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INSTITUTIONAL EVOLUTION UNDER WATER SECTOR REFORMS: LESSONS FROM THE MAZOWE CATCHMENT, ZIMBABWE

*Claudious Chikozho**

Abstract: The effectiveness of institutions that have emerged from the Zimbabwean water reform process needs to be assessed from a socio-political standpoint. Global shifts in water management thinking emphasizing participatory development seem to have played a significant role in precipitating the reform. Theoretically, the new institutions are appropriate but rhetoric has overtaken reality. Without sufficient capacity building, the institutions cannot tackle the multiple complexities facing the sector. Government has not demonstrated commitment to transfer power to these institutions. Lack of support to water user boards has alienated local communities from the reform process. The land reform programme has also disrupted water reform activities in a very fundamental way. The paper argues that future research must ascertain the suitability of the water management model adopted to circumstances prevailing in Zimbabwe.

Key Words: *Decentralization, institution, integration, community, globalisation*

1. INTRODUCTION

1.1 About the Paper

Since 1995, Zimbabwe has been involved in concerted efforts to revamp the institutions governing the water sector. Subsequently, new institutions of governance have emerged in the sector with the hope that they will ensure the equitable and effective management and control of water resources through devolution of management responsibilities from central government to the local community levels. This paper seeks to assess the effectiveness of these new institutions as units of natural resource governance. So far, there is no indication or guarantee that the new institutions are better than the old ones. An analysis of these new structures and the policy and legislative framework that they operate under could help to demonstrate their potential effectiveness particularly in comparison to the old institutions. The extent to which power is being devolved in reality has also not yet been assessed. It is therefore necessary to analyse the water management decentralization process and find out whether or not some significant management authority has been shifted from central government to the community levels.

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1.2 Why the Water Sector Reforms?

Before the Water Act of 1998, water resources in Zimbabwe were mainly developed, managed, and governed through a number of institutions. The Ministry responsible for water resources was at the top of the hierarchy. It generally set out policy guidelines for water development and resource allocation in the sector. The Department of Water Development (DWD) attended to the day-to-day running of the water sector nationally. It also designed and constructed government dams. Rural District Councils, through the District Development Fund, provided funding and technical assistance for borehole and dam construction and maintenance at the district level. The Water Court was responsible for issuing water rights to users. It also resolved conflicts over water between and among water users. At the local level, river boards managed rivers and water point committees managed water for primary purposes. Department of Agriculture and Extension Services (Agritex) officers provided technical assistance to prospective water users in applying for water. The Hydrological Department provided the requisite hydrological reports on behalf of the prospective users. Some Non-Governmental Organizations funded water development projects of various types.

The set-up explained above was riddled with a number of shortcomings. There was no systematic coordination of the institutions involved in water resources at the local level. Overlaps, duplication of effort and unsatisfied water needs were difficult to identify. In addition, the legislation governing the water sector was, in several respects, fundamentally biased in favour of large-scale commercial farmers. Conflicts over water rapidly increased. Major problems were encountered at the administrative court and river-board levels. The administrative court was often considered inefficient and slow in processing water rights such that it could take years for one to be granted a water right after applying. Membership of river boards was exclusive to water right holders (mainly large-scale commercial farmers). This systematically excluded other people from participating in the management of water resources at that level. In rural areas, Rural District Councils (RDCs) failed to cope with the need to develop and maintain water structures in their areas of jurisdiction due to inadequate resources. The more or less open access water regime in the rural areas also rendered water resources conservation efforts useless as people had little incentive to manage the rivers and dams in a sustainable manner. Effective management of water resources was, therefore, only possible in the commercial farming areas where the farmers were well organized into river boards.

The scenario presented above resulted in the rise of a powerful and perennially productive commercial farming sector while the communal areas remained stagnant or degenerated as their natural resource base was exploited to unsustainable levels. The institutional and legal framework for water resources development and management was not fully supportive to

new entrants in the irrigation sector. It heavily relied on the priority date system, which stipulated that the water needs of new entrants would only be satisfied after those of earlier water right holders had been satisfied. This ensured that the allocation of water remained skewed in favour of the large-scale commercial farmers because most of them inherited, from their parents and grandparents, very old water rights attached to commercial farming land. Some of the water rights they inherited dated as far back as the 1920s. Dismantling that monopoly could not be done without the establishment of new water management institutional structures that accommodate all stakeholders.

1.3 General Objective of the Study

The principal aim of the Zimbabwean water reform is to advance poverty alleviation and social equity by broadening access to water resources and to achieve more integrated water development planning across economic sectors. This study seeks to further these goals by assessing the suitability of the institutions that have emerged in the water sector and how effective they are in contributing to the achievement of the reform's major goals.

1.3.1 Specific Objectives of the Study

The specific objectives of this study are:

- To examine how different stakeholder groups are represented on the new water management institutions and how this representation impacts on the effectiveness of those institutions;
- To assess the extent to which integrated planning is occurring in the new institutions and more broadly in the water sector;
- To assess the extent to which authority and decision-making powers have been devolved to the lowest water management institutions, and the power dynamics involved as power determines the patterns of resource allocation that eventually emerge; and
- To generate viable policy recommendations for the advancement of the reforms.

1.4 Assumptions

- Large-scale commercial water users will dominate the reform and water management processes because they already have an unfair historical advantage over other groups. In other words, the larger the amount of water used, the better the interests will be represented in the new institutions of water reform. Users of small quantities of water will be poorly represented in the new institutions.

1.5 Significance of the Study

On the one hand, Zimbabwe and other Southern African countries have a predominantly agro-based economy. Availability and accessibility of water is,

therefore, at the core of the countries' economies. On the other hand, there are growing concerns over water shortages and conflicts in Zimbabwe that clearly point to the need for sustainable and equitable water resources allocation and management strategies. It is, therefore, essential that the effectiveness of the emerging water management institutions be analysed in the light of the legal and organizational framework that they operate in. Useful suggestions and recommendations for improving the governance of the water sector may then be derived there from. This also provides an opportunity for the researcher to contribute (through publications) to the small but growing body of literature on sustainable water resources management in Zimbabwe and the developing world in general.

1.6 Scope of the Study

The study focuses on the Mazowe catchment area. The Mazowe is one of the pilot catchment planning areas selected as a test-bed for new ideas when the reforms were initiated. Research was carried out in two sub-catchments, namely the Nyadire and the Nyagui rather than in the whole catchment in order to make it more manageable. This also created sufficient room for comparison of developments in the two different sub-catchments. The Nyagui has all categories of water users from mining, large-scale commercial farming agriculture, small-scale farming, towns, rural and resettlement areas. The Nyadire has extensive resettlement areas and communal areas. The concern mainly lies in water for agricultural purposes because it accounts for about 85% of all water use in the country. Large-scale commercial farmers use 70% of this water.

The analysis of the water management institutions emerging in the water sector includes national level institutions like the Zimbabwe National Water Authority (ZINWA), the Mazowe Catchment Council, the Nyagui and Nyadire sub-catchment councils, and Water User Boards (WUBs) at more localized levels. The interaction between and among the new and existing institutions in the water sector is also examined to find out the integrated nature of the new management regime, given that the river basin boundaries do not necessarily coincide with existing administrative boundaries. The study also assesses the extent to which various groups are involved in the new institutions and in the reform process in general.

1.7 Theoretical Framework

The study is grounded in a community-based natural resources management (CBNRM) theoretical framework. This provides an analytical approach which views users as the focal point for sustainable natural resources management. Without user cooperation and participation, the chances of successful natural resources management diminish. This analytical approach is manifest in literature from scholars like Murphree (1991) who argues that the unit of proprietorship should be the unit of production, management and benefit. It must also be as small as practicable and the users must perceive

management of the resource in question as beneficial to them if they are to be motivated. In this study, water is the resource. Since the reform encourages devolution of management to communities, the study assumes that communities, with the help of the new institutions, are expected to become the unit of proprietorship, production, management and benefit.

The CBNRM framework relates institutional dynamics to environmental conservation and management. In this case, institutional evolution is linked to water resources management at the local level. Improvements in the local level (community) institutions tasked with management of the environment are expected to reflect on improved natural resources management. Understanding the power dynamics between and among various actor institutions and groups is seen as vital. It shows who makes the decisions that affect access to the resource as well as its management. It reflects how and for whose benefit decisions are made regarding a particular common property resource. Alexander (1992) argues that sustainability is not only about the way the environment is managed, it is also about who has the power to decide on how it is managed.

Other scholars have also examined institutional and power dynamics, monopolies over natural resources management, and the role of different stakeholders (see Murombedzi 1991; Abel and Blackie 1986; Seiderman 1992). To these scholars, environmental sustainability is conceived as having to do with control, power, participation, and self-determination. Development of institutions that empower local communities is seen as a prerequisite for sustainable resource management. In this paper, this theoretical framework is used to analyse the emergence of new institutions in the Zimbabwean water sector. The study explores the power relations between a multiplicity of actors. Some of them are government departments versus local institutions; differentiated groups in society; new versus old institutions, international financiers versus government and local communities.

1.8 Methodology

A historical approach was utilized to come up with a detailed exposition of the institutional set-up that existed before the reforms were initiated. The study sought to establish the operational strengths and weaknesses of the old institutions in order to compare their relative efficiency and effectiveness to that of the emerging institutions. In this endeavour, review of literature and documentation in the national archives was of critical importance. The Water acts of 1976 and 1998 are analysed and compared in order to see which legal instrument provides for a more equitable and enabling water management environment. Documentation and literature on sustainable water resources management, institutional development, and institutions for water resources management in Zimbabwe are reviewed in order to assess the nature and effectiveness of those institutions.

To assess the extent to which integrated water resources planning and management is incorporated in the new water resources regime, focus group discussions were held in the study sites to identify all water user groups, local and national development institutions working in the areas and their interaction, available water resources, the uses made of the water, and the people's aspirations regarding water development and management. This was followed by a brief historical inquiry and village profiles to understand the history of local water use, past water projects and how water institutions have changed over time. These initial inquiries provided the foundation for carrying out a household survey on knowledge and understanding of the water reform process, household knowledge of the new institutions, village water projects, and investments in water. The survey was carried out in each of the two selected sub-catchments. A total of 99 households were selected for this purpose in the two sub-catchments. Two enumerators were recruited and trained to assist in questionnaire administration. Data from the household surveys was processed using the Statistical Package for Social Sciences (SPSS).

- Interviews were carried out with key informants from various organizations. These organizations are involved in the reform and their views helped the researcher to further understand the differences between the former water management institutions and those that have emerged from the reforms. They also revealed some of the theoretical strengths and weaknesses inherent in the new institutions and the water sector reforms more generally.

The researcher attended monthly Mazowe catchment council meetings and the two sub-catchment council meetings. This enabled the researcher to make direct observations regarding the way different stakeholder groups are represented. Direct observation also enabled the researcher to gather information on the operations of the new institutions and gauge how effective they are in carrying out their mandate. Proceedings of the meetings were recorded in detail and later used to complement information gathered in the field.

2. NATURAL RESOURCES MANAGEMENT DISCOURSES

2.1 Introduction

This chapter is dedicated to the review of literature that has a bearing on the development of new institutions for effective management of water resources and equitable access to water. Let it be mentioned once again that bias is towards water for agricultural purposes for reasons already stated in the first chapter. A number of thematic issues are explored in relation to how they have emerged in the water management debate in Zimbabwe and other parts of the world. Some of the major issues include the following: integrated community management (ICM) of water resources; decentralization and participatory development, and institutional change. These issues are inter-linked among themselves as well as being intertwined

with other issues that affect the sustainable management of water resources. The purpose of exploring these issues and their inter-linkages is to show how they impact on sustainable management of water resources. A brief presentation of experiences with ICM in other countries is also made to give the literature review some practical examples from which Zimbabwe can learn.

2.2 Integrated Community Management (ICM)

Integrated Community Management (ICM) may be seen as a development planning and implementation concept or strategy that has characterized and guided a number of development initiatives over the years. It is applicable to various programmes and projects of different disciplinary backgrounds. In other words, it knows no disciplinary and sectoral boundaries. It applies to both rural and urban development programmes with varying degrees of success depending on the circumstances prevailing at that particular point in time. It has several similarities with Integrated Rural development (IRD). The ongoing water sector reform programme in Zimbabwe provides a good example of an attempt to institutionalise the principles of ICM.

Integration concerns itself with bringing together a number of previously separate and often different components for the benefit of all of those entities, or a particular group for the achievement of specified objectives. It has to do with “the systematic interaction of numerous activities, to be carefully orchestrated if objectives of inducing growth or improving quality of life are to be reached” (Cohen 1987, 32). Inherent in this definition is the need to relate everything to everything else wherever possible, bringing various components and activities together and administering them in a way that achieves a specific purpose. Cohen (1987) has called it the planned supply of simultaneous activities and services that enables a rural development programme to become operational.

In terms of water resources, ICM may be taken to mean the management of water resources in a comprehensive manner taking into consideration a number of elements that have a bearing on the availability and condition of the resource. The major goal of ICM is the realization of sustainable development and management of water resources through the coordinated utilization of resources within a community. It is a concept that acknowledges the fact that water does not exist in isolation. Its availability and quality depend on several other factors and at the same time, this holistic view of the resource’s management is best attained at the lowest levels, the community level. The Australian Water Association defines ICM as, “A holistic natural resources management system comprising interrelated elements of land and water in a river basin, managed on an ecological and economic basis. It is a system that favours the integration of environmental policy across government, community, and industrial sectors through partnerships and extensive stakeholder inclusion” (Water Tec Pvt. Ltd. 1999, 9).

The United Nations Conference on Environment and Development held in Rio de Janeiro in 1992 described ICM as a concept based on the perception of water as an integral part of the ecosystem, a natural resource and social and economic good. In other words, water resources have to be protected, taking into account the functioning of aquatic ecosystems in order to satisfy and reconcile needs for water in human activities.

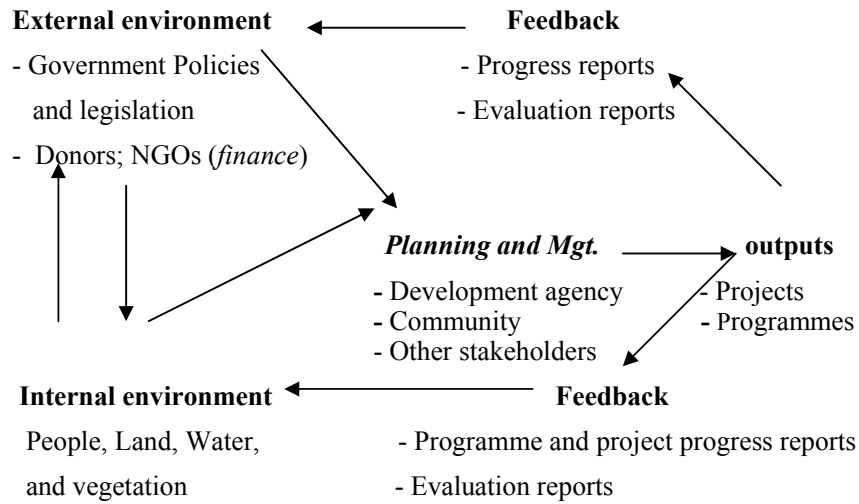
Cohen (1987, 32) outlines a number of basic requirements that are essential for the achievement of ICM:

- (a) Projects/programmes must be limited to a specific catchment area, community, or region;
- (b) The projects must be time-bound in terms of meeting established objectives;
- (c) There is an inherent assumption that two or more inter-dependent activities or services not already presented or effectively provided will be carried out;
- (d) An executing agency will be responsible for promoting the integration necessary in providing these activities and services. This will be done in collaboration with other institutions already in place.

The goals of ICM include the coordination of policies, plans and actions of government agencies, the private sector, NGOs and individuals in the utilization and conservation of water, land and vegetation. It attempts to maintain stability and quality thereby enhancing the productivity of the four components, namely, land, water, vegetation and people. It also increases the awareness of communities regarding sustainable and balanced resource use. It facilitates the creation of strong institutions for managing water in the community involved. ICM aims at facilitating the use of the available resources in an equitable manner so that conflicts may be avoided (Water Tec. Pvt. Ltd 1999,11).

The major physical elements that affect one another in ICM are vegetation, animals, soils, river channels and weathered materials. Socio-economic elements would include people, institutions and livelihood strategies. Plants in the environment obtain their food from the soil which derives this food from weathered/or decayed matter. Vegetation provides organic matter to the soil. Channels receive water and soil eroded from slopes. The socio-economic system relies on the resources provided by the catchment and the people's production activities often impact on the whole environment positively or negatively. In short, one can say that each component affects the other in such a way that without careful and coordinated integration, the end results could turn out to be overall negative.

Fig. 1. A conceptualized model of ICM based on the systems approach*



ICM is a concept that can be easily grounded in the popular systems theory, which basically explains situations in which various elements are so inter-linked that a change in one of them has far reaching consequences on the state of the other elements. Conservation practices carried out in the management of one resource or component have an impact on another component of the system. The view advanced by Hinderink and Dabrowiecka (1988, 25) regarding integrated rural development also applies to ICM. They argue that integrated rural development emphasizes the

***Note:** The internal and external environments contain a number of variables which feed into the planning/decision making process that the development agency goes through before coming up with viable options for effective ICM. The decision making process is done taking into consideration the views and contributions that can be made by other interested parties like the community itself, and local government units. The outcomes of this exercise include programs and projects for developing and managing the resource. Those projects and programs in turn produce lessons of experience that provide feedback into the whole development process. The feedback forms the base for new inputs to the planning process (ICM). The internal and external environments affect each other as each of them makes demands and requests on the other either directly or indirectly. It can be concluded that in essence, ICM is a continuous cyclical process that demands a constant review of strategies in response to new changes that take place in the external and internal environments.

required attention for the interrelationships between individual activities, sectors, areas and institutions in the development process. "It finds its origins in the systems approach, the disillusionment with technocratic and bureaucratic approaches [top down]; the experienced ineffectiveness of single-sector activities, and the marginalization of large segments of the rural population."

2.3 Decentralization and Stakeholder Participation

Much has been written on decentralized development planning and implementation and most of the writings tend to agree with the notion that decentralization has to do with the devolution or deconcentration of decision-making powers to local levels. It has to be accompanied by democratic participation of the intended beneficiaries in a development programme. It involves the systematic shift of development planning responsibility from central government to regional and provincial offices, districts, wards and villages. In this way, it recognizes the utility of smaller geographical units of management in making development more effective. Smaller units are physically more manageable than bigger ones hence, the need to create effective management institutions at the community level.

Decentralization helps to reduce pressure on central government planners. It also reduces bureaucratic delays as localized management institutions take over some of the functions originally carried out by central government planners. Mawhood (1983,1) states that decentralization "suggests the hope of cracking open the blockages of an inert central bureaucracy, curing managerial constipation, giving more direct access of the people to the government and government to the people, stimulating the whole nation to participate in national plans."

Decentralization makes the projects more relevant to social, economic, physical and political conditions prevailing within specific localities. The developmental needs of one area often differ from those of another and this makes the case for decentralization stronger, and for centralized development planning weaker. Centralized planning cannot do it all; it does not ensure the collection of first hand information on what is necessary for the development of local communities that are far away from the centre unless the communities fully contribute. Rondinelli (1984, 3) explains this more clearly by stating that, "When central planners design rural development projects in the national capital without thoroughly understanding local, social, economic, physical and organization conditions, they often generate opposition among local groups. Central administrators cannot know the complex variety of factors that affect the success of projects in local communities throughout the country."

People will only change if they both understand and consent to changes that are being proposed, and never just because they receive orders from above. Government officials know far more than the local people about the

technology available, but the local people know more about the environmental constraints to their own situation. The official is often seen as a stranger on the local scene; he may not speak the local language; and he enjoys a totally different lifestyle. How can he take decisions on behalf of peasant farmers without consulting them, decisions that involve hardships and risks for them? (Mawhood 1983).

Decentralization as a concept, therefore emphasizes stakeholder consultation and participation. Programmes cannot realistically be carried out without adequate consultation of the beneficiaries and this applies to water development and management projects as well. This becomes even more important when viewed in the light of the basic goal of sustainable development. It is the beneficiaries who must eventually take total control of the project when the development agency pulls out and they must therefore be made ready for that take over. They cannot anticipate and prepare for that responsibility if they are not consulted right from the beginning. They cannot take over if local institutions for managing the resources are not strengthened or created.

Consulting stakeholders gives them a sense of ownership and responsibility over the project and benefits accruing there from. A lot of literature abounds on this subject and has been growing fast over the years after it was realized that many development programmes wholly initiated and implemented from the top were failing. Some have faced active opposition from the intended beneficiaries and such situations lead to unsustainability of projects. In many developing countries, central decision-making was often seen as the key to rapid socio-economic change. The results were, however, generally disappointing such as developmental plans that were quickly abandoned, gross national products whose increase fell far short of expectations, uncontrolled urban growth, and a stagnating countryside. Within the administration, any official could quote examples of ineffective or wasteful centralized decision making: funds and supplies that never arrived, projects that remained paper proposals, funds and proposals that could not be obtained unless one had a friend or relative in the central ministry to lend a hand (see Mawhood 1983).

Stakeholder consultation and participation is about listening to the previously voiceless; it is about democratising development; it is about empowering the poor to take their destiny into their own hands; it is about letting the intended beneficiaries define their own needs and utilize their knowledge of the area to the advantage of the development initiative; it is about the development officer acknowledging that the beneficiaries know what needs to be done as opposed to calling them illiterate and uninformed. According to Rondinelli (1984, 8), "Ultimately however, decentralization is an ideological principle associated with objectives of self reliance, democratic decision making, popular participation in government, and accountability of public officials to citizens." Participation is about

commitment to help create the conditions which can lead to a significant empowerment of those who have little control over the forces that condition their lives (Blackburn and Holland 1998, 3).

Meanings associated with participation tend to change over time and different people can have different perceptions about it depending on their own circumstances. Even institutional procedures and considerations can cause variations in the definition of participation. When defined as consultation, it mainly involves public meetings, and information solicited through interviews and questionnaires. It is important that this be genuine consultation aimed at gathering views of the people. It must be distinguished from a process of just informing people about a particular programme and trying to solicit their support for that programme without them contributing to the design of the programme. It must be different from an attempt to legitimise reforms designed by the government alone. In short, meaningful stakeholder involvement cannot be realized if the people are not involved in project design, control or management.

The ideal form of stakeholder participation involves empowerment. This perspective sees the transfer of power as central to participation. Participation is seen as empowering previously disadvantaged groups in order to increase their access and control of development resources. This can mean development of skills and abilities to enable people to manage better and negotiate with existing development agencies. It may also be viewed as political, that is, enabling people to decide what should be done and take actions they believe to be essential to their own development (self-sufficiency and self-help).

It is a process of directly involving people in structures that govern their daily lives, in decision-making and implementation, and in taking action to tackle problems affecting them. It is political in that the people are given a chance to decide their own course of development. It refers to the bottom-up approaches in terms of project formulation as opposed to top-down. It recognizes that without the local people's involvement in all stages of the project, the chances of success diminish. Instead the project might face active resistance from the intended beneficiaries. In Zimbabwe today, one of the best examples of community-based natural resources management programmes is the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) where communities manage wild animal resources, benefit from that management and bear the costs of that management.

The main benefits of stakeholder involvement and participation may be summarized as follows:

- a. Efficiency: Resources would be used more efficiently, that is, participation minimizes disagreements on implementation because

everyone will be informed; people take more responsibility and this saves costs;

- b. Effectiveness: Participation contributes to the effective realization of the objectives since the people define the problem and come up with solutions they consider most useful;
- c. Promotes self-reliance: Participation breaks the dependence mentality, promotes self-awareness and confidence, brings more independence and control over one's life;
- d. It allows one to reach a broader mass of people instead of just a few privileged ones; and
- e. Sustainability: Projects generated through participatory means stand a better chance of sustainability because the locals support them, and are interested in them. For example, many dams have been built without community participation; but now lie idle and unused. Some are being heavily silted without the communities showing any care.

2.4 Participation: Rhetoric Versus Reality

Over the years, it has come to be realized that some programmes that are deemed to be participatory in nature are not truly participatory. There is often a big gap between the requirements for participation and the reality. As is usual with concepts that gain currency, rhetoric has run far, far ahead of understanding, let alone practice (Blackburn and Holland 1998, xiii). Genuine stakeholder participation is sometimes not realized because of the commitment that it demands on the government and other development agencies. It means the transfer of power and authority from the centre to the local management structures. It means a considerable change of attitude in order to absorb the long-term implications of giving villagers authority to determine the course of their own development. It implies change not only in the way projects are implemented, but also in the procedures and processes by which decisions are made, resources allocated and policies formulated.

Governments are often unprepared to devolve power to the lower levels because they consider it as a loss of control over their jurisdiction. Participatory development programmes must, therefore, deal with a number of complications and obstacles linked to power and authority. It implies that actors and agencies possessing powers must willingly give them up, or be forced or persuaded to do so. It is one thing to direct resources to facilitate participatory planning in villages or poor urban districts. It is quite another to question and begin to change the often rigidly hierarchical and risk-averse management structures that exist within institutions and that make participatory approaches difficult to implement over the long term (Blackburn and Holland 1998, 3).

Outsiders often think that they know best. Some will say that the rural poor do not know what is in their interests or that they must be enabled to see what they would want if they knew what they really wanted. Changing power relations and the distribution of wealth may often be a necessary condition for major improvement. The initiative starts with outsiders but the aim is to transfer more and more power and control to the people (Chambers 1983, 145). Failure to do this means that participation becomes mere rhetoric, which is not practiced in reality.

Instances abound where innovative participatory development programmes were centrally formulated but not linked to local organizations and sources of political and financial support. Authority is commonly delegated to local organizations but they are not given the resources to perform their new functions. Local governments in most Asian countries, for example, still function as bureaucratic instruments of the centre rather than as generators of alternative values, preferences, and aspirations. They act merely to extend centrally established priorities and controls (Rondinelli *et al.* 1984, 31). "In Tanzania, for a majority of the peasants, the decade after the Arusha declaration was not so much a period during which Ujamaa had failed but simply a period where they had been subjected to many government directives and orders without witnessing much economic development."

Similar conclusions could be drawn from the experiences of Kenya where development planning remained highly centralized despite reforms and reorganizations. The Sudan has seen more than a decade of political conflict over the devolution of development planning and management, with little apparent improvement in the living conditions of the majority of the poor. Participatory development therefore requires special preconditions and supporting policies that many governments have not been willing to provide. Political will to carry out operational changes must exist before participation can become meaningful.

2.5 The Myth of Community

A community may be considered to be a relatively big group of people that stays in a clearly defined geographical location. These people are organized along more or less similar political and cultural institutions, norms, values, rules and regulations. Underlying the definition of community is the idea of homogeneity, and cohesion that binds the people together. In the context of development programmes, a community may be seen as an open system whose inputs are made up of the physical and mental activities that the project calls for. These inputs are intended to initiate developmental change that will lead to the betterment of the community or project beneficiaries' lives.

It is, however, important to note that this is a simplistic definition of a community. When a developmental programme is initiated, the situation often turns out to be much more complex. What we normally see or take for

granted to be a community is not as simple as it appears. There are certain social, political, and economic factors that tend to divide a seemingly homogenous community into various segments, some of which are of a nature that might derail the process of programme implementation. According to Chitere and Mutiso (1991, 79) in socio-economic terms, the community is not a homogenous mass of people (individuals, families); it is not a stratificational tabula raza. The extent to which residents of a community have a sense of community identity affects their involvement in community development.

What is being emphasized here is that those with more wealth, social status, and leadership positions are likely to react in a different way from those with less. Gender dimensions of a community must also be taken into account. Men and women often have different views regarding a given programme because of the different roles they play in any developmental process. In many development programmes implemented in the past, gender was hidden in seemingly inclusive terms: the 'people', the 'oppressed', the 'beneficiaries', or simply, the 'community'. It was only when comparing projects that it became clear that the 'community' was all too often the 'male community' (Guijt and Shar 1998,1).

Officials from a development agency would be gratified to find a homogenous community that quickly agrees to and participates fully in a new development initiative. Unfortunately, that is rarely the case. A community will have internal socio-economic disparities that will cause some groups to oppose a given programme and some to support the programme.

An important question arises which the development officials must tackle before implementing a project: 'Does the membership of a community give its consent to participate in community development activities or is it just acquiescing by simply conforming to the directives of leaders?' The social forces of acquiescence and sense of community on one hand, and degree of involvement in community development activities on the other, may make for either success or failure of a given project. Inequalities, oppressive social hierarchies, natural biological differences, discrimination and other disparities are often overlooked and enthusiasm is generated for the cooperative and harmonious ideal the community promises. But "The feasibility of hundred percent local participation is a myth. The local political context will strongly influence what is a feasible intensity and form of participation" (Guijt and Shar 1998,10). In essence, one's interests and social position will determine the extent to which one becomes committed to the development project.

2.6 Defining Institutions

The utility of smaller units of management is made possible by the formation of new management structures at the lower levels. Therefore, any

study of decentralization efforts and programmes has to incorporate institutional analysis. Various theorists have concerned themselves with the study of institutions. In so doing they have tried to come up with specific definitions of the term "institutions" and a number of definitions have emerged. Some authorities define institutions as the rules and regulations that guide human behaviour. Under this definition falls legal documents like constitutions, statutory instruments, legislative Acts, customary law, and so on. North (1990) defines institutions as the rules of the game in a society or, more formally, as the humanly devised constraints that shape human interaction.

Other authorities consider institutions as the organizations that regulate human behaviour and action. Because of this view, there are many instances where the term institution and organization are used interchangeably. Selznick (1948) equated institutions to organizations. He argued that institutional processes view organizations as adaptive, organic systems affected by the social characteristics of their participants as well as the variable pressures from the environment and that organization, to a variable extent and over time, are transformed into "institutions". The distinction between organizations and institutions may be useful for purposes of academic debate and theory but in reality, both rules of the game and organizations are very essential to the development of water resources, or of any other resource for that matter. They compliment each other in terms of transforming objectives into action and using the two terms interchangeably is fairly tolerable. No organization can effectively survive without making use of certain 'rules of the game'. The rules of the game on the other hand are useless if there is no organization to interpret and apply them judiciously. Leach, Mearns, and Scoones (1999) argue that if institutions are "the rules of the game" in society, then organizations may be thought of as the players or groups of individuals bound together by some common purpose to achieve objectives. Organizations exist only because there is a set of working rules or underlying institutions that define and give those organizations meaning.

Organizations are social systems with goals and procedures that tend to achieve an established value-laden status. Over time, they become institutionalised. Viewed in this way, institutionalisation is a process that occurs to an organization over time, reflecting the organization's own distinctive history, the people who have been in it, the groups it embodies, and the vested interests they have created. It also reflects the way in which the organization adapts to its environment. As the organization institutionalises, it also makes inputs into the development and modification of the rules of the game. Thus new rules have the potential to transform the organization, and an evolving organization has the potential to change the existing rules. As organizations acquire certain predictable modes of operation, they become institutionalised and as a result, the need to distinguish between institutions and organizations becomes irrelevant.

For the purposes of this paper, there is no need to delve deeply into the distinction between institutions and organizations. Both rules of the game and organizational structures have a direct bearing on how water is managed. In most cases, the two (if at all the distinction between the two can be taken seriously) complement each other. The two will therefore be used interchangeably and institutional development will be used to refer to both the legal and operational frameworks for managing water resources as well as the organizational structures that may come into being.

While theorists may not agree on the definition of institutions, the importance of institutional analysis still needs to be highlighted. And for this reason, Scott's (1995) definition becomes very useful. He views institutions as consisting of cognitive, normative, and regulative structures and activities that provide stability and meaning to social behaviour. Institutional change shapes the way society evolves over time. Institutions reduce uncertainty by providing structure to everyday life. They are the guides to human interaction; they are the guides to the processes of resource allocation; they determine 'who gets what, when and how'. They play a big role in the division of power between and among humans. Institutional arrangements specify which actions are required or prohibited (and the corresponding probable penalties for non-compliance), and which actions are permitted.

Institutions consist of formal written rules (like legislations) as well as typically unwritten codes of conduct that underlie and support formal rules. The rules and informal codes of conduct are sometimes violated thereby making it necessary to have forms of punishment in place for the correction of rule violations. As Oakerson (1997) points out, institutional arrangements specify which actions are required or prohibited (plus probable penalties for non-compliance), and which actions are permitted. What is missing from Oakerson's discussion is the need to consider, in advance, the costs associated with ascertaining violations and forms of punishment as well as actually meting out the punishment.

This becomes even more important when one takes into consideration the fact that sometimes formal rules may change overnight as a result of political or judicial decisions. But at the same time, informal rules and regulations embodied in custom, tradition and codes of conduct are much more resilient and impervious to deliberate policies. Thus enforcement of compliance to the new management regime becomes quite costly.

In the Zimbabwean case, the need to redress past injustices in water allocation has been identified as core to the reform process. But this cannot be achieved without institutional reconfiguration. Changing the management regime to suit new needs for environmental conservation invariably calls for systematic institutional change. According to North, (1990,3), "institutions are the rules of the game in a society, or more formally, are the humanly devised constraints that shape human interaction.

Institutional change shapes the way societies evolve over time and hence is the key to understanding historical change.”

Scott (1995, 6) states that, as carried out by such leading practitioners as W. Burgess (1902), Woodrow Wilson (1889), and W. Willoughby (1896), “institutional analysis was grounded in constitutional law and moral philosophy. Careful attention was given to the legal framework and administrative arrangements characterizing particular governance structures.” Such an analytical framework is also applicable to the field of water resources governance today. For this reason, this paper does not attempt to separate the legal issues from the institutional issues. Closer analysis of the major goals of the water reforms shows that the legal and institutional issues are quite crucial to the whole reform programme.

It has already been decided that any institutional change for effective management of water resources in Zimbabwe will have to be implemented through a process of decentralized management and control of the resource. Darby (1997, 8), commenting on the South African water reform process quotes C. Veijeren, as saying, “We must have Catchment Authorities and each Catchment Authority must have control of the water in its area. Any delegation of responsibility or attempt at capacitating user organizations must include empowerment. Without user empowerment, user-based management will fail.” Empowerment of users can only be complete if effective organizational structures are put in place to represent the users.

The following excerpts taken from South Africa’s Department of Water Affairs and Forestry publication (1996,31) show the importance of institutional change in the governance of the water sector:

- “One of the most important factors in successful implementation of integrated catchment management has been the development of institutional approaches that are appropriate to the needs of each situation.”
- “In South Africa, the department of water resources managers were fully aware that the existing institutional structures and legal framework were inadequate to deal with the complexity of water resources management.”
- “The absence of suitable institutional structures and the presence of an inappropriate legal framework also prevented adequate involvement of the public in decisions around the wider socio-economic implications of development and resource management.”

Some institutional structures for managing resources in Zimbabwe and other African countries were designed during colonialism and were subsequently inherited at independence. These have now outlived their utility because socio-economic circumstances have altered considerably. The African Charter for Popular participation calls on African governments to abandon

or transform the inherited structures which are obsolete and inappropriate for African development (Makumbe 1996, 4). There is need to enhance and develop responsive, dynamic institutions across the different levels or hierarchies of need (Mbetu 1997, 1). Most countries have a multiplicity of public agencies and commissions with overlapping responsibilities for managing water resources and decisions are fragmented. Institutional arrangements, such as river basin organizations or coordinating committees, that encourage water-related agencies to coordinate and establish mutually agreed priorities for investment, regulation, and allocation need to be developed. This will require representative bodies and devolution of authority to the local levels. Decentralized water management is not possible without institutional reforms that are sensitive to traditional practices and local realities and are responsive to the new structures (Serageldin 1995,16).

2.7 Case Studies of Catchment-Based Management

An examination of experiences with ICM in other countries could help Zimbabwean water managers to learn from the successes and failures of others.

2.7.1 South Africa

As other chapters will demonstrate, the South African experience with ICM is similar in many ways to the Zimbabwean one. Darby (1997, 2) states that "Water Law and the Water sector reform programme in the Republic of South Africa are in many ways very similar to that of Zimbabwe". This might be a result of the two countries undertaking water reforms at almost the same time. Since the early 1980s, South African water resource managers have come to realize and accept the need for an integrated approach based on small hydrological units (river basins) if effectiveness was to be achieved. It was quickly realized that development of catchment management plans for each catchment would help to ensure the systematic and equitable distribution of water among different users. Several catchment studies were commissioned to obtain the physical and ecological characteristics of the water resources available in each catchment; quantify present and likely future demand for water by each water sector; identify individuals, institutions and organizations for consultation in decisions over water allocation and formulate appropriate water management strategies for the country, conflict resolution strategies and drought management strategies.

