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ADDIS ABABA UNIVERSITY SCHOOL OF GRADUATE STUDIES
COLLEGE OF DEVELOPMENT STUDIES

ISSUES & CHALLENGES TO UNIVERSAL ACCESS PROGRAM (UAP)
IMPLEMENTATION in SNNPR:

With Particular Reference to Mirab Abaya Woreda

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS
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BY TELEGN AMBERBIR

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Title

**Issues and Challenges of Universal Access Program (UAP)
Implementation in SNNPR: with Particular Reference to Mirab Abaya
Woreda**

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List of Abbreviations

CRDA:	Christian Relief and Development Association
DBH:	Deep Bore Hole
DDA:	Demand Driven Approach
DEPSA:	Development Projects Studies Authority
EVDSA:	Ethiopian Valleys Development Studies Authority
EWWCA:	Ethiopian Water Works Construction Agency
FGD:	Focus Group Discussion
HDW:	Hand Dug Well
IDD:	Irrigation Development Department.
IDWSSD:	International Drinking Water Supply and Sanitation Decade
KID:	Key Informants Discussion
LPA:	Learning and Practice Alliance
MAW:	Mirab Abaya Woreda
M&E:	Monitoring and Evaluation
MNRDEP:	Ministry Of Natural Resources Development and Environmental Protection
MoFED:	Ministry of Finance and Economic Development
MoH:	Ministry of Health
MoU:	Memorandum of Understanding
MSW:	Machine-drilled Shallow Well
MWR:	Ministry of Water Resources
NWRC:	National Water Resources Commission

NGO: Non Governmental Organization
 PCD: People Centered Development
 QIS: Qualitative Information System
 RWSS: Rural Water Supply and Sanitation
 RHB: Regional Health Bureau
 RiPPLE: Research inspired Policy and Practice Learning in Ethiopia
 SAP: Structural Adjustment Program
 SDA: Supply Driven Approach
 SDPRP: Sustainable Development and Poverty Reduction Program
 SNNPRS: Southern Nation Nationalities and People Regional State
 SPSS: Statistical Program for Social Scientists
 SSA: Sub Saharan Africa
 SWAP: Sector-Wide Approach
 SWWCE: South Water Works and Construction Enterprise
 TVET: Technical and Vocational Education
 UAP: Universal Access Program
 VADA: Valleys Development Agency
 VLOM: Village Level Operated & Maintained
 WASH: Water, Sanitation and Hygiene
 WASHCOM: Water, Sanitation and Hygiene Committee Members
 WATSAN: Water & Sanitation
 WB: World Bank
 WRDA: Water Resource Development Agency

WSSA: Water Supply and Sewerage Authority

WVE: World Vision Ethiopia

WWDA: Water Well Drilling Agency

WWD: Woreda Water Desk

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Abstract

Water is a common property resource and is critical for sustainable livelihoods. All households need water for domestic use, i.e. for drinking, food preparation, washing, cleaning, etc. Access to adequate, clean water will greatly contribute to improved health and better productivity.

Water supply and sanitation coverage in Ethiopia is one of the lowest in the world, which is 39.4 percent and 11.5 percent in 2004 respectively. To change the situation the government of Ethiopia has launched a Universal Access Program for water supply and sanitation in 2005. The objective of the program is to reach 100% coverage of water supply and sanitation services through out the country until 2012. The respective regional governments have prepared strategic plan to implement UAP in their region.

This study is carried out to identify major issues and challenges in the implementation of UAP in SNNPR, with particular reference to Mirab Abaya woreda. Primary data is collected through KID and FGD at regional and woreda level. Totally 34 key informants are interviewed and two FGDs are carried out. The data is analyzed and interpreted qualitatively with the help of some quantitative methods (percentage).

The SNNPR water bureau and MAW water office have prepared strategic plan for the period 2006-2010. The plan preparation process, the participants of the planning process, the time and resources allocated for the preparation of the plan and availability of data are analyzed.

Stakeholders in the sector include NGOs, Donors, GOs, private sector and community, Water bureau being the major responsible body in the region. Their coordination and integration is very weak. There is no defined line of communication among the stakeholders (e.g. water bureau & NGOs). Some of the existing means of communications are not being implemented consistently.

Material and Human resources available to implement the strategic plan are mapped and analyzed at regional and woreda water sectors. The woreda water office is well capacitated to implement the program.

Monitoring and evaluation of the different processes (planning, implementation, management, etc) are examined. The plan and programming section in the bureau is not well equipped with necessary equipments and adequate man power. Lack of standard indicators and formats is one of the problems. At woreda water office there is no responsible person to carry out M&E.

CHAPTER ONE

INTRODUCTION

1.1 Background

Water is a common property resource and is critical for sustainable livelihoods. To begin with, all households need water for domestic use, i.e. for drinking, food preparation, washing, cleaning, etc. Access to adequate, clean water will greatly contribute to improved health and better productivity. Secondly, there are distinct population groups whose livelihoods are water-based, entirely or to a considerable extent; such groups include fishermen, and artisans such as tanners and potters. Thirdly, water resources can play a significant role in improving food security and household income. Irrigation is the most common means of ensuring sustainable agriculture and coping with periods of inadequate rainfall and drought. Fourthly, water is employed to generate power for use in industry, services, and by urban households. In Ethiopia (as well as many countries in Africa), power generation is a monopoly of the state. Finally, in the developed countries, water is an important asset for the leisure industry. The extent to which water resources will contribute to sustainable livelihoods will depend on availability, the nature of rights of access, the system of management and the technology with which the resources are exploited. Moreover, the specific relationship between livelihoods and water resources will determine the nature of the stakeholders and their interest in the resources. (ibid)

Until recently, the multiple benefits or roles of domestic water supply and sanitation have not received as much attention as they deserved. Water supply and sanitation are usually considered as largely a “public health” benefit. Now broad ranges of non-health benefits have started to be recognized and targeted in an increasing number of studies and reports,

such as WB development reports.

The World Health Organization (WHO) estimates that in 2003, approximately 1.1 billion people had no access to safe water and 2.4 billion had no basic sanitation, in the world. And in 2004 about 3.5 billion people worldwide (54% of the global population) had access to piped water supply through house connections. Another 1.3 billion (20%) had access to safe water through other means than house connections, including standpipes, "water kiosks", protected springs and protected wells. Finally, more than 1 billion people (16%) did not have access to safe water, meaning that they have to revert to unprotected wells or springs, canals, lakes or rivers to fetch water.

Water supply and sanitation coverage in Ethiopia is one of the lowest in the world, which is 39.4 percent and 11.5 percent in 2004 respectively.

As cited in the MDG need assessment (BoFED and UNDP, 2005) the coverage for water supply estimated at 19% in 1990 has increased to 30% in 2000. The SDPRP appraisal report of June 2003 estimated the coverage at 34 %. Data from the Ministry of Water resources Planning Department estimated the coverage for year 2004 at about 36.7 %. In the absence of complete and accurate data these figures are good indicators of the trend and current status of water supply.

The international community has adopted the Millennium Development Goals (MDG) in 2000. The MDG targets cutting in half the proportion of people with out access to essential services by 2015. The objective of the Millennium Development Goals include eradicating extreme poverty and hunger; achieving universal primary education; promoting gender equality and women's empowerment; reducing child mortality; improving maternal health; combating major diseases; improving environmental sustainability and develop a global partnership for development. The MDG goal related to water supply stipulates:

- Goal 7: Ensure environmental Sustainability

- Target 10: Halve, by 2015, the proportion of people without sustainable access to safe water and basic sanitation.

According to the MDG Needs Assessment Report (MoFED and UNDP, 2005), to meet the MDG target for water, estimated to be 70%, an additional 38 million people would need to be provided with access to safe water by 2015. As concerns sanitation, to achieve the MDG target the coverage has to increase from 18.5% in 2004 to 58%, or an additional 41 million people gaining access to sanitation services.

The government of Ethiopia has launched a universal access program (UAP) for water supply and sanitation services. The program aims to raise the water supply and sanitation coverage of the whole population (rural and urban) to 100% within seven years, from 2006 – 2012 (MWR, 2005).

1.2 Statement of the Problem

Safe water supply has multiple benefits in addition to health related benefits. Water plays important roles in rural livelihoods. It has impacts on economic, social, and political aspects of people's livelihoods in terms of capacity building, empowerment and greater ability to work together to achieve common goals and objectives. But in many developing countries including Ethiopia the majority of their communities, especially rural, are suffering from lack of adequate and safe water supply (TAM, 2002).

The awareness of the rural community about personal and environmental sanitation is very poor. Open field excreting is a common practice among the rural as well as urban communities. Awareness about the advantages of safe water for the improvement of health is not sufficiently developed. As a result, water-born diseases cause the highest mortality rate in the rural communities of developing countries. (IBID)

Hence, developing countries should fully understand and feel the problems there by initiating and taking actions aimed at improving the livelihood of their communities.

In light of these great threats to the population, the policies, strategies, plans and programs developed by the government of Ethiopia to improve the safe water supply and sanitation services all over the country are encouraging. There are also some achievements registered in the sector in the past two five year plans. But in relation to what is needed the previous performances are very poor. The country's safe water supply coverage is 39.4% and the sanitation coverage is 18.5% in 2004 (MoFED & UNDP, 2005).

The universal access program (UAP) for water supply and sanitation services launched by the government in 2005, aims at full coverage of safe water supply and sanitation services in seven years period (2006 - 2012), that is three years earlier and doubling the target set by MDG.

Previous experiences of water supply and sanitation service delivery shows a very poor level of performance in comparison to the needed rate of increase in the service delivery to meet the objectives of UAP. Both at country and regional level the rate of increase in the water supply and sanitation services is less than 5% per year (MoFED & UNDP, 2005; WRDB, 2006).

The SNNPR water resource development bureau has prepared a strategic plan for five years period, 2006- 2010, based on UAP. The objective of the plan is to increase the water supply coverage of the region from 48 % in 2005 to 85% at the end of the plan period; from 45% to 73% in the rural areas and from 60 % to 83 % in urban areas.

The strategic plan prepared by the regional water bureau (WRDB, 2007) has identified the challenges that were faced during the implementation of previous strategic plans, these are: (1) Lack of integration, (2) Low

implementation of the plan, (3) Weak information dissemination system, (4) Low initiation from the staff, (5) Low private sector involvement, (6) Low implementation capacity (technical, financial), (7), Low community participation, (8) Low sustainability of the schemes constructed in delivering the service, (9) Instability of the sectors, (10) Lack of appropriate technology. But there is no research done to identify the major challenges that are facing the sector.

Whether the country is able or not to achieve the objectives set by the UAP is of a great concern. The objectives of UAP will be achieved if the respective regional states are able to implement their strategic plans successfully.

And this research is done to assess the major issues and challenges in the implementation of UAP in SNNPR.

1.3 Objectives

The overall objective of the study is to assess the issues and challenges of UAP implementation in the region, with particular reference to Mirab Abaya woreda of Gamogofa zone.

Specific objectives

- To examine the planning process followed to the preparation of the strategic plan – at regional and woreda level
- To examine the practices and challenges of coordination & participation of the different stakeholders in the sector
- To assess gaps and issues with human and material resources needs & utilization
- To understand the monitoring & evaluation systems and practices

1.4 Research Questions and Indicators

The major research question is: what are the major issues and challenges in the implementation of UAP in SNNPR, with particular reference to Mirab Abaya woreda of Gamogofa zone?

Specific questions

- How is the strategic plan prepared in terms of the process followed?
- What are the issues and challenges of coordination & participation of stakeholders?
- What are the issues/problems related to human and material resources?
- Is there properly designed monitoring & evaluation process?

No	Research questions	indicators
1	How is the strategic plan prepared in terms of the process followed?	-who are involved in the planning process -what is their background and experience -what is the time taken to prepare the plan -were there adequate data, what are the sources and means of communicating data -was the planning process participatory- different stakeholders have participated -what is the approach followed (top-down/ bottom-up) -Is the plan consistent with the zonal & woreda plans
2	What are the issues and challenges of coordination & participation of stakeholders?	-Identifying the major stakeholders -What is the line of communication between stakeholders -Are processes (planning, implementation, M&E) participatory -Attitude towards participation of the end users -Who is accountable for what -Are processes transparent
3	What are the issues/problems related to human and material resources?	-types and number of professionals required for water and sanitation -types and number of professionals working at present - the number of vacant spaces -professional turn over -types & number professional equipments and tools available -means of transport (vehicles, motorcycles) -office & office furniture - machines (computer, typewriter, copier, etc) -hand tools for technicians -water quality testing instruments -spare parts availability
4	Is there properly designed monitoring & evaluation process?	-who is responsible to carryout M&E -how often it is done -Is there guideline/manual to do M&E -how it is done -to whom are findings reported -is there a trend to incorporate findings of M&E in the next implementation phase

Table 1.1 Specifying Indicators of the research questions

1.5 Significance of the Study

The findings of this study will benefit local governments, policy makers and development practitioners in terms of widening their knowledge base of the issues to be considered and challenges to be tackled to successfully implement strategic plans.

On top of this, the findings of the research work will give insight for researchers and students interested in similar research theme for further investigation of the issue.

1.6 Methodology

1.6.1 Description of the Study Area

The Southern Nations Nationalities and people Regional State, SNNPRS, is one of the nine regions that form the federal state of the country. The region is located in the southern and south western part of Ethiopia. It Borders Kenya in the south, the Sudan Republic in the southwest, Gambella region in the Northwest and Oromiya Region in the Northeast. The regional capital is Awassa which is about 275 km from Addis Ababa, the capital city of Ethiopia. The Region is divided into 13 zones and 133 Woredas that include 8 special Woredas. More than 56 nations, nationalities and peoples live in the region.

