

Lund

University

2000/2001

LUMES Master's Thesis

**Assessing stakeholder participation in Integrated
Water Resource Management. The role of Youth in
Community Water Management Projects in
Cameroon**

Ransom Nambuanyi LEKUNZE

Lund, Sweden.

**LUMES, Lund University Master's Programme in Environmental
Sciences.**

LUMES

Lund University

Autumn 2001

**Assessing stakeholder participation in Integrated Water
Resource Management. The role of Youth in Community
Water Management Projects in Cameroon**

By

Ransom Nambuanyi LEKUNZE

Environmental Management Forum (EMAF)

B.P 13766, Yaounde, Cameroon.

Tel: 00237 331 7302

ransomlek@yahoo.com

Supervisor:

Abdulahdi khalaf

Ph.D., Assistant Professor

Department of Sociology

Box 114, 22100 Lund

046 222 34 66

alhadi.khalaf@soc.lu.se

Acknowledgements

I wish to thank the Almighty God for the blessings, guidance and care he gave me through out my stay in LUMES. A big thanks to my supervisor Khalaf Abdulhadi of the Department of Sociology Lund University in Sweden for his wonderful support. To the Lekunzes' family for their moral, material and financial support during my stay in Sweden and to the Environmental Management Forum (EMAF) for granting me the permission to participate in this course. Special thanks also goes to the staff of LUMES who were always there when we needed them.

List of Figures and boxes.

Figure 1: <i>Lack of access to water supply and sanitation by region</i>	3
Figure 2: <i>Poor water management and poverty loop</i>	4
Figure 3: <i>Proper water management and poverty loop</i>	5
Figure 4: <i>Importance of water resource management</i>	5
Figure 5: <i>Political map of Cameroon</i>	22
Figure 6: <i>Organisations promoting rural water supply in Cameroon</i>	24
Figure 7: <i>A causal loop diagram of the system</i>	22
Figure 8: <i>Cycle of a youth empowerment process</i>	33
Box 1: <i>Guidelines for operating community water supply in Cameroon</i>	25
Box 2: <i>Terms of Community water management contracts in Cameroon</i>	27
Box 3: <i>CARE's Instruments of community Participation in water resource management</i> ...	29

Abstract

This paper is the outcome of an analysis of the role of youth as important stakeholders in an Integrated Water Resource Management (IWRM) process in rural communities in Cameroon. It acknowledges the fact that increasing populations and their associated activities are placing a high demand on very scarce water resources. On the one hand, the situation is caused by or accelerated by poverty in the region while on the other hand; water when properly managed can constitute an instrument for socio-economic recovery and poverty alleviation. Business as usual in water resource management is not the way to overcome this problem. As such community water resource requires a new management paradigm that considers water not only from a holistic, comprehensive and multi-disciplinary perspective, but that, which seeks to fully associate all the different stakeholders into all the stages of the process. The study aimed at analysing the importance of a participatory approach in community water resource management with a more special focus on the youth as a key stakeholder. It examines the potentials youth dispose and the constraints they face in their attempt to contribute to such a development initiative. Based on data and information published by the several institutions managing community water projects in Cameroon, this study analysis the participation of youth to water resource management by comparing the results of the different approaches used. Generally, the institutions that used a stakeholder participatory approach while involving the youth have greater chances of success than others that did not consider such an approach. Also, with the use of Causal Loop Diagram (CLD) it illustrates the reciprocal flow of influence between different actors of the system by identifying such actors, their interrelationships and effects. It also evaluates several strategies that can be used to facilitate effective youth participation in water resource management such as youth empowerment and economic instruments.

Key words: Participation, youth, stakeholders, and empowerment.

Table of content:

1	<u>BACKGROUND.....</u>	<u>1</u>
1:1	WATER CRISIS IN AFRICA.....	2
1.2	AIMS AND OBJECTIVES OF THE STUDY.....	5
1.3	STRUCTURE OF THE PAPER.....	5
1.4	METHODOLOGY AND SCOPE.....	6
2:	<u>OVERVIEW OF THE CONCEPTS RELATED TO INTEGRATED WATER RESOURCE MANAGEMENT (IWRM):.....</u>	<u>7</u>
2:1.	RE-STATING THE DEFINITION OF IWRM.....	7
2:2.	THE IWRM AS AN INTEGRAL COMPONENT OF SUSTAINABLE DEVELOPMENT.....	10
2:2:1.	UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (UNCED) 1992.....	11
2:2:2.	AGENDA 21.....	11
2:3.	PARTICIPATORY DEVELOPMENT: THEORIES AND CONCEPTS.....	12
2:3:1.	STAKEHOLDER PARTICIPATION.....	13
3:	THE ROLE OF YOUTH IN STAKEHOLDER PROCESSES.....	15
3:1.	WHY CURRENT ATTENTION ON YOUNG PEOPLE?.....	16
3:2.	WHAT IS YOUTH PARTICIPATION?.....	16
3:3.	YOUTH POTENTIALS IN WATER RESOURCE MANAGEMENT.....	17
3:4.	CONSTRAINTS TO YOUTH INVOLVEMENT IN THE WATER RESOURCE MANAGEMENT.....	18
3: 5	<u>COMMUNITY WATER RESOURCE MANAGEMENT IN CAMEROON.....</u>	<u>20</u>
3:1.	ROLE OF GOVERNMENT OF CAMEROON.....	21
3:2	COMPARING APPROACHES IN COMMUNITY WATER SUPPLY PROJECTS IN CAMEROON.....	22
3:2:1.	SCANWATER: FROM OUTSIDE TO INSIDE CONTROL – A FAILURE.....	23
3:2:2.	CIACC: FROM TOP DOWN TO COMMUNITY-MANAGED.....	24
3:2:3	CARE INTERNATIONAL.....	25
3:2:5	ASSESSING THE RESULTS OF THE DIFFERENT PROJECTS:.....	27
5:	<u>MEASURES TO FACILITATE YOUTH PARTICIPATION IN A COMMUNITY WATER RESOURCE MANAGEMENT.....</u>	<u>30</u>
5:1:	YOUTH EMPOWERMENT:.....	30
	EMPOWERED YOUNG PEOPLE.....	31
5:2:	POLITICAL EMPOWERMENT:.....	32
5:2.1:	ENACTMENT OF WATER RULES AND REGULATIONS:.....	32
5:3:	RIGHT TO YOUTH INFORMATION.....	32
5:4.	LOCAL WATER MANAGEMENT BOARDS OR COMMITTEES.....	33
5:5.	ECONOMIC EMPOWERMENT.....	33
5:6.	YOUTH CAPACITY BUILDING IN WATER RESOURCE MANAGEMENT.....	34
5:7.	YOUTH GROUPS AND ASSOCIATIONS.....	35
5:7: 1.	YOUTH NGO-BASED WATER PARTICIPATION.....	35

5:7:2. MUNICIPAL YOUTH COUNCILS AND SCHOOL CLUBS: 36

5:8. STRENGTHENED NATIONAL STRUCTURES. 36

6: CONCLUSION. 36

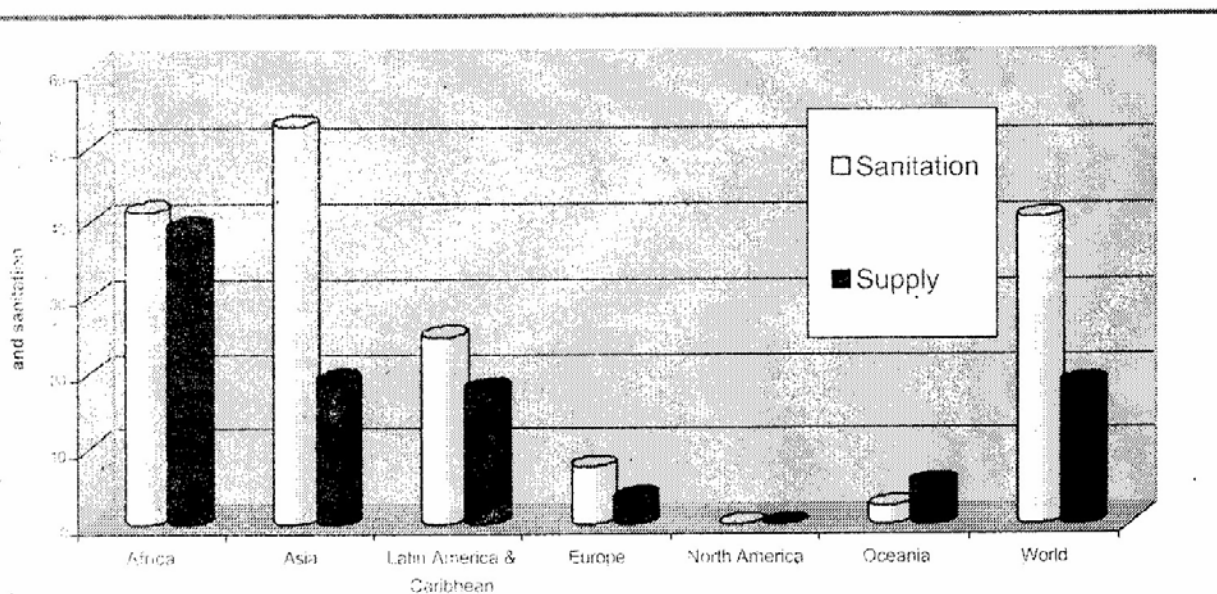
REFERENCES. 37

1 Background.

Of all natural resources, water is probably the most essential for life. “Water remains very vital for the survival of the human species and the entire system,” write Krenkel and Novonty (1980:73). In an opening statement during the VII session of the World Congress on Water Resources in Morocco 1993, King Hassan II noted, “Water is an important factor for progress and development and represents the basis of the development of authentic civilizations through the ages” (Biswas 1993: 3).

This notwithstanding, UNDP (2001) reports that 20% of the world’s population still lack access to safe drinking water. As human populations and their associated activities increase, there is the driving demand for contemporary water for instance, for industrial uses, drinking, household uses, irrigation and agriculture. Other landscape transformations such as clearing, tilling, draining and well drilling are placing freshwater ecosystems and their associated species under enormous strain. As such, water no longer represents a cheap resource, which can be profligately used, abused or squandered without noticeable consequences on humans and for generations to come. More so, water security was declared by the Second World Water Forum in The Hague, Netherlands, (2000) as the principal concern for sustainable development in the twenty-first century. Biswas et.al. (1993) claim that new sources of water are becoming scarce, more expensive to develop, require more expertise and technological knowledge for planning, design, implementation and operation, and are contributing to more social environmental disruption. Nevertheless, as illustrated in figure 1 below, the causes of water degradation and the resultant impacts are particular to each locality and region of the world although the case of Africa calls for some special concern.

Figure I: Lack of access to water supply and sanitation by region.



(Source: ECOSOC, 2000)

1:1 Water Crisis in Africa.

As illustrated in figure 1 above, the water situation in the continent of Africa is highly problematic. Approximately 16% of the continents population (230 million) will be subject to water scarcity by 2025 (ECOSOC 2000). According to WBGU (1999), 25 countries in Africa will face water stress or scarcity by 2025 and nearly 51% of the people in sub-Saharan countries lack access to safe supply and 41% lack adequate sanitation. 14 countries are already experiencing water stress; another 11 countries are expected to join them by 2025.

A number of factors account for this. Firstly, climate variability is causing drought, desertification and other natural disasters. Rainfall - the major source of water varies from one part of the continent to the other. Water bodies such as rivers, lakes, marshes, and coastal waters that support life for both humans and wildlife, are degrading. Other sources of water such as wells are under threat of desertification and are depleted, thus accelerating the migration of pastoralists into marginal lands. Secondly, land clearing for agriculture, encroachment of poor people into the forest and subsequent felling of trees pose a threat to the water retaining capacity of forest which lead to the reduction of available water. Furthermore, siltation by soil erosion continues to shorten the life span of reservoirs.

A fundamental feature of Africa's water problems is its link to poverty. Ndiaye (1993) observes that while poverty has a tremendous impact on African water resources, water when managed poorly, hurts the poor most. Africa faces a crisis of endemic poverty exacerbated by slow economic growth and high levels of indebtedness. For many sub-Saharan countries, since the oil crisis of the mid-1970s, economic performance has been poor and worsening, affecting mainly the agricultural sector. Mkandawire and Soludo (1999).