The result of the above effort has been the division of South Africa into nineteen Water Management Areas (WMAs). Water in each WMA is controlled by a local Catchment Management Agency (CMA) which makes decisions on water allocation and use. This is expected to make water management more participatory since decisions are made at the local level. "The Water Act of 1998 calls for catchment management policies which

include all relevant stakeholders and communities, including historically marginalized groups, in the decision-making process" (Rowntree *et al.* 2000,1). The CMA is expected to act within the boundaries of a National water resources strategy. The CMA must also come up with a catchment management strategy to guide water management in the catchment. Chapter 2, part 2 of the South African Water Act 1998 expressly states that the catchment management strategy must set principles for allocating water to existing and prospective users, taking into account all matters relevant to the protection, use, development, conservation, management and control of water resources. There is a significant downward delegation of authority to other water management institutions below the CMA. These are in the form of catchment management committees and Water User Associations. Public participation and cooperative governance are key tenets in the operation of CMAs. Section 9 (g) of the Act spells this out by stating that a catchment strategy must "enable the public to participate in managing the water resources within its water management area."

Planning and decision-making at the national level is left to the Department of Water Affairs and Forestry (DWAF). This mainly relates to dam construction, irrigation and other waste water supply schemes, and issuing of licenses to water users. Licenses will be issued for a limited time period (five years for agricultural users; ten to twenty years for industry; forty years for forestry). Theoretically, this means that the right to use water can be withdrawn on expiry for reallocation to other, more deserving, users. The government has indicated its commitment to redressing inequities of the past by providing water to people who have not been using water. The major problem that must be faced is that most of the available water has already been allocated to established commercial water users. The mechanism for resolving this is the review of all existing allocations to determine their reasonableness and if possible, free up some water for new users.

Irrigation farmers in government schemes have always received water at very low prices. This is rapidly changing and in future users are going to have to pay more for their water in order to cover maintenance and depreciation costs of the infrastructure. Catchment management charges are also factored in to cover the functional costs of the CMAs. The DWAF will not develop any new infrastructure unless the users are willing to pay the full costs of construction. Darby (1997, 3) quotes the DWAF minister's speech as stating: "We must learn to pay the cost of providing and managing our water. Our country was built on enormous subsidies and those subsidies remained in place long after they were required. This cannot continue. It is economic suicide."

A number of problems are identifiable from the process. The first one is that the communal areas of South Africa use very little water for irrigated agriculture even though they have higher populations. The inequities in

water distribution are very stark. This raises questions about plans for a more equitable allocation of the available water between sectors. According to Goldin (2000,1) the water Act provided a progressive and innovative framework for implementation but the inherited inequalities of the past regime make it difficult to match policy with practice. Another major problem has been the lack of cooperation between and among relevant government departments. The relatively narrow segmentation of functions and responsibilities between different government departments, and the lack of effective interdepartmental collaboration, had the result that many land use activities which affect water resources and water quality were outside the influence of the DWAF. This confined the department's focus to that of water resources management (DWAF 1996, 31).

The separation of the land reform from the water reform also presented problems since provision of water would not automatically provide an opportunity to irrigate. Versfeld (2000,7) argues that plans for providing water to communal areas "are based entirely on the redistribution of existing land along with existing water entitlements. What is made clear through this assessment is that the need for land reform cannot be separated from water reform." A lesson to be learnt from the South African experience is that if catchment authorities are granted management responsibilities, then along with that responsibility goes financial autonomy and accountability. To discharge its duties effectively the authority requires expertise, skills and competence at the catchment and sub-catchment levels. Whether Zimbabwe has these requirements at present is quite doubtful. The decentralization model of the mixed authority where government technocrats are seconded to the catchment councils in order to strengthen the councils' technical capacity may be more suitable at the moment. This also implies that relevant government departments of the experts must be willing to release them to carry out catchment council duties. Collaboration between different departments becomes absolutely essential. Legislation made by different ministries and departments must be harmonized to make it more focused on resource management and avoid unnecessary conflict.

2.7.2 France

In France, water management is the responsibility of the Ministry of Environment, and is dealt with under the auspices of the department's water directorate. The Ministry formulates and supervises the implementation of these policies by local representatives. Each political and administrative district has a "Prefect" to whom water management responsibilities are delegated. The Prefect in turn appoints basin coordinators for water management who oversee the process. Two sets of legislation promulgated in 1964 and 1992 guide water use activities in the country. Five major principles may be said to guide water management in France. These are:

- Water must be managed within the context of drainage basins;

- Water management must be integrated to include all activities which influence the quantity and quality of water;
- There must be financial solidarity between all categories of water users;
- Management of surface and underground water resources must be harmonized;
- There is need for close collaboration between all parties and agencies involved in, or associated with water management and use.

What the French approach to water resources management recognizes is the importance of using natural drainage basins as units of management. The result of this realization has been the division of the country into six major drainage basins whose boundaries cut across administrative and political boundaries. A Drainage Basin Committee and a Drainage Basin Agency manage each drainage basin. Each committee acts as a mini parliament and determines the running of the basin within the context of national policies. The decisions of the committee are implemented by the drainage basin agency. Membership of the drainage basin committee is mainly drawn from water user groups, local governance officials, and state representatives. The basin agencies are financially autonomous public institutions operating under the auspices of the responsible ministry. Taxes and levies collected from the water users and effluent dischargers finance the operations of the agencies.

The institutional features of the French model seem to be relatively cumbersome. This should not be very surprising given that local governance systems differ from one country to another, and usually decentralization of power from the centre to the local levels is determined by the local governance system already in place. However, the basic concepts of ICM are still identifiable within the French system and can be applied successfully in any other country.

3. WATER RESOURCES MANAGEMENT PARADIGM SHIFTS

3.1 Introduction

This chapter explores the nature of water resources management paradigm shifts that have taken place at the international level and how developing countries have responded to these shifts. A number of countries in the Southern African region have been grappling with the demanding task of reforming their water sectors. Closer analysis reveals that the changes taking place across the region are not isolated events. They are part of the winds of change blowing across the whole world aimed at making the water sector more sustainable, equitable, democratic and integrated. An exploration of the nature of reforms in these countries shows that

international agencies, events and global shifts in natural resources management theory are playing a big role in shaping changes that occur at localized levels. It is argued in this chapter that the rationale behind the reforms is closely linked to new global water resources management strategies and philosophies. But the question that must be asked is whether water sector problems in the developing countries can be easily resolved by adopting recommendations made at global forums.

From the mid 1980s to the early 1990s, the world witnessed concerted efforts at the global level to come up with workable solutions to environmental degradation problems and increasing levels of poverty. The search for solutions revealed the need to focus more on the appreciation of the cross-cutting natural resources management complexities that must be faced from the local up to the global level. This view is also shared by scholars like Derman *et al.* (2000, 1) who argue that, management of natural resources, including water, requires understanding the complex intersections of global, national and local management regimes situated within a context of rapid economic, political and institutional transformation. There is, therefore, sufficient ground for one to argue that the wave of water reform programmes that has gripped the Southern African region is not an independent event. It is closely linked to global paradigm shifts in natural resources management thinking and economic restructuring exercises.

The search for solutions has also brought about a shift in water resources management thinking from a supply to a demand-oriented focus. A summation of the paradigm shift would indicate that motivations underlying this change in emphasis include the need to reduce the size and costs of government, decentralizing management authority, encouraging stakeholder participation in resource management, cost recovery, promoting greater social equity in access to water and conservation of the resource (Nhira and Derman 1997; Robinson 1998; Winpenny 1994; World Bank 1993). Therefore, water reform programmes initiated by Southern African countries (Zimbabwe included) may be viewed as a response to domestic as well as international philosophies in favour of decentralizing water management to the user or community levels. Water reform experiences throughout the world however, point to the need for a closer analysis of the applicability of global resource management prescriptions to the developing countries. This chapter is devoted to such analysis.

3.2 The New Global Natural Resources Management Paradigm

The natural resources management paradigm that has emerged is mainly grounded in a community-based natural resources management (CBNRM) framework. This framework provides an analytical approach that views users as the focal point for sustainable natural resources management. Without user cooperation and participation, the chances of successful natural resources management diminish. This analytical approach is manifest in literature from natural resource management scholars like

Murphree (1991) and Murombedzi (1991) who argue that in managing natural resources, the unit of proprietorship should be the unit of production, management and benefit. It must also be as small as practicable and the users must perceive management of the resource in question as beneficial to them if they are to be motivated to manage the resource sustainably. Since the reforms encourage devolution of management responsibility to communities, this paper assumes that communities, with the help of newly created institutions, are going to be the unit of proprietorship, production, management and benefit. Woodhouse, Bernstein and Hulme (2000,13) sum the CBNRM framework succinctly when they state that as well as fitting the rhetoric of agenda 21, the CBNRM approach is attractive to the minimal government stance of international aid agencies, which could be formulated as: "not state but market, and if not market then 'civil society' or community."

The CBNRM framework relates institutional dynamics to environmental conservation and management. In this case, institutional evolution is linked to water resources management at the local levels. Improvements in the local level institutions tasked with management of the environment are expected to reflect on improved natural resources management. Understanding the power dynamics between and among various actors, institutions and groups is seen as vital. It shows who makes the decisions that affect access to the resource as well as its management. It reflects how and for whose benefit decisions are made regarding a particular natural resource. Alexander (1992) argues that sustainability is not only about the way the environment is managed; it is also about who has the power to decide on how it is managed.

Other scholars have also examined institutional and power dynamics, monopolies over natural resources management, and the role of different stakeholders (see Murombedzi 1991; Abel and Blackie 1986; Seiderman 1992). To these scholars, environmental sustainability is conceived as having to do with control, power, participation, and self-determination. Development of institutions that empower local communities is seen as a prerequisite for sustainable resource management. The need to explore relations between a multiplicity of actors and factors is unavoidable. These include government departments, local institutions, differentiated groups in society, finance and international financiers, and global prescriptions versus local solutions to resource management. While focusing on institutions is essential, it is also necessary to note that other scholars point out that institutional development is not a sufficient condition for success. Leach *et al.* (1999, 241) for instance argue that because institutional arrangements are dynamic, influenced by ongoing practices and agents of numerous social actors, as well as by contingent events in the economy and society, they cannot assume predictable outcomes. This perspective argues correctly that strategic institutional changes such as alterations of legal frameworks do not necessarily lead to particular desired outcomes. There are other factors that

contribute to the success or failure of any reform and these factors are usually peculiar to the particular community or country in question.

3.3 Water as a Common Property Resource

At the global level, water issues have been the subject of increasing international concern and debate. This concern can be traced back to the 1992 International Conference on Water and the Environment (ICWE) held in Dublin, Ireland. The ICWE alerted the rest of the world to the need to identify innovative strategies for the assessment, development and management of water resources. This conference provided the springboard from which the United Nations Conference on Environment and Development held in Rio de Janeiro, Brazil, was to take off. It would appear that the basic policy guideline foundation had been laid at ICWE. According to the World Bank (1993, 24), the ICWE conference report sets out recommendations for action at the local, national, and international levels based on four guiding principles. First, the effective management of water resources demands a holistic approach linking social and economic development with the protection of natural ecosystems. Secondly, water development and management should be based on a participatory approach involving users, planners, and policy-makers at all levels. Third, women play a central role in providing, managing and safeguarding water. Fourth, water has an economic value.

An examination of principles that subsequently came out of the UNCED shows that they resemble an expansion and re-moulding of the ICWE principles. Chapter 18 of Agenda 21 for instance is a reproduction of principles laid down at ICWE. What UNCED basically confirmed was the widespread consensus that the management of water resources needed to be reformed. Therefore, UNCED adopted the definitions and principles that came out of ICWE and redefined them into concrete action-plans that different countries could adopt. In 1993, the World Bank published a policy paper also stressing the need to implement principles that came out of the UNCED and defining its new objectives for the water sector. UN specialized agencies, international non-governmental organizations (NGOs) and bilateral assistance agencies took up this call and are now participating in programmes related to water resources management in one way or another. The Economic Structural Adjustment Programmes (ESAP) supported by the World Bank and the International Monetary Fund also stressed the need to cut costs in all spheres of government, including the water sector. The concept of treating water as a scarce and economic good spread widely and quickly.

In 1996, the Global Water Partnership (GWP) was formed to promote a holistic approach to water resources management. It is a forum through which various country members and institutions can collaborate and share water resources management experiences. According to Water Dialogue, Jan-April 2000, "It was created as a mechanism to follow-up the water

management principles agreed at the 1992 Dublin conference and Chapter 18 of Agenda 21". It aims to support countries in the sustainable management of their water resources. One outcome of the formation of the GWP has been the formation of the Southern Africa Water Partnership (SAWP), launched in June 2000. It has a regional focus but shares the same vision and mission statement with the GWP. The SAWP and GWP mission statement (Water Dialogue, August 2000) reads: "Equitable and sustainable utilization of water for social and environmental justice, regional integration and economic benefit for present and future generations".

According to the Food and Agriculture Organization (FAO) (1995, 4) the message highlighted by all these efforts is that water is an increasingly scarce and valuable resource that must be managed in a sustainable manner for both the present and future generations' survival. In response to these developments and other domestic factors, many countries the world over started planning to revamp their water sectors. The Southern African region responded accordingly, and South Africa and Zimbabwe as well took more or less leading positions in the water sector reform movement that has been sweeping across the region. Thus, systematic linkages between national water reform strategies and global management of the commons are identifiable.

The history of water reforms in the region indicates an adoption of principles agreed at international conferences and conventions. The similarity of the basic goals and objectives between the country reform strategies and those laid down in agenda 21 for instance is clear testimony to the effect that global paradigm shifts are having on countries restructuring of the commons. In all reform programmes undertaken in the region, a few principles stand out that resemble agenda 21 recommendations. These are: the move towards decentralization and CBNRM; the desire to consider water as an economic good and emphasize cost-recovery; embracing equity in resource allocation for sustainability in management and poverty reduction.

3.4 CBNRM in Southern Africa

While the response to international shifts in water management thinking is undeniable at country level, in the Southern African region this response coincided with another more general move towards decentralized natural resources management. Throughout Southern Africa, there has been a move to decentralize natural resources management. Natural resources management scholars like Murphree (1991); Campbell and Shackleton (2001), and Murombedzi (1991) agree that in recent years, coinciding with the mainstreaming of participatory approaches in development theory and practice, there has been a policy shift to advocate that local resource users play an active role in the management of natural resources. In most countries of the region, decentralization efforts have been initiated for the transfer of some responsibility or authority over natural resources from

central government to a lower level, be it local government, government department, or community-based institution.

Success of the different decentralization programmes has varied from one country to another and from one resource to another. Wildlife management has pioneered the move towards decentralized natural resources management with a considerable degree of success. The Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe, for instance, has gained an international reputation as a typical example of successful CBNRM even though it has had its fair share of criticisms and shortcomings. Steiner and Rihoy (1995) argue that the focus on wildlife meant that broader NRM issues have not featured prominently in the programmes so far. However, indications are that serious attempts have also been made to initiate CBNRM programmes for other resources like forests and water with varying degrees of success. Within the space of a decade, a policy framework which relied on the state as the exclusive owner and manager of natural resources has evolved into a process of policy reforms that provide the legal, institutional and economic framework for communities to get more involved in natural resources management.

The evolution of CBNRM in the region has however not yet reached full fruition. The policy framework is now well known and well documented but tangible benefits are still minimal. According to Campbell and Shackleton (2001), in most instances there is little evidence to demonstrate that decentralized authority has resulted in more sustainable natural resources management. The assumption is that if true community control is in place, then sustainable use and management will follow. But the links between local management and sustainable natural resources management still require attention and further research. That is why, for some scholars, associating decentralization with sustainable resource management and improved governance remains debatable (see Brand 1998; Agrawal and Ribot 1999). Nevertheless, the successes achieved by some decentralized wildlife management programmes in the Southern Africa region remain a living example of what CBNRM can do. The history of CBNRM in Southern Africa cannot be fully covered here but a number of scholars have already documented CBNRM programmes' successes and failures in the region (see Murphree 1991; Hulme and Murphree 2000; Western and Wright 1994). It is not surprising, therefore, to find new attempts being made to replicate this experience in other natural resources.

Although it may appear to be too early to talk of a general CBNRM strategy for the region, there is little doubt that a shared set of principles and policies has emerged to guide natural resources management. Steiner and Rihoy (1995,1) point out that these principles represent a reversal of protectionist conservation philosophy and subsequent top-down models for development and resource protection. However, there is need to bear in mind that globalisation of water resources management and the reform programmes

that it has influenced in Southern Africa may not necessarily bear the expected fruits because of a number of reasons. It is one thing to sit down and come up with a brilliant resource management framework, considering all the elaborate principles to borrow from agenda 21. It is quite another thing altogether to put those principles into real practice. Campbell and Shackleton (2001) argue that even though appropriate policy and legislation may exist, there can be large differences between the stated intent of government and how bureaucracies apply this intent in practice. Real commitment by government to transfer authority and power to the lowest levels is rarely existent.

The decentralization processes recommended at the international level and adopted at the national level are quite noble. They bring resource management to the user level by utilizing smaller units of management. One might want to call the decentralization movement 'globalisation through fragmentation and localization'. However, a cautious approach needs to be adopted because the process is full of complexities. These complexities have led some scholars to conclude that there is a "cloud of rhetoric" surrounding the re-orientation to community participation and that participation in development projects is still a myth (see Cernea 1985; Midgeley 1986; Ghai 1988).

For many years, governments have controlled resource management and sidelined communities in conservation efforts. In line with the new global paradigm shifts, community-based institutions are suddenly given enormous responsibilities to manage the resources. They need time to adjust to their new roles, they also need time to adjust to the need to bury their differences with other different stakeholders who are part of the new institutions and cooperate with them. This cannot be a smooth process because the new institutions are not familiar with the new roles. It is also impossible to wish away the mistrust that exists between and among groups that were originally divided by history. Unfortunately, in the execution of their duties, the new institutions are expected to interface effectively with the institutions that historically held ownership, management rights and benefits from the natural resource. As Oakley *et al.* (1991, 4) state, centuries of domination and subservience will not disappear because we have "discovered" the concept of participation. Under these circumstances, the fruits of decentralizing management responsibilities can only be realized (if at all) in the long term. In any case, as Ostrom *et al.* (1999, 281) point out, having larger numbers of participants in common property resource management increases the difficulty of organizing, agreeing on rules, and enforcing the rules.

The above view is also shared by Wilson (1997, 7) who argues that the new institutions that emerge from these CBNRM programmes face a formidable task. They should be able to assume more formal property rights decisions, police resource access, make decisions on the harvests and distribution of

benefits, develop and deploy the necessary resource management expertise, and measure and monitor basin hydrology. These are responsibilities that require a considerable level of capacity which is not readily available in the communities. At the same time, the costs of creating and capacitating new institutional structures are very high. The transfer of authority to the local levels can also create a new group of elites who take advantage of this authority to benefit themselves. Thus, communities with many layers of socio-economic stratification and multiple interests can pose serious problems for CBNRM.

In the Southern African region countries, there is a clear move towards management of water at the catchment level through the establishment of new catchment-based institutions. Rivers and catchments or river basins cut across administrative and political boundaries leading to overlapping jurisdictions and mandates, potentially leading to contestations and conflict among different actors. This makes coordination of management across administrative boundaries essential and formidable. Creation of new institutional structures at the catchment level also has the problem of not recognizing the role that existing institutions can play in resource management. In most cases, both traditional and modern local government units are already in existence when the reforms are initiated. To link the new structures to the existing structures is not easy. Some members of the old structures might even feel that their territory has been invaded and friction ensues. This makes CBNRM difficult to implement. A general observation is that most of the catchment-based successful models and examples are from higher income countries like Australia, France and America. With blind optimism, some developing countries have adopted those models but they do not necessarily work in developing country contexts.

4. OVERVIEW OF THE WATER REFORMS IN ZIMBABWE

4.1 Introduction

This chapter presents a comprehensive overview of the water sector reforms instituted in Zimbabwe. It details the major objectives behind the reforms and the process that the reform went through. It provides a historical overview of the situation that prevailed before the reforms were introduced and the major changes that the reform brought, or was supposed to bring about. In other words, it answers the question: 'Where is Zimbabwe's water sector coming from and where is it going?'

4.2 The Political Economy of Water before the Reform

It is unfortunate that the political economy of agricultural water in Zimbabwe has been closely linked to that of land. Those with large tracts of arable land are in a position to utilize water on a large scale. Possession of a commercial farm almost ensured automatic access to water. This set up was a result of deliberate colonial development policies that ensured dual

economic development, a clear division being established between development policies designed for the indigenous people and those for the Europeans. The 1930 land Apportionment Act, and thereafter, subsequent legislative measures on land defined the ownership, control and user rights in the water sector (Kambudzi 1997, 3).

A considerable amount of literature exists on how colonialist policies favoured the Europeans at the expense of the indigenous population. It suffices to say that ultimately, good arable land in regions with a favourable climate for agricultural activities was acquired and divided among the colonialists. The local inhabitants were relegated to less friendly environments where overcrowding became very high thereby causing serious environmental degradation as the land could no longer support the large populations. According to Rukuni and Eicher (1994, 15), Zimbabwe's agriculture is currently divided between two distinct sub-sectors: about 4 500 large-scale commercial farms, and about 850 000 communal farms. The large-scale farms occupy about 10 Million hectares mainly in the high-potential zones while the communal farms occupy about 18 Million hectares in the drier zones of the country.

4.2.1 Land

The history of access to land in Zimbabwe is a long one and though it is not the major focus of this study, the effect of access to land on access to water was so direct and strong that it compels one to examine it. The following chronology of legislative Acts that entrenched the domination of large-scale commercial farmers over other sectors serves to illustrate how land was appropriated for the benefit of one sector of the country's population over the years:

- 1889 – The Lippert Concession was signed. Its purpose was to allow white settlers to acquire land rights from native Zimbabweans. The result was that the British South Africa Company bought the concession and used it as a basis for land appropriation.
- 1898 – Native Reserves Order in Council designed to create Native Reserves in the face of mass land appropriation by white settlers. These Native Reserves were created haphazardly in low potential areas and subsequently became communal areas.
- 1930 – Land Apportionment Act. This was one of the cruelest and segregative pieces of legislation made in Zimbabwe. Its purpose was to separate by law, land between Black and white. The high potential areas became white large-scale privately owned farms.
- 1951 – Native Land Husbandry Act. It was intended to enforce private ownership of land, destocking and conservation practices on Black smallholders. It resulted in mass resistance to legislation and fuelled nationalistic politics. It was removed in 1961.

- 1965 – Tribal Trust Lands Act. It sought to change the name of Native Reserves and create trustees for the land. Due to population pressure, Tribal Trust Lands became degraded “homelands.”
- 1969 – Land Tenure Act. It sought to finally divide land into 50% for whites and 50% for Blacks irrespective of the differences in population figures between the two groups. Combined with the Tribal Trust Lands Act, Rhodesia had the equivalent of apartheid.

SOURCE: (Excerpt from the Report of the Commission of Inquiry into Appropriate Agricultural Land Tenure Systems, October 1994)

Legislation enacted after independence had very little impact on possession of land and, by extension, on access to water. The means of production remained heavily skewed in favour of the large- scale commercial farmers.

Besides legislation, there were other ways in which settler domination of the colonial economy was ensured. The white settler farmer benefited from a number of crucial factors and considerations (Kambudzi 1997). Privatisation of land property ownership and development enabled white farmers to plan on a long term basis in view of vital inputs, outputs and water needs; granting of security of occupation enabled the white farmer to build up and provide for the children and grand children; government support was extended to the farmers with respect to both physical (roads, telephone, etc) and productive infrastructure (electricity, dams, boreholes, etc); support from financial and insurance houses over permanent infrastructural investments, and new agricultural production technology was also made readily available to the farmers (Rukuni and Eicher 1994).

The general political economy of agriculture inevitably translated into an unfairly skewed water legislation and sector. White farmers monopolized the use of commercial agricultural water while the rest of the community remained on the sidelines. By 1980 and afterwards, agricultural water had become an exclusive preserve of the large-scale commercial farmers. Large-scale commercial farmers monopolized use of water and land even well after 1980.

Table 1. Distribution of irrigation use by farming sub-sector in 1994.

Farming sub-sector	Command area (Ha)	% of total irrigated area
Large-scale commercial farming	126 000	84
Parastatal estates	13 500	9
Small-scale farmers	3 600	2
Communal and resettlement	7 200	5
Total	150 300	100

SOURCE: Manzungu (1999, 23)

Unequal access to both land and water remained a bone of contention spilling over into the new millennium. As Rukuni and Eicher (1994) argue, access to land was the reason for dual development. It was also the most important reason for the liberation war in the 1970s. The land issue will not disappear easily. This also implies that the water issue too will not disappear easily.

4.3 The Water Act No. 41, 1976

The Water Act No. 41 of 1976 had been the major piece of legislation controlling the water sector until 1998 before a new Act was formulated. It had a number of strengths and weaknesses. Its major strengths may be summarized as follows:

- Provisions that dealt with dam safety, public water shortage areas and combined irrigation schemes were quite good and useful under the circumstances if not of world class standard. As a result, they were fully incorporated into the Water Act of 1998.
- The attachment of water rights to land and title deeds ensured that they could not be easily transferred through the market mechanism. No one could easily sell the water right without relinquishing their land and this meant that water rights remained, to some extent, under the control of the government, and not some greedy capitalists. This was supposed to facilitate easier monitoring and compliance according to the terms of the water right as issued. Unfortunately, due to lack of monitoring and supervisory capacity on the part of the department of water development, allocations stated in the water rights were sometimes exceeded resulting in insufficient supplies for downstream users. This became a major source of conflict among users.
- The Act provided for the establishment of River Boards. To some extent, this significantly broadened stakeholder participation even though the participation was limited to water right holders only.

The major shortcoming of the 1976 Water Act was that it gave large-scale commercial farmers more access to water than other sections of the community. In situations where distribution of resources is not equitable, conflicts tend to arise easily and these conflicts increased significantly as competition for water increased. The major shortcomings of the Act were exposed by the devastating droughts of 1992 and 1994 during which a number of water conflicts were experienced in the face of severe water shortages. Some of the Act's weaknesses are as follows:

- The Act expressly stated that all water rights attach to land. This made monitoring and control of the transfer of water rights possible but, unfortunately, it automatically meant that many people without private land could not realistically be granted a water right. This also

made it difficult for those in the communal areas to use water for commercial agriculture since they did not have private irrigable land.

- The 1976 Water Act granted water rights in perpetuity implying that one could hold a water right for the rest of his life once it was granted to him. This situation disadvantaged new applicants for water especially in those catchments with many water users and greater demand for water. It constrained development because a particular catchment area could be deemed over-righted and therefore, unable to accommodate new water users.
- Water rights were given a priority date upon application. This date was intended to facilitate the allocation and access to water in the event of a water shortage. This meant that water would be allocated on a “first come first served” basis. Those with earlier water rights would therefore be given first priority of access to the water. Section 53 of the Act states that whenever the volume of public water to the use of which rights have been granted proves insufficient to satisfy all such rights, a holder of any such right shall not, subject to the provisions of subsection (2), exercise his right to the use of public water until the rights to the use of public water of prior holders have been satisfied. This entrenched the rights and access to water by those people who applied for water rights earlier at the detriment of newer applicants. In most cases, those with very old settler lineages ended up having first priority because they inherited very old water rights. What worsened the situation was the fact that in the communal areas, water rights could only be granted through the District Administrators. This increased the red tape to an already cumbersome process.
- The use of the term "water right" in the water Act gave the impression that a water right was an immutable right, more like a constitutional right, thereby creating the impression that the right could not be taken away. This impression encouraged users to quickly resort to court action whenever they thought their rights were being infringed on.
- The Act defined the concept of private water as “all water other than public water and underground water, which (a) rises naturally on any land; or (b) drains or falls naturally on any land.... so long as it remains on the surface of the land and does not visibly join a public stream.” This definition gave many people the impression that groundwater especially borehole water was private. This made control of ground water very difficult.
- The Act also provided for exemption permits for pollution. This exemption tended to encourage industry to pollute water. Although there was provision for fines, these were often so low that they were

not deterrent enough and offenders could continue to pollute (WRMS 1999).

- Membership of River Boards was limited to water right holders. Since most water rights were held by those with commercial agricultural land, this meant that commercial farmers monopolized control of water resources and systematically excluded other stakeholders from participating in decision-making over water.
- The administration of the Act was cumbersome because the implementing agencies were located in the capital and well removed from the users. It could take years for one to get the final water right.
- The Act made no specific provision of water for the environment thereby neglecting the needs of the natural habitat found in rivers. The new reforms expressly sought to remove these shortcomings found in the Water Act of 1976.

4.4 Macro-Economic Context

The water sector had its problems but the reforms were not an isolated process. They were conceived within the context of wider changes that were made at the macro-economic level aimed at improving the efficiency and performance of the economy as a whole. From 1991, Zimbabwe was engaged in a major effort to improve the efficiency of the economy through a better allocation of production factors and natural resources. This was supposed to be achieved through the Economic Structural Adjustment Programme (ESAP), which was meant to transform the inefficient command model into a more efficient market oriented model. The changes in the water sector were thus, part of a grand design of decisions taken at the highest level (Government of Zimbabwe 1995, I).

The water sector was viewed as a burden for the national budget because water was subsidized and also depended heavily on public funds for its infrastructural development. The idea was, therefore, to change the water pricing mechanisms in order to make the prices more market-based and the sector self-financing.

In 1991, the government held discussions with the World Bank, Food Agricultural Organization, and a number of bilateral donors about assistance in developing a comprehensive strategy for supply and use of water. The following components were identified as essential to the reforms:

- (a) A Water Resources Management Strategy (WRMS) secretariat located in the Ministry of Water. It was to act as the coordinating unit for the development of a comprehensive Water Resources Strategy. It was to be staffed by a multi-disciplinary team of experts to carry out the planning. It was comprised of a Technical Coordinator, a Water Resources Strategist, an Economist, an Environmental Management

Specialist, and a Public Relations and Promotions Manager. When the strategy was completed, the secretariat was disbanded. Institutions developed under the institutional development component of the reform programme then assumed the implementation of the strategy.

- (b) The second component of the reforms was the preparation of pilot catchment plans contributed to by several departments and coordinated and guided by the WRMS secretariat. The Mazowe and Mupfure catchments were selected to provide both real world environments for testing evolving strategies as well as models for the development of further catchment plans in other areas. One of the principles that were suggested is that water should be managed at the lowest possible level. The catchment becomes the centre of activities as far as planning, management and development of water is concerned.
- (c) The third component involved building capacity in the Department of Water Resources (DWR) so that it could provide WRMS with specialists in hydrology, hydrogeology and systems analysis. Recruitment for these specialists would be done internationally if local expertise could not be found. Technology and working methods at DWR would be upgraded and updated to bring them to international standards. This was to be done to ensure that information needed by the WRMS project from DWR would be correct and timely.

The WRMS projects major objective was to bring about an improved allocation of water among various users, and in the process improve economic viability, environmental sustainability as well as social equity. At the macro level, the reform was expected to create more income and more employment through the commercialisation of the water sector. Better drought management would improve economic stability and lessen the devastating impact of the droughts particularly on the poor.

4.5 Objectives of the Reforms

4.5.1 Goal

The overall goal of the water sector reform in Zimbabwe could be identified as the promotion of sustainable, efficient and integrated utilization of water resources for the benefit of all Zimbabweans. This is supposed to be achieved through the formulation of a comprehensive water resources development and management strategy.

4.5.2 Specific Objectives

A number of objectives of the reform have been outlined in various documents. The objectives are clearly outlined in the Government of Zimbabwe programme document for the Development of a National Water

Resources Management Strategy for Zimbabwe (October 1995). They include:

- (i) The promotion of equal access to water for all Zimbabweans. This objective took cognizance of the fact that most of the available water was mainly being used by a small segment of the population (large-scale commercial farmers). Small-scale users and communal areas often did not have access to the resources even in cases where the resources had been developed in their vicinity. Promoting equal access, therefore, meant redressing past injustices in water access to the benefit of historically disadvantaged smallholder farmers and upcoming indigenous farmers without prejudicing large scale commercial and estate concerns (Bolding *et al.* 1997, 32).
- (ii) To promote stakeholder participation and involvement in the decision-making process for the water sector. This is to be done in light of the fact that participation in water matters has been restricted to a privileged section of society, the large-scale commercial farmers. The legal and institutional provisions did not create an environment conducive to stakeholder participation (WRMS 1999, 10). The need to revamp the legal and institutional environment of the water sector was therefore identified as a high priority issue.
- (iii) To promote an integrated approach to water resources development planning and management. This meant emphasizing coordinated development and utilization of the resource between and among different sectors in order to maximize the social, economic and environmental value of the resources to society.
- (iv) To decentralize water management institutions to the catchment and sub-catchment levels. This entailed the formation of water user organizations as smaller units of management that are closer to the people on the ground.
- (v) To remove inefficiencies in water use and make the sector self-sustaining. This encompassed putting more emphasis on cost recovery of investments in the water sector and treating water as an economic good. Thus, the user-pays principle was adopted to reinforce this new focus.

4.6 The Legal and Institutional Changes

A new Water Act was drafted and passed into law in 1998 to replace the Water Act of 1976. The Zimbabwe National Water Authority Act was also formulated to legalize the formation of the parastatal that would run the water affairs of the country on commercial lines. A number of essential features of the Water Act of 1998 are identifiable.

The first feature relates to the vesting of power regarding all water in the President. This has the advantage of legally removing the concept of private ownership of water, thereby removing the idea of water rights being real rights issued in perpetuity and attaching to the land in respect of which they are granted. Section 4 (1) of the Act states, "No person shall be entitled to ownership of any water in Zimbabwe...." In place of this was introduced a permit system under which permits for the use of water will be valid for a specified period of time and will be subject to review as circumstances change. Section 36 (1) of the Water Act clarifies this by stating: "Subject to this Act, a permit shall be valid for a period of twenty years or such shorter or longer period as a catchment council may fix". Granting the permits for a time period that is short and subject to review might help ensure that users make use of the permits rather than holding them for speculative reasons, hoping to use the water later. Those who do not need the water for immediate purposes will be forced to apply for water later on when they have more pressing needs.

The 1998 Water Act removed the differentiation in management of water between surface and ground water. This means that use of ground water for purposes other than primary ones will be subject to the same conditions as applies to surface water. Both of them now fall under the Catchment council's jurisdiction. There is the implied understanding of the importance of the linkage between ground water and surface water as they relate to the hydrological cycle. This means that water is now viewed in its totality as part of a complete hydrological cycle, taking into cognizance the fact that the way underground water resources are exploited has a bearing on surface water resources.

The Act removes the preferential rights to water held by riparian owners in the 1976 water Act. Essentially this has the advantage of doing away with the priority date system that was used to allocate water under the 1976 Water Act even in times of scarcity. It reduces the number of conflicts that may arise since every water user has as much access to water as any other user. Instead of some users having priority over others in terms of access to water, section 54 of the water Act specifies that whenever the volume of water in any river system or part thereof for the use of which permits have been granted proves insufficient to satisfy all the permits, the catchment council shall.....reallocate or reapportion the permits upon such conditions and in such manner as will ensure the equitable distribution of the available water. This provision places everyone on the same footing at all times.

The Act introduces the formation of catchment councils (CCs) and Sub-catchment councils throughout the country to manage the use of water in catchment areas of their jurisdiction. Section 20 (2) of the Water Act defines a catchment council as "a body corporate capable of suing and being sued in its own name and, subject to this Act, of performing such functions as a body corporate may by law perform." The same definition applies to the

sub-catchment council. These councils have the power to issue permits required for certain uses of water thus decentralizing and removing this function from the Administrative court. The Administrative court becomes a court of appeal only for water disputes that the CCs fail to resolve. The Act therefore, formally decentralizes water management functions to the stakeholders with a view to increasing stakeholder participation in decisions related to water that they co-exist with. This is also expected to speed up the process of applying for and obtaining permission to use water. The Mazowe Catchment Council for instance has resolved that the application process must be completed within one month.

The new Act emphasizes representation of all stakeholders at the CCs, the intention being to ensure that people in communal and resettlement areas are involved in management of water. Section 25 (1) of the Water Act states that before proceeding to the determination of any matter submitted to it, the catchment council shall satisfy itself that all persons who, in its opinion, have an interest which is reasonably likely to be adversely affected by the determination have been duly notified of the proceedings. People likely to be affected by the catchment council's decisions have the right to present their arguments to the catchment council before it makes the decisions.

The 1998 Water Act provides for permits to pollute and stiffer penalties for excessive pollution levels. It is hoped that the penalties will be deterrent enough to all categories of polluters. The money accumulating from the penalties can be used to correct the damage caused by the pollution if possible. The environment is recognized as a legitimate water user to whom water must be allocated in order to preserve it. This has the advantage of ensuring that the natural habitat in and along the rivers is preserved. It is also an attempt to approximate and maintain the river's natural state as much as possible.

