach is seeking local initiatives of farmers and communities, there is a tendency to revert to conventional approaches to supporting them. It is important to find ways to allow the innovators to drive the process – carrying out investigations and experimentation in ways that the local people regard as necessary and meaningful.

General findings

- Now that many people in Mozambique and South Africa are not actually dying from AIDS, support organisations are starting to recognise the need to focus on how to strengthen the livelihoods of HIV/AIDS-affected households. It would seem that at least some NGOs working on HIV/AIDS-related issues, especially in South Africa, now see the PID approach as an option for strengthening the work that they do.
- It is clear that discussion about relevant innovations gives local people more options to choose from, and can also lead to confirmation of what they are already doing. An example is the savings club case in South Africa, where one group, after visiting and being exposed to a new model for savings, decided not to make use of the new model but rather to pursue more vigorously the one they have known previously.
- The identification of local innovations should be a starting point in a development process, in which "outsiders" (primarily research, development support and educational – e.g. adult learning – organisations) work with innovators and other community members to develop more effective ways to deal with the challenges they face. The local innovations reflect the people's current motivations, and working with these innovations is a way of picking people up where they are and going in a direction they want. The process also gives recognition to innovators, which encourages creativity by communities – this may be through the development of new ideas or the adaptation of ideas that they

encounter elsewhere. Farmers and communities are innovative, often out of necessity, and they are usually willing to help others, but the process needs to be effectively facilitated. This requires facilitation skills, training in which needs to be incorporated into capacity-building programmes for researchers and development workers.

- The HAPID study and the follow-up activities in exploring and sharing local innovations made all participants – including community members – more aware of the role that local innovation can play in overcoming the challenges that communities face.

7 RECOMMENDATIONS

Having completed these exploratory activities concerning local innovation and PID in the face of HIV/AIDS, the HAPID international team reflected on the challenging nature of the study and what should be done if and when future initiatives of this nature are undertaken. In order to identify local innovations that are closely linked to and/or relevant for people living with HIV/AIDS, much more intensive preparation and closer accompaniment and coaching of all partners would probably have been needed. Moreover, considerable capacity-building would be necessary to prepare potential partners for collaboration in PID processes. In future initiatives, attention should be deliberately given not only to innovations that reduce communities' vulnerability to the impacts of AIDS-related illness and death but also to innovations that reduce the susceptibility of communities and reduce the likelihood that people become infected in the first place. Such work would need to be integrated into a community-development approach within HIV/AIDS-affected communities.

What is still needed as follow-up to the HAPID study is to provide space and time for the organisations that were involved to reflect on how they could integrate a PID approach into their future work. Not only top-level decision-makers in these organisations but also decision-makers in relevant local government organisations should be invited to participate in this reflection process. If an initiative of this nature is to have long-term effects, it will also be important to influence higher-level policymakers in government and donor agencies. HAPID partners and other interested organisations will still need to develop strategies to do this.

Drawing on the experiences of the HAPID study, there should be more reflection among existing PROLINNOVA partners in other provinces and countries as to whether the innovations they are identifying and supporting through PID are related or relevant to the situation of people living with HIV/AIDS. PROLINNOVA partners also need to think about how the incidence of HIV/AIDS can affect the farming households and communities with which they are working and what implications this could have for promoting farmer-led participatory innovation.

Future PROLINNOVA activities at a national level in Mozambique and South Africa, whether workshops, exchange visits or simply electronic exchange of information, should actively involve the organisations that have been connected to the HAPID study. This would allow for a mutually enriching exchange of ideas and experiences.

The main findings and lessons from the HAPID study should be presented at the next PROLINNOVA International Partners Workshop in 2012, and the network should consider how these lessons can be made more widely known, also among policymakers and donor organisations outside of Mozambique and South Africa.

8 CONCLUDING REMARKS

The HAPID initiative was initially planned to consist of studies taking place over a 2-year period; it was then expanded to include follow-up activities intended to support and strengthen cases of local innovation identified through the studies. The addition of follow-up activities saw the timeframe for HAPID being extended from December 2009 to December 2010.

The first step in the process – mobilising new partner organisations working on HIV/AIDS-related issues – proved to be difficult and, even after new partners became involved, there continued to be difficulties in terms of obtaining long-term buy-in and collaboration in the follow-up activities. Nevertheless, in the process of identifying cases of local innovation relevant to the HIV/AIDS situation, a range of interesting technical and social innovations were identified. Most of them could be seen as contributing to making communities less vulnerable to the impacts of HIV/AIDS.

The follow-up activities gave partner organisations an idea of how local innovation processes can be strengthened and how this could strengthen the organisations' work programmes and the support that they provide to communities affected by HIV/AIDS. In some cases, the follow-up activities could have been made more effective by bringing key additional partners, such as research scientists, into the process earlier and ensuring that they had a better understanding of PID. This would probably have required more intense support from the other PROLINNOVA partner organisations in the two countries that already had some experience in joint innovation processes.

The HAPID study was effective in creating awareness amongst a new group of stakeholders on the role of local innovation in addressing challenges faced in rural parts of southern Africa. It also led some support organisations to reflect on how the innovations they encountered relate to HIV/AIDS and how individuals, households and even communities develop effective coping strategies.

Moving beyond this initial study, the organisations that participated in it and recognised the benefits of local innovation and PID will need to share more widely the lessons learnt. They will need to develop strategies to engage in dialogue with decision-makers and policymakers about these experiences and to influence approaches to supporting people living with HIV/AIDS and well as approaches to rural development in general in areas with a high prevalence of HIV/AIDS.

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