According to the 1994 census, the projected population of the region in 2005 was 14.9 million. Ninety two percent of this population lives in rural area and the remaining 8% lives in urban area. Fifty point one percent of the population is female. This means 20% of the country's population lives in the region, and the yearly average population growth of the region is 2.9%. (WRDB, 2006)

The yearly per capita income in the region according to the 2003/4 data is estimated to be birr 800 and daily calorie is 1880. The region's population that lives below poverty line is estimated to be 56.5%.

The infrastructure facility of the region is relatively very limited and inadequate. Currently the region has 425 km long asphalt roads, 4907 km gravel roads and 2488 km dry weather roads. (WRDB, 2006)

The strategic plan document of the regional water bureau states drinking water supply coverage of the SNNPR has risen to 48% (2004 data) through the efforts of government and non government organizations and funding organizations. The distribution of the water supply facilities vary in the urban and rural areas. Only 45% of the rural populations have access for safe water and on the other hand 60% of the urban populations have access for safe water. This shows that about 40% of the urban and 55 % of the rural population has no access for safe water. More than 80% of the diseases are related with lack of safe water. (WRDB, 2005)

Approximately, 1304 hand dug wells, 1678 shallow wells, 421 deep wells, 2686 spring developments at spot and 255 springs with network distributions were constructed in the past years plan and 6,953,649 people are benefiting from the schemes. But about 22% of the existing schemes are not functional. (WRDB, 2006)

The regional water resource development bureau is the major responsible body to provide safe & sustainable drinking water for the community and the schemes are managed by the community.

Gamogofa is one of the thirteen zones in the region. The total population of the zone in 2006 is estimated to be 1,553,740 (male 773,565 and female 780,175) based on the 1994 census. The zone is subdivided in 17 woredas, and Mirab Abaya, the study site, is one of the woredas in the zone.

The woreda has 23 rural and one urban kebeles. According to the 1994 census, the projected population of the woreda was 69,036 (male 34,056 and female 34,980), in 2006. The urban population is 5,630 and the rest 63,406 (92%) carry rural population.

The table below shows the existing water supply schemes in the woreda and the woreda's water supply coverage.

Table 1.2 Total number of water schemes by type and functionality for Mirab Abaya woreda

Type of Water schemes	No of Schemes	Functioning schemes	% of non-functional schemes
Hand dug well (HDW)	11	5	54.5
Machine drilled shallow well (MSW)	33	24	27.3
Deep Bore-Hole (DBH)	6	4	33.3
Protected small & medium spring	7	7	0
Total	57	40	29.82
Water supply coverage		27.38%	

Sources: *Regional Statistical Abstract, June, 2006*

1.6.2 Method of Data Collection

I. Primary data

Primary data is collected through focus group discussion (FGD) and key informants discussion (KID) at regional level (Awassa), and Mirab Abaya woreda. A total of two FGDs are conducted at woreda and regional level. One FGD has been held at regional level with strategic planning team and experts from the water bureau (seven in number). At woreda level

one FGD has been conducted with professionals, technicians, community promoters, health service extension workers and supporting staffs from water and health offices (nine in number).

34 Individuals, from government and non-government organizations, have been interviewed. The key informants included top managers, department heads, experts, technicians, and support staffs. Those who have better work experience are given priority. The KID has been conducted at regional and woreda level (see Annex 1).

In addition to FGD & KID personal observation has been used as primary data collection method. This method is used specially to collect additional data from the regional water resource development bureau and woreda water office. At woreda level it has been used to observe the office and its environment.

Semi-structured interview guides (check lists) are used to collect data from focus group discussion and key informant discussion (see Annex 2).

II. Secondary data

Statistics related to previous and current sector performances, problems and other related secondary information are reviewed and used. Relevant policy documents, strategies and reports related to water supply and sanitation are also reviewed. Budget allocated for the sector in the last five years, and human and physical resources available are collected from regional and woreda archives. Relevant issues in the sector are also browsed from internet and other printed materials.

1.6.2 Data Analysis

The data collected through FGD, KID & Observation is analyzed qualitatively, specially triangulation, with the help of additional methods like QIS (Qualitative Information System), whereas quantitative data collected from secondary sources (man power and material resources) are analyzed using descriptive statistics (percentage).

1.7 Scope and Limitations of the Study

There are many factors that are responsible to the success or failure of a program, such as institutional, social, economic, environmental, financial, etc. But this research study focus only on the planning and management factors that influence implementation of UAP.

The study is limited to one region, SNNPR, with particular emphasis to one woreda, Mirab Abaya, in the region. The institutional situations are different in different woredas in the same region and across regions. Therefore the findings of the study are limited to the study area.

Water supply is a multi disciplinary process; it involves social and natural science professionals and technical persons. Research that examines such complex processes should be done by team of multi disciplinary people in order to see the issue from multiple dimensions. Thus the author's effort to look at the issue holistically is not absolute. Therefore this research could have some limitations in this regard.

CHAPTER TWO

LITERATURE REVIEW

2.1 Definition of Terms

Water Supply service: delivering water services for domestic purposes

Safe water: water supply service with adequate quantity and acceptable in quality

Access to water supply service: according to UAP access is defined as the ability of an individual/household/community to get the services with in a reasonable distance and quantity. For rural communities access is 15 liter per day per capita with in 1.5 KM, while for urban communities access is 25 liter per day per capita with in 0.5 KM distance.

Sanitation: refers only to toilet services

Water Supply Schemes: infrastructures (hard wares) built to deliver water supply services. Types of water supply schemes:

Protected Spring: Natural springs protected from contamination by constructing structures at their sources. Some are without distribution pipe lines (capped at spot) and other are with distribution pipe lines and more than one water point.

Hand Dug Wells: Water well dug by human labor and hand tools. It could be open or fitted with hand pump.

Machine Drilled Shallow Well: Water well drilled by drilling machine and fitted with hand pump

Deep Well/Borehole: A scheme with machine drilled well fitted with motorized pump and distribution pipe line.

2.2 Conceptual Outlooks and Strategies

Study of the literature available on the WATSAN sector as well as practical experience from the field reveals a progression of methods and approaches to WATSAN interventions over the past 70 years (Mathew, 2005). This is important as it helps to put into context how thought has

progressed over how sustained beneficial outcome from WATSAN can be achieved. According to him, the progression can be put in simple terms into a timeline,

- largely technocratic solutions appearing as far back as the 1930s and
- evolving in the late 1970s into village level operation and maintenance (VLOM),
- With the gradual realization that participation by primary stakeholders (users) in implementation was important if solutions were to last or be sustained.
- Water committees were formed to manage maintenance, and later this evolved into longer term community management, an approach which has itself come under increasing scrutiny in recent years.
- The role of women as the primary users of water became increasingly appreciated, and this has led many projects and programmes to focus particular attention on the involvement of women in all stages of project implementation from planning onwards.
- Sanitation, always the poor cousin to water, gained greater importance with the realization that it had at least as big a part to play in the fight against disease
- Health and hygiene education became prominent in projects and programmes to help ensure that full use was made of improved facilities, and this was especially helped with the development of usable participatory hygiene education methods,
- More recently the limitations of communities in terms of the sustained operation and maintenance of their water and sanitation utilities has been recognized, along with an appreciation of the need for support services to provide long term back-up to community managed systems

- Attention is now also being given to the ways in which partnerships of institutions from very different origins - non-government, private, public and academic - can be brought together to innovate, develop policy, provide accountability and deliver in the WATSAN sector

The international community has formulated different strategies and approaches to meet the safe water supply and sanitation demands in poor nations. These include: the International Drinking Water Supply and Sanitation Decade (IDWSSD), the Dublin Statement on Water and Sustainable Development, Agenda 21 and the Rio Earth Summit, Vision 21 and the Millennium Development Goals (MDGs).

The Dublin Principles are recommendation for actions at local, national and international levels based on four guiding principles

(<http://www.gwpforum.org>). Two of the principles are:

- Water development and management should be based on a participatory approach, involving users, planners, and policy makers at all levels. Participatory approach involves raising awareness of the importance of water among policy makers and general public. It means that decisions are taken at the lowest appropriate level, with full public consultation and involvement of users in the planning and implementation of projects.
- Women play a central part in the provision, management and safeguarding of water. This pivotal role of women as providers and users of water and guardians of the living environment has seldom been reflected in institutional arrangements for the development and management of water resources. Acceptance and implementation of this principle requires positive policies to address women's specific needs and to equip and empower women to participate at all levels in water resources programmes,

including decision-making and implementation, in ways defined by them.

The Dublin Principles were used at the Earth Summit, held in Rio de Janeiro, to form the basis of Chapter 18 on freshwater resources of the summit's key discussion document, "Agenda 21".

Chapter 18 of Agenda 21 stressed the following activities linked to water supply:

- Encouragement of water development and management based on a participatory approach, involving users, planners, and policy makers at all levels.
- Application of the principle that decisions are to be taken at the lowest appropriate level, with public consultation and involvement of users in the planning and implementation of water projects.
- Support and assistance to communities in managing their own systems on a sustainable basis.
- Encouragement of the local population, especially women, youth, indigenous people and local communities in water supply management.
- Linkages between national plans and community management of local waters.
- Integration of community management within the context of overall planning. (Evans and Appleton, 1993)

In March 2000 the Water Supply and Sanitation Collaborative Council's "Vision 21" was endorsed by the Second World Water Forum meeting in the Netherlands at The Hague. This effort, dubbed "a clear statement of what is now possible, and of how the vision of universal access to water, sanitation, and hygiene can be turned into reality in the years immediately ahead".

In brief, Vision 21 is a plea for full people's participation in WATSAN, an acknowledgement of WATSAN as a human right, and the need for good

governance, integration and shared commitment for this to become a reality. This is development rhetoric, but can be important nonetheless in helping to establish benchmarks with which to judge progress to achieving sustained beneficial outcomes from WATSAN (Mathew, 2005).

The IDWSSD ran from 1981 to 1990 and extended until the MDGs, the most important international effort to bring safe water supplies and sanitation to the developing world.

Carter, Tyrrel and Howsam estimated the IDWSSD to have reduced the overall percentage of people living without safe water supply from 56% in 1980 to 31% by 1990, while those living without sanitation fell in percentage terms from 54% to 44%. Impressive though these results were, they fell far short of the Decade's objectives of water and sanitation for all (Carter et al. 1993). And they point inadequate funding, inappropriate technical solutions and shortcomings of agencies, both governmental and non-governmental as the three major factors to explain the failure of the Decade to reach its goals.

Set at the Millennium Summit at the United Nations in New York in September 2000 and upgraded at the World Summit on Sustainable Development in Johannesburg in September 2002, the Millennium Development Goals comprise eight goals, which in turn have specific targets. The MDGs goal seven and target ten state: "Ensure environmental sustainability" and "Halve, by 2015, the proportion of people without sustainable access to safe water and basic sanitation", respectively.

According to the MDG Need Assessment Report (BoFED and UNDP, 2005) if the MDGs targets are to be achieved in the coming 11 years, in Ethiopia:

- Capacity building in the public sector is required
- Communities' capacities in planning and management of water supply services should be increased.

- The private sectors' supply and consultancy services should be enhanced through credit mechanism and training.

In parallel with these physical interventions, other interventions such as the need for houses or offices, vehicles for transport and others are also required. To make this whole scheme sustainable, a monitoring and evaluation program at federal, regional, woreda, town and community levels is also required.

2.3. APPROACHES TO RWSS

2.3.1 Supply Driven or the Basic Needs Approach/SDA/ to RWSS.

Since 1970s, there was a consensus that governments and donors should alleviate poverty in rural areas though providing basic services such as drinking water, which was delivered freely at least in capital costs. This approach is now labeled as supply driven (Kleemeier, 1995)

The basic needs/supply-driven approach had been adopted for its own elements that were taken to expand water services in the developing nations. The first element is that donors and governments provide the minimum level of improved water services such as hand pumps, to as many people as possible with available funds. The second one was to build up the capacity of government agencies to appraise, implement, and manage schemes. And the third one was providing subsidies to rural water supply (Kleemeier, 1995).

The assumptions behind basic needs /supply-driven approach to wards rural water supply refers to the idea that provision of clean water would contribute to economic growth; government agencies should construct and maintain water schemes; public financing should subsidize water services (Kleemeier. 1995). But, these assumptions were challenged by the rationales of SAP and the approach was found to be not helpful to gain many achievements because of the following three problems. The first problem was that given the high population growth rates, the

strategy of the access to safe water supply within a reasonable time period found to be difficult. Secondly, the funds needed to achieve universal coverage by 2000 have proved to be very far from being a reality. Thirdly, in too many cases, schemes were not sustainable (Briscoe and de Ferranti, 1988)

The long run objective of the basic needs approach has been to improve the health of households through providing safe drinking water. These health benefits were used to justify heavy public investments as households might not be willing to make the investment (WB, 1993). Because of the aforementioned shortcomings, there appears a general recognition that a transformation from a target based, supply-driven approach that pays little attention to the actual practice and / or preferences of the end users to a demand driven approach, where users get services they want and to which they are willing to pay and responsive to schemes' up keeping is required. This is because the supply driven approach makes the rural community to develop the mentality that water is a social right to be provided free by the government rather than as scarce which should be managed locally as a socio economic good in order to ensure its effective use (Alemu, 2005).

2.3.2 Demand-Driven Approach/DDA/ to RWSS

Starting from the later part of 1970s, developing countries experience very poor growth and huge balance of payments deficits. To restore growth, there appears a paradigm shift from micro level-basic needs focused growth and equity approach to macro level structural adjustment policies with central measures such as restraining public expenditures, removing subsidies, and letting the private sector and market forces take over many functions from government agencies (Kleemeier, 1995). Such policy prescriptions were incompatible with the assumptions of basic needs/supply-driven/approach. This is because in the early 1980s, the strategy of donors aimed once again at alleviating

poverty through economic growth based on macro level policy reforms such as SAPs (Riddle, 1987; please, 1984).