The Act gives the Minister powers to declare water shortage areas in the event of acute shortages and if he/she is of the opinion that the continued abstraction of water from any public stream, water storage works or underground is reducing or likely to reduce the water resources to unacceptable levels. The abstraction of water in the water shortage area may then be regulated following the suspension of permits. This is not entirely a new provision because it was there in the 1976 Water Act. It is, nevertheless, very crucial in that it deals with an issue that is sensitive to commercial water users particularly in agriculture who may not be amused by the declaration of a water shortage in their own areas. The concept has the advantage of allowing for governmental control on water resources in areas that are facing acute shortages and giving priority in access to water for certain groups becomes inevitable. It, however, has the potential to cause conflict between water users and the ministry.

The Act also introduces new institutional structures for the management of water. These include the Zimbabwe National Water Authority (ZINWA),

CCs, and Sub-catchment Councils (SCCs). ZINWA is a commercially oriented public enterprise that took over most of the functions originally performed by the Department of Water Development (DWD). The ZINWA Act No. 11, 1998 was passed to bring this institution into being. Development and management of the national water resources are now the responsibility of the ZINWA whilst the policy-making function remains the domain of government and the DWD. ZINWA will operate on a commercial basis except in respect of certain non-commercial functions for which levies will be raised from water users. The idea is for it to eventually finance all its operations on its own. In other words, it will be expected to meet its expenditure and any taxes for which it is liable. The Act allows for the transfer of some members of the public service from the Department of Water Development to ZINWA.

ZINWA is directed by a ten-member board made up of six ministerial appointees and four other persons appointed by the minister from a list of nominees selected by the catchment councils. From the six, five are persons recognized for their ability and experience in the development and management of water resources, and business and administration, and one member is a water engineer from the ministry responsible for water resources development. The chairman of the ZINWA board is also appointed by the minister. The ZINWA will advise the minister in the formulation of national policies and standards. It will also advise on: water resources planning, management and development; water quality pollution control and the protection of the environment; on hydrological matters; dam construction and borehole drilling, and water pricing. The Authority will supervise CCs in discharging their functions.

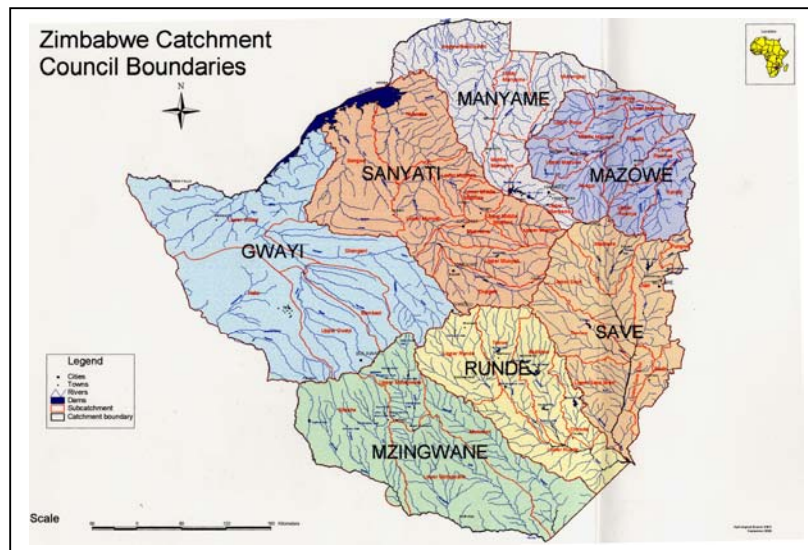
One of the questions that immediately come to mind is whether the minister is not allowed to do too much in terms of these appointments. One wonders to what extent ZINWA will not become another political playing field due to political interference as has happened in other public enterprises. If the minister is responsible for appointing all these members, how impartial are they going to be when they carry out their operations? Will they not make sure that whatever they decide to do is in line with ministerial views and not necessarily business-oriented? It might have been better for CCs to have a greater say concerning who sits on the ZINWA board. The fact that CCs can only submit a list of names from which the minister selects four of the board members makes a mockery of their participation in the process. Legally, it means the minister can reject all the names submitted if he/she does not like the personalities listed. The ideal situation would be for the CCs rather than the minister to choose more of the board members if the spirit of stakeholder participation evident in the 1998 water Act is to be brought into reality.

The board was appointed in the year 2000 but members' operations and thinking regarding water management in the country have been a closely

guarded secret. Two years down the line members of the Mazowe Catchment Council were still expressing lack of knowledge about what the ZINWA 's thoughts on water management in the country were. They were also not sure what stage of institutional building ZINWA had reached. At one point, they were even considering skipping ZINWA and going straight to the minister in order to have their views taken into consideration regarding water management in the country.

Catchment Councils are organizations made up of representatives from various sectors brought together to manage water at the catchment level. A Catchment may be taken to mean a hydrological zone or river basin dominated by one big river into which a number of smaller rivers flow, for example, the Mazowe Catchment. The country has been divided into a total of seven catchments each with a CC to manage water in it. These are the Mazowe, Mzingwane, Manyame, Gwayi, Runde, Save and Sanyati catchments.

Map 1. The catchments of Zimbabwe



SOURCE: Hydrology Department, Zimbabwe (2000)

The formation of CCs is a move intended to decentralize water management from the capital city (Harare) to lower levels that are not only closer to the users but are also composed of the users themselves. The Councils take over some of the functions previously carried out by the Administrative court. This includes processing and approval of permit applications for water use.

The Administrative court becomes a court of appeal only in the event that the CC fails to resolve some disputes over water.

CCs assist in the preparation of outline plans for their respective catchments, regulate and supervise the use of water by permit holders, and ensure compliance with the water Act. They have powers to grant permits, to revise existing water rights/permits, investigate and give orders in any disputes concerning the use of water. Day-to-day management of the affairs of the Catchment council is done by a Catchment Manager who is an employee of ZINWA. He acts on the advice of the CC but under the supervision of the ZINWA.

The position of the catchment manager has already been a subject of controversy at various water related forums in the country. While the catchment manager is supposed to provide the much-needed technical expertise to the CC, he reports directly to ZINWA and not to the CC. Section 28 (2) states that "in the performance of his functions, the catchment manager shall act on the advice of the catchment council and shall be supervised by the National Water Authority." Ideally, it would be better for the catchment manager to report to the catchment council rather than to ZINWA because the catchment council is supposed to be the general overseer of water management in the catchment on behalf of ZINWA. It is also quite difficult to imagine how ZINWA will supervise someone based in the catchment while it operates from the capital city.

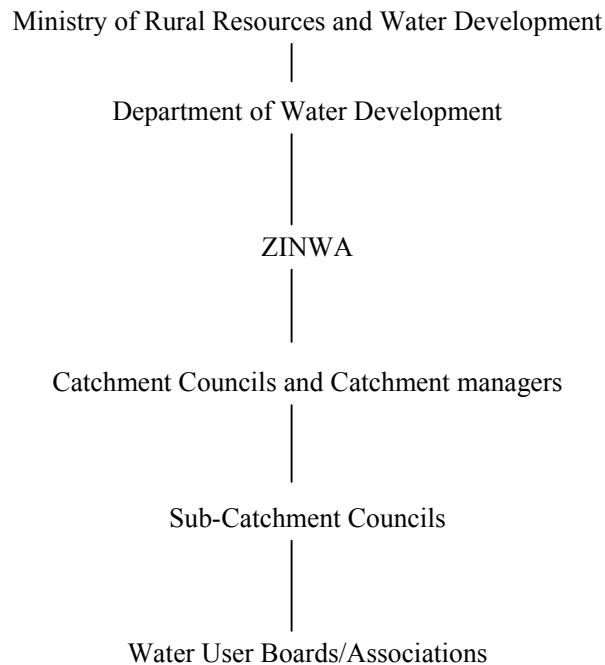
Some have questioned the amount of decision-making powers given to the catchment manager by the Water Act. The main argument is that his powers make him the equivalent of the catchment council itself in certain instances and that one person should not be as powerful as a group of elected persons. If the CC is not meeting, section 29 of the 1998 Water Act gives the catchment manager the power to grant permits on an unopposed application or claim; to revise a permit, cancel existing permits, and resolve water disputes. The CC is entitled to carry out all these tasks as well and to some, it would appear as if the catchment manager wields too much power.

In processing permits and carrying out their general functions, Catchment Councils are expected to depend on the advice of Sub-Catchment Councils (SCC) who operate at a smaller and lower level of water management. Their boundaries follow sub-hydrological zones, that is, they are based on catchment areas of smaller rivers that flow into the major river systems. The Nyadire and the Nyagui rivers flow into the Mazowe River. Their hydrological boundaries for instance determine the boundaries of the Nyadire and Nyagui SCCs, respectively. Like a CC, the SCC will be a body corporate with powers to levy rates for purposes of meeting their expenses. Permit applications will be made to the SCC first which then passes on the applications to the CC after approving. The SCC is expected to oversee management of water in its area of jurisdiction. Section 24(4)(a) identifies

one of the functions of SCCs as regulating and supervising the exercise of rights to water within the area for which it was established.

Below the SCC level, there are smaller water management institutional structures called Water User Boards (WUB) or Water User Associations (WUA). Though the Water Act 1998 and ZINWA Act 1998 do not recognize this third tier in the decentralized water management system, they are important structures in that they are supposed to feed essential information into the SCC structure. They are small localized units of management that are closer to the user than the CC and the SCC are. Their membership is drawn mainly from the community in which they operate and one can say that their existence illustrates the newly adopted concept of community based natural resources management. The Chairperson and the deputy are members of the respective SCC in whose constituency the WUB falls. In essence, the WUBs are designed to replace river boards as local units of water management. Their roles are almost similar to those of the SCC except in terms of collecting water levies. They are not in a position to levy anyone because the new laws do not legally recognize them. They are only legal in so far as the law allows the SCC to create other sub-structures that help it improve the running of its legal water management operations.

Fig. 2. Organizational chart of the CEW water sector management institutions



5. THE MAZOWE CATCHMENT EXPERIENCE

5.1 Introduction

This Chapter presents findings from the Mazowe Catchment's implementation of the water reforms. It briefly examines the water management background in the catchment before the national reforms were introduced. The process that the Mazowe followed in adopting the reforms as defined at a national level is described and analysed. The reforms are also assessed in relation to issues of equity, stakeholder participation and the treatment of water as an economic good. Expectations of the Mazowe Catchment Council and other stakeholders are discussed, and areas of conflict or agreement between national objectives and Mazowe objectives are pointed out. Excerpts from results of surveys, Participatory Rural Appraisals (PRAs) and interviews with stakeholders carried out during the study are also incorporated. This helps demonstrate the meaning of the reforms to various people in the catchment and the extent to which the reforms filtered to the grassroots level over the period of study.

5.2 Background to the Mazowe Catchment Planning Project

The Mazowe catchment was the first in the country to be chosen by the government to become a pilot catchment planning project area. Its mandate was to interpret the principles of WRMS, discuss them and contribute to the formulation of the new Water Act and the ZINWA Act. In addition, principles essential to the reform were supposed to be converted into specific action plans that would be tried and tested in the Mazowe catchment before they could be replicated elsewhere. But it needs to be pointed out that the water reform programme was never the beginning of the Mazowe catchment planning project.

The project was initially a private initiative started in 1990 by farmers in the area in order to bring about systematic management and allocation of water in a way that would minimize the number of water conflicts as well as stimulate investments in water development projects. Participation of a wider spectrum of stakeholders in decisions regarding water allocation was expected to make the process more transparent and less conflict ridden given that the Mazowe River had many water right holders and competition for the available water was increasing rapidly. As Dougherty (1997) puts it, the vision was for all stakeholders to be involved in dam investment and, through levies on the water released, further investments could be made to the benefit of the community. Darby (2000,11) states, "a portion of the Mazowe catchment had a history of decentralized catchment-based management and had already formed a private-sector-driven 'Mazowe River Catchment Development Company' when the water sector reform began." The portion referred to was approximately 5000 square kilometres. It had a fully functional rights holder-based water management system existing for

surface water with seven river boards under the umbrella of a catchment river board.

The implications of the above are not difficult to deduce. The most obvious is that systematic catchment planning was not a new initiative introduced to the Mazowe by the water reform programme. The large-scale commercial farmers were already grappling with the demands of catchment planning when the water reform programme was started. One may even be tempted to argue that the Mazowe was selected as a pilot project because it had already started to move along the desired course, and it would therefore be easier to implement the reforms among willing stakeholders than in other catchments where the degree of uncertainty was much higher. Therefore, what the reform programme managed to do was to increase the pace of change and widen stakeholder participation to include people in non-commercial farming areas most of whom did not have water rights. Dougherty (1997) stresses this point when she states that, "fortuitously, the advent of the WRMS has provided an opportunity to maintain the considerable momentum for stakeholder involvement in water resources development in the Mazowe catchment."

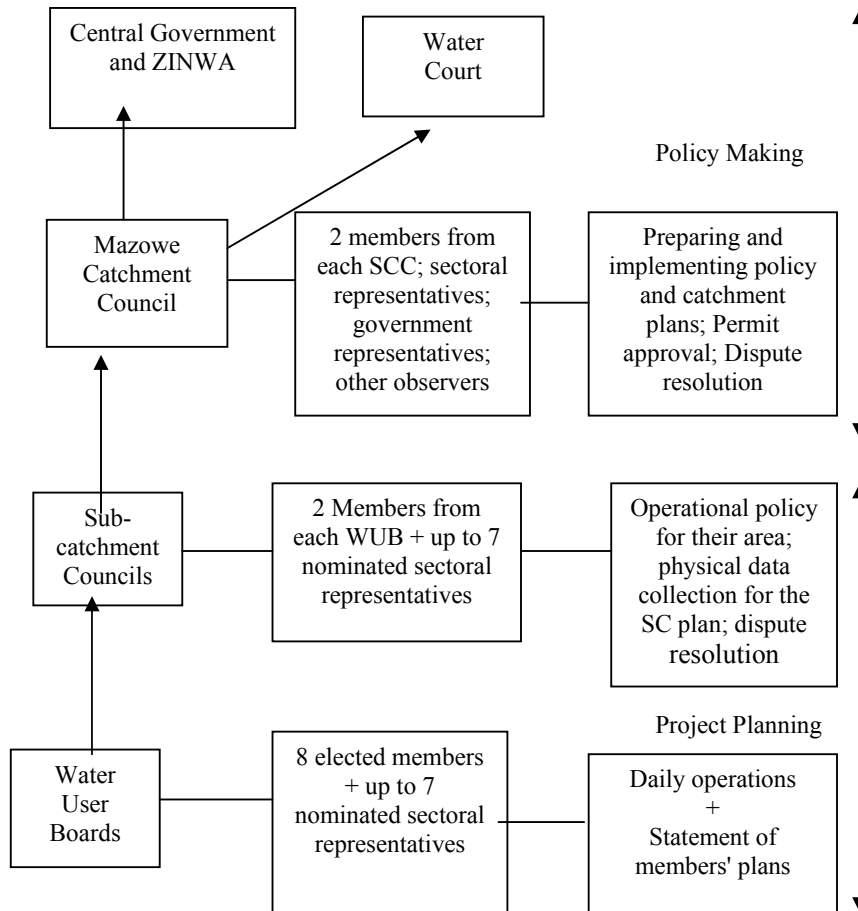
In July 1996, a workshop was held in Bindura to elect a working group that would spearhead the formation of the Mazowe catchment council. Considerable care was taken to ensure that all sectors were represented on the working group in order to bring everyone on board right from the beginning (urban, industrial, large and small-scale mining, large and small-scale farming, communal and resettlement areas). Government departments were also represented though not as part of the catchment board but as observers and technical advisers. Five sub-committees eventually emerged to deal with specific issues. These are:

- A logistics sub-committee to deal with institutional structure development and regulations;
- A technical sub-committee to ensure effective liaison with technical experts;
- A catchment planning sub-committee to spearhead the development of a catchment plan;
- A publicity sub-committee; and
- Returning officer teams to deal with the sub-division of the catchment into sub-catchments, water user boards, and elections for these lower structures.

By April 1997, the catchment could boast of at least some clearly defined institutional structure that was beginning to operate and spearhead the reforms. On 11 April, the Minister responsible for water resources officially launched the Mazowe Pilot project. Community-level elections for the thirty-two WUBs were held in May 1997. Each WUB nominated two

members to represent their stakeholders at the SCC level. SCCs met for the first time in June 1997 and nominated two members each who would represent them at the CC level. Out of a total of fifteen members, only two were women. Both the Nyadire and Nyagui SCCs do not have even a single woman. This reflects negatively on gender balance issues.

Fig. 3. Structure of the Mazowe Catchment Council



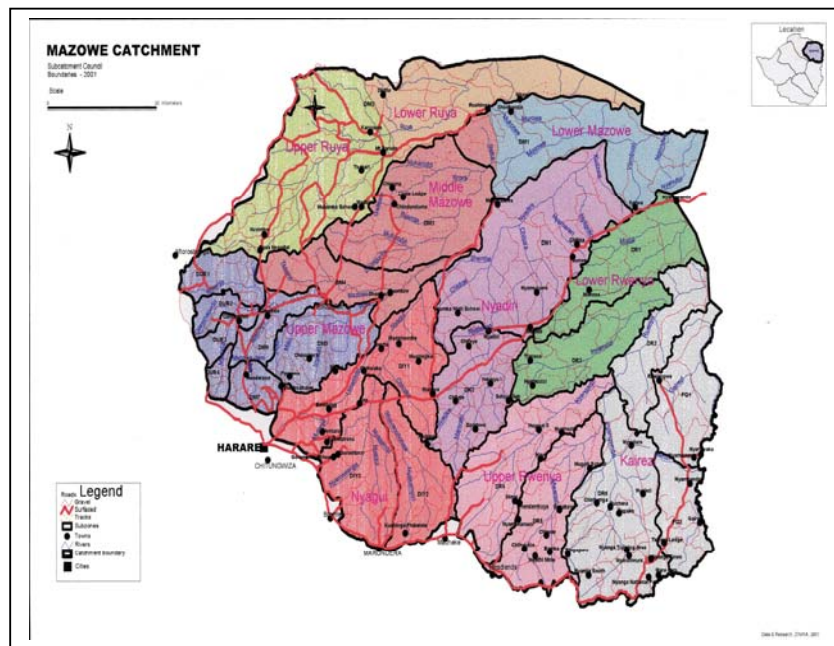
SOURCE: T. Dougherty (1997, 45)

The fully elected Mazowe CC officially met for the first time in July 1997 and thereafter, once every month. Most of the discussions centred on how to assist the fledgling WUBs and SCCs within the original project area. The technical and catchment planning sub-committees continued with the

development of a catchment outline plan and a water allocation system with extensive guidance from the WRMS secretariat. Monitoring and commenting on successive drafts of the Water and ZINWA bills was also maintained.

From May to October 1999, the size of the project area was enlarged and roughly doubled to 39,00 km thereby including the catchments of all rivers that join the Mazowe outside Zimbabwe's borders. The broadening of the stakeholder base also meant a physical expansion of the boundaries. Initially the catchment was made up of five sub-catchments, namely the Upper Mazowe, Middle Mazowe, Lower Mazowe, Nyagui, and Nyadire lying in Mashonaland east and Mashonaland central provinces. By 1998 when the new Water Act was passed, five more sub-catchments had been added: Rwenya South, Rwenya North, Kairezi, Upper Ruya and Lower Ruya. Twenty-nine new WUBs were formed in these SCC areas. This means that the Mazowe Catchment Council now has jurisdiction over people in parts of three provinces including Manicaland. This has also increased the dynamism of the discussions held at monthly catchment council meetings since the newly added catchments had more questions and less knowledge about the water reform than the others.

Map 2. The Mazowe Catchment



SOURCE: Department of Hydrology, Zimbabwe

One major development that occurred concurrently with the expansion of the Mazowe catchment expansion is the formation of CCs and SCCs throughout the country spearheaded by the WRMS secretariat. The significance of this is that it heralded the beginning of a flood of information and ideas on how to push forward the reform programme conveyed to the WRMS secretariat from various corners of the country (seven different catchments). The different sources of information often had different and sometimes conflicting views all together, and it was left to the Ministry of Water and the WRMS secretariat to distil the information into a form that could be applicable to every catchment.

At the grassroots level, the water reform did not lead to immediate changes in the existing form of water management. Results from surveys carried out in the Nyagui and Nyadire sub-catchments indicate this conclusion.

5.3 Socio-Economic Survey Results

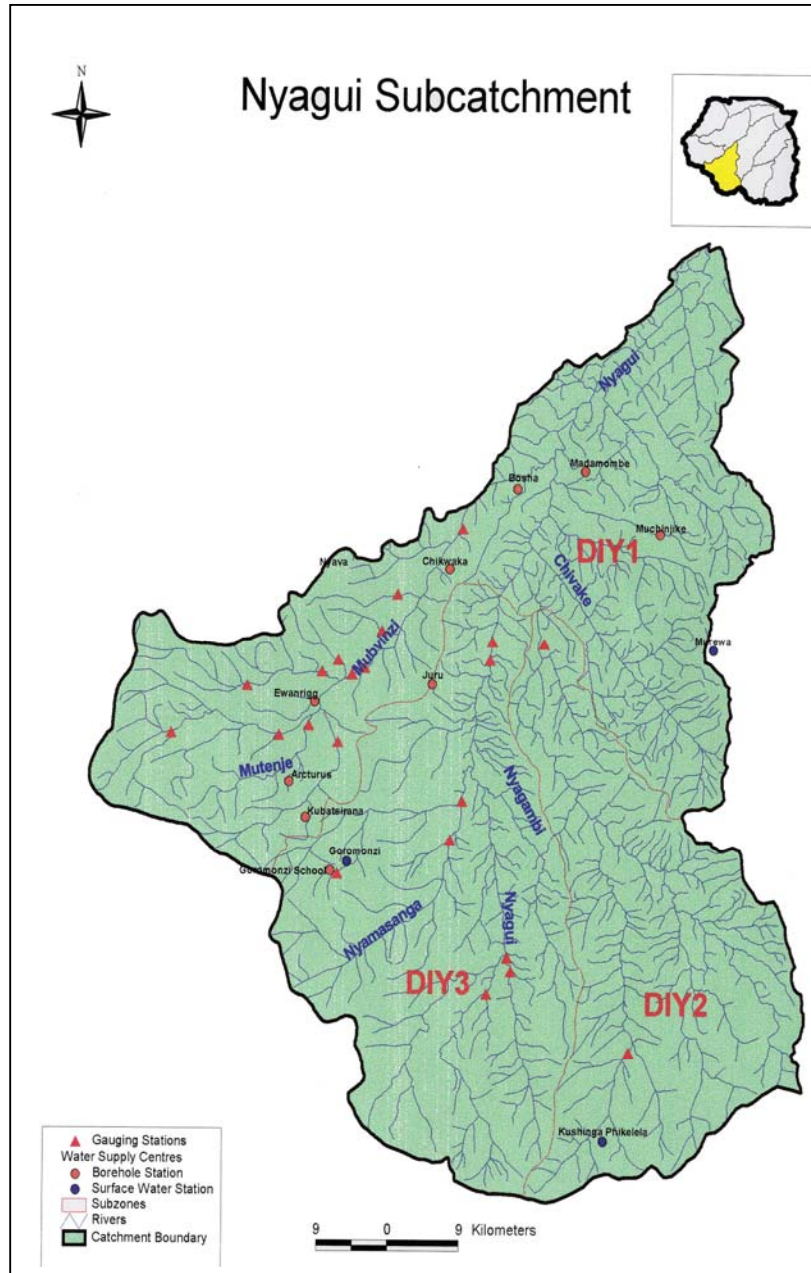
The research was mainly carried out to establish the following:

- To establish water resources availability and use patterns. This has a bearing on the amount of responsibilities that the new institutions will carry in the study sites;
- The level of awareness regarding the water sector reform programme, the new institutions and the activities they are carrying out in the area of study;
- To establish realities on the ground in relation to the reform in general and more specifically, the performance of the new institutions.

5.3.1 Musami Water User Board (Nyagui Sub-catchment)

Musami WUB lies in the Nyagui Sub-catchment, Mashonaland East province, 40 km from Murewa, 30 km from Marondera and 50 km from Harare. Its total area is about 84, 980 hectares made up of nine wards, namely 11, 12, 13, 14, 15, 25, 26 and 27. Darare village in Ward 27 was selected for the water resources survey. Ward 27 lies about 25km south of Musami Business Centre. Fifty household representatives were randomly sampled from Darare and Mushinga villages in ward 27. A research assistant was recruited to administer semi-structured questionnaires in the area through face-to-face interviews. Of the 50 people interviewed, 30 were male and 20, female.

MAP 3. Nyagui Sub-catchment



SOURCE: Hydrology Department, Zimbabwe

5.3.2 Rainfall

The rainfall of the area ranges from 800 – 1000 mm per year. Temperature ranges from 10⁰C to 30⁰C averaging 24⁰C annually. The whole WUB lies in Natural Region 11. Major rivers in the area include the Shavanhowe and the Nyagambe. Both rivers are perennial and reliable.

5.3.3 Soils and Vegetation

Ward 27 is a generally hilly area with numerous granite, rocky outcrops. As a result, granitic soils dominate the area. There are moderately deep sandy loam soils mixed with pockets of red clays. They are prone to rapid erosion when poorly managed. Heavy clay soils are also found in low-lying areas. Vegetation is sparse, degraded and of stunted growth. It ranges from open grassland in vleis to a degraded Savannah tree bush. Miombo trees are the most dominant.

5.3.4 Resource Endowments

Table 2. Cattle ownership

Number of cattle	Frequency of ownership	Percentage of total
0	12	30
1-4 cattle	21	53
5-15	6	15
16 and above	1	3

The majority of the respondents own some domestic animals mainly cattle and goats. On average, each household owns four cattle and three goats respectively. These statistics indicate that a considerable amount of water has to be set aside for livestock in this area. In addition, most of the people own some small gardens in which they grow various crops. Thirty-three percent of the respondents own home gardens; 78% own riverine gardens, and 88% have gardens on dambos. The gardens are watered using buckets. More water should, therefore, be reserved for watering crops grown in these gardens.

Table 3. Investments in water

Item	Positive responses	Percentage
Boreholes	3	8
Unprotected wells	35	88
Deep wells	29	72
Water pumps	1	3
Water drums	20	50
Water tanks	1	3
Watering cans	34	85
Water engines	1	3
Water pipes for irrigation	0	0
Canal systems	3	8
Carts for carrying water	2	5

Table 4. Asset ownership

Item	Positive responses	Percentage
Ox-plough	29	73
Scotch cart	18	45
Cultivator/harrow	11	28
Wheelbarrow	21	53
Tractor	1	3

Results presented in the tables above indicate that the asset most of the people own is the ox-plough followed by the wheelbarrow. Ownership of assets directly linked to investments in water is very low. Those assets linked to investment in water which the community seems to have are normally used for the acquisition of water for domestic purposes and not for irrigation purposes. The highest investment went to deep wells and unprotected wells. The implication is that people rely more on rain-fed agriculture than on irrigated farming. This conclusion is made more plausible by the fact that all the respondents indicated that they are not members of any irrigation scheme. Where some of the respondents said they

invested in dams, they were referring to contributions they made in the form of labour. Again one sees no major financial investment in water for irrigation purposes.

Table 5. Gardens owned, by type

Riverine	25	62
Home	5	13
Borehole	9	22
Missing	1	3

Most of the people have gardening projects of one form or another. Because there is little irrigation activity, most of the people resort to gardening. For now, the gardens are playing the role that irrigation would play. About 85% of the people use buckets to water their gardens. This implies that the areas watered are mainly small ones since one cannot water a large area using a bucket. However, this does not mean that the people are not willing to invest in water. They are faced by various constraints that make it difficult for them to invest. Lack of finance seems to be the main constraint to investment in water.

Thirty-eight percent of the respondents stated that they were willing to invest in water for irrigation, and 33% said they were willing to invest in dams. This indicates that a considerable number of the people are willing to engage in irrigation activities. 72% of the respondents were even willing to borrow money in order to finance water projects.

Table 6. Who should invest in water for the community?

Item	Frequency	Percentage
Government	15	38
Donors	11	28
RDC	5	13
Community	3	8
Individuals	2	5

It would appear as if most people think that either the government or donors should bear the burden of developing water resources for the community. Very few people thought that individuals could do it for themselves. This is quite unfortunate because the water reform programme is emphasizing the need for communities to initiate their own water projects rather than for them to wait for outsiders to do it for them.

5.3.5 Awareness of the Reforms

Table 7. Water meetings attendance

Item	Frequency	Percentage
Invited to discuss water in the past	14	35
Meeting called by RDC	1	3
Meeting called by government	1	3
Meeting called by NGOs	5	13
Meeting called by WUB	3	8
Meeting called by SCC	2	5

Statistics in the table above show that most of the people do not attend meetings to discuss water issues. This also means that the new Water management institutions are not holding many awareness-raising meetings. Non-governmental organizations appear to have arranged more meetings than the WUBs and SCCs during the period under review. The implication is that the new institutions are not yet fully functional in their areas of jurisdictions.

Table 8. Water rights and institutions

Item	Frequency	Percentage
There is a basic right to water	35	88
Never heard of a water right	38	95
Has heard about CCs	9	22.5
Never heard about CCs	31	77.5
Has heard about SCCs	7	17.5
Never heard about SCCs	33	82.5
Has heard of WUBs	7	17.5
Never heard of WUBs	33	82.5
Has heard of ZINWA	13	32.5
Never heard of ZINWA	27	67.5
Knows WUB chairman	14	35
Do not know WUB chairman	26	65
Never met the board members	29	72.5

What one can say from the above is that most of the people do not yet have knowledge about water rights. In any case, there is no irrigated farming in the area probably because there are few dams and no irrigable land. Under such circumstances, only a few people would need water rights, and therefore, seek knowledge about them. Nevertheless, the water reform is

supposed to educate the people about these issues, and in a sense, lack of knowledge about water right reflects a general lack of knowledge about the reform programme itself. Most of the respondents are also not aware of the existence of the new water boards and the people who sit on these boards. This shows that insufficient publicity has been given to the reforms even though they have been going on for some years now. It also reflects negatively on the functioning of the representatives who sit on these boards. They are not frequently meeting the people they represent. Therefore, they are not giving their constituency some feedback concerning new developments in the water sector. One wonders whom they think they are representing if their constituency is still unaware of their existence.

However, in Musami WUB, the situation was a bit different. It appears the SCC member from the area has been quite active and has spread the word to many people through the existing local leadership structures. As a result, quite a number of the people now know the member and they also have some knowledge of what is happening in the water sector.

Table 9. Willingness to pay for water

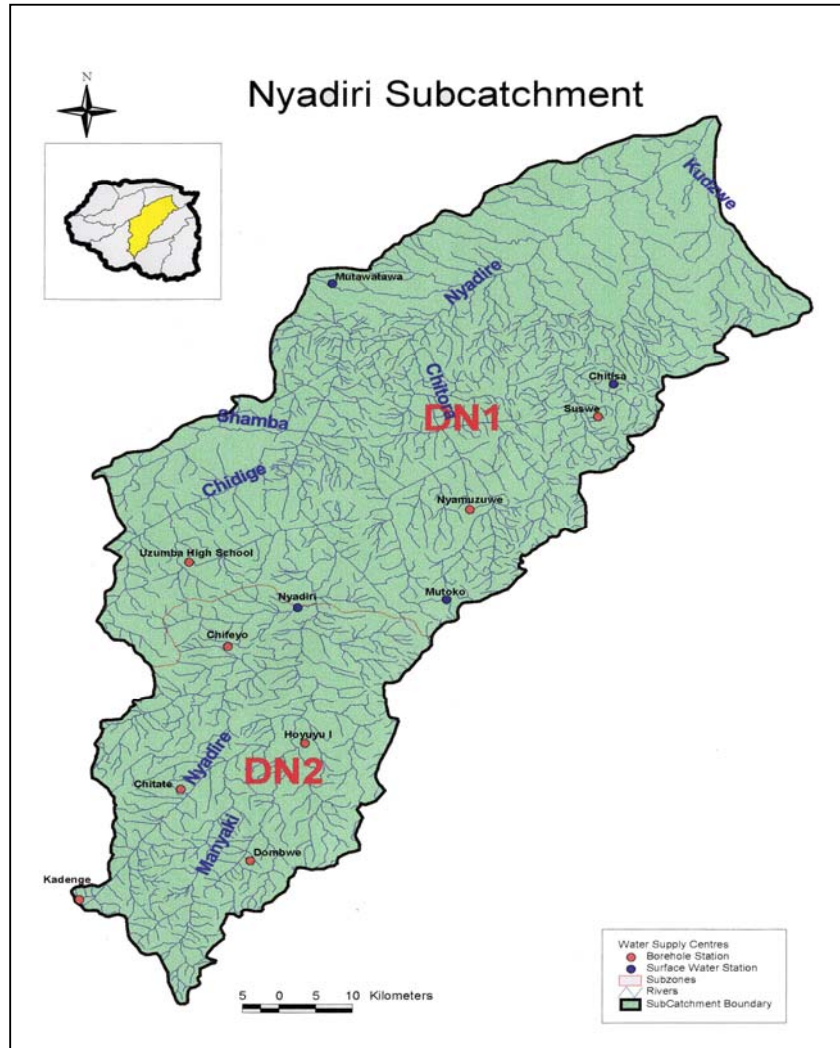
Item	Frequency	Percentage
Water for drinking should not be paid for	40	100
Livestock water should not be paid for	38	95
Irrigation water should be paid for	67.5	27
Water for business centres should be paid for	16	40
Not willing to pay for water you are using now	35	87.5

The responses show that there is a general low level of willingness to pay for water that is presently being used in this community. This outcome should not be surprising at all given that very little commercial use of water is going on in the area. Most of the water is used for watering livestock and for other domestic purposes which do not generate any income. It would be quite unrealistic to ask the people to pay for domestic water since most of it is just raw water which is neither piped nor treated. The question would be more applicable where a lot of water is used for irrigation purposes. The statistics show that most of the people generally agree that water for irrigation needs to be paid for.

5.4 Mutoko Water User Board (Nyadire Sub-catchment)

Mutoko is one of the districts in the Mashonaland East province which falls within the Mazowe catchment. The Nyadire, a sub-catchment of the Mazowe catchment, covers Mutoko. The specific area of study, Chidowe ward B is part of the Mutoko Water user board area lying in the Hoyuyu resettlement scheme.

Map 4. Nyadiri Sub-catchment



SOURCE: Hydrology Department, Zimbabwe

Chidowe ward B falls in the Natural Region III. The scheme is made up of thirty-four villages with an average of twenty-five households per village. Village 68 and 77 were chosen for the research. They are made up of 24 households each. These villages are located near Chitangazuva business centre. A total of 41 households were randomly selected for the household survey carried out using semi-structured questionnaires. Of the 41 people interviewed, 23 were male, and 18, female.

5.4.1 Rainfall

The annual rainfall varies between 550 and 800 mm. The mean annual rain is 750 mm. The area is subject to severe mid season dry spells or a reduced season length and consequently is marginal for crop production and enterprises based solely on crop production. The mean annual temperature is 23 degree Celsius. Rivers drain northwards into the Nyadire River or eastwards into the Nyangadzi River.

5.4.2 Soils and Vegetation

The soils are fersiallitic with appreciable reserves of weatherable minerals and a clay fraction containing 2.1 lattice minerals. The soils are generally moderately shallow to moderately deep grey-brown coarse-grained sands through the profile to similar sandy loams overlying sandy clay loams derived from granite. There are small areas of moderately deep-to-deep red-brown granular clays formed from magic rocks.

The dominant trees include juebernadia grobifiona, brachystegia boehmii, monotes glober, and acacia species. The dominant grasses include Hyparrhenia, pogonarthria, andropogon and etuoridion species. The area is moderately-to steeply rolling, more broken in the south and west, and flatter towards the east.

5.4.3 Communications

The National Harare to Mutoko road runs along the northern boundary of the Hoyuyu resettlement scheme. Most of the internal roads are not in a good state of repair and maintenance.

5.4.4 Water Development

The resettlement scheme is located on what was originally commercial farming area. Many low-yielding boreholes were drilled in the past and the commercial farmers left them functioning. A basic water supply is therefore available with almost every village having at least one borehole.

The Hoyuyu resettlement scheme as a whole has the following water rights:

No. 8297 to store 68 x 103m³ for irrigation;

No. 6870 to store 4 x 103m³ for conservation purposes;

- No. 7470 to store $27 \times 103\text{m}^3$ and further to abstract $247 \times 103\text{m}^3$ from normal river flow for irrigation purposes;
- No. 8913 to store $318 \times 103\text{m}^3$ for irrigation;
- No. 4151 to abstract $300 \times 103\text{m}^3$ from normal river flow for irrigation; and
- No. 4668 to abstract $71 \times 103\text{m}^3$ from river flow between January and August for irrigation purposes. None of these water rights fall under the villages in which the research was carried out.

