

Community Drought Mitigation Project Final Report Project No. 050/19284

Enhancing sustainable livelihoods in drought-prone areas of Mudzi (Makaha Ward) and Gwanda (Gwanda Ward 19)

Building on Adaptive Strategies









INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT INSTITUT INTERNATIONAL DU DÉVELOPPEMENT DURABLE

Community Drought Mitigation Project Final Report Project No. 050/19284

Enhancing Sustainable Livelihoods in Drought Prone Areas of Mudzi (Makaha Ward) and Gwanda (Gwanda Ward 19) Building on Adaptive Strategies

Country: Zimbabwe

Prepared for the Community Drought Mitigation Program, CIDA Southern Africa Region

Prepared by Charles A. Agobia Project Manager, Community Adaptation & Sustainable Livelihoods International Institute for Sustainable Development 161 Portage Avenue East, Winnipeg, MB, R3B 0Y4, Canada

September 1999

TABLE OF CONTENTS

1.	EXE	CUTIVE SUMMARY	1
	1.1 1.2 1.3	SUSTAINABLE LIVELIHOODS APPROACH IMPLEMENTATION CHALLENGES PROJECT ACHIEVEMENTS	2 3 4
2.	APP	ROACH AND METHODOLOGY	7
3. A(IMP GREEM	LEMENTATION CHALLENGES AND AMENDMENT TO THE CONTRIBUTION IENT	.10
	3.1 3.2 3.3	POLICY ANALYSIS AND LOBBYING OF THE GOVERNMENT ENDA'S CAPACITY TO IMPLEMENT PROJECT AND WORK PLAN AMENDMENT TO THE CONTRIBUTION AGREEMENT	. 11 . 12 . 13
4.	PRO	JECT ACHIEVEMENTS BY OUTPUT	.13
	4.1 4.1.1 4.2.2 4.2 4.2.1 4.3 4.4 4.5 4.6 4.7 4.8	 EVALUATE PAST SOIL AND WATER CONSERVATION PRACTICES	. 13 . <i>13</i> . <i>14</i> . 15 . <i>19</i> . 21 . 22 . 25 . 26 . 26 . 27
5.	PRO	JECT CONCLUSIONS AND RECOMMENDATIONS	. 28

LIST OF FIGURES

Figure 1. From left to right: Dr. Daniel Mtetwa (Managing Director, ENDA), Dr. Nola-Kate Seymoar (Deputy to the President, IISD), Charles Agobia (Project Manager) and Mowdin King (local project	
coordinator)	L
Figure 2. IISD's sustainable livelihoods approach	
Figures 3a and 3b: Soil and water conservation technologies demonstrated	;
Figure 4: Seed fair and exhibition	j
Figure 5: Vegetable gardens	j
Figure 6: Project discussion and village workshop14	ŀ
Figure 7: Dmonstration of various technologies—soil and water conservation	j
Figure 8: Community participating in gully reclamation in the field	1
Figure 9: Growing of trees and vegetables in the same field (agroforestry demonstration)	}
Figure 10: Women fetching water from the borehole)
Figure 11: Members showing their produce from the garden	2
Figures 12, 13 and 14: Growing of jatropha curcas and oil extraction and soap making	ŀ
Figure 15: Resource centre	,
Figure 16: Community participating in assessing impact of the project through a pra workshop	}

LIST OF ACRONYMS

CIDA	Canadian International Development Agency
CDMP	Community Drought Mitigation Project
CDMC	Community Drought Mitigation Committee
ENDA-ZW	Environment and Development Activities - Zimbabwe
IISD	International Institute for Sustainable Development
PRA	Participatory Rural Appraisal
SD	Sustainable Development
SL	Sustainable Livelihoods

1. Executive Summary

The International Institute for Sustainable Development (IISD) believes that sustainable development requires policies and practices that integrate environmental stewardship, economic development and social well-being. In 1993 IISD developed a sustainable livelihoods framework to integrate policy, local adaptive strategies and contemporary knowledge, leading to sustainable livelihood systems. To test the framework, IISD implemented one of the nine community drought mitigation projects (CDMPs), funded by the Canadian International Development Agency (CIDA) in partnership with a local organization, Environment and Development Activities (ENDA-Zimbabwe).



Figure 1. From left to right: Dr. Daniel Mtetwa (Managing Director, ENDA), Dr. Nola-Kate Seymoar (former Deputy to the President, IISD), Charles Agobia (Project Manager) and Bowdin King (Local Project Coordinator).

The project entitled, "Enhancing Sustainable Livelihoods in Drought-Prone Areas: Building on Adaptive Strategies" was implemented in the Makaha Ward of Mudzi Rural District Council of the Mashonaland East Province and in the Mlambapele Ward of the Gwanda Rural District Council of Matebeland South Province of Zimbabwe. The objectives of the project were to:

- Enhance community capacity to adapt to shocks and stresses and harness sustainable livelihood options by bringing into focus through Participatory Rural Appraisal (PRA) the local knowledge and skills by which the communities have for generations maintained livelihoods in the drought-prone areas of Gwanda and Makaha;
- Demonstrate that local adaptive strategies, when reinforced by appropriate policy and technologies, can lead to sustainable livelihoods and reduce community vulnerability to drought, and to promote the widespread adoption of this approach in drought-prone regions;
- Apply the sustainable livelihoods approach to land and biodiversity conservation in arid and semi-arid lands;

- Sensitize policy-makers about the linkages between policies, community adaptive strategies, science and technology and sustainable livelihoods of the poor; and
- Help policy makers redesign policies and the policy-making process to help households and communities achieve sustainable livelihoods.

1.1 Sustainable Livelihoods Approach

The sustainable livelihoods approach is an integrated development method, which brings individual approaches together to achieve sustainable development. It involves an assessment of community assets, adaptive strategies and technologies contributing to livelihood systems, and the analysis of cross-sectoral policies and investment requirements to enhance livelihoods.



Figure 2. IISD's Sustainable Livelihoods Approach.

IISD defines a 'livelihood' as the capabilities, assets (stores, resources, claims and access) and activities required for a means of living. A livelihood is sustainable if it can cope with and recover from stress and shocks, maintain and enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation.

