

**BUILDING SUSTAINABLE RURAL LIVELIHOODS THROUGH  
TECHNICAL CO-OPERATION: THE CASE OF GoK – GTZ MWINGI  
INTEGRATED FOOD SECURITY PROGRAMME.**

**BY:**

**CHRIS KILIKO MUSYOKA**

*FOR USE IN THE LIBRARY ONLY*



Institute for Development Studies,  
University of Nairobi  
P.O. Box 30197, 00100  
Nairobi

A Project Paper submitted in Partial Fulfilment of the Requirements for the Award of the  
Degree of Master of Arts in Development Studies, University of Nairobi.

September 2005

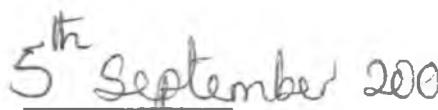
*UNIVERSITY OF NAIROBI  
I.D.S. LIBRARY*

# DECLARATION

This Project paper is my original work and has not been submitted for a degree in any other university



CHRIS KILIKO MUSYOKA



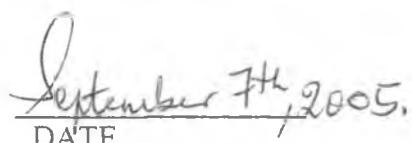
5<sup>th</sup> September 2005

DATE

This project has been submitted for grading with our approval

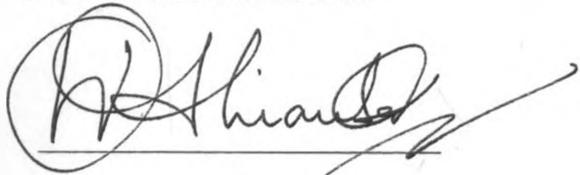


DR. RACHEL MUSYOKI

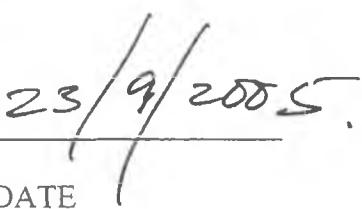


September 7<sup>th</sup>, 2005.

DATE



DR. WALTER ODHIAMBO



23/9/2005.

DATE

Institute for Development Studies

UNIVERSITY OF NAIROBI

## **DEDICATION**

To my parents, Mzee Thomas Musyoka Mwalwa and Mama Lenah Koki, let this be my token appreciation of your toil to see me go through to this level.

My brother, Muasya You have always encouraged me to carry on

and

My best friend Julius Mbeya for being supportive

# TABLE OF CONTENTS

Declaration .....	i
Dedication .....	ii
Table of Contents .....	iii
List of Diagrams.....	iv
Acronyms and Abbreviations .....	vi
Acknowledgements .....	vii
Abstract .....	viii

## CHAPTER ONE: INTRODUCTION

1.0 Background to the Problem .....	1
1.1 Definition and Operationalization of Concepts .....	2
1.2 Statement of the Problem.....	4
1.3 Study Objectives .....	5
1.4 Hypotheses.....	5
1.5 Justification .....	6
1.6 Organization of the Study .....	7

## CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction .....	8
2.2.1 The Sustainable Rural Livelihoods: A Historical Background .....	8
2.2.2 The Sustainable Livelihoods Framework .....	9
2.3. Other Focal Points.....	11
2.4 Utilization of Natural Resources.....	13
2.5 Agriculture and Livelihoods .....	14
2.6 Water and Livelihoods .....	16
2.6.1 Water as a Good and an Asset in ASALs .....	19
2.6.2 Impact of Land and Water use on Livelihoods .....	20
2.7 Food Security: Theoretical and Conceptual Issues.....	21
2.7.1 Differing Interpretations.....	22
2.7.2 Food Security in Perspective: Supply versus Availability.....	23
2.7.3 Conceptualising Food Security at Household Level: Concluding Remarks.....	25
2.8 Theoretical Approaches .....	27
2.8.1 Basic Needs Approach and Rural Livelihoods .....	27
2.8.2 The Rights Based Approach .....	29
2.8.3 Trickle Down Approach .....	31
2.8.4 Human Development Approach .....	32
2.8.5 Trusteeship Theory.....	34
2.8.6 The Sustainable Livelihoods Framework.....	35

## CHAPTER THREE: TECHNICAL CO-OPERATION BETWEEN KENYA AND THE FEDERAL REPUBLIC OF GERMANY

3.1 Introduction.....	37
3.2 Origins of Technical Assistance in Kenya.....	37
3.3 Objectives of Technical Assistance.....	39
3.4 Implications on Development.....	41

**CHAPTER FOUR: RESEARCH METHODOLOGY**

4.1 Introduction.....	46
4.2. Selection of Mwingi.....	46
4.3 Research Design .....	47
4.4 Sampling Frame .....	48
4.5 Data Collection.....	50
4.6 Data Analysis .....	51
4.7 Limitations and Constraints.....	51

**CHAPTER FIVE: FOOD SECURITY STRATEGIES**

5.1 Introduction .....	52
5.2 Food for Work .....	53
5.3 Improved Small Livestock Production .....	54
5.4 Improved Grain Storage and Marketing: Crop Stores and Seed Banks .....	55
5.5 Community-Based Water supply .....	56
5.6 Capacity Building .....	57
5.7 Income Generating Activities .....	58
5.7.1 Kitchen Gardening .....	59
5.7.2 Micro-credit Scheme.....	60

**CHAPTER SIX: STUDY FINDINGS OF THE IMPACTS OF THE PROJECT**

6.1 Introduction.....	62
6.2 Natural and Physical Impacts.....	62
6.2.1 Community and Household Water Supply.....	62
6.2.2 Rural Feeder Roads.....	64
6.2.3 Physical Assets.....	64
6.3 Economic Impacts.....	65
6.4 Human and Social Impacts.....	66
6.5 Sustainability of the Mwingi Integrated Food Security Programme.....	68
6.6 Concluding Remarks .....	69

**CHAPTER SEVEN**

7.1 Conclusions and Policy Recommendations.....	70
7.2 Recommendations.....	71

**REFERENCES .....** 74**7.3 QUESTIONNAIRE .....** 80

## **LIST OF TABLES**

Table 1: Aid Recipients in Africa .....	41
Table 2: Study Villages in Mwingi District .....	50

## **LIST OF FIGURES**

Figure 1: Map of Mwingi District showing study villages.....	49
Figure 2: Impacts of Technical Assistance and Rural Livelihood.....	67
Figure 6: Food Status of the people of Mwingi after the project.....	69

## ACRONYMS AND ABBREVIATIONS

AAK	Action Aid Kenya
ASAL	Arid and Semi-arid Lands
CBO	Community Based Organization
CGIAR	Consultative Group on International Agricultural Research
CK	Care Kenya
GTZ	Gessenschlaft fur Technische Zusammenarbeit
JICA	Japan International Co-operation Agency
HDA	Human Development Approach
MIFSP	Mwingi Integrated Food Security Programme
NGO	Non-Governmental Organization
RBA	Rights Based Approach
RWS	Rural Water and Sanitation
TA	Technical Assistance
TC	Technical co-operation
UNDP	United Nations Development Programme
WV	World Vision
WFP	World Food Program

## **ACKNOWLEDGEMENTS**

I wish to thank the Director of the Institute for Development Studies, Professor Dorothy McCormick for her support and understanding through out my MA programme. Many colleagues and friends contributed in different ways towards the preparation of this work. Thank you all. Among the many whom I am grateful to, a few merit special thanks for their contributions and insights. I am greatly indebted to Dr. Karuti Kanyinga the Masters (MA) program co-ordinator, whose timely intervention early in the program meant that my study course ran smoothly. In addition, I would like to thank Dr. Rachel Musyoki and Dr. Walter Odhiambo who gave me academic support and strengthened my resolve to take this work to its fullest logical conclusion. Whereas their guidance, attention, advice and moral support was instrumental in writing this paper, I take full responsibility for any errors and omissions that may be found in the paper as the final responsibility lay with me.

## ABSTRACT

In this paper, I argue that rural poverty in the semi-arid regions is a result of a combination of interacting social, economic and environmental factors and processes. *At the grassroots level, the sustainable livelihoods framework is utilised to gain a more accurate picture of the asset and activity patterns that characterize the poor in particular, and the institutional context that either blocks or enables rural citizens in their pursuit of more secure livelihoods over time.* The study adapted the sustainable livelihoods framework. In this approach the emphasis takes an integrated view of peoples' livelihoods and the factors that hinder them or help them to construct routes out of poverty, hence it provides us with a dynamic understanding of the operating environment within which impact of development assistance on livelihoods can be more accurately evaluated. The research was guided by the following hypotheses: that there was an observed emerging pattern of a relationship between technical assistance and enhanced capacity for food security in Mwingi; that this observed livelihood and food security status can be attributed to the GTZ's intervention strategies; However, the residents of Mwingi are likely to revert to being food insecure once the technical assistance ended due to limitations of the intervention associated with GTZ programme.

One case study was sampled. The Mwingi Integrated Food Security Programme in Mwingi district was investigated. Primary data was obtained through interviews with key informants in the implementing agencies, i.e. both government and non-government development agencies. Secondary data was obtained by document study that helped understand the raw data from the field.

The study found that the food security programme was not implemented successfully and its sustainability is in doubt. The goals of policy are not being realised and the resources invested in development projects fail to impact on the target/client populations. Development Projects have become ventures that are neither imbedded nor contribute to development goals stipulated in government's policy on rural development.

The reasons accounting for the poor performance included the weak institutional capacity of the local groups that were to manage the projects after GTZ withdrew. Consequently, the following recommendations were made that could contribute to the successful implementation and sustainability of development projects in future.

Improve partnership among development partners by building capacity for the local communities to better understand their role in development. This should endeavour to motivate their participation in the implementation of the projects and subsequent ownership. Others include labour intensive agricultural undertakings, diversifying in non-farm activities as crucial in laying the appropriate foundation for other socio-economic sectors.

# CHAPTER ONE

## INTRODUCTION

### 1.0 Background to the Problem

The idea of sustainable livelihoods began as an approach to maintain or enhance resource productivity, secure ownership of, and access to assets, resources and income-earning activities as well as to ensure adequate stocks and flows of food and cash to meet basic needs (Lipton, 1987). It was a reflection of the growing recognition that food security was not merely a problem of agricultural productivity but was a problem of poverty in all its multi-faceted dimensions.

Understanding food security in a broader context is therefore, closely linked to a more appropriate term – Livelihood security. Food security is seen as one key element of a broader portfolio of livelihood strategies where livelihoods are seen to be composed of a range of sources (Ahmed and Lipton 2000, p.i). Access to basic food (agricultural/livestock products) though, still is seen as the most significant component of a sequence of livelihood strategies especially among the poorest and the most vulnerable households of sub-Saharan Africa (Bebbington, 1999, p.20-21).

In the semi arid areas of Kenya, livelihoods and food security continue to deteriorate. Over the last decade, the number of people living below acceptable consumption levels measured by any social and economic indicator has increased. The region is dependent on a disproportionate amount of food aid (RoK, 2002a, p.6). This however has happened behind a backcloth of substantial resources having been spent in pursuit of ‘food for all’ goal in line with the Millennium Development Goals.