Moreover, the World Water Forum (2000) stresses that water and socio-economic development are mutually dependent. This paper therefore contends that water is a valuable but vulnerable natural asset. When properly managed it can be an instrument for poverty alleviation, economic recovery and economic growth but when poorly managed water can rather serve as a limiting factor in poverty alleviation, resulting in poor health and low productivity, food insecurity, and constrained economic development.

Fig 2: **Poor water management and poverty loop.**

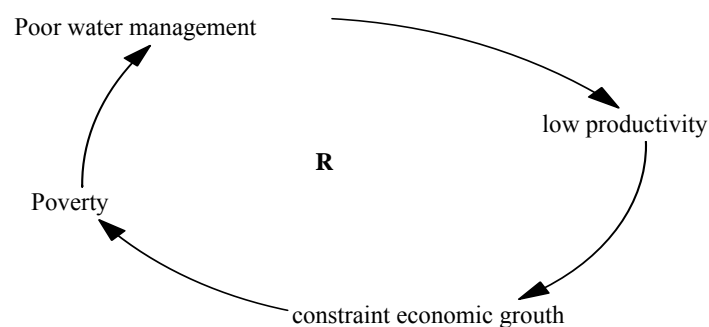
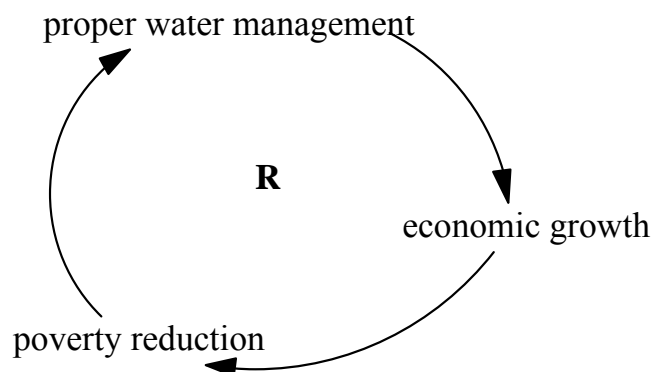
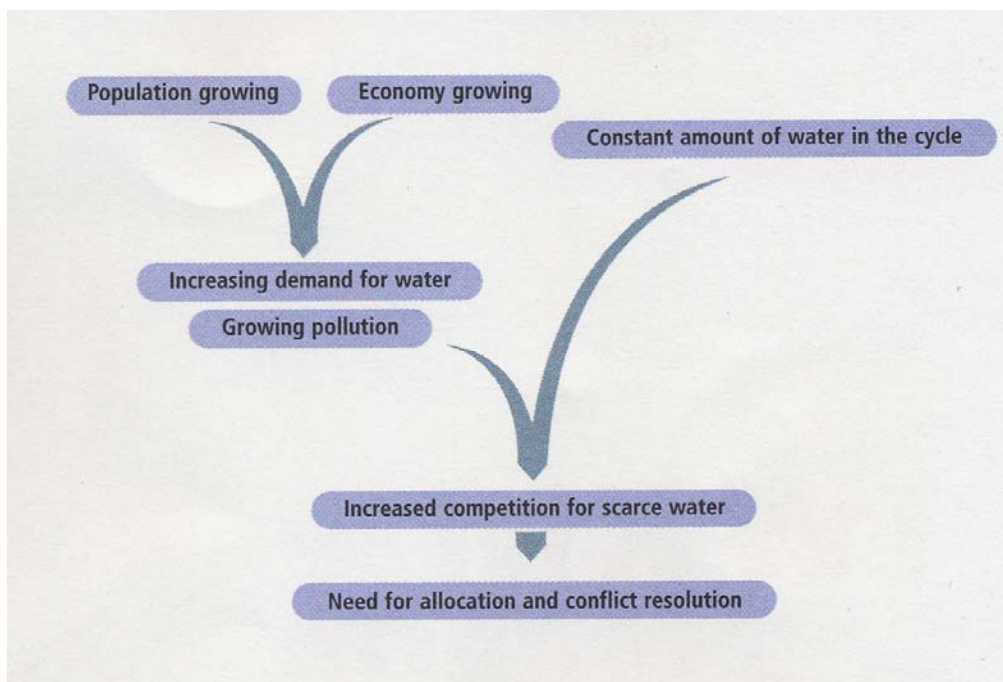


Fig 3: Proper water management and poverty loop.

The World Water Forum (2000) further contends that these could be nodes in a vicious cycle that puts societies in a downward spiral of poor economic development and poor access to safe and adequate water supply and sanitation. Alternatively, says the same report, they can be nodes in a vicious cycle reinforcing each other in an auto-catalytic way, and leading to an upward spiral in which improved socio-economic development produces resources needed for improved development of water resources that in turn, buttress further socio-economic growth. Figure 4 illustrates the importance of appropriate water resource management.

Figure 4. Importance of water resource management.

Source: Global Water Partnership. (2000: 2)

Faced with this need for reform, the International Conference on Water and the Environment (ICWE) held in Dublin in January 1992 and the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, June 1992, came up with a new paradigm of water resources management referred to as Integrated Water Resource Management (IWRM). These Dublin-Rio statements express a holistic, comprehensive, multi-disciplinary approach to water resource problem solving worldwide taking us from a sub-sectoral to cross-sectoral approach to water management. IWRM brings together a variety of disciplines and approaches and according to Sherbinin and Dompka (1997) this represents a critical first step towards finding lasting solutions in water issues and achieving this therefore is everyone's business. IWRM is highly rated for its focus on the concept of local participation, an approach stressed in the Agenda21 of the UNCED and recently, Koffi Annan, UN Secretary General emphasised that "without the fullest participation of people at all levels of society the goal of full coverage of Water Supply and sanitation is unlikely to be obtained"(UNEP 2001:2). Our study therefore contends that, local participation in water resource management comes out of a growing recognition that where local environmental knowledge is harnessed and where communities are empowered and have rights to water resources, there is a greater likelihood of a sustainable water management.

Unfortunately, this cooperation between the different actors and agencies has always been weak, conflicting with the interest of the different states, different sectoral plans and different stakeholders, which in many cases have differential access or entitlement to water resources. The weaker links like the youth will always suffers from such a phenomenon.

Drawers of Water (White et al. 1972), a classic American study of East African water issues, presented strong intellectual justification for donors giving attention to the provision of domestic water to rural African communities and becoming aware of the socio-political issues related to conflicting needs and competition for water resources at the community level. The study became a standard reference work for water-resource planners in the 1970s and 1980s (M. Woodhouse, personal communication, 1995). Despite its specific focus on an integrated approach involving social issues, like water use, health, individual costs, and communities, it did not address the role of some key actors such as women and youth in water-resource management, except to note that in most African societies it is considered women's and children's work to carry water. The authors' research implied that women just like youth were not significant decision-makers, even with respect to domestic water use and sourcing. In the ensuing years, this notion has been uncritically accepted, time and again, in the design of water projects around the continent.

While often neglected by many researchers, water-planners and decision makers, youth actors are a large and very resourceful category of stakeholders in the water resource arena as this paper seeks to demonstrate.

While we acknowledge that the concept of youth may be ambiguous to define, youthfulness is universally perceived to refer to specific positive qualities including dynamism, energy, skill, etc. By their sheer numbers, young people are the greatest resource for the world's future development.

This study holds that in order to adequately address water problems in the developing countries in the light of fast growing difficulties, we need to analyse and appreciate the roles played by the different stakeholders in the process, assess their goals, contributions and vital importance to the process. As such, we identify a key actor "Youth" and seek to increase the understanding of their role in a participatory development process such as water management.

1.2 Aims and objectives of the study.

The aim of this study is to present a case for highlighting the role of youth as important actors in an integrated management approach for a sustainable water use especially in a rural African community. More specific objectives of the study will be:

- 1). Explore the use of a participatory approach in community water resource management in Cameroon.
- 2). Analyse the potentials youth dispose and the contribution they can make in an Integrated Water Resource Management (IWRM) process.
- 3). Examine some of the constraints and challenges faced by young people in their contribution to a development approach such as water resource management.
- 4). Recommend various strategies through which effective participation of youth could be facilitated in a community water management process.

1.3 Structure of the paper.

The paper is divided into four parts. The first deals with an overview of two key concepts as strategic background concepts in the context of the study. These are: Integrated Water Resource Management (IWRM) and the concept of Sustainable Development. While we recognize the ambiguity in the definition of the terms, the thesis will derive meaning from the context of certain specific users and the prevailing circumstances but in the case of Sustainable development, more emphasis will be placed on the definition by the Bruntland Report of the WCED¹ because of its focus on intergenerational issues considering the fact that "Youth" the central focus of this study constitute the leaders of tomorrow and are likely to be the negative beneficiaries of today's water odds.

¹ World Council on Environment and Sustainable development, 1987 pp94-140.

The second part presents a problematisation of the notion of youth with emphasis on the potentials they dispose in an integrated water resource management process. We also assess some of the specific constraints young people face in their efforts to provide adequate water in rural communities.

Part three assesses the participation of youth to water resource management in Cameroon by comparing the results of some on-going community water resource projects, which have used or failed to use the participatory approach.

Part four looks at some of the strategic measures to facilitate youth participation in sustainable water resource management and focuses on the enabling conditions of youth empowerment in this process. The paper ends up with a general discussion about sustainable water management in Cameroon.

1.4. Methodology and Scope.

The first step of the methodology assesses the participation of youth in water resource management in Cameroon by comparing the results of some on-going community water resource projects, which have used or failed to use the participatory approach. Our analysis is based on data and information published by the several institutions managing these projects in Cameroon and also on information from related projects. While we acknowledge that technical aspects are important for the understanding of the IWRM concept, the scope of this study does not allow us to consider technical aspects of water resource management.

The next step of the method used in this paper is through a conceptual model of the Causal Loop Diagram (CLD). The CLD illustrates the reciprocal flow of influence between different actors of the system by identifying such actors, their interrelationships and effects (i.e. positive or negative, direct or delayed). It helps to understand how a community water resource management system works with the involvement of different stakeholders especially the youth. It is important to note that the CLD is specifically focused on the objectives and scope stated in this paper.

Effective participation in this paper is referred to as a situation where all the stakeholders democratically elected or otherwise accountable spokespersons at all levels of social structure and at different levels of water management are represented, and have an impact on the decisions taken. This thesis while analysing the effectiveness of stakeholder participation will pay greater attention to the participation of youth as a major stakeholder. It considers the *Third system Project*, a bottom- up approach to development put forward by the International foundation for Development Alternatives (IFDA) in 1976 as the principal for values of participatory development today because it is based on a system of people's power, voluntary organization, consciousness raising, and local action.

2: Overview of the Concepts related to Integrated Water Resource Management (IWRM):

The debate about water resource management has been going on for decades. According to the International Water and Sanitation Centre (IRC 1994), water resource management (WRM) was globally discussed for the first time in the United Nations Water Conference in Mar del Plata in 1977 but it was not until the early nineties that it was really put on the international agenda with the holding of a number of significant meetings such as the 1990 New Delhi meeting, the 1991 Nordic Freshwater Initiative in Copenhagen, the 1992 Dublin meeting, and the 1992 UNCED meeting in Rio de Janeiro (UNDP, 1992) etc.

However, there is an increasing recognition that in order to safeguard water resources from depletion and degradation, concerted action is needed on all fronts, including the different sectors of agriculture, forestry, industry, transport, urban and spatial planning, population planning, and based on a participatory management. Such a holistic approach is what is being referred to as integrated water resources management (IWRM). A 1991 UNDP report argues, “IWRM is necessary to combat increasing water scarcity and pollution” and mentioned methods, which include water conservation and reuse, water harvesting, and waste management. An appropriate mix of legislation, pricing policies and enforcement measures is essential to optimize water conservation and protection says the same report.

2:1. Re-stating the definition of IWRM

Although IWRM has been defined and applied variously by different actors and users of water resources, the objective to ensure optimal and sustainable use of water resources for economic and social development, while protecting and improving the ecological value of the environment remains commonly shared. As such, different regions and nations have developed their own IWRM practices using the collaborative framework emerging globally and regionally.

According to the Nordic Freshwater Initiative (Danida, 1991) “Water resources” means water in the broad sense as available for use and susceptible to human interventions. Water can be surface or groundwater, and characterized by both quantity and quality. “Development and Management” says the same report cover all phases of resources planning, development, use and protection, i.e. assessment, planning, implementation, operation & maintenance, and monitoring & control. “Integrated” means development and management of water resources as regards both their use and protection, and considering all sectors and institutions, which use and affect water resources.