IISD's entry point to the sustainable livelihoods approach for sustainable development is the community's strengths, which for drought mitigation are their adaptive strategies. This approach acknowledges that communities are both subjects and objects of change and that they have much

strength and much knowledge about their own situation. It puts strong emphasis on the question of sustainability in economics, environmental and social well-being of people, governance and policy as well as their linkages. It uses empowerment rather than welfare, improves the productivity of existing livelihood systems and creates new opportunities sustainably. As part of the empowerment of a community, the sustainable livelihoods approach allows for the development of indicators to measure improvements in livelihood systems and the sustainability of these systems.

1.2 Implementation Challenges

The project faced a number of challenges during its implementation period; among them were the following:

- The delivery of the project from a distance, since project officers were based in Harare, far from the project areas. The IISD project manager was based in Winnipeg for the first half of the project. This made effective delivery and beneficiary participation in first half of the project very difficult.
- A lack of accommodation and office facilities for project staff seriously affected the delivery of the project, as it was difficult for the project officers and field assistants to interact with the community. Serious project activities were undertaken for only a few days a month, when the project officers were in the area.
- ENDA-Zimbabwe's top-down rather than bottom-up approach to the design of the CDMP and in the initial stages of the delivery of the project made community participation in decision-making difficult, even though local institutions such as Community Drought Mitigation Committees (CDMCs) were created to take ownership of the project. To address the issue, the project had to put more emphasis on training of the CDMC, the local leaders, in the last half of the project period and in empowerment of the community.
- ENDA-Zimbabwe's lack of expertise and capacity to handle the policy component of the project and poor networking ability with like-minded institutions made the policy analysis and promotion of the concept of sustainable livelihoods among decision-makers impossible.
- The minor drought of 1997 resulted in the borehole in Gwanda providing insufficient water for the community garden, hence the community garden in Gwanda had to be relocated to the nearby river, where it could provide sufficient water for both human consumption and watering the gardens.
- The design of the project called for establishing just two community gardens per ward, which were not able to support all the households in the project areas. Hence, those villages close to the gardens benefited more and the gardens became more or less village gardens. To address the problem, the program officer, together with the first local project co-ordinator, obtained funding from the Canada Fund for two more boreholes and gardens.
- The design of the project did not have any provision in the budget for training, marketing and construction of office facilities in the project areas. Hence, the budget had to be revised to allocate some funds for training and construction of office and accommodation facilities in the two project areas.
- As the project was implemented, there were a number of staff turnovers and changes in the management structure of the project. The policy analyst and the agriculturist/environmentalist left the project after two months. The local project coordinator and the agronomist left in

December 1997. The staff turnovers had serious impacts on the progress of the project. For example, the simultaneous departure of the local project co-ordinator and the agronomists left the project with only one professional staff member for four months, during which the project came to a standstill. The failure to replace the environmentalist resulted in the environmental aspects of the project not being carried out.

To address these implementation challenges, IISD redesigned the project in the first half of 1998. CIDA agreed to relocate the project manager from Winnipeg to Harare in July 1998, so he could manage daily activities more effectively. IISD and CIDA shared the cost of the relocation.

1.3 Project Achievements

Despite the challenges described above, at the end of the two years and nine months, the project had increased each community's ability to be self-reliant, enhanced their capacity to engage in development dialogue with government and donor agencies, created awareness among the community about the value of local knowledge and of their own capacities for self-reliance. The communities' understanding of the integration of indigenous and contemporary knowledge, adaptive strategies, and their relationships to sustainable livelihoods was greatly enhanced.

A number of appropriate technologies for soil and water conservation practices were demonstrated. Demonstrations of various technologies in the gardens and farmers' fields, field and garden days, farmer educational tours, and classroom training were provided by project officers. More than 80 agricultural/ water/soil conservation demonstration plots were established to compare old and new methods and for communities to appreciate and understand the benefits of the simple and appropriate technologies.

The technical skills and management training provided by the project empowered the communities, enhanced their identity and solved some of their problems. The project also strengthened the link between the community and the local government representatives in the area.

To promote the use of indigenous crop varieties adapted to drought, the project adopted two approaches. One involved lending of open-pollinated indigenous crop varieties to farmers at the beginning of the season, which they returned at the end of the season. The second approach involved creating Seed Exchange Committees (SEC) in each project area to manage the lending and collection of indigenous seeds from farmers at the beginning and end of the cropping season. The SEC also organizes annual seed fairs and exhibitions at the end of each cropping season so that farmers can share knowledge about best cropping practices and availability of indigenous crop varieties within their respective areas.





Figures 3a and 3b: Soil and water conservation technologies demonstrated.



Figure 4: Seed fair and exhibition.

The two community gardens established under the project have had significant benefit and impact on the households that became members of the gardens. The community garden activity fit very well into the overall farming system of the two communities and provided them with fresh vegetables during the periods of drought. One of the most remarkable impacts of the CDMP is the ability of communities to generate income from the sale of vegetables, especially in the dry season, when household income is generally low. Substantial amounts of income were generated by the members of the gardens, who used the proceeds to purchase such items as bicycles, goats, kitchen utensils, and to pay for their children's school fees.



Figure 5: Vegetable gardens.

Community adaptive strategies that have led to sustainable livelihoods or those that have the potential to lead to sustainable livelihoods were documented, using monthly progress reports and pictures of important community development activities including changes in the environmental status of their respective areas. These were presented in documents and photographs prepared with communities in their local languages as well as in English.

Policies, which reinforce or constrain the sustainable livelihood systems of the communities, were identified and documented by Dr. Sam Moyo of the Southern African Regional Institute for Policy Studies. A report was prepared outlining the experience of integrating indigenous and contemporary knowledge into knowledge systems that assisted the communities to meet their objectives of achieving sustainable livelihoods.

The project manager outlined the concept of the sustainable livelihood framework at a rural district development committee (RDDC) meeting. It was through this type of meeting and visits to the project that rural district government officials and NGOs were made aware of the link between local knowledge and technologies and an enabling policy environment for sustainable development. The acceptance and appreciation of the sustainable livelihood approach by the rural districts is evident by their request for the project to be extended to cover entire districts rather than wards.

2. Approach and Methodology

The Sustainable Livelihoods (SL) approach focuses on community participation and empowerment. It acknowledges that communities are both subjects and objects of change and they have the most detailed understanding and knowledge about their own situation. It emphasizes that development plans for the community should be based on supporting these strengths.

The SL approach recognizes that communities develop adaptive strategies to pursue their livelihoods, using the resources available to them. These adaptive strategies are developed in response to shifts in the long-term political, economic, social, natural and technological environment. Adaptive strategies can signal periods of significant change and help both communities and developers determine which factors promote or inhibit sustainable livelihood development in the target group. After fairly short periods, new adaptive strategies are seen as the normal way of life.