The Mwingi Integrated Food Security Programme is one such example. This project was started with an aim to improve rural livelihoods and increased food security through sustainable management of natural resource. It aimed at enabling the people of Mwingi cushion themselves from vulnerability to unsustainable rural livelihoods in general and food insecurity in particular (Dietrich 1994, p. vi). After 10 years however, this

intervention has not produced positive results. It has not led to a realisation of 'food for all' and hunger still persists for the majority of the people. Stakeholders would be hard pressed to tell the impacts of their interventions. This study seeks to analyse in detail, the actual food security interventions that were implemented, to see how and why they were carried out, how well they were targeted and what impact the interventions had on food security in the area. It is an attempt to examine what has been the contribution by the Mwingi Integrated Food Security Programme towards mobilization and utilization of resources for the improvement and subsequent sustainability of livelihoods for the people of Mwingi in general, and the access to basic foodstuffs for the households in particular. The paper assesses the extent to which the technical co-operation and partnership between the Kenyan and German government through its agency for technical co-operation, GTZ, has created, strengthened and enhanced the innovative and productive capacities of the peasant farmers to attain acceptable levels of self sufficiency in food access, self-esteem and rural dignity.

## **1.1 Definition and operationalisation of Concepts**

**Livelihoods:** A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living.

**Sustainability:** Sustainability refers to the maintenance or enhancement of resource productivity on a long-term basis. It refers to the management and conservation of the natural resource base and the orientation of technologies and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations.

**Sustainable Livelihoods:** A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base. Livelihoods are considered sustainable if they persist over time, yielding a non-declining output, despite shocks and adverse conditions.

**Foreign aid:** Refers to the explicit transfer of real resources to the less developed countries on concessional terms.

**Technical Assistance:** Technical assistance refers to the transfer from the developed countries to the developing countries of technology, skills, and know-how for the promotion of socio-economic development.

**Technical Co-operation:** Technical co-operation refers to a situation when both the recipient and donor of technical assistance have reached a level in which the transfer of the same is mutually beneficial to both parties involved. In this case they are said to be co-operating.

**Food Security:** Refers to the ability of a household to command an adequate amount of staple grain through any one or combination of existing sources like cultivation, purchase or food donation.

## **1.2 Statement of the Problem**

Modernisation of the agricultural production assumed a central place in the rural development policies and practices of this country in the last three decades. The Government of Kenya in partnership with multilateral and bilateral donors invested substantial resources in pursuit of this goal through the integrated rural development programmes. Although evaluation and assessment literature on their impact is not extensive, a general review of the literature, however, attests to the pessimism of scholars, and development practitioners as to the real and actual outcomes of these programmes with regard to building sustainable livelihoods (Cleaver and Donovan, 1995, p.23).

One of the main disappointments is that, food sufficiency has not been widespread and hunger continues to abound for some though not for others. In addition, where there is evidence of 'success', this has continued to co-exist with food insecurity, a direct challenge to the intervention strategies adopted by the programme as a viable solution to poverty in the rural areas (Omosa, 1998, p.36). After years of the Mwingi Integrated Food security Programme, there may be hope on the food production front. There is also despair in terms of the absolute number of people going to bed hungry. This scenario raises fundamental questions that are of interest to researchers. Strategies employed by GTZ towards building capacity for food security need to be researched. There has been little attempt at providing empirical data on GTZ intervention strategies to food security and the implications of this intervention to building sustainable livelihoods. This study highlights some pertinent issues relating to GTZ strategies in promoting food security in Mwingi.

Development Assistance is the explicit transfer of real resources from the developed countries to the less developed countries on concessional terms necessary for social, and economic growth. Since 1994, Mwingi district has benefited from development assistance from the Government of the Federal Republic Germany mainly in form of technical assistance intended to build capacities of the people there with the expectation that hunger and famine would be reduced. Yet, to date, self-sufficiency in basic

foodstuffs among small farmers, labourers, craft workers is not only lacking. They have also become vulnerable to droughts, pests, changes in prices and quantities on volatile markets. The fundamental question which this study seeks to answer is what has been the contribution of this development assistance in ensuring food self-sufficiency in the semi-arid land region of Mwingi. What responses have development agencies used to promote food security in Mwingi? What results have been produced by this intervention? What are the prospects of basic food sufficiency for the people of Mwingi even after these projects have been completed? These questions constitute an interesting research problem whose explanation calls for systematic analysis of GTZ intervention in Mwingi with special emphasis on food security.

### **1.3 Study objectives**

The general objective of the study is to assess the efficacy of GTZ intervention in Kenya as an instrument of promoting sustainable rural livelihood. More specifically, the study aims to examine

1. The relationship between GTZ intervention and enhanced capacity for food security in Mwingi district
2. The strengths/weaknesses of GTZ intervention strategies in Mwingi; and
3. To establish and ascertain the prospects of self-sustaining food security among inhabitants of Mwingi.

### **1.4 Hypotheses**

The hypotheses of this study are:

1. GTZ interventions have not raised the food security status of the people of Mwingi.
2. There was an observed emerging pattern of a relationship between technical assistance and enhanced capacity for food security in Mwingi;
3. The residents of Mwingi are likely to experience food insecurity once GTZ withdraws due to limitations of the intervention associated with GTZ programme.

## **1.5 Justification**

Since Kenya became independent, development focus has been in the high potential districts where 70% of the population live. Yet these districts account for only fifteen to twenty per cent of the total Kenya's area. The rest is either arid or semi-arid (Cohen, 1987, p. 9-11; World Bank, 1989, p. ix)

Today, Kenya's high potential areas are said to be fully inhabited. For the past ten to fifteen years, people have been moving from high potential into semi-arid areas. There is also movement from arid zones mainly by pastoralists into the semi-arid areas. This has meant that a real problem has developed in the semi-arid lands due to the pressure of more people and more livestock. These pressures have meant that the quality of life of people in these areas deteriorated and the environment degraded. Everyone living in semi-arid lands has become more vulnerable to the effects of drought as well as increased human and livestock population (Bahemuka, 1998, p. 14).

The Mwingi Integrated Food Security Programme is a rural semi-arid based dynamic model for designing and implementing an integrated resources management project. It aims to support in a sustainable way, the rural people, their livestock and plant life. Investing in rural water supply has a huge socio-economic impact on rural dwellers. This case study will generate data and knowledge that can enlighten the ongoing debate over sustainable rural livelihoods approach to rural development. It will stimulate and provide a model for future studies on other important projects based on this intervention strategy.

The fact that bilateral relationship between countries encapsulates not only political but also economic and social links (for instance through the dispatch of personnel, experts, etc) underscores the importance technical co-operation has assumed in contemporary development thinking and practice. The need to subject technical assistance to a systematic and analytical study therefore cannot be overemphasized. The track record of Kenya-German technical co-operation is neither established nor has there been a comprehensive evaluation study of the development implications of this bilateral co-

operation. Apart from consulting reports and in-house evaluation reports aimed at self-justification and glorification, little has been studied or written about actual impact of this partnership (Wanjohi, 1980, p. 17). There is thus a gap in knowledge that development thinkers and practitioners are challenged to fill. This study is thus an attempt to respond to such a challenge.

## 1.6 Organization of the Study

The geographical focus is Mwingi, a semi-arid district in Eastern Kenya. An evaluation study was conducted on the Mwingi Integrated Food Security Programme. This evaluation intends to look into the extent to which these specific components of the programme have met their goal of creating sustainable rural livelihoods in Mwingi district.

This study is organized into seven chapters and is structured as follows: Chapter one is the introduction, including the statement of the problem, study objectives and the justification of the study. In Chapter two, relevant literature on livelihoods and food security is reviewed. This is followed by a discussion of approaches (basic needs approach, rights-based approach, trickle-down approach, sustainable livelihoods framework, human development approach) in addressing rural livelihoods. Subsequently, the Sustainable Livelihoods Framework is adopted as the theoretical framework informing this study due to its ability to integrate strengths of other approaches. Chapter three discusses the Technical Assistance / Technical cooperation philosophy, policy and objectives. It also gives a background of GTZ in Mwingi as well as a summary of its development work. Chapter 4 explores the link between constraints to food security in Mwingi and responses, analysing the appropriateness of each intervention strategy to see to what extent these responses met their objective of building capacity for food security. Chapter five describes the methodology which was used to conduct the analysis in the study area. Chapter six discusses the study findings, analysis and interpretations related to the impacts of the project. Finally, chapter seven concludes with a short discussion of results of the evaluation exercises that followed the project; and offers some conclusions and lessons for the future.

Understanding household-level integrated asset management helps to draw out the critical relationships between access to water resources and food security.

The challenge is to take the debate beyond the achievement of health benefits, and simplistic visual associations of water and poverty. This will involve demonstrating that support to water supply development can help to achieve sustainable livelihoods within poor communities in the semi-arid areas, and in so doing make a real contribution to poverty reduction.

The premise is often stated that, because the poor have been shown to pay a given percentage of their income for water supply and sanitation, they are capable of contributing to the administrative and maintenance overheads of a rural community water supply system. Financing by the rural poor forms part of the goal of cost maintenance and is seen as a means of ensuring sustainability. This is the crux of the issue regarding sustainability. If responsibility for operations is to be decentralised, care must be taken to ensure that local governments or beneficiary groups have enough funds and technical skills to handle the work (World Bank, 1989, p. 186–187).

Under economic provisioning the UNDP (1999), states, that 'in developing countries, lack of access to health services and safe water, and the level of malnutrition capture deprivation in economic provisioning more practically than other indicators (UNDP, 1999, p. 13). The emphasis on water quality is closely linked to, and remains however as an indicator to the level of economic provisioning within a community. Hence, where as a lack of a good quality supply of water may indicate lack of provisioning for human consumption, it does not necessarily indicate the lack of provisioning say, for livestock assets, or for the cultivation of crops - which may in fact, be more significant determinants of poverty and livelihood security in given communities than water access and availability for human consumption (World Bank, 1989, p. 155).

This is a key departure for the livelihoods view of water supply. While a poor quality supply for a household's own consumption might warrant a higher poverty weighting, the

same supply might be plentiful and not harmful for livestock, serving to increase livestock productivity and reduce the vulnerability of the household. It may also increase the household's income sufficiently to free other assets to improve supplies in the long term. Thus, while the water–livelihoods relationship is significant, the mechanisms to building stronger livelihoods through water supply involve trade-offs. The emphasis is not on water quality, so much as the uses to which it is put (Wolmer, 1997, p.171).

It is also necessary to recognise water as just one type of asset available to households that determines the types of livelihood strategies employed. Availability and access are elements in a network of choices and activities which form livelihoods of communities (Clarke, 1994). Those with the range of assets necessary to combine with water to create income or produce for exchange may in fact, benefit a richer strata of a community disproportionately, either through increasing the value of other assets such as land or through increasing the tendency to monetise access to water resources.

These complexities are revealed in the Wajir region of Kenya and in Makueni, where the increased sinking of boreholes in those areas since independence has caused the monetisation of the water supply (Murton, 1997). Whereas pastoralists were previously able to move long distances by using water which they had rights to, by virtue of reciprocal obligation, now most water has to be paid for...this can (and has ) prevented poorer pastoralists from moving, as they cannot afford the water at “foreign” boreholes. This inability to move makes their herds far more vulnerable to dying in a drought. In a nutshell, the increased provision of water resources – and the monetization that has gone with it – have, ironically, increased and endangered the livelihoods of the poor and are now more vulnerable in times of emergency (Clarke, quoted in Murton, 1997, p. 63). The relationship between access to one capital asset and other household assets, including physical capital, can be critical. Increased access to water can create greater demand, so where water is made more easily available and access is improved, demand for labour (often gender specific) at a household level is frequently increased. In some cases, children (particularly girl children) may spend more time collecting water as a result of improved access.