Recent thinking as suggested by the Netherlands Development Assistance (NEDA, 1998) emphasizes the need to include a consideration of the whole water cycle, including rainfall, and both “blue” – ground or surface water – and “green” - soil moisture – components of the resource in order to gain a truly holistic overview. However, such considerations are beyond the scope of our present discussion.

Building on the Dublin Principle, the Global Water Partnership (2000 15) provides a more comprehensive understanding of IWRM and refers to it as “a process, which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems”. The Dublin-Rio statement leads us from a sub-sectoral to cross-sectoral water management and expresses a holistic, comprehensive, multi-disciplinary approach to water resource problems worldwide based on four guiding principles which cover environmental, social, political and economic concerns as we shall summarily analyse below:

Principle 1: Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment.

This principle looks at the totality of water recognizing the fact that water is a natural capital asset with a fixed quantity yield per time period and therefore needs to be maintained in order to ensure it’s requirement for the many different purposes, functions, services and users. Also, the effect of human activity on water is explained by this principle. Human beings can reduce the availability and quality of water by actions, such as mining of groundwater, polluting surface and ground water and through changing land use. As such, upstream users must recognize the legitimate demands of downstream users to share the available water resources and sustain usability. This is the catchment approach.

Principle 2: Water development and management should be based on a participatory approach, involving users, planners and policy makers at all levels.

This second principle, which is the focus of my paper, recognizes the fact that water is a subject in which everyone is a stakeholder. According to the GWP (2000 15) “Real participation only takes place when stakeholders are part of the decision-making process. This can occur directly when local communities come together to make supply, management and use choices” or occasionally through market places with the use of appropriate pricing systems. Participation here means more than mere consultation. It should be an instrument that can be used to pursue an appropriate balance between a top-down and a bottom-up approach in IWRM. As we shall demonstrate further, it should be effective participation where all the stakeholders democratically elected or otherwise accountable spokespersons at all levels of social structure and at different levels of water management are represented, and have an impact on the decisions taken.

Effective participation must be able to exploit all the available consultative mechanisms and stakeholders must recognize that the sustainability of water resource is a common problem and that all parties must be willing to sacrifice some desires as a means for achieving long-lasting consensus and common agreement. For this to be possible there should be an enabling environment which includes the creation of mechanisms for stakeholder consultation, awareness raising, confidence building and education, the provision of the economic resources needed to facilitate participation and the establishment of good and transparent sources of information at all spatial scales; national, basin, catchments; including the marginalized social groups such as the women and youth.

Principle 3: Women play a central part in the provision, management and safeguarding of water.

This paper joins the GWP/TAC in supporting the Dublin principles' claim that women play a key role in the collection and safeguarding of water for domestic and agricultural uses though they have less influential role than men in management. GWP/TAC continues with the claim that although gender issues have been reflected in many agreements since the Rio conference, the Dublin principle strives to ensure that the water sector is gender aware and that rhetoric is replaced by operational mechanisms and actions to ensure an equitable participation of women in IWRM.

Ironically, the Dublin Principle like many others by stigmatizing the role of women failed to fully recognize that youth just like women exercise a similar role. By their sheer numbers amounting to about 30% of the world population (UNCED 1992) and through their dynamism, skills and energy and their ability to mobilise resources, youth can play a vitally non-negligible role in IWRM.

Principle 4: Water has an economic value in all its competing uses and should be recognized as an economic good.

The Dublin Principle attributes many past failures in water to the fact that water was considered as a free good, or that its full value was not recognized. The principle asserts that water has a value as an economic good. Treating water as an economic good may help balance the supply and demand of water, thereby sustaining the flow of goods and services from this important natural asset. The full cost of providing water includes the full economic cost and the environmental externalities associated with public health and ecosystem maintenance. The full economic cost consists of: the full supply cost due to resource management, operating and maintenance expenditures and capital charges, the opportunity costs from alternative water uses, and the economic externalities arising from changes in economic activities of indirectly affected sectors. The recovery of full cost should be the goal for all water uses unless there are compelling reasons for not doing so.

The Dublin principles have gained universal support as the guiding principles underpinning IWRM because it calls for effective participation - the focus of this thesis, a hallmark of the concept of sustainable development developed during the 1992 UNCED conference.

2:2. The IWRM as an integral component of Sustainable Development.

The Brundtland Report - named after its chairperson, Gro Harlem Brundtland, Former Prime Minister of Norway defined sustainable development as “*Development that meets the needs of the present without compromising the ability of future generations to meet their own needs*”. It underscores that sustainable development should be linked to the goals of distributional equity and social justice –within and between countries as well as generations.

Rao (2000) argues that this definition addresses the issue of both intergenerational and intragenerational resource distribution, with expressed concern for the poor. Sustainable development must bring in basic political change in line with an alternative development agenda. As the UNCED (1987: 63,65) states “The pursuit of sustainable development requires a political system that secures effective citizen participation in decision-making ... This is best secured by decentralizing the management of resources upon which local communities depend and giving these communities an effective say over the use of these resources. It will also require promoting citizen’s initiatives, empowering people’s organizations, and strengthening local democracy”

However, Sustainable Development is a concept that grew out of the feeling that western patterns of development have ignored traditional society-nature relations within the south and inadequately addresses issues of social equity, ecological balance, and overall sustainability.

Supporting this claim, Colchester (1994) as contained in Brohman (1996 201) argue that many projects such as roads, railways, ports, power lines, dams etc typically initiated in the name of development and sponsored by national governments with loans from the World Bank and other international financial institutions have only been clearly beneficial to elite groups linked to these transnationals. Such groups have often used lobbying to further their interest within national and international development agencies. Meanwhile, the poor and disadvantaged have usually been excluded from the decision-making process and have borne the burden of the costs of these projects. This paper raises the argument that future generations (today’s youth) will pay a heavy price for present unsustainable development – the benefits of which are currently being monopolized by an elite minority.

It is against this backdrop Brohman (1996 307) suggests that attention has recently been focused on issues related to the sustainability of development and he provided the pace for environmental issues to move top on the world agenda. An incentive to this was the 1972 report published by the Club of Rome entitled *The Limits to Growth*, “which warned that life as we know it faces a sudden apocalyptic end if development practices are not dramatically altered to respect the earth’s physical limits to growth” Meadows and Meadows (1972). This concept of sustainability was further advanced via the works of theorists like Lester Brown (1981) and others at the Worldwatch Institute who stressed that no international economic order could be viable if the natural biological systems that underpin the global economy are not preserved. The process gained greater recognition

at a number of major international meetings, including the Stockholm conference on Human Environment in 1972, the 1974 Cocoyoc conference in Mexico on 'Patterns of Resource use, Environment and Development Strategies' and the very significant World Commission on Environment and Sustainable Development report published in 1987 which gave birth to the historic United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, 1992.

Although several scholars such as Robert Solow (1974, 1986); Redcliff (1991); Keiichiro Fuwa (1995); Vellinga et al. (1995); Harremoes (1996) etc have attempted fairly useful definitions of sustainable development, this concept similar to the concept of IWRM and the concept of Youth, all addressed in this paper, may not be possible to define with great precision as well as consensus, but refinements go on. My analysis in this paper favours the definition provided by the 'Brundtland Report' of The World Commission on Environment and Sustainable Development (WCED) 1987 because it is more generally accepted as a working definition, addresses intergenerational issues, and echoes a basic political change in line with development agenda that secures effective citizen participation of the community which is the central argument in this thesis.

2:2:1. United Nations Conference on Environment and Development (UNCED) 1992.

According to Elliot (1998) the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, or the Earth Summit was borne out of international support galvanised by the Brundtland report. The UNCED represented one of the largest gatherings of world leaders and decision makers to address issues of common interest to the planet. Its purpose as agreed upon by the UN General Assembly (UNCED (1993) was to "elaborate strategies and measures to halt and reverse the effects of environmental degradation in the context of strengthened national and international efforts to promote sustainable and environmentally sound development in all countries". Although five major agreements were signed at the end of the deliberations, we contend that the most significant out-come of the Earth Summit which paths the way for real stakeholder participation is probably the Agenda 21.

2:2:2. Agenda 21

This is a non-binding blueprint and action plan for a global partnership for sustainable development in the 21st century. Connelly and Smith (1999) suggest that Agenda 21 is perhaps the most thorough and ambitious attempt at the international level to specify what actions are necessary to reconcile development with global environmental concerns. By devoting chapters-28 and chapters 25 of its forty chapters document on water and

youth respectively, Agenda 21 stands out distinctively as one of those documents that recognises the important contribution of youth to a development process like water resources management.

Highly credited for changing the direction of development to be peopled-centred and focussing on a bottom-up approach and strengthening the role of major social groups, Agenda 21 is further quoted by UNEP (2001 6) as, “the first UN document to extensively address the role of different stakeholders in the implementation of a global agreement”. In each of its chapters, it outlines roles and responsibilities of the respective stakeholder groups such as women, indigenous populations, local authorities, NGOs, workers and trade unions, business and industry, scientists, farmers, youth and stresses their involvement as being absolutely crucial for successful implementation of sustainable development. Nevertheless, Agenda 21 only enhanced the idea of participatory development but did not constitute the birth of the process.

2:3. Participatory Development: Theories and concepts.

Since the early post-war period, the central focus of mainstream development strategies has been economic growth and the top-down diffusion of development impulses (Brohman 1996). As such the benefits of economic growth during this period were thought to trickle down to the needy population through a top-down process controlled mainly by major international institutions in cooperation with local Third World elites. Brohman further argues that national and international experts conceived and designed development projects from the outside without associating the people to whom these projects are supposedly directed and sometimes these people exist mainly in the abstract as socio-economic indicators.

As such, development analysts by 1960 began to notice that despite the development efforts of many countries during this time, growth was not necessarily correlated with other development objectives. Evidence was accumulating of growing labour underemployment, especially in agriculture, and rising inequalities in income distribution (Adelman and Morris 1973); Fishlow (1972); Griffin and Khan (1972). Indeed, by the early 1970s, it had become of commonplace to argue that throughout much of the third world growth was accompanied by increased inequality (Griffin 1989: 165). Something was therefore wrong with the nature of growth rather than the pace of growth as the crucial factor to development.

During the First and Second United Nations Development Decade (1961-71, 71-81), many theorists and practitioners of development argued that the focus should be on the ‘animate’ instead of the ‘inanimate’ - on human resources, as measured by quality of life considerations, rather than on material resources. This was Black’s (1991: 20-1) argument. Ul Haq as quoted by Brohman (1996 :203) further argues that new development approaches should be oriented toward the satisfaction of basic human needs and desires, particularly at the local community level, encouraging local participation and projects should “build development around people rather than people around development”. Such alternative development concept is what Berntein and Campbell (1985) refer to as the birth of ‘Populist movements’.

Similarly, Moser (1989) links this to the origins of the concept of `community development`, which the British used to develop basic education and social welfare during the colonial days. However, participatory development really became an impetus in international development projects especially with institutions like the World Bank by the 1970s (Brohman 1996: 204).

According to Brohman (1996 204), the World Bank in 1973 marked its commitment to this concept by adopting a new development approach termed `redistribution with growth` which targeted programmes for the poor during the initial stages of development instead of simply relying on trickle-down mechanisms to eventually spread the benefits of growth. In parallel, the International Labour Organisation (ILO) adopted a `basic needs approach` which was later formally adopted as the Declaration of Principles and Program of action for a Basic Needs strategy of Development by the World Employment Conference in 1976 putting focus on the basic needs of the poor. Such needs, according to Ghai (1977), included minimum requirements of private consumption such as food, shelter, clothing; essential services of collective consumption such as electricity, water, sanitation, health care, education, and public transport. He further stressed on the need for participation of people in decisions affecting their lives as satisfactions of basic needs within the broader framework of human rights.

Further participatory development concepts came up in the later part of the 70s. The Swedish Dag Hammarskjöld foundation published a document in 1995 entitled *What now: another development* calling for a humanist approach to development that should be geared towards the satisfaction of basic human needs. Also parallel to this publication was the *Third system Project*, a bottom-up approach to development put forward by the International foundation for Development Alternatives (IFDA) in 1976 in Nyon, Switzerland. According to the IFDA (1980: 69-70), the third system was dedicated to exploring new methods of raising consciousness and increasing participation by grassroots movements in development decision-making. IFDA makes a distinction between the first system of political power, which is dominated by the state, the second system of economic power that is dominated by transnational capital and the Third system of people's power, based on voluntary organization, consciousness raising, and local action. We regard IFDA's third system as the principal for values of participatory development today.