5.4.5 Resettlement

Resettlement began in 1982. Except in a few instances, each village has a maximum of twenty-five families due to the prevalence of low yielding boreholes. Each family received 7.5 hectares gross, five hectares net of arable land, communally held grazing area, and a residential plot of 0.25 hectares. The people came from different parts of the country. Their culture is therefore a mixture of different cultures.

5.5 Resource Endowments

Table 10. Cattle ownership

Number of cattle	Frequency of ownership	Percentage of total
0	3	7
1-4	21	51
5-15	10	24
16 and above	7	17

The majority of the respondents own some domestic animals. The statistics from the surveys indicate that a considerable amount of water has to be set aside for livestock when allocation of water is made in these areas.

Table 11. Asset ownership

Asset	Frequency	Percentage
Ox-Plough	38	93
Scotch cart	27	66
Cultivator/harrow	23	56
Wheelbarrow	18	44

The most common asset the people own is the plough. Ownership of assets directly linked to investments in water is very low. Most of the people do not own assets linked to commercial use of water. The implication is that people rely more on rain-fed agriculture than on irrigated farming. In Musami WUB, we met two people who water their gardens using diesel engines. Otherwise most people in the study sites do not have access to engine power for water abstraction.

Table 12. Investments in water

Item	Frequency	Percentage
Boreholes	3	7
Unprotected wells	10	24
Deep wells	3	7
Water drums	6	15
Watering cans	3	7
Water tanks	1	3
Water pumps	1	2
Water pipes	0	0
Water carts	6	25
None	10	24

The majority of the people said that they have never invested in water for irrigation purposes. All respondents indicated that they are not members of any irrigation scheme, and because of this, most of the people resort to riverine gardening. Sixty-four percent of the respondents indicated that either the government or donors should finance water development projects for the community. Very few people thought that communities could do it for themselves. This is quite unfortunate because the water reform programme is emphasizing the need for communities to initiate water projects rather than for them to wait for outsiders to do it for them.

The fact that most of the people use buckets implies that the areas watered are mainly small ones since one cannot water a large area using buckets. Sixty-six percent of the respondents indicated that they would invest in irrigation if they had the resources and the opportunity. In the Hoyuyu resettlement scheme, people indicated that they have been trying to establish an irrigation scheme without success because the resettlement officer argued that there was insufficient water in the dam. The people do not agree because the previous commercial farmer was irrigating on a big scale. They are willing to pay for irrigation water.

5.6 Awareness of the Reforms

Table 13. Invited to discuss water last year by SCC/WUB

Item	Frequency	Percentage
Yes	1	2
No	40	98

The surveys indicated that most of the people are not attending meetings to discuss water issues. This also means that the new water management institutions are not holding many awareness meetings. The implication is that the new institutions are not yet fully functional in their areas of jurisdiction. If they were fully functional, they would be arranging more meetings to spread the water reform information.

Table 14. Ever heard of a water right?

Item	Frequency	Percentage
Yes	5	12
No	13	32
Have applied for one	2	5
Do not know it	20	49

These figures show that most of the people do not yet have knowledge about water rights. In any case, irrigated farming in these areas is very minimal and negligible probably because there are few dams and no irrigable land. Under such circumstances, only a few people would need water rights and therefore seek knowledge about them. Nevertheless, the new water management institutions are supposed to have been educating the people about these issues and in a sense, lack of knowledge about water rights reflects a general lack of knowledge about the reform programme itself.

Table 15. Awareness about the new institutions

Item	Frequency	Percentage
Never heard about the CC	40	98
Never heard about the SCC	35	85
Never heard about a WUB	35	85
Never heard about ZINWA	39	95
Do not know the WUB chairman	40	98
Never met any board member	40	98

The statistics indicate that knowledge of Catchment Councils, Sub-Catchment Councils, Water-User Boards and ZINWA is very limited, almost non-existent in the area. None of the respondents said they are part of any of these new institutions. Most of the respondents also said that they have not yet met anyone from these boards. Most of the respondents also do not know the people who sit on the water boards. This shows that insufficient publicity has been given to the reforms even though they have been going on for some years now. It also reflects negatively on the functioning of the representatives who sit on these boards. They are not frequently meeting the people they represent to give them some feedback about the water reform process. However, these representatives cite some justifiable constraints that make it difficult for them to carry out their duties effectively. For instance, they do not have funds for transport within their areas of jurisdiction; yet one cannot move on foot from one corner of the WUB to another.

Sixty-five percent of the respondents from Nyadire said that women are most suitable to represent the community on water issues. What is interesting is that membership of Water-User Boards, Sub-Catchment Councils, and Catchment Councils in most areas, including this study site, is mainly dominated by men. Both Nyadire and Nyagui SCCs do not have any woman.

5.7 Summary of Conclusions Drawn from the Surveys

The two study areas may have different land tenure systems but their water resources circumstances have very negligible differences. The way the water reforms are taking place in these areas is also quite similar. Given all the similarities one observes from the surveys, the following general conclusions apply to both areas:

- Most of the people in the study areas engage in livestock rearing, rain-fed agriculture and gardening. When water development issues are discussed in these areas, these are some of the facts one would need to consider in order to make adequate provisions for these sub-sectors’ water use;

- There is no formal irrigation activity in the study sites. Instead, there is a widespread use of small gardens. Given this scenario, construction of dams and the provision of finance to establish new irrigation schemes might help improve the people's income;
- Investment in water for commercial purposes is not widespread in these areas. Most people who invest in water construct unprotected wells and deep wells for domestic consumption only. People still expect the government, donors or outsiders to invest in water for the community. This is a serious problem because the water reforms encourage users to start their own investments rather than wait for outsiders to do it for them;
- Water issues are not regularly discussed in the communities unless there are serious water shortages;
- The respondents indicated that they would prefer women to represent them in discussions on water issues. But while people acknowledge the important role that women play or can play in water resources management, this is not reflected in the water reform programme as evidenced by the conspicuous absence of women from the new water management structures;
- The results of the survey revealed that awareness of the ongoing water sector reforms is negligible. Very few people are aware of the existence of the new water management institutions, legislation, and management dispensation. This also means that the new institutions for water management are not yet operating effectively hence the lack of publicity for the water reforms.

6. OVERVIEW OF ISSUES RAISED DURING MEETINGS AND KEY INFORMANT INTERVIEWS

6.1 Introduction

This chapter provides a summarized overview of the major issues raised during the meetings by sub-catchment and catchment councils. The issues are identified from minutes of the meetings, workshop records, and observations made by the researcher during the whole process. Some of the important issues were raised during workshops on water held in the catchment. Information gathered during interviews with some of the key informants is also presented to give a wider view of how the reform process is understood by various people and stakeholder groups. This chapter is, therefore, expected to provide some insights on the main concerns of the members of the new institutions and how they viewed the reform process.

6.2 Workshops

In late 1997, WRMS carried out a series of consultative workshops in different catchments in the country to find out what issues the stakeholders considered to be very essential if the water reform was to be successful. The Mazowe catchment council identified the following five top priority issues (in their order of importance):

(i) Funding of Water Development Projects

This issue was mainly raised and supported by stakeholders from communal and resettlement areas. They made it clear that without new water development projects being implemented in their areas, the reforms would be of little significance to them. In other words, what water would they be expected to manage when they do not have the resource in their areas?

(ii) Ensuring Equitable Access to Water

All stakeholder groups agreed that this is a very important issue that would help reduce water conflicts among and across water user groups.

(iii) Stakeholder Participation

Again all groups represented unanimously agreed that without user participation the technocrats in Harare could not manage water at local levels effectively. In other words, water would be easier managed with the full participation of the users themselves.

(iv) Economic Sustainability and Security of Investments

This was mainly championed by large-scale commercial farmers who stood to lose in the event that their investments (especially dams) were made accessible to other user groups who could access them. They were also concerned with the possibility that they could lose control of water in their water works to the new institutional structures as well as the prospects of the state nationalizing all water structures.

(v) Environmental Conservation

All user groups agreed that poor environmental conservation practices were leading to the degeneration of water works mainly through pollution and siltation. Unless serious attention is given to environmental conservation issues, the reforms would be rendered useless as there would be no clean water to look after.

6.3 Meetings

(i) Stakeholder Participation

During the drafting of the new Water Act, stakeholders in the Mazowe felt that their views were being sidelined and therefore their participation was inadequate. On 17 October 1997, when the 8th draft of the Water Bill was issued out to the Mazowe CC, most of the stakeholders stated that they had

never seen the earlier drafts. When the draft Bill was already being discussed in Parliament, people from the Nyagui SCC were still requesting to be educated on the contents of the Water Bill. Again, they complained that they were being sidelined from a very important part of the reform process.

(ii) Allowances and Per diems

As early as February 21, 1997, participants at the Mazowe CC complained that they needed incentives for attending the CC and SCC meetings mainly in the form of sitting allowances as well as transport and subsistence allowances. Sitting allowances were rejected outright but transport and subsistence allowances were accepted as necessary. In meetings that were to follow, the issue of raising these in order to meet rising costs of living were to arise constantly. In some cases, the meetings almost degenerated into allowances and per diems sessions rather than focusing on the core issues.

(iii) Water Development versus Water Management

Most Catchment Council and SCC discussions reflected a clear distinction between large-scale commercial farmers' interests and those of stakeholders from communal and resettlement areas. Commercial farmers are more interested in the management side of water, whereas the other groups are interested in the development side. It also became clear that commercial farmers have more knowledge on water issues than the other groups. As a result, there was very little articulation of water issues from the communal and resettlement areas. It was often admitted that communal and resettlement area stakeholders' focus in terms of water issues do not necessarily coincide with those of commercial farmers because they are coming from totally different backgrounds. Because of the inescapable need for water development in areas that lack investment in water, suggestions to set aside 5% of righted water for new users at subsidized rates, as well as renting of storage space were discussed frequently.

(iv) Linkages with Existing Institutions

The link between the new institutions and the existing ones has been considered to be weak. Examples frequently cited during CC and SCC meetings include the absence of RDCs and the Agritex department from CC and SCC meetings and workshops. It was often stated that these and other technocratic governmental organizations are supposed to participate in water management and catchment planning because they are already involved in one way or another. It was felt that their expertise and knowledge could assist CC and SCCs in carrying out their functions. Therefore, their involvement would enhance the capacity of the new institutions. It was also stated that there is need to make use of indigenous knowledge systems in water management by involving local leadership structures in the reform process. In addition, it was noted that CCs, SCCs, and WUBs have to deal with issues which appear to be beyond their terms

of reference, for example, gold-panning. This makes it very important for other government departments who have not been participating to be involved in the reform process.

(v) The Need to Finance WUBs

This issue was raised as soon as WUBs came into being and was mentioned in many meetings held later on. Most WUBs were considered too big in terms of the geographical area they covered. It was, therefore, repeatedly stated that without a consistent source of finance, there is no way in which WUBs can operate effectively. Because the distances separating WUB members are too big, most WUBs were not holding meetings and were therefore non-functional. Some WUBs were advised to split into smaller units in order to reduce the areas covered by each WUB. Some suggested the application of the CAMPFIRE concepts to water management. Other members suggested that the CC should buy bicycles for the WUB members, but this was rejected as unviable in the long run. WUBs were advised to resort to other means of communication in order to publicise the water reforms in their areas of jurisdiction. There is a general need for more awareness campaigns throughout the catchment.

(vi) Water Pricing

The need to set reasonable and affordable water prices was frequently discussed. Large-scale commercial farmers felt that too high prices would stifle investment and push out a number of people from farming. Communal and resettlement area stakeholders felt that too high prices would make it very difficult for them to begin any significant commercial utilization of water. Some people were even questioning the logic of making people pay for water when it is a God given gift. Unaffordable prices would hinder equitable access to water. The proposed \$40/mega litre ZINWA levy was discussed extensively. On many occasions, it was concluded that it is too high and some farmers may resist paying it. Linked to this, questions were raised regarding how the figure of \$40/mega litre was calculated in the first place, and how this figure is justified. In addition, if SCCs collect the levy on behalf of ZINWA, how will ZINWA reward them?

(vii) Financing SCCs

It was often acknowledged that some SCCs might face serious financial problems in future. They relied on donor funds (GTZ) to kick-start their operations but the question that needs to be tackled is how they will finance these operations when the donors pull out. They are expected to raise levies from water users in their SCC areas, but what happens to SCCs like the Nyadire and Lower Mazowe who have virtually no water right holders at all? Indeed, how do communal areas without many water permits finance their activities?

(viii) Complex Jurisdictional Boundaries

It was noted that the catchment and sub-catchment boundaries do not necessarily follow existing political or administrative boundaries. In fact, they cut across provinces and districts. Therefore, planning, developing, and managing water resources could be very complex and difficult. At the same time, these new boundaries have the potential to facilitate inter-district and inter-provincial planning.

(ix) Who Should Employ the Catchment Manager?

It was repeatedly argued that the Catchment Manager should not be employed by ZINWA because that might create tension between him and the CC. A number of people argued that the Act should be amended to reflect these sentiments.

(x) Language

All CC and SCC minutes are written in English. The question is, are all the people really getting the message given that English is not their mother tongue? The Mazowe CC held a series of workshops to promote the proportional water allocation system. The definition of water allocation for instance was not easily understood by a number of stakeholders because it does not have an equivalent in the local language (Shona).

(xi) Gender Balancing

It is interesting to note that there is only one woman in the Mazowe CC. The Nyadire and Nyagui SCCs do not have any woman member. This shows that there is very limited participation by women in the new institutions. The gender dimension of water resources management is being neglected.

(xii) Land and Water Nexus

Participants from the communal areas have often pointed out that there is need for land reform to complement water reforms since one cannot realistically use water for commercial purposes without land. There is limited scope for commercially exploiting water under the current communal setting.

6.4 Summary of Main Issues Raised in the Interviews

There is need for the reform to focus on both water development and water management. For now, focus is mainly on water management while water development is being neglected. This runs the risk of neglecting the previously disadvantaged groups like communal area people.

- Most stakeholders agree that equitable access to water must be achieved through the reforms.

- To most people, stakeholder participation is a vital and a welcome part of the reform process. Unfortunately, it has not yet been adequately addressed.
- Environmental conservation is vital to the success of the reform in general and to water management in particular.
- WUBs are not functioning mainly due to lack of finance. There is need to find ways of financing the WUBs if grassroots participation is to be ensured.
- Existing traditional and governmental institutions, NGOs, etc. must be brought on board for the reforms to be holistic and easier to implement.
- Some SCCs like the Nyadire may face serious financial difficulties in future because they do not have a revenue base in the form of water permits from which they can raise water levies.
- There is need to synchronize water reforms and land reforms in order for the two reforms to be more beneficial to the country.
- To some observers, the water reforms have remained at the level of theory for too long even though new institutions have already been set up. Some stakeholders may lose patience if they do not see tangible benefits accruing to the majority of the people, particularly in the communal areas.
- More awareness campaigns must be carried out at the grassroots level.
- Large-scale commercial farmers have an advantage over other groups in terms of water management knowledge. In the eyes of most people, 'the playing field is not level'.
- Stakeholders are concerned about ZINWA becoming too powerful, inefficient and corrupt.
- There is need to launch capacity building programmes for the new water management institutions.

7. CONCLUSION AND RECOMMENDATIONS

7.1 Institutional Development

On paper, the institutional and water management structures that have been put in place look quite promising. ZINWA, the parastatal that has been given overall responsibility for water management at the national level, is composed of experienced professionals from various backgrounds, thereby, presumably, forming a very formidable team. What is required now is for ZINWA operations to be made known at least to the CCs. It is also essential

for communication channels to be set up between ZINWA and the CCs so that information and ideas can start flowing between them. A CCs association could be formed to facilitate this process.

The Mazowe CC was formed with emphasis being put on sectoral representation. It is made up of representatives from urban areas, mining, communal, commercial farming, and government. It is run on a daily basis by a team of administrative experts led by the Catchment Manager. The Catchment Manager is a qualified Engineer in his own right. At the SCC level, WUB representation is emphasized. The main drawback in terms of composition is that no attempt was made to ensure a reasonable gender balance at both the CC and SCC levels. However, all things being equal, the management structures put in place are quite promising.

A number of problems have arisen that threaten to derail the operations of the new structures. The lack of support from other government departments needs to be resolved urgently or else the new structures will become ineffective. The fact that the WUB is not legally recognized has made running the catchment very difficult. The WUBs need basic financial support for them to be fully operational. Without input from the lowest grassroots structures (WUBs), any water reform programme can easily fail. Policing abuse of water and spreading the relevant information among the water users will become difficult. The utility of smaller units of management is thus, lost.

The new management structures are not made up of technical experts. They are made up of ordinary community members who require training in areas like natural resources management, water management, financial management, basic conduct of meetings, communication and advocacy. Very little training has been provided so far and this paints a negative picture on capacity building. With no commitment from other government departments to participate in CC and SCC affairs, running the new management structures becomes quite a challenge.

The new institutions solely relied on donor funds right from the beginning. Government finance was not forthcoming. This has had negative results in the sense that when the donor pulled out in the year 2002, the CC and SCC found it difficult to continue functioning. SCC activities were suspended as soon as donor funds ran out. There is need to set aside sufficient resources in any reform process so that outside support is limited.

7.2. Stakeholder Participation

This is a concept championed right from the beginning of the reform but its implementation on the ground has not been satisfactory. If anything, rhetoric seems to have run far ahead of reality. The reforms are a new phenomenon to the majority of people in the country, and therefore, there was a need to launch massive awareness campaigns at community level. Results from the surveys in Mazowe have shown that this did not happen

and the people are still ignorant about a process that is supposed to affect their way of life. Because the people were not consulted from the beginning, they do not feel that they own the programme. There are chances of facing active resistance from the people in future. Reform programmes should take all beneficiaries on board right from the beginning to avoid difficulties when it comes to implementation. The participatory process was superficial. It remained focused at higher levels, that is, the CC and SCCs. It would be better if it had gone down to the lowest level. The fact that WUBs are virtually not functional is testimony to the exclusion of the grassroots level from the reform process. More resources should have been committed to awareness raising and community development work. Even the employment of full-time community development officers could make a huge impact on the progress of the reforms at the grassroots levels.

7.3 Integrated Planning

It is going to be difficult to achieve this because of a number of reasons. Firstly, bringing together various elements together is not easy. The Mazowe experience is already revealing that certain social, political, and economic factors tend to divide the community into various segments. On one hand, there are large scale-commercial farmers with a long history of commercial water use under a favoured status. They are familiar with modern water management principles. As a result, they are more concerned with water management issues like the establishment of a viable water allocation system that will prevent water conflicts. On the other hand, there are communal and resettlement area farmers who have not had a similar opportunity. Their main concerns lie with water development, the construction of new dams, irrigation schemes, and boreholes for domestic water consumption. It is very difficult to reconcile these different interests. The reform seems to be on the side of commercial farmers in the sense that it encourages efficient use and management of existing resources while the communal farmers emphasize creation of new resources. Therefore, integrated planning becomes difficult.

Institutions that were already in existence, like Rural District Councils, Chiefs, and other local leaders, have been sidelined by the reform process. Yet these are the people in authority and control large sections of the society. It is essential that the new structures work together with the old structures so that planning is integrated. RDCs, for instance, have annual water development plans that could be integrated with CC plans, hence efforts could be combined. Chiefs hold enormous traditional authority and they are respected in society. This also applies to kraal-heads, councillors and herd-men. It would be wise to include them in catchment planning so that their authority is used for the benefit of the CCs.

The 'fast-track' land reform programme has also made redundant most of the water reform plans. The land reform programme was implemented at a time when the need to bring together everyone to the water planning table was

about to be realized. What it has done is to alienate most commercial farmers who were active in the water reform programme. Those whose farms were taken away from them left thereby creating a gap in terms of the revenue base for water levies. All plans that were made based on the contribution of commercial farmers were overtaken by events. The lack of systematic coordination between the water and land reforms has made integrated planning a farce. It is difficult to see how the newly resettled farmers can succeed without reliable water supplies. It is equally difficult to see how the communal area farmers can start irrigation schemes without good farming land.

The CCs, SCCs, and WUBs cut across political and administrative boundaries. No clear coordination mechanism or system has been put in place to bring together the new, and the existing management structures across the administrative boundaries. Yet without the coordination of the various structures, the new institutional structures may not operate effectively. Consensus decision-making by different districts, for instance, will be very difficult.

7.4 Power Dynamics

Decision-making authority and power has not been genuinely transferred to the lower management structures established. The Mazowe CCs have not been listened to and they have shown signs of frustration. They have unsuccessfully struggled to get ZINWA 's audience. They have even gone further to try and get direct ministerial attention by arranging meetings with the Minister of Water without consulting ZINWA so that they can put across their views regarding the reform. This clearly demonstrates that decision-making authority cannot be taken for granted no matter what is written down on paper. The SCCs have been asked to collect levies on behalf of ZINWA for no payment. They are bitter about this and may resist the instruction. ZINWA has taken its authority for granted and may wake up to reality when the SCCs refuse to comply.

The WUBs have not been given any financial backing and as result they have not been operational. The government continues to hold the purse strings and this is negatively affecting the WUB 's power at local levels. In other words, the grassroots structures have not been given any meaningful power and authority. However, the WUBs' power also lies in the fact that they are closest to the water users and if they are not functional, the reform cannot be implemented easily. Eventually, the government might be forced by circumstances to fully bring the WUBs into the reform process.

Various groups are pursuing different interests at the CC and SCC levels. Commercial farmers, for instance, want to safeguard their position which has been exposed by both the land and water reforms. Urban, mining and industrial sectors would want to see water pollution penalties maintained at very minimal levels. Communal and resettlement farmers would want to see

the construction of more water reservoirs in their respective areas. The power dynamics that ensue at this level are interesting. In all this, the commercial farmers tend to be better off because they have a more systematic way of putting forward their interests. Some participants become spectators during meetings. This reflects that those who are economically well off tend to have a bigger voice when it comes to interest group politics.

The new structures are venturing into new territory. Their formation can be easily misconstrued by existing traditional and local governance structures as an invasion of their territory. The power dynamics that can come into play among these groups need to be closely monitored so that potential conflicts are avoided.

7.5 Recommendations

Hardin (1985,144) advises, "Never globalise a problem if it can possibly be dealt with locally." Initiation and leadership of reform programmes should be the responsibility of the individual countries themselves. Differences between the developed and developing world preclude the wholesale importation of management models. Elements of the models must be selectively adopted and adapted to particular countries. There is need for partnerships to be developed between government agencies, sectors, rural and urban areas, communities, other stakeholders, co-riparian states and international donors.

Institutional capacity must be built carefully, and assigning particular functions to the new institutions must be done gradually in order to give them time to develop sufficient capacity to carry the new responsibilities. Institutional strength is enhanced by clearly defining responsibilities for the newly created institutions, and by providing training and guidance where necessary. While decentralization has its positive aspects, the danger that arises is in that of having new institutions operating independent of existing local government and traditional authorities. This leads to decreased political support, and conflicts. But this can be avoided by taking everyone on board at least in terms of representation on the new institutions and coordinating the various institutions' activities. Despite the weakening of traditional institutions by colonial and post-colonial governance systems, there is still strong evidence to suggest that neither colonial governance nor independent regimes managed to destroy these institutions completely. These and other formal local government agencies continue to play an important role in NRM and must be given the room to participate in any decentralization programme.

Developing and strengthening new institutions which are effective and responsive to dynamic and competing demands from all quarters is a very difficult and time consuming exercise that requires a lot of patience. It needs a number of years (at least three years) to bear fruit. Those facilitating the process must bear this in mind as well as realize that there cannot be any

shortcuts to progress. Any attempt to put this process on higher speed can easily derail the initiative by ignoring the social, economic and political dynamics in the society. The Zimbabwean water reform presents an interesting scenario. Before any water right had been issued under the new water management regime, and before anyone had adequately evaluated the successes and failures of the pilot catchment areas, other catchment councils were quickly formed, maybe with a view to meeting certain deadlines. No lessons of experience from the pilot projects seem to have been used and this can easily work against the reform initiative. In future, this must be avoided.

CBNRM initiatives should start on a small-scale, be rigorously selective on priority management functions, take a medium to long term orientation and be given the time they need to mature. There is also need for genuine commitment by government agencies to transfer authority to the new institutional structures. Genuine commitment is also reflected in the adequacy of financial resources allocated to the reform process. Relying solely on donor support is, in the long run, untenable, unless prepared for the donor's withdrawal in advance. Over the years, it has become common knowledge that political decentralization without financial autonomy is not adequate. The failure to recognize legally WUBs and give them the necessary financial backing will forever stand out as a serious drawback to the Zimbabwe water reform programme. As Murphree (2000, 12) points out, institutional evolution involves experiment. A chain of incremental learning which defines objectives, identifies options, selects and implements approaches, monitors results, and adapts objectives and takes action on the basis of these results in a continuous and iterative process is necessary. In the spirit of this statement, it is suggested here that nothing should be carved on stone. The legislation can and should be changed to ensure that WUBs get the recognition and support they deserve if the reform is to be really meaningful.

In conclusion, it is important to emphasize that CBNRM still faces many challenges and that there are still a number of lessons to be learned. It is a development approach that is still in a state of constant flux and change. Each situation is unique and the success of any CBNRM initiative is heavily dependent on a number of factors and aspects peculiar to that context. It would, therefore be naïve for anyone to prescribe in definite terms on what works and what does not. Policy-makers, practitioners and researchers must recognize the need for CBNRM initiatives to maintain some degree of flexibility in order for them to be adaptable to local contexts. There is also a need to recognize that institutional evolution is a process which takes into account multiple issues, complexities, needs, interests and power dynamics that arise from the desire to allocate resources. Globalisation trends in natural resources management must be adopted cautiously and selectively so that they fit particular contexts. It would be helpful if future researchers could closely analyse the reform model adopted and find out whether or not

it is suitable for circumstances prevailing in Zimbabwe at the time of its implementation.

Appendix 1: List of Organizations Surveyed

- The *Water Resources Management Strategy Unit*, and the department of *Water Development* in the Ministry of Rural Resources and Water Development (two officials);
- *Zimbabwe National Water Authority* (one Board member). This is a new parastatal tasked with the management of water at the national level;
- *Donors*: GTZ, who has been funding the operations of the Mazowe Catchment Council (one official);
- *The Water Court*, as the organ responsible for operationalizing the Water Act of 1976. Two Water Court officials provided details regarding the Court's operations and how they view the new water sector set-up. Views from one former water court judge were also taken into consideration;
- Former *RiverBoard* members for the Nyagui sub-catchment. This area had fully functioning river boards until the reforms began. Some of the River Board members have joined the Catchment and Sub-Catchment Councils in their areas such that it was easy to locate them and ask them questions relating to both the old and the new era. Two former River Board members were interviewed;
- *Catchment Council, Sub-catchment Councils and Water User Board* members are the new institutions in which water management functions have been decentralized. Their views gave an indication of whether or not decentralization of power and authority from the government is actually being realized. Five Catchment Council members who appeared to participate more than the others in Catchment Council debates were targeted for interview. Five members in each of the two selected Sub-Catchment Council were interviewed. Four Water User Board members were also interviewed. The use of open-ended questionnaires proved invaluable in this endeavour.

Appendix 2: Key Informant interviews***Interview No. 1***

The first interview was held with Mr. P. Ndoro, aged 66 Years. He is the Vice Chairman for Nyagui SCC, Chairman for the Musami WUB as well as a member of the Mazowe CC. A retired primary school teacher with a teaching certificate, he is now a communal farmer whose livelihood is mainly dependent on farming. Mr. Ndoro is also a member of other organizations besides the Mazowe CC. He is a Village Committee Advisor as well as a Ward Development Committee member. He states that before joining the Mazowe CC, he had been the district Chairperson for Ward Development Committees, and in this forum, water resources development issues were often discussed. Therefore, he has some experience with water related issues.

He believes that his constituency is made up of all farmers in his WUB, agricultural extension workers, and village leaders. He reports back to the constituency through meetings with the WUB members, Agritex officers, veterinary officers, attends monthly meetings held by the headmen, and sometimes attends political rallies and addresses the people there. For water reform business, he consults the Nyagui SCC chairperson Mr. L. Wood, Mr. Windram (a commercial farmer in the area), and the SCC itself.

In his opinion other groups that should be part of the water reform process but are presently not participating include those in the mining industry because they use a lot of water and also pollute rivers on a wide scale. In terms of important issues being raised in the water reform debate, he identified the following:

- Commercial use of water particularly in irrigation schemes because this has a bearing on availability of food for the people;
- Efficiency in the use of the water that is available;
- User-pays principle which encourages viewing water as an economic good.

He believes that while the CC and SCCs are working well, WUBs are not functioning because of lack of support from the top particularly in terms of finance and other logistics. The water reform itself's main strengths include the goal of making water accessible to everyone, including the previously disadvantaged groups (equity). This makes water more meaningful to everyone throughout the country.

On the other hand, the reform process's main weaknesses are: firstly, there are unnecessary delays in instituting a water right/permit

application procedure. Secondly, “there are no tangible benefits that are visible to the people at the moment and this de-motivates those who are interested in participating; holding endless meetings and conferences does not satisfy the people especially those from communal areas.”

He believes that real changes that may be brought about by the reforms include:

- Change from water rights to permits is a very helpful move;
- Equity in access to water and productive use of the water;
- “Water shall become everyone’s property”.

He recommended the following in order to improve the water reform process:

- Raise awareness levels among the populace concerning good use and management of water as well as about the reform process itself;
- Provision of finance for kick-starting commercial activities that depend on water in the rural areas rather than for people to depend on rain only;
- Provision of loan facilities for the poor so that they start their own irrigation projects.

Interview No. 2

The second interview was held with the Chairman of the Nyagui SCC, Mr. L. Wood, 57 years old. He is also the Chairman for Marondera North WUB, as well as a member of the Mazowe CC. He is not a commercial farmer himself but is employed by commercial farmers in the area as a water manager. He also represents the farmers on the Mazowe CC. He is quite knowledgeable about water issues. He has a diploma in Agriculture from Gwebi Agricultural College. He has worked as a Conservation Officer for Agritex, and has been a commercial farmer.

He thinks that as chairman of the SCC, he represents all water users in the SC. As a member of the WUB, he represents all irrigators in the Marondera WUB area. He reports back to the constituency through general meetings and personal, face-to-face dialogue with individuals who have a contribution to make about water management. For advice, he consults the stakeholders at general meetings. He also “consults individuals who demonstrate preparedness to think about water issues

and give reasoned replies.”

He strongly believes that anyone with a commitment to water issues must be free to participate and must be encouraged to do so. The most important issues being discussed at water meetings include:

- Management systems – this is what the user will interface first;
- Permit Application system, because rural people need a simple and quick method for accessing water;
- The Catchment Plan insofar as it maps out a clear path to be followed in the development of the catchment’s water resources;
- The allocation system in so far as it simplifies the distribution of water amongst various users and uses;
- Dam construction in so far as it makes available some water for commercial use.

Asked to comment about how the new institutions are progressing, he stated that CCs are working very well. He is not sure about SCCs because until the SCCs start exercising their authority as outlined in the Water Act, it would be difficult to know their effectiveness and the conflicts that may arise between user sectors. "WUBs are not yet effective because most people are concerned with the need for water development, yet these boards are supposed to be management units and not development agencies. The members’ interests and expectations can only be realized in the long term but that interest is not there at present."

He identified two major strengths of the current water reform process. These are, that it has focused people on efficient use of water, and it provided an environment in which they can generate new ideas and encourage people to use water for production. As for weaknesses of the reform, he stated the following:

- Stakeholder influence/ideas do not seem to be accepted by the civil servants;
- The civil service is not committed. For example, one year after the new Water Act was passed, there are still no regulations to operationalize it;
- Political requirements have taken precedence over practical ones – the water department still wants to safeguard water rights held by government and accord them priority over others;
- Town dwellers are not really interested in the process because city councils provide the water supplies;
- "The water Act itself is rather complicated in certain areas, for instance how will the use of boreholes be regulated, how will the

regulations be enforced?"

"How is the ZINWA levy justified?"

- There are delays in getting the catchment plans and allocation system in place and passed so that everyone can begin on the same footing;
- There is no clarification on how water in one's dam carried over from one rain season to another will be handled.

On real changes that may be brought about by the reforms he identified the following:

- ZINWA would become another NOCZIM (a loss-making, and an enterprise where corruption is rampant);
- The Water Act will change very little since there is no water scarcity but a serious scarcity of finance and government commitment;
- Catchment Councils would not bring much change because the work they are going to do was already being done by river boards.

Asked to make suggestions for improving the reform process, he put forward the following:

- Make it demand-driven by the users;
- Those who have no access to storage space should be allowed to rent storage space /water in other people's dams;
- Increase penalties for those who do not put in measuring devices because without the correct devices for everyone, the management system will not be 100% accurate.

It must be recognized right away that provision of water is only +/- 20% of the cost of a water scheme. For example, it needed \$356 million to build Osborne. There is need for \$2 billion to provide the means to use the water at Chisumbanje. Presently, the government sells less than 50% of possible gross sales of water held in government dams. A massive amount of water is captured but there is no means to get it used. This is an enormous waste of a precious resource and serious thought must be given to utilization of water in government dams by the majority of the people. Government wants to build and control irrigation projects that are generally non-economic. People need new ideas on how to get that resource used productively without waiting for government to provide.

Interview No. 3

The third interview was held with Mr. Caleb Gurure, 65, the chairman of the Nyadire SCC. He is also the chairman of Budga WUB and a member of the Mazowe CC. He has a Junior Certificate of Education (form 2), has attended short courses on agriculture, veterinary science, meteorology, and bee keeping. A retired primary school teacher, today he is a small-scale commercial farmer. He is a member of the school committee (as a chairman), as well as the Zimbabwe Farmers' Union (as chairman of the Mutoko branch).

He believes that he represents all people who use water in the Nyadire SC. He says he reports back to the constituency through attendance at meetings organized by and for the chiefs, government department meetings, and school committee meetings. He consults Agritex officials, DDF, ZFU; CASS and any other interested parties he meets on water issues. He thinks that groups that should not be left out but are presently not participating in the reform process include Chiefs, kraal heads, and mission schools because they use a considerable amount of water.

For him, the most important issues being discussed at water meetings include:

- Issuing of permits;
- Water levies;
- Dam construction for the communal areas;
- Equitable access to water;
- Siltation of dams and rivers.

Commenting on operations of the new water management institutions, he argues that the CC and SCCs are working quite well in terms of regular holding of meetings but they are not reaching the grass roots, meaning that some stakeholders are being left out. WUBs are not functioning well because they often fail to hold their planned meetings due to lack of resources. More workshops about the reform must be carried out.

He sees the major strengths of the reform process as being that the "CCs will have power to lead the catchments because they are closer to the stakeholders. Hopefully, dams will be constructed for the poor/disadvantaged groups."

As to weaknesses of the reforms, he outlined the following:

- "Mistakes were made right from the beginning. The MCC was instituted first, then the SCCs and then the WUBs, in that order. The WUB should have been constituted first so that developments

would start from the grassroots. Now because the process was top-down, the grassroots people are not even aware of what's going on, they are not really involved;

- Funds raised through water levies may not be used in the right way by the leaders of the reform. The funds may be diverted to other uses that have nothing to do with water;
- So far, the reform has failed to work closely with the chiefs and grassroots stakeholders and this might make it very difficult to implement the reforms in the long run. Awareness raising was not adequately carried out;
- "Without money to support WUBs, the programme could come to a complete stand-still!";
- "Government departments are not being helpful to the water programme. At first they were there, formulating budgets, but now they are nowhere to be seen, they seem more interested in money, that is, 'what's in it for me'";
- Power is too centralized in ZINWA. It is bad for one organization to wield so much power.

He does not think that at the moment he can make any meaningful comment about real changes that may be brought about by the reform. He stated, "We cannot say anything until we get to know what ZINWA plans to do for the country." On what can be done to improve the water reform process, he pointed out the following:

- All departments, stakeholders and chiefs should be given some form of training;
 - All relevant authorities and stakeholders should be coordinated so that they work together;
 - Water Projects should be implemented in the communities;
 - The RDCs should use Public funds to generate water projects;
- The SCCs and WUBs should have sufficient funding so that they can hold their meetings regularly.

Any other comments?

"The year 2001 should be a year of projects as a lot has already been discussed in past years. What we need now are deeds and not continuous talking. Stakeholders should be given more knowledge about the use of water."

Interview No. 4

The fourth interview, a more wide ranging one, was held with Mr. Chihwai, member of the Nyadire SCC and vice-chairman of Budga WUB. Mr. Chihwai is 35 years old. He holds an Ordinary Level certificate of education and a certificate in Cooperative Development and Management. He is currently a ward Community Coordinator under the Ministry of National Affairs, Mutoko district. He is also a Mutoko development project chairman. He has participated in the Water and sanitation programme's borehole, deep well and shallow well pre-siting, community mobilization for local resources, and training water point committee members.