## **2.6.1 Water as a Good and an Asset in ASALs**

The rational and integrated development of water is a key issue in the ASAL. Unless the development of water resources is linked with grazing capability or with the needs of the mixed farm, environmental problems rapidly multiply. Even the effective use of fertilizers and pesticides is tied closely to availability of water. It is therefore important that water be integrated with the development activities in the ASALs.

Most discussion of domestic water is concerned with human consumption requirements and its use as part of daily household requirements for cooking, cleaning, washing and drinking. The weighting given to this view of water – as opposed to its use as a productive asset – is perhaps undue, and arises from the health-based approach described earlier (Chambers, 1983). Water is both a good which has costs attached (in delivery and disposal), and an asset in productive processes at a household level – whether watering animals, supplementing small plot irrigation, producing local drinks for sale or other cottage industrial products or even reselling for a profit to other households.

Access to clean water is considered a basic human right. Lack of it is an indicator of poverty. However, in rural areas, the role of water in human well-being is more complex. Water is used in a variety of productive and consumptive activities. Food production, income generation, fishing or agro-processing and health can all depend directly on the quantity and quality of available water. Where water is not piped, the time that households must devote to collecting water is a major factor in livelihood options and outcomes.

Issues of distribution and access are also critical in understanding the role of water in rural livelihoods. Ensuring access to water quality is similarly problematic. Social organization around water is also important. The way that communities come together to manage water can strengthen social ties and help integrate the poor and more marginal members of a community (Conway, 1985). These social assets can be important to those whose asset base is limited. Because of their lack of safety nets, the poor are often disproportionately affected by shocks such as droughts, heavy rains or floods. This can

deal catastrophic blows or contribute to the slow erosion of the quality of, or access to, a resource. Uncertainty and insecurity affects the contribution of water assets to rural livelihoods. It has implications on people's incentives regarding exploitation and conservation.

The biggest challenges facing smallholder farming communities in the semi-arid lands are food insecurity, poverty and ill-health. Many ASAL regions are routinely food-deficient and rely on food aid. Their economies which depend on rain-fed agricultural systems and are characterized by low productivity, vulnerability to frequent drought, poor adoption of improved technologies and diminishing farm labour due to out-migration and HIV/AIDS (WFP, 2002 quoted in Maxwell and Slater, 2003, p. 697-708).

There is need therefore to strengthen linkages through a systems approach that integrates improved water and soil management with markets and other institutional arrangements which facilitate farmer investment in improved production practices. A pro-poor water-management policy should be based on a clear understanding of the linkages between poverty, land degradation and water management within catchments. Specific attention should be paid to:

- a) The role of water in the livelihoods of the poor in upland watersheds,
- b) The role of the poor in the management of water and other resources; and
- c) The implications of improved technologies, policies and institutions for sustainable watershed management.

## **2.6.2 Impact of Land and Water use on Livelihoods**

Water is critical to sustainable livelihoods of rural people through the range of services it provides. Land use in the upper catchments can affect the availability and quality of water downstream. This relationship between land and water is the basis for many watershed-management programs and policies aimed at improving water availability by reducing resource degradation. Research findings by the World Commission on Environment and Development (Our Common Future, 1987, p. 54), have shown that the relationship between land use and water is more complex than was initially thought. The

## **CHAPTER THREE**

# **TECHNICAL CO-OPERATION BETWEEN KENYA AND THE FEDERAL REPUBLIC OF GERMANY**

### **3.1 Introduction**

This chapter presents the philosophy, policy and objectives of technical assistance/technical co-operation. It gives a background of technical cooperation between Kenya and Germany, as well as a summary of development work of GTZ in Mwingi.

### **3.2 Origins of Technical Assistance in Kenya**

Technical assistance is the transfer of skills, technology, and know-how from the developed to the developing countries for the promotion of socio-economic development in the developing countries. Technical Assistance is supposed to promote growth and sustainability of economies of the recipient countries through the transfer, adaptation and mobilization of skills, knowledge and resources in order to raise the recipient's economic surplus thereby helping it to generally increase resources for growth-inducing outlays (Omollo, 1994 p.4-5). Technical assistance involves a series of actions designed to enhance the recipients' capacity to use their own resources more effectively.

Technical co-operation on the other hand refers to a situation when both the recipient and donor have reached a level in which both countries collaborate to develop needed skills and attitudes in the less developed countries and to create and support in those countries the institutions necessary for social, economic and political growth (Berg, 1993, p. 71). In this study both terms are used interchangeably without any change in meaning. The methods most commonly adopted are five fold:

- The sending out of experts and advisors with semi-operational functions e.g. in establishment of new institutions;
- Equipment for use in research, teaching or training or demonstration for pilot projects;

- Operational personnel placed at the disposal of recipient government for such tasks as may be assigned to them;
- Students and trainees from developing countries in recipient of bursaries and scholarships from donor agencies to finance participation in courses deemed to have a developmental.
- Limited funding to offset running and maintenance costs of equipment like machines and motor vehicles.

The period after 1950 according to Lele (1991, p.66), saw a commitment by governments in metropolitan Europe to the development of African dependencies. The adoption of what was known as “responsible colonialism” was born out of a mixture of genuine humanitarian concern about poverty in Africa, a sense of moral obligation for war-time assistance and very large dose of self interest. Considerable amounts were made available to colonial administration of colonial Africa after 1945. Between 1945- 1958, Britain supplied about \$263 million into colonies in Africa. France provided the equivalent of \$345 million (Arnold, 1979, p. 180-181).

Central to these were development plans, majority of which were responses to post war requests for plans to which metropolitan finance might be supplied. Most of the plans were long term public expenditure programmes which brought a greater degree of co-ordination to the functions of government departments and corporations through the supply of technical personnel and limited funding. Infrastructure development, social welfare - education, health and agriculture - was given priority. Following from the Marshall Aid programme, Britain and France sent aid in form of technicians and experts to implement ambitious development schemes designed to revitalize the metropolitan economies.

The United Nations declaration of 1960s and 1970s as the *first* and *second* development decades attached special attention to development planning with the state taking the central role in development process. With comprehensive planning, achieving the target rate of growth needed assistance both financial and technical (OECD, 1974). By 1975,

Africa was receiving a total of US \$ 587 million worth of technical assistance with personnel accounting for 27% (Riddell, 1987 p. 245).

### **3.3 Objectives of Technical Assistance**

Technical assistance whether bilateral or multilateral has through out the post World War II been an important factor in development. Save for emergency aid following natural or man-made catastrophes such as large-scale starvation or drought, the ultimate purpose of technical assistance is to promote development rather than a temporal intervention for consumption. Thus technical assistance is generally seen as an instrument of development. According to Tisch and Wallace (1994, p. 47), ideally, the role of technical assistance and aid in general is to help the recipient beneficiary to realize 'real development' and become free of aid dependency. It should enable the recipient to increase its own economic production and accumulation of wealth side by side with increased consumption.

Rationale for entering into bilateral technical co-operation is spelt in the 1970-1974 National Development Plan: "Kenya acquires technical assistance from foreign governments in order to remove short-term manpower constraints and thus enable government to plan and execute the development plan programme" (RoK, 1969, p. 127).

Kenya became Germany's co-operating partner when an agreement on economic co-operation was concluded between the two countries in 1974. However, Technical assistance from Germany to Kenya precedes Kenya's independence in 1963 as Kenya was already receiving minimal amounts of aid from Germany before then (Arnold, 1979, p. 180). Technical co-operation became an inescapable reality as well as a defining characteristic feature of these bilateral ties (Omollo, 1995, p. 7). According to the Ministry of Finance (1969, p.172), the agreement on the Partnership for Technical and Scientific Co-operation between the Government of the Republic of Kenya and the Government of the Federal Republic of Germany dated 25th February 1966, this arrangement sought to co-operate in the following fields:

- i) Research, applied science and the planning of development projects.

- ii) Promotion of institutions providing technical and scientific studies.
- iii) Planning, development and implementation of agricultural projects.

This co-operation has mostly taken the following forms:

1. Knowledge transfer in planning, management and adaptive research and development.
2. Limited funding for implementation capacities through governmental structures, NGOs.
3. Limited provision of development funds for input supplies.

Technical assistance from Germany to Kenya has continually been improving and to date, Kenya ranks among the top 10 countries in Africa that receive aid from Germany. (See table 1). This assistance is mainly delivered in the form of discrete individual projects, with a bias towards integrated rural development. It also comes in the form of providing experts tied to specific projects of GTZ, the German government arm for technical co-operation. All these account for about three quarters of bilateral technical assistance commitments, the Federal Republic of Germany to Kenya (UNDP, 1992).

Interviews with the Federal Republic of Germany embassy officials in Kenya in 2003 confirm that as a general policy, the bias towards project aid continues to be a major feature of German bilateral technical co-operation programmes. The bulk of technical assistance to Kenya is therefore mainly project assistance. These projects are necessary prerequisites for uplifting the living standards of the people in the rural areas for they facilitate exploitation of natural resources. The agricultural sector continues to receive substantial funding in grants.

**Table 1: Aid recipients in Africa 1950 – 1989 in Million Deutsch Marks**

Country	Technical Assistance	Total Amount.
1. Egypt	1,128.4	2,565.0
2. Sudan	940.4	2,268.3
3. Tanzania	1,179.9	2,199.1
4. Mali	644.3	1,260.2
5. Ghana	545.3	1,297.9
<b>6. Kenya</b>	<b>939.6</b>	<b>1952.1</b>
7. Morocco	460.6	2,150.0
8. Cameroon	532.8	1,262.1
9. Democ Rep. of Congo	654.0	1401.1
10. Tunisia	<u>502.9</u>	<u>2130.9</u>
	18,232.7	42,385.8

Source: The Federal Ministry of Economic co-operation (BMZ), (The Economic Division, of the Federal Republic of Germany Embassy in Nairobi.)

### **3.4 Implications on Development**

The Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) is owned by the government of the Federal Republic of Germany, but operates as a private sector enterprise. On behalf of the German Federal Ministry of Economic Co-operation and Development (BMZ), it helps governmental and non governmental institutions in the recipient country to plan and implement development projects. The objective of projects of this sort is to strengthen the performance capacity of individuals and organizations. Thus GTZ helps make sustainable improvements to the living conditions of people in developing countries (Dietrich 1994, p. 14).

Technical assistance as one of the existing frameworks of Development aid plays a key role in determining livelihood security and eventual sustainability. To date, substantial resources have been disbursed through technical assistance. There is a lot of data that has been generated on the same subject. It is not therefore prudent to applaud the supposed

efficacy of technical assistance on the basis of thin consulting reports and in-house donor evaluation. Neither is it appropriate to justify present tendencies of critics to reject technical assistance on the basis of superficial knowledge of troubled projects and deductive application of general principles from economics and public administration (Cassen, 1994, p.11). This therefore begs the question: What has this technical assistance achieved?

Broadly, studies show that notable advances have been made in social conditions in the developing world in the past 40 years, though there is no consensus that technical assistance has been decisive in achieving these gains. According to Cassen (1994, p. 23), it is a well-known fact that after decades of technical assistance disbursements to the developing countries, no genuine viable structure of broad-based socio-economic development of rural communities in a national context has been identified. There is also the repeated charge that underdeveloped countries do not make the best use of technical assistance and that many experts return to their home country feeling that they've wasted time. Others argue that the presence of foreign experts or the introduction of new technology, the so-called psychology of technical assistance tend to undermine the very essence of economic development by building up the attitude "that someone else is better qualified and can do it for me" among recipients (Berg, 1993, p.68). Technical assistance can also sap a peoples' energy and initiative, so it is argued. A whole population lapses into a state of apathy arising from a feeling of mental impotence. All these things sap energy for self reliance and relegate indigenous people to the role of bystanders.