2:3:1. Stakeholder Participation.

Due to the several shortcomings deriving from top-down development efforts, participation has come to be recognised as an absolute imperative for development within mainstream strategies. Nevertheless, like the many other concepts analysed earlier in this paper, it has remained an elusive concept. Brohman (1996 251) argues that it has been given multiple meanings and connected to multiple methods of implementation in the last few decades. He feels that there are still many unanswered questions about who participates, what they participate in and how they participate and for what reasons they participate..

Participation is a complex multidimensional concept involving different stakeholders. Fleming (1991:37) suggests that participation emphasises the decision-making role of the community. At the community level, helps `to improve the design of policies so that they correspond to the needs and conditions of the people to whom they are directed (Cornia et al. 1987: 163). Fenster (1993: 163) makes a distinction between economists' definition of community participation, which is the equitable sharing of the benefits of projects; and social planners definition as community's contribution to decision-making.

A much more realistic interpretation of community participation is given by Paul (1986:2) as "an active process by which beneficiaries influence the direction and execution of a development project with a view to enhancing their well-being in terms of income, personal growth, self-reliance or other values they cherish". This therefore brings us to the question of participation, as either induced, or spontaneous. However, caution should be given to the frequently abused term `participation` because the bottom-up approach in itself has got several limitations. While many development programs have been promoted by rhetoric about decentralisation and participation, in practice, they have generally been either tightly controlled by the state or outside development institutions. Most states still fear that grassroots organisations (especially the youth) will generate popular empowerment beyond state control. Justifying this claim, Fowler (1991) state "the imposition of outside concepts of participation ...has often undermined indigenous forms of political organisation and democratic practice, thereby reproducing paternalistic and authoritarian patterns of domination". In several cases, participation that is not spontaneous is top-down and vice versa.

Midgley (1986) as quoted by Brohman (1996 208) argues that spontaneous participation "comes closest to the ideal mode of participation as it reflects voluntary and autonomous action on the part of the people to organise and deal with their problems unaided by governments or other external agencies".

Nevertheless, many development agencies currently contend that participation is their objective simply in a bid to gain project favour or donor support, few have actually put effective participation in practise. For participatory strategies to begin achieving their potential, the poor need to be genuinely empowered through fundamental changes to the status quo and the distribution of power equitable to all actors including the young people.

Conyers (1985) and Moser (1988) see another distinction between participation as a means to improve projects results and participation as an end in itself. As UNCHS (1984:6) argues, more people will benefit and the outcomes will respond better to the needs of the beneficiaries with participation as a means to improve project results than with the later because people contribute their ingenuity, skills and other untapped resources.

According to UNEP (2001), stakeholder participation describes a process, which aims to bring together all major actors in a new form of communication, negotiation and decision-making on a particular issue. Such a

process should be based on democratic principles of transparency and participation, the recognition of the importance of achieving equity and accountability. It should comprise dialogues on policy, consensus building, decision-making and implementation of practical solutions.

Stakeholder processes have therefore emerged because there is a perceived need for a more inclusive, effective manner for addressing the urgent sustainability issues of our time. For participation to be effective, it must be broad based and involve all stakeholders including the young people equally into all the stages of the process. This is imperative for the success of any development project.

3: The role of youth in stakeholder processes.

Defining youth appropriately is a task riddled with polemics and one, which still lacks comprehensive attention. Different schools of thought, regions, nations and people of different ages define youth variously. However, this is due to the fact that youthfulness is a relative concept. The New Oxford Dictionary of English defines youth as “the period between childhood and adult age, - the state or quality of being young, especially as associated with vigour, freshness, or immaturity”. To complement this, these thesis contend that being a youth means belonging to a particular identity that demonstrates dynamism, knowledge, skill, and aspiration.

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO 1995), youth constitutes people between the ages of fifteen and twenty-four. If we go by this definition, youth make up approximately 18% of the world population. Agenda 21 considers that youth comprise nearly 30 per cent of the world’s population. Young women and men defined by the Commonwealth Youth Programme (1995 5) as those aged 15-29 make up between 15 and 35 percent of the populations in most Commonwealth countries; and in some like in Cameroon, the proportion of people below the age of 30 is above 50 percent. UN estimates project that those below the age of thirty could form as much as 55 percent of the world’s population (UNESCO 1995).

Considering their sheer numbers as indicated above, Chapter 25 of Agenda 21 (UNEP online August 2001) highlights the role of youth in a stakeholder process by clearly stating “the involvement of today’s youth in environment and development decision-making and in the implementation of programmes is critical to the long-term success of Agenda 21...It is imperative that youth from all parts of the world participate actively at all relevant levels of decision-making processes because it affects their lives today and has implications for their futures. In addition to their intellectual contribution and ability to mobilise support, they bring unique perspectives that need to be taken into account”

Since Rio, stakeholders have in various ways tried to work out the norms and standards for attaining the above goals. For example with the launching of the Global Compact Initiative by the UN Secretary General, multi-

stakeholder discussions occur at the UN Commission on Sustainable Development (CSD) each year on different topics. However, the power gaps between different stakeholders still remains very wide given the fact that there is no common and equitable consideration and platform of action of the different interest groups.

3:1. Why current attention on young people?

Contemporary youth show a low and declining interest in representative politics, and a declining trust in politicians. There is the rise of the extreme right, youth activism and other forms of resistance with a concomitant increase in attitudes of passive resignation to authoritarian leadership. Movements like ATTAC and anti-globalisation demonstrations have dominated the scenes of many gatherings of world leaders today. It seems that the current political structures do not meet the expectations of young people, and accordingly, there is room for extreme parties with authoritarian and intolerant connotations to appeal to a large part of the electorate. According to Kovacheva (1999), the public notions about the pressing social problems of the day affect the way youth participation is understood and developed, as well as the structure and scope of involvement granted to the new generation.

3:2. What is Youth Participation?

The classical approach toward the idea arises from the socializations theories of Coleman (1966). From this perspective the participation of young people is conceptualized as their integration into the structure of society through internalizing dominant social norms. The social position of youth is accomplished through their involvement in existing institutions and arrangements. Thus participation turns out to be more about controlling young people and regulating their activities in concordance with the requirements of the state system than about their autonomy or self-fulfillment. This understanding has been criticized as biased toward preserving the status quo, perceiving the young only as passive acceptant of adult values and practices (Hartman and Tynka 1986). Social exclusion is shown on our CLD (section 3.5) to be a causal factor in the system.

A similar approach was applied in the agendas for youth work, policy and research proclaimed by the United Nations during the International Youth Year in 1985. Youth participation became a dominant theme in a recognition of the need for youth active involvement in solving the increasing problems of young people worldwide: poor living conditions; unemployment; health hazards such as abuse of alcohol and drugs; water resource need, environmental problems; and discrimination in the labour market, in cultural affairs and in the legal systems. While urging for the widening of youth services and provisions, this concept again defines youth as a recipient in need rather than as an initiator of policy.

Looking from a different perspective, Mahler (1982) envisaged that youth participation should reveal the extent to which young people have power over present and future conditions and the extent to which they are governed

by the established social authority. Nevertheless, present-day youth especially those in rural Africa faced with economic and political difficulties have conform to the established order through their submission, dependence and alienation.

However, this paper contends that it is not only society that imposes norms on young people. Young people themselves produce new values and through their active participation in social life, change and 'juvenitise' society. Participation therefore results in the self-realization of personality, the opportunity for young people to actualize their own potentialities (knowledge, skill and aspiration) in education, work, culture, and family life. In pursue of self-realization, youth change society and contribute to social progress.

3:3. Youth potentials in Water Resource Management.

Eva Rathgebar (1996) indicates that an average household in developing countries consumes about 40-60 liters of water daily for drinking, cooking, cleaning, personal hygiene etc. Meeting such a demand usually entails the expressed dynamism and potentiality of youth and women who make several trips to the water collection points, and sometimes for very long distances. If we go by the UN statistics, it will necessitate the massive 30% of world population making youth to provide such water needed by households in these regions.

This paper acknowledges that young people constitute a vital force; a critical age group, which is capable of mature reason and action; their condition constitutes an apogee of both ideals and expectation.

More so, in many rural community development committees, young people have often constituted those with reading and writing skills competent enough to act as secretaries, translators, interpreters and spokespersons for others in their communities.

From the cultural point of view, youth are important arenas of identification (developing an identity) and expression (participation). The Swedish youth culture researcher Johan Fornas et al (1995) maintains that body, sound and image are the three key vectors of youth identification and expression. One can easily see how important the body; sport, dance, music, visual culture and their combination are to young people and the world today. Of course there are people who maintain that this field of activities are totally overtaken by commercial cultural production and that the only role for young people is that of the passive consumer. Nevertheless, they are themselves the best resource for promoting their development, and they must be both the architects and agents in meeting the challenges and solving the problems faced in today's world including water resource scarcity. It is imperative therefore, to ensure that they are empowered fully to take charge of the further sustainable challenges. Youth deserve to be considered as full and equal citizens. They are capable of assuming responsible, determining roles in society. They need only to be given the opportunity and guidance to prove their ability

The World Water Forum (2000 ii) stresses that it will necessitate the concerns of youth in water resource management in the region in order for Africa's development partners to mobilise funding needed in this sector. The same report further agrees that adherence to the above approach will lead to a stream of critical success

results such as openness, transparency and accountability in decision making; greater ability to generate and receive knowledge and information; proper planning, assessment and evaluation; and a higher political will and grassroots support.

However, political, socio-economic, cultural, gender as well as age differences determine in which way and to what extent young people can be involved, and empowered.

3:4. Constraints to youth involvement in the Water Resource Management.

Notwithstanding the above potentialities, youth like many other social groups in the society such as women groups, indigenous people, aged etc, also face some distinctive structural impediments to their improved social and economic well-being and in their efforts to provide adequate water supplies. These include amongst others an unequally distribution of resources and assets, skewed power relations, and a frequent dependence on the elderly or elite groups even though these elites may be responsible for the continuing oppression of the youth.

In rural areas in third world societies where poverty is particularly severe, land, water resources and other resources have become increasingly concentrated in the hands of the elderly, thereby depriving the youth of any real opportunity to manage it. El-Ghonemy (1990); Griffin (1989); Islam (1992); Lipton (1993) contend that broadly based rural development is impossible in most countries without fundamental agrarian reforms, including land redistribution.

From the political point of view, there is a lack of the political will to fully incorporate youth in this process. It is our contention that youth by the force of their number and their potentiality constitutes a threat to many governments. There is the general feeling of mutual suspicion and mistrust characterizing relations between popular movements like youth groups and the state. Brohman (1996 258) argues that “popular movements have tended to view the state as an adversary, dominated by elite groups aligned against the interest of the majority” particularly the young people. Most states still fear that grassroots youth organisations will generate popular youth empowerment beyond state control.

Consequently, Moser (1989:117) notes “projects... whose objectives include capacity building, effectiveness, and cost sharing, but which in practice also result in empowerment, tend to be introduced by governments for specific political reasons linked to social and economic transformations at the national level, and to last only as long as those reasons are valid.” It is contended here that the responsibility of youth group formation for instance youth water catchment unions has especially in the third world been placed within conventional bureaucratic control, therefore making the problems of young people solved through the intervention of the state or older people. This approach is limited, perceiving young people as passive objects upon which interventions must act, rather than as active subjects participating in the shaping of their lives and communities. It tends to be based on a range of negative assumptions about young people- that they are, at best, unable to take care of

themselves and, at worst, responsible for crime and violence. This does not however underscore the fact that young people themselves are responsible for some of the political or social problems that face them.

In Cameroon like in many other developing countries, there is a growing dichotomy between conditions in the rural and urban areas leading to a tendency of urban bias in the allocation of resources. Also such regions are vulnerable to destabilizing effects of drug abuse, money laundering and the damage these activities can do to the lives of young people. People especially in the rural areas do not have access to safe drinking water, nutrition, and adequate health services. This is especially true in rural areas where there are high levels of infant, maternal and youth mortality from preventable causes.