He believes that he represents all stakeholders in the Nyadire SC, particularly those in his WUB. He reports back to his constituency through meetings with leaders at the Ward level and district level (councillors and other stakeholder representatives). He consults stakeholders, the council, governmental and non-governmental organizations for advice on water management. He feels that other groups that should be represented at the CC, SCCs and WUB levels but presently are not participating include RDCs, traditional leaders, headmen and chiefs, NRB, and MPs.

He pinpointed the following as the most important issues being discussed in the reform process:

- Water allocation system
- Water permits
- Catchment plan
- Water User Board funding

Commenting on operations of the new institutions, he says that he is not sure about the CC, but the SCC and WUBs are not functioning very well. What CCs and SCCs are discussing is not spreading well to the stakeholders due to lack of meetings at the WUB level. This last group is very crucial for stakeholder participation at the grass roots level, yet it is not getting sufficient support from the policy makers and donors. There is need to fund the WUB or alternatively reduce its size to that of the ward so that members can easily walk to the meeting place instead of the present situation where members sometimes have to get a bus for a WUB meeting. If WUBs meet regularly, the SCCs and CCs can be assured of capturing actual stakeholder views.

On strengths of the reform process he mentioned the following:

- Stakeholder empowerment through the creation of CCs and SCCs;
- The change from water rights to water permits ensures equitable

redistribution of the resource;

- Equity in access to water for all users is socially just and fair;
- Improved administration of water.

He identified the following as weaknesses of the water reform process:

- Exclusion of WUBs from the Water Act and from funding;
- "Lack of emphasis on conservation is a serious shortcoming because without conservation, these new water management institutional structures will have sand basins to manage instead of rivers and dams;"
- There is no guaranteed support for newcomers in the water sector, be it financial or managerial, to start water projects. There is need for a water fund that will assist people in all areas to start commercial water use;
- Participation of chiefs and other local leaders was left out yet their participation is very vital. The absence of technocrats from the process is also a serious let-down;
- "As CCs and SCCs, we should not hold meetings in towns or growth points. Instead, we should be meeting in the villages so that the grassroots people get to know about us;"
- "There is too much theory and talking without action. For example, I joined this programme in 1996 but up to now, there is no specific project that has been built into the programme. These people you see attending meetings are not smiling farmers anymore. I myself might resign because there is no progress and we are wasting our time;"
- Whites are taking advantage of the knowledge they have;
- "The water reform project itself is too broad (national). It lacks geographical specificity and it is therefore, not easy to implement. It lacks realism, and it has no time frame".

Real changes that may be brought about by the water reforms are:

Stakeholder participation through democratically elected institutional structures;

- Fair distribution of available water at any level;

Water management and conservation by stakeholders for future generations.

What needs to be done to improve the water reform process?

- Educate the stakeholders through their representatives by

conducting workshops, where the Water Act and ZINWA Act will be read, explained and discussed in detail;

- Water needs a holistic approach. More groundwork needs to be done on that;
- The CC and SCCs should initiate big water projects to demonstrate that they are bringing development to the people. Other wise, no one will take them seriously;
- There is need to enlist the help of organizations like the World Bank who can provide financial support;
- "There is need for finance to implement development projects. We are not going anywhere without support and finance from various sectors;"
- We need to take a look and have learning tours so that we can see what the commercial farmers are doing on their farms. Each district's leaders should be involved. Chiefs might have to be involved as well on these tours so that the message quickly filters downwards to the grassroots;
- "ZINWA must not be too powerful. If ZINWA comes up and strips us of all powers, we will retreat and get out of the programme. It's a wait and see game with the ZINWA issue;"
- All SCC members must be sent for courses as a capacity building exercise;

NB: *Unfortunately, Mr. Chihwai later resigned from the SCC and WUB citing lack of tangible progress in the reform programme.*

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PROBLEMS AND PROSPECTS OF THE NON-FORMAL ROUTE OF GIRLS' BASIC EDUCATION IN SOUTH WOLLO, ETHIOPIA

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Abstract: The purpose of this study is to identify the basic problems of the non-formal route of girls' basic education in South Wollo and suggest mechanisms for alternative non-formal provisions. To attain the objective of the study, a quantitative survey method was employed. Accordingly, data was secured from a sample of educators, enrolled girls, non-enrolled girls, and parents. Rank order, percentage, t-test, and f-test were employed to analyze the data. The findings of the study revealed that socio-cultural factors were the most important factors in determining girls' non-formal basic education participation. The findings of the study also showed that some specific factors, namely early marriage, early pregnancy, parents' low expectations of the returns on girls' education, and parental demand for girls' household labour had exceptionally high effects. It was, therefore, concluded that success in girls' non-formal basic education in South Wollo is largely dependant on intervention on the demand side.

1. INTRODUCTION

1.1 Background of the Study

The 1990 Jomtien (Thailand) World Declaration of Education for All, the World Summit for Children, and the Convention on the Rights of the Child have been the most widely accepted international treaties. In the Declaration and Plan of Action, as well as on the Convention on the Rights of the Child, all nations have agreed on commitment to work for the interest of the child. Article 28 of the Convention on the Rights of the Child in particular, emphasises the need to work for the progress that reduces illiteracy and provide educational opportunities for children, the youth, and adults irrespective of their background and gender (UNICEF 1990).

Nonetheless, as reported in the World Education Forum (2000), there were more than 113 million children, 100 million of them living in developing nations and most of them girls, with no access to primary education. The problem in the least developed countries (LDCs) is further complicated by high dropout rate. Children in industrialized countries rarely leave school at

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the primary level because of compulsory education laws. In LDCs, however, non-attainment is a major problem.

The situation in Ethiopia is bad, if not worse. Despite the wish and aspirations of governments for universal primary education since the advent of modern education in Ethiopia, the pressing reality is that the majority of children are without access to basic education. The average primary school enrolment is 45.8 percent (MOE 1999). Moreover, gender bias in favour of boys is apparent in all school levels, and rural-urban differences in terms of net enrolment rate are highly pronounced (PHRD Project Office 1996). The time span for universalizing primary education has, therefore, been pushed further to the year 2015.

For Ethiopia, however, it is unlikely that the formal schooling and the government alone could solve the dire need for basic education. The high population growth rate, coupled with limited resources available for education, would not allow the existing formal schooling system to address the basic learning needs of all children in the foreseeable future. Therefore, as Tekeste (1996) rightly argues, we should invest in the non-formal education sector because it is cheaper, more flexible and easier to reach most children in the remotest areas of the country. Tekeste (ibid.), besides opting for the non-formal education, sees the approach as a neglected area in the Ethiopian situation.

South Wollo was chosen to study the problem for two reasons. Firstly, as the researcher had worked there as a non-formal education coordinator for two years, and is familiar with the context. This would help to manage the process of gathering relevant data effectively. Secondly, South Wollo is one of the repeatedly drought-stricken zones in the country. As a result, several NGOs, mostly international NGOs, are working there, engaged mainly in food aid and rehabilitation activities.

As argued by authorities (see *Literature Review*), sustainable poverty alleviation or human development cannot be realized unless the basic learning needs of the growing number of children are met. One could, therefore, expect active participation of the NGOs in South Wollo in providing education, particularly basic education, to children if they are meant to be partners in realizing sustainable development in the zone. This initiated the researcher to examine how this opportunity has been used so far and could be used in the future.

South Wollo, which is one of the 11 zones in the Amhara National Regional State, is currently divided into 18 *woredas*. There are a total of 517 *kebeles* in the zone, of which 55 (10.64%) are in towns while the remaining 462 (89.36%) are in the rural areas of the zone.

The Federal Government in Ethiopia is composed of National Regional States. In the Amhara National Regional State, there are 11 Administrative zones. Each zone is divided into *woredas*. Each *woreda* is again subdivided into *kebeles*. *Kebeles* are, thus, the lowest administrative units (Region, Zone, *Woreda*, and *Kebele*).

According to a biannual report of South Wollo Zone Education Department (unpublished report in Amharic in Megabit 1994 E. C.), there are 476 primary schools in the zone, of which 48 (10.08%) are found in towns and the other 428 (89.92%) in rural areas. The total number of students enrolled in the primary grades was 334,531, of which 154, 730 (46.25%) were females. The situation for girls is worse when seen from urban-rural perspective. Among a total of 97,464 students enrolled in the primary grades in towns, only 46, 675 (47.89%) were females. The number of students enrolled in these grades in rural schools was 237, 069, of which girls were only 108, 055 (45.58%).

Among the total primary school student population indicated earlier, 234, 151 were enrolled in lower primary grades (grades 1-4). Girls were 112, 822, which account for 48.18 percent of the total enrolment in lower primary grades. The report indicates that the primary education participation rate was 68.63, 59.22 and 63.93 percent for boys, girls, and both sexes respectively.

The report further shows that there were 945 literacy centres in the zone in the academic year, and only 35 (3.70 %) of them were in towns. According to the report, 67,531 learners were enrolled in all the three stages of the literacy programme in these centres in the academic year. Females were only 28,044 (41.53%). (See 2.7 for the history and status of non-formal education in Ethiopia.)

From the data above, we can observe that:

- About 40 percent of children in South Wollo are out of school.
- There are gender and rural-urban disparities in primary education participation.
- The current literacy programme emphasizes rural areas.

The non-formal approach should, therefore, be opted for as argued earlier. It would, however, be more helpful in narrowing these gaps only if the current practical strengths and problems are identified and improvements made on a continuous basis. In light of this, the current study is expected to indicate directions and mechanisms of designing more flexible and relevant non-formal basic education programmes for girls in particular and for children in general in South Wollo and in the region as well.

NFBE, nowadays, is widely used in the literature as well as in official documents of the government (Emebet 2001; Tekeste 1996; Transitional Government of Ethiopia 1994-*Education and Training Policy* and *Education Sector Strategy* are examples). The researcher would, thus, like to remind the reader that Literacy Programmes and Literacy Centres would also mean NFBE Programmes and NFBE Centres, respectively in the current Ethiopian context.

1.2 Statement of the Problem

It was stated earlier that about 40 percent of children in South Wollo are out of school. It was further revealed that gender and rural-urban disparities exist in the zone in primary education participation. Girls' participation rate in general is smaller than that of boys', but it is even worse in rural areas. This necessitates non-formal education programmes that aim at providing basic learning skills to those who remain out of formal education due to non-enrolment or dropout. Tailor-made age-specific programmes that give special emphasis to girls and suit the psychosocial needs of children need to be designed.

In line with this, the study tries to examine the current practices and problems of the non-formal route of girls' basic education in South Wollo. The study further attempts to seek for non-formal basic education modalities other than literacy, which currently is the typical and perhaps the only children's non-formal basic education provision in the Zone. The study is, in a way, an attempt to give answers specifically to the following questions:

1. What are the major factors that affect girls' participation in literacy (NFBE) programmes?
2. To what extent do the existing literacy (NFBE) programmes include age-specific literacy classes which give special emphasis to girls?
3. Is there any non-formal basic education provision other than literacy for children in the Zone? What other alternative non-formal routes could be sought for girls' basic education in South Wollo in the future?

1.3 Purpose and Specific Objectives of the Study

The major purpose of the study is to identify the basic problems of the non-formal route of girls' basic education in South Wollo. The study further attempts to indicate the prospects of the non-formal route in providing basic education to children with special emphasis to girls. The following are the specific objectives of the study.

- Examine the current status of girls' participation in non-formal basic education programmes in South Wollo;
- Identify the major factors that affect girls' participation in non-formal basic education programmes in South Wollo; and
- Suggest mechanisms for devising various alternative non-formal programmes that provide basic education to children with special emphasis to girls.

1.4 Significance of the Study

Promoting basic education to all is a major educational challenge in Ethiopia. The problem becomes even subtler when it comes to the issue of gender and rural-urban equity. The formal education system alone is incapable of meeting the basic learning needs of all children. Promoting basic education to all, therefore, requires alternative routes other than formal schooling. Since the very concern of this study is to identify factors that affect girls' participation in non-formal basic education programmes and suggest other alternative arrangements, the findings can provide policy makers and educational planners with ideas on mechanisms to improve the existing programmes and devise other alternative routes.

The study also helps to transcend the existing literature on non-formal basic education with particular emphasis on the Ethiopian situation. It can, thus, help all concerned with the education of children in Ethiopia to further widen their scope of understanding on the nature and significance of non-formal basic education.

1.5 Scope of the Study

There are 18 *woredas* in South Wollo. Nine of them (Sayint, Debresina, Wogidi, Kelala, Tenta, Mekidela, Legambo, Wereillu and Jamma) are situated in the western part of the zone. The remaining nine (Dessie Ketema, Dessie Zuria, Kutaber, Ambassel, Worebabo, Tehuledere, Combolcha, Kalu and Albuko) are found in the eastern part. Each *woreda* has its own education office. There are also several literacy centres (which are also called Non-Formal Basic Education Centres) in each *woreda*. To make the research manageable, the study was delimited to obtain the required information from two *woreda* Education Offices, two literacy centres from each of the sample *woredas*, and the Zone Education Department (currently Zone Education Desk).

The plan in the research proposal was to include Woreilu and Dessie Zuria *woredas* in the study. Nonetheless, the researcher later learned that literacy programmes were not being provided in several *woredas* in South Wollo (including Woreilu and Dessie Zuria) due to a budget constraint faced in the

fiscal year. Two other *woredas*, namely Kalu and Worebabo were, therefore, included in the study.

Budget constraint is actually a common phenomenon in relation to non-formal education. Governments allocate a budget to it only when some money is left over after allocating to all other programmes. With regard to this, Zeleke (2001, 2), citing several authorities said, " Education managers are mostly observed relegating non-formal basic learning programs to the side and consider them as ad hoc, peripheral and unsuitable."

1.6 Conceptual Framework

Girls' participation in education is determined firstly by the willingness of their parents. Parental demand for their daughters' education is affected by several socio-economic and cultural factors. These are out-of-school factors. Parental demand alone is not a sufficient condition for girls' education. Educational services or schools should be made available. In schools, factors such as distance from home, policy, qualification of teachers and quality of textbooks, and other facilities affect girls' enrolment and persistence. These are school-related factors.

Some girls may not enrol at all, or may dropout soon either due to out-of-school factors, school-related factors, or both. The provision of non-formal education for the basic learning needs of these girls is quite essential. Such non-formal basic education programmes are again affected by parental demands. This means that girls' participation in such programmes is affected by out-of-school factors. Nonetheless, the flexible nature of the programmes can increase parental demands. As a result, non-enrolees as well as dropouts would join the programmes.

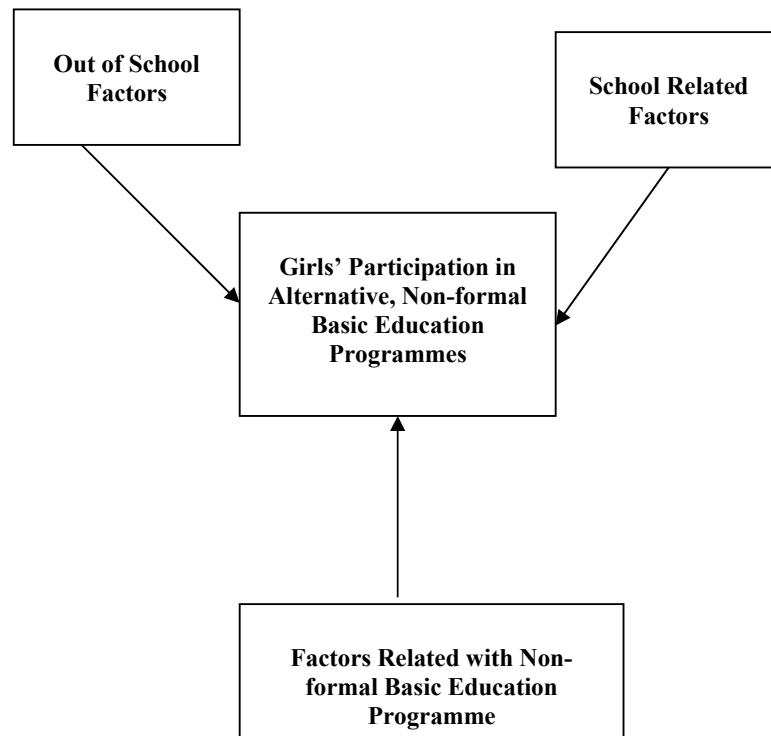
On the other hand, factors such as absence of age-specific classes, quality of primers and facilities, and training of teachers affect girls' participation. These are factors related with non-formal basic education programmes. Due to these factors, girls may dropout, or enrol in formal schools. As we saw earlier, girls who dropped out from schools could also enrol in non-formal programmes. This shows that there could be a flow of students from schools to non-formal programmes and vice versa. The theoretical guide of the research discussed above shows that girls' non-formal basic education participation is determined by the interplay of three groups of factors.

- Parental demand for the education of their daughters which is influenced by several socio-cultural and socio-economic factors, such as household income, parents' educational background, parents' attitudes and religion, family size, sex of children, distance to school, and cost of schooling;

- School-related factors such as distance from school, school facilities and training of teachers;
- Factors related with non-formal basic education provisions, such as programme arrangement, facilities, and quality of primers and training of teachers.

For better clarity, these factors are classified as Socio-Cultural, Socio-Economic and Institutional factors in the study.

Figure 1. The interplay of factors affecting girls' participation in alternative, non-formal basic education programmes



2. LITERATURE REVIEW

2.1 Basic Education (BE) and Non-formal Education (NFE): Basic Concepts

2.1.1 Basic Education (BE)

Haggis (1995, 2) defines BE as, “the very minimum knowledge, skills, attitudes and values that will enable individuals to operate with reasonable expectation of success in their community or society”. This definition implies that BE is the transfer of knowledge, skills, and attitudes that citizens need for a decent existence in their communities. Nonetheless, this definition has limitations because it does not consider the fact that BE can also be conceived as a tool or foundation.

Addressing both of these fundamental conceptions, Ahmed and Carron (1993, 2) define BE as "...a base or foundation of learning for all citizens consisting of basic learning tools of reading, writing and numeracy as well as basic knowledge and skills for life as defined in specific circumstances." BE, thus, includes not only literacy and numeracy but also other vocational and non-vocational life skills which are the foundations of both further learning and decent life in one's community.

The core elements of BE could be literacy and numeracy, but BE is also expected to include other leanings. However, there cannot be a fixed formula about what should be included in BE other than literacy and numeracy. Authorities in the field such as Ahmed and Carron (1993), Lauglo (2002) and others argue that BE should meet the minimum essential learning needs and thus include the following:

- Positive attitudes toward cooperation with and help to one's family and fellow humans toward work and community, and national development;
- The knowledge of functional literacy and numeracy sufficient to:
 - read with comprehension national and local newspapers and magazines useful for agricultural, health and other "how-to-do it" bulletins or instructional sheets,
 - write a legible letter to a friend or a government bureau requesting information, and
 - handle important common computations such as measurement of land, building, or rental rates.
- A scientific outlook and an elementary understanding of the process of nature in particular areas, pertaining to health and

sanitation, raising crops and animals, nutrition storage and environmental protection;

- Functional knowledge and skills for raising a family and operating a household including family health, family planning, childcare, cultural activities and recreation;
- Functional knowledge and skills for earning a living including the skills required for a particular local occupation, and
- Functional knowledge and skills for civic participation including some knowledge of national and local history, an understanding of one's society, awareness of government structure and functions.

2.1.2 Non-formal Education (NFE)

NFE on the other hand, is a new name for an old concern. As observed by Kundu (1986, 10), the need to provide education for those who did not attend school, and the concern to provide education to both the schooled and the unschooled throughout their lives has been expressed in different terms. These include basic education, fundamental education, second-chance education, continuing education, recurrent education, extension education, and life-long education.

Coombs (1992, 4) defines NFE as, "any organized activity outside the structure of the formal education system consciously aimed at meeting specific learning needs of particular sub-groups of the community-be they children, youth or adults." Coombs further clarifies that NFE is different from "informal education", which arises from daily exposure to the environment, family, and friends. It is also different from formal education, which is a highly institutionalized, chronologically graded, and hierarchically structured education system. In Kundu's (1986, 10) views, NFE is organized but not fully and formally institutionalized, is systematic but not routinized and is delivered out of school. Most significantly, NFE is not the monopoly of "education institutions"; it is best undertaken by a variety of economic, social and political institutions. Among them are government departments such as agriculture and health, businesses, factories, trade unions, cooperatives, political parties, the army, the courts, churches, and the whole array of voluntary organizations. Still, Kundu (ibid.) argues that the institution specifically concerned with education plays and should play a central role, particularly in coordinating and assisting the various departments and organizations.

Kundu (1986, 11) summarizes the major characteristics of NFE as follows:

- (a) NFE programmes are generally intended to serve the deprived sections of the society. Women and the rural poor receive a special focus in these programmes.
- (b) An attempt is made to provide programme flexibility concerning duration and timing of the courses, implementations, financial pattern, etc.
- (c) There is practically a focus on involving the community in planning programmes, designing curricula, evaluation, etc.
- (d) There is a departure from dependence on the professional teacher, and an attempt is made to select instructors from the local community.
- (e) There is emphasis on development orientation and functional education.

2.2 The Need for Non-formal Basic Education (NFBE)

The upsurge of interest in non-formal approaches to education seems to be the wedge that promises an opening to a wider view of education that extends beyond the traditional structures and functions of the school system. The formal system falls far short of meeting the basic learning needs of all citizens. Citing various sources, Ahmed *et al.* (1992, 2) state the formidable challenges of the formal education system as follows:

- In the 1990s, there were more than 100 million children with no access to primary education and approximately 960 million illiterate adults, two-thirds of which were females.
- Today, up to half of the primary school children who start school do not finish due to different socio-economic factors.
- If trends continue, more than one billion adults, 98 percent of whom will live in developing countries, will lack literacy and thus the foundation of other life skills by the year 2000.

As indicated in Part One of this study, 113 million children, of whom 100 million live in developing countries, were with no access to primary education in the year 2000. This means that although greater efforts have been made to extend educational opportunity by linear expansions of the formal system, the existing institutions fall far behind in meeting the basic learning needs of all citizens. Rapid population growth, rising costs, and diminishing resources available for education further aggravate the problem in LDCs. NFBE is, therefore, needed for low income countries in particular because they face the greatest difficulties in financing schooling for all. The flexible nature of NFBE, with its multitude of entries at several points,

would allow these countries to meet the basic learning needs of their citizens where they needed them and where they lived.

From what has been told about the need for NFE by Kedrayate (2002, 217-218), the following major purposes of NFBE could be identified.

- NFBE is needed for progress towards EFA. Primary school expansion alone will not suffice to reach the EFA target of 2015.
- NFBE serves the poor and improves gender equity. It is the best means of meeting the basic learning needs of the rural poor and redressing social injustices such as gender inequity.
- NFBE can be used for remedial purposes. This is particularly true where the formal system has been unable to satisfactorily educate all citizens and where illiteracy is a problem. The need to ensure that neo-literates do not lapse into illiteracy has led to NFE being used for functional literacy to enhance skills and competence in job-related activities.
- NFBE is a means to achieve the goal of life-long education. The concept of life-long education is best realized through NFE as it provides possibilities to fulfil people's needs better than formal education.

2.3 Contributions of Girls' BE to Socio-Economic and Political Development

Expanding education, especially BE, has been a policy objective in several LDCs for the last three decades. The reasons for these are clear. BE is often considered a right which governments have a responsibility to guarantee to each generation. Education improves the quality of life. It promotes health, expands access to paid employment, increases productivity in market and non-market work, and facilitates social and political participation (Bellew and King 1993). There is a consensus that universally accessible education leads to fuller and healthier lives for children, greater social equity and stability, and higher level of economic and social development. With regard to this, Ahmed and Carron (1993, 1) had the following to say:

Evidence is indeed accumulating that without a minimum of education for the entire population, a human-centred development process cannot be implemented or sustained. Basic education for all, therefore, is a battle cry against the prevailing pattern of elitism and selectivity in education that offers much to a few at the expense of a common core of learning for all.

Ahmed and Carron (1993, 5) further argue that the price to society is particularly high when women and girls are not educated because their

education tends to bring several benefits. Investments in the education of women lead to better child health, lower fertility, and reduced mortality rates. Data from thirteen African countries between 1975 and 1985 showed that a ten percent increase in female literacy rates reduced child mortality by ten percent and the effects increased when mothers had more education (PHRD Project Office 1996, 5). Hicks (1980) similarly states that basic education facilitates improvements in health, nutrition, and fertility control. In-depth country studies reinforce the point that women with more education have fewer children. In Brazil, for example, uneducated women have 6.5 children on average while those with a secondary education have only 2.5 children on average (Herz *et al.* 1991, 23).

Girls' basic education also correlates positively with the economic well-being of a country (King 1990). Evidence shows that mothers' education enhances agricultural productivity (PHRD Project Office 1996, 6). Girls' basic education has also been associated with increased desire to educate their future children (Kossoudji and Muller 1983; Wolfe and Behrman 1987).

To sum up, the contribution of female schooling to social and economic well-being of a society is high. Female education, as we saw earlier, improves children's health, reduces unwanted births, and causes women to want smaller families. Yet, as observed by Herz *et al.* (1991), governments and families provide less schooling for girls in most of the LDCs.

2.4 Educational Conditions of Girls in Least Developed Countries (LDCs)

Several studies reveal that, whether in the conditions of educational scarcity or not, girls face a larger set of obstacles than boys in both gaining access to school and completing their schooling. The various indicators, including measures of literacy, enrolment, and years in school reveal important patterns and trends in girls and women education in LDCs. Stromquist (1997, 25) observes that educational gaps between boys and girls:

- Increase with higher levels of schooling;
- Are more marked when the students belong to racial or ethnic minorities, and
- Are greater in rural than in urban areas.

Stromquist (*ibid.*) further elaborates that the large disparity between enrolment and cycle completion is characteristic of many education systems. According to her, in Sub-Saharan Africa, South Asia, Latin America, and the Caribbean fewer than half of the girls who enter primary

school finish grade five. At the global level, by the age of 18, girls have received 4.4 years less education than boys (Stromquist 1997, 27).

Stromquist (ibid.) further notes that girls in LDCs show lower academic achievement at all levels of schooling particularly in science and mathematics. According to her, this differential performance of girls is not associated with intelligence of girls but with reduced opportunity to learn, less prepared teachers serving girls, absence of support systems for girls, and absence of meaningful role models.

As we saw so far, the various aspects of educational participation, i.e. enrolment, attainment, and achievement reveal lower educational status of women than men particularly in LDCs. Yet, the lag of girls and women's education has far-reaching consequences for both individual and national well being in these countries.

2.5 Factors Affecting Girls' Participation in Basic and Primary Education

Several out-of- school and school-related factors are responsible for the low educational status of girls and women. Household income, parents' educational background, family size, the direct cost of schooling, cost of the child's time forgone, sex of the children, distance to school, and expected returns of education are identified as major determinants of households' demand for schooling by authorities. The effects of each of these socio-cultural and economic factors on the education of girls are briefly discussed in the following few pages.

The prevailing sexual division of labour, which assigns domestic tasks and responsibilities to women, results in obstacles to schooling for girls that boys do not face. As observed by Stromquist (1997, 22), girls particularly in poor homes are needed to perform domestic tasks such as cooking, fetching wood and water, and helping with smaller siblings. In general, Stromquist (1997) further clarifies that the lower the levels of technology for access to water and fuel the greater the domestic burden on women, thereby, reducing their availability for schooling. A study reported by the PHRD Project Office (1996, 9) also reveals that the main reason for most of the girls for never attending school is that they are needed for household activities. In poor families, in an economy dominated by agriculture in particular, the additional income even very young children generate can be a powerful reason for keeping them from rather than sending them to school.

Children may also be kept out of school because they need the time to learn traditional skills. Even in an urban setting, the forgone learning time can be so costly that it could deter the enrolment of girls in schools. Girls and women are overwhelmingly employed in the traditional or informal sectors,

and school attendance means that they have less time to learn from their mothers or to apprentice with other older women (Hyde 1993, 115).

Parents may also not send their children to school because they perceive the returns of education to be very low. The PHRD Project Office (1996, 27) observes that the farming method in rural Ethiopia is quite traditional, and therefore, education is unlikely to have a significant effect on agricultural output when the innovating environment is not specifically considered. It is unlikely, therefore, that households would perceive positive returns of schooling in traditional agriculture.

Distance from school, not merely a physical but also a psychological perception as well, may also operate as a major deterrent to girls' attendance. This is particularly true when girls approach puberty. As distance increases, so does parents' fear that their daughters risk sexual assault on the way, leading them to make decisions such as not sending girls to school. Furthermore, social and cultural pressures surrounding engagement, marriage, and initiative rites may prevent girls from staying in schools. In Ethiopia, for example, 20 percent of the students surveyed by Biazen and Junge were either promised, married, or divorced (Hyde 1993, 16). Physical accessibility is, therefore, important to improving enrolment. If a school is within the community and within easy walking distance, enrolment is likely to be high for girls in particular.

Early marriage has also a significant effect on girls' educational participation. Several studies show that there are certain culturally induced practices that encourage early marriage in Africa and other developing countries when girls are not physically, psychologically or socially prepared for it. Research findings reveal that there is a strong association between early marriage and pregnancy, and school dropout rates. A recent study on school girls pregnancy and continuance in Kenya, for example, shows that out of 20,000 secondary school and 9,000 primary school girls drawn from seven provinces, 10,400 dropped out of school, on average, due to pregnancy in 1985, 1986, and 1987. In Tanzania, more than 18,000 girls dropped out of school due to pregnancy in 1982, amounting to about ten percent of the female primary and secondary school enrolment (Yaboah 1993).

The reinforcement of religious outlooks, coupled with cultural practices, also limits girls' schooling. King (1990) argues that religious ideas and teachings have a powerful influence in shaping women's lives and access to education. Research findings show that some religious beliefs, particularly Islam are thought to keep girls away from public schools. This arises from the fear of imposition of Western education, which is largely associated

with Christianity and conversion of their daughters (Odaga, and Heneveld 1995).

A number of studies have suggested that area of residence is predictive of enrolment and attainment at all levels of education (Hyde 1993, 116). The PHRD Project Office (1996) also reports that gender bias against girls in the rural areas in Ethiopia came out very strongly, especially at primary school levels. The gross primary enrolment of females in rural areas was only 11 percent, as opposed to 24 percent for boys. By contrast, primary enrolment of girls in urban areas exceeded that of boys (94 percent for girls compared to 88 percent for boys). Earlier study on Ethiopia (Hyde 1993, 117) reveals that urban girls enrolled in school are more likely to persist than rural girls are. Moreover, enrolment equity, measured as the ratio of female to male enrolments in middle primary grades, is significantly higher in urban schools than in rural schools.

Hyde (1993), however, argues that the mechanisms, through which area of residence operates, are not always clear. She states that the following factors may all be relevant.

- (a) The greater availability of schools in urban areas;
- (b) The higher opportunity cost of rural girls' time;
- (c) The greater wealth of urban families;
- (d) The more open attitudes among urban parents toward having girls attend Western schools, and
- (e) The greater opportunities for girls in urban areas to obtain jobs in the modern sector.

School-related factors can also be important determinants of whether girls go to and remain in school. The quality of the schools, especially the courses offered and the messages about sex roles conveyed by educational materials and teachers influence how parents and students themselves make schooling decisions.

The availability of school facilities is equally important in determining the level of participation of both boys and girls. When educational facilities are available and accessible (in proximity and cost), daughters are likely to be given equal opportunity with sons. Availability of schools, the type and quality of schools, presence of female teachers, and direct costs influence parents' decisions about their daughters' education.

2.6 Key Areas of Intervention in Girls' Basic and Primary Education

The removal of the unequal and disadvantageous condition of girls' schooling requires a multifaceted approach as the barriers are several.

Interventions can take place in relation to the supply and demand of schooling. Special steps can also be taken to favour or target the education of girls, in particular to reduce the gender gap. The key areas of intervention in girls' education, suggested by Stromquist (1997), and others are discussed in the following few pages.

How governments, communities, and donors approach the challenge of closing the gap in education must depend on the specific context. This can include the existing supply of schools, the quality of education, prevailing cultural and social norms, families' income and productive activities, and women' opportunities for paid work.

To begin with, children cannot attend school when places are in short supply or schools are located far from home. Thus, various low cost strategies such as multiple grade classrooms, double shifts, feeder and satellite schools at the primary level, radio education and correspondence courses at the post primary levels, and literacy programmes should be worked out. Expansion via the formal system could help a lot, but expanding through NFE and religious schools can also be thought of. These could include Koranic and Church schools, and non-formal primary education by NGOs and others. NGOs can make a dramatic contribution in cases where the regular education system faces substantial financial limitations. By resorting to such elements as the use of local teachers, the use of existing or temporary facilities in the community, and in-kind contributions from parents, NFE primary schools can help to reach dispersed rural populations or small villages in remote areas.

NGOs can develop learning packages to satisfy the knowledge and skills needs of rural or marginal urban populations. The possibility of transferring and adapting such packages to other parts of the country is high. This form of alternative education can be used very effectively to serve girls simply by adopting enrolment quotas that establish specific proportions of girls and boys to be served through these programmes. For NFE to truly become part of a strategy for an equal education opportunity, there must be linkages between the formal education and NFE which enable girls who have been attending the NFE programmes to survive the transition and be promoted to more advanced years of the formal education programme.

Non-formal programmes offered before or after the working day provide an alternative for children unable to attend a regular school. Adopting flexible school schedules will also help to make formal education more responsive to children's work schedules. Programmed instruction in particular helps to ensure that all children get the same quality of instruction, and to reduce the penalty for absenteeism. It allows the curriculum to be organized in sequential units so that students can learn at their own pace.

The resources that households must allocate for girls' education include not only direct costs such as school fees but also the girls' time. Girls in LDCs usually share household chores with their mothers. This necessitates lowering the opportunity cost of girls' schooling. The following supportive mechanisms can help to accomplish this well.

- Providing scholarship programmes that can ease the barrier that high opportunity costs create by offering monetary compensation to parents for the loss of their daughters' time;
- Allowing girls to bring younger siblings to school by establishing nearby day-care centres;
- Introducing more flexible schedules for instruction in schools to accommodate girls' work schedules;
- Modifying home technologies to save hours of time that can be devoted to school, and
- Reducing direct costs by lowering the costs of uniforms, school fees for school supplies such as books, transportation, etc.

We must, therefore, know that access is only one aspect of girls' schooling. The type of schooling offered also affects parental willingness to cover the costs of education. Parents anywhere will naturally be concerned with the relevance of education, the quality of teaching, and the regular attendance of the teacher (Herz *et al.* 1991, 44). If access leads to a school experience that reinforces messages about the girls' subordinate position in society, it will be a partial victory. It has been demonstrated that school textbooks transmit messages and illustrations that present women in predictable situations playing domestic roles and as being passive, emotional, weak, fearful, and unintelligent. Men by contrast are portrayed as assertive and intelligent, and as taking on leadership and being open to multiple occupational roles. There is clearly a need to improve the current textbooks and to produce new ones. This implies work along several lines, the following of which are some:

- Removing language that depicts most examples of human actions as being undertaken by men;
- Identifying sexual stereotypes in stories, arguments, examples and illustrations and removing them from textbooks;
- Presenting a more balanced account of actual accomplishments of women that have been obscured or ignored in society, and
- Promoting an altered view of women's role in society.

Where replacing existing textbooks by new ones is difficult, teachers should consciously counteract these in classrooms and schools. The bulk of research on classroom dynamics, however, reveals that teachers treat boys and girls differently in the classroom. Boys tend to be disciplined more often, but they also receive more cognitive-related attention. It is further noted that these teachers are not conscious of the differential treatment of girls. Teachers, thus, should consciously avoid the following:

- Giving subtle messages that a certain subject is not appropriate for one sex. The following are common examples of such messages: "Home economics is for girls." "Girls find math difficult." "Men like politics."
- Making derogatory statements that reinforce the devaluation of girls and women. "Don't cry like a woman."
- Failing to combat women's invisibility and negative images in textbooks.

To create classroom environments that appeal to girls and boys equally, teachers will have to intervene consciously. A crucial objective of teachers regarding the school and classroom climate should be to ensure that the girls' self-confidence and self-esteem are promoted throughout the schooling experience. Teachers not only have to be made aware of their role in sustaining gender ideologies but also incorporated as change agents in the task of transforming gender ideologies. Interviews and anecdotal evidence in some countries suggest that increasing the number of female teachers will boost girls' enrolment.

Schools must conform to communities' cultural standards, especially the standards of propriety to which females are held. Parents may insist on separating girls from boys at school, and they may be more concerned with the availability of closed latrines than the supply of desks and chairs.