Robert Cassen in "*Does Aid Work?*" writes that "Technical co-operation as part of the bilateral effort to speed up Africa's economic development has yet to show much success. Measured against its physical capital objectives, it has had a very high success record. The difficulties have concerned the institutional and human capacity-building assistance that comprises the bulk of technical assistance by bilateral donors (Cassen, 1994, p.168).

In Kenya over half of all the technical assistance has gone to Education, Health, Public works, Agriculture, Finance and Economic planning (UNDP, 1999, p. 2). Only a limited amount has gone to rural sector. Through an assemblage of piecemeal studies and interpretations, the impact of this technical assistance in the either sectors of Kenya's economy is varied. Wanjohi is basically pessimistic about the efficacy of technical assistance as an instrument of broad-based development (Wanjohi 1980, p.472). His argument is that technical assistance can never facilitate enhancement of livelihoods particularly among rural communities. He argues that the direct involvement in socialisation, policy formulation, day to day running of strategic public departments by experts, volunteers and operational advisors has sought to ensure the promotion and maintenance of neo-colonial economic system.

"Aid in general, and technical co-operation in particular is an inextricable part of the neo-colonial nexus that binds the poor countries to the rich ones, and that it is bound to be used by the wealthy elites in poor countries to strengthen their positions. Technical assistance personnel impact lies in the continuation of socio-economic and political policies, structures, attitudes and institutionalization of a value system considered vital for the continuation, protection and perpetuation of the interests of international capital (ibid. p. 477).

On another perspective, even if the overall record of technical assistance has been mediocre, it has had a substantial impact on policy research, analysis and formulation. Technical assistance has played a central role in supporting key ministries, agencies and local research institutions in Kenya. Expert personnel as part and component of technical assistance have been most productive in areas of research. In Kenya, technical assistance has undoubtedly influenced the analytical capabilities of a number of Kenyan technocrats and research institutions that are of multi-sectoral nature. e.g. Kenya Agricultural Research Institute, KARI, Kenya Medical Research Institute, KEMRI and the Kenya Institute for Public Policy Research and Analysis, KIPPRA (RoK, 2000, quoted in UNDP, 2002, p.21).

"TA has undoubtedly influenced the research capabilities of Kenyan technocrats and institutions and their approach to analyzing economic issues....although outsiders may have influenced the priority given to various economic policy issues, its nevertheless, clear that most of the reform agenda implemented over the past 20 years has been developed internally" (UNDP, 2002, p. 21-22).

In view of these varied standpoints as regards technical assistance, what then does the presence of GTZ in Mwingi mean? Has it built and strengthened the capacity of the local people to overcome vulnerability, especially food security vulnerability or has it scuttled or stifled the energies and initiatives of the indigenous people geared towards self sufficiency in basic needs.

### **3.5 The Mwingi Integrated Food Security Programme**

Mwingi population is predominantly peasantry. Climate, specifically rainfall is the most critical factor in much of the Akamba life. Mwingi occupies semi-arid agro-climatic zones experiencing relatively high temperature and low, erratic rainfall. The timing and amount of rainfall are critical determinants of the adequacy of grazing pastures and prospects of relative prosperity. Short-lived droughts have been part of the normal cycle of peasantry in the region. However, with rapid destruction of the environment, mainly due to tree felling for charcoal production, the length and frequency of droughts have increased (RoK, 2000, p. v).

The Mwingi Integrated Food Security Programme was started in July 1994 and ended in April 2002. This was a Kenyan-German technical co-operation and partnership and a number of ministries and NGO's were involved in this multi-disciplinary effort. GTZ and the then Ministry of Agriculture and Livestock Development were the implementing agencies.

MIFSP overall goal was to contribute to the sustainable improvement of food security, incomes and livelihoods of smallholder farmers in Mwingi through asset creation and rehabilitation. The programme supported a participatory and demand-driven development

process to enhance the organizational capacities of vulnerable groups and to link sector support in areas of health, agriculture, livestock water and income generation.

It entailed to increase the self-reliance of the targeted community with regard to food security and other essential basic services. This was to be achieved through the establishment of a number of village-based projects including an early warning system, district-based crop and fodder seed supply systems; promotion of appropriate food storage structures; promotion of adoption of appropriate crops and livestock production technologies and practices; and training of target groups in management of the project, its assets, and human resources. Specific interventions which were targeted include:-

- Natural resource conservation
- Improved small livestock health and production
- Improve access to potable water and to enhance water quality.
- Strengthen capacity of communities to implement and manage project activities and assets.
- Improve access to markets through construction of feeder roads.
- Food for Work activities
- Income Generating Activities

# CHAPTER FOUR

## RESEARCH METHODOLOGY

### 4.1 Introduction

This chapter describes the methodology used to conduct the study. This study utilised a variety of methods and approaches. These were:

- Household questionnaires were administered to 36 households out of sampled 45
- Focus group discussions with opinion leaders and key informants at community level.
- A stakeholders' analysis was conducted to establish the capacity of stakeholders to deal with food security issues in the 2 divisions. This included a SWOT (Strengths, Weaknesses, Opportunities and Threats) for each identified stakeholder.
- An organisational capacity assessment (OCA) was used to analyse the institutional capacity within the CBOs, youth and women groups which were left to manage the projects after GTZ withdrew.

The methodology involved collecting primary data aimed at making a field study project evaluation of the Mwingi Integrated Food Security Project.

Broadly, the study involved the following steps:

1. Selection of the project scenario.
2. Definition of project scenario
3. Data Collection
4. Data analysis

### 4.2 Selection of Mwingi

Mwingi was chosen for this study because it is highly famine-prone and because there was already a project in place addressing food security. The population of Mwingi district according to 1999 National Housing and Population Census was 174,059 people. The district's population grows at 2.1 percent per annum (ROK, 2002b). Key features of Mwingi district are its remoteness. Climatic conditions permit cultivation of just two

annual crops of maize and cowpeas or millet, sorghum and green grams. Livestock are an important component of livelihoods in all villages.

Mwingi district as a case study was selected because it met the conditions of having a GTZ project on site; Moreover, the district has a challenging environmental for a sustainable rural livelihoods. Its selection was based on the need to capture high quality data that is representative of the diversity in ASAL communities in Kenya. The considerations behind the selection of each division are as follows:

Two sites ( Kyuso and Tseikuru divisions) were selected because GTZ was undertaking activities in these two areas. It was important to build on existing rapport and relationships between GTZ and the villagers, ensuring that community felt comfortable and confident enough to provide accurate and helpful answers.

#### **4.3 Research Design**

In order to analyse the benefits of GTZ activities, the situation without GTZ needs to be compared with the situation now. Project evaluation sought to compare the current conditions of the beneficiaries with those before the project was initiated. Basically, this involved looking at what the project aimed to achieve and compared against project outcomes. To get a precise picture of this intervention, the study also did compare conditions in the project area relative to a control project area, that is, an area with similar socio-economic and ecological conditions, but which did not benefit from GTZ intervention.

- Without Mwingi Integrated Food security Project:- What would have been the livelihood status of the community before Mwingi Integrated Food security Project had taken place
- After GTZ had taken place
- With Mwingi Integrated Food security Project:- What is the impact on community now that Mwingi Integrated Food security Project has taken place

#### **4.4 Sampling Frame**

A number of techniques were used. First, focus group discussions were conducted in the villages, and questions were asked concerning the impacts of droughts and how this had changed with the GTZ intervention. In Tseikuru, focus groups were conducted with five villages - three that had GTZ interventions - (Mivukoni, Tseikuru kwa Mutisya and Nguuku) and two that had not (Kaningo and Kyenini). In Kyuso, focus groups were conducted in three villages - two that had GTZ interventions (Kyuso and Katse) and one (Kamuwongo) that had not. By working with both villages it was possible to gather data for both scenarios. The study locations were chosen in order to capture livelihoods of varying kinds. Key livelihood gradients that determined village selection were intensive vs. extensive farming, small vs. large farm size, variations in livestock keeping, proximity or remoteness from public infrastructure and services, and variations in access to non-farm activities.

In Kyuso and Tseikuru divisions, there were 87 households, and 11 villages. Three villages only -Kyulungwa, Kaningo and Kamuwongo - fell at least partially outside the project area, according to the National population census of 1999 (ROK, 1999). The location of study district and villages can be ascertained by reference to the maps provided in Fig 2. on page 49.

A complete household list was compiled for the villages and a stratified random sample was taken with households selected from each of the villages. The data demands of a livelihoods investigation are potentially awesome. However, a mix of qualitative and quantitative methods was used. In particular, qualitative methods were found more insightful in capturing the social and institutional context of people's lives than quantitative methods.

The sample size was 45 households. In addition, eight officials of GTZ, Government departments, and community-based organizations were interviewed during the study. The Government departmental officers were the ones considered to be more knowledgeable on the projects' related issues like strategies, partnerships and constraints that are the

main subject of this study. The actual fieldwork took in excess of five weeks in the months of September and October 2003.

Fig 1: Map of Mwingi district, in Kenya showing location of study villages



Mwingi District:  
Kyuso and Tseikuru divisions

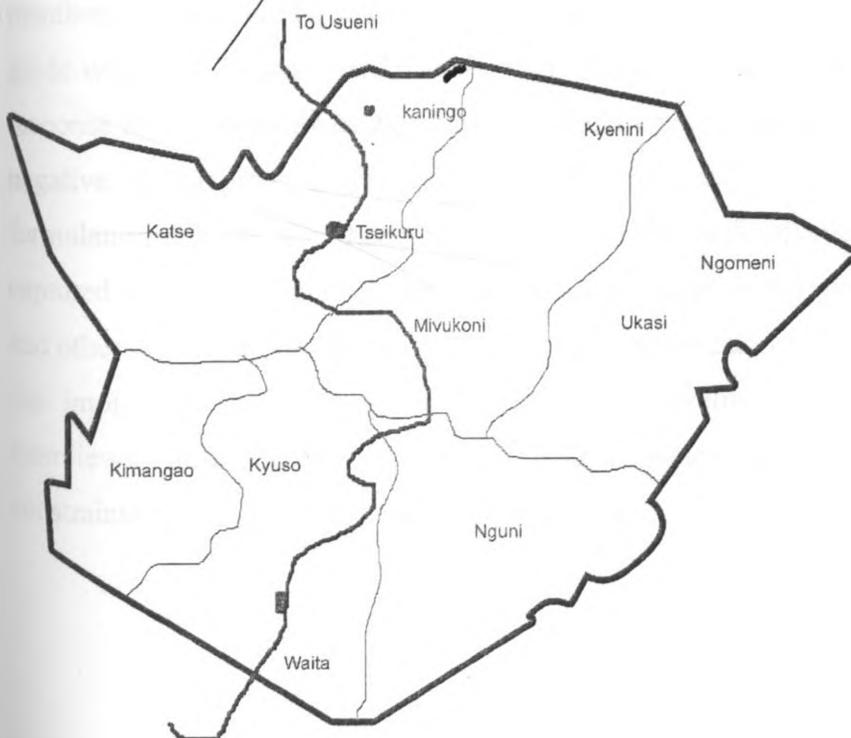


Table 2: Study Villages in Mwingi District

Division	Location	Village	Benefited from Project YES NO
Kyuso	Kyuso	Waita	YES
Kyuso	Kamuwongo	Yumbisye	NO
Kyuso	Kamuwongo	Kakuyu	YES
Tseikuru	Tseikuru	Kimangao	YES
Tseikuru	Kyulungwa	Kyulungwa	YES and NO
Tseikuru	Tseikuru	Katse	YES
Tseikuru	Kaningo	Kaningo	NO
Tseikuru	Kaningo	Kyenini	NO and YES
Kyuso	Kamuwongo	Kyulungwa	NO
Kyuso	Ngomeni	Ukasi	YES
Kyuso	Kyuso	Nguuku	YES

#### 4.5 Data collection

In this study both primary and secondary sources of data were used. An in-depth face-to-face interview with GTZ officials, Government departmental officers, heads and members of households, leaders of community-based organizations using an interview guide was used. Unstructured interview guide was used since this gave greater depth of response to questions focusing on expected and unexpected outcomes, both positive and negative of the projects. The interviews also focussed on the GTZ's strategies, their formulation and the respondent's perception of their effectiveness. The interviews also captured working relationships between the lead development agency, in this case GTZ and other organizations examining the strengths and weaknesses of such partnerships and the implication of such relationships for the livelihoods improvement. From the interviews, the problems which GTZ faced in achieving its objectives and how such constraints can be addressed were also looked at.