More so, the HIV/Aids pandemic estimated at 540,000 carries in Cameroon (CIA 1999) is having a devastating effect on the efforts of the youth to be involved in the water management domain. UNESCO (1998) estimates that more than half of the HIV infected population worldwide fall between the age group 10 and 24 with the disease spreading at an alarming rate in central Asia and Africa. Young women are particularly vulnerable. According to The Commonwealth (1995:15), pregnancy- related deaths, including complications from unsafe abortion, are a leading cause of death among young women aged 15-19 in Africa. Access to knowledge, information and skill, and vocational training, the main drivers of sustainable development is another area in which young people have pressing difficulties in fully participating in water management.

The same source suggests that, youth have a disproportionate burden of unemployment, with young women, schools leavers and dropouts being particularly vulnerable. While UNESCO (1995) considers that youth comprise about 18 per cent of the world population, they make up averagely only 4 percent of all UNESCO professional staff, ironically, the same UNESCO, declares that the strongest demand expressed today by young people themselves is that of participation. Youth desire to be serious and reliable partners in the conception, planning and implementation of water policies and programmes in their communities and societies.

3: 5 Community water resource management in Cameroon.

Figure 5: Political Map of Cameroon.



Source: <http://www.cia.gov/cia/publications/factbook/geos/cm.html>

Cameroon according to CIA June 2001 estimates has a population of 15,803 220. The total population is on an increase with about 2,41% per annum (CIA, 2001). Of this population, about 18% are below the age 18.

Cameroon has one of the best-endowed primary commodity economies in sub-Saharan Africa, because of its oil resources and favourable agricultural conditions (CIA 2001 online). Still, it faces many of the serious problems facing other underdeveloped countries, such as slow economic growth, poverty, poor access to water and sanitation facilities, and corruption. As far as water resources are concerned, Cameroon is blessed with abundant fresh water resources, a strong incentive for economic growth. As the population and socio-economic activities increase, more and more waste products are contaminating available sources of surface water as well as groundwater (Biswas et al 1993). These contaminants are seriously affecting the quality of available sources of water for various uses and putting enormous pressure on the water resources in Cameroon. Although Cameroon has about 62 percentage of population with access to safe water; 82% in the urban areas and 42% in the rural areas (UNICEF 2000 online), a seemingly high rating as compared to other sub-Saharan countries, there is still a water problem justified by the prevalence of water borne diseases and the poor sanitation conditions of the country.

The supply of portable water to both urban and rural areas in Cameroon after independence was the responsibility of the Ministry of Mines, Water and Power and the Community Development Department (CDD). Also active were such foreign organizations as SCANWATER, Cooperation for American Relief Everywhere (CARE), Cameroon Industrial and Civic Contractors (CIACC) and Swiss Association for Technical Assistance (SATA-HELVETAS) (Nforba et al 1997). Nforba et al also indicate that many of the estimated 7000 water systems constructed in the rural areas in Cameroon, have gone out of operation or abandoned to ruin long after the project completion. They attribute the causes to be linked to “poor planning and management and in particular, the failure to involve the local population in all phases of the project. Effective participation would have helped to guarantee continuity after the projects completion”(Nforba et al 1997 2). Projects in which the government operates and administers the water scheme are far less successful than those, which treat communities as the future managers and involve them directly in the process. Nevertheless, Nforba et al continue to argue that not all projects were bad, some projects carried out by institutions promoting a better supply of potable water to the rural areas, such as CDD and SATA-HELVETAS have been the most successful. Their projects emphasize self-help and the involvement of the members of the community throughout the various phases. Once the project is handed over, the community assumes responsibility for managing the water system. We shall look at a couple of community water supply projects in Cameroon and analyze the successes and the failures in terms of their involvement of the local population particularly the youth.

3:1. Role of Government of Cameroon

The Hague Declaration on participation in water resource management as quoted in UNEP (2001 2) states “government role is not reduced, and remains pivotal in supporting local inclusion e.g. education/capacity building, monitoring and in producing enforceable regulations...” Support from higher levels of government is essential to the success of water resource management projects. According to the World Bank Participatory sourcebook it was crucial, for example, in overcoming line agency resistance to plans for beneficiary participation through an autonomous fund for rural Water and Sanitation projects in Nepal. When consensus or political support at the national level is weak, there is the greater possibility of project failure.

As a sign of commitment to this international declaration, the Cameroon government has created the Ministry of Mines and Water, the National Water Corporation SNEC – a para-statal whose activities are concentrated in the urban areas, the Rural Engineering Department (now defunct) and the Community Development Department to carry out its policy and has also encouraged foreign organizations to provide potable water in the country as shown on the figure 3 below:

Figure 6: **Organizations promoting rural water supply in Cameroon.**

CIACC	CARE	SCANWATER	RURAL ENGINEERING	CDD/SATA- HELVETAS
30 PROJECTS	143 PROJECTS	335 PROJECTS	3900 PROJECTS	347 PROJECTS

Total number of water projects: 4755

Source: IRC 2001 online.

As further signs to show that Cameroon government favours community participation, the Ministry of Mines and Power issued policy statements and the following guidelines for institutions operating community water supply in Cameroon:

Box 1: Summary Guidelines for Operating Community Water Supply in Cameroon:

(Source: Ministry of Mines and Power in Cameroon)

- Projects initiated by the local population shall continue to be operated and maintained by the population with the assistance of CDD/SATA-HELVETAS.
- The completed projects of SCANWATER and CIACC must be reorganized so that the local population becomes responsible for maintenance of the systems.
- Before any new project is carried out in a village, a sum of XAF 135,000 must be paid by the population as a guarantee for the maintenance of the system.
- The population shall contribute to the realization of a water project through labour, funding and any other appropriate means.
- When a water supply system is completed it belongs to the members of the community for which it was meant and not to the government.
- Water operators shall be trained to guarantee the proper functioning of each system..
- The Ministry of Mines, Water and Power shall take the decision about what type of water system is good for that village.
- Provincial commissions shall be created in every province to sensitise and educate the of some of these

3:2 Comparing approaches in community water supply projects in Cameroon.

Our analysis seeks to compare the results from the approaches of four different institutions that manage water resources at the community level in Cameroon by looking at their levels of involvement of youth. Our assessment of the success cases will be combined because they seem to have similar approaches to water resource management.

3:2:1: SCANWATER: from outside to inside control – a failure.

By 1992, SCANWATER, a private Danish company, had built about 335 borehole water supply schemes in medium-sized villages and small towns in Cameroon. The technology involved pumping the water up into a reservoir, the water was then distributed through public standpipes and a few private connections. A diesel-powered generator normally supplies power, but sometimes-electric pumps are used. According to Nforba et al 1997, the SCANWATER approach failed not because the technology used was not good, rather, it used only their own engineers and technicians to bring potable water into a village. Usually, the organization will train an operator; hand over the project to the government and leave for the next village. They further indicate that until August 1988, the local community was never involved at any stage of the project. This paper contends that the failure of this project proved that a participatory approach, was highly preferable and that the government did not exercise her role of supporting local inclusion because for many years the government has maintained these water systems free of cost to the consumers, entrusting their operation and management to SCANWATER.

It may be right to also attribute the failure of the Scanwater experience to the fact that it occurred in the depths of an economic crisis affecting all of sub-Saharan Africa and as a result, the government of Cameroon could no longer maintain the installed water systems. To justify this, the World Bank, (1989); and the UNECA (1995) contend that this economic crisis which was characterized by weak agricultural growth, a decline in the industrial output, poor export production, disintegration of the productive and infrastructural facilities, increasing debt, deteriorating social indicators and institutions, affected mostly education, public health and sanitation, housing and potable water. Faced with not only the full range of operating problems, but also the growing number and dispersed nature of its installations, government decided to transfer all running and maintenance expenses to the beneficiaries. Gordon and Gordon (1996 111) argue that this crisis contributed to the process of participatory development in Africa where responsibility was passed on to “grassroots organizations that nurtures rather than obstructs informal sector enterprises and that promotes nongovernmental organizations (NGOs) and intermediary bodies”. In other words, development became more bottom-up and less top-down. Acknowledging the failure of this approach and recognizing the need for a change of paradigm, Nforba et al say that a new water policy was put in place that delegates power to the community, through a village committee, for the management of the water installations.

Although the report raises as many questions as it answers concerning the different levels of participation, it however, demonstrates that the main reason behind the initial failure of this water supply system was lack of effective participation and had it been, the youth were effectively involved, the result would have been better.

3:2:2: CIACC: from top down to community-managed.

The Cameroon Industrial and Civic Contractors (CIACC) water scheme was also bound to fail because initially it used a similar approach like that used by SCANWATER. CIACC is a local water construction company of Dutch origin that receives technical and management support from the Vermeer contractors group in the Netherlands and also placed under the supervision of the Ministry of Mines, Water and Power in Cameroon. According to Nforba et al, CIACC constructed a total of 30 water systems in three provinces but the community members were not in any way involved; hence many of the systems became inoperative. Fleming (1991:37) while arguing that participation emphasizes the decision-making role of the community also supports Cornia et al's (1987: 167) claim that such participation helps "to improve the design of policies so that they correspond to the needs and conditions of the people to whom they are directed" In this second case, it will not be erroneous to assume that the young people were not also associated in the conception, design, construction, operation, maintenance and management, of the water supply system and that had the youth been involved, the outcome would not have been the same.

As a remedy to the situation, the Ministry of Mines, Water and Power ordered for a reorganization of the water supply system through the creation of democratically elected village committees to administer and maintain water systems. The report did not mention the different categories of people elected into the committee. That notwithstanding, it is apparent that by the force of their number, and other associated potentialities including their reading and writing skills, the youth could easily have a reasonable representation in any democratically elected rural committee.

After the creation of the committees, and in a bid to assure future success of the project, the Ministry of Water, Mines and Energy requested that a contract is signed between the village and the government whose contents

Box 2: Terms of community water management contracts in Cameroon

- 1) The villagers are responsible for operating and maintaining the system, and for financing the purchase of spare parts.
- 2) The government is responsible for providing technical assistance, for funding training and for the purchase of tools for repairs.

Source: Ministry of Water, mines and Energy, Cameroon.

Nforba et al (1997) reveal that of the 335 Scanwater systems and 30 CIACC systems developed in Cameroon, over 90 percent are reported to be non-functioning and in many, the locations of the systems were not even known. If these two projects were initially a failure, one lesson is to be acknowledged, that both projects did not use an effective community partnership approach and that the young people who make-up a majority of the population were not actively associated.

Failure has resulted not only in heavy financial losses but also in dashing the hopes of the affected rural communities of enjoying a reliable supply of potable water and increasing the incidence of water-borne diseases.

3:2:3 Care International.

Care International is referenced by IRC (1997) as one of the institutions that have been successful in rural water supply because of their use of the stakeholder approach. Originally designed by the United States to respond to the needs of Europeans destitute after the second World War, the 'Cooperative for the American Renovating of Europe' changed its name to 'Cooperation for American Relief Everywhere' once the situation in Europe improved. As a Non- Governmental Organization NGO that promotes rural development, CARE USA opened a mission in Cameroon in 1979 and currently operates in four provinces in different fields of development. Besides developing village water supplies, it is interested in health, environment, conservation, forestry, agriculture, the promotion of small and medium-sized enterprises, emergency aid, women and development, training and education with sponsor from American organizations and the Dutch government.

In the area of rural water supply CARE has so far constructed 141 handpump wells in the rural areas of the East Province and one water supply system in the Far North Province using a water catchments. CARE's approach from the onset uses instruments of a participatory approach where any village wishing to benefit from CARE's assistance in the provision of potable water has to show its commitment by meeting the following conditions:

Box3: CARE's Instruments of Community Participation in Water Resource Management:

- an application to CARE for assistance.
- a down-payment of XAF 150,000 after the first field test has been carried out
- a bank or post office account opened with at least XAF 25,000 for future maintenance
- readiness to dig from the ground level to the water level if the project is a well
- supply by the village of sand and gravel, if available
- fencing off the well after completion
- routine testing of water quality
- the formation of a Water Maintenance Committee
- Provision of voluntary labour in the case of a large water supply system.

In return, the village gets the following services from CARE:

- CARE takes over the construction of the well when the water level is reached and installs the rings and a handpump imported from Canada
- CARE trains the water operator or pump mechanic
- CARE carries out routine supervision and financial monitoring after handing the project over to the community and evaluates the communities effort
- CARE educates the users about water quality issues
- Provides technical advice and support.

Source: Ministry of water, mines and Energy, Cameroon.

3:2:4 SATA-HELVETAS- An active partnership.