In 1993 IISD developed a sustainable livelihoods framework and, through funding from CIDA, tested the approach in the CDMP by focusing on sustainable livelihoods in the villages of Gwanda and Makaha. IISD designed the CDMP to demonstrate that an integration of community knowledge, policies and technology can lead to sustainable livelihoods and promote the concept as the most appropriate approach to sustainable development.

The first step in the SL approach involves identifying and documenting a community's assets and adaptive strategies through Participatory Rural Appraisal (PRA), and an analysis of the livelihood systems of the community. The second part is the encouragement of the community to draw up a Community Action Plan (CAP), based on the identified needs and solutions developed through the PRA. In this way, development activities are built on the community's strengths and knowledge, taking into account the long-term consequences of their actions, and deciding how to adapt to changes.

Sustainable livelihoods are derived from people's capacities to generate and maintain their means of living, enhance their well-being and that of future generations. These capacities are contingent upon the availability and accessibility of options that are ecological, socio-cultural, economic and political, and are predicated on equity, ownership of resources and participatory decision making. The methodologies of the SL approach comprise livelihood analysis and integration of adaptive strategies, policies, local knowledge and investment to enhance livelihood systems. The SL approach starts with a livelihood analysis that involves the following activities:

- 1. Identification of assets, entitlements, activities and knowledge bases that people currently use to make their living, including coping and adaptive strategies using participatory research.
- 2. Carrying out a cross-sectional, macro-micro-linked policy analysis to identify which policies or policy combinations disrupt or enhance local adaptive strategies or livelihood system. A policy analysis matrix is developed and used for this purpose.
- 3. Assessing the contribution of key technologies to livelihood systems, determining which technologies will help to improve productivity of assets and livelihood systems sustainably.
- 4. Identification of existing micro-finance (micro-credit and savings) facilities and traditional practices and identification of opportunities for putting such facilities to the service of the local people.

By following the SL approach, local people in the project areas made the following improvements to their livelihood system:

- 1. Improvement of productivity through soil and water conservation.
- 2. Creation of alternative-income generating activities.
- 3. Improvement of on-farm storage capacity to increase the availability of buffer stocks.
- 4. Improvement of common property management through community participation.
- 5. Establishment of links between food surplus areas and food deficit areas through investment in regional infrastructure and market organization.
- 6. Focusing on preventive measures that improve the health of sanitation conditions and the population and resource balance.

The adaptive strategies of local people in the project areas were identified by IISD in 1994 through a case study funded by UNDP.

The aim of the case study was to:

- Document and make available to the local community, NGOs and policy-makers integrated information sets on adaptive strategies, which lead to sustainable livelihoods.
- Develop a model package of recommendations through identification of key interactions, synergies, antagonisms, and the like among traditional and contemporary knowledge and the relevant policy conditions, under which the adaptive strategies evolved.

The specific objectives of the initiative were to:

- Engage local communities in identifying and documenting adaptive strategies that have led to sustainable livelihoods.
- Assist communities to articulate their vision and understanding of sustainable livelihoods.
- Explore the internal and external constraints and opportunities that either limit or enhance the communities' ability to adapt.

Some of the adaptive strategies identified by the communities of Gwanda and Makaha were the following:

- Rearing of multi-species herds of livestock
- Cultivation of more than one type of grain staple: sorghum, millet and maize
- Adoption of irrigated agriculture where opportunities permit
- Supplementary feeding of livestock during the dry season
- Alternative income sources from outside the community. These activities were seen to be supplementary and their nature depended on the available opportunities: gold panning in Makaha, Zimbabwe; sale of livestock; seeking employment in neighbouring South Africa and Botswana
- Reliance on new forms of social organizations, such as village committees, religious organizations and NGOs.

The case study for UNDP also identified key policies that have direct and indirect impacts on the sustainable livelihoods of the two communities. One of the most important is land tenure policy. The past colonial administration established a land-tenure system, which excluded local people from having access to productive land, resulting in the communities cultivating overworked lands, leading to further environmental degradation in the project areas. Land tenure has yet to be addressed by the current government.

All policies that influence the traditional system of governance were found to be particularly significant for sustainable livelihoods because the adaptive strategies that pertain to eco-system health seem to be vested more on the traditional, rather than the statutory system of rule. Thus, the system of local government in Zimbabwe which allowed the local chiefs and headmen to levy fines in their process of adjudication served to strengthen their ability to enforce those elements of social cohesion which are still under traditional rule.

The case study was useful to communities and local institutions, policy makers and the donor community because it:

- Informed them of what works;
- Provided innovative approaches to integrating contemporary and indigenous knowledge;
- Improved the understanding of adaptive strategies by researchers, policy-makers, development agencies and consultants;
- Stimulated networking among communities; and

• Influencing extension and other community workers.

IISD's project within the CDMP built on the findings of the case study.

3. Implementation Challenges and Amendment to the Contribution Agreement

A lack of community participation in the design of the project, a financial crisis at ENDA, IISD's partner organization, and lack of expertise in participatory development and policy analysis at IISD contributed to the slow start of the project. The departure of the local project coordinator and agronomist in December of 1997 left the project with only one project officer and decreased ability to maintain project activities.

The project's design did not include baseline data such as socio-economic status of households, availability of resources, and local institutions and their capacities in managing development projects. The little information about the two communities and their livelihood system was not consistent with the reality on the ground; for example, in Gwanda, livestock is the main livelihood of the community, yet, the project promoted agricultural activities. The lack of accurate baseline information about the areas made it difficult to monitor the project progress properly. A socio-economic household survey was later developed to get the necessary information, but the design of the questionnaire and analysis did not yield any fruitful results.

Under the agreement between IISD and ENDA-Zimbabwe, the responsibility of monitoring the implementation of the project at field level rested with ENDA. ENDA submitted for IISD's information and use in reporting to CIDA, the reports on the activities of the project and allowed an authorized representative of IISD to visit the project twice in a year to monitor and evaluate the progress of the project. The agreement and the project management structure did not provide clear roles and responsibilities for effective monitoring of the project by IISD. Therefore, even though the project was supposed to have been jointly managed, the reality was that ENDA was responsible for the management and output of the project. IISD had no direct role over the project, which made it difficult to obtain firsthand information from the project. These problems were not addressed by IISD and CIDA during the first year of the project, which led to a slow start and little progress for the project at the beginning.