Girls' enrolment or sustained participation in school, as indicated earlier, can be promoted by lessening the opportunity costs and direct costs of schooling. A powerful incentive for greater participation in primary school is to make it clear that a transition to higher levels of education is possible. The availability of secondary education affects the motivation of girls to enrol in primary education as they can see that this level can lead to a higher level of education and thus to a better job.

When parents weigh educational decisions, the potential benefits are as important as the costs of schooling. Most past efforts to raise female enrolment have focused on lowering the costs. However, if parents do not believe that education will benefit their daughters as much as it will their sons, they may not send them to school, no matter how much the costs are

reduced. Girls may seem to gain less from being educated than boys, in the eyes of many parents, because it is not readily apparent that schooling enhances women's productivity in non-market work. However, girls may actually gain less from being educated than boys if they learn less in school, or if they study subjects that do not enable them to find jobs or earn a reasonable income. Both the perception and the reality need to be addressed if the gender gap in education is to shrink. Strategies such as launching information campaigns to advertise the benefits of education and training girls and women for occupations that lead to jobs and reasonable incomes, and supplying textbooks that are free of gender bias can be used as alternatives or as complements to the cost reduction measures. Herz *et al.* (1991) summarize the approaches to overcome constraints at different levels as follows:

- A) School Level:** Approaches at this level reduce the direct and opportunity costs of schooling for girls, address access and safety, and improve the quality of schooling offered. School level approaches include the following:
- Reservation of school places for girls;
 - Awareness campaigns focused on girls;
 - Incentives (e.g. scholarships) or fees waived only for girls;
 - Girls' schools;
 - Separate toilet and facilities (in coeducational schools);
 - More female teachers, and
 - Childcare.
- B) Community Level:** Measures at this level reduce the direct and opportunity concerns and address safety concerns. These include:
- Provision of wood and water supplies;
 - Childcare, and
 - Public support.
- C) National Level:** Measures at national level are basically policies to raise economic returns of schooling and include the following:
- Remove macro policy distortions affecting the sectors in which women predominate;
 - Ease barriers to female labour force participation;

- Increase access to information, credit, and resources for self-employed women (farmers or entrepreneurs), and
- Improve health, nutrition, and food supplies for girls to increase learning ability.

2.7 NFBE in Ethiopia: A Brief Historical Account

Since the advent of modern education in Ethiopia, governments of the country had aspirations for universalizing basic education.

NFE assumed an organized entity under the ministry of education (MOE 1964, 2) as early as 1995. Voluntary organizations were also set up to undertake literacy programmes. One of such voluntary organizations was the National Literacy Campaign Organization (Emebet 2001, 12). In Emebet's views, this organization was a non-profit private organization aimed at providing basic education to the illiterate of any age. During this time, NFE, designated as Adult Education, was conceived as a composite of literacy and further education. The establishments of Berhaneh Zarenew evening school in the capital with sections of adult classes, the Majete Training School for Community Development, and a Community Teacher Training in Debre Birhan in the 1950s were beginnings in the advancement of NFE.

During the *Dergue* regime, NFE was promoted to a department level – the Adult Education Department. The National Work Campaign for Development through Cooperation, the Successive, and Massive Literacy Campaign that started in 1979, and the establishment of Community Skills Training Centres throughout the country were the major accomplishments of the period. Evening schools were also widespread in all big towns in the country. The official working hours of the government, which began at eight in the mornings and ended at four in the afternoons, was convenient for evening schools. Despite the glorious achievements of this period, three main shortcomings are often mentioned:

- Literacy over-shadowed other programmes;
- Voluntary organizations had no chance to participate- education was the monopoly of the Ministry of Education, and
- There was no room for community participation- the management of NFE programmes was entirely top-down.

Due attention has been given to NFE in the educational policy documents of the current Federal Government of Ethiopia. The Education and Training Policy (Transitional Government of Ethiopia 1994, 16) states that NFE will be provided beginning with and parallel to basic education and at all levels of formal education. The Education Sector Strategy (Transitional

Government of Ethiopia 1994, 13) also notes that NFE has to play a predominant role in satisfying the demand for education by the community and the requirements of the economy. NFE and training programmes will be organized by the various development and social institutions in coordination with the Ministry of Education (Transitional Government of Ethiopia 1994, 26).

Nonetheless, some studies reveal that due attention was not given to realize the aspirations of the policy. With regard to this, Tekeste (1996, 90) argues, "The current education system is heavily biased in favour of the formal education sector where the latter appropriates all the budget leaving virtually nothing for the non-formal sector." Elaborating his argument in practical terms, Tekeste further wrote:

...The Department of Adult Education is no longer a department but only a panel. It is now called the non-formal education panel and is one of the several panels under the Education Programmes and Supervision Department. The non-formal education panel has a staff of four experts who are entrusted with the responsibility of supervising the activities of regional non-formal education panels all over the country. In the regions, the non-formal education panels are run by a one person staff. Without having to enter into the merits of regionalization, we can clearly see that the government has to put far more resources into non-formal education.

A study by the Ministry of Education in 1999 (Berhanu 2000, 4) also indicates that due emphasis was not given to the various kinds of the non-formal programmes as envisaged in the policy documents. A new development with regard to NFE in the country is, however, that some NGOs have begun involvement in providing NFE to children who are out of school. Berhanu (2000) assesses four alternative primary education programmes in two national states of rural Ethiopia that are provided by NGOs. He concludes that encouraging achievements are being attained in reaching children who are unable to join formal schools. Berhanu (2000, 50-54) provides detailed background information of the programmes. The background information of each programme is summarized as follows.

A) ACCESS-Action Aid Ethiopia: This is an innovative non-formal basic education programme initiated by Action Aid Ethiopia (UK based international NGO) in 1989. ACCESS stands for Appropriate, Cost effective, Centre for Education within the School System. It is designed to address the basic learning needs of disadvantaged children in Ethiopia. Symbolized as a feeder school programme, ACCESS-AAE has the following three objectives:

- a) Provide primary school education (equivalent to grade four level) to children (7-14 year olds) who lack the opportunity of schooling in

the formal primary schools as a basis for further learning or improved life;

- b) Promote access of girls to basic education, and
- c) Reinforce and strengthen formal primary schools through the feeder school programme in order to boost up enrolment, decrease dropout rate and share innovative experiences and practices.

As a programme, ACCESS is guided by a set of twelve principles: community participation, flexibility, accessibility and relevance, linkage with formal schooling, cost effectiveness, local resource focus, programme integration with other development works, sustainability, curriculum integration, learning-centred approach, and gender equity.

B) ACCESS-RCWDA: It is a replication of ACCESS-AAE adopted by Rift Valley Child and Women Development Association (RCDWA) in its operational *woredas* of East Shoa Zone. RCDWA is an indigenous NGO that works for the promotion of the welfare of the poor in fulfilling their basic human needs focusing on children and women. Its guiding principles are humanity, genuine and mutual partnership, neutrality, equity, and empowerment.

As regards education, the objective of ACCESS-RCWDA is to improve the educational status of the target community through the establishment of rural community owned and managed by educational institutions that will provide basic education to children and adults.

C) Non-formal Primary Education of SDP/SZED: This is a programme initiated to ensure access to basic primary education in the Sidama zone of the Southern Region in 1998 in view of accelerating universal primary education. The objectives of the Non-formal Primary Education programme of SDP/SZED are to:

- a) Promote culture, language and positive attitudinal change in Sidama society, and
- b) Provide basic primary education for those who did not get the chance of formal schooling (aged 8-10 years) and/or who dropped out of formal schooling (aged 11-14 years) due to various reasons.

Democratization of education, gender equity, equal access, relevance and community participation are the core principles of the programme.

D) The Life-Glow School Project of KCYDS: This is an alternative learning programme for out-of schoolchildren in rural Ethiopia initiated by Kangaroo Child and Youth Development Society (KCYDS) in 1998. KCYDS is a local non-for profit society with the mission of promoting Education for All through innovative community based basic education

programmes as well as through the execution of village economic development projects. The objectives of the Life-Glow School Project are to:

- a) Develop an alternative learning programme for out-of school children, youth, and adults in the Ethiopian context;
- b) Conduct innovative pilot programmes in basic education to fit into the needs of rural children and expectation of parents;
- c) Strive to promote girls' participation with at least 50 % enrolment in the pilot programmes, and
- d) Adopt and advance intergeneration and active learning as a viable strategic approach to quality of basic education.

The guiding principles that are to be followed in order to achieve the objectives include the following:

- Active community participation,
- Intergenerational learning,
- Schools within the reach of the community,
- Low cost and attractive learning environment, and
- Flexibility, adaptability and use of local resources

Zelege (2001) also has made a comparative study of the management of government and non-government Non-Formal Adult Basic Learning Programmes. In his study, Zelege included the management of Non-Formal Basic Adult Learning Programmes of Agri-Service Ethiopia, Adult and Non-Formal Association of Ethiopia, and Ethiopian Muslims Rehabilitation and Development Association on the part of NGOs.

3. RESEARCH DESIGN AND METHODOLOGY

This Chapter is devoted to the presentation and analysis of data obtained through the procedures discussed in chapter three. It is organized into four sections. The first section deals with the procedures of the development of data gathering tools. The second section is concerned with sampling procedures. The third and fourth sections are devoted to the description of administration of data gathering instruments and methods of data analysis respectively.

3.1 Data Gathering Instruments Development Procedures

A descriptive survey method was employed in the study since the major purpose was to examine the current status of the non-formal route of girls' basic education. For this, qualitative as well as quantitative data were gathered through questionnaires and structured interviews.

Two types of questionnaires were developed to obtain data from girls who enrolled in literacy programmes, from literacy teachers, and from education officers of the two sample *woredas* and the zone education desk. The questionnaire prepared for the education officers specifically requires the respondents to provide different kinds of information, and statistical data from documents in their respective education offices or literacy centres. Questionnaires were also developed for non-enrolled girls and parents. In all the questionnaires of the study, the same Likert-type items concerning socio-cultural, socio-economic, and institutional factors were included. Each questionnaire consisted of several closed questions and some open-ended questions peculiar to its respondents.

For clarity and relevance, two experts reviewed the data gathering tools. The data gathering tools were also pilot -tested in a selected *Kebele* near Combolcha in South Wollo zone. The questionnaires were amended based on the feedback from the expert suggestions, and the pilot-study. Finally, all these data gathering tools (questionnaires for four groups of respondents, viz. literacy teachers and education officers, girls enrolled in literacy programmes, non-enrolled girls and parents) were translated into Amharic, which is the vernacular of the respondents.

3.2 Sampling Procedures

As indicated above, four groups of respondents were identified for the study. These include educators (literacy teachers and education officers), girls enrolled in literacy programmes, non-enrolled girls, and parents. Accordingly, all girls under the age of 15 who enrolled in four literacy centres (two from each of the sample *woredas*- Kedida and Metene Tikuro from Kalu, and Asselel and Hara from Worebabo) were included in the study.

All literacy teachers in the four literacy centres were also included in the study. As regards non-enrolled girls and parents, ten girls and ten parents (five fathers and five mothers) were drawn from each of the *kebele* farmers' associations surrounding the four sample literacy centres. This means that 40 non-enrolled girls and 40 parents were interviewed. Stratified random quota sampling was employed to select them. Accordingly, all villages surrounding each of the sample literacy centres were taken as clusters of respondents (non-enrolled girls and parents). Then, the respondents for the study were selected randomly. The number of respondents that were selected from each village was proportional to the size of the target population in the respective village. In addition to the interviews with non-enrolled girls and parents, heads and non-formal education coordinators of the two sample *woredas* completed questionnaires. Some statistical data were also obtained from the Zonal Education Desk with the help of a form

designed for this purpose. The total number of respondents selected from the different categories for the study as a result of the above procedures, and those who ultimately completed the questionnaires is summarized as follows:

- Educators (education officers and literacy teachers) =12 (6 from each *woreda*)
- Enrolled girls = 45 (23 from Kalu, 22 from Worebabo)
- Non-enrolled girls = 40 (20 from each *woreda*)
- Parents = 40 (20 from each *woreda*)
- Total = 137

3.3 Administration of Data Gathering Instruments

The researcher, together with the assistant researcher, made preliminary contact with educational officers. The researcher, then, obtained the necessary statistical data from the education offices with the help of the questionnaire designed for this. The assistant researcher assisted in recruiting, training and supervising data enumerators, and in administering the questionnaire for the literacy teachers.

The questionnaire for girls enrolled in literacy programmes was administered with the help of selected teachers from the schools around the literacy centres who were trained to do this. They also administered the questionnaires for non-enrolled girls and parents.

3.4 Methods of Data Analysis

The rank order was largely employed to analyze the data since the nature of the study is descriptive. The weighted mean was used to establish the comparative importance of the three groups of factors that affect girls' participation in non-formal basic education programmes (socio-cultural, socio-economic, and institutional).

The significance of the mean difference in the three groups of factors (socio-cultural, socio-economic, and institutional) among enrolled girls and educators, non-enrolled girls and parents, as well as among respondents of the two *woredas* were determined by employing the t-test. To establish the significance of the mean differences in the three groups of factors among parents of small, medium and large family sizes, and among illiterate, literate and primary education level parents, the F-test (ANOVA) was employed, with specific consideration of male and female parents.

All relationships were tested for statistical significance at 0.05 level, which according to authorities is, neither too high nor too low for most social and educational research.

4. PRESENTATION AND ANALYSIS OF DATA

This Chapter is devoted to the presentation, analysis, and interpretation of the data obtained. It is divided into four major sections. The first section is concerned with the analysis of socio-cultural factors that affect girls' participation in NFBE in South Wollo. The second and third sections deal with socio-economic and institutional factors respectively. The responses to open-ended items and the statistical data obtained from the education offices of the sample *woredas* are discussed in the fourth section.

4.1 Socio-Cultural Factors Affecting Girls' Participation in NFBE

Table 1. Rank order of socio-cultural factors

Items	Rank					Mean
	E*	EG	NEG	P	ALL	
Educational background of parents	54 (3)	169 (4)	146 (6)	147 (5)	516 (4)	3.77
Religion of parents	40 (6)	88 (10)	116 (9)	83 (10)	327 (10)	2.39
Early marriage	55 (1)	202 (1)	168 (2)	153 (1)	578 (1)	4.22
Early pregnancy	55 (1)	195 (2)	168 (2)	151 (3)	569 (2)	4.15
Fear of sexual harassment, abduction or rape	33 (10)	122 (9)	129 (8)	133 (7)	417 (9)	3.04
Priority given to boys' education by parents	45 (4)	145 (7)	141 (7)	131 (8)	472 (7)	3.45
Girls' lack of interest in education	36 (9)	171 (3)	164 (4)	139 (6)	510 (5)	3.72
Girls' fear that they may not succeed in education	39 (7)	159 (5)	113 (10)	125 (9)	436 (8)	3.18
Low perception of the community toward girls' education	45 (4)	157 (6)	174 (1)	151 (3)	527 (3)	3.85
Lack of encouragement (support) of administrators	38 (8)	142 (8)	162 (5)	153 (1)	495 (6)	3.61

E* =Educators

EG =Enrolled girls

P =Parents

NEG =Non-enrolled girls

Table 1 indicates that early marriage and early pregnancy, which are interrelated factors, stood first and second respectively. Three groups of respondents ranked them *first* or *second* interchangeably, except parents who ranked early pregnancy *third*. Early marriage, in particular was ranked *first* by three groups of respondents and *second* by non-enrolled girls. Early marriage could be a critical indirect effect because as parents are preoccupied with early marriage of their daughters, they would not allow them to attend NFBE even in their early years of late childhood before marriage.

A low perception of the community towards girls' education was ranked *third*. Non-enrolled girls ranked this factor *first* while enrolled girls ranked it *sixth*. Parents and educators ranked it *third* and *fourth* respectively. Table 1 further shows that the *fourth* in rank was educational background of parents. Non-enrolled girls and parents ranked this factor *fifth* and *sixth* respectively while educators and enrolled girls ranked it *third* and *fourth* respectively. On the other hand, religions of parents, fear of sexual harassment, girls' fear of failure, and priority given to boys' education by parents were rated *least* by the respondents (they were ranked *tenth*, *ninth*, *eighth* and *seventh* respectively).

It can be observed from Table 1 that there are variations in the rating of the effects of the socio-cultural factors under treatment on girls' NFBE participation among the different groups of respondents. To see whether the variations are significant, a t-test was employed. Accordingly, as indicated in Table 2 below, a significant difference was found between educators and parents ($p < .01$, $df = 50$), enrolled girls and non-enrolled girls ($P < .01$, $df = 83$), as well as between the respondents of the two *woredas* ($P < .01$, $df = 135$). These findings imply that there are no common views on the effects of socio-cultural factors among the different groups of respondents who have a key stake in girls' education.

Table 2. Means, standard deviations, and t-test values of the socio-cultural factors, by enrolment, supply/demand and *woreda*.

Variables	Category	N	Mean	SD	t-statistic
Enrolment	Enrolled girls	45	34.96	5.31	-2.689
	Non-enrolled girls	40	38.33	6.24	$df = 83$
Supply/demand	Educators	12	36.17	3.97	1.029
	Parents	40	34.33	5.78	$df = 50$
<i>Woreda</i>	Kalu	69	39.33	5.01	8.774
	Worebabo	68	32.34	4.29	$df = 135$

$P < .01$

Giving due consideration to parents (who are decisive in girls' enrolment), a two-way ANOVA was employed to establish if there are significant variations among parents with different educational levels and different family sizes by gender. As indicated in Tables 3, 4, 5, and 6, there were no significant variations.

Table 3. Number of cases, means, and standard deviations of socio-cultural factors, by educational level and gender

Level of Education	Gender	N	Mean	SD
Illiterate	M	3	34.67	6.35
	F	3	33.33	7.57
Literacy	M	10	33.30	5.85
	F	13	34.23	5.79
Primary Education	M	6	35.50	5.72
	F	4	36.50	7.72

Table 4. Two-way ANOVA for socio-cultural factors, by education level and gender

Source	SS	df	MS	F
Education Level (A)	34.591	2	17.295	.457 (NS)
Gender (B)	.283	1	.283	.007 (NS)
AXB	6.608	2	3.304	.087 (NS)
Residual	1248.241	33	37.825	
Total	1289.231	38		

NS = Not significant

Table 5. -Number of cases, means, and standard deviations of socio-cultural factors, by family size and gender

Family size	Gender	N	Mean	SD
Small (1-2)	M	3	35.11	5.57
	F	5	34.00	6.87
Medium (3-5)	M	8	33.43	5.59
	F	12	36.18	5.47
Large (6 and over))	M	8	34.56	5.50
	F	4	34.25	8.42

Table 6. Two-way ANOVA for socio-cultural factors, by family size and gender

Source	SS	df	MS	F
Education Level (A)	17.159	2	8.580	.238 (NS)
Gender (B)	17.534	1	17.534	.486 (NS)
AXB	16.026	2	8.013	.222 (NS)
Residual	1190.323	34	36.070	
Total	1249.744	39		

NS = Not significant

These findings imply that the sex of parents, parents' educational level, and family size do not play a significant role in the socio-cultural variables of girls' NFBE participation.

4.2 Socio-Economic Factors Affecting Girls' Participation in NFBE

Four items were included in the questionnaire. The respondents were again required to rate the effect of each socio-economic factor on girls' participation in NFBE. The results are summarized in Table 7.

It can be seen from Table 7 below that parents' low expectation of the returns of girls' education ranked *first*. All groups of respondents ranked it top except for the enrolled girls who ranked it *second*. The respondents perceived parental demand for girls' household labour as the second most important factor. Here again, all groups of respondents ranked it *second* except for the enrolled girls who ranked it *first*.

These findings imply that parents are unlikely to allow their daughters to enrol unless special arrangements that will increase girls' employment opportunity or introduce technologies to reduce the burden of chores are introduced. Low parental income causing girls work on the farm and high direct costs of literacy programmes ranked *third* and *fourth* uniformly by all groups of respondents respectively.

Table 7. Rank order of socio-economic factors

Items	Rank					
	E	EG	NEG	P	All	Mean
High direct costs of literacy programmes	20 (4)	97 (4)	53 (4)	57 (4)	227 (4)	1.66
Parents' demand for girls' household labour	48 (2)	175 (1)	159 (2)	120 (2)	502 (2)	3.66
Low parental income causing girls to work on the farm	34 (3)	102 (3)	82 (3)	82 (3)	300 (3)	2.19
Parents' low expectation of the returns to girls' education	50 (1)	161 (2)	183 (1)	151 (1)	545 (1)	3.98

From Table 7, it can be observed that there are variations in the rating of the effects of the socio-economic factors under treatment on girls' NFBE participation among the different groups of respondents. To establish if the variations are significant, a t-test was employed.

Table 8. Means, standard deviations, and t-test values of the socio-economic factors, by enrolment, supply/demand and *woreda*

Variables	Category	N	Mean	SD	t-statistic
Enrolment	Enrolled girls	45	12.11	2.36	.715
	Non-enrolled girls	40	11.30	1.51	df=83
Supply/demand	Educators	12	12.67	2.67	3.491
	Parents	40	10.10	2.10	df=50
<i>Woreda</i>	Kalu	69	11.46	2.76	-.093
	Worebabo	68	11.50	1.63	df=135

P<.005

According to the t-test in Table 8, a significant difference was found between educators and parents ($p < .005$, $df = 83$), enrolled girls and non-enrolled girls ($P < .005$, $df = 50$), as well as between the respondents of the two *woredas* ($P < .005$, $df = 135$). These findings imply that there are no

common views on the effects of socio-economic factors among the different groups of respondents who have a key stake in girls' education.

Giving due consideration to parents, who are decisive in girls' enrolment, a two-way ANOVA was employed to see whether there are significant variations among parents with different levels of education and different family sizes by gender. As indicated in Tables 9, 10, 11 and 12, there were no significant variations.

Table 9. Number of cases, means, and standard deviations of socio-economic factors, by educational level and gender

Level of Education	Gender	N	Mean	SD
Illiterate	M	3	9.00	2.00
	F	3	10.33	2.52
Literate	M	10	9.80	2.70
	F	13	10.15	1.77
Primary Education	M	6	10.33	2.50
	F	4	11.50	1.73

Table 10. Two-way ANOVA for socio-economic factors, by educational level and gender

Source	SS	df	MS	F
Education Level (A)	7.714	2	3.857	.775 (NS)
Gender (B)	6.463	1	6.463	1.298 (NS)
AXB	1.800	2	.900	.181 (NS)
Residual	164.292	33	4.979	
Total	177.077	38		

NS = Not significant

Table 11. Number of cases, means, and standard deviations of socio-economic factors, by family size and gender

Family size	Gender	N	Mean	SD
Small (1-2)	M	3	12.00	1.73
	F	5	11.40	1.34
Medium (3-5)	M	8	10.00	2.73
	F	12	9.92	1.78
Large (6 and over))	M	8	8.88	2.03
	F	4	10.25	2.06

Table 12. Two-way ANOVA for socio-economic factors, by family size and gender

Source	SS	df	MS	F
Education Level (A)	22.330	2	11.165	2.678 (NS)
Gender (B)	.428	1	.428	.103 (NS)
AXB	5.259	2	2.630	.631 (NS)
Residual	141.742	34	4.169	
Total	173.600	39		

NS = Not significant

These findings imply that sex of parents, parents' educational level, and family size do not play significant role in the socio-economic variables of girls' NFBE participation.

4.3 Institutional Factors Affecting Girls' Participation in NFBE

As Table 13 below reveals, shortage of primers, lack of age-specific literacy classes, and lack of space in literacy classes are the most important institutional factors in determining girls' enrolment in NFBE programmes (they were ranked *first*, *second* and *third* respectively). Lack of primers, particularly, was identified as critical by all groups of respondents and its total score is much greater than that of the other two. The *fourth* and *fifth* in rank are shortage of well-prepared teachers and lack of day-care centres for younger siblings, respectively.

On the other hand, Table 13 shows that the least important institutional factors are shortage of female teachers, lack of nearby primary schools, and distance from home to literacy centres (they ranked *twelfth*, *eleventh* and *tenth* respectively). The other less important institutional factors are schedule of literacy programmes and lack of separate toilet for girls, ranking *ninth* and *eighth* respectively. It can also be observed from Table 13 that there are wide variations in the rating of the effects of the institutional factors under treatment on girls' NFBE participation among the different groups of respondents. To see whether the variations are significant, a t-test was employed.

Table 13. Rank order of institutional factors

Item	Rank					Mean
	E	EG	NEG	P	ALL	
Absence of enough female teachers	48 (1)	102 (3)	83 (7)	78 (8)	303 (4)	2.21
Distance from home to literacy centres	36 (4)	71 (9)	75 (9)	62 (2)	244 (11)	1.78
Lack of age-specific literacy class	28 (8)	78 (6)	65 (12)	75 (9)	246 (10)	1.80
Lack of enough space	30 (6)	138 (2)	81 (8)	104 (2)	353 (2)	2.58
Lack of day-care centre for younger siblings	30 (6)	84 (4)	87 (6)	104 (2)	305 (3)	2.23
Lack of water in literacy centre	40 (3)	63 (12)	109 (2)	84 (6)	296 (5)	2.16
Lack of separate toilet for girls	26 (10)	68 (10)	94 (4)	85 (5)	273 (6)	1.99
Schedule of the literacy program	31 (5)	68 (10)	95 (3)	71 (10)	265 (8)	1.93
Season of the literacy programme	22 (12)	73 (8)	89 (5)	80 (7)	264 (9)	1.93
Shortage of primers	23 (11)	81 (5)	75 (9)	90 (4)	269 (7)	1.96
Lack of primary school	44 (2)	152 (1)	156 (1)	118 (1)	470 (1)	3.43
	28 (8)	76 (7)	69 (11)	71 (10)	244 (11)	1.78

Table 14. Means, standard deviations, and t-test values of the institutional factors, by enrolment, supply/demand and *woreda*.

Variables	Category	N	Mean	SD	t-statistic
Enrolment	Enrolled girls	45	23.60	6.35	-3.470 df=83
	Non-enrolled girls	40	27.95	5.03	
Supply/demand	Educators	12	32.33	6.26	3.566 df=50
	Parents	40	26.05	5.07	
<i>Woreda</i>	Kalu	69	24.67	7.53	-3.373 df=135
	Worebabo	68	28.02	3.49	

P< .005

As indicated in Table 14, a significant difference was found between educators and parents ($p < .005$, $df = 50$), enrolled girls and non-enrolled girls ($P < .005$, $df = 83$), as well as between the respondents of the two *woredas* ($P < .005$, $df = 135$). These findings imply that there are no common views on the

effects of institutional factors among the different groups of respondents who have a key stake in girls' education.

Giving, once again, due consideration to parents, who are decisive in girls' enrolment, a two-way ANOVA was employed to see if there are significant variations among parents with different levels of education and different family sizes by gender. As indicated in Tables 15, 16, 17, and 18, there were no significant variations. These findings imply that sex of parents, parents' educational level, and family size do not play a significant role in the institutional variables of girls' NFBE participation.

Table 15. Number of cases, means, and standard deviations of institutional factors, by educational level and gender

Level of Education	Gender	N	Mean	SD
Illiterate	M		3	7.81
	F		3	2.00
Literacy	M		10	5.32
	F		13	4.42
Primary Education	M	6	28.00	5.44
	F	4	27.75	4.27

Table 16. Two-way ANOVA for institutional factors, by educational level and gender

Source	SS	df	MS	F
Education Level (A)	52.419	2	26.075	1.047(NS)
Gender (B)	70.515	1	70.515	2.831(NS)
AXB	66.411	2	33.205	1.333(NS)
Residual	822.073	33	24.911	
Total	985.897	38		

NS = Not significant

Table 17. Number of cases, means and standard deviations of institutional factors, by family size and gender

Family size	Gender	N	Mean	SD
Small (1-2)	M	3	25.00	6.25
	F	5	26.50	3.56
Medium (3-5)	M	8	27.13	6.10
	F	12	26.83	4.49
Large (6 and over))	M	8	23.88	5.62
	F	4	25.75	4.79

Table 18. Two-way ANOVA for institutional factors, by family size and gender

Source	SS	df	MS	F
Education Level (A)	32.749	2	16.375	.618 (NS)
Gender (B)	10.251	1	10.251	.387 (NS)
AXB	10.650	2	5.325	.201 (NS)
Residual	900.967	34	26.499	
Total	961.900	39		

NS = Not significant

Table 19. Comparative importance of the three groups of factors

Groups of Factors	Numbers of Items in Categories of Rating				
	Very high (4.50 and above)	High (3.50-4.49)	Medium (2.50-3.49)	Low (1.50-2.49)	Very low (Below 1.50)
Socio-cultural	-	6 (60.00%)	4 (40.00%)	-	-
Socio-economic	-	2 (50.00%)	-	2 (50.00%)	-
Institutional	-	-	2 (16.67%)	10 (83.33%)	-

From Table 19, it can be seen that out of ten socio-cultural factors included in the study, six (60.00%) were said to have high effects on girls' NFBE participation. The effects of the remaining four (40.00%) were rated

medium. Table 19 further shows that the effects of two (50.00%) socio-economic factors fall under the high category while those of the remaining two (50.00%) fall under the low category.

On the other hand, out of 12 institutional factors treated in the study, the respondents rated none as *high*. Only two were rated *medium* while the remaining ten factors were rated to have low effects. From these findings, it can safely be concluded that institutional factors had the least effect on girls' participation in NFBE programmes in South Wollo and that socio-cultural factors are determinant.

4.4 Analysis of Responses to Open-ended Items and Statistical Data Obtained from Education Offices of the Sample *Woredas*

4.4.1 Responses of Educators

The first open-ended question presented to educators was, "Are there any other factors (other than those listed in the Likert-table) that affect girls' participation in NFBE programmes?" A good number of the respondents emphasized taking care of siblings as an important factor. It was seen earlier that lack of day-care centres ranked *fourth* by educators while enrolled girls ranked it *second*. Its overall rank was *fourth*.

The other question posed to educators was whether there are any NGOs, Churches/Mosques, or other Governmental Organizations that provide NFBE programmes in their zone, *woreda*, or *kebele*. There was none in the sample *kebeles* and *woredas*. Information from the Zone Education Desk reveals that there is only one in the zone. A local NGO called, "Yegodana Tedadari Wodajoch Mahiber" (which means Forum for the Street Child Friends-FSCF), has initiated an alternative basic primary education for street children and children from the poorest families in Dessie.

FSCF was established in 1997 with an objective of supporting the education of street children and children from the poorest families in Dessie. It initiated an alternative basic primary education programme known as ACCESS-FSCF, which is a replica of ACCESS-AAE (see part two). It receives financial and technical support from AAE, and provides an intensive two-year basic education programme. Its curriculum has been accredited by the Regional Education Bureau. Children who successfully complete the two-year programme are transferred to formal schools at grade four. FSCF provides financial and advisory assistance to children who join formal schools. In 1995 E. C. there were a total of 888 participants.

It was stressed in part two that NFE could be given by a variety of governmental and non-governmental organizations. It was also stated in part one that significant involvement of NGOs in providing NFBE in South Wollo could be expected as several local and international NGOs are

working in food aid and rehabilitation activities. It is, therefore, unclear to see why only one local NGO is taking part.

The respondents were also asked whether children who successfully complete literacy programmes were transferred to primary schools. All the respondents confirmed that children transfer to schools but statistical data were not available. Regarding the regulation of transfer, the respondents said that the circular of the Regional Education Bureau allows children who complete all the stages of the literacy programme to join grade five.

According to the respondents, the major problems encountered in providing NFBE to children include the following:

- High drop-out rate and absenteeism;
- The wrong view among all sections of the community that providing NFBE is the sole task of educational institutions;
- Low attention given to NFE by government authorities;
- Parents' lack of interest to the education of their children, and
- Shortage of well-trained teachers.

As mentioned earlier, data regarding literacy participants and literacy centres were obtained from the Education Offices of the sample *woredas*. The data are summarized in Tables 20 and 21 as follows.

Table 20. Literacy participants in the sample *woredas*, by sex

Year (E. C.)	Kalu			Worebabo		
	M	F	All	M	F	All
1991	4935	4817	9572	2944	3050	6994
1992	3815	3285	7100	1101	1178	2279
1993	4263	3478	7741	989	1093	2082
1994	3040	2413	5453	1107	1035	2142
1995	2065	1389	3454	1116	951	2067

From Table 20, it can be observed that female participation is in most cases less than male participation, and the total number of participants is decreasing.

Table 21. Literacy centres in the sample *woredas*, by type of building

Year	Kalu					Worebabo				
	TRL*	GRL	ST	SC	ALL	TRL*	GRL	ST	SC	ALL
1991	4	50	15	16	85	4	57	-	14	11
1992	4	60	20	14	98	3	27	-	7	37
1993	6	88	15	16	125	3	33	-	3	39
1994	8	70	12	10	100	-	72	-	3	75
1995	4	39	10	17	70	-	33	-	3	35

TRL* =Tin roofed literacy house ST =Shade of tree
 GRL =Grass roofed literacy house SC =School

The following observations can be made from Table 21.

- Most literacy centres in both *woredas* are thatch roofs. The use of the shade of trees has also been significant in Kalu for years. This shows economic and/or budget constraints. One could normally expect tin roofed literacy centres in all or most cases.
- The number of literacy centres has decreased eventually as participants decreased.
- The number of schools which served as literacy centres in Worebabo decreased significantly from year to year. This could be the effect of the school-feeding project. A school-feeding project run by the World Food Programme and the Ministry of Education supports several schools in Worebabo, as a result of which, enrolment increased significantly (Eshetu 2003). If most children enrol in regular schools, opening literacy classes in those schools may not be necessary.

The respondents were further asked how many of those literacy centres arranged age-specific classes for children. Their reply was that none of them arranged such classes. Actually, as we saw in Table 20 earlier, even the statistical data of participants were not made available by age. This reveals that the issue of age-specific literacy class arrangement has totally been neglected.

4.4.2 Responses of Enrolled Girls

Enrolled girls were also asked to relate any other factors that affect girls' NFBE participation. Some of them re-emphasised low motivation of girls. They suggested that compulsory basic education would solve the problem.

The other question posed to them was, "Why do you attend a literacy programme rather than formal school?" Their response were:

- *Literacy programme is cheaper, and,*
- *Parents would not be willing to send us to formal schools.*

The respondents were further asked whether they thought they would continue their education in school after completing the literacy programme. The vast majority of them said they did not think so. Their reasons are as follows in their order of importance.

- *My parents will not be willing;*
- *My parents will force me to marry;*
- *My parents are poor and I have to help them, and,*
- *I would rather marry.*

4.4.3 Responses of Non-Enrolled Girls

Non-enrolled girls were also asked to list any other factors that affect girls' NFBE participation. A good number of them gave unwillingness of parents as an important factor. They suggested compulsory basic education as a solution. The other question included was whether they have ever enrolled in a literacy programme or school and to tell their reasons for dropping-out if their answer was *yes*, and to tell the reasons for non-enrolment and if *no*. Their reasons are listed down as follows in their order of importance.

Reasons for dropping-out from literacy programme/school

- *My parents needed my labour;*
- *I left in search of work to help myself, and*
- *I faced a health problem.*

Reasons for non-enrolment:

- *My parents need my labour; and,*
- *My parents are not aware of the importance of education.*

4.4.4 Responses of Parents

Likewise, parents were also required to list down any other factors that affect girls' participation in NFBE in their *kebeles/woredas*. Some female parents mentioned unwillingness of husbands as a barrier. They suggested continuous awareness-raising programmes as a solution. Unwillingness of male parents could be critical because in South Wollo fathers make the final decision on family matters.

Eleven parents (27.50%) have let some of their children enrol either in literacy programmes or in schools. The reasons given by parents for non-enrolment for their children were that their children are too small (young) to enrol, and that their daughter has married early.

Finally, parents whose children enrolled in literacy programmes were asked why they sent their daughters to a literacy programme rather than to formal schools. Most respondents identified only one reason. They said that there would be a chance for them to continue their education in the formal school after completing their literacy education. This has an important implication on the need for the smooth transfer of children from literacy programmes to schools or vice versa.

A discussion of the findings of the study is summed up as follows.