Demand-driven approach primarily proposes the necessity of transferring roles from public sector to the beneficiaries and private entrepreneurs. According to DDA, effective demand of consumers, that is, their willingness and ability to pay, Will determine who gets what level of services, Proponents of DDA further argue that the new approach can provide improved and sustainable water supplies, replicable on the scale necessary to reach millions of un-served people who want such services.

The central theme of DDA is that communities should receive, via the private sector, safe drinking water, for which they are willing and able to pay (Kleemeier, 1995; Please, 1984). Proponents of DDA argue that health benefits alone do not generally provide a rationale for public subsidy to water and sanitation services (WB, 1993). The benefits from improved water supply were those perceived by beneficiaries, i.e., time saved in water collection, color, taste, and odor of the water. The households themselves should finance such benefits (Serageldin, 1994). The immediate objective of water supplies should be not to supply every one with minimum services but to provide the desired level of services to those who were willing and able to pay for it. In view of the supply-driven approach, providing the minimum level was used to keep costs down. But respondents of DDA argue that rather than deciding to install hand pumps in every community, however, communities should decide the type and level of services, among potential options, change perspectives on how to lower costs.

In this approach, it is no longer believed that government agencies should be strengthened and expanded its presence in rural areas, to implement and manage water supply schemes, rather private companies or cooperative should manage and expand schemes (Roth, 1985).

The expected role of the community in demand- drive approach differs considerably between urban and rural areas. In urban areas, private companies and cooperatives are thought to handle management, where as in rural areas community organizations would generally have to assume all the management responsibilities. Government officials are still taken to assume the responsibility of motivating and organizing communities (Briscoe and de Ferranti, 1998).

By the early 1990s, World Bank (WB) had officially adopted the new approach to water supply. This approach was adopted in order to correct shortcomings of the basic needs/Supply-driven approach, i.e., insufficient coverage, high cost, and poor utilization (Kleemeier, 1995; WB, 1992; 1993)

2.4 Water Supply, Sanitation and Hygiene Promotion

2.4.1 Benefits of Water Supply Services

Rural water supply and sanitation schemes have the potential to act as a catalyst for change in the socio-economic and health aspects of the target communities. Several benefits are anticipated from the development water supplies (Alemu, 2005).

The availability of clean water, adequate sanitation and hygiene education has a profound impact on the health of children, on learning, the teaching environment, and on girls' education. It is directly related not only to physical, mental and social health, but ultimately to economic and political development (UNICEF, 2005).

The social and economic benefits are aimed at improving access to and increasing the quantity and productivity of available water (Davis, 1993). The health benefits, on the other hand, concentrate on the combination of issues, such as improving water quality, changing hygiene behavior and improve sanitation condition (Briscoe, 1988).

One of the social conditions that could primarily be improved by the provision of water supplies is a reduction in the effort and time required to collect water. Safe physical access to water sources is an important consideration in this regard. Thus, improving physical access to a physically dangerous source can be a major benefit in itself. The locations of some water points are risky and dangerous to women and children. Such conditions may cause various physical and health hazards or injuries (Alemu, 2005).

Carefully planned access, however, ensures physical safety in the collection of water. In addition, it may also have an advantage of increasing water quality. Reducing carrying distances is also another related factor that has its own effect in the social and physical life of user communities. It helps to shorten women's walking hours, i.e., help to reduce the drudgery of fetching water from distant sources (www.africarecovery.org).

Bringing the collection point closer to the women's homes, i.e., improve the availability of water might probably be achieved by digging wells in the village depending on the nature activities such as income generating ones (www.lboro.ac.uk).

Improving availability of safe water may have economic benefits as well. Increasing the quantity of safe water, and bringing it closer to the point of use, can help to undertake productive activities such as income generating ones (www.lboro.ac.uk).

Adequate quantity of water is required for a healthy living, i.e., for drinking, cooking and washing. The world health organization recommends that the minimum daily amount of water per person should be 27 liters a day (www.lboro.ac.uk).

If water sources are at a long distance from the village, it can significantly restrict the amount of water it is possible to carry home. It

does not, however, follow that easy access to a water point meant people use more water (Davis 1993).

2.4.2. Sanitation and Hygiene

Improvements in health will possibly be achieved not only by providing safe water supplies, but also in practicing effective sanitation and complementary hygiene promotion activities. Unsafe disposal of human and domestic wastes and poor hygienic practices allows easy transmission of diseases, i.e., Water provides the link in disease transmission (Morgan, 1990).

The condition of sanitation has remained poor in the rural areas because of low level of awareness to uses of sanitation services. As a result, many people practice open-field defecation. Children may defecate in or near the household yard. Such traditional sanitation practices are uncontrolled and can pose serious health risks. Sanitation in the rural context refers to the use of pit latrines in addition to complementary hygiene promotion (Serageldin, 1994).

Sanitation can be viewed from the individual, household and community perspectives. Community sanitation takes the form of public. It is usually common in densely populated urban areas where the lack of space makes it difficult to build many individual latrines (UNDP, 1992). In rural areas, however, space is normally not a problem, and improved sanitation is often encouraged at the individual household level (Davis, 1993). The emphasis of a sanitation program in illiterate communities should be on education with the aim of changing peoples' behavior, so as to stimulate demand for sanitation services. The cost of improved sanitation options, however, may be a problem as community members might not be able to afford it. Designs should provide options to satisfy variation on the software aspects of the program, particularly at the initial stages, because latrines will only be built and used if households

are convinced of their benefits. It is also vital to adopt a flexible approach to achieve the desired sense of ownership and consequently replicate latrine use within a community (Davis, 1993).

2.4.3 Hygiene Promotion

The existence of poor hygiene behavior forms the basis for the existence of many health problems. Like sanitation, the issue of hygiene can be seen at the individual, household and at the community level (Davis, 1993). Poor personal hygiene paves the ground for the transmission of water associated health risks. Inadequate body, cloth and hand washing increases the chance of contracting skin and eye diseases. Washing hands after defecation, however, reduces the transmission of microorganisms, which might cause diarrhea (Davis, 1993).

Improvements to existing methods of handling and use of water at household level could make a difference in health among household members. Cleaning, collection and storage materials, making a distinction between water for drinking and for other domestic use filtering water by making it settled in storage and so on, can be taken as hygiene related traditional water management activities by rural households to increase the quality, and thus, the health of the household (Burgers, 1988).

2.5 Water Sector Development in Ethiopia

Ethiopia, which has been trying to supply potable water since about a century (Menelik II), has not achieved much success (Yishak, 1993, Getachew, 2002). As a result the great majority of the population at present has no access to reliable and potable water.

2.5.1 Institutional Arrangements

Regarding to Institutional Arrangement until the early 1990s, the public agencies involved in the water sector included the National Water

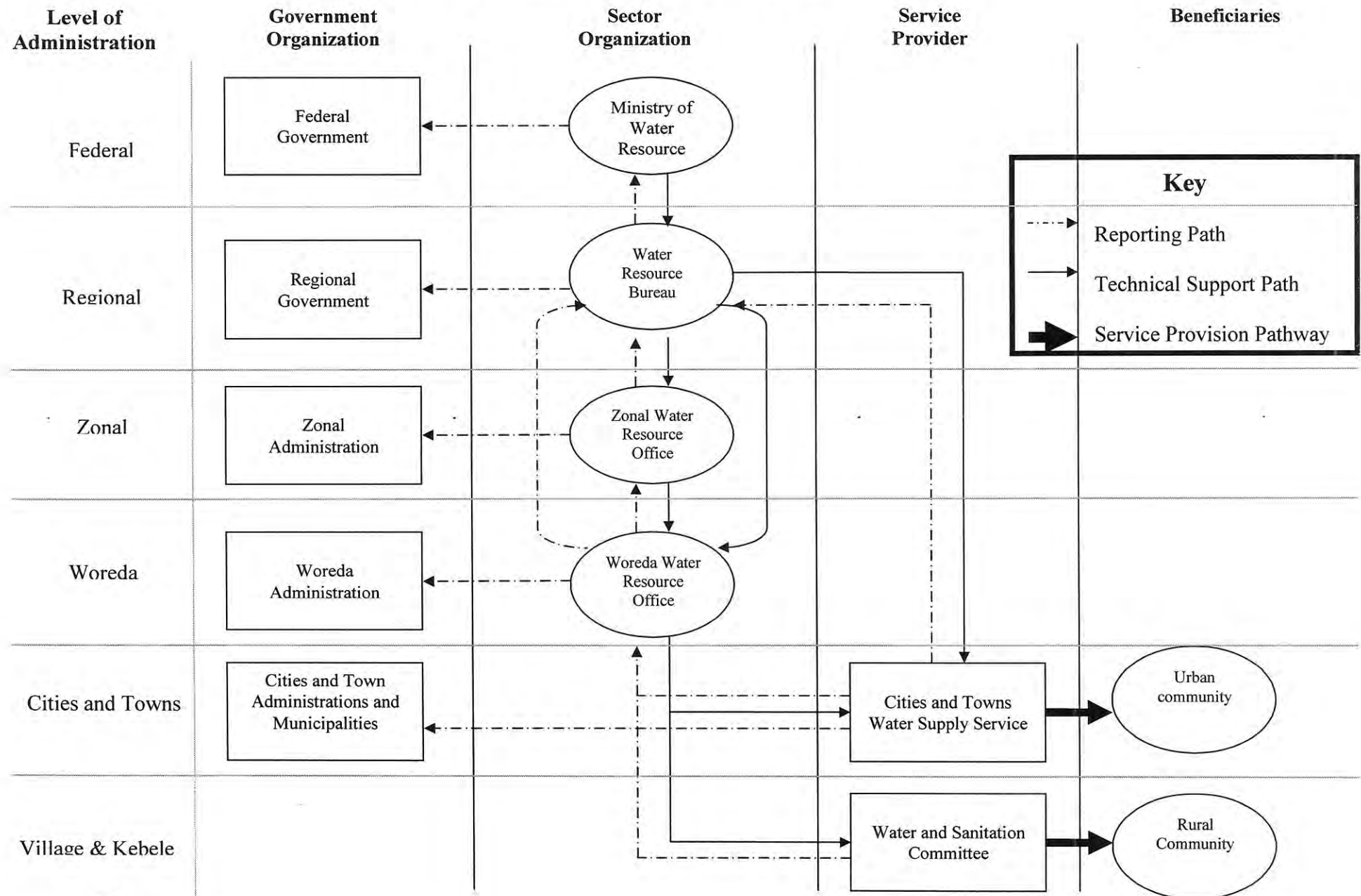
Resources Commission (NWRC), Water Resource Development Agency (WRDA), Ethiopian Water Works Construction Agency (EWWCA), Ethiopian Valleys Development Studies Authority (EVDSA), Development Projects Studies Authority (DEPSA), Water Supply and Sewerage Authority (WSSA), Water Well Drilling Agency (WWDA), and Irrigation Development Department (IDD) within the Ministry of Agriculture. All irrigation was the responsibility of NWRC, and the construction of all water project infrastructures was undertaken by EWWCA or international contractors. WRDA was mainly responsible for the design, implementation and operation of large and medium-scale irrigation projects. In all cases, the end user was the Ministry of State Farms. IDD was entrusted with the planning and construction of small-scale irrigation, which were mostly utilised by agricultural co-operatives. Feasibility studies and planning of irrigation schemes was undertaken by EVDSA (which took over from VADA, Valleys Development Agency) and DEPSA. WSSA's responsibility was water supply services for urban and rural settlements. There was often much duplication of effort among these myriad, autonomous and semi-autonomous agencies and wastage of resources. In the early 1990s, all these agencies were placed under MNRDEP, which ended up making the Ministry a gargantuan monster (Desalegn, 1999).

With the creation, in 1994, of Ministry of Water Resources (MWR) there is now a unified public agency responsible for water development. However, there is still considerable confusion and uncertainty regarding the Ministry's precise responsibilities and spheres of activity on the one hand, and its relationship with the regional authorities on the other. There is thus indecision and lack of initiative on the part of the Ministry. The decentralisation of water development, which is in place at present and which can serve as a viable alternative to the system in the past,

must be based on a clear division of responsibility between MWR and the relevant authorities in the regional administration. (Desalegn, 1999)

In Ethiopia the ministry of water resources at federal level, regional water bureau, *Zone and Woreda* water desks and kebele water committees and communities are responsible for all water related studies including water supply, hydropower development and irrigation (see Fig.1).

Fig 1: Institutional Arrangement in the Water Sector



2.5.2 Legal Frameworks

Until recently, the lack of a comprehensive sector policy and strategy, and the lack of a sector program negatively impacted on sector development (Desalegn, 1999). The country has prepared Water Resource Management Policy and National Water strategy, in 1999 and 2001 respectively (MWR).

2.5.2.1 Water Resources Management Policy

Goal: *The overall goal of Water Resources Policy is to enhance and promote all national efforts towards the efficient, equitable and optimum utilization of the available Water Resources of Ethiopia for significant socioeconomic development on sustainable basis.*

Objectives:-

1. Development of the water resources of the country for economic and social benefits of the people, on equitable and sustainable basis.
2. Allocation and apportionment of water based on comprehensive and integrated plans and optimum allocation principles that incorporate efficiency of use, equity of access, and sustainability of the resource.
3. Managing and combating drought as well as other associated slow on-set disasters through, *interalia*, efficient allocation, redistribution, transfer, storage and efficient use of water resources.
4. Combating and regulating floods through sustainable mitigation, prevention, rehabilitation and other practical measures.
5. Conserving, protecting and enhancing water resources and the overall aquatic environment on sustainable basis.