The Swiss Association for Technical Assistance (SATA-HELVETAS) applies the similar participatory guidelines like CARE. According to IRC, SATA-HELVETAS first came to Cameroon in 1961 and working very closely with the Community Development Department CDD of the Ministry of Agriculture; its pioneer engineer had constructed 23 water points in the Ekona Mbenge Water Supply Project by 1963. Given this initial success and the interest shown by the people in community work, an agreement was signed between SATA-HELVETAS and the Cameroon government on 29 June 1964 to extend SATA-HELVETAS's assistance to water projects on a larger scale. By 1994 SATA-HELVETAS had constructed 344 water points.

Besides its water supply activities, SATA-HELVETAS set up a Building Training Centre in Kumba where technical personnel could be trained for different jobs: mason, caretaker of a Water supply, building contractor, technician, supervisor, etc. By 1994 SATA-HELVETAS had trained a total of 189 caretakers and 446 water project maintenance committee members.

SATA-HELVETAS also provided training for its partners, notably the Community Development Department CDD technicians and staff of non-governmental organizations (NGOs), mainly on the protection of the water catchments and the maintenance of water systems.

SATA-HELVETAS maintained a role to support local initiatives, encourage rural communities in their self-help efforts and create incentives for economic and social development. It gives priority to villages having the most urgent need; villages/communities providing considerable self-help through substantial contributions in kind and cash; projects serving the whole population or all concerned groups; villages guaranteeing proper maintenance and respecting the environment. To qualify for assistance with SATA-HELVETAS the communities have to meet the with similar conditions as imposed by CARE with the difference that communities have to make 30 percent worth contribution for new water systems, 40 percent minimum contribution for the extension of an existing water system, 50 percent minimum contribution for extensive repairs and assume responsibility for the maintenance of completed projects and cover 100 percent of the costs.

How CARE and SATA-HELVETAS Projects work.

For the SATA-HELVETAS Projects, IRC reports that the community initiates the water project, usually on the basis of a felt need. It sets up a Project Committee to plan and implement the project. The General Assembly or the Representative Assembly, which represents the whole community, is usually the highest decision-making body. When the plans are agreed to, all members of the community contribute in cash, labour or kind to the project and its eventual maintenance.

On completion of the water system the community sets up a Maintenance Committee, elected from the local population. The community engages a qualified caretaker (plumber) and an assistant. To manage the funds the community opens an account and ensures proper auditing.

It also is expected to protect the catchments areas and ensure the continued reliability of the water source. It establishes a monitoring, evaluation and reporting system. The water supply belongs to the community and to no one else. CDD and SATA-HELVETAS sensitize and educate the entire community; provide technical, financial and material support.

IRC further reports that CARE operates a similar scheme, communities indicate clearly its needs and interest in developing a water supply. Sensitization, mobilization and education of all members of the community is carried out by the community development department. Democratically conducted elections are carried out to choose the water committee members after the idea of a water supply project has been accepted. Those elected are installed and charged with the responsibility of planning, implementing and maintaining the water system on behalf of the community. The Committee then formally applies to CARE, accepting the terms of the agreement and invites CARE to do feasibility studies.

CARE works hand in hand with the CDD to implement the project. Through the Water Committee the villages contribute money to construct the well from the ground level to water level and to supply local materials. CARE staff constructs the well from the water level downwards and installs rings and a handpump, usually purchased from Canada. It also trains the village water mechanic.

To assure accountability and guarantee for the maintenance, CARE further makes sure that the savings in the post office do not get below XAF 25,000 to avoid closure of the account. To preserve the quality of the water in the well, a clause prohibiting community members from washing clothes and other items at the pump site is contained in the internal regulations on water use.

3:2:5 Assessing the results of the different projects:

By allowing the community to indicate clearly its needs and interest in developing a water supply, CARE and SATA-HELVETAS are correcting the failures of Scanwater and CIACC. This approach therefore has greater chances of success. Nforba et al (1997 10) indicate that out of the 142 handpumps installed in the East Province by CARE, 136 are reported to function well and so do the Water Committees while out of the 302 completed projects SATA-HELVETAS only 33 (10 percent) are not functioning well. They further state “Community management involves all the members of a community (including young people) directly in all phases of a project, regard the project as their own, give it their support and continue to look after it”.

The extent to which members of the community were made aware of the project’s purpose and benefits also played a critical role in determining success or failure. Generally, youth are more actively motivated to carry out education campaigns and are easily accepted by the community than other groups. Thus, while the success of the CARE and the CDD/SATA-HELVETAS-supported projects can, to a large extent, be attributed to the

principles of community involvement, management sensitization, education and ownership, the failure of the CIACC, SCANWATER and the Rural Engineering Department projects can be attributed to the lack of these elements. A project is judged successful if the system for supplying potable water to a community is maintained and continues to function after its installation. For instance the Scanwater and CIACC systems failed because the community could not come to the rescue with the belief that it was someone else's (the states) project and, besides, they had not been involved in planning a type of water system that they could sustain and did not receive the relevant training to maintain and manage the water supply.

The major reason for success or failure stems from whether or not the members of the community have been involved throughout the project. The question of ownership – who owns the improved water system? – is also a significant contributing factor. For instance, when the Rural Engineering Department constructed improved water systems and handed them over to the Ministry of Mines, Water and Power for operation and maintenance, these schemes were doomed to fail as the state not only lacked the organizational support but also was unable to continue to provide any financial support.

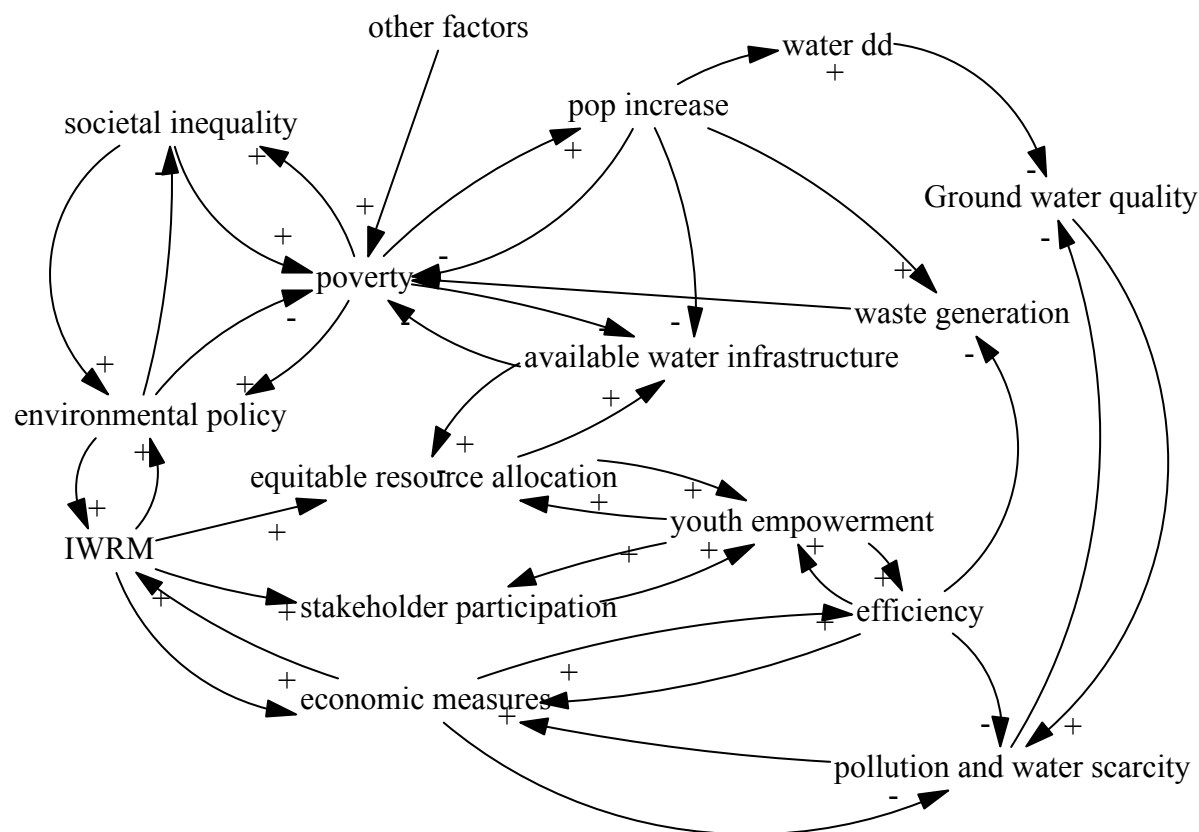
Experiences in Cameroon in the domain of rural water supply show that the extent of success or failure in keeping rural water supply systems operational depends on the degree of involvement of the community members especially young people in all stages of the water project and in their preparation for self-management of the system after it has been completed.

Although the project reports fail to mention who participated and at what levels, judging from the success example of CARE and SATA-HELVATAS in training members of the community as project operators, we can suggest that generally, youth will be preferred for any kind of training and will be willing to volunteer as trained staff than other groups in the community.

Moreover, the manpower supply in projects especially for digging and backfilling of trenches, sand and gravel supply, fencing will generally be readily available from young people than other groups given their numbers and strength.

4: A causal loop diagram of the system.

Fig 7:A Causal loop diagram (CLD) of the system



Poverty in the model is considered to be the prime cause of water resource degradation in Cameroon. When there is inequality in the society, more persons are not given equal opportunity to manage water resources, this increases poverty. On the other hand an increase in poverty re-enforces societal inequality. Although other factors may account for increased poverty, Ndiaye (1993) suggest that population increase has tremendous impact on poverty and African water resources, meanwhile water when managed poorly, hurt the poor most. An increase in poverty increases the potential for Africans to bring forth more children to guarantee security and increase the labour force. An increase in population will increase poverty. As population increase, the demand for water for household and industrial activities also increases; therefore bring pressure to bear on the quality of ground water. A decrease in ground water quality will lead to pollution and water scarcity.

Reading the loop the other way round, we find that increased poverty calls for increased environmental policy to manage water resources. An increase in environmental policy reduces poverty and also decreases inequality in the society. An increase in environmental policy calls for an Integrated Water Resource management IWRM that in turn increases environmental policy. An IWRM paradigm leads to three central measures, which go a long way to decrease the incidence of poverty: economic measures, stakeholder participation and resource

allocation. An increase in economic measures increases efficiency and when there is greater efficiency, there is an increase in economic performance. Likewise, an increase in economic measures decreases pollution and water scarcity. IWRM increases stakeholder participation that increases youth empowerment. As youth are empowered, stakeholder participation increases while efficiency also increases. On the other hand, increased efficiency leads to increased youth empowerment. An increase in youth empowerment also increases equitable resource allocation. As resource allocation is increased, available water infrastructure is increased. More water infrastructure reduces poverty and vice versa.

5: Measures to facilitate youth participation in a community water resource management.

5:1: Youth Empowerment:

Recalling earlier arguments about water crises, the potentialities of youth and the importance of Youth participation in a water resource process, it therefore becomes incumbent for youth to be empowered in this process. In the Commonwealth's (1998 5) view "empowerment takes place when young people are provided with choices in life, are able to make informed decisions and take responsible action based on their decisions"... "pursuing the objective of youth empowerment gives young people the maximum opportunity to contribute to the economic, social and cultural advancement of their families and countries and to gain self-fulfillment". Effective and meaningful participation in decision-making is central to any kind of youth empowerment.

Facilitating youth empowerment means creating and supporting the enabling conditions under which young people can contribute on their own behalf, and on their own terms rather than at the direction of others in a community water process. These enabling conditions as indicated in figure 4 below may include; political will, adequate resource allocation, a supportive, legal and administrative framework; access to knowledge, information and skills, and a positive value system. The empowerment of youth in a water resource process should be the business of the communities as a whole and involves the concerted efforts of key community stakeholders, including governments, water systems support agencies, non-governmental organizations NGOs, family, kinship and community water networks, youth peer groups and, above all, young people themselves.

Fig (.8.) Cycle of a Youth Empowerment process:

Empowered young people

- Have choices and opportunities in water resources management.
- Being aware of these choices and opportunities
- Taking responsible action based on these decisions

Outcomes of youth empowerment

- Youth contribute to local water management
- To economic growth
- To reduced unemployment
- Educated and skilled workforce
- Just and equitable society.

Enabling condition for youth empowerment.

- Freedom to form local water management associations
- Economic and material base
- Political will, resource, legal and administrative framework
- Equality, democracy and peace
- Knowledge, information skill.