- Socio-cultural factors were found to be the most important factors in determining girls' participation in NFBE. As indicated in part two (discussed also in part four), several studies show that socio-cultural factors, especially early marriage, early pregnancy and low perception of the community towards girls' education have strong association with girls' enrolment and attainment.
- Early marriage and early pregnancy, parents' low expectation of the returns of girls' education, and parental demand for girls' household labour were found to have the highest effects on girls' participation among socio-cultural and socio-economic factors treated in the study respectively. While early marriage and early pregnancy are interrelated factors, early marriage, in particular can also have an indirect influence. As parents are preoccupied with early marriage of their daughters, they would not allow them to attend NFBE, even in their early years of late childhood before marriage. On the other hand, parents are unlikely to allow their daughters to enrol unless their expectations of the returns of girls' education is raised by increasing girls' paid work opportunity. They are also unlikely to allow their daughters to enrol unless home technologies are modified to ease off household activities so as to save time that can be devoted to NFBE programmes.
- The findings of the study reveal that the issue of arranging age-specific classes that give emphasis to girls has been totally neglected. Even statistical data of participants had not been organized age-wise. Yet, the respondents rated lack of age-specific literacy classes that give emphasis to girls as the second most important institutional factor. Arranging age-specific literacy classes that do give emphasis to girls, as shown in chapter two of

the study, is an important institutional mechanism to encourage enrolment and attainment.

- The respondents identified lack of interest (unwillingness) of parents to send their children to schools as a critical problem. They also said that a high dropout rate and absenteeism were serious problems. High dropout rate and absenteeism could partly be explained by parental demand for their children's' labour. This is particularly true for girls because, as we saw earlier, parental demand for household labour was one of the most important factors that affected their participation. This contradicts the plan of the Ethiopian Government to universalise primary education by the year 2015.
- It was stated earlier that only one local NGO is engaged in providing NFBE to children in South Wollo. To see only one local NGO taking part in a zone where several local and international NGOs exist is a sad thing. There is a consensus nowadays that BE is the basis for sustainable development and that governments alone cannot meet the learning needs of all citizens by expanding elementary schools in LDCs. Yet, those NGOs in South Wollo are involved in one way or another in development activities.
- Literacy programmes were not being provided in several *woredas* in South Wollo due to a budget constraint faced in the fiscal year (1995 E. C.). Budget constraint is actually a common phenomenon in relation to non-formal education. Authorities of education institutions allocate budget to it only if some money is left over after allocating to other programmes. To re-emphasise what has been said earlier, Zeleke (2001,2), citing several authorities, said, " Education managers are mostly observed relegating non-formal basic learning programmes to the side and consider them as ad hoc, peripheral and unsuitable." This reminds us that sincere commitment, not simply lip service, is what is needed on the part of education managers themselves.

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The major objective of the study was to identify the basic problems of the non-formal route of girls' basic education in South Wollo and to seek for mechanisms of alternative non-formal provisions. To attain the objective of the study, data were secured from a sample of educators, enrolled girls, non-enrolled girls, and parents using questionnaires and a structured

interview. Data were analysed using rank order, percentage, t-test, and f-test. The major findings of the research are the following.

- Socio-cultural factors were found to be determinant of girls' participation in NFBE while institutional factors turned out to have the least effect. Sixty percent of the socio-cultural factors, but none of the institutional factors, included in the study were rated *high*. Only 16.67 % of institutional factors were rated *medium* while the rest (83.33 %) were rated *low*.
- Exceptionally high scores were found for some specific socio-cultural and socio-economic factors. The socio-economic factors include: parents' low expectation of the returns of girls' education, parental demand for girls' household labour, and early marriage and early pregnancy.
- Significant differences were found in the rating of the effects of socio-cultural, socio-economic, as well as institutional factors on girls' NFBE participation between educators and parents, enrolled girls and non-enrolled girls, and between the respondents of the two *woredas*.
- There were no significant differences in the rating of the effects of socio-cultural, socio-economic, as well as institutional factors on girls' NFBE participation among parents with different levels of education (illiteracy, literacy, primary education), and different family sizes (high, medium, low) by gender.
- It was found out that NGOs, churches/mosques, and governmental organisations (other than educational institutions) were not taking part in providing NFBE. Only one local NGO was providing non-formal (alternative) basic primary education in Dessie for street children.
- The issue of arranging age-specific literacy classes that give emphasis to girls had been totally neglected. Such literacy classes had never been arranged in the last five years. Even the statistical data of participants had not been organized in terms of age. Yet, the respondents rated lack of age-specific literacy classes that give emphasis to girls as the second most important institutional factor.
- The respondents further identified a high drop-out rate and absenteeism, the wrong view among all sections of the community that providing NFBE is the sole task of education institutions, low attention given by government authorities to NFE, parents' lack of interest to educating their children, and shortage of well-trained teachers as basic problems encountered in providing NFBE to children.

5.2 Conclusion

It can safely be concluded from the findings cited above that success in girls' NFBE in South Wollo largely depends on interventions on the demand side. This would require institutional arrangements such as the provision of wood and water supplies, childcare centres, and other forms of public support. It can also be safely concluded from the findings that the issue of Girls' Non-formal Basic Education is not well discussed among critical stakeholders to achieve shared values and determination to the cause. Effective provision of alternative non-formal basic education necessitates shared values, sincere commitment, and active involvement of all parties—parents, educators, government, and NGOs. Based on the findings and the conclusions reached, some recommendations are suggested.

5.3 Recommendations

- Tremendous work has to be done to change the attitudes of the community for realizing success in girls' NFBE. The fight against harmful traditional practices, including early marriage, should be strengthened. Serious measures have to be taken to bring into effect the law of the country that forbids early marriage at a larger scale.
- A linkage between NFBE programmes and schools that makes the transition to higher levels of education clear would be helpful in increasing girls' participation.
- Educational leaders and administrators should give attention to the issue of arranging age-specific NFBE classes. It would be an exceptionally effective tool that costs little. They need to embrace it soon. Arranging age-specific literacy classes will be more effective if flexible class schedules that accommodate girls' work schedules and quotas for girls are adopted.
- It would be advisable to enforce a compulsory basic education law right now to effect the plan of the Government of Ethiopia to universalise primary education by the year 2015. The respondents of the study also share this opinion.
- Encouraging NGOs to take part in providing NFBE and providing them with technical assistance would be necessary. Church schools, Koranic schools, and non-formal primary schools by NGOs and others should be considered. Such provisions could effectively be used to serve girls simply by adopting quota systems for them. The experiences in this respect in Dessie and other parts of the country (discussed in detail in part two) can help a lot to devise alternative non-formal routes of girls' basic education in the zone.

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III. THE MEANS AND PROSPECTS TOWARDS REFUGEE SELF-RELIANCE: A STUDY OF DADAAB CAMP, KENYA

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Abstract: Proper management of refugees remains a challenge to the international community as we begin the 21st century. Currently there are over 20 million people categorized as refugees worldwide. The African continent has more than 30% of the world's refugees. Kenya currently hosts an estimated 235,000 registered refugees.

In Kenya, the official government policy has been one of confining refugees to camps. These camps are located in arid and semi-arid areas of the country. The main source of livelihood for the refugees in these camps is relief supplies from donor agencies. Provision of relief supplies is an important first step in dealing with displaced persons. But, however essential this humanitarian assistance may be, a mere provision of relief supplies is not enough. In the long-run, this must necessarily be accompanied by more concerns to establishing socio-economic structures that reduce dependence and increase self-reliance of refugees.

Refugees are a heterogeneous group of people with basic knowledge, skills and experience gained in their home countries. But these assets mostly remain unexploited, as is the case with refugee camps in Kenya. Given the dwindling donor support, hosting refugees is indeed becoming a burden. This study examines the refugee situation in Dadaab Camp and investigates the viability of durable solutions to the refugees problems. It analyses the options that make it possible for them to fend for themselves while at the same time making a contribution to the economy of the host country.

A field survey was conducted in the Dadaab refugee Camp. Several categories of respondents for the study were identified, sampled and interviewed. Multiple sampling techniques, which included systematic, random, quota and purposive sampling, were employed. 925 refugees were drawn for a detailed structured survey. A further sample of 20 refugee leaders, as well as 30 UNHCR officials was interviewed.

The findings reveal that the main source of livelihood for refugees in Dadaab Camp is relief supplies from donor agencies. The daily food ration has been on the decline due to reduction in donor funding, with the resultant

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hardships for the refugees. In efforts to supplement their inadequate supplies, a number of refugees engage in income generating activities. These are however beset by several hurdles. Based on the findings, the study makes suggestions towards a proper management of refugees.

1. INTRODUCTION

1.1 Introduction

In the recent past, economists have observed that a key element in the development process especially of developing societies is the creation of a conducive environment so that people can exploit their potentials to improve their welfare. As we strive to attain higher levels of development in these regions, one of the issues we have to address ourselves is that of displaced persons and refugee management.

Today, as we move into the 21st century, the phenomenon of the world's refugees is among the most complicated issues before the international community. Although the refugee phenomenon is a global problem, in Africa the situation is grave. One of the indicators of the seriousness of the refugee problem in Africa is the increasing growth rate of refugee population in the continent. In the early 1960s the refugee population of the continent was estimated at 500,000. By 1972, this number had increased to one million people, and six years later it reached four million. Currently, of the world's estimated twenty million refugees, Africa hosts the world's largest population of refugees (30%) (UNHCR 1999), and has the longest-standing refugee problem while remaining the least developed.

It is estimated that every second refugee in the world is an African and more than one half of these African refugees are found in Eastern and Central Africa. This region is a home for more than one quarter of the refugee population in the world. Apart from being an affront to human dignity, the refugee problem also contributes to the perpetuation of underdevelopment in Africa. This is because many people who should be actively involved in the development process of their respective countries are unable to do so on account of their situation.

In the case of Kenya, it has been observed that, of about the twenty million refugees worldwide, the country currently hosts about 200,000 registered refugees. These are mainly from Somalia and Ethiopia, with a few others from Sudan, Uganda, Democratic Republic of Congo, Rwanda, Burundi and Tanzania. The actual number could be higher than this since there are

spontaneously settled refugees and refugees that do not register themselves with the United Nations High Commissioner for Refugees (UNHCR).

UNHCR, the Government of Kenya and Non-governmental Organisations (NGOs) have been at the forefront of assisting the refugees in Kenya. Past programmes of assistance to refugees by these agencies mainly involved settlement in camps and provision of emergency and relief supplies. This has been the case since 1992. Emergency and relief supplies are important first steps in dealing with displaced persons. But, however essential this humanitarian assistance may be, merely coping with emergency situations and relief supplies is not enough. In the long run, this must necessarily be accompanied by a concern to move from emergency situations to establishing of social and economic structures that would reduce dependence and increase self-reliance among refugee communities.

Alternative strategies for responding to the refugee phenomenon are now being considered by the international community. Currently, much discussion is taking place at the UN as well as in other fora as the search continues for more effective ways to protect and assist refugees. The discussion points to the fact that the problems faced by refugees are both multi-dimensional and global. Thus, any approach or solution would therefore have to be carefully thought out, well-planned and comprehensively conceived with long term development initiatives. The above scenario essentially calls for research to come up with strategies towards sustainable programmes in which the refugees would be facilitated to support themselves while at the same time contributing to the development of the host country. It is against this background that this research project was conceived. It aims to make recommendations towards establishing the basis for durable solutions to refugee problems in order to make it possible for them to fend for themselves, while at the same time making a contribution to the economy of the host country through concrete refugee enterprises.

1.2 Problem Statement

Refugees are a heterogeneous group of people. This group possesses basic knowledge, skills and experiences gained in the refugees' home countries, which mostly remain unexploited in refugee camps such as those in Kenya. Skills among refugees are hardly catalogued and enhanced. Given the dwindling donor support, which is hardly adequate and the scarcity of resources in host countries, the refugee problem is indeed becoming a burden. This calls for the need to assist refugees to be more entrepreneurial by being creative and innovative in operating income-generating activities.

There are examples where refugees have been successfully integrated into the mainstream economy through farming, as happened in the refugee settlement schemes in Tanzania in the 1970s and 1980s. However, not all refugees can be farmers. Therefore, a question arises whether other ways could be found, through popular participation of the refugees, that could integrate them in a way that they will utilize their skills and at the same time contribute to the development of the host country. Herein lies the thrust of this research project. It seeks to examine the refugees in the Dadaab Camp within the wider context of efficient utilization of resources, income generation and entrepreneurial skills.

Furthermore, the study also explores ways and means of identifying and utilizing refugee skills so that they can be self-sufficient, with a view to enhance self-reliance and minimize dependence on relief. Towards this end, the study addresses itself to specific questions, such as: what is the economic lifeline of refugees in Dadaab Camp? What are the effects of relief on the refugees? What attempts are refugees making to become self-reliant? What entrepreneurial activities do refugees currently engage in for purposes of attaining self-sufficiency? What is the employment capacity and profitability of these activities? What other entrepreneurial channels can be opened up for refugees, and what is their potential in terms of employment creation, technology transfer, and etc?

Providing answers to these questions is considered as an important contribution to the continuing sensitisation and advocacy efforts geared towards the formulation and realization of durable solutions to the multi-faceted problems of refugees in Kenya in particular, and the East African region in general.

1.3 Study Objectives

The overall objective of the research project is to characterize the refugee population in Dadaab Camp in terms of available human resource base with a view to identifying the strategies in use and to suggest improvements in order to enhance the livelihood of the refugees. The specific objectives are to:

1. Establish the source and adequacy of refugee livelihood in Dadaab Camp;
2. Examine the attempts that refugees are making to become self-reliant and the problems they encounter;

3. Investigate the extent to which entrepreneurial activities among refugees can contribute to their self-sustainability and to the development of the host country, and
4. In light of identified issues, make policy recommendations towards refugee self-reliance in Kenya in particular, and the East African region in general.

1.4 Study Assumptions and Scope

The study was guided by four basic assumptions:

1. That a refugee, like any other person, is entitled to a minimum standard of livelihood;
2. That self-reliance is better than dependence on relief supplies, and that it is possible to move from relief to sustainable self-development;
3. That, given a conducive policy and economic environment, refugees can strive towards economic self-reliance, and
4. That refugees possess skills that can be exploited for both their benefit and that of the host country.

The scope of the study is confined to the Dadaab refugees camp in North Eastern Kenya. It is the largest refugee camp in Kenya and it holds refugees of different nationalities.

1.5 Study Significance

A study of efforts aimed at evolving a firm foundation for proper management of refugees in Kenya and the region is considered crucial and significant in several respects. Firstly, research in this area in the region is quite inadequate, and as a result, policy practitioners have no proper guide for decision-making. Hence, a research that provides the necessary data in the formulation of policy to assist refugees is an important agenda. Such research would highlight issues relating to refugees that have not been given serious academic considerations. It will also bring to the fore important policy proposals and implications regarding the way refugees are presently managed and what needs to be done for their proper management.

Secondly, despite a rapidly growing number of refugees in the country and in the region, one of the bottlenecks towards their proper management has been lack of data, particularly socio-economic data. A survey of skills, education and talents available among refugees has not been conducted and documented.

Such information is useful for identifying refugee needs, providing training, and for expanding spontaneous income generating activities among the refugees.

With renewed displacement crises adding to the already unparalleled numbers of refugees across Africa, the humanitarian assistance has suffered a shortfall, often ascribed to the so called 'donor fatigue'. Moreover, limited relief assistance has led aid agencies to concentrate on meeting only the basic subsistence needs of refugees, creating extreme dependency among them, and with little scope for developing their own potential in preparation for their eventual reinsertion in to the society.

Yet, enhancing this potential so that refugees may achieve a degree of self-sustainability in the livelihoods and direction in their lives may prove a constructive alternative to the prevailing regime of relief dependency. The viability and policy implications of this approach have yet to be explored in depth. This is what the current research project set out to do through empirical study of the refugee entrepreneurship at Dadaab Camp. It aimed to point the way to new policy initiatives capable of enhancing refugees' own prospects for their lives both while in exile and on return to their home countries.

The study is also justified by the critical need there is to produce greater understanding among all stakeholders, of refugees' potential and their strategic resourcefulness in improving and advancing their own lives. It also highlights the particular challenges faced by refugees and their strategies for turning these into opportunities. Furthermore, it points out the way to new policy initiatives capable of alleviating the burden put on host governments and the international community in responding to the seemingly never-ending demands of emergency assistance.

Finally, the study also makes an important contribution to build up a database on the general phenomenon of refugees. The data also constitutes an important literature on the emerging discipline of forced migration.

1.6 Methodology and Data

1.6.1 Study Area

This study was carried out in Dadaab Refugee Camp. The camp is situated in Dadaab town, which is located in Dadaab Division, Garissa District, in the North Eastern Province of Kenya. This Province borders Somalia to the East and Ethiopia to the North. The security situation in this region is very volatile

due to escalated banditry that has engulfed the whole province since dating back to the colonial period.

During the colonial period, this area was a closed off district that required a special pass to enter. Because of the artificially constructed colonial boundary, the Kenyan Somalis were separated from their kith and kin in Ethiopia and Somalia. However, strong cultural, political and economic ties with Somalia remained. The Somalis in this region had started a secessionist movement to join Somalia. The government responded by enacting state of emergency powers which remained in force till 1993.

The region has been neglected in terms of provision of infrastructure and development. As a result, the area has remained underdeveloped and isolated, and its population marginalized. Much of the nomadic population has increasingly resorted to cattle rustling, banditry and poaching, activities that have made the region very insecure to stay in. The camp was set up by the government of Kenya in conjunction with UNHCR in the early 1990s. Dadaab refuge complex consists of three refugee camps situated within a radius of 20 kilometres from each other.

This camp was purposely chosen for several reasons, which include, among others; it is the largest refugees camp in the country and is inhabited by refugees of several nationalities. The refugee population in this camp thus gives a representation of refugees in the country in terms of diversity of nationality and other characteristics.

1.6.2 Study Population

The population involved in this study consisted of three categories of people. The first category was the UNHCR staff both at the sub-office and in the field. The second category consisted of the officials and employees of implementing agencies operating in the camp. The last category consisted of the refugee population. A detailed survey of the refugees was conducted through their leaders and individually. At the time of the study, the total population of refugees in Dadaab Camp was 136,031 peoples. Of these, 66,697 (49%) were women while 69,352 (51%) were men.

1.6.3 Sampling and Sample Size

Several categories of respondents were identified and sampled. The identification took place during pilot survey. The identified categories were: UNHCR field staff, officials representing UNHCR partner agencies serving refugees (such as CARE), refugees involved in income generating activities

(IGAs), and refugee leaders. Government and Church officials were also among the sampled and interviewed groups.

Multiple sampling techniques were employed. These included systematic, random, quota and purposive sampling techniques. A sample of 925 refugees were drawn for a detailed structured survey. A further sample of 20 refugee leaders, as well as 30 UNHCR officials and implementing partners were interviewed.

1.6.4 Methods of Data Collection and Analysis

The survey was conducted during the months of January to March 2002. Several instruments were used for data collection. The information was gathered in four main ways. First, substantial secondary data was collected from various sources on the subject under study. The data so collected formed the background information for the detailed survey. Second, an in-depth discussion using an interview guide was held with employees of UNHCR and key officials of agencies involved in refugee management in the camp.

The third technique of data collection was the observation method. This technique was specifically used to enable the researcher to get a first hand look at the environment the refugees live in, how they go about their daily lives and how they manage their affairs.

Lastly, structured and semi-structured interviews based on a questionnaire were used to collect information from the sampled refugees and agency staff. The detailed interviews were conducted with the help of enumerators. These were selected from each of the various nationalities in the camp. The enumerators were people who spoke both the language of the respondents and English or Kiswahili. They worked for various agencies in the camp as volunteers, and had also acted as enumerators in previous researches at the camp.

All the relevant agencies operating in the camps and those involved in income generating activities for the refugees were interviewed in a more informal but systematic manner. The questionnaire for the refugees sought information concerning the type of income generating activities that they engage in, the profitability and employment capacity of these activities, problems experienced and what, from their experience, needed to be done to enhance refugee self-reliance. Focussed group discussions were also used to encourage respondents to analyse the current situation regarding their conditions of living and come up with joint suggestions towards self-reliance.

Two debriefing sessions were held at the end of the survey. One was with the head of the UNHCR sub-office and his field staff. The other was with the senior staff of implementing agencies operating in the camp. At the end of data collection, all the information was organized for analysis. The data was analysed using both descriptive and inferential statistics.

2. LITERATURE REVIEW

2.1 Introduction

Despite the magnitude of the refugee problem in Kenya and the East African region, the subject of refugee economy and enterprise has not received adequate attention in the literature, nor have broad based studies been carried out on this important topic. The review provided here is generated from two main issues:

- i) Refugees as economic resources especially utilising their skills and training for self-reliance and to the advantage of the host communities, and
- ii) Refugee assistance policy.

Before we review the literature, we consider first the definition of refugee and take a brief look at Kenya's refugee policy.

2.2 Refugee: Definition

For purposes of this study, the question of who is or is not a refugee is an important one as, in a way, it determines the degree of support and protection that genuine refugees receive, and the long-term resolution of their plight.

The first legal definition of a refugee was given by the 1951 UN Convention. Later on, the 1967 UN Protocol, relating to the status of refugees, amended this defines a refugee as a person who

...owing to well founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion is outside the country of his nationality and is unable or wing to such a fear is unwilling to avail himself of the protection of the country, or who not having a nationality and being outside the country of his former habitual residence is unable or owing to such fear unwilling to return to it (UN 1950).

This definition was developed as a result of the consequences of the Second World War. It was formulated in the context of post World War II Europe when millions of displaced people, affected by boundary shifts and changes in

government, existed in limbo (Hamrell 1967). The convention sought to define the rights of these individuals and the obligations of states that found themselves hosts of refugees for whom return to their own countries would have meant either persecution or instant death. However, this definition does not adequately cover the current scenario of refugees, especially of those in Africa.

Since World War II, the vast majority of refugees have not been found in Europe but in Africa, Asia and Latin America. The causes of the refugee phenomenon in these regions, particularly in Africa, are twofold and linked to the colonial domination. The first major wave of refugees in Africa was in the 1960s. The 1960s were a period of decolonisation and intensification of the struggle for independence on the part of the colonized Africa. Displacements of people from colonized regions resulted from the intensification of the struggle for political independence that led to the introduction of harsher and brutal measures of repression. This was the decade of the fastest growth in refugee population in Africa.

Secondly, there have been large displacements of people in post independent Africa, this being due to people fleeing post independence disturbances. These disturbances are partly a result of the colonial legacy. Social and political upheavals in some independent African states have resulted partly from the arbitrary boundaries created by the colonial powers and partly from the intolerance of governments of newly independent states, many of which were puppets of the former colonial masters. These waves of refugees are not adequately covered by the 1951 UN definition.

In 1967, the Organization of African Unity (OAU) convention, recognizing that certain situations causing refugee problems were not adequately covered by the UN definition, redefined it. Its definition incorporated the earlier definition of a refugee and added to it, any person who, *“..owing to external aggression, occupation, foreign domination or events seriously disturbing public order in either part or the whole of his country of origin or nationality is compelled to leave his place of habitual residence to seek refuge in another place outside his country of origin or nationality”* (OAU 1983). For purposes of this study, we will use the broad definition of the OAU.

2.3 Refugee Policy in Kenya

Kenya has been host to refugees, resulting from the political fluidity in the Great Lakes region and the Horn of Africa since the early 1960s. For four decades from 1960 to 1990, the country did not have an explicit refugee policy.

As a result, refugees were used to come in and mingle freely with Kenyans. The attitude towards refugees -both from the government and the people- was friendly and positive.

At this time, we find two categories of asylum seekers. One category consisted of refugees who moved to Kenya's major urban centres. Most of these, particularly the well educated, were able to find their way out of Africa through Kenya. Others remained in Kenya and settled into lucrative jobs in the urban centres. Another category consisted mainly of asylum seekers from Uganda.

During the political turmoil in Uganda in 1970s and 1980s, many Ugandans crossed over to Kenya. Some self-settled amongst communities speaking the same or similar indigenous languages. Others moved to various parts of the country and were integrated in to several sectors of the economy, most notably the education sector. A major characteristic of asylum seekers at this time was that they used their skills to support themselves.

The beginning of the 1990s coincided with a maximum influx of refugees into Kenya mainly from the Horn of Africa and the Great Lakes region. The refugee population reached a record number of 420,000 in 1990. Faced with such a large influx of asylum seekers, the government came up with a policy to control the movement of refugees. This policy rested on four basic premises (Obuya 2001):

1. A general recognition of the principles of asylum;
2. Determination to resist the integration of the majority of refugees into the economic and social life of the country;
3. The maintenance of refugee camps in remote areas close to the refugees' country of origin; and
4. An assumption that, pending their repatriation, responsibility for the refugees will be fully assumed by UNHCR and other donors.

The policy introduced by the government was quite rigid and restrictive. First, all the refugees were to be registered and then enclosed in camps. The camps were established by the government in collaboration with the UNHCR. These camps were located in the semi-arid parts of the country, far removed from both Kenyans and key economic activities in urban centres (Kagwanja 1998). In these camps the refugees were to rely for their subsistence on relief supplies and food aid from UNHCR and other donors.

Thus, from the late 1990s to date, the official government policy has been one of restricting refugees to enclosed camps. In practice, however, the government has been discriminatory in the implementation of this policy. Whereas the majority of refugees are kept in camps, the government has adopted an accommodating attitude towards the educated, politically well-connected, skilled and business classes. These are self-settled in towns. Often referred to as urban refugees, they operate freely in towns and own property either as individuals or together with Kenyans. They use their skills, whether professional or business, to support themselves. The Ethiopian refugees for instance have heavily invested in the transport sector in the country. In essence, the self-settled and urban refugees have rendered a major contribution to the growth of the economy.

The above category, however, form a small percentage of the total refugee population. The majority are confined in camps and depend mainly on relief supplies from donor agencies for their survival. The big question is, why can't mechanisms be created for encamped refugees to utilize their skills and energy to supplement their sustenance since they also possess skills which, if tapped, can assist them towards self-reliance.

2.4 Literature Review

Having defined who a refugee is and examined the refugee policy in Kenya, we note that the protection of refugee rights- especially the right to work, invest and lead a decent standard of living- remains a daunting challenge to the post cold war refugee protection (Kagwanja 1998). In Kenya in particular and to some extent in the region, refugees have tended to be regarded not as a resourceful group of individuals but as a burden.

They are assumed to be in competition with the locals on the labour market, to contribute to cluttering up of social services such as hospitals and schools, and are accused of inflating rents and aggravating shortage of consumer goods. Other negative effects of refugees cited in the literature include: security concerns, interstate tensions, social and political unrest, and environmental damage (Lukhoba and Cheluget 1992; Kagwanja 1998; Nowrjee 2000). These negative effects tend to fuel a growing incidence of discrimination, hostility and intolerance directed against refugees. Lack of researches or policy initiatives that counter such assumptions has rendered refugees more vulnerable.

This negative view is further propagated by beliefs that refugees come into their host countries with nothing. Added to this is the perception of most Aid workers. Most of them always feel that they know better about what is good

for refugees. This is reflected in most of the assistance programmes that hardly consider the feelings or needs of refugees. This character of relief aid translates into insensitivity towards refugee needs and preferences.

Thus, the nature and manner in which aid programmes are administered curtails the realization of the resourcefulness of refugees. Further, it inhibits the refugees from participating in enhancing their capacities and improving their lives. This attitude of aid agencies is also a key factor in pushing young refugee professionals to seek resettlement opportunities in North America and Europe, a practice that is contributing to the brain drain in Africa. While negative perceptions about refugees are increasingly popular, this study enquires into ways of turning the refugee dilemma into an opportunity for development.

In camp situations, resentment against refugees is perpetuated by the nature of assistance programmes. Often relief programmes target refugees to the exclusion of the hosting populations (Kathina 1997). This means assistance provided to refugees rarely benefits the hosts. Instead of integrating assistance with local plans and strategies, these programmes create an oasis of relatively better resources among poverty stricken environments. This generates resentment against refugees and further causes great tensions between refugees and the host communities.

The image of refugees as a problem rather than as people with a problem has obscured the reality that refugees are ready to put their energies into productive work towards their sustenance. Citing the advantage of refugees, the former President of Tanzania, Dr. Julius Nyerere, who was acclaimed for his sterling treatment of refugees, was quoted as saying: *"I like the refugees, they cultivate the country for me. But I have no money. You bring in the money"* (Nyerere 1983,20).

Cheluget and Lakhoba have also argued that refugees are an important source of foreign exchange which is greatly needed by poor host countries in Africa. While some refugees come with foreign exchange, others receive remittances from their relatives living abroad. Foreign exchange also comes into the country indirectly as relief aid to refugees through various non-governmental organizations. In fact, there is a body of research which contradicts the view that refugees are a mere burden. There are several studies which indicate that refugees are an important human resource that needs to be harnessed (Callamard 1994; Ayok 1990; Kok 1989; Kagwanja 1998).

Callamard (1994) carried out a study in Luwani camp in Malawi of Mozambican refugees. She indicates that both advantages and disadvantages accompany an influx of refugees. Whereas there was one identifiable negative impact, the loss of land to the refugees by the local people, there were many more positive impacts. The main advantage of having the refugees as expressed by the local Malawians themselves was development, which was lacking previously. This included:

- Infrastructure, including the construction of market places, roads, hospitals and schools was undertaken and this benefited the locals.
- The presence of refugees generated a vibrant business with women as the main actors. It also facilitated trade between refugees and the local population and this enabled the locals to meet their other requirements like paying fees for their children.
- The sale by refugees of relief food items also provided the locals with access to alternative sources of food, which they could not afford in the past.

Kagwanja (1998) cites the case of Ethiopian refugees in Kenya. They have been able to utilise their skills to not only earn a living for themselves, but also to provide a service and jobs to Kenyans. He argues that refugee participation in the economy is a sure way of ensuring their self-reliance in exile, and a positive contribution to the host society despite the prevailing anti-refugee sentiment throughout the world. Likhoba (1993) observes that the involvement of Ethiopian refugees in the Kenyan economy offers direct employment to hundreds of Kenyan youths as well as providing revenue and other indirect jobs in other sectors. Some of the indirect forms of employment include jobs in the motor-vehicle insurance industry, revenue to the government as a result of such motor vehicle premiums, amongst others.

Kok (1989) studied the socio-economic impacts of the self-settled refugees in Kasala, Eastern Sudan. His main conclusion was that the congeniality of the hosting area determines the survival strategies of self-settled refugees. He observes that in Kasala region, specific factors mitigated the socio-economic and socio-cultural burden of refugees, and maintains that the alleged helplessness of the refugees is a myth. He further argues that the policy of encampment as happens in Kenya has little chance of success, and the alternative of spontaneous settlement deserves more investigation than has hitherto been the case.

Nowrojee (2000) examined the refugee phenomenon within the broad framework of refugees and development. He contends that assistance to refugees should be linked with development for all in the area, refugees and locals alike and that refugees need to be given equal rights with the surrounding nationals with respect to all practical and every day legal situations affecting their life, work, education and sustenance.

Other studies by Hansen (1979, 1981, 1982); Wilson (1992), and Harrel-bond (1996) have suggested that, given a chance, a large proportion of refugees would choose to self-settle and forego assistance for a variety of reasons, the main one being the desire to maintain control over their own lives. Most refugees agree that if the environment were enabling, they would engage in productive activities and meet some of their needs outside the assistance nets. However, laws and administrative inhibitions make it difficult for refugees to acquire jobs, skills and training, or to undertake business activities. This renders them heavily dependent on the relief programmes. Even those refugees who find salaried employment remain insecure as the host government can revoke their work permit at will.

Studies from other parts of the world help to reinforce the view that with a conducive policy environment and proper practices refugees can take care of themselves. For instance, in 1984 the Norwegian Refugee Council and the Austrian Relief Committee initiated a programme called Assistance to Skilled Afghan Refugees (ASAR). This project aimed at empowering refugees to utilise their skills for their upkeep. This assisted them to rebuild their lives in exile. If such programmes are properly introduced, capacity building can be enhanced to improve refugee sustenance and self-reliance.

Uganda has experimented with encouraging the settlement of refugees within the local community. In one such settlement the government made available 5000 square kilometres of land to help Sudanese refugees rebuild their lives in integrating with the local community. The UNHCR provided development assistance such as roads, wells and health centres to benefit the refugees and the host community. In justifying this approach, Jaber Ssali, the Uganda's Minister for Local Government, observed:

...There is no way you can think of sending back or encouraging people to go back to a situation from which they ran away. You see, the situation in Southern Sudan has been permanently hostile. So we thought that instead of always hoping to ask for food from the international community or from

UNHCR, why don't we think in terms of integrating many of these refugees (Focus 1990).

Such flexible schemes are intended to assist refugees to reach economic and social self-sufficiency, and to provide viable amenities to both the refugees and the host community. This essentially leads to harmonized development of the whole region. In support of these mixed settlements, Black (1994) argues that the separation of refugees from local communities exacerbates their marginalization onto the poorest quality, and probably least accessible land.

In a nutshell, events of the recent past are casting doubt on the cost effectiveness of international relief, some of which are planned and managed on the basis of incorrect assumptions and mixed political and economic motives (Wilson 1992). In echoing this, Larbu Mebtouche, UNHCR's senior economist and planner, has noted:

In the post cold war era, it has become increasingly difficult to raise funds to cater for and maintain refugees in many countries ... beyond the emergency phase. Donors are demanding solutions to refugee problems ... The buzzword now is think of solutions to set up a strategy for self reliance at the earliest stage (UNHCR 1990).

In essence, aid programmes have been poor at harnessing the skills of refugees. The question, therefore, becomes, how can refugees' skills be utilised for their own benefit and that of the host community? Several scholars have linked the failure of harnessing such individual skills to the continued perpetuation of relief assistance (Harrell-Bond 1996).

As Lukhoba and Cheluget (1992) have consistently argued, a bundle of belongings is not the only thing a refugee brings into his country of asylum. Alongside this they also bring certain skills that could be useful to the development of host countries if properly utilised. The challenge of the humanitarian assistance systems lies in harnessing these skills and assisting refugees to seize opportunities that may present themselves during exile.

Kibreab (1998) notes that, refugees who have managed to go through the two stages within the refugee cycle of depression and adjustment, reach a third phase where they begin to feel they need to get on with their lives. During this phase refugees show a lot of initiative. Helpers therefore need to be sensitive and provide opportunities that help boost and nurture the capacities of such refugees.

Undoubtedly, most refugee situations in Africa stay long enough to reach this third stage identified by Kibreab. In Kenya and the East African region, several refugee situations could be said to have reached this stage, and whether refugees have become good risk takers is an important research question.

Besides facilitating for the injection of skills, refugees have among them skilled professionals, including teachers, doctors and lawyers, amongst others, whose skills can be used for their benefit and that of the host communities. The case of Ugandan and Sudanese secondary school teachers in the 1970s and 1980s is one where refugees were utilised to develop the education sector in Kenya.

In conclusion, we note that an environment of emergency relief has tended to dominate refugee work in Kenya and the Eastern and Central African regions. This has resulted due to an approach that has emphasized programmes designed to address refugees' immediate needs, with little effort being made to identify long term durable solutions. Refugee crises have tended to be treated as isolated instances and addressed by short-term crises management programmes. Furthermore, relief operations are frequently run in an authoritarian way, and principles of development such as supporting the refugee communities' own initiatives are hardly encouraged. It is assumed that the agency-managed operations are more efficient and that the refugee community is not able to organize and support itself.

The narrow conceptualisation of the refugee situation and the subsequent emphasis on emergency relief programmes is likely to have negative effects on both the refugees and the host population. This needs rethinking. Refugees' skills, potential and economic activities can be mobilized for the development of both refugees and the host population.

There is need to exploit, with a view to adopting, new approaches such as the one recommended at the second international conference on assistance to refugees in Africa (ICARA II) which called for a shift of refugee assistance towards self-development according to the saying: "*Give a man fish and you feed him for a day, teach a man to fish and you feed him for a lifetime*" (Hopkins and Khasianis 1990). ICARA II recognized the need for refugee communities to be enabled to become economically self-reliant as quickly as possible.

Another area of concern is related to the policy and practice of assistance. As noted earlier, in Kenya the official policy is the confinement of large numbers of refugees in camps, rendering them dependent on relief supplies. Camps deprive refugees of access to services and opportunities beyond such areas.

Furthermore, focusing assistance on refugees in camps ignores the needs of the refugees who are self-settled (Chambers 1979; Hansen 1979, 1981, 1982; Clark and Stein 1985). Confinement to camps has been demonstrated to have a number of adverse effects on both refugees and hosts (Chambers 1985; Nieburg et al 1992). For instance, it leads to the establishment of parallel services which undermine local institutions by attracting the best to earn the higher salaries paid by humanitarian organizations (Goyen et al 1996). Further, targeting relief to camps, surrounded by people often as poor or poorer than refugees is wasteful and generates hostility from local communities (Harrell-Bond 1986).

The popular media image of refugee as a problem rather than as persons with problems has obscured the reality that refugees are ready to put their energies into productive work which could also benefit their hosts (Wilson 1992; Harrell-Bond 1986; Bulcha 1988; Kuhlman 1990). Where governments have been able to provide sufficient land to sustain a population and where they have not imposed restrictions on movement or their employment within the wider economy, refugees have proven to be an economic asset (Kuhlman 1986; Harrell-Bond 1996).