2.5.2.2 The National Water Strategy

Objectives: As mentioned earlier, the principal objective of the water resources strategy is to translate the national water resources management policy into action. More specifically, this strategy sets the road map as how to make meaningful contributions towards:

- Improving the living standard and general socio-economic well being of the Ethiopian people.
- Realising food self-sufficiency and food security in the country.
- Extending water supply and sanitation coverage to large segments of the society, thus achieving improved environmental health conditions.
- Generating additional hydro-power.
- Enhancing the contribution of water resources in attaining national development priorities.
- Promoting the principles of integrated water resources management

2.5.3 Organizational structure of WSS sector

Though decentralization is critical to Ethiopia's development, the transfer of responsibilities to the regions and woredas has compounded the weak institutional capacity. Further aggravating this problem was the poor coordination between the various institutions at federal and regional levels, and with NGOs and donors. (Desalegn, 1999)

The major role and responsibilities of the major governmental organizations in the sector, at all levels, is discussed below and the organogram of woreda office and regional water bureau is annexed (Annex 3).

i) **Ministry of Water Resource at Federal level:** Responsibility for policy and strategy development for the water sector is with the Ministry of Water Resources (MWR) at the federal level. The MWR coordinates external agencies for sector finance, and is responsible for introducing a sector-wide approach (SWAP) by developing the WSS Sector Development Program. With the increased responsibility of regional governments to ensure service provision, the role of MWR is also to ensure effective monitoring and evaluation and provide technical and capacity building

support to regions. In urban areas the federal government is also responsible to install appropriate economic regulation of the sector.

ii) **Water Resource Development Bureau at Regional levels:** The responsibility for ensuring the provision of WSS services is lodged with the regions and woredas. Regional Water Bureaus are responsible for the over all WSS activities within regional governments. WRDB is charged with providing technical and financial (for capital investment) support to Woredas. Water Departments at the zonal level are also responsible to support development, implementation and regulation of WSS activities in their respective area. Their role in regulatory functions is, however, not very clearly stated.

iii) **Woreda water office:** The responsibility for ensuring the provision of WSS services at grass root level relies on the Woreda Government. Within the decentralization process in the sector, the woreda water office is responsible to plan, implement and evaluate WSS activities in the respective area. Due to the lack of human resource, the office is also expected to collaborate with Woreda education and health offices, especially for sanitation, hygiene promotion and small water schemes.

iv) **Kebele level committee (local government).** The kebele council is responsible for the mobilization of community contributions in cash or in kind for development project. In most of the kebeles, a committee called "WASH" is established with a major role of coordination of scheme development, operation and preventive maintenance. Because the WASH Committee is questioned for its legality, it has restricted its ability to access fund and effective financial management. In most of the cases, the members of this committee (where women account about 40%) are elected by the community (the prime beneficiaries) in which the woreda water office is responsible to facilitate the election and provide technical assistance.

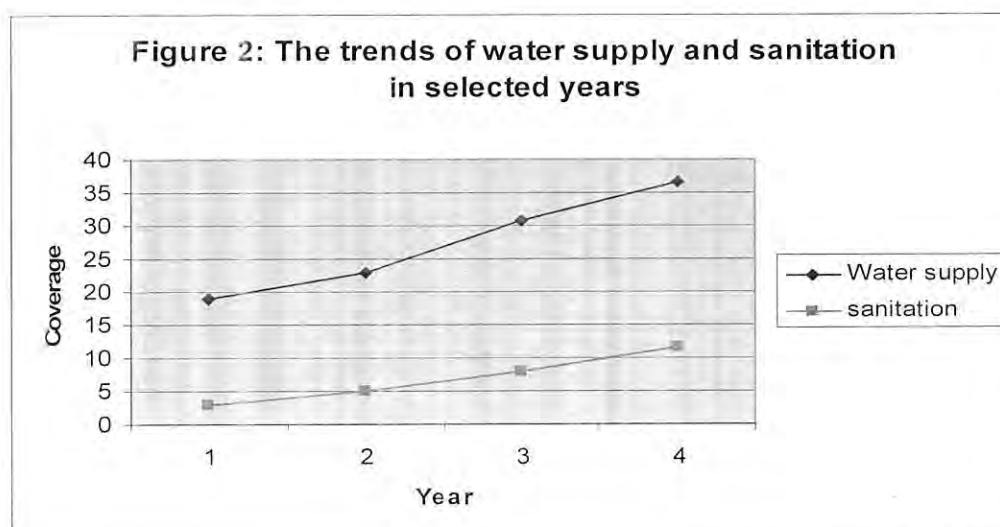
2.5.4 Past Achievements and Failures

Notwithstanding the definition of water supply coverage which is controversial and different by various stakeholders, the coverage for water supply estimated at 19% in 1990 has increased to 30% in 2000. The SDPRP appraisal report of June 2003 estimated the coverage as 34 %. Data form the Ministry of Water Resources Planning Department raw data; also indicate that the coverage estimated for year 2004 is about 36.7 %. Other estimates are also indicated in table 2.1 below. Even though complete and accurate data is not available this figures are good indicator of the trend and also the current status.

Table 2.1 *Current estimates of Water Supply coverage for Ethiopia*

MWR (Planning Department)			
Year	Rural	Urban	National
1990	11	70	19
1994	14.7	87	22.5
1995	15	87	23
2000	17.1	74.4	30.8
2003	24	82	33.7
2004	24.2	85	36.7
SDPRP Appraisal Report 2003			
2003	25	85	34
Millennium Dev goals - MOFED & UNCT 2004			
2000	24	72	30

Teshome has presented the trends of water supply sanitation coverage from 1990 to 2004 graphically (fig. 2), based on data from different sources (Teshome, 2007).



Note: 1: represent 1990, 2: represent 1995, 3: represent 2000 and 4: represent 2004

Among the main reasons given for the slow pace of progress in water supply services in the 1980s the following are noteworthy and are still relevant today: the lack of comprehensive water legislation (until recently); inadequate investment resources; and the lack of a national water tariff policy. Moreover, there has been a strong urban bias in water supply programmes, and the rural areas have suffered as a result. On the other hand, the main reason for the poor record of sustainability of existing water schemes in the rural areas is the absence of beneficiary participation and community management (Desalegn, 1999).

The government's involvement in water development in the past has suffered from many shortcomings. There is first of all unnecessary red-tape. Plans are not executed in time, and projects take much too long to implement. Secondly, there has been a lack of technical competence on the part of the implementing agencies. Thirdly, there has been a lack of water policy and strategy, and guidelines on water development schemes and their management have been either unavailable or not clear and comprehensive. Fourthly, as has been noted above, the government has frequently used a top-down approach, and has not made efforts to win the confidence of the direct stakeholders (<http://www.africa.upenn.edu/eue>).

Quite frequently in Ethiopia, planners have emphasised the agronomic, engineering or technical aspects of water projects, and most of the important decisions have been made by technical experts, with little regard to issues of management and beneficiary participation. Policy planning and implementation in Ethiopia was guided by a strong top-down approach. There were few occasions when stakeholders were involved in any aspect of water resource development. Neither the direct beneficiaries nor concerned institutions at the local level were consulted in the planning and implementation of water projects. Moreover, the management of the projects themselves were in the hands of party or government functionaries, and not in the hands of the beneficiaries themselves. The irrigation and potable water schemes lacked operational autonomy, and there was no sense of ownership on the part of the beneficiaries (<http://web.worldbank.org>).

2.5.5 Water Supply Current Status

In Ethiopia Water supply and sanitation coverage is very low, which is 39.4 percent and 11.5 percent in 2004 respectively. It is even much below the average coverage of Sub-Saharan Africa countries (table 2.2).

Although the Government has well articulated sector policies and strategies, complemented by a Water Sector Development Program, a Water Supply and Sanitation Master Plan and a Water Supply and Sanitation Program, the major challenge now is their implementation.

However, the weak institutional capacity in sector institutions at the federal government, local government institutions and the communities continues to pose a significant constraint for the sub-sector development. This has limited the planning, implementation and monitoring capacity at federal, regional, and Woreda levels, while low private sector participation has resulted in limited competition and high implementation costs of water and sanitation projects.

Table 2.2: Water supply and sanitation coverage in selected countries, 2004

Country	Water supply coverage				Sanitation coverage			
	National	Urban	Rural	Urban rural Gap	National	Urban	Rural	Urban rural Gap
Kenya	62	89	46	43	48	56	43	13
Uganda	60	84	56	28	60	71	58	13
Ethiopia	39.4	83.1	31.4	38	11.5	49.7	3.9	45.8
SSA	56	80	42	40	37	53	28	25
S.E Asia	82	89	77	12	67	81	56	25
Latin A	91	96	73	23	77	86	49	37
World	83	95	73	22	59	80	39	41

Source: JMP, 2006 and AFRIC MDR- Report 2006 as cited in Teshome, 2007

The Government's decentralization program, though critical to the nation's development, has also contributed to the fragmentation of scarce human resources and equipment among the 9 regions and 2 administrative areas. The emerging regions have had limited resources to implement their programs (Desalegn, 1999).

Major capacity constraints exist at all levels of government in the sector. Institutions are weak, afflicted with insufficient and inadequate equipment, staff/skills shortages, poorly motivated staff and a general lack of funds. MWR and MoH have lost many of their professional staff to the private sector, donor agencies and NGOs, and the low salaries have reduced its ability to attract new competent professional staff. While the staffing levels are better for the 4 biggest regions – Oromia, SNNPR, Amhara and Tigray – the situation in the other emerging regions (Affar, Somali, Benishangul, and Gambella) is much worse (<http://www.sjwater.com/quality/supply.jsp>, 2004).

2.5.6 Challenges in Water Supply Development

Despite the concerted efforts of the government, the communities and sector partners the water supply situation has not improved

substantially. Ethiopia like other sub-Saharan countries faces a number of challenges in improving water supply coverage.

The major constraint is lack of adequate financing. While increasing funding to the sector is proving difficult in many countries, the use of available funds tends to be inefficient and potential sources of funding from system users remains largely under-utilized. Most systems and facilities are badly designed, poorly constructed, and utilize technologies that are not appropriate (BoFED and UNDP, 2005). Imported technologies and equipment may be inappropriate in many applications, and importing spare parts is frequently expensive and difficult. Condition with respect to access to safe water in urban areas is far better in terms of coverage, with about 85 percent having access to safe water sources. However, the reliability of supply is quite poor, both in terms of quantity and frequency of breakdowns.

In rural areas, poor maintenance appears to be a common problem. A number of issues that need to be addressed in this regard are (BoFED and UNDP, 2005):

- i) Inadequate emphasis on promotion and participatory and informed demand articulation during the planning stage results in poor technology choices and a lack of community ownership of the scheme,
- ii) poor user fees collection, both due to inadequate management and up-front clarity of rules results in lack of resources to undertake timely maintenance of assets,
- iii) lack of or poorly developed supply chains (in relation to technology choices) that makes access to spare parts difficult and unduly costly, iv) inadequate technical support and
- iv) Lack of access to credit for bridge finance for sudden or major repairs and augmentation.

In urban areas sustainability of investments is also threatened, as timely and regular maintenance is not undertaken. In urban areas the financial

viability of the schemes is not ensured due to low tariff rates and inadequate institutional capacity. Poor service delivery discouraged consumers to get connected to systems. The challenges and issues in the Water supply sector can be summarized as follows: i) sustainability, ii) capacity and iii) Finance. (BoFED and UNDP, 2005)

According to Getachew (2002), for success in the improvement of sustainable water supply coverage, the country needs to give attention to the following major actions:

- accelerated and integrated development of sustainable and reliable rural water supply services
- formation of co-operatives or water user's association
- balanced action on software (e.g. scheme management) and hardware (e.g. scheme construction) aspects
- replacement of supply driven approach with demand responsive approach that could start with affordable cost sharing initiative
- replication of the findings to other regions based on consultative process
- integrated development to boost up the economy
- promote public-private partnership that will eventually lead to privatization
- establish tri-party partnership amongst the community, government and support organizations and
- special consideration for the drought affected and nomadic community

2.6 Water Supply and Sanitation Project Phases

A project is a series of investments activities that aim at solving particular problem within a given time frame and in a particular location.

The investments include time, money, human and material resources. Before achieving the objectives, a project goes through several stages.

The three major stages include project planning, project Implementation and Project Monitoring and Evaluation. After the completion of

2.6.1 Project Planning Stage

According to Philip (<http://www.sujin.com.np>) formulating strategies, designing a work plan, and budgeting. Situation analysis is a process through which the general characteristics of the community are identified. It is done through collecting information necessary to understand the community as a whole and individuals within the community. Information should be collected on what happened in the past, what currently happening and what is expected to happen in the future, based on the community's experience. Based on the result obtained from situation analysis problems of the community that should be addressed through the project will be identified. Next planners, implementers and beneficiaries should set up goals and objectives of the project. A goal emerges from the problem that needs to be addressed and it signals the final destination of a project. Objectives are finite sub-set of a goal and should be specific in order to be achievable. Goals and objectives provide the basis for monitoring and evaluation. The planners and implementers, with the communities and their enablers, should decide on how they are going to implement the project, which is the strategy. Finally a work plan is prepared, which is description of the necessary activities set out in stages with, indication of the timing (www.scn.org.htm).

To effectively implement a project, the people planning and implementing it should plan for all the interrelated stages from the beginning.

Plans must be:

- approved by those who will be affected by them

- accepted by those who will have to implement them
- adopted by those responsible for financing and authorizing them

2.6.2 Project Implementation Stage

Implementation is the stage where all the planned activities are put into action. It includes mobilization, utilization and control of resources and project operation. Before the implementation of a project, the implementers should identify their strength & weaknesses (internal forces) and opportunities & threats (external forces). The strength and opportunities are positive forces that should be exploited to efficiently implement a project. The weakness and threats are hindrances that can hamper project implementation. The implementers should ensure that they devise means of overcoming them ([www. scn.org.htm](http://www.scn.org.htm)).