## **4.6 Data analysis**

First, household and village famine indicators and records cases were reviewed. Second, local CBOs and Government ministries and departments were a key source of data because they had been working in these communities for several years. Baseline data collected by the NGOs and the government departments was also used to verify impacts of the GTZ intervention.

## **4.7 Limitations and Constraints**

Crisscrossing the vast Mwingi district with its teething transport and communication problems was quite difficult. Most of the officials interviewed were not actively involved in the entire project cycle. In most cases, these officials had only been contracted at one stage of the project lifecycle hence their insight was somehow limited. The MIFSP which wound up early in 2002 and left Mwingi albeit rather acrimoniously had transferred its physical assets to the local Ministry of Agriculture and Livestock Development. Most staff from that ministry were not willing to disclose comprehensive details regarding the project. The above are seen as field problems because they are factors that were working against the main objectives of collecting valid and reliable data. However, everything possible was done to ensure the quality of the data was upheld in terms of validity, reliability and accuracy.

## CHAPTER FIVE

### GTZ FOOD SECURITY INTERVENTION STRATEGIES

#### 5.1 Introduction

This chapter analyses the strategies employed by GTZ in strengthening food security in Mwingi. The project's initiatives are examined. In addition, the success and failures of the strategies and their suitability in tackling food insecurity are also discussed. The above are then analysed in relation to food and livelihood security.

The strategies need to be understood because they are crucial in addressing problems of livelihood insecurity. Since livelihood insecurity has numerous manifestations such as low income, poor health, low levels of education, hunger and malnutrition, it is necessary to devise strategies and interventions that will strengthen livelihood systems effectively. The poor and the most vulnerable should be provided with means to improve their living standards. This will only be achieved if appropriate approaches and intervention strategies to address the incidence of livelihood insecurity are in place. Do the strategies utilized by GTZ to reduce food security, and therefore strengthen livelihoods have advantages over other agencies of development such as government acting alone? What benefit does a partnership like this one which involved the government and GTZ bring to grassroots where the majority of the poor live?

One of the objectives of this study is to identify the strategies utilized by GTZ in addressing food insecurity. The study hypothesizes that the strategies employed by that development agency to build capacity for food security provide a major reason why this goal was or was not accomplished. GTZ's activities were in diverse sectors and fields. All were aimed at tackling the wider incidence of 'livelihood insecurity' since vulnerability to livelihood insecurity in general is a multi-sectoral phenomenon cutting across all sectors of development in the semi arid lands.

## 5.2 Food for Work

Food-for-work was organized with the local households in the highly environmentally degraded areas to initiate conservation of the environment such as gully rehabilitation, bunds and terraces, and tree planting. It also aimed at infrastructure building. There is widespread land degradation in Mwingi, manifested by soil erosion, nutrient depletion, desertification, deforestation and/or overgrazing. The relationships between land degradation, low productivity, food insecurity and poverty are complex and driven by an array of common factors. The alarming rate of degradation reflects a dramatic draw down of natural capital and a simultaneous lack of investment to replenish it. Motivating investment in natural resources requires incentives, inputs, information and institutions more or less concurrently.

The short-term objective of the food for work initiative was to provide an employment programme during the off-farming period. This would allow poor families to have access to additional income and so improve their food status. It would also enable rehabilitation of critical infrastructural assets which would improve marketing opportunities for agricultural producers in the area. In addition to the rehabilitation of the road, the ultimate objective of the project was to provide a sound basis for informing future responses addressing the problem of seasonal food insecurity in the area.

In order to benefit from this scheme, a household had to have available labour. This means that food for work in most cases would not help households where there were no able-bodied people. Neither would it add value to a household where all available labour was already productively employed. In-kind food payments were sourced from domestic production in food-surplus areas of the country to compensate for work done in those works. This arrangement resulted into, multiple development goals being accomplished: reclamation of severely degraded water sheds, increased food security and expanded market demand for domestically produced food staples.

### **5.3 Improved Small Livestock Production**

For many poor households, livestock are the primary form of savings, and source of income. As an investment, few can match livestock as a means of capital growth. Equally, animal sales do allow poor households to quickly generate cash during times of need. From a technical perspective, a higher level management of the herd size would probably lead to greater financial profitability. Livestock gifts are commonly made in response to formal or informal social events or occasions. For example, dowry and bride wealth in Mwingi is paid in cattle and small stock. Informally, livestock are often given in direct response to the emergency needs of friends and neighbours.

The multiple roles of livestock in contributing to successful secure livelihoods is illustrated here. High livestock ownership not only denotes high wealth associated with livestock as a store of value, but also implies high income, always placing bigger livestock owners in upper per capita income ranges. Notably, in Mwingi, it is livestock itself that is the major contributor to these incomes. Non-farm self employment income is however closely linked with livestock, providing an example of the interlocking nature of relative livelihood success in this semi-arid region. Livestock is a substitutable asset that can be sold in order to invest in land or small business, and vice versa, non-farm income can be used to build up herds of cattle. Nevertheless, in addition to its benefits, livestock keeping also held risks for the poor households of many arid and semi arid lands. Livestock related income frequently does have seasonal peaks that negatively impacts on the poor.

Livestock have a very clear role in the derivation of social capital for the individuals and households as the formulation and design of the project envisaged. First, for many poor households in ASAL, livestock are shared or loaned between friends and neighbours or reared for absentee owners. In this manner, livestock do help cement social networks and community-level obligations for the households involved. Second, livestock are frequently used as a means of augmenting social capital through gifts such as dowry, presents, thanks giving, fines and bailouts and tokens of appreciations.

Less well-off households had not been benefiting from seasonal price increases due to the year-round need to generate off-take for foodstuffs and other basic requirements. However, since the improved small livestock production project sought to support improved animal health, this had a direct increase in the benefits of livestock keeping as a financial activity. The improved small livestock production approach envisaged helping to decrease the risks of livestock keeping and smooth income curves for poor households. Nevertheless, this well-meaning project was scuppered by several intervening factors. Poor households were often constrained by lack of labour and access to markets for their livestock products emanating from increases in production. Others included: the inability of poor farmers to pay for new technologies (like raising money for entry qualification to the breed improvement phase) and the lack of demand for production gains by individual farmers. In a nutshell, increases in production did present opportunities for the households involved.

Because of declining veterinary services in the area, cattle mortality has increased dramatically, and cattle numbers are not recovering to the extent they should from drought. The slow recovery of the cattle from the drought of 1998/1999 illustrates the impact of the reduction in veterinary services. This slower recovery of cattle numbers then feeds through the livelihood systems of the people of Mwingi with lower incomes and lower related inputs to the cropping system hence food insecurity and precarious livelihoods still exist.

#### **5.4 Improved grain storage and marketing: Crop stores and seed banks**

Storage falls into two main categories: household stores and community grain and seed banks. Due to poverty and low agricultural productivity in Mwingi, it is important to maximise crop preservation. Inadequate, improper storage causes crop rotting, contamination or farm produce, mostly cereals getting eaten by pests like weevils.

Poor farmers in Mwingi used to lose a sizeable portion of their harvested grain to insect pest during storage. Reduction of these losses can help to reduce vulnerability of the small farmers and improved food security and increase income. Storage systems were

developed which made it easier for farmers who cannot afford to construct grain stores to store their harvest. In many villages, households used to rely on the unsustainable public sector grain management. This was the FAO, Italian Aid Fund and the Government of Kenya (through the National Cereals and Produce Board) countrywide grains storage facilities of the late 1980s.

## 5.5 Community based water supply

Nothing is more important to the sustainable livelihoods of the rural areas in semi arid lands than water management. Water scarcity is not a new phenomenon in the semi-arid lands. Availability or unavailability of water has undoubtedly been an important factor around which rural communities in the ASALs have had to adjust their activities for many years. GTZ intervention was thereby mainly focused increasingly in helping Mwingi residents to cope with drought, and lessen the multiplier effects of this phenomenon.

There were adjustments which individuals had to make to reduce the impact of drought on their food supply. Some of those ‘coping strategies’ involved modification of their relationship with the environment for example, careful selection, sowing and mixture of crops, selling of livestock, storage of crops from good seasons, food donations, loans or cash. Such coping strategies had developed over many years and evidence suggests that additional strategies were evolving such as the physical, political economic and social environment change for the people. However, the breakdown of traditional coping strategies had left a large number of people in the ASALs increasingly vulnerable not just to natural events such as climatic drought, but also to the incorporation of the free market economy. This mainly occurred where previously free resource like water was now a commodity to be accessed via the market.

GTZ promoted new approaches to water supply targeting needs of special category of people, especially the poor and women. One of the distinct approaches by GTZ was to challenge the conventional separation of domestic and productive uses of water and aimed to integrate competing demands for water. Small-scale income generating

activities like fruit and vegetable gardens, improved livestock rearing, making beer, often fall between the remit of the domestic water supplier and that of micro-irrigation sector. The recurrent droughts to which Mwingi district is susceptible to, require that water resources be carefully husbanded and watersheds be protected. Experience in Mwingi has demonstrated that careful management of water resources can prevent droughts turning into famines and enable agricultural productivity and soil quality to be maintained.

## 5.6 Capacity building

Capacity development had moved into center-stage in agendas of GTZ. Strengthening the capabilities of individuals, households, and community-based organizations was viewed as essential to ensuring the sustainability of GTZ development efforts beyond the goal of increasing food production, to the broader goal of reducing poverty. Substantial amounts were invested in the development of organizational and institutional capacities of community-based organizations, farmers associations, youth self-groups and women groups.

In most semi-arid lands the prime asset which every household controls is their own labour. The productivity of this labour depends on skills and knowledge, health status and degree of experience. Unskilled labour was underutilized especially during the dry season. The HIV/AIDS pandemic escalated the labour crisis situation in the research area especially through the exodus of able bodied men from the area to urban centres like Nairobi or Mombasa, and the migration out of the area for trading women.

There were mechanisms for mobilising the labour situation through customary social institutions and relationships. For example some group work parties, where individuals could get together to tackle some specific jobs (e.g., digging a well in return for some reward, usually beer in case of male groups). However, in the face of HIV/AIDS there is a widespread loss of capacity and outright breakdown of these traditional institutions and cultural practices that provide a safety net. In the past, members of the extended family would normally share the responsibility of looking after orphans and widows. The institution is, however, unable to cope with the dual pressure of rising burdens from

HIV/AIDS and the rising cost of living. There was emerging consensus that these norms and networks do facilitate collective action for mutual benefits, in other words, “social capital” and are crucial for societies to prosper and achieve sustainability.