Ayok (1990), after describing some of the problems associated with camp settlement for Rwandan refugees in Tanzania, went on to contrast them with those refugees who did not pass through one of the main centres but who established themselves as individual families or in small groups among the local population. Without receiving any official government assistance and by cultivating food on land acquired through local customs, they were in many cases able to become self-sufficient within a season.

The above review demonstrates how, for social, economic, environmental and health reasons, the consequences of placing refugees in camps are often negative not only for the refugees but also frequently for national populations and governments of receiving states. This calls for more attention to be paid to promoting comprehensive regional solutions to the problems associated with refugee livelihood. This is important to ensure that the human and developmental needs and rights of refugees are met in the host countries. In suggesting a lasting solution, Salim Salim, the [former] Secretary-General of the then Organization of African Unity, has observed:

What we should be looking at here is how the two communities; that of the refugees and of the receiving countries can build a symbolic relationship and be mutually supportive – helping each other and benefiting from each other. Likewise we should see how the intervention of the international community

can promote that mutualism rather than create differences of divisions (OAU, Salim 1983,97).

Conclusion

What emerges from the literature is the fact that refugees need not necessarily be a burden. An influx of refugees can be considered as a mixed blessing. Mixed in the sense that refugees have amongst them skills and energy, which can be utilized for development. However, if the right environment and policy direction is lacking, then the influx can indeed pose serious problems. Hence the challenge is for policy makers to devise mechanisms that would turn the refugee influx into an opportunity for development.

3. DATA PRESENTATION AND ANALYSIS

3.1 Introduction

Dadaab Refugee Complex was set up between 1991 and 1992 by the Kenyan government in collaboration with the United Nations High Commissioner for Refugees (UNHCR). The camp is located in Garrisa District, in the North Eastern Province. It is situated 80km from the Kenya/Somali border and about 550km from Nairobi City.

Three camps make up the Dadaab Refugee Complex. These are Ifo, Dagahaley and Hagadera. These camps, covering a total area of 50 square kilometres are within a radius of 18km from Dadaab town. Ifo was the first camp to be established in September 1991. It is located 5km from Dadaab town. This camp is 7km long and 4km wide, totalling 28sq. km. Dagahaley was established in March 1992. It is 17km North of Dadaab Town and 10km from Ifo camp. The camp is 3.5km long and 2.6km wide and has an area of 9.1sq.km. Hagadera was established in June 1992. The camp is 10km South East of Dadaab town and occupies an area of 16 sq.km.

At the time of study, the number of registered refugees in the three camps was 136,047 persons. Table 1 below gives the total population per camp, while Table 2 provides a summary of the refugee population by nationality, sex and age group.

Table 1 Dadaab Refugee Complex, by camp size, population, and camp population density

Camp	Ifo	Dagahaley	Hagadera	Total
Date of establishment	September 1991	March 1992	June 1992	
Camp population to date	49,845	37,009	49,193	136,047
Camp size in km ²	28	9.1	16	53.1
Camp population density	1,780	4,067	3,075	2,562

SOURCE: Compiled from camp profile reports.

From Table 1, we observe that the population density per camp is very high. It varies from 1,780 persons per square kilometre to 4,067 persons per square kilometre, with an average of 2,562 persons per square kilometre. This high camp population density should also be seen under the background that the camps are located in a remote and semi-arid area which is devoid of any investment or development activity.

From Table 2, two main observations can be made:

- (i) Most of the refugees come from Somalia, Ethiopia and Sudan followed by refugees from Uganda and Eritrea, and a few others from countries which include Democratic Republic of Congo (DRC) and Burundi. Thus, most of the refugees are from the neighbouring countries. They originate mainly from the Great Lakes Region and the Horn of Africa.
- (ii) The total refugee population in the camps is 136,047. Of this, 66,994 (representing 49%) are women while the remaining 69,178 (representing 51%) are composed of the youth below 17 years of age, and men who represent 23.8% of the total refugee population.

Table 2: Distribution of refugee population in dadaab, by nationality, sex and age group (as at March 2002)

Country of origin	Sex	0 –4 yrs	5 – 17 yrs	18 – 59 yrs	60 yrs	Total
Somalia	Female	9,347	22,763	31,819	1,502	65,431
	Male	9,894	25,876	29,692	1,821	67,283
Ethiopia	Female	120	288	476	12	896
	Male	133	315	769	25	1,242
Sudan	Female	49	118	143	2	312
	Male	44	147	522	-	713
Uganda	Female	4	3	4	-	11
	Male	1	1	27	-	29
Eritrea	Female	1	5	36	-	42
	Male	2	5	68	2	77
DRC	Female	1	-	-	1	2
	Male	1	-	3	-	4
Burundi	Female	-	-	-	-	-
	Male	-	-	4	-	4
TOTAL		19,597	49,521	63,564	3,365	136,047

SOURCE: Compiled from UNHCR files

3.2 Source of Refugee Livelihood

One of the main objectives of this study was to establish the source of livelihood of refugees in the camps and ascertain the adequacy of this source. As seen earlier, the majority of the refugee population in Dadaab Refugee Complex are of Somalia, Ethiopia and Sudanese origin. These are essentially male- dominated patriarchal societies, whose main economic activity in the rural areas is pastoralism for men, while women help with domestic chores that contribute to food self-sufficiency at the family level.

The current source of livelihood for the refugees seems to have been determined by the strategy adopted by both the Kenyan government and UNHCR, together with its implementing partners, at the time the camps were being set up some eleven years ago.

According to Mr. Ageri, who is CARE's officer-in-charge of IGAs in the camp complex, the strategy adopted when the refugees first came into the camps was by way of handouts. It was thought then that the refugees were a passing cloud. The arrival of refugees in 1991 was treated as a temporary situation. Everyone thought that the refugee problem was short-term and within one or two years they would all go back home. Hence the immediate assistance was relief which essentially involved a handout strategy. At this time, donor funding was adequate to cater for all the food and other basic requirements of the refugees. Donor countries provided food aid through the world food programme (WFP). As per the WFP standard global ratio scale, each refugee was supplied with 600 grams of food daily, equivalent to 2,100 kilo calories distributed as shown in Table 3.

Table 3 Food basket entitlement for refugees

Item	Grams
Cereals (maize)	235
Wheat flour	235
Pulses	60
Vegetable oil	25
CSB	40
Salt	05
Total	600

SOURCE: Compiled from CARE files and field data.

In addition to the above, onions, carrots, potatoes and cabbages were provided. Upon arrival, refugees were also provided with non-food items (NFI). These included plastic sheeting, sleeping mats, blankets, kitchen sets, water containers, clothes, firewood and poles to construct shelters.

As time went by, two things emerged. First, it became clear that a refugee problem was not a passing cloud. It dawned on policy makers that the refugees would be around for a long time. It is now eleven years since the camps were set up and more refugees are still coming in. Secondly, since the donor and relief agencies were not prepared with long-term solutions, donor funding started dwindling. With this, the supplies to refugees started decreasing to the

extent that at times only cereals and occasional wheat flour were being rationed to refugees. As support from donors dwindled, both the refugees and implementing agencies in the camps found themselves in a difficult situation. The agencies were aware that they provided an inadequate food basket on which the refugees could not be expected to survive.

In discussions held with both the refugees and staff of implementing agencies operating in the camps, several issues emerged concerning the current food aid package. These include:

- *It is not adequate.* Refugees acknowledged that in the early 1990s, they used to receive the food items as indicated in Table 3. However, since 1995, there has been a gradual reduction in the food ration provided. The reason given for the shortfall in provision is the reduction in donor funding. Refugees stated that currently they receive 365 grams of food daily, which constitutes just one half of the caloric intake recommended by the UN. This is a sharp drop in food provision, and leads to a lot of suffering for the refugees since food aid forms their main source of survival. In acknowledging the reduction in the food basket ration, WFP in its quarterly report notes: "...During 2000 WFP could not sustain the provision of 2,100 kilocalories per person per day to the refugees due to food pipeline difficulties.... There were further decreases in food provided to the refugees between January – July 2001" (WFP 2002).

This situation seems to be worsening with time. On 23 January 2003, *The Daily Nation*, Kenya's leading newspaper, quoted the UNHCR representative in the country as saying:

More than 230,000 refugees in the country face starvation.... The camps most affected by acute food shortage are Kakuma and Dadaab in Turkana and Garrisa respectively. The stocks are expected to dry up by early February; hence we need more food aid to save the situation (Daily Nation, 23rd January 2003).

As can be expected, the people to suffer more from this reduced food ration are children, expectant and lactating mothers and the poorest section of the refugee community.

- *It is limited in variety.* Although initially the food basket had six items, currently they receive mainly two items, maize and beans. This does not constitute a balanced diet. Basic food items such as milk, sugar, vegetables, meat, etc. are not included in the food ration basket. In

addition, basic non-food items such as soap, blankets, clothes, cooking utensils, sleeping mats, etc. are currently not provided. Thus, if they are to avoid starving, the refugees have to find ways and means of providing these basic requirements.

- *The food items distributed are not the staple food of most of the refugee communities.* Therefore, the refugee women particularly from the Somali and Ethiopian communities sell the food items so that they can buy foods which are traditionally acceptable to them. Given the restricted or closed market in which they have to operate, they end up selling the rations at throw-away prices. As a result, unless they supplement from other sources, they face problems in sustaining themselves till the next distribution time.

In summary, we note that refugees in Dadaab camps mainly rely on relief supplies from donor agencies for their livelihood. The daily ration has been dwindling due to a reduction in donor funding. This diminishing source of livelihood for the refugees has led them to search for avenues to supplement the food shortfall and provide for other basic necessities. These sources include moving out of the camps in search of these items, relying on assistance from relatives who have settled abroad, and engaging in various types of income generating activities.

3.3 Income Generating Activities and Refugee Livelihood

The second objective of our study sought to examine the attempts that refugees were making towards their sustenance and the problems they experienced, while the third objective aimed to investigate the extent to which entrepreneurial activities amongst refugees can contribute towards their self-sustenance. Since the food aid is inadequate and decreasing in an effort to fulfil the above objectives the study sought to find out what the refugee community and the implementing agencies were doing to supplement refugee livelihood.

The study established that there is a refugee economy evolving in the camps in which a few refugees are involved in various types of IGAs to earn an income to supplement their livelihood. There are also efforts by the implementing agencies to support attempts by refugees to carry out IGAs.

Within the emerging refugee economy, we sought to investigate the proportion of the refugee population involved in IGAs, the types of IGAs they were involved in, the employment capacity of these IGAs, their profitability and the problems they experience. Since there were no records as to the number of refugees involved in IGAs, it was necessary to initially carry out a

comprehensive survey of all types of IGAs in the camps owned and operated by the refugees. The counting of the refugees was done during the reconnaissance survey. The IGAs owned and operated by the locals were left out since they were not a focus of this study. However, it will suffice to maintain that the locals also owned and operated business in the refugee camps.

Out of the 136,047 refugees in the camps, 9,252, representing 6.8% of the total refugee population were involved in IGAs of various types. Table 4 below is a summary of the number of refugees involved in IGAs by gender and nationality.

Table 4 Distribution of refugees involved in IGAs, by gender and nationality

Country	Total Population	Numbers Involved			% of the Total
Somalia	132,714	7,045	1,164	8,209	6.2
Ethiopia	2,138	768	128	896	4.2
Sudan	1,025	30	7	37	3.6
Uganda	40	3	14	17	42.5
Eritrea	119	67	21	88	7.4
DRC & Burundi	11	3	2	5	4.5
Total	136,047	7,916	1,336	9,252	

SOURCE: Compiled from field data

From Table 4 we can observe the following: The proportion of refugees involved in IGAs to the total population is very small. Only 6.8% of the total population or 13.8% of the adult population is involved in IGAs. This means that 93.2% of the total population and 86.2% of the adult population are wholly dependent on relief supplies and other kinds of assistance.

- i) The proportion of women refugees involved in IGAs is even much smaller. Of the total number of refugees involved in IGAs, i.e. 9,252, women represent 1,336, accounting for only 14.4% of those involved. From the discussions held with refugees, UNHCR officials and officials of other agencies serving refugees, it emerged that various

handicaps hindered women's participation in enterprise activities, hence their low participation. The hindrances included limited access to initial capital for investment and restrictive cultural practices especially among the Somali refugees. According to the Somali culture, women are not expected to be enterprising and outgoing, and married women require their husbands' permission to engage in business. Similarly, refugee women lacked adequate representation in leadership, and thus they were not able to ascertain their involvement in business within the camp situation, for example to influence plot allocation for business purposes. The IGA training programmes in the camps do not aim at the economic empowerment of women.

- ii) Although, because of their numerical strength in the camps it is the Eritreans, followed by Ugandans and Ethiopians, that represent the Somalis constitute the largest number of those involved in IGAs, the highest percentage of those involved in IGAs.

Our findings indicate that various types of informal business activities are in existence. These business activities can be put under three broad categories. The first category consists of commercial activities such as retail shops and butcheries. The small retail shops sell basic commodities such as salt, sugar, tealeaves, cooking fat and etc. These shops also stock most of the food ration items issued to refugees by UNHCR and its implementing agencies. Such rations include maize and beans, among others.

The Somalis are the main players in the butchery industry where beef, goat, and to a lesser extent camel meat are readily available. Indeed there is a slaughterhouse situated not far from the Somali community compound where animals are slaughtered. Both refugees and the local people buy their meat mainly from the butcheries within the camps. The butchery business is male - dominated and well - established as evidenced by the crowded nature of the area where meat shops are located particularly in the mid-morning hours between 10.00 a.m. and 12.00 noon.

Other businesses with in this category include the sale of both new and second hand clothes. Somali and Ethiopian communities excel in this business activity. There are several shops selling different types of ready made and used clothes, shoes, cloth materials, etc. Most of the clothes are competitively priced. The newer items originate in Dubai and find their ways through Somalia to the camps. An attempt was made to establish how these items are brought from Dubai to the camps. In discussions held with refugee businesspersons and

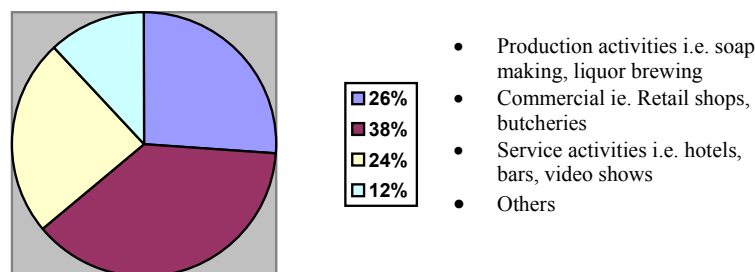
senior management of the camps, we were informed that, due to lack of central authority and government in Somalia, the items are transported easily through Somalia to Kenya via the porous Kenya – Somalia Border. Once in Kenya, the goods find their way into the camp. This is possible due to a lapse in the policing system and with the help of local business people in Kenya.

The second category consists of service giving activities such as small hotels, bars, video shops etc. A large section of those doing business is involved in video business. Some enterprising people have set up satellite dishes where they screen live BBC, CNN, sports broadcasts and movies. Those operating video show business confirmed that they were earning an average of Ksh. 300(USD 4) per day. The majority of owners of video shops were found to be men. Difficulties in this business include inadequate space for customers and the cost of fuel for operating generators.

The third category forms those engaged in production activities such as soap making, brick making, woodwork, liquor brewing, and other similar activities. Bricks are used for making shelters by the refugees. Woodwork is mostly carried out by the Sudanese community. This community specialized in the making of traditional chairs, stools, tables and walking sticks. Some of these items are kept in a craft shop managed by CARE and sold to visitors to the camp. A sizeable number of refugees, particularly women, are engaged in the brewing and selling of illicit liquor. Majority of these belong to the Ugandan and Sudanese communities. Refugee women liquor sellers informed us that they had found the business quite helpful. It enabled them to earn some money with which to buy food items, clothes and meet other basic necessities. The women involved in the liquor business were in agreement that, despite the booming business, they faced numerous problems such as sourcing and transportation of “raw materials”, and constant harassment by the Kenya security personnel. Figure 1 below shows the percentage of each category of business.

From the 9,252 businesses, stratification was done based on Table 5 below. Ten percent (10%) of the business type was then picked for a detailed examination of the businesses. (For social science research, Kerlinger (1973) recommends a sample size of not less than 10% depending on the population size.) Simple random sampling technique was employed to select 925 respondents.

Figure 1: IGAs in Dadaab Camp



SOURCE: Compiled from field data.

Table 5: Sample size of refugee entrepreneurs

Business Type	Population Size	Sample Size	As a % of sum (N)
Commercial activities	3,516	352	38
Service activities	2,220	222	24
Production activities	2,406	240	26
Others	1,110	111	12
Total	9,252	925	100

SOURCE: Field data

The 925 respondents were asked a number of questions using a structured questionnaire which included open-ended questions that thoroughly probed in to the situation. As noted earlier, enumerators were selected from each of the communities to be interviewed. They were asked a common set of questions concerning their IGAs, such as sources of their initial capital, incomes they received, what motivated them to venture into business, their market outlet, the problems they experienced, and from their perspective, what needed to be done to improve refugee livelihood. During the interview, respondents were

encouraged to expand on the questions raised and bring up other issues they considered important.

Income Earned

Respondents were asked to state their earnings either on a daily or monthly basis. It was not easy to arrive at exact figures since they do not keep records of their business operations. However, it was possible to get an estimate of their earnings from our probing in to the particular business. Basically, the income they earned per month depended on many factors such as the type of activity, the value of initial investment, output, and the nature of the product.

With regard to the butcher business, it was established that a butcher buys one goat for an average of Ksh. 1,200 (US\$ 15) and, after slaughtering, sells it for a total of Ksh. 1,800 (US\$ 22.5) thus making an average of Ksh. 600 (US\$ 7.5). They stated that they usually sell an average of one goat per day. This means that they make a total of Ksh. 18,000 (US\$ 225) per month. After deducting the costs associated with running the business, the butcher remains with a profit of Ksh. 10,000 (US\$ 125) per month.

Those engaged in video show business indicated that they cater for an average of about 30 people per day on weekdays, and 70 customers during weekends. Each customer pays Ksh. 10.00 (US\$ 0.13). This means they collect Ksh. 300 (US\$ 4) per day during weekdays and Ksh. 700 (US\$ 9.3) per day during weekends. On average, they earn Ksh. 12,200 (US\$ 163) per month. If we deduct Ksh. 4,000 for the expenses incurred, they make a net profit of Ksh. 8,200 (US\$ 109) per month.

One young man who was running a computer school, training people in basic computer skills, the time of study, had 42 trainees, 22 girls and 20 boys. The course runs for three months and each trainee pays Ksh. 1,000 (US\$ 13.3). This means that the 42 trainees had paid Ksh. 42,000 (US\$ 560). His expenses for the three months estimated at Ksh. 15,000 (US\$ 200). This leaves Ksh. 27,000 which translates in to a monthly profit of Ksh. 9,000 (US\$ 120).

Table 6 below summarises information gathered concerning income earned.

Table 6 Average monthly earnings, by type of IGA

Bracket Business Type	Income				More than 12000
	Less than 1000	1001-4000	4001-8000	8000-12000	
Commercial activities	130	88	63	53	18
Service activities	78	70	33	26	15
Production activities	92	77	26	28	17
Others	45	39	22	5	0
Total	345	274	144	112	50

SOURCE: Compiled from field data

From this Table, we can observe the following:

- i) Eighteen commercial activities, 15 service giving activities and 17 production activities which together constitute 5.4% of the sampled activities, were generating a monthly income in excess of Ksh 12,000 (US\$ 160) per month.
- ii) Fifty three commercial activities, 26 service giving activities, 28 production activities and five activities under “others”, constituting 12% of the sampled activities were generating a monthly income of between Ksh 800 – 12,000 (US\$ 107 160) per month.
- iii) The rest of the activities which constitute 82.6% of the sampled activities were generating income less than Ksh 8,000 (US\$ 106) per month.

It can also be observed that 17.4% of the activities were generating fairly high incomes, 15.6% generating average incomes while the rest of the activities were essentially generating subsistence incomes. Thus a high percentage of those involved in IGAs are engaged in simple trades such as selling rations, vegetables, running small retail shops, and etc. This is just a coping mechanism, rather than serious entrepreneurship.

Sources of Initial Capital

Respondents were asked to state their initial source of funds which they used for establishing their IGAs. Their responses are summarised in Table 7 below.

Table 7 Initial source of fund for the business

Source	Number	Percentage
Own sources	222	24
Remittance from relatives abroad	55	6
Loan from agencies	139	15
Selling food rations	278	30
Donations from friends	231	25
Total	925	100

SOURCE: Compiled from field data

Five main sources of initial capital used to start up the business were identified. The first was own sources (24%). Some of the refugees, especially of the Somali community seemed to have sought asylum with large sums of money. These are the ones running businesses which require a large amount of initial investment. For instance, to install a microwave dish so as to be able to receive BBC and CNN broadcasts, one requires Ksh. 3,000,000 (US\$ 4,000). In discussions with staff of implementing agencies operating in the camps, they confirmed that some refugees had a lot of money. The source of their money could not be ascertained, as they were not willing to disclose it. However, it is suspected that most of them were either prosperous business people and/or senior government officials who came into exile with the money. Further, it is also alleged that some of them may have received the money from the sale of small arms that they brought along. We could not, however, confirm this.

Six percent (6%) of the respondents indicated that they had received assistance from their relatives abroad. Some refugees have relatives who have settled either in North America or Europe, who usually send them money. Fifteen percent (15%) indicated that their source of fund is loans from implementing agencies operating in the camps. As we will see later, some implementing agencies operate loan schemes in the camps.

The highest percentage of respondents (30%) indicated that their source of initial capital was from the sell of food rations. As noted earlier, the food (maize and beans) distributed by relief agencies is not preferred or commonly eaten by most of the refugees. They thus sell the rations to buy their preferred foodstuffs. Those who derive their source from the sell of food rations and loans from implementing agencies were essentially struggling to make ends meet.

To the question as to what motivated them to venture into IGAs, the respondents were unanimous in their answer: *the will to survive*. They observed that they needed to replace or at least supplement the “dry rations” that are distributed by the donor agencies. They noted that the income they earned was used to purchase additional foods to diversify their diet, thereby contributing to improvement in health and nutritional status of the household.

Encouraged by the involvement of refugees in IGAs and in an effort to assist their endeavours, two agencies operating in the camps the WFP and CARE, decided to assist the refugees. WFP’s responsibility is the provision of the daily ration to the refugees. In 1996 WFP decided to put to use the sacks and tins (food containers), and started distributing them to women in the camp in an effort to boost their income generating activities.

At first, the refugees had rejected the bags and empty tin cans, thinking they were receiving worthless items. However, the market value of an empty sack then was Ksh. 20.00, (\$ 0.27) meaning that a trader could easily increase his income with the sale of these items. Soon the items became very popular because of the demand for them in the market. The sacks and tins are sold and the funds generated thus are used to buy materials, such as knitting wool and reeds for making baskets and mats, or other items which they sell to earn income. The tin cans and sacks are given to women only and men are excluded from the programme.

The empty cans, apart from being sold, have been used by the refugees themselves in the construction of classrooms in the camps. These rooms provided a conducive learning place for refugee children. The tin cans have also been used for the construction of refugee shelters and latrines.

In 1994, CARE came up with a programme to assist the refugees so that they could be able to supplement what they received from donor agencies. This programme had one main objective, that of increasing resources at the family level. CARE sought to enable refugees to utilize their existing skills and to

acquire new ones. This programme had two main elements: skill development and provision of micro-credit.

Economic Skills Development

In 1994, CARE started to support the IGAs, and begun by providing materials such as reeds for weaving baskets to refugees CARE would then market the products on behalf of the refugees and give them the money. This system proved unsustainable and it led CARE to demand that the refugees pay back 30% of the cost of materials. By 1996 the percentage to be repaid had increased to 60%. By 1997, the programme was discontinued because it could not sustain itself.

Thus, CARE decided to develop skills amongst refugees and thereafter grant them loans to start IGAs. At the time of this study, CARE had trained 5,329 refugees. Table 8 below is a summary of the training under this programme with activities and the number of refugees trained.

Table 8 Distribution of activities, by number of people trained

	Activity	No. of groups	No. of members	Gender	
				F	M
1	Weaving	74	3250	3250	0
2	Woodcarving	08	118	0	118
3	Soap making	06	545	355	190
4	Bee keeping	03	84	0	84
5	Poultry	08	71	33	38
6	Traditional	04	32	21	11
7	Traditional skin and hides treatment	03	24	15	9
8	Tie and dye	08	88	83	5
9	Hairdressing	15	54	54	0
10	Micro agriculture	03	770	320	450
11	Batik	03	33	14	19
12	Tin smiths	02	08	0	08

Table 8. cont.

13	Candle making	03	15	09	06
14	Mat making	03	56	56	0
15	Community tailoring school	03	143	97	46
16	Typing	03	38	12	26
Total			5329	4,319	1010

SOURCE: Compiled from CARE and UNHCR files

From the above Table, it can be observed that CARE has sponsored the development of skills in 16 different activities. This has involved IGA groups with a total membership of 5,329 refugees. This represents 7.9% of the total adult refugee population in the Dadaab camp. Of the total number trained, 4,319, representing 81% of those trained, were women while 1010, representing 19% of those trained, were men.

During the survey we held focused group discussions with members of these groups and were able to look at their products both during the production process and in the retail craft shop where the items are displayed for sale. From the survey, the following a few issues emerged:

- The quality of the products was not very high. This could be attributed to several factors, the first of which is the tools used by refugees. The tools in use tended to be old fashioned. Second is the effectiveness of the training. For instance, the women weavers informed us that they were trained for only one week. As a result, the quality of most of the products was such that they cannot be sold in a competitive market.
- Refugees operate in a closed circle. They cannot go out to look for materials or to see what their competitors are doing. Due to this restricted movement, their access to outside of the market is only through CARE. This restriction, for most of them, was the main obstacle to their enterprise.

It was also established that not all the people who have been trained are involved in practicing the skills they learned. Some were not able to start up a business after training while others were engaged in trades unrelated to the field

they were trained in. This raises the issue of the criteria CARE uses in selecting those to be trained, and whether a needs assessment was done. In the discussions held with both the beneficiaries of the scheme and CARE staff, it was confirmed that a needs assessment had not been done. We feel that this is a serious oversight in the training process.

Micro Finance

In 1997, CARE introduced four credit schemes meant to finance the development of IGAS: The Ted Turner Fund (TTF), the Community Revolving Loan Fund (CRLF), Youth Fund and Fund for Vulnerable Men. These credit schemes had similar conditions and level of funding. They differ only in the different or segment of the refugee population they target. For instance, the Ted Turner Fund is earmarked specifically for women refugees, while the youth fund is intended for the youth only etc. The conditions for one to get these loans are three:

- 1) One must be a registered refugee aged 18 years and above;
- 2) Must either be doing business or intending to start a business, and
- 3) Be among those categorised as the poorest of the poor.

Moreover, the loans are given to groups, not to individuals. First, applicants form a group of five members and apply for the loan as a group. The loans are of three types:

Type i)	Loan amount	Ksh. 5,000 (\$66.6)
	Loan repayment	5 months
	Interest =	10%
Type ii)	Loan amount	Ksh. 10,000 (\$133)
	Loan repayment	9 months
	Interest =	10%
Type iii)	Loan amount	Ksh. 20,000 (\$267)
	Loan repayment	10 months
	Interest =	10%

Each group is expected to get the first loan, start a business and repay the first loan so as to apply for the second loan. After successful repayment of the

second loan, the group can apply again for the third loan. Accordingly, for a group to access the second loan, it has to repay the first loan, and to access the third loan, it has to repay the second loan. Table 9 below is a cumulative summary of the credit beneficiaries as at the end of the year 2001. The 278 groups are comprised of 1390 individuals (5 x 278) who represented 1390 households.

Table 9 Credit beneficiaries of the four credit schemes, until 2001

SCHEMES	DIRECT				Amount disbursed
	Groups	Individuals	Households	Female	
TTF	278	1390	1390	100%	3,875,000
CRLF	122	610	610	54%	2,475,000
Youth	16	80	80	48%	80,000
Vulnerable men	19	95	95	0%	95,000
Total	435	2,175	2,175		

From this table we can observe that TTF (a sum of 3,875,000) has been disbursed to 1,390 refugee women, which means an average of Ksh 2,788 per person. The CRLF, a total amount of 2,475,000, has been disbursed to 610 refugees. Which means Ksh 4,057 per person. Fifty-four percent of this loan went, to women while 46% was giving out to men.

From this table it can also be discerned that the scheme has benefited 2,175 refugees. This represents 3.3% of the total refugee population aged above 18 years. Here several issues about these programmes could be observed.

- i) The proportion of the population covered, compared to the target population, is very small.
- ii) The loan amount disbursed, i.e. Ksh 5000 for five members, appears to be too small to start or sustain a viable business venture. This amount can only be used to start a business at the subsistence level.
- iii) Refugees complained about the lack of an enabling environment to do business. For instance, the restriction on movement means that they do

not have access to raw materials and markets, and hence no proper business conducts.

- iv) It appears that all IGA supporters depend on a continuous flow of donor funding. Thus they are not viable ventures since donor funding is not always guaranteed.

Problems Experienced

Refugees involved in IGAs face a number of problems. The respondents were asked to state what they considered to be the most serious problems. Table 10 below shows the problems cited by respondents.

Table 10 Problems faced by refugee entrepreneurs

No.	Problem	Frequency	Percentage (%)
1.	Restriction on movement	326	35.2
2.	Environment (climate/security)	210	22.7
3.	Lack of finance for expansion	207	22.4
4.	Harassment by the police	97	10.5
5.	Market outlet	52	5.6
6.	Lack of proper physical facilities	33	3.6
Total		925	100

SOURCE: Compiled from field data

From the above table, the following observations could be made:

326 respondents, constituting 35.2% of the total sample population, indicated that restriction on movement was the most serious problem that affected their business operations. Since they are not allowed to move out side of the camps, they cannot travel even to nearby towns to buy materials or sell their final products. This restriction on movement affects both the marketing and the quality of their products. Indeed, 5.6% of the respondents noted that market outlet (which is also related to the travel restriction) was a serious hindrance to their entrepreneurship.

If a refugee has to travel out of the camp, he/she needs to get permission from the authorities. The respondents however indicated that if they were found out

of the camp, they were generally harassed by the Kenyan Police whether they had a permit or not. The police always insist on demanding bribes from them. Thus 10.5% of the respondents cited police harassment as another most serious hindrance to their business. The denial of freedom of movement to the refugees is not only a hindrance towards their efforts to self-reliance and entrepreneurship, it is also an affront to their basic human rights.

More than twenty-two percent of the respondents cited the camp environment as the most serious hindrance to their enterprise. Two issues were noted regarding the environment, one of which is the climate. The region surrounding Dadaab is an arid area with sparse desert vegetation and without surface water. The temperature at the camps is always above 38⁰C. Furthermore, the place is almost totally devoid of any investment or development activity undertaken whether by the Kenyan government or private investors. This is mainly because climate is not favourable to enterprise development.

The second issue has to do with security. Dadaab region and the entire Garissa District has been plagued with security problems and banditry for decades. Violent crimes such as armed banditry occur in and around the camps. Movement to and from the camps must be with armed police escorts. The security situation in the entire area is volatile due to escalated banditry that has engulfed the whole North Eastern Province dating back to the colonial era. Insecurity impacts negatively on every aspect of refugees' lives. It hampers aid work and creates a culture of fear and suspicion amongst those who have already experienced considerable suffering. The location of the camps is well suited to the government's policy of confining them to camps.

Despite the problems they experienced, the respondents exuded confidence and were generally of the opinion that their business had positively changed their lives.

3.4 Summary of Findings

This study was undertaken to characterize the refugee population in Dadaab camp in terms of available human resource base, with a view to identify the strategies in use and to suggest improvements in order to enhance the livelihood of the refugees. As such, the study has investigated the source and nature of livelihood of the refugees. From this analysis of refugees in the Dadaab Camp Complex, the following findings emerged:

The first group of refugees arrived in Dadaab in 1991. On arrival, refugees were treated as a temporary phenomenon and thus the immediate assistance was relief supplies by donor agencies. After 12 years, the refugees are still in the camps, but no durable solution in sight.

The refugee camps are located in a remote area and as a result refugees living in hostile conditions and face multiple humanitarian and security threats and risks.

Refugees rely mainly on food aid from donor agencies for their subsistence. This food aid package has over the years decreased drastically due to what WFP refers to as “food pipeline difficulties” occasioned by reduced donor funding. Currently the ration basket package is inadequate in quantity, quality and variety. This has subsequently led to hardships on the side of the refugees.

In efforts to supplement their inadequate food ration packages a segment of the refugee community has started income generating activities. A few well-off refugees are doing good business while the majority are just struggling to make ends meet. Most of the refugees do not have access to required resources and are without a conducive environment for business.

The proportion of refugees involved in IGAs (about 6.8%) is not significant in relation to the total population.

The refugees engaged in IGAs were facing a number of problems, among others, their restriction on movement. Restriction on refugee movement under the government’s encampment policy has been an obstacle to refugee enterprise as refugees cannot have access to sources of raw materials and markets for their products. Again, due to the restrictions and strict encampment in a hostile environment, most of the development potential of the refugees is lost. Even when they possess some capital and skills, they still feel constrained.

Implementing agencies have started programmes to support training and the development of small income generating activities. However, there are a number of concerns arising from these programmes. Firstly, the number and amount of refugees and fund involved is currently too inadequate to have an impact. Secondly, the programmes seem to focus mainly on the poorest of the poor rather than aiming to tap the entrepreneurial capacity of the refugee community as a whole. Lastly, when one critically looks at the

programmes, it emerges that the original initiatives were not well designed with clear objectives towards self-reliance.

Most of the refugees are people who had been in charge of their lives before seeking asylum. They have the skills that used to support them and which they are willing to utilize as evidenced in their attempts to set up IGAs despite operating under difficult circumstances. For people who fled with little or nothing, the spirit of enterprise is motivated partly by the loss of income through displacement and partly by the aggressive survival instincts that they developed. What they therefore require is an enabling environment that can assist them to help themselves.

4. CONCLUSION AND RECOMMENDATIONS

The study has addressed the livelihood strategies of refugees in Dadaab camp and investigated the means towards refugee self-reliance. Refugees constitute a segment of society with needs and wants to fulfil their efforts to survive. The refugees rely mainly on food aid from donor agencies for their survival, a source which has been declining due to donor fatigue and is currently inadequate. In efforts to supplement their inadequate food ration basket, a segment of refugees is engaged in business activities. The refugee enterprise, however, is beset with several hurdles and problems.

In light of our findings and based on the analysis of the livelihood of refugees in Dadaab Camp, we make the following recommendations:

- Camps deprive refugees of their rights as human beings and restrict them from exploiting their potential to support themselves. As highlighted in the literature, encampment has been demonstrated to have a number of adverse effects on both refugees and the host community (Chambers 1985; Harrel-bond 1986; Nieburg et al. 1992; Goyen et al. 1996). Thus we propose that as a policy at the international level, the UNHCR should move away from the policy of encampment as a strategy of settling displaced persons. We advocate settlement schemes instead of camps. These schemes should be provided with economic and social amenities which would also be accessible to the local population. Such schemes would enable refugees to achieve economic and social self-sufficiency. As a matter of fact, available literature indicates that where refugees have not been confined to camps, they have been able to fend for themselves and contributed to the development of host countries (Hansen 1982; KOK

1989; Ayok 1990; Lukhoba 1993; Callamard 1994). We therefore call upon the Kenyan government, in conjunction with the UNHCR, to review the country's current encampment policy.

- In developing the settlement schemes, the objective from day one should be to keep the emergency period short and make refugees aware that the emergency aid is temporary. The aim should be to tap their initiative and assist them towards self-reliance. Indeed, evidence from literature show that with a conducive policy environment and proper practices refugees can take care of themselves (Kagwanja 1998; Nowrojee 2000).
- Refugees in the camps are treated as a homogenous group. However, there is need to realize that they are heterogeneous communities comprising of farmers, pastoralists, traders, craftsmen, semi-skilled and skilled professionals. There is need to have a catalogue of the skills available in the refugee community with a view to identifying activities to involve them in.
- UNHCR and donor agencies are involved in entrepreneurship training of the refugee. Refugees need training in entrepreneurship and survival skills. Such skills and attendant attitudes would free them from dependency and prepare them for self-employment and successful operation of income generating activities. However, the first step towards such a training should be conducting a needs assessment and the cataloguing of the skills that already exist amongst the refugees; their level of education and preferences.
- In attempts to supplement their livelihood, refugees have been engaged in IGAs and have faced many hurdles. In essence there is no enabling environment for refugees to engage in meaningful enterprises. There is need for a policy change to create a favourable environment for refugee enterprise.

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