Effective implementation of plans depends upon:

- Approval, acceptance and adoption of the plans by beneficiaries, implementers and donors.
- Establishment of priorities within the programme
- Realistic budgeting, adequate financing and effective budgetary control
- Adequate performance checks and procedures for monitoring and evaluation
- Adequate administrative support
- Translation of objectives into specific projects

2.6.3 Project Monitoring and Evaluation

Monitoring is the regular observation and recording of activities taking place in a project or programme. Project monitoring is a process. It needs to be done constantly and consistently. Set the pattern at the outset of your projects. Plan how you will monitor progress right along with how you will accomplish the work. Set the process in motion and keep it moving from the beginning (<http://www.sujin.com.np>).

It is a process of routinely gathering information on all aspects of the project. It involves giving feedback about the progress of the project all planners, implementers and beneficiaries. Monitoring should take place at and be integrated in to all stages of the project cycle. Monitoring should be done by all individuals and institutions which have an interest (stake) in the project. Monitoring provides information that will be useful in:

- analyzing the situation in the community and its project
- determine whether the inputs in the project are well utilized
- identify problems facing the community or project and finding solutions
- ensuring all activities are carried out properly by the right people and in time
- using lessons from one project experience on to another
- determining whether the way the project was planned is the most appropriate way to solve the problem at hand

Evaluation is a process of judging value on what a project or programme has achieved particularly in relation to activities planned and overall objectives. Since it involves value judgment it is different from monitoring, which is observation and reporting of observations. Evaluation is important to identify the constraints or bottlenecks that hinder the project in achieving its objectives. It also enables planner and implementers to assess the benefits and costs that accrue to direct and indirect beneficiaries of the project. Evaluation is essential for drawing lessons from the project implementation experience and using the lessons in the planning of other projects in that community and elsewhere (www.scn.org.htm).

Evaluation can and should be done: i) before, ii) During, iii) After project implementation.

2.7 Management Aspects of WSS Projects

There is general agreement in the literature that management is an important element in all water development schemes, determining success or failure.

According to Getachew, 2002 good management of water system includes a number of functions: provision and maintenance of adequate facilities, good and smooth operation, provision of satisfying services to consumers, official maintenance, establishments of sound fiscal methods, development of equitable water rates, efficient organizational structures and procedures, development of technical and financial plans for future expansion, supervision of personnel and control of equipment and supplies.

Involving stakeholders in the management and planning of water services and resources is recognized as a key element in obtaining a balanced and sustainable utilization of water (<http://gwpforum.org>). Whilst the involvement of stakeholders or their representatives in planning processes is clearly desirable, experience has shown that such involvement can be time consuming and fraught with difficulties. These difficulties arise because stakeholders often have conflicting interests and objectives in addressing water-related challenges. Difficulties can also arise as a result of factors that are not directly related to the water sector, such as political tensions, antagonism between different social groups or a lack of respect between specialists and non-specialists. Hence, wide-scale involvement of stakeholders in water resource planning and management is highly desirable, but only if methods and tools are used that are cost effective, lead to conflict resolution, identify

tradeoffs between different objectives, and produce outcomes that are measurably better than existing approaches (Patrick et al., 2005).

Some of the schemes are not functioning due to faulty installation or lack of maintenance. The magnitude of malfunction of water supply schemes is not known accurately though it is believed to be high. An official of MWR recently estimated that at any given time more than 60 percent of all systems are in various stages of disrepair, and thus in effect only 40 percent of the population covered by improved water systems has access to safe water (CRDA 1996; MWR, 2000).

2.8 Theoretical Framework

From the literature reviewed the author has summarized points in a conceptual framework (fig. 3).

For successful implementation of programs, like UAP, four major factors need to be effectively considered and put in action. These are a sound plan document, stakeholders' participation, resources allocation & utilization and effective monitoring & evaluation. Each factor is interrelated with and also dependent on the other three factors.

- i) **A Sound plan document:** a sound plan document is a pre-requisite for success of program implementation. Preparation of a sound plan requires full participation of stakeholders at all levels, allocation & effective utilization of resources (financial, material & human) and monitoring & evaluation of the planning process. In addition to these the plan should be based on reliable data.
- ii) **Stakeholder participation:** without full participation of stakeholders it is difficult to implement a program, even in the presence of a sound plan document and resources. To effectively involve stakeholders it should be properly planned, adequate resources and M&E of activities are required. In addition to these the concerned bodies are expected to

prepare a convenient environment for participation and to raise the awareness of the stakeholders about their roles & responsibilities in the program.

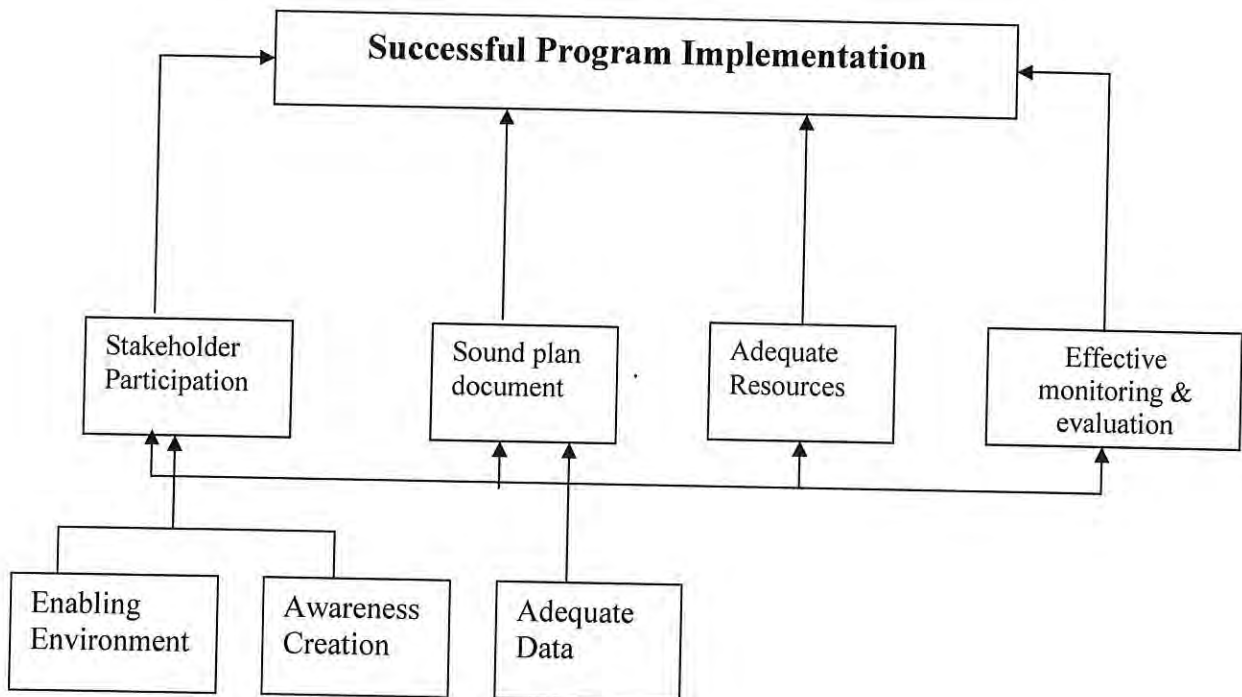


Fig. 3 Conceptual Framework

- iii) **Adequate resources:** program implementation depends on the availability of resources and efficiency of utilization of the resources allocated. Resources allocation and utilization should be planned properly. Stakeholders could be sources of resources and contribute to increase efficiency of utilization. Resources allocation and utilization needs to be monitored and evaluated.
- iv) **Effective monitoring and evaluation:** Monitoring and evaluation of activities play a significant role for success of program implementation. Effectiveness of monitoring and evaluation depends

on planning of activities, participation of stakeholders in the activities, and availability of resources to carry out the activities.

CHAPTER THREE

RESULTS AND DISCUSSION

3.1 The Strategic Plan document

After the launching of the Universal Access Program for water supply and sanitation nationally in 2005; it was the responsibility of the regional governments to prepare strategic plan to implement the program in their regions. SNNPR Water Bureau has prepared a five year strategic plan for the period 2006 – 2010, based on the national UAP.

This five year strategic plan, 2006-2010, of the water resources development bureau has been prepared to give direction for the region's development through proper utilization of the water, minerals and energy resources of the region. The plan states the bureau's, vision, mission, goals, objective, critical issues to be addressed and strategies to implement the plan and achieve the desired objectives. It has also included the major achievements gained and challenges the sector faced in the implementation of previous plans.

The document is prepared by the regional bureau staffs based on the information collected from secondary sources, the Woredas and Zones plus individual staff experience from the region.

3.1.1 Goals and Objectives

Goals

The overall goal of the regional Water resource sector is to enable the community in the region develop, conserve and use the available water resources to improve their living standards. This goal is operationalized by 2 sector level goals namely; Water supply and Irrigation sectors. The water supply sector's goal is stated as follows:

- Increase the rural and urban community's access, utilization and conservation of water resources for drinking and other uses.

Objectives

The strategic document has clearly stipulated the specific objectives to be achieved under WSS sector in the next 5 years as given in the following table (Table 3.1):

Table 3.1: WSS related goal & specific objectives

Sector	Goal	Specific objectives
Drinking water supply	1. Increase the rural and urban community's access, utilization and conservation of water resources for drinking and other uses	1. Increase safe and sustainable drinking water supply coverage from 48% to 85% in 5 years and to 100% in 7 years 2. Increase sustainability of existing water facilities from 76% to 95% 3. Improve the management and conservation of water resources.

3. 1.2 SWOT Elements in the Regional Strategic Plan

The strengths, weaknesses, opportunities and threats (SWOT) elements are discussed in the strategic document under 2 categories: those that have negative effects (weaknesses and threats and those with positive effects (strengths and opportunities) for each sector.

With regards to the internal weaknesses of the WSS sector, the strategic document listed the followings: (1) non participatory, non responsive and unaccountable nature of the existing leadership, (2) inadequate integration of activities, (3) inadequate monitoring and evaluation, (4) low implementation of the previous strategic plans, (5) limited human resource capacity and commitment, (6) inadequate and inefficient management of financial resources, (7) inadequate and poor management of material resources including vehicles, (8) poor information access and dissemination. On the other hand the external threats of the sector, as stipulated in the document, that can limit the achievement of the objectives include: (1) low stakeholder participation

and coordination (community, private sector NGOs etc), (2) low water resources accessibility in some areas, (3) high investment cost in some areas, (4) high fluorine content, (5) pollution from industrial wastes and poor sanitation, (6) poor community management of water resources and facilities, (7) inappropriate technology choice, (8) limited knowledge and information, (8) the instability after 2005 election, (9) high vulnerability to HIV/AIDS, (10) increase of population number and (11) recurrent drought and erratic rainfall pattern.

The strategic document has also enumerated a number of strengths of the WSS, which can be taken as advantages to achieve the desired objectives: (1) Existence of a previous strategic plan, (2) decentralized sector structure up to the woreda level, (3) existence of limited but competent staff, (4) availability of basic material resources, (5) existence of a service to receive complaints of the customers, (6) healthy and strong relationship with other organizations, (7) emerging and encouraging private sector involvement in construction, consultancies etc. The document has also stipulated the following opportunities, which includes: (1) presence of abundant surface and ground water, (2) High donor willingness for financial support of MDG and universal access to water, (3) favorable governments policies and strategies for rural development, water resources development, MDG, and PASDEP, (4) abundant unskilled manual labour and skilled labour from technical collages, (5) high community interest and willingness to participate in world bank programs, (6) Existence of relevant institutions (Water basin authorities, universities active on water issues) and departments, (7) existence of NGOs, (8) existence of technologies that can easily be adopted and (9) good partnership environment to work together with different organizations.

3.1.3 Strategies in the strategic document

The regional strategic document considers the following strategies to tackle the expected obstacles. In addition, the bureau has planned to implement the strategy of increasing its human material and financial resources capacity in order to address the functional critical issue of inadequate human, material and financial resources. Among the major strategies were: Strengthening community participation, stakeholder involvement, exploring new water resources and rehabilitation of the existing ones, standardization of construction methods, participatory and integrated development and research. The major activities to implement these strategies are listed in annex 4.

The strategic plan has enumerated a number of action plans. The plan has tried to incorporate all the necessary actions activities, and many positive aspects are included:

1. It addresses cross cutting issues including gender and HIV/AIDS mainstreaming.
2. It emphasizes private sector involvement
3. It has included Measurable targets to achieve community participation and capacity enhancement.
4. It has called for sustainable service through capacitating woreda, kebele and local communities.
5. Gives due consideration for stakeholders participation
6. Incorporation of training as capacity building and motivation factor.
7. Incorporation of sector financing options.

The strategic plan has also described the human and financial resources plan for the five years period, for the different departments of the sector. The plan assumes 100% coverage of all the allowed positions in the bureau structure, in the year 2007/08. The financial plan for the five years period indicates that more than 50% of the total required budget for the period is proposed to be borne from loans and grants.

2.1.4 Monitoring & evaluation in the strategic document

The document has enumerated list of indicators for monitoring and evaluation of performance which are clear, measurable, and time bounded. Monitoring is planned to be done on three aspects: (1) achievement of objectives, (2) implementation of the strategic plan and (3) Assumptions and risks. The sector specific monitoring plans are summarized in annex 5.

The data collected from the multiple sources using the designed methodology are organized, analyzed and interpreted to answer the research objectives and associated research questions raised in chapter one. In the following section the findings of the study are presented in their order.

The figure below compares the planned and implemented water supply coverage in the region.