To improve the delivery of the project, IISD and CIDA had to amend the contribution agreement to provide for the relocation of the program officer to Harare to take charge of the daily activities of the project, ensure financial accountability, and strict adherence to the project workplan. In addition to being involved in the implementation of the project, he coordinated the project activities with other CDMP implementing organizations in Zimbabwe, meeting with government officials, donor agencies and NGOs to promote the concepts of sustainable livelihoods. He provided an important link between IISD and ENDA-Zimbabwe, improved the overall delivery of the project, and regenerated the momentum of the project.

Section 5:4:3 of the agreement with CIDA states that for project efficiency, impact and effectiveness, the organization is to establish permanent or semi-permanent presence in the two districts where the project activities is carried out. This was not, however, the case. The project officers were in the project area for short periods and hence they were not effective. The situation improved, when Community Resource Centres (CRC)/Office Accommodations were constructed in each project area. With accommodation and office facilities provided, the project officers were

able to spend more time in the project areas, interact with the communities and become effective. They were able to establish a good grasp of what needed to be done to enhance the implementation and sustainability of the project, as well as to improve community's active participation in the project.

The project budget did not have provision for training of the communities, hence some of the essential activities were not undertaken during the first year and half of the project. The lack of clear roles and responsibilities of the CDMC and the local leaders led to misunderstanding between the field officers and the local leaders, which led to the community having little interest and participation in the initial stages of the project.

A Technical Advisory Committee of Harare-based experts was established in the first year of the project. It proved to be ineffectual, as members were too busy to provide any technical advise. Therefore, they made little or no contribution to promote the concept of sustainable livelihoods among decision-makers. In the last year of the project, Local Advisory Committees (LACs) were established in each project area. Members of the LAC were people residing in the district and involved in the development of the district, which greatly improved the promotion of the concept of Sustainable Livelihoods, networking and linking of project activities to the development activities of the two districts. It also resulted in establishing excellent working relationship between the Rural District Development Committees (RDDC), the community and the project officers.

As a result of the good working relationship, the RDDC of Gwanda will improve the office/accommodation by building two chalets and drilling bore-holes to improve the facilities at the community resource centre. The organization and management of agricultural exhibitions and seed fairs will be done jointly by the communities and the Agritex officers in the area. The link of the project activities with overall development activities of the two rural districts was established.

The lack of capacity and interest of ENDA Zimbabwe to network with like-minded institutions, NGOs and the government agencies became a barrier in promoting the concept of sustainable livelihoods and lobbying of the government to change policies on dryland farming.

ENDA's top-down approach did not allow for the communities as a whole and the local Community Drought Mitigation Committees (CDMCs) to actively participate in the implementation of the project. It led to confusion among the CDMC members, the field assistants and the local leaders. This confusion was resolved only after clear roles and responsibilities and local constitutions were established.

The project activities did not include marketing and market infrastructure development. As a result, the sale of produce from the gardens became a problem. To alleviate the problem, the project provided food preservation training to members of the community gardens, so that if they are unable to sell their fresh vegetables, they can preserve them and either use or sell them at a later date.

3.1 Policy Analysis and Lobbying of the Government

Unlike the other drought mitigation projects funded by CIDA, IISD's project was based on the principles of the sustainable livelihood approach, a holistic approach to sustainable development, which uses adaptive strategies of communities as the entry point for development. Linked to adaptive strategies are enhancing policy environment and science and using appropriate technologies. Hence, in the first part of the project, which was funded by UNDP in 1994, IISD

and ENDA identified a number of policies that have an impact (either beneficial or detrimental) on the adaptive strategies of the communities. Among the policies identified were extension policies, the drought-recovery program, credit and marketing policies, the mines and mineral act, land-tenure policies including communal lands, the forest act, and the wildlife and national parks act. But no analysis of how these policies have an impact on the adaptive strategies on the communities of Gwanda and Makaha was done, an issue set for the CDMP to address.

Before and after independence, the government of Zimbabwe's agricultural policies were geared toward supporting commercial farmers rather than subsistence farmers. In the 1980s the government embarked on promoting maize countrywide, including in drought-prone areas, at the expense of the traditional crops such as sorghum and millet. In view of this the project sought to counteract the move by attempting to lobby the government to put in place appropriate policies for dryland farming systems and use of environmentally friendly pesticides. Hence, the project developed strategies for handling the issue and lobbying the government. These strategies included the following:

- a) Creating a Technical Advisory Committee, composed of well-placed individuals who were expected to influence decision-makers.
- b) Hiring a policy analyst to work with IISD and ENDA staff to identify key policies that have a direct impact on the adaptive strategies of the communities.
- c) Establishing a policy working group to analyze the key policies and make recommendations for the reform of those policies.
- d) Having a national workshop to review the findings, analysis and recommendations of the policy working group.

Among the above-mentioned strategies, only one of them was implemented: the hiring of the policy analyst, who identified 27 policies that have a direct or indirect impact on the sustainable livelihoods of the communities in the drought-prone areas of Zimbabwe.

3.2 ENDA's Capacity to Implement Project and Work Plan

ENDA-Zimbabwe is an NGO involved in poverty alleviation in rural and urban poor communities. Its mission is to promote and develop opportunities for wealth creation for rural and urban poor through sustainable natural resource use and capacity development of Zimbabwean people and institutions. It is committed to working with marginalized people in Zimbabwe to assist them to generate wealth, using the participatory approach. ENDA's design of the CDMP on behalf of IISD, however, was done without the participation of the communities of Gwanda and Makaha, as shown by the project not enhancing Gwanda's livelihood system: livestock.

Expertise in environmental assessment, participatory development and policy analysis was not available at ENDA, as most of the qualified personnel left when ENDA began to experience financial difficulties in 1997. The few staff that remained at ENDA had little or no knowledge of the participatory development approach and were not directly involved in the project. ENDA's top-down approach and method of delivering projects from a distance made participatory project delivery and monitoring difficult. It also made the communities dependant on project officers for instructions, instead of being proactive and taking full charge and ownership of the project themselves.

To ensure that the objectives of the project were adequately met, IISD had to hire a policy analyst and impact assessment specialist, who identified and analyzed policies that have impact, and assessed the impact of the project on the sustainable livelihoods of the communities. In addition, IISD had to relocate its program officer to Harare to revive and improve the overall delivery of the project.