Considering the current state of affairs, the way ahead is to have a serious look at how the present forms of participation could be developed, what kind of organization (village development committee, tap committee, traditional authority) is best in charge of the management of the water supply system, how to increase decision making on the type of organization, how it chooses its members, their responsibilities, how to strengthen the rules and regulations governing the use of the water system and the access to the economic resources to increase youth influence in the community?. SIURALA (2000) distinguishes between “modern” forms of participation such as NGO based structures, co-management, youth parliaments, school councils, youth hearings, demonstrations, and “post modern”, “emergent and future forms” of participation, like the various types of expressive, emotional, aesthetic, cultural, casual, virtual and digital participation. However, our analysis will be limited to traditional and some modern forms of participation because post modern forms are not adequate or are little developed in a community water resource system in a developing country like Cameroon.

5:2: Political Empowerment:

5:2.1: Enactment of water rules and regulations:

The key to effective water policy reform in our view is the enactment of enforceable legislation that establishes the rights and obligations of all stakeholders. Good laws and policies can create an enabling environment that facilitates or at least does not impede-youths participation. Although individuals, groups, and agencies play key roles in initiating a process of "bottom-up" development, change can be facilitated if rules and regulations at both the national level and project level provide the freedom and incentives for youth to participate in the design and implementation of community water projects. The World Bank (1995) identifies three main sorts of legal issues that contribute to participation in projects: (a) the right to information, (b) the right to organize and enter into contractual agreements, and (c) the impact of the borrower's financial and other regulations on communities.

In the case of Cameroon these rules and regulations have been strengthened and enforced by the Ministry of Mines, Power and Water Resources especially after the experiences of failed Scanwater and CIACC projects in the country. Rights were given to communities to freely go into equal contracts with water instituting agencies in order to promote real participation.

Nevertheless, getting the appropriate laws and putting them into practice in a country like Cameroon that is still experiencing a nascent democracy are two different sides of the coin. As Bernard Roudet (2000 12) concludes in his overview on youth participation in France: "participation is more rhetoric than reality. There is something inherent in our political culture which doubts everything which is not originated by the actual political actors". African governments and local community management authorities are victims of similar attitudes. Even where the legal frameworks are supportive of youth empowerment, discrimination still exists in the values and attitudes of adults' vis-à-vis young people who still see young people as a problem that needs to be solved. A youth empowerment model shifts this premise to one which young people are seen as an asset rather than a liability in a water resource management process

5:3: Right to youth Information.

Given the political nature of integration, the first challenge to enabling Integrated Water Resources Management is to cultivate the political critical mass in favour of it and young people are a vital target. Participation is a function of information through which people come to share a development vision, make choices, and manage activities. Illustrating this, Harnmeijer (1993) relates the case of some small-scale water supply projects that have failed because they started without adequate information bases concerning the needs, preferences, and level of commitment of the community. To achieve this, information must flow from

governments and water support institutions to the communities in ways that genuinely support people's informed participation. Youth groups should have access to adequate information on water system management in a timely and meaningful manner. In the case of CARE and SATA-HEIVATA, information about the water system is disseminated through education and sensitisations by organising seminars, workshops and training sessions for water technicians etc. It may also be done by outreach community visitations by members of the water management committee. The World Bank reports that in the Gambia Public Works and Employment project, a community participation program is being developed that uses newspapers, radio, talk shows, leaflets, posters, and stickers to disseminate information. The Gambia experience reveals that taking into account literacy, language, scope, timing, and selection of themes sensitive to gender, age, and ethnicity is critical to channelling information flows to target audiences.

However, newspapers, radio, television, and other forms of mass communication are not the most effective means of reaching the rural community especially in Cameroon. Information can flow vigorously through local communication systems. This includes traditional entertainment such as songs, dance, and community theatre, at traditional gathering places, such as village markets, religious meeting places, police stations, or marriage celebrations. In several communities where modern means of communication is limited, the traditional method will be the chief calling a meeting either at the marketplace or in his palace.

Nevertheless such information is sometimes restricted when youth have to fill in complicated forms to obtain a water management contract from government and support from donors or when the information is not available in local languages and dialects for some illiterate youth.

5:4. Local water management boards or committees.

During the project preparatory phase in the cases of CARE and HELVATAS, water committees were formed in the villages to collect contributions and to assign responsibility for looking after taps and water sources. Although such boards often have the responsibility for the administration, operation, maintenance, expansion and improvement of the water system, it should be done in such a way that is in the light of community customs and respect especially the agricultural commitments of the youth and other groups in the community.

5:5. Economic Empowerment.

Many community water systems require some financial contribution from the community themselves for the maintenance of the system especially after donor support has ended. In order for youth to be part of this process, young people require economic enfranchisement, and ready and equitable access to resources that provide the solid material base for their action. While opportunities for waged employment are not always available especially in the rural areas in Cameroon, community laws should favour access of youth to land, productive activities, micro-credit schemes that provide potential for self-employment through entrepreneurial activities, access to small farming loans, training and advisory services.

For this to be possible, it will require an equitable distribution of resources within the community and families allowing youth to have their own income to contribute to the system. However, this suggestion may seem difficult to implement especially in a traditional African social setting where family and kinship relationship has often considered the man as the owner of vital productive resources. This paper is not recommending a complete overhaul of these traditional myth but suggest that such limitations to youth access to economic resource should be removed if young people have to effectively participate in a community water resource scheme.

That notwithstanding, cash contributions, who contributes what, and assuring accountability of the cash contributions to a water system running and maintenance scheme are completely very problematic issues. The Global Water Partnership GWP (2000 26) relates the fact that lack of transparency has led to opportunistic behaviour, favouring some water management committees, central bureaucratic governments and financial institutions. A solution to this will be devolving responsibility to water users themselves. Community management is a powerful mechanism for developing IWRM. GWP further sites the cases of irrigation schemes in Mexico, Andhra Pradesh (India) and Albania, for example which have been successful because of management transfer to farmer-controlled organisations. Local forms of water organisation should operate under greater autonomy in decision-making, have sustainable strategies for cost recovery, clear standards for assessing performance and be publicly accountable through regulations. For this to occur, women and youth must be properly represented.

Furthermore, experience in Cameroon reveals that there is lack of clear and well-defined policies and plans, which link water supply to other development programmes such as agriculture, power development and sanitation. UNICEF (1979) as quoted in *Assignment Children* relates that schistosomiasis; a water-related health problem was causing economic loss amounting to about E£214 million annually to Egypt due to lack of an integrated and comprehensive planning for irrigation management. By integrating water and socio-economic development programmes reduces the cost, enhances the financial base for youth action and provide a true picture of IWRM. This may be possible through the development of irrigation projects, local water- power systems and some water associated health programmes.

5:6. Youth Capacity building in water resource management.

Many water supply schemes experience severe constraints due to shortage of professional and technical personnel. However, the major constraint is the insufficiency of funds, slowdown and interruption of flow. Enabling youth in such schemes to use water-wise knowledge well will require programmes of training, capacity building and human resource development especially in areas such as accounting and budgetary and management performance should be strengthened with supervisory and advisory services. However, to get maximum benefits, knowledge of and respect for community approaches must become an integral part of education and training schemes. In many cases, youth worker are either recruited as volunteers or by some objective selection and undergo on-the-job training.

5:7. Youth Groups and Associations.

The freedom of youths to associate and their internal organization is essential to effective participation. There should be the design of effective mechanisms for group participation, an appropriate legal standing that enables them to interact effectively with other stakeholders as required, and an equitable relationships among group members and transparent processes for internal decision making.

There should be less complex or less time consuming processes available for formalizing youth groups so that they can participate in community project-related activities. Such formalization must be necessary to receive public funds or enter into valid contracts. In the case of Cameroon, the law on associations binds this.

5:7: 1. Youth NGO-based water participation.

The basic strategy to enhance youth role in a water resource process is to support youth organisations and provide them structures through which their voices can be heard. Such structures in a community context will include Youth NGOs, Youth Water Catchments Committees, and Quarter Youth Associations etc. Dicklitch (1998) argues that the greatest potential of Non Governmental Organisations NGOs in their capacity to generate self-help initiative is said to lie in empowerment. NGOs have the potential to be significant vehicles of empowerment because of their ability to reach grassroots Bratton (1990). Judging from the positive examples from India, Bangladesh, Burkina Faso, Kenya, Zimbabwe and Mali, Garilao (1987) paints a very optimistic picture of NGOs by asserting that they are emerging as advocates of self-reliance, who will, by themselves, bring about significant policy and institutional change.

On the other hand, some writers like Graaf (1987) are more pessimistic and argue that NGOs are oversold since their presumed effectiveness in development is not positive as it is thought to be. His argument is based on the issue that “NGOs are not systems on their own” but is integrated into a wider and more complex political and administrative environment in which they have limited influence and even less control. On a national level the most developed structures are the national youth councils (composed of NGOs) and youth committee (as advisory governmental bodies).

The problem with these structures is that youth organisations de facto represent only a cross-section of young people in the community. The Expert group on Swedish Youth Policies argues that current youth is becoming increasingly diverse and heterogenous making it difficult for any one structure to reflect the immense variety of youth. Furthermore, their diverse and heterogenous composition raises another question about the internal organisation of these youth structures themselves. In some cases, it may be difficult to arrive at common position on controversial policy and political issues. However, community youth structures that have been

freely formed, devoid of political bottlenecks; with good laws and internal rules; chooses its representatives democratically, has a greater potential to enhance water systems in many rural areas.

5:7:2. Municipal Youth councils and school clubs:

Parallel to Youth NGOs has been the establishment of municipal youth councils and local school clubs, which promotes youth involvement in water resources. These groups particularly in small municipalities and small schools are able to draw the attention of the decision makers and the teachers on youth priorities and water resources issues. Furthermore, the sense of responsibility of pupils in the schools and youth peers in their municipalities can be increased through education and sensitisation activities of these groups.

5:8. Strengthened National structures.

Effective youth participation entails not only their involvement in water committees at the community level, but also at the provincial and national levels. Other national and international youth NGOs operating in the country should carry with them programmes that enhance youth work in the water supply sector. The ministry of youth and sports and the national youth council must design programmes and actions that favour youth role in water resource management.

Also, agencies and authorities responsible for water supply must have well defined responsibilities that avoid conflicting roles and waste of resources. It may not be wrong to assume that such confusion arising from the duplication of responsibilities has been designed to benefit the elite and cronies in power, all to the detriment of young people.

6: Conclusion.

As indicated in our analysis, community water resource management in Cameroon is still faced with some given paradox. On the one hand, it is linked to increasing population and their associated activities leading to a high demand for very scarce water resources. On the other hand, the situation is caused by or accelerated by poverty and when water is poorly managed, the poor suffer most. On the other hand, when water is properly managed, it can constitute an instrument for socio-economic recovery and poverty alleviation. Business as usual in water resource management is not the way to overcome this problem. As such community water resource requires a new management paradigm that considers water not only from a holistic, comprehensive and multi-disciplinary perspective, but that, which seeks to fully associate all the different stakeholders into all the stages of the process. In our analysis in chapter 3:3, we have shown the potential that youth dispose as key stakeholders in this process, although constraint by socio- economic and political needs.

Cases presented in this work of experiences in Cameroon in community water supply show that the extent of success or failure in water systems management depends on the degree of involvement of all stakeholders in the community (especially the young people for the various reasons advanced) in all the stages of the project operation. This is assumed to have a direct relation to the approaches of CARE and HELVETAS water agencies that registered successes and vice versa to CIACC and SCANWATER that failed. Success is related to the varying approaches. Those who succeeded have relied on involvement of communities, local stakeholders and particularly the young people.

Our review confirms that success in the IWRM brings about genuine community empowerment through the development of feelings of ownership and responsibility. However, it also highlights that genuine stakeholder involvement especially concerning youth remain elusive. This is partly due to the fact that the underlying idea of stakeholder participation (particularly with regards to youth role in IWRM) is still a fairly recent concept and much remain to be done in terms of developing methodologies for its practical implementation

Nevertheless, this study shows that although treating youth as the future managers of their own water supply and empowering them for these tasks gives better results, it is no panacea for overcoming all water problems. In order to ensure sustainable water, all stakeholders in the community water resource process must play its role effectively.

References.