Membership to these organisations and institutions provides individuals and households with an instant reliable social group to which they unequivocally belong to. This is a group with formally defined (often to the extent of being written) reciprocal rights and duties, including immediate sources of support, not only in financial terms, but also often in the form of labour for critical activities like house building, harvesting, funeral and wedding preparations and many others. It is perhaps not surprising that in a situation of increasing vulnerability for many households, people seem to no longer feel confident of relying exclusively on kinship and clan affiliations. These associations are by their nature always negotiable and that they are prepared to invest significant sums to guarantee the membership and support of a group, whose rules of behaviour are explicit.

GTZ intended to give these organisations some capacity like training on conflict (disputes) resolution, law and discipline enforcement. Such lack of capacity at a peasant production level is an evidence of institutional failure. This inhibits pursuits of livelihoods to a secure and self-sustaining level. New forms of institutionalised support seem to be increasing in importance: institutions are proliferating, diversifying and becoming more formalised, perhaps at the expense of traditional norms of reciprocity. By far, the most common association, to which everyone is said to belong, are the *clans*, which were traditionally kinship ~~associations~~ associations. The cost of funerals, fines in case of conflicts, and accidents can be prohibitive; through the *clans*, regular contributions from members are used to cover the costs.

## 5.7 Income Generating Activities

Reliable income generating alternatives to agriculture are not available locally. Petty trading is for most households the most important means of supplementing the household food supply. The last resort is cutting of firewood and grass, burning charcoal for sale.

### **5.7.1 Kitchen Gardening**

Gardening is not a large part of livelihood portfolios for the people of Mwingi, either in terms of time dedicated to it or gross income, largely because of water constraints, labour scarcities and lack of good markets. However, it was acknowledged and adopted as an important component of the overall livelihood strategies, especially for women, as it provides a degree of food security as well as a source of cash income.

By the time Mwingi Integrated Food Security Programme wound up, a total of 24 households in Katse area alone had benefited from the scheme and were operating fully self-sustaining sheds compared to a paltry 10 members at inception. This initiative was largely community-driven, in which most community members were happy to see new beneficiaries enter the scheme. Given the close family networks, many of the beneficiaries were related. We learned that the above action did not require any major investment, as the water sources, a very reliable collector well, and an earth dam were already operating and being maintained by the community.

This development is improving food security and improving equity (the later new members are generally poorer households from the catchments), but is not making a fundamental difference to the poverty status of the community. It would have been ideal, as one woman told the author, to open up additional such water points and further handful could be opened up in the 4.5 km<sup>2</sup> Katse physical catchments. A similar initiative was undertaken in Nzouni, facilitated by World Neighbours in Kya Mulinde dam by providing gravity-fed water to the new garden. Being based on surface water, this development work is less viable as a food security measure in times of extended drought, but does provide water at lower labour cost. Labour saving is significant; it has allowed other activities like ciondo-making, hiring out labour during peak dryland cropping particularly by women. While these kinds of developments have not made major changes to the current poverty status, they have improved livelihoods. If similar initiatives can be undertaken at other water catchments areas, then the impact can be of considerable proportions.

## **5.7.2 Micro-credit scheme**

The financial capital of most households in Mwingi is extremely limited. A micro-credit scheme, whose objective was to offer households in Mwingi a loan facility for the purchase of production inputs and also to start small projects, was operative, and the success stories resulting from the use of funds demonstrate the importance of cash injections into the livelihood systems of the poor and vulnerable in semi-arid lands. However poor local management of these funds and the high likelihood of defaulting as a result of unforeseen disasters, usually weather related, highlight the limitations of any micro credit scheme.

There's much borrowing of money as part of the social fabric of these rural communities, though amounts are not large. In addition, there is widespread formation of savings clubs to which one gives a small amount of money each month going to a particular person whose chance it is to receive the money (with no obligation to give it back, but an obligation to keep making monthly payments). What is surprising about these savings and credit institutions is that someone is free to belong to as many as one wishes, yet, each has its own particular characteristics, rules and regulations. All these separate institutions are becoming more and more indistinguishable from one another. In particular they all lend money; they consist of a social grouping, generally rotating both the place at which the event takes place and the beneficiary of the separate individual contributions.

Access to formal credit is more or less absent. In Kyuso division, in the late 1998, 54 individuals received loans totalling kshs 65,000. This disbursement occurred in three locations in the Kyuso villages – Nguuku, Kakuyu and Kimangao as part of GTZ-assisted, but community run, micro-credit scheme. In a number of cases the loans were put to good use and resulted in relatively sustainable improvements in livelihoods.

With the disastrous season of 1998/1999 very few loans were repaid. The success of this credit scheme has been intermittent and uneven despite years of support from the GTZ. Since output is so dependent on the vagaries of weather, the likelihood of a sustainable

credit scheme appears highly unlikely. There would appear to be little hope for sustainability of such scheme over the longer time period without constant cash injections from external sources.

## **CHAPTER SIX**

# **STUDY FINDINGS OF THE IMPACTS OF THE PROJECT**

### **6.1 Introduction**

In the previous chapter, an analysis was done of the food security interventions that were implemented, to see how and why they were carried out, and how well they were targeted. This chapter explores in detail, the impacts of GTZ interventions. However, some of the impacts that the project had on the community are difficult to quantify. For example: “capacity building” in community-based organisations, where confidence and coherence in the community were enhanced, women’s self-help groups were empowered, and relationships with external bodies strengthened and the mental stresses of dealing with hunger and famine were reduced. All these impacts are extremely important, and will contribute to further development and progress within the community.

### **6.2 Natural and Physical Impacts**

#### **6.2.1 Community and household water supply**

The community water supply projects evaluated have generally had positive impacts on the lives of the rural poor: the target populations gained access to safe water they did not have before. Beneficiaries, mostly women and children, walked less distance in search of drinking water, indeed greater than two kilometres in some projects. There were also cases where most reservoirs used to collect surface water were dry. Many shallow wells were inoperable. Some work was useful and encouraged soil conservation, and forestry, albeit at small scale.

In general, poor rural households in all the community water supply projects significantly improved their living standards through involvement in rural water projects. Households spent less time collecting water as well as better health that led to greater labour productivity. In some instances, the introduction of water systems had an impact on the density of settlement or the price of land. It was found that easier access to safe water also led to new income-generating activities and, in some cases, increased personal wealth because household proximity to the water source permitted the development of

small enterprises like growing tomatoes and kales for sale. Activities ranged from restaurants and laundries to agriculture and animal husbandry to the sale of alcoholic and non-alcoholic drinks *mawa*, *mbithi*, (fermented porridge). The direct economic impact of water access was slight as there were reported and recorded cases of individuals or households who made increased incomes from directly from this improved water access,

Whereas GTZ is credited with initiating several water projects, this has not had any meaningful impact on the aggregate food availability per household. Some success stories that we found include the Kyuso borehole. Others like Mui shallow well, have provided adequate clean water albeit for drinking and domestic consumption only. Fitted with a hand-pump, this water drawing facility has slightly changed the lives and consumption patterns of all the households who benefit from it. Many households and individuals interviewed reported having initiated small-scale kitchen gardening, cassava growing and thus altered their relationship to food access. It came to our knowledge that in some cases, for instance, the Kyuso borehole not everyone benefits. This is due to the fact that the facility levies a consumption fee of 3/- per 20 litre jerrican.

Most residents find this too costly and have resorted to walking long distances in search of free water reserves. This in turn takes away the time they would have utilised in the farm labouring or other income generating activities. During the dry season, the water salinity increases to uncomfortable levels that it is unfit for human consumption and crops production. The availability of this new source of water as a result of the MIFSP has not translated into increased food security. The multiplier effects of all the community water projects have been very limited as regards food availability. Local people feel community water project phase of the Mwingi Integrated Food security Programme demonstrates a case of a project, which meant well but was poorly executed. As one resident bluntly put it: “We poor people need water not only for drinking, cooking and washing but also for productive purposes.”

## **6.2.2 Rural feeder roads**

The study found out that food-for-work had significant impacts in terms of their effects in reaching the poorest. However, doubts have been raised regarding the replicability and cost-effectiveness of this approach especially since labour on food-for-work was used by beneficiaries as a substitute for, rather than as a complement to, other income generating activities. Moreover, the relevance and sustainability of the assets created through these schemes appears to be problematic. Many were implemented hastily in the immediate aftermath of a famine situation, and careful planning and community consultation regarding such issues as ongoing maintenance and asset ownership, use and/or access was rare. Most beneficiaries unreasonably appreciated the short-term benefits of involvement and payment in food, but did not share the implementing agencies' commitment to the longer term objectives of the programmes.

Over 40 kilometres of feeder roads were rehabilitated through the activities of the Food for work project. The improvement of feeder roads did have immediate economic impact. The flow of both commercial and relief traffic into areas such as Kimangao, Kyuso, Ngomeni and Tseikuru significantly increased. A regular bus service now operates between Kamuwongo, Kyuso, Mivukoni and Kaningo. Transport costs decreased by over 30%. Human transport and goods improved significantly. This opened up access to markets for mangoes and some traditional wild fruits which are marketed mostly in Mombasa.

## **6.2.3 Physical assets**

Villagers were supplied with wheelbarrows, fork jembes, mattocks, pick axes, spades, and pangas. Through collective labour, they built and acquired physical facilities like improved feeder roads (through food or food for work) health dispensaries, maternity wings, shallow wells, rock catchments, sub-surface and earth dams. These ensured safe water supplies during dry season.

The study found out that GTZ built community-managed grain banks to enable poor groups put their grain stocks, preserve quality in order ensure food availability in lean periods, while marketing any grain that is surplus to community needs. In Katse and

Kyuso and villages, these crop stores and seed banks made from heavy metal like steel and tin are still firm and in good condition. They sought to ensure that there was food to eat during the lean season, and that there were seeds to plant. However, three years after the technical partners withdrew and transferred the projects to the government and local community, the seed banks stand out merely as empty structures without anything to store due to low yields in the area.

### 6.3 Economic Impacts

The micro-credit scheme received reports of numerous instances of wasteful use of the funds given out in the micro-credit phase of the project (such wasteful acts included supporting the drinking and womanising habits of young men at Mivukoni!). There was also widespread default on the loan repayments. We also noted two farmers who as a result of the loans, purchased improved goat breeds (Toggenberg and Boar) from the Goats and Sheep project GASP in Kwa Vonza in Kitui and Kajiado. But one of the farmers unfortunately never lived to reap the economic benefits of this investment as the exotic goat breed failed to adapt effectively to the Mwingi climatic. The goats died soon on arrival in Kivula village. This contributed towards their failure to repay the loan. Some farmers, especially women recipients, invested in gardening, buying seeds and pesticides, and made good profits. Other women used funds to start trading activities. For example one woman used it to purchase ciondos from local women in Kyulungwa and Kakuyu to sell in Nairobi. The micro-credit scheme provided an opportunity for jointly addressing local-level issues together with enhancing community capacity for collective action. While we documented success in terms of the funds being put to good use and improving livelihoods, the overall scheme was not successful due to the large number of defaults on repayments.

The small livestock production helped decrease the risks of livestock keeping and smooth income curves for poor households. Specifically, since the project supported improved animal health, this had a direct increase in the benefits of livestock keeping as a financial activity. Nevertheless, this well-meaning project was scuppered by the inability of poor

farmers to pay for new technologies (like raising money for entry qualification to the breed improvement phase) and the lack of demand for production gains by individual farmers. Poor households were often constrained by lack of labour and access to markets, and therefore aggregate increases in production did not present opportunities nor increases in income for the households involved.