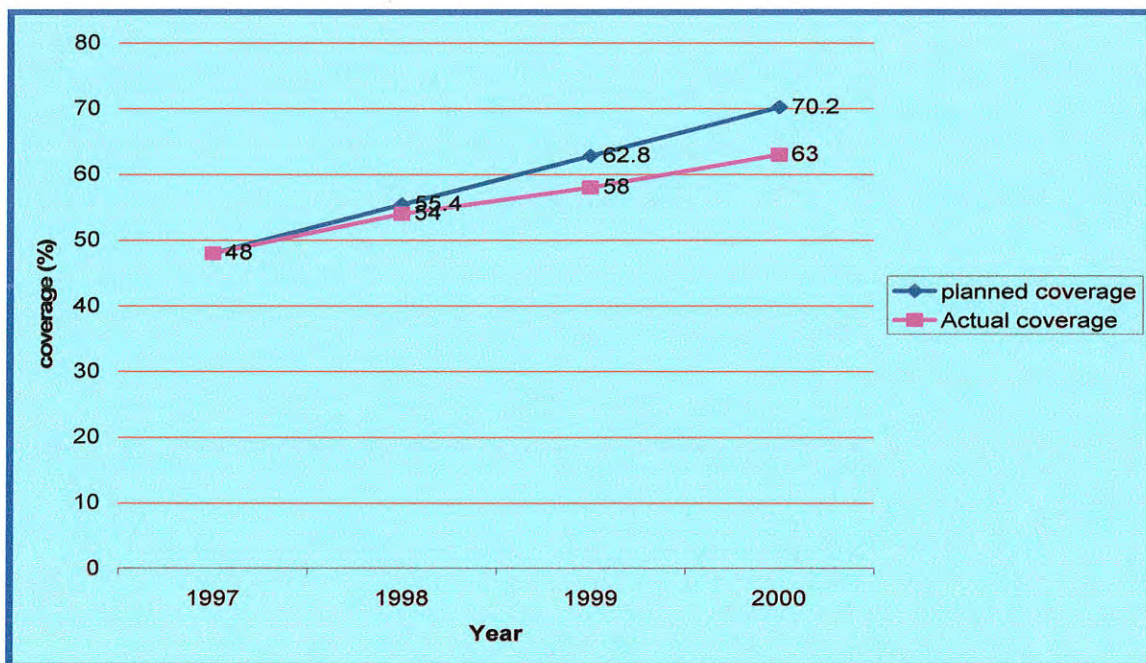


Fig.4 Water supply coverage gap between the planned and implemented in SNNPR

3.2 The Planning Process

The processes followed in the preparation of any plan have a significant impact on the implementation of the plan. The regional water bureau and the study woreda strategic plan preparation processes are discussed below.

3.2.1 Preparation of the strategic plan

Since the strategic plan is the interpretation of the UAP in to locally/regionally implementable conditions it should be prepared with in the objectives, principles & strategies of UAP and by considering the existing resources, capacity of implementation, the need of the user community, etc. Therefore, the planners are expected to have good knowledge about the UAP document and data, resources and adequate time are crucial to come up with implementable plan. And also they need to have relevant educational background and good work experience. In addition to this the planning process should be participatory and transparent to all concerned bodies.

I. Participants in the document preparation

The strategic plan document is prepared by a committee composed of five members organized by the bureau for this purpose. Three of the committee members were selected from the water supply, mines & energy and irrigation sectors and the other two members were from planning & program section and pool center office.

The planners have different educational background and work experience. The three representatives from the three sectors are technical experts - one Chemist, one physicist and one engineer. The participant from planning and program section is water resource engineer and the representative from the pool center is diploma graduate in public administration. All the planners have ample work experiences that range between 12 and 20 years (see table 3.2).

Table 3.2 educational background & work experience of the planning committee members

sector	Educational background	Educational level	Year of experience	Remark
Water supply	Chemistry	M.Sc.	16	
Mines & Energy	physics	B.Sc.	14	
Irrigation	Engineering	B.Sc.	12	
Plan & program	engineer	B.Sc.	16	
Pool center	Public administration	diploma	20	

From the focus group discussion held with the planners, there were no clearly set criteria to select planners from sectors and sections. And there is no clearly known reason why the number of the committee members fixed to be five. All the discussants agreed that the number was set traditionally and participants were selected from their sector arbitrarily. The other point that needs attention is why the number of representatives from sectors and sections was limited to one. All the participants of the planning process have agreed that it very difficult to prepare a strategic plan for a sector alone. There are different departments and sections in a sector that have different responsibilities. Therefore no single person can be responsible to prepare a sound plan for a sector with vast and different responsibilities.

When we see the water supply sector, key informants were asked about the strategic plan preparation process and most respondents reply that the sectors plan is not prepared by an appropriate expert that has relevant educational background and professional work experience. The plan is prepared for all departments and sections in the sector, but only

one person was involved in the planning process. All respondents agreed that the plan should have been prepared by a committee organized from the different departments and sections, and clear criteria to select committee members were necessary. According to the respondents, it was better if the number of participants from the different departments were determined according to the weight of the works under the departments and sections.

The planners were asked whether different stakeholders have participated in the planning process or not. They responded that there was no adequate time and resource to involve all major stakeholders, but there was an effort to consider information collected from zone and woreda water offices. And they agreed that the planning process was not participatory, because the different stakeholders, including the beneficiaries, were not consulted, comments and experiences of different NGOs that have been working in the sector for long periods are not incorporated.

In the preparation of the study woreda water office strategic plan, almost all the professional, technical and supporting staffs have participated. There are four sections in the office; these are water supply study and design, operation and maintenance, community training, and Administration. And each section (team) was responsible to prepare the section's plan. .

The participants have different educational background and work experience. The planning participants include advanced diploma engineers, Electro mechanics, Community promoters and twelve complete workers (see table 3.3).

Table 3.3 woreda planners' educational background & work experience

Section	Qyt	Education level	Profession	Work experience	remark
Water supply study & design	2	Advanced Diploma	Engineering	2 and 6 yrs	
Operation & maintenance	3	10+3 & Advanced diploma	2 Electro-mechanics and 1 Engineering	1, 2 and 4 yrs	
Community promotion & training	2	12 grade completed		Both 2 yrs	
Administration	1	>>		< 2 yrs	

There were three engineers (two water resource and one civil), one mechanic, one electrician, two community promoters and one personnel involved in the planning process. The two engineers were responsible to prepare the plan of the water supply study and design section, two technicians and one engineer were responsible to prepare the strategic plan of operation and maintenance section, the two community promoters were responsible to prepare the strategic plan of the community training and participation section and administrative issues were planned by the personnel.

The number and organization of the planning participants is better than the regional planning committee. Almost all the professional and technical staffs of the office have participated and they were given the responsibility that is relevant to their work experience. The office has tried to use the potential of the existing staffs to the maximum. But when we see the educational level, work experience and results of the KAP survey the regional planning committee is in a better position. The

woreda planners are diploma holders and twelve grade complete, and most of them are non-professional technical persons, they have never participated in strategic plan preparation previously, and they do not have adequate knowledge about UAP (what it is, its objectives, the relation between their strategic plan & UAP, etc). All of them have a few years work experience, that is, less than three years; except two who have six and four years experience.

The woreda strategic planners have agreed that the planning process was not participatory. They said no body has been invited, including the community, to participate in any part of the planning process. It is fully prepared by the office's staffs only.

II. Time and resource allocated

The strategic plan is prepared for five years that extend from 2006 to 2010; it is a medium term plan according to the Ethiopian government.

The time taken to prepare the regional strategic plan is not definitely known. The work has been interrupted many times due to different personal reasons and some immediate and emergency works that come from the bureau. Even though the planners have been out of office for many days for the planning work, the committee members were not totally exempted from their office works. The committee members were asked to estimate the time taken to prepare the strategic plan, and they responded the plan is completed within six months period, but the estimation given to the actual time taken to prepare the plan varies between 45 days and three months, the average being two months. Generally they agreed that the time allocated to prepare the plan was not adequate, because the work needs in depth thinking, collecting adequate data, referring previous experiences of the bureau and other organizations in the region and in other regions, identifying the causes of failure of previous plans and the likes. But due to the short time allocated it was not possible to examine strategic issues in depth and they were continually urged by the bureau to complete the work soon.

Regarding the material and financial resources allocated for the plan preparation the planners have similar response. They were using two laptop computers and one vehicle and there was adequate budget to purchase stationery materials. But there was financial constraint for fuel and per diem. The budget allocated for fuel was very small; it is allocated to give transportation service for the committee. It was not adequate to collect data from different bureaus, zones and woredas. Similarly the money for per diem was not also adequate to stay long out of home.

The woreda strategic plan is prepared within a month and the actual time used is not more than twenty days, according to the woreda water office planners. There was no additional budget and material resource allocated for the plan preparation. They have used the desk top computer of the office to write and print the document; no additional stationery material is purchased. Since they did the work in the office there was no budget for per diem and other expenditures like fuel. The planners assume that the time and resources allocated are enough to prepare the plan and they were not crowded to finish the plan within the mentioned number of days. These points show the poor understanding of the planners about strategic plan.

III. Availability of data

For strategic plans to be dependable plans they should be built on concrete data that are adequate and trustworthy. Data about the past and present trends of the organization are necessary to forecast the future. There should be data about the natural, material, human and financial resources available for implementation.

The regional strategic plan is prepared based on secondary data collected from different printed materials and consultation with the bureau management. The main sources of secondary data were Universal Access program (UAP) , water sector development program, Woody Biomass Inventory Strategic Plan Document, Water Bureau Annual Report (2005), Regional statistical abstract (2005) and partially Zonal and Woreda

strategic plan documents were also used as secondary sources to update relevant information. Most of the documents used, except the zone and woreda strategic documents, can give only the general direction to be followed but they can not be sources of information about the past and present situation of the bureau and the existing field conditions of the areas where the plan is to be implemented. For example regarding the plan for maintenance of non-functional schemes inventory data that identifies the type, number, location and type of problems of the non-functional schemes are essential, but there is no recent inventory data for most parts of the region. To plan new water supply schemes data about the water resource potential of the area where the scheme is to be constructed are needed. These data can be collected either from previous studies conducted in the areas or through conducting field investigation. The planners complained about the absence of organized data management system in the bureau. Study & design documents, reports, inventories, as built reports, rules & regulations, guidelines, manuals, maps, etc are available in the bureau which are produced by the bureau professionals, consultants, contractors and/or purchased from outside. But these documents are not available when they are needed, because some were in hands of professionals, some in Bureau & Department Heads offices, and others at Library shelves, etc. Other respondents of the bureau also have markedly underlined the poor data handling system in the bureau.

One respondent said *"in this age of information, it is humbling for such huge organization to be unwise to keep data systematically"*.

Respondents added that people are not faithful to return materials they borrowed from the library and the bureau did not design a strong mechanism to manage such actions. Therefore there are a number of materials at the hands of individuals that are very important and needed by many people.

Regarding the woreda strategic plan the source of data were own recordings and personal experiences of the planners. The planners did not have even the UAP document to follow the objectives, principles and strategies. The only document they used as a guide is a previous strategic plan document of the regional water bureau, collected informally. All the participants agreed that the plan is prepared based on their personal knowledge and understanding. They also added that the number of tasks that are stated in the strategic document are simple agreed figures of the planners, except some activities like organizing community committees and simple maintenance works. The planners criticized the woreda administration for not allocating adequate budget for the office since its establishment in 2003. Therefore the office is not in a position to collect data that are necessary to prepare sound strategic plan.

The researcher has also observed that the woreda¹ office was not well organized and that its data handling was poor. For example it was not possible to get the strategic document from the office. This shows the poor data handling culture in one hand and the fact that the office is not following the strategic document in its work of water supply.

III. The approach followed

There are two commonly known approaches in planning. These are “Top – Down” and “Bottom – Up” planning approaches. Their names indicates the point where planning starts; the first approach starts from higher level bodies (national/ regional) and the plan goes down to the lower bodies through the existing level of institutions and in the second case the opposite path is followed, that is, the plan starts from the lower level and it climbs up to the higher level using the institutional ladders.

The planning process in the region basically follows Top – Down approach, even though Bottom – Up approach was used at some points. First the idea of the need for preparation of a plan arises from top,

regional or National level, then the lower level bodies are instructed to prepare their plan based on pre-specified goals, objectives, strategies, principles, etc. This approach binds lower governmental bodies to stick to some principles and strategies that are not practical to their local conditions and also they will be enforced to set a target that can not be achieved in the specified time period. In this regard the planning process follows a Top – Down approach.

On the other hand in the preparation of the plan it was the responsibility of the woreda to prepare its own plan for the period specified without the interferences of any top level government body. The woreda is autonomous to determine types of schemes to be constructed, maintained, etc and areas where the works will be done. This makes the woreda the owner of the plan, since it is not imposed on it by another body. This part of the planning process makes the planning process to follow a Bottom – Up approach.

Theoretically the planning cycle in the preparation of the strategic plans of the region and woreda water sector is:

- The UAP is set by Federal government
- The regional governments are ordered to prepare their strategic plan to achieve the objectives of UAP in their region
- Regional bureaus ordered the respective zonal and woreda offices to prepare their strategic plan based on the same objectives
- The woreda offices prepare their strategic plans
- Then the Zonal offices collect the strategic plans of the woreda offices, they compile and add additional tasks that will be performed by the Zone (man power capital /resources) and complete zonal strategic plans
- The regional bureau collects the strategic plans prepared by the zonal offices.

- It compiles, summarizes, add additional tasks that will be performed by the bureau and it will become the regional water resource bureau strategic plan.
- Then the plan will be sent to BoFED and MWR to approval and it will be sent back to Zone and woreda sector offices for implementation.