- Adelman**, I (1975) Growth and income distribution and equity oriented development studies, *World Development*, 3 (2-3), 67-76.
- Bernstein**, H. and **Campbell**, B (eds) (1985) *Contradictions of Accumulation in Africa*. Beverley Hills, CA: Sage Publications, 204.
- Biswas** K. Asit, Mohammed **Jellali**, Glenn **Stout** (1993) *Water For Sustainable Development in the 21st Century*, Oxford University Press.
- Black**, J. (1991) *Development Theory and Practice: Bridging the Gap*. Boulder: Westview.
- Bratton**, Michael. (1998). *The politics of government: NGO relations in Africa*. Mimeo, July U.K.
- Brohman**, John. , (1996) *Popular Development, Rethinking the theory and Practice of Development*, Blackwell Publishers, Oxford, UK.
- CDEF** 1997. *The participation of Young People*,_ Strasbourg: Council of Europe Publishing
- Colchester**, M. (1994) sustaining the forests: the community based approach in South and South- East Asia. *Development and Change*, 25, 69-100.

- Commonwealth** *Plan of Action for Youth Empowerment to the Year 2005*, Commonwealth Youth Programme, London, 1995.
- Conyers, D.** (1985) Rural regional planning: towards an operational theory. *Progress in planning*, 23, 3-66.
- Connelly j., Smith G.:** *Politics and the Environment: From theory to Practice*, Routledge, London, UK, 1999, p. 200-216.
- Cornia, G.** (1984). A summary and interpretation of the evidence. *World Development*, 12 (special issue on the impact of world recession on children), 381-91.
- Cornia, G., Jolly, R. and Stewart, F.** (1987) *Adjustment with a Human Face: Protecting the Vulnerable and Protecting Growth*. Oxford: Oxford University Press.
- Danida** (1991). Copenhagen report: *implementation mechanisms for integrated water resources development and management*. Nordic Freshwater Initiative for the UN Conference on Environment and Development (Rio), 1992 and the International Conference on Water and the Environment (Dublin), 1992. Report from Copenhagen Informal Consultation, November 11-14, 1991. Danida Ministry of Foreign Affairs, Copenhagen, Denmark
- Dicklitch, S.** 1999. *The elusive promise of NGOs in Africa – lessons from Uganda*. Published by Macmillan Press LTD.
- El-Ghonemy, M.** (1990) *The Political Economy of Rural Poverty: The Case for Land Reforms*. London: Routledge.
- Elliott, L.,** (1998) *The Global Politics of the Environment*, New York University Press, USA.
- Fenster, T.** (1993) Settlement planning and participation under principles of pluralism, *Progress in Planning*, 39, 171-242.
- Fishlow, A.** (1972) Brazilian size distribution of income, *American Economic Review*, USA 60, 391-402.
- Fleming, S.** (1991) Between the household: researching community organisation and networks, *IDS Bulletin*, 22.
- Fowler, A.** (1991) The Role of NGOs in changing state-society relations: perspectives from Eastern and Southern Africa, *Development Policy review*, 9, and 53-84.
- Fox, J. and R. Fisher** (1990) *Community organizations and government bureaucracies in social forestry*. In: Stevens, M.E. Et al.. eds. Asia Pacific Region proceedings of a seminar, Jan 8-11, 1990. Bangkok, Thailand.
- Garilao, Ernesto D.** 1987. Indigenous NGOs as strategic institutions: managing the relationship with government and resource agencies. *World Development*.
- Ghai, D.** (1977) What is the basic needs approach to development all about? In International Labour Organisation (ILO): *The Basic-needs approach to development: Some issues Regarding Concepts and Methodology*, Geneva, Switzerland.
- Global Water Partnership**, (2000): *IWRM at a Glance*. Stockholm, Sweden.
- Global Water Partnership**, (2000): *Towards Water Security: A Framework for Action to achieve the Vision for water in the 21st century*. Stockholm, Sweden.
- Global Water Partnership GWP** (2000) Technical Advisory Committee (TAC) Background Papers Series: No 4 “*Integrated Water Resources Management*”. Stockholm, Sweden.

- Gordon** April A. and Donald L. **Gordon**, (1996) *Understanding Contemporary AFRICA* 2nd edition, Lynne Reiner Publishers, Inc. Colorado, USA.
- Griffin**, K. (1989) *Alternative Strategies for Economic Development*, New York, St. Martin's, USA.
- Griffin**, K. and **Khan**, A (eds) (1972) *Growth and inequality in Pakistan*, London: Macmillan.
- Hartman**, J. and S. **Tynka** 1986; *Democratic Youth Participation in Society. A concept Revised*, Uppsala; Uppsala University Press. Sweden.
- International Water and Sanitation Centre** IRC (1994). Ministerial Conference on Drinking Water and Environmental Sanitation: *Implementing UNCED Agenda 21: 22-23 March 1994*. Political statement and action programme. Noordwijk, The Hague, The Netherlands.
- International Water and Sanitation Centre** IRC (1997) *Water Supplies Managed by Rural Communities*, Country reports and case studies from Cameroon, Colombia, Guatemala, Kenya, Nepal and Pakistan. Project and Programme Papers 5-E, Hague, Netherlands.
- Islam**, N. (1992) Poverty in South Asia: approaches to its alleviation, *Food Policy*, 108-28.
- Johan Fornas** and **Goran Bolin** (1995) *Youth culture in Late Modernity*, London and New Delhi, Sage publications.
- Kovacheva** Siyka (1999). *Keys to Youth Participation in Eastern Europe*. Council of Europe, Strasbourg.
- Krenkel**, P. and **Novontry**, V. (1980) *Water Quality Management*, Academic Press, New York, USA.
- Lipton**, M. (1993) Land reform as commenced business: the evidence against stopping. *World Development*, 21, 641-57.
- Mahler**, F. 1982: *Introducere en Juventologie*. Bucuresti (English Summary in IBYR- Newsletter No 1/1984).
- Marshall**, T. H. 1952 *Citizenship and Social class*, Cambridge University Press.
- Meadows**, D. H. and Meadows, J. Randers, and W. Behrens. (1972) *The limits to Growth*, New York: Universe Books.
- Mkandawire**, T. and C.C **Soludo**, 1999. "Our Continent, Our Future: African Perspective on Structural Adjustment". World Press, Inc. Trenton, N.J, USA.
- Midgley**, J. (1986) *Community Participation, Social development and the state*. London: Methuen.
- Morris**, C. (1973) *Economic Growth and Social Equity and Developing countries*. Stanford: Stanford University Press.
- Moser**, C. (1989) Gender planning in the Third World: meeting practical and strategic gender need, *World Development*, 17, 1799-1825
- Munasinghe** M. (1995) *Implementing Sustainable Development: Role of Environmental Economics*. The World Bank, Washington DC.
- Ndiaye Babacar**, President of the African development Bank, Abidjan. Keynote address to the vii session of the World congress on Water Resources, Morocco 1993.
- Netherlands Development Assistance (NEDA)** (1998), *Water for the future – Integrated water resources management, 2 Policy priorities for Netherlands development assistance*. The Hague, The Netherlands, NEDA.

- Nforba**, A. Nchari, **Nformi** E. Ngaba and **Nguethakan** Amouye: *Community Water Management Experiences in Cameroon*. In: International Water and Sanitation Center (IRC) *Water supplies managed by Rural Communities*, country reports and case studies from Cameroon, Columbia, Guatemala, Kenya, Nepal and Pakistan. Netherlands 1997. Pg 1-19.
- Paul**, S. (1986) *Community participation in development projects. The World Bank Experience*. World bank Discussion Papers, 6. Washington DC.
- Rathgeber**, E. (1996) *Women, men and water resource management in Africa*, as contained in *Water management in Africa and the Middle East: Challenges and opportunities*, edited by Eglal Rached, Eva Rathgeber and David B. Brooks, International development research center, 1996, Canada.
- Rao**. P.K, *Sustainable Development, Economics and Policy*, Center for Development Research, Princeton, NJ, Blackwell Publishers Ltd, UK: 86-87.
- R.M. **Solow**, (1974), 'Intergenerational Equity and Exhaustible Resources', Review of Economic Studies, Symposium, p. 29-46
- Roudet**, Bernard: "*Politique Publiques et Participation des Jeunes. La Situation Francaise* », Seminaire franco-finlandaise de reserche sur la jeunesse, Paris, avril 2000
- Sherbinin**, Alex. and Victoria **Dompka**: *Water and Population Dynamics: local approaches to a global challenge*, published by IUCN/PRB/USAID, 1997.
- SIURALA**, L. (2000) *Changing forms of participation* Contribution to Round Table on New form of participation, Biel (Switzerland), 4-6 May 2000
- Ul Hag**, M. (1976) *The Poverty Curtain: Choices for the third world*. New York: Columbia University Press.
- United Nations Environment Programme (UNEP)**, United Nations Conference on Environment and development (UNCED) Report, (1993) A/CONF.151/26/Rev.1 (Vol.1) 55.
- United Nations Center for Human settlements (UNCHS)** (1984) *Community Participation in the Execution of Low Income Housing Projects*. Nairobi, Kenya.
- United Nations Development Programme (UNDP)** (1991). Report of the Global Consultation on Safe Water and Sanitation for the 1990s, Safe Water 2000, 10 - 14 September 1990. New Delhi, India. New York, NY, UNDA, UNDP.
- United Nations Environment Programme (UNEP)** (2001) *Freshwater: A Global Crisis of Water Security and Basic Water Provision*, Towards Earth Summit 2002, Environment Briefing Paper No1.
- United Nations Educational, Scientific and Cultural Organization (UNESCO)** (1995), Strategy for UNESCO's action with and for youth, *youth information kid*, 1995.
- United Nations Children's Fund (UNICEF)** (1979) *Assignment Children*. A journal concerned with children, women and youth in development. "People, water and sanitation" 45/46.
- United Nations** (1977). Report of the United Nations Water Conference; Mar del Plata, 14- 25 march 1977. New York, NY, USA, United Nations

United Nations Economic Commission for Africa (UNECA). N.d. African Alternative Framework to structural Programmes for Socio-Economic Recovery and Transformation (AAF-SAP). E/ECA/CM.15/6/Rev **White**, G.F.; Bradley, D.J.; White, A.U. 1972. *Drawers of water: domestic water use in East Africa*. University of Chicago, Chicago, IL.

World Bank (1989) b. *Sub-Saharan Africa: From Crisis to Sustainable Growth: A long-term perspective study*. Washington, DC: World Bank.

The World Bank *Participation Sourcebook*, Participation in the Water and Sanitation sector Appendix II: Working Paper Summaries.

World Commission on Environment and Development (WCED), *Our Common Future*, Oxford University Press, Oxford, 1987.

WGBU German Advisory council on global Change (1999) World in Transition. Ways towards sustainable Management of freshwater resources. *Annual Report 1997*

World Water Forum, March 2000, The Africa Water Vision for 2005. Equitable and sustainable Use of Water for Socio-economic Development., The Hague, The Netherlands.

Internet sources.

- 1) CIA Cameroon. <http://www.cia.gov/cia/publications/factbook/geos/cm.html> (October 2001)
- 2) Economic and Social Council (ECOSOC) (2000) Report of the Secretary-General on progress made in providing safe water supply and sanitation for all during the 1990s: <http://www.un.org/esa/sustdev/csd8/wss4rep.pdf> 2001 (October 2001)
- 2) Harnmeijer, Joanne. Ann Waters-Bayer and Wolfgang Bayer Dimensions Of Participation In Evaluation: Experiences from Zimbabwe and the Sudan <http://www.iied.org/agri/gatekeepers/gk83.html>. October 2001
- 3) Second World Water Forum in the Hague, Netherlands, March 2000. <http://www.worldwaterforum.net/Ministerial/declaration.html> Nov 2001.
- 4) United Nations Environment Programme (UNEP), United Nations Conference on Environment and development (UNCED) (1992), *Agenda 21*, Chapter 25 <http://www.un.org/esa/susdev/agenda25chapter18.htm> (August 2001)
- 5) The Political Map of Cameroon. www.theodora.com/maps/cam/Oct.2001
- 6) United Nations Children Fund (UNICEF) 2000. http://www.unicef.org/statis/Country_1Page30.html.

Some Acronyms and abbreviations

CARE Cooperation for American Relief Everywhere

CDD Community Development Department

CIACC Cameroon Industrial and Civic Contractors

ESA External Support Agency

SATA-HELVETAS Swiss Association for Technical Assistance

SNEC National Water Corporation

WMC Water Maintenance Committee

XAF Communauté Financière Africaine franc