3.3 Amendment to the Contribution Agreement

To revive the project and ensure that the planned project objectives were achieved, IISD and CIDA amended the original contribution agreement and revised the project budget to allow IISD's program officer to relocate to Harare. Funds were also allocated for training of the community and purchase of equipment. Under the amendment, IISD contributed \$20,000 and CIDA contributed \$22,500 for the relocation of the program officer to Harare to take full charge of the management and the implementation of the project and to improve the overall delivery of the project. The above-mentioned initiative had a positive result on the project; the delivery of the project, training and empowerment of the communities and accountability for project funds greatly improved, although the project ended three months ahead of the original schedule.

4. Project Achievements by Output

Despite the slow start of the project and some of the personnel and management problems at the beginning, the achievements of the project were significant.

4.1 Evaluate Past Soil and Water Conservation Practices

The people of both Makaha and Gwanda are primarily agro-pastoralists who live in arid and semiarid lands, where soil erosion and inadequate rainfall are the major crop production problems. To address these problems under the CDMP, the communities and the project officers had to fully understand the root causes of the problems, and develop an appropriate and realistic project workplan. Therefore, the first task of the project was to have participatory village workshops to identify the root causes, the livelihood systems in the areas and the communities' own adaptive strategies. Then the project developed ways and means of enhancing those adaptive strategies.

4.1.1 Focus Group Discussion, Village Workshops and Questionnaire, Interviews

The Participatory Rural Appraisal (PRA) method was used at three focus group discussions held in each project area, to understand and validate community profiles for Makaha and Gwanda wards as documented in the case studies of 1994. The main focus of the group discussions were crop production, animal husbandry, problems associated with production resources (climate, soils, rainfall), livelihood systems, and the various community adaptive strategies to mitigate those problems.



Figure 6: Project discussion and village workshop.

The key achievements were as follows:

- Specific agricultural production problems were identified, which included drought and shortage of water, lack of income-generating opportunities, depletion of soil and decrease in production resources because of increased human and livestock population and lack of draught power.
- Coping and local adaptive strategies as perceived by the community were validated and documented, such as multiple-cropping to hedge against crop failures; contour ridging, storage of two years' supply of grain, multiple species of livestock, income diversification, which include gold panning, beer brewing and sale of vegetables.
- Possible solutions were discussed and a tentative plan of action was drawn up, roles of the community and the field assistants were developed, and members of the Community Drought Mitigation Program Committees (CDMC) chosen.

A summary of the rest of the focus group discussion is presented in Appendix C and D.

4.1.2 Carry out a survey of resources and baseline socio-economic data

To augment the results of the focus-group discussions and fully understand the available productive resources within the community and the overall socio-economic status of the households, household questionnaires and interviews were carried out. This activity provided the project officers with additional information about household food sources, income status and household composition, overall socio-economic data and income-generating potential of the community in each project area.

The information obtained through the workshops provided baseline data for the project and became the cornerstone for both the project officers and the communities to plan the project activities. The community baseline data document also became the basis for assessing the overall impact of the project on the community's welfare.

To help the communities to continue with the process of documentation, two cameras were bought. Field assistants and the community have been using these cameras to take pictures of important events, such as community activities and progress of demonstration plots in the community gardens. These important community pictures taken by the field assistants and the community itself are kept in the community resource centres for future reference and comparison of the past environmental status of the area with the present.

The key achievements were as follows:

- Community baseline data were established and communities and project officers became aware of the socio-economic status and income-generating opportunities in the area.
- The focus-group discussions and village workshops empowered the locals and collectively enabled them to identify and solve their own problems, and use their common resources sustainably.

4.2 Promote Soil and Water Conservation Practices

The two most important problems faced by the communities living in the drought-prone areas of Gwanda and Makaha are land degradation and lack of moisture. Hence, during the focus-group discussions, they were identified as the major problems in maintaining productivity and sustainability of agricultural production in both Makaha and Gwanda. The situation is worsened by the low water-holding capacity of the soils. Added to this is the high susceptibility to the formation of crusts, which impedes germination as well as water permeability. Most of the soils have poor structural stability as they have generally low organic matter content.

The soil erodability aspect (Makaha-high; Gwanda-medium) has an impact on erosion, resulting in a further reduction on the physical and nutritional crop-supporting qualities of the soil. The short growing season has limited farmers to the conventional annual cropping system, as there is usually enough moisture to produce one crop in the soils but rarely enough to produce more than one crop a season.

Crop residues, which could prevent soil erosion, are usually left on the fields for livestock to eat during the dry season. The little crop residue left on the field is further destroyed by termites, leaving the soil with no organic matter to enrich the soil and prevent erosion at the beginning of the rainy season. The tillage equipment available to the farmers is not always appropriate for soil surface configurations. Worse still, other farmers have no machinery at their disposal for land preparation and planting, weeding and harvesting of crops, so they have to wait for those who have implements to finish before they can borrow this equipment. As a result, many farmers are unable to take advantage of the first rain of the season, and, because of the late planting, their crops are affected by drought toward the end of the season. It was against this background that the project embarked on providing technical support to farmers to improve their crop production while conserving soil and water. Using a participatory method, a total of 80 farmers were identified in their respective wards to participate in field demonstrations of appropriate agricultural practices and technologies. These were referred to as lead farmers (LF). Each of them was allocated a demonstration of appropriate soil and water conservation technology to conduct, monitor and explain to other farmers in their area. One among them became the "umbrella farmer," who conducted the demonstrations of all the appropriate technologies in his or her field for the other farmers.

Some of the demonstrations were meant to explore and determine production levels and factors important to local circumstances. Information obtained from these demonstrations were provided to farmers so that they could improve crop stand and yield, using a combination of factors such as soil and water conservation practices, good quality seed, seedbed preparation, correct plant density and the like.

The following soil and water conservation technologies were demonstrated in the lead farmer's field, as well as in the nutrition gardens during the project period.

(i) Improvement of water-use efficiency

A number of demonstrations were conducted to improve water-use efficiency. These included planting in furrows. In other cases these furrows were tied after every three plants. Crop residue was incorporated into the soil to improve soil aggregation and reduce surface sealing, mulching using grass and stones, and so on.



Figure 7: Demonstration of various technologies-soil and water conservation.

(ii) Maintenance and enhancement of soil fertility

A large amount of residue incorporated into the soil enhances soil fertility. Upon decomposition, nutrients are released to the soil and water retention by the soil is greatly improved. Other

technologies demonstrated in this regard were intercropping of sorghum and cowpeas, millet and cowpeas, maize and cowpeas, maize and peanuts. Intercropping is more advantageous when nutrient and moisture stresses are more prevalent.