Because of declining veterinary services in the area, cattle mortality has increased dramatically, and cattle numbers are not recovering to the extent they should from drought. The slow recovery of the cattle from the drought of 1998/1999 illustrates the impact of the reduction in veterinary services. This slower recovery of cattle numbers then feeds through the livelihood systems of the people of Mwingi with lower incomes and lower related inputs to the cropping system hence food insecurity and precarious livelihoods still exist.

As far as the quantity and quality of food per household is concerned, the Mwingi Integrated Food Security Programme did not contribute in a sustainable manner to increased availability of food and improved access to food for the majority of people. Food rations of poor quality nutritional value were given through food for work. Though there was skills transfer through capacity building for the youth groups and the introduction of better farming methods, e.g. seed bulking & soil conservation, this did not lead to increased crop yields per acreage.

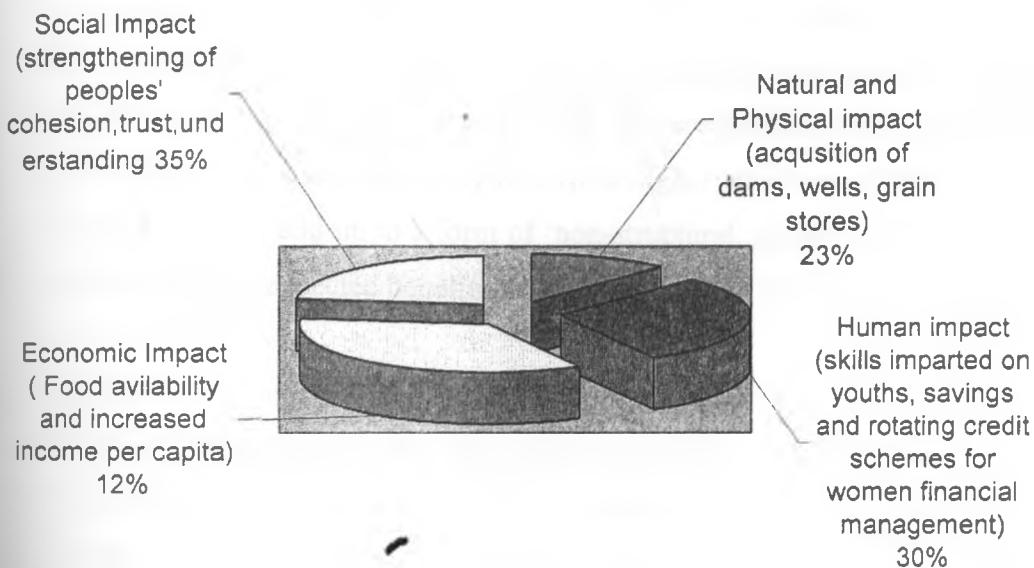
#### **6.4 Human and Social Impacts**

Villagers reported enhanced community relationships as a result of training they received through the project as well as from co-operation with neighbouring communities (mostly Tharaka and Galla). There was a strong feeling amongst villagers that they have gained more confidence and have a greater sense of control over their development path. As a result, community groups like women groups became popular in Mwingi villages for instance rotating, saving and credit associations, ROSCAs, burial and youth groups. First aid training has helped villagers to feel more confident about dealing with common illness and injuries like snake and dog bites which are very common in Mwingi. Youth

groups particularly. Muiyu and Kauwi Nzau self help group were imparted with semi-skilled know-how to operate the manual shallow well excavation drill. They continue to be hired out to undertake shallow well excavation in various parts. This has boosted their earnings as well as ensuring access to water.

Fig 2: Impacts of Technical Assistance and Rural Livelihood

### Impacts of the project



Source: Author.

## **6.5 Sustainability of the Mwingi Integrated Food Security Programme**

From the filed findings, it was found that adequate capacities of the locals had not been created to control the development process before they (the agencies) had withdrawn. Locals cannot manage projects without further technical backstopping so far.

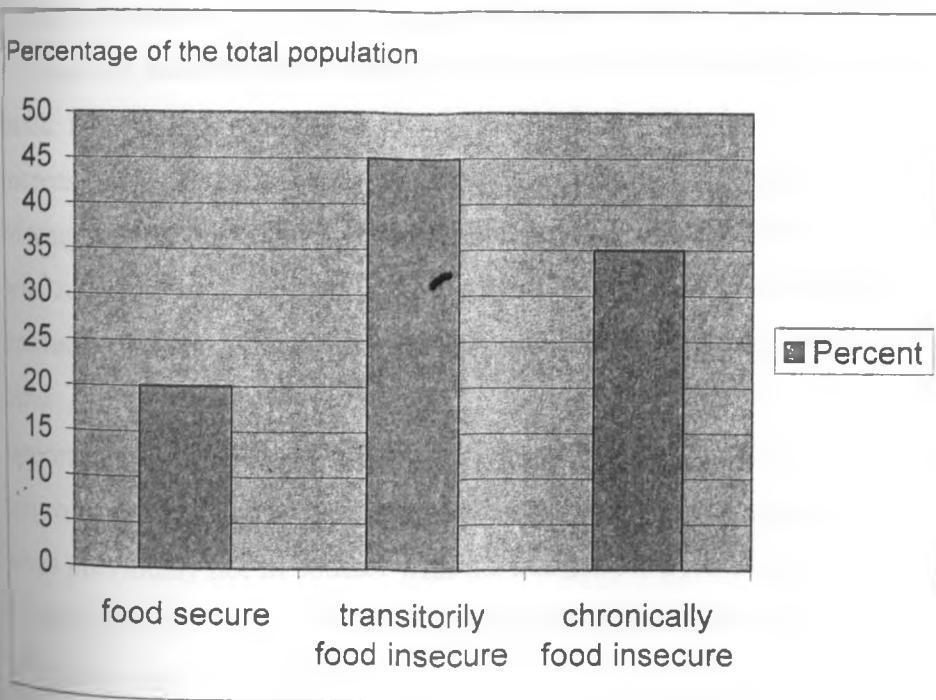
In much of the project's lifespan rock-fill dams were built to store surface run-off water for use in periods of drought and to redistribute it to supply the activities and areas where it was most needed. Many households had joined hands in the spirit of *harambee* (pulling together) and initiated a large number of self-help water projects. However these small-scale water projects had been poorly designed, ill prepared and hastily implemented in isolation focusing mainly in raising the service coverage levels. Such projects failed to deliver sustainable supply of water due to lack of meaningful improvement of the support of these facilities. In this respect, intervention by GTZ has indeed not been truly 'sustainable'. It failed to address major sustainable livelihood problems that contributed to agricultural stagnation and poverty in Mwingi. Severe difference in access to rural assets (so that only a few gain, and many lose from higher water prices, for instance the case of Kyuso borehole), add up to a form of 'non-structural, partial intervention' that is unlikely to have the full, expected benefits for sustainable rural livelihoods generation.

Maintaining natural resources such as forests, grazing land and sources of water is important to food security, especially where these are held in common. More intensive use of common property- for grazing, collecting firewood, wild fruits - is an important coping strategy when there is drought. Preserving these resources against encroachment by private interests is also very important. Increased human activities , particularly in the water catchment areas, has resulted in the reduction and deterioration of areas under forest and constitute a threat to the Mwingi water resources, not only in respect to siltation of the already existing rock-fill dams, but also as regards the run-off, water balance and ground water recharge characteristics. The effect of this has been the diminishing of the available water resources, some of which have disappeared or dried up thus complicating the further the water availability problem.

## 6.6 Concluding remarks

The findings of the study do indicate that, even in a good year, 45% of households face food shortages for at least 3 months. In a year, 35% of households reported food shortages for more than four months while only a paltry 20% reported being food secure. Vulnerability in these conditions of endemic food crises on an annual basis is relative (See figure below). Families either have to reduce consumption, sell off household assets mostly cattle and divert productive household labour in order to cope. The last resort is begging, burning charcoal and the cutting of firewood and grass for sale. The long-term implications of these coping strategies are obvious. Malnutrition-related diseases are prevalent, further reducing the productivity of labour, most households are unable to retain and accumulate productive assets such as livestock and vulnerable households are forced to divert labour from on-farm productive activities at critical times of the year to satisfy basic consumption requirements. The intensified cutting of trees and grass for sale particularly during the hunger and famine has had an impact on forage resources and soil conservation and significant erosion is observable in many areas.

Fig 3: Food status of the people of after Mwingi



Source: Author.

## CHAPTER SEVEN

### 7.1 CONCLUSIONS AND POLICY RECOMMENDATIONS

The overall aim of this study was to explore what GTZ did to improve livelihoods in the semi-arid region of Mwingi. It arrives at the following conclusions:

- First, GTZ utilized a variety of strategies that had the potential to address food insecurity. The strategies which were employed by GTZ arose from the actual needs on the poor. However, there are several constraints that hindered GTZ from realizing the expected outcomes of their strategies and there is need to address these problems. The study is particularly concerned that food security initiatives centred strictly on rainfall patterns, may not build very sustainable rural livelihoods. Low and unreliable rainfall in semi-arid regions may severely limit the ability of households to mobilise resources and improve incomes. Interventionists in rural development should be informed by the efforts to mobilize, utilize and manage the rational and integrated development of water in the ASAL. Unless the development of water resources is linked with grazing capability or with the needs of the mixed farm, environmental problems rapidly multiply. It is therefore important that water be integrated with the development activities in order to effectively address the multidimensional nature of poverty.in the ASALs.
- Second, food security responses focused on farm-based food production and access to basic foodstuffs obtained solely from the farm , despite the fact that market forces increasingly played a large role in determining food security. Market development in Mwingi is critical to improved cash income and access to foodstuffs especially since the area relies heavily on purchased food stuffs due to it's self-insufficiency in farm food production. Lack of reliable markets, and dilapidated road network in Mwingi hugely limit the ability of households to intensify production and benefit from market opportunities. Through the intervention feeder roads were rehabilitated. This improvement of feeder roads increased the flow of both commercial and relief traffic into areas previously not in contact with the market. As a result, there was a noted decrease in transport costs. Hope is also very high that access to markets for farm products such as mangoes might be improved.
- From the findings it is evident that overall impacts of this intervention were

mostly short term in nature. For instance, food for work schemes benefited where people could work locally rather than migrating, and some of the work besides ensuring per capita improved access to food stuffs and or other assets, there were multiplier effects of the impacts like soil conservation, forestry, improved feeder roads. This encouraged collective work spirit locally called *myethya* or *ngwatano* and many people participated in their own development. Negative aspects arose when people sought an incentive (food) before they got involved in development programmes that benefit the community. This kind of situation is bad for people to wait for an incentive before they work for their own wellbeing. They could have done it out of self-initiation.

- The findings indicate that partnership among development partners in the form of Technical Assistance can make an impact in boosting the effectiveness in food security strategies by building and strengthening their capacity for formulation of strategies aimed at improving their socio-economic growth. This collaboration among development partners ensures information sharing, joint action and working together in areas of common interests. The formal and informal community based groups and associations provide direct support to self-help activities that need recognition and support from development agencies like GTZ strategies to realize their objectives.