3.2.2 Major drawbacks of the planning process

The regional and the woreda water sector strategic plans are prepared with the objective of implementing the UAP. From the analysis of the data collected from the regional water bureau and the woreda water office staffs through FGD, KID, and Observation methods the following major problems encountered in the planning process and major weaknesses of the plans are identified:

At regional level

- ❖ Adequate and relevant professionals were not involved in the plan preparation
- ❖ The time allocated for the preparation of the strategic plans was not adequate
- ❖ There was no adequate budget allocated for major activities, such as data collection
- ❖ Due to poor data management system of the bureau the plan was based on inadequate data and information
- ❖ The planning process was not participatory, major stakeholders, including beneficiaries, did not participate in the planning process

At woreda level

- ❖ The planners do not have relevant educational background and adequate work experience

- ❖ None of them was involved in any previous strategic planning and/ or was not involved in training about strategic planning
- ❖ The planners were not aware of the objectives, principles, strategies of UAP and the relation between their strategic plan and UAP
- ❖ There was no resource allocated for the plan preparation
- ❖ There was no data except personal records and knowledge
- ❖ The planning process was not participatory; the community and other stakeholders are not involved in the planning process
- ❖ The prepared plan document is not available at the office, implying that it is not followed strictly in the service delivery activities

3.2.3 Summary

From literature it is generally agreed that implementation of a plan is highly influenced by the way it is prepared. For a plan to be successfully implemented it should be based on concrete data not on the desire of the planners, prepared in a participatory environment not in a closed door policy, planners should be appointed based on their professional skills and experiences not arbitrarily, adequate time and resources are needed to make the plan more smooth, because it is the high way that all implementation trucks will ride on.

The regional and the woreda strategic plans are not prepared on the basic principles of planning therefore affecting implementation negatively. Because people will not be willing to implement a plan in which they do not have trust, communities will not be willing to accept and participate in implementation of projects in which they have not participated, and since the plans were not based on data, mismatch

between what is planned and the real conditions on the ground was the consequence.

3.3 Stakeholders Analysis

3.3.1 Roles and Responsibilities of Stakeholders

Based on the data collected, from secondary and primary sources, at regional and woreda levels the following stakeholders with their role and responsibilities are identified. Depending on their level of importance in implementation and influence in decision making, stakeholders are classified as Primary, Secondary and collaborators. These stakeholders are enlisted in the following table.

Table 3.5 List of stakeholders at regional level.

Stakeholder	Role	responsibility	Expectations from the WRDB
Primary Stakeholders			
Water Resource Bureau	-Play leading role in planning, implementation and monitoring of the water supply activities -Coordination of different stakeholders	• Ensuring the provision of WSS services • Oversees overall WSS activities within the region • Providing technical and financial supports to Zones and Woredas. • Support development, implementation and regulation of WSS activities at all levels.	
BOFED	Allocation of finance and controlling overall project activities	• Allocation of adequate and timely budget for the program and timely auditing • Monitoring and Evaluation of WSS activities carried out by the other primary sectors • Registration and licensing of NGOs working on WSS • Monitoring and Evaluation of the overall activities of NGOs working in WSS activities • Receiving and documentation of timely report on physical and financial plan and implementation.	• Proper and efficient utilization of budget • Respect financial rules and regulations • Timely report on physical and financial plan and implementation • Project documents and timely report on the progress of project activities

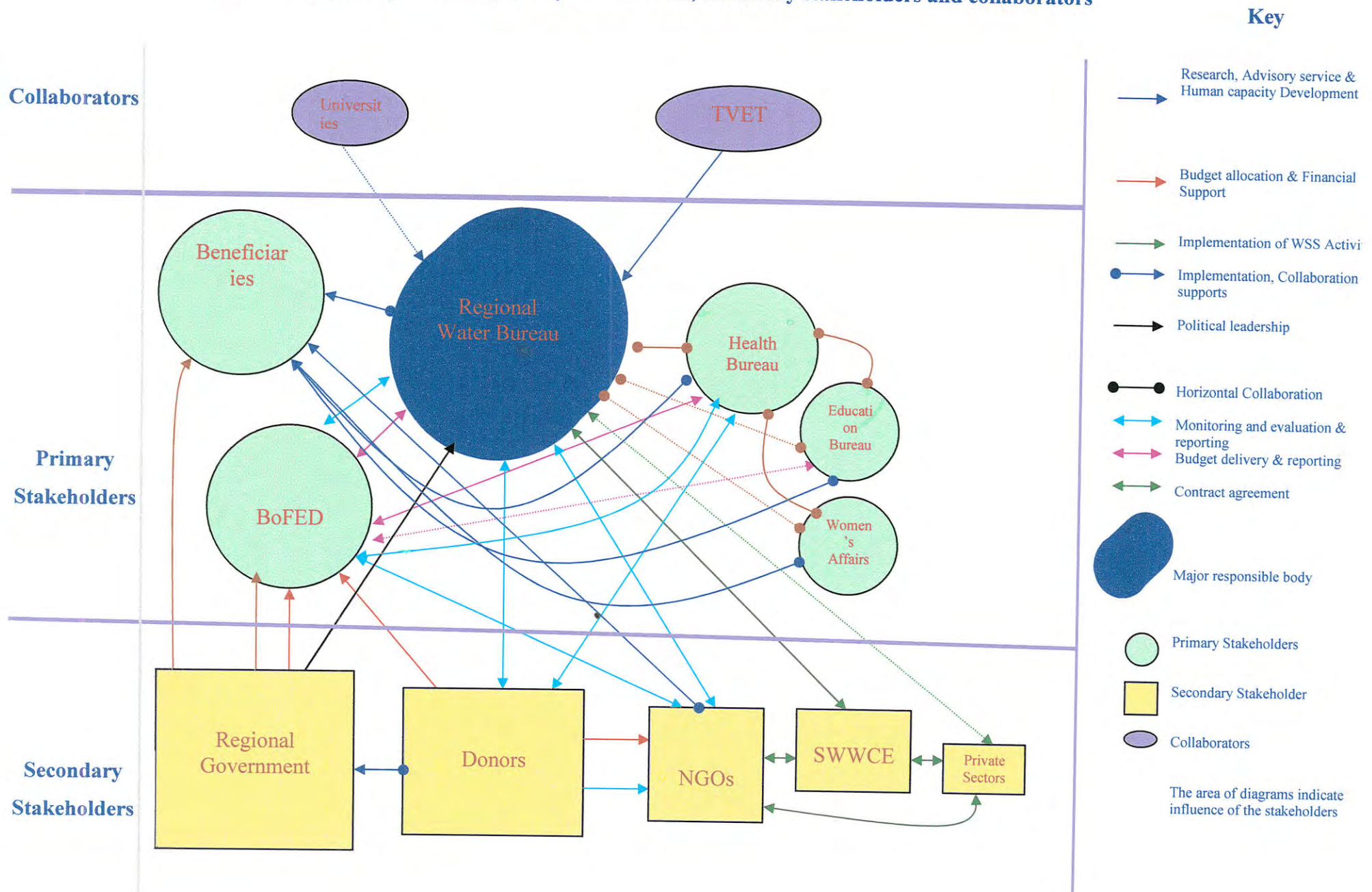
Health Bureau	Participation in sanitation and hygiene promotion	• Implementation of sanitation activities in urban and rural areas • Awareness creation programs on WSS activities • Provision of professionals, including Health Extension Workers , specially at Kebele level • Overseeing the development and quality of pit latrine	• Minimize the effect of water born diseases caused by a lack of clean water. • Train the community concerning hygiene and sanitation.
Education Bureau	Development & implementation of the water, sanitation activities at schools	• Implementation of water supply and sanitation activities at schools, • Integration of WSS issues in curriculum • Hygiene promotion at schools	• Reduce the burden on women and children caused by fetching water and fuel wood collection by increasing the accessibility of water and energy facilities.
Women Affairs Office	Gender issues	• Ensure protection of women's rights in Laws, rules and regulations prepared by the bureau and other sectors and stakeholders • Gender mainstreaming in WSS plans and programs • Ensure participation of women in WSS activities especially at Kebele level.	• Gender mainstreaming in development plans and programmes • Ensure women's participation in implementation of projects
Community	-	• Participate in project identification, formulation, and implementation. • Manage the schemes in sustainable way.	• Development of water supply, irrigation and energy projects. Community training and other technical support.

Secondary Stakeholders			
Zone, Special Woreda and Woreda Administration	Development and implementation of the water, sanitation activities	• Efficient communication and information exchange • Preparation of policies, strategies, rules and regulations • Allocation of region's development plans based on fairness and equality • Efficient service and transparent ways of working • Capacity building (training, technical support, guidance and manual preparation), availing laws and regulations • Hand over the projects upon completion of the construction	• Efficient communication and info exchange • Preparation of policies, strategies, rules and regulations • Allocation of region's development plans based on fairness and equality • Efficient service and transparent ways of working • Capacity building (training, technical support, guidance and manual preparation), availing laws and regulations • Hand over the projects after completion of construction
Donors	Provide finances	• Provide financial, material and technical support for UAP program • Monitoring and evaluation of financial flow in the system • Involvement in capacity building • Provision of consultancy service • Approval of project proposals	• Proper utilization of financial resources provided • Positive impact on beneficiaries • Timely financial and physical report • Fair development • Projects documents & proposals

Stakeholder	Role	responsibility	Expectations from WRDB
NGOs	Technical corporation and implement water supply and Sanitation activities	• Involvement in the implementation of WSS activities at grass root level • Monitoring and Evaluation of their own performance • Periodic reporting and participation in discussion forums • Working inline with government policies and strategies • Involvement in Capacity building activities related to WSS	• Efficient service and technical support • Timely project take over • Technical support & information • Timely project appraisal, follow up and evaluation
Urban water service	Water service provision	• Provision of water supply in urban areas • Capacity building (technical, financial, materials)	• Capacity building. • Technical support
South water works construction enterprise	Construction of water supply schemes	• Involvement in actual WSS implementation activity • Mobilization of Machinery for WSS activities • Capacity Building	• Project documents • Finance • Training
Private Sector	Contractors, consultants, Suppliers	• Involvement in actual WSS implementation activity • Provision of efficient service • Timely reporting of activities (specially contractors) • Involvement in capacity building • Technical support and supply of spare parts	• Transparent and fair working condition • Efficient service • Timely information and capacity building • Promotion of government polices and existing resources • Technical support.

Regional Admin Council	Setting policies and strategies	Enforcement of government policies and strategies	- Development of the region's water, mining and energy resources - Implementation of government policies and strategies
Region's Civil Service Commission	Staffing & structure development	Implementation of civil servants administration proclamation, policies, rules and regulations	To strictly follow rules & regulations in hiring & administering employees
Collaborators			
Technical and vocational training institutes	Training	Human Resource Development	To employ graduates in appropriate positions
Arba Minch University	Research, advisory service and training	- Human Resource Development - Involvement in research related with WSS - Provision of consultancy service	- To implement research findings in wss activities
Awassa University	Research, advisory service and training	- Human Resource Development - Involvement in research related with WSS - Provision of consultancy service	- To implement research findings in wss activities
Information Bureau	Promotion	Involvement in promotion of WSS activities	To handle data in systematic manner

Fig 3: Relationship between primary stakeholders, secondary stakeholders and collaborators



3.3.2 Existing collaboration among stakeholders

There are different efforts to coordinate the different stakeholders of the sector. Regardless of their effectiveness the different means established to coordinate and integrate stakeholders are discussed below. Some of the efforts are made by government bodies while others are initiated by NGOs and/or donors.

I. Memorandum of Understanding (MoU)

In 2006 a Memorandum of Understanding (MoU) was signed nationally among Ministry of Water Resources, Health and Education to integrate resources in carrying out water supply, sanitation and hygiene activities through out the country. The signing of the MoU has also been extended to regional and woreda levels. In addition, Women's Affair Bureau and BoFED are also expected to have major involvement in the implementation of WSS services. According to the memorandum of understanding, the water sector is responsible to take the spearhead position in implementation of WSS activities and the health sector will take responsibility for sanitation and hygiene promotion activities. The education sector is expected to involve through addressing WSS activities, including hygiene promotion, at schools and Women's Affair will involve in gender respective issues in all water supply and sanitation activities.

II. Multi-stakeholder Discussion Forum and Harmonization Forum

There are multi-stakeholder and Harmonization forums that involve all stakeholders, and they are held semi annually, in the region. These forums are used as flat forms to contact stakeholders and to create the environment that allows all participants to express their views and experiences. Through discussion about their weaknesses and strengths, in working in coordinated and integrated manner, some points that are commonly understood will be proposed for future carrier.

III. NGOs desk of BoFED

BoFED is the responsible body to register all NGOs that are willing to involve in the development activities in the region. NGOs are required to submit their implementation plan and their financial & other resources to be deployed in the implementation processes to BoFED, and they have to sign agreement to act according to the laws, rules and regulations of the country & the region and based on their plan & schedule. The NGO desk in BoFED is responsible to monitor & evaluate the activities of these NGOs and all NGOs are required to present a quarterly report of their activities to the desk.

IV. Regional Steering Committee

There is a steering committee at regional level that is composed of bureau heads of government organizations that have primary stake and the regional administration. The major responsibility of the committee is to create enabling political environment to implement plans. The committee evaluates past activities on a regular basis and takes measures on important points and set policy direction for the implementation of future activities.

V. Learning and Practice Alliance (LPA)

This is a newly established alliance between stakeholders of the WSS sector in the region. The alliance is organized by RiPPLE (Research inspired Policy and Practice Learning in Ethiopia), and the major objective of the alliance is to create environment of learning from the experiences of the different actors in the sector and to carry out action research with the participation of all willing stakeholders.

3.3.3 Integration of water bureau with the different stakeholders

As the major authorized body in the region to carry out water supply activities, the regional water bureau is responsible to coordinate, integrate and lead the activities of stakeholders in the sector. The relation of the bureau with the stakeholders is discussed below.

i. The bureau and Donors

The major donors in the region include WB, UNICEF, UNDP, ADB, and JICA. The bureau is working with good bondage with the different donors that donate financial and material support to the bureau. Since the donors give their financial (through BoFED) and material support directly to the bureau the planning, implementation, supervision works are done under the control of bureau. Some of the donors hire their own focal persons, some take focal persons from the bureau, and others have their own offices (with a number of personnel) under the bureau. These donors are working through the bureau; therefore they have good coordination with the bureau. But there is little or no coordination (integration) between the different donors. The reason for this weak coordination between donors is addressed to the different principles and strategies they propose to release their donation. WB uses private consultants to plan, study, design, water supply activities both in rural and urban areas; and monitoring and evaluation work is done by experts hired by the bureau for these tasks. In JICA projects study, design and construction of water supply schemes is done by consultants and contractors from Japan and a focal person is assigned from the bureau to control the over all activities of the contractors and consultants. But UNICEF gives all the responsibility to the bureau to plan and implement services and a focal person is assigned from UNICEF head office to over see implementation activities.