Figure 8: Community participating in gully reclamation in the field.

(iii) Decrease runoff and soil erosion

Gully reclamation demonstration exercises were undertaken in both wards. They focused mainly on gullies going across farmers' fields, as well as gullies affecting the nutrition gardens and gullies in open pastures, where small wells were constructed for proper drainage of the field, and to provide livestock and wildlife with water.

(iv) Agroforestry

The technique of intercropping annual species extends very well to agro-forestry, as trees provide large amounts of biomass from their foliage and bring nutrients originally deep down in the soil to the surface. Deep-rooted trees are able to tap more moisture from a lower depth during the dry season, thus overall productivity per unit of land is realized. The combination of different crop canopies efficiently uses light, and added nitrogen agroforestry systems enable the return of large amounts of materials to the soil. The trees also provided shelter against wind erosion at the beginning of the rainy season when winds increase.



Figure 9: Growing of trees and vegetables in the same field (agroforestry demonstration).

In Makaha, moringa and papaya trees were included in a demonstration with sunflowers. Moringa provides edible leaves to livestock and, at times, to people. The tuber is edible and the tall straight trunk and branches are used for construction. Species of leucanea and acacia were planted in both Makaha and Halisupi, which provide excellent fodder for cattle and goats.

Below are the performance results of crop variety trials under different moisture conservation technologies, compared with those without the technologies.

Soil and water conservation technology applied	Purpose of demonstration	Crop variety	Yield	Yield No soil and water conservation technology	Comments on crop performance
Mulching	Moisture conservation	MACIA	1.8T/ha	1.00T/ha	Good yield but poor thinning caused the difference
Tie-ridging	Moisture conservation	K-white	2.0T/ha	1.8T/ha	Yield is good since no fertilizer was added
Furrow	Moisture conservation	K-white	1.8T/ha	1.6T/ha	Good yield compared with no furrow
Pot-holing	Moisture conservation	SC 501	1.8T/ha	1.4T/ha	Delayed weeding caused some yield losses
Intercropping 1:1 ratio	Moisture conservation	macia	1.4T/ha	1.2T/ha	Excellent yield

4.2.1 Community Boreholes Sunk and Nutrition Gardens and Nurseries Established

One of the major components of the project was to establish one nutrition garden and one borehole in each project area to irrigate nutrition gardens for demonstrating appropriate technologies such as soil and water conservation, integrated pest management, organic farming practices, or agroforestry practices. The other purpose of the nutrition gardens was to provide the communities with nutritious vegetables and household income throughout the year. A community-based approach was used to identify a central area for the nutrition gardens to benefit the whole ward.



Figure 10: Women fetching water from the borehole.

In the early stages of the project, some farmers did not appreciate some of the technologies; some households had not realized that soil erosion is a problem; others had realized the problem, but were unable to address it because they felt that solutions were too labour intensive. Still, others were able but unwilling to use the improved soil and water conservation. Others had beliefs that made it difficult to accept new ideas; for example, some farmers believed that goat manure burns crops and grass mulching accommodates termites, which later fed on vegetables. Once the application of the appropriate technologies produced beneficial results, however, most of the nutrition garden members and farmers adopted the technologies.

Below is a summery of some of the appropriate technologies that were introduced by the project and adopted in both project areas.

Crop name	Total beds	Types of conservation methods practised and adopted					
		Tie ridge	Ridge	Mulch	Trench	Ordinary	Intercrop
Tomato	240	190	20		5	8	17
Rape	304	265	4	1	10	4	20
Covo	206	176	8		12	3	7
S. loaf	160	130	12		5	2	11
Cabbage	104	94	4				6
Carrot	95	101	4				
S. potato	40	36	4				
S. beans	109	88	9				12
Lettuce	40	30	4		4		2
Total	1,308	1,110	69	1	36	17	75

Gwanda Ward 19 nutrition garden (A total 211 household members)

Makaha Ward A nutrition garden (A total of 134 household members)

Crop	Total beds		Types of con	nservation met	thods practise	d and adopted	1
name		Tie ridge	Ridge	Mulch	Trench	Ordinary	Intercrop
Tomato	103	44	3	50	2	1	3
Rape	208	36	10	106	24	7	25
Covo	98	25	10	52	7	3	1
S. loaf	148	41	22	59	7	4	15
Cabbage	86	12	10	44	9	3	8
Carrot	77	21	14	29	4	6	3
S. potato	4		4				
Cowpeas	47	3	11	25	1	3	4
Total	771	182	84	365	54	27	59

The technology adopted by most of the garden members in Gwanda Ward 19 was tied ridging on furrows, while in Makaha Ward A it was the mulching method. The reason for adopting tied ridging is that the method conserves both soil and water. Mulching is practised less often in Gwanda Ward 19 because it attracts termites.

The key achievements were as follows:

• Training field assistants and the community at large in agricultural, management and other technical skills strengthened the communities' ability to sustain their livelihoods.

- Coping and adaptive strategies of the communities have been enhanced by the introduction of the improved and appropriate technologies.
- Household food security increased through increased crop yields as a result of application of appropriate farming technologies by the farmers.
- Knowledge of soil and water conservation was greatly enhanced as a result of demonstrations in farmers' fields and nutrition gardens, as well as by the knowledge gained from educational tours.
- Nutrition gardens and boreholes provide communities with fresh vegetables during the dry season, clean drinking water, reduced incidence of waterborne disease, and greatly reduced the time women used to spend searching for water.

4.3 Preserve and Promote Biodiversity of Indigenous Crops

Farming is the main economic activity and livelihood for most households in Gwanda and Makaha, even though they are drought-prone areas. Hence, the project focused on promoting those indigenous crop varieties that are drought tolerant: sorghum, pearl millet, finger millet and short season bean varieties.

A wide array of indigenous and improved seed varieties was issued to the farmers through the seed-exchange scheme in last 2¹/₂ years of the project. These included white maize variety macia and SV2 for sorghum, and an open-pollinated variety of maize k-white as well as ten varieties of cowpeas. The relative performance of maize versus sorghum in the two zones clearly indicates that the open pollinated sorghum macia performed better than hybrid R 215 as well as k-white.