## 7.2 Recommendations

Based on the findings and conclusions of this study, the following recommendations have been advanced in order to improve the innovative approaches to livelihood programming that can be developed by agencies in situations of chronic food insecurity

- 1) Promote food for work projects among vulnerable households: The household level is where food insecurity impacts occurs and are felt most, specifically, vulnerable households such as those headed by women and children. In recognition of this, the study recommends that the interventions target such households in providing assistance for food for work projects. This will enable them to cope with the impacts of drought by providing an income base to cater for increased household food purchases expense as a result of drought.
- 2) There's need to diversifying crop and animal production in accordance with ecological characteristics, especially, promotion of vegetable production. There is

need to build and strengthen the capacity of rural dwellers to engage in crop production and animal keeping that is adaptable to the rural agro-climatic landscape.

- 3) The partnership among development partners should be strengthened. This will enable them to establish effective forums to understand each other thereby enhancing communication between themselves, the government and other partners. This can be made possible by having effective formal structure and process through which the development partners involves and seeks each others views on how to address sustainable livelihoods. This will ensure the formulation of good and sustainable strategies to effectively tackle poverty.
- 4) Capacity building for these local communities and their organisations both formal and informal should be accorded utmost priority to better understand the development process becomes one of the urgent needs in ensuring sustainability of development projects. The reasons accounting for the poor performance included the weak institutional capacity of the local groups that were to manage the projects after GTZ withdrew.
- 5) Improve partnership among development partners by building capacity for the local communities to better understand their role in development. This should endeavour to motivate their participation in the implementation of the projects and subsequent ownership. Others include labour intensive agricultural undertakings, diversifying in non-farm activities is crucial in laying the appropriate foundation for other socio-economic sectors.
- 6) There is need for further research to examine the food security strategies by other development actors like the private sector, e.g. church, philanthropists, The understanding of strategies employed by different development agencies will facilitate the formulation and adoption of integrated and comprehensive strategies to address the never ending problem of food security in Mwingi.
- 7) This paper has argued that many of the problems facing food insecure households in Mwingi relate to the linkage between access to resources and the capacity to exploit them. This infers that a monitoring and evaluation component is central to the efficacy of such interventions. Such monitoring and evaluation must move

away from implementation checklist, noting number of shallow wells constructed, the number of people fed etc. What is needed in addition are more subtle indicators that depict the real impact of activities. These indicators could include the degree of access to resources based on clan representations, the degree of resources diversion; the scale of threats imposed by traditions - *witchcraft* - to beneficiaries and external agencies.

## REFERENCES:

- ALILA, P. and OMOSA M., (1999), *Rural Development Policies in Kenya* in Nge'the, N. and Owino, W., *From Sessional Paper No. 10 to Structural Adjustment: Towards Indigenizing the Policy Debate*. IPAR, Nairobi.
- ALLAN, T. and ALLEN, T., (2000), *Poverty and Development into the 21 Century*. Oxford University Press. London.
- ARNOLD, Gury., (1979), *Aid in Africa*: Kogan Page Ltd., London.
- BAHEMUKA, J. et al, (1998), *Poverty Revisited: Analysis and Strategies Towards Poverty Reduction in Kenya*. Ruaraka Printing Press. Nairobi
- BERG, J. E., (1993), *Rethinking Technical Co-operation: Reforms for Capacity Building in Africa*. IDS, Sussex.
- Bebbington, A., (1999), *Capitals and Capabilities: A Framework for Analyzing Peasant Viability, Rural Livelihoods and Poverty*', World Development. Vol. 27, No. 12 New York
- CARNEY, D., (1998), *Sustainable Rural livelihoods: What difference can we make?* DFID, London.
- CASLEY, D. J., and KUMAR, K., (1988), *The Collection, Analysis and Use of Monitoring and Evaluation Data*. John Hopkins Press. Washington.
- CASSEN, R., (1994), *Does Aid Work?* Oxford University Press, New York
- CHAMBERS, R., (1983), *Rural Development: Putting the Last First*. Longman, Nairobi.

(1988), 'Sustainable Livelihoods, Environment and Development: Putting Poor Rural People First. IDS Discussion Paper 20, Brighton.

CHAMBERS, R. and CONWAY, R., (1992), 'Sustainable Rural Livelihoods: Practical Concepts for the 21st century. IDS Discussion Paper 296, Brighton.

CLEAVER, K. and DONOVAN, W., (1995), 'Agriculture, Poverty, and Policy Reform in Sub-Saharan Africa'. World Bank Discussion Paper, No 280, Washington.

COHEN, J., (1987), *Integrated Rural Development: The Ethiopian Experience and Debate*, Scandinavian Institute of African Studies, Uppsala.

CONWAY, G., (1985), *Contrasting Agro-Ecological Zones: A Review*. IDS Working Paper 63, Brighton.

COWEN, M. P., and SHENTON, R. W., (1996), *Doctrines of Development*, Routledge, New York.

CRAIG A. J., (1997), *Rules, Norms and the Pursuit of Sustainable Livelihoods*. IDS Working Paper 52, Brighton.

DEVEREUX, S. and MAXWELL, S. (eds), (2001), *Food Security in Africa*. IT Publications, London.

DIETTRICH, T., (1998), *Report on the Project progress Review. (INFSP-E) Mwingi: Community Based Water Supply and Village Infrastructure*: GTZ. Berlin

ECONOMIST, The, (1999), 14<sup>th</sup> -20<sup>th</sup> August 1999, p. 21

ELLIS, F., (2000), *Rural Livelihoods and Diversity in Developing Countries*. Oxford University Press, Oxford.

FAO, (1990), *Integration of Sustainable Agricultural and Rural Development*. FAO, Rome.

FOWLER, Allan., (1985), "NGOs in Africa: Naming Them by What They Are." in Kinyanjui, K., 1985. Non-Governmental Organizations Contributions to Development. Proceedings of a Seminar held at the Institute for Development studies, Nairobi, 19th September 1985 Nairobi, University of Nairobi, IDS.

GHAI, Y., (2001), "*Human Rights and Social Development Towards Democratisation and Social Justice*", United Nations Research Institute for Social Development Democracy, Governance and Human Rights Paper No. 5. New York.

HETTNE, B and BLOSTROM, M., (1984), *Development Theory in Transition*. Zed books, London 1984.

ISMAIL, A., and LIPTON, M., (1997), *Impact of Structural Adjustment on Sustainable Rural Livelihoods: A Review of the Literature*. IDS Working Paper 62, Brighton.

LEACH, M. R., and SCOONES, I., (1997), *Environmental Entitlements: A Framework for Understanding the Institutional Dynamics of Environmental Change*. IDS Discussion Paper 359, Brighton.

LELE, U and NABI, I., (1991), *Transitions in Development: The Role of Aid and Commercial Flows*. International Centre for Economic Growth, San Francisco.

LIPTON, M., (1987), "Improving the Impact of Aid for Rural Development". Discussion Paper No. 233, IDS. Sussex

MAXWELL, S. and Slater, R., (eds), (2003), *From Food Policy to Food Security in Africa*. IT Publications, London.

MURTON, J., (1997), *Sustainable Livelihoods in Marginal African Environments: The Social and Economic Impacts of Agricultural Intensification in Makueni District, Kenya*. IDS Discussion Paper 296, Sussex.

NASONGO, WANJALA., (1995), *Claims and Realities in Inter-State Relations: An Analysis in Kenya-Norway Relations*. Unpublished MA thesis, University of Nairobi.

OECD, (1974), *The Role of Technical Assistance Expert*. Organization of European Community and Development, OECD, Paris.

OMOLLO, J. K., (1994), *Foreign Policy through Foreign Aid*. Unpublished MA thesis, University of Nairobi,

OMOSA, M., (1998), Re-Conceptualising Food Security Among Small-Scale Farmers in Kisii District, Kenya, Unpublished PhD Thesis, University of Wageningen, The Netherlands.

PEARSON, L. B., (1969), *Partners in Development*. Praeger Publishers, Washington.

RIDDELL, R. C., (1987), *Foreign Aid Reconsidered*. Overseas Development Institute, Oxford

SCOONES, I., (1996), *Rural Livelihoods: A Review of the Literature*. IDS Working Paper, Brighton

SEN, A.K., (1981), *Poverty and Famines: An Essay on Entitlements and Deprivation*. Clarendon Press. Oxford

TISCH, J. S., and WALLACE, B. M., (1994), *Dilemmas of Development Assistance: The What, Why and Who of Foreign Aid*. Westview Press, New Jersey

UNDP, (1987), A Report to the World Commission on Environment and Development: *Our Common Future*, London.

(1992), *Capacity building and Technical Co-operation: Managing the Connection*, Press Inc, London.

(1993), United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Agenda 21: United Nations, New York.

(1999), *Kenya: Development Co-operation Report*. UNDP: Nairobi

(2002), Kenya Human Development Report 2001. *Addressing Social and Economic Disparities*. UNDP, Nairobi.

(2004), Human Development Report 2004. *Cultural Liberty in today's diverse World*. 1<sup>st</sup> UN Plaza, United Nations, New York.

WANJOHI, N. G., (1980), *The Politics of Foreign Aid in Kenya since Independence*. Unpublished PhD thesis, University of Nairobi

WOLMER, W., (1997), *Crop-Livestock Integration. The Dynamics of Intensification in Sustainable Livelihoods in Marginal African Environments*, Zed Books, Sheffield.

WORLD BANK, (1989), *Sub-Saharan Africa: From Crisis To Sustainable Development: A Long Term Analysis*, World Bank, Washington DC.

(1990), World Development Report, World Bank, Washington DC.

(1993), World Development Report, World Bank, Washington DC.

#### **Government Publications:**

Kenya, Republic of, (1965), "Sessional Paper Number 10 of 1965 on African Socialism and Planning". Government Press, Nairobi.

(1979), *National Development Plan 1979-1983*. Government Press, Nairobi.

(1984), *The 5 Year National Development Plan 1984-1989*.  
Government Press, Nairobi.

(1989). *National Development Plan 1989-1993*. Government  
Press. Nairobi.

(2001). *Poverty Reduction Strategy Papers for the Period 2001-2003*. Ministry of Finance and Planning, Nairobi.

(2002a), *Mwingi District Development Plan 2002 – 2008*.  
*Ministry of Finance*. Nairobi

(2002), *Kenya Rural Development Strategy 2002-2017*, Final  
Draft. Government Press, Nairobi.

## **7.3 QUESTIONNAIRE**

### **STUDY OF THE CONTRIBUTION OF GTZ - MWINGI INTEGRATED FOOD SECURITY PROGRAMME TO FOOD SECURITY IN MWINGI.**

#### **Introduction:**

My name is **Mr. Chris Kiliko Musyoka**, from the Institute for Development Studies of the University of Nairobi. I am undertaking a study of the contribution of GTZ to Food Security in Mwingi, through the Mwingi Integrated Food Security Programme ( MIFS-P). It is part of my primary data and will add to the literature for the writing of a paper for my award of the degree of Master of Arts in Development studies.

This study is meant to increase understanding of the capacities GTZ has built for the households of Mwingi so as to develop strategies for ensuring availability of food all year.

Below are some questions which you are required to answer for helping the researcher to give a true picture regarding your perception of GTZ in Mwingi. Please be very sincere and honest in your responses.

## **LIVELIHOODS**

### **a. Peoples Entitlements and Assets**

1. What were your household's assets before the project?-----
2. What are the assets of the household now?-----
3. Would you say the change in our assets' base is a direct impact by the project?-----
4. What is the state of infrastructure in this village?
5. What is the state of our natural resources?
6. Were any improvements or deterioration in the natural resource base thereof, a direct result of this intervention, or would they have occurred anyway-----?
7. What in your view are, or have been the benefits of the project to the community?
  - b. Cash; -----Material; -----Facilities; -----

### **b. Access to Basic Foodstuffs**

8. Briefly describe your main food varieties in the village are composed of?