The donors have their own schedule to carry out monitoring & evaluation works. And the bureau is required to submit timely financial and technical reports to the due bodies of the donors.

ii. The bureau and NGOs

So far there are 21 international, national and local NGOs who have signed agreement with regional bureau (BoFED) to involve in WSS activities.

The NGOs are responsible to plan, implement and M&E their works. And the Bureau has not prepared the means to examine, review, monitor and evaluate their activities. These NGOs contact the bureau whenever they need support of skilled labor and /or equipment from the bureau, and at times of project completion and handing over to the community. In addition to these when the NGOs prepare workshop/seminar they invite representative from the bureau to participate in the ceremony. There is no defined line of communication to coordinate the different NGOs with the bureau.

Due to lack of systematically designed way of communication between these NGOs and the bureau, there is no formal communication among the NGOs themselves. Respondents from the bureau and NGOs have revealed duplication of works in some areas and misuse of the existing scarce resources. Different NGOs do baseline surveying of similar areas, conduct research works on similar issues, conduct study and design works for the same community and even well drilling is done at areas where previously well drilling has failed. According to the respondents these are good & enough evidences for the weak coordination of the different stakeholders that work in the sector.

iii. The bureau and GOs

Even though there is a MoU signed between water, health and education sectors to carry out water supply and sanitation activities in integrated manner, the level of actual involvement of these partners is found to be below the expected at all levels. All the sectors are working individually without the awareness of what the other sectors are doing and without recognition of their work by the other sectors.

In the case of health sector, the KAP survey results show that UAP is not well communicated and institutionalized in the regional health bureau. In addition, the sanitation sector is not visible in the organizational structure of the RHB. It appears as small team under disease prevention

and control department, which practically has got only one expert. At lower level the sanitation sector becomes more invisible in the structure and dissolved with in other activities. It appears as project and component of health packages. Even though water supply and sanitation activities are expected to be implemented in integrated manner but there are only very few practical manifestations. UNICEF is playing the major role to integrate water supply and sanitation activities in its project areas.

The integration between the education and the other two sectors, to implement water supply and sanitation activities in schools, is also at a very poor level. There is no data about water supply service coverage of schools, but it is believed by all respondents that the level is at a very low level. The reason for the low water supply services is related to lack of budget allocated to implement the services and the misconception that water supply implementation is considered as the task of NGOs. Sanitation coverage (latrine) of schools is at a better condition. Data collected from Mirab Abaya woreda education office shows that all schools in the woreda have latrine services, but the functionality and service levels of the latrines is not known.

The integration between BoFED and water bureau is in a better condition relative to the others. Since every financial resources allocated to the bureau comes through BoFED the bureau has strong communication with it. But the two bureaus complain on each other on carrying out their responsibilities. Water bureau complains that there is no fast and quality service delivery by BoFED; budget is not released on time, financial requests are not released fast due to minor reasons, etc. BoFED criticize the bureau not to submit reports on time and poor budget utilization. Their integration in monitoring and evaluation of implementation of projects is very weak. BoFED is responsible to monitor and evaluate programs and projects that are being implemented in the region, but the data collected through KID shows that UAP is not even

heard by the experts of monitoring and evaluation department of BoFED and the regional strategic plan implementation is not being monitored by BoFED. And there is no any effort from the bureau to initiate BoFED to carry out M&E of water supply activities.

The integration between the regional bureaus of women's affair and water resource development is at the lowest level. Though gender mainstreaming in water supply and sanitation activities is well understood and accepted in the water supply sector, there is no visible line of communication between the two bureaus to foster its practical application.

SWWCE is a governmental body, which is responsible to carry out water works construction in the region through competitive bid processes or direct award of projects on contractual basis. The regional water bureau and SWWCE have strong linkage and they are considered as the two wings of the same body. Some respondents of the bureau and the enterprise look the strong linkage positively and believe it should be strengthen more, while others look it in suspect. These individuals argue that the existence of informal relations and believe these relations might open a pin hole to corruption. Therefore they suggest there should be a well defined and transparent line of communication between the two bodies.

iv. The bureau and the private sector

The private sector is believed to be a driving force in economic development of a nation, in the present economic thought. The sector is new in the region, even through out the country, and there are only few that are involved water supply activities. The major private sector partners for the bureau are consultants, contractors, material & equipment suppliers and local technicians and artisans. The relation of the bureau with consultants, contractors and suppliers is based on bidding process and contract agreement. But the bureau is taking the

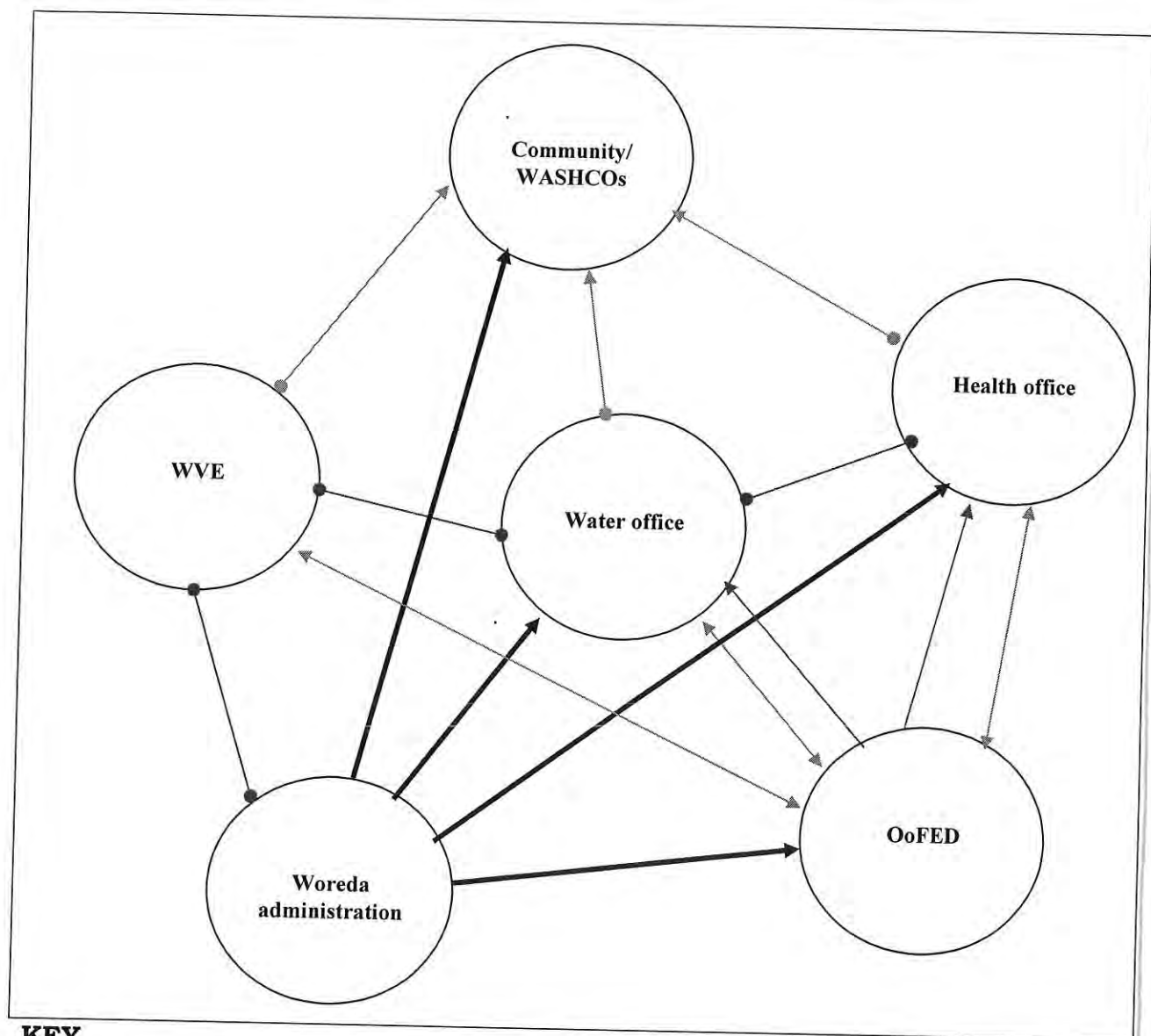
initiative to select, train and organize local technicians, artisans, material suppliers.

Respondents from the bureau were asked about the level of private sector participation in the water supply sector. Most of the respondents perceive contractors and consultants as business persons only, not as development partners. The reason they give for their outlook lies generally on the practical existence of corruption in government institutions. But none of them was willing to give evidence based examples. Respondents from private consultant firms have confirmed the existence corruption and it is common that they are asked to pay some percent of every payment for individuals in the bureau as rent, but they are not willing to mention their positions. All respondents agree that this type of relation has a negative impact on the partnership between the two sectors.

3.3.4 Stakeholders integration at Woreda Level

Similarly, the woreda water office is the responsible body to coordinate all stakeholders and their activities in the water sector in the woreda. There are GOs, NGOs, Donors, and the community, that have stake in the water sector. The relation between the different stakeholders at woreda level is shown in fig. 4.

The woreda office and workers have not the capacity and awareness to coordinate and organize the activities of the different stakeholders.



KEY

- — ● Bilateral collaboration
- ➡ Political command & direction
- Monitoring & evaluation and reporting
- ↔ Budget allocation & control
- — ● Collaboration, implementation and backstopping support
- Stakeholders

Fig. 4 relationship between different stakeholders at woreda level

The only NGO in the woreda that participate in water supply activity is world vision Ethiopia (WVE). The manager of the ADP (Area Development Program) explained that there is no defined way of communication between his office and other Government offices. He added that unless requested by the organization no government body (water office, finance and economic office) asks to participate in any of the activities. Sometimes they are not willing to participate, even when they are invited. Since the woreda water office has no experienced professionals they are forced to bring man power from Zonal water office, for study & design works, and this has further weakened their communication with the woreda water office.

The coordination between the different GOs is also very weak. Works are being done in fragmented ways. Water supply and sanitation works were expected to be integrated, but the data collected about the water supply and sanitation services coverage at kebele level shows that the activities are not integrated. In many of the kebeles sanitation coverage is much higher than safe water supply coverage. In other kebeles water supply coverage is higher than sanitation (latrines) coverage. Where sanitation services (latrines) coverage is higher than water supply coverage it might be due to the low construction cost of latrines and/or water supply can be controlled by natural conditions. But in areas where there is good water supply coverage sanitation services are expected to be integrated with water supply services. But in the woreda many kebeles have good water supply services with poor sanitation service provisions (table 3.6)

Table 3.6 water supply & sanitation coverage of kebeles in MA woreda

S.No.	Name of Kebele	Coverage	
		Water Supply	Sanitation (latrine)
1	Menena	0	33
2	Zalagutisha	0	35
3	Layo Tirga	0	42
4	Doshe	0	48
5	Degadone	0	56
6	Fetele	34	30
7	Weyobarena	14	57
8	Zalabarena	10	63
9	Yayuke	30	45
10	Dega Shangole	26	52
11	Molle	25	53
12	Delbo	16	62
13	Ankober	20	62
14	Ugayehu	35	47
15	Birbir	50	34
16	Alge	55	34
17	Fura	40	52
18	Korga	70	25
19	Kollabarena	37	61
20	Furagussa	54	46
21	Kollamulato	40	62
22	Omolante	25	84
23	Morede	40	72
24	Wajifo	36	87
	Total	27.38%	51.75%

Sources: Regional Statistical Abstract June, 2006

The woreda water office has a good communication with the beneficiary communities. The water office through the community promoters and other professionals and technicians contacts the community to involve them in the study, design, construction, operation & maintenance, and

M & E activities. The communities participate in all of the activities directly and through the WASHCOs, except in the planning process. The woreda and the WASHCO, communicate through reports, meetings and individuals contacts.

3.3.5 Summary

The water sector strategy of the country states “Stakeholders at each level in the water resources will be consulted and their participation in decision-making will be secured” and the respective responsible bodies should:

- (a) Promote and enhance participatory approach in project identification, planning, implementation, operation and maintenance of water resources projects.
- (b) Involve all stakeholders as partners in decision-making in water resources projects from inception to completion.

And also the regional strategic plan has tried to give the due emphasis to the participation of stakeholders in the implementation process. But the practical coordination of stakeholders in the whole processes of water supply services provision is at its infant stage at all levels. Though there are some initiatives taken by the government bodies, donors and NGOs to strengthen the integration between the different actors in the sector, the total out put gained is not satisfactory. The major weaknesses identified in coordinating and integrating activities of stakeholders at regional and woreda level are listed below:

- ❖ Lack of capacity & awareness (at woreda level)
- ❖ Lack of systematically designed line of communication with NGOs
- ❖ Misconception about the role of the private sector
- ❖ Reluctant approach towards NGOs in BoFED
- ❖ Lack of awareness about UAP, in all stakeholders, except WRDB
- ❖ Unable to maintain already established means of coordination

3.4. Analysis of Human and Material Resources

3.4.1 SNNPR Water Bureau Manpower

According to the new structure, the bureau is allowed to have 306 staff. From these 188 are professional staff and 118 are support staff. Currently the bureau has 112 professional staff and 109 supporting staff, totally there are 221 staff members (191 men and 30 women). From the total staff, 29 have second degree, 46 have first degree, 2 have advanced diploma, 33 have diploma, 40 are from vocational and technical training, 59 are twelve grade completed and 12 are twelve incomplete.

Out of the total positions available 71 positions (67 professionals and 4 supporting staff) are for