The key achievements were as follows:

- Revived indigenous crops coupled with the introduction of high-yielding crop varieties, leading to diversification of crop varieties in the two project areas.
- Improved ability of the community to mitigate drought by growing drought-resistant crops such as sorghum, millet and short-seasoned legume crops.
- Established a seed-exchange scheme managed by locals that will ensure that indigenous crop varieties are available to farmers. The seed-exchange committees have learned to create a seed bank and conduct germination tests for the community.
- Annual seed fairs, garden and exhibition, which ensured that farmers exchange information about crop varieties and acquired new crop production ideas annually.
- The skills acquired by farmers through demonstrations, training, seed fairs and education tours improved their ability to increase agricultural production and household food security.
- Improved household nutrition and income from the increased agricultural production as a result of using indigenous crop varieties.

4.4 Enhance Income Generation at the Household Level

Information on the overall socio-economic situation of the communities of Gwanda and Makaha was used to design income-generating activities at household levels and improve the food-security status in the two project areas. Among the income-generation activities introduced by the project were soap making, gardening, and the raising of tree seedlings for sale.

(i) Vegetable production

This activity started with site selection for a nutrition garden and drilling of boreholes in both project areas. Nurseries were later set up for raising seedlings. As part of the overall project objectives, project officers introduced a number of technologies in the gardens, including soil and water conservation, inter- and intra-row spacing, tied ridging, ridging, mulching and stalking or trellising of tomatoes, integrated pest management and use of aromatic plants to repel pests. The introduction of these appropriate technologies enabled farmers to grow vegetables for home consumption and some for sale to improve household income.



Figure 11: Members showing their produce from the garden.

Below is a summary of average income generated through sale of vegetables from the community gardens in Gwanda and Makaha.

Gwanda

Crop name	Total beds	Vegetables consumed	Vegetables sold	Amount obtained in \$Z
Tomato	240	340 buckets	101 buckets	6,060
Rape	304	804 bundles	1,500 bundles	6,000
Covo	206	720 bundles	1,100 bundles	3,200
S. loaf	160	500 heads	900 heads	2,700
Cabbage	104	441 heads	743 heads	2,315
Total	1,109	2,912	4,807	19,798

Makaha

Crop name	Total beds	Vegetables consumed	Vegetables sold	Amount obtained in \$Z
Tomato	103	240 buckets 76 buckets		1,520
Rape	208	520 bundles	140 bundles	280
Covo	98	340 bundles	78 bundles	156
S. loaf	148	426 heads	88 heads	176
Cabbage	86	243 heads	102 heads	204
Carrot	77	88 bunches	40 bunches	132
Cowpea	47	102 plates	44 plates	44
S. potato	4	consumption		
Total	771	1,977	568	2,512

(ii) Production of Jatropha Curcas and Soap Making

In Makaha Ward A, 3,000 Jatropha curcas plants were raised in the tree nursery. These seedlings were planted around nutrition gardens while some were distributed at household levels. In Gwanda Ward 19, the Jatropha curcas seeds were distributed to households and 1,300 were raised in the nursery. Other exotic and indigenous tree species were also raised and planted by the communities of each project area.

Training in extraction of oil from Jatropha seeds and making soap from the oil was demonstrated to representatives of the two communities by Biomass Network, a local organization that specializes in training communities in the appropriate use of natural resources. Afterward, the representatives conducted demonstrations in their respective areas for the rest of the community members.







Figures 12, 13 and 14: Growing of Jatropha Curcas and oil extraction and soap making.

The key achievements were as follows:

- Introducing Jatropha curcas, sinking boreholes and establishing nutrition gardens have enhanced income-generating opportunities in Gwanda and Makaha through soap making and sale of vegetables.
- The education tours and training in marketing and small business management have equipped some community members well enough to embark on small businesses.
- The training in soap making, food preservation and vegetable production has enabled the communities to add value to their produce and increase income from the sale of such produce.
- The resource centres have provided the communities with the opportunity to generate income from renting the facilities.

4.5 Analyze Current Policies and Recommend Changes

A Technical Advisory Committee was set up in April 1997 to advise the communities and project managers on policy issues, and to help in promoting the concept of sustainable livelihoods among the decision-makers. At its first meeting, the TAC reviewed the objectives, activities and progress of the project and agreed to set up a special group to deal with the policy aspect of the project. Because of lack of coordination and commitment of the members to other issues, however, they could not perform policy analysis. At the second meeting of the TAC, which took place in December 1997, it was decided that rather than having a high-powered body based in Harare, the project should constitute a subcommittee at the district level that would have a better knowledge and understanding of the local environment. The outcome of this decision was the creation of Local Advisory Committees in each area, made up of the local district officials, the local community leaders, members of the CDMC and project officers as ex-officio members.

To move the process of policy analysis forward, a senior policy analyst, Professor Sam Moyo, was contracted to identify and summarize key policies and associated factors that have direct or indirect impact on the livelihoods of the communities of Gwanda and Makaha, analyze each of those key policies and recommend reform of those policies. He was able to identify 27 policies that have an impact on the livelihoods of the communities in Gwanda. He also carried out some analyses but made no recommendations for reforming those policies as the funds allocated for policy analysis had run out. His report is available at IISD, upon request.

The key achievements were as follows:

- 27 key policies that have an impact on livelihoods of the people of Gwanda and Makaha were identified.
- Communities of Gwanda and Makaha, rural district council officials and project officers became aware of some of the policies that have an impact on livelihood systems, and have understood the linkage between policy, adaptive strategies and appropriate technologies for sustainable livelihoods.

4.6 Lobby Government to Improve Dryland Farming

It was the intention of the project to present decision-makers with alternative policies to the current ones to improve the sustainable livelihoods of the people of Gwanda and Makaha in particular, and those in drought-prone areas of Zimbabwe in general. Since the identified policies were not fully analyzed, however, policy changes were not recommended by the consultant and a policy working group was not established to review and recommend improved policies. Neither was there an attempt to lobby government directly. Instead, IISD's approach shifted from national to rural district levels, where the projects were situated. A Local Advisory Committee made up of local government officials, CDMC members and local leaders was established in each project area to discuss the concept of sustainable livelihoods approach, and link the project to the overall development activities of the respective rural districts.

To further promote the concept of sustainable livelihoods, the project proposed to produce and disseminate technical reports to government and others on crop diversification, dryland farming methods and water, soil and crop relationships. Because of the rapid staff turnover, however, it was not possible to produce and disseminate technical papers. Instead, the program officer/project manager promoted the sustainable livelihoods approach of the project among local government officials, NGOs and other development agencies through networking, as well as at national and regional workshops.

The key achievements were as follows:

- Good working relationships with the rural district councils were established, which led to very strong support to the project from the rural district councils, especially the rural district council of Gwanda.
- Good linkages were made between the project and its activities to local and national development initiatives such as the Poverty Alleviation Action Programme (PAAP).
- The sustainable livelihood approach was promoted at rural district development council meetings.
- The Local Advisory Committee members promoted and supported the sustainable livelihoods approach. The relocation of IISD's program officer greatly improved policy discussions; coordination and networking with other CDMP partners in Zimbabwe and ENDA was also greatly enhanced.
- Capacity was improved in policy analysis of the CDMC, lead farmers and field assistants and the community as a whole through training, educational tours, seed fairs, field and garden days.

4.7 Construct Project Officers' Accommodation/Community Resource Centres

This output was not in the original project proposal. It was created after realizing the need to have such facilities in the project areas. Before the construction of the facilities, project officers could not stay in project areas and there was no place for the community and the project officers to meet to discuss issues related to the project. It became necessary to revise the original budget by allocating funds for the construction of the two facilities.



Figure 15: Resource Centre.

The key achievements were as follows:

- Project delivery was improved as project officers were able to stay in the community and could be easily contacted by the community.
- Travel and transport expenditures were reduced as project officers were able to stay in the community for longer periods and an accommodation allowance was required.
- Organizing community meetings became easy, as there was now a meeting place for the communities.
- Communities earned income from renting the facilities to agencies, such as NGOs, government institutions and individuals.
- The centres became an important resource for the two communities, as they can use it as a meeting place for future development activities.

4.8 Assessment of Project Impact and Improvement of Local Management Capacity

This output was added at the time of the amendment of the contractual agreement between CIDA and IISD in June 1998. Its objectives were to assess and compare the impact of the project on livelihoods with the community profile compiled in 1994. A second objective was to build and strengthen the management capacities of local institutions such as the CDMC, to ensure that the project remains sustainable. Hence, a local consultant was hired to carry out an impact assessment in the two project areas through PRA workshops.



Figure 16: Community participating in assessing impact of the project through a PRA workshop.

The key achievements were as follows:

- Both the project implementers and the community have been made aware of the successes, failures and problems of the project and what needs to be done.
- Clear areas of focus for enhancing sustainable livelihood were identified.
- Training needs of the CDMC, field assistants have been identified and the way forward recommended.
- Ownership of the community resource centres was identified as an issue. It was discussed and resolved by having lawyers draft legal handover documents, which will ensure the communities' ownership of the resources.

5. Project Conclusions and Recommendations

The project made considerable progress achieving its original objectives and enhancing the livelihood systems of the two communities. Establishing community and nutrition gardens, boreholes and resource centres, and strengthening the management and technical capacities of the two communities greatly enhanced their ability to mitigate drought. Relocating IISD's program officer to do on-the-ground management of the project greatly improved the delivery of the project and linked community initiatives with the overall rural development plan of each district. To conclude the project, a workshop was held from June 28-29, 1999 which was attended by the Vice-President of IISD, Dr. William Glanville; the Managing Director of ENDA-Zimbabwe, Dr. Daniel Mtetwa; Director of the Community Adaptation and Sustainable Livelihoods Program, Neil Ford; the Program Officer/Project Manager of the CDMP, Charles Agobia; the project

officers and 20 representatives from the two communities.

The following are the project manager's recommendations for future projects of this nature:

- 1. Executing agencies (EA) should not try to deliver the project from a distance, because it makes beneficiary participation practically impossible. Therefore, however small a project may be, the presence of the project officers on the ground is essential for effective project delivery.
- 2. Participatory project preparation is just as important as participatory development itself. It enhances community participation, builds a sense of ownership, and allows projects to be designed in such a way that they address identified needs of the target group.
- 3. EAs must understand the host country's government, development initiatives and policies before planning a project. This allows project and community initiatives to be designed in such a way that the government and community initiatives are supported by various policies and complement each other.
- 4. EAs should establish clear roles and responsibilities for effective project management, both for the project-implementing organization and the target groups during project design. This will ensure that each party is aware of its obligations and thus prevent misunderstandings from developing during the course of project implementation.
- 5. Before starting a project, it is important for the EA and the community to understand the adaptive strategies of the target group and the development initiatives that are already underway by the local and other development agencies, such as NGOs. This analysis would help the agency develop a clear entry point and points of linkage with the other development initiatives in the country and the target areas.
- 6. EAs should always consider having their representative from a partner organization attached to the local partner organization at the field level to enhance project delivery. This provides an important linkage between the executing agency and the partner organization, the government, departments, and like-minded institutions. It also promotes organizational trust and ensures accountability.
- 7. It is essential to recognize the importance of local politics, local administrative structures, and traditional authorities in the project area. For example, the ruling party representative, the relationship between the traditional chiefs and the local government authorities, and the relationships between the villages must all be understood. All these can have a beneficial or detrimental effect on the outputs of the project, from participation, to contribution by the communities, to the relationship between the project staff and the community. The project staff must maintain their neutrality and not be seen as supporting individuals, a village or section of the community. Otherwise, the project staff may lose the confidence of the rest of the project participants and thus contribute to project failure.
- 8. Project design must be flexible to accommodate changes that may come up as the project is being implemented.

- 9. Establishing a strong and trained local project management team improves the delivery of every project. It ensures full participation of the project beneficiaries, good communication between project officers and the community, and sustainability of the project.
- 10. Determining and establishing the market and marketing infrastructure for the project beneficiaries' produce and products should have been a component of this project. It would have enabled the beneficiaries to sell their produce and products more easily. In addition, beneficiaries should have been trained in methods of improving the value of their products, for example, methods of preserving their vegetables.
- 11. Networking and co-ordinating with other NGOs, national and local government institutions and linking project activities with government initiatives can lead to effective use of resources and ensure project sustainability.
- 12. Dealing with policy and policy issues is a sensitive task, especially for NGOs. It requires resources, consultations and lobbying at various levels of government.
- 13. Activities such as community gardening, rural-based industries and the like, which fit well with the overall livelihood system, engage the community between growing seasons, and assist the community in their effort to mitigate drought should be encouraged.
- 14. The people who benefited most from the project, especially those involved in the nutrition gardens in the two project areas, were those close to the nutrition gardens. In this regard, the project should have focused on promoting kitchen gardens at household levels and used the nutrition gardens only as training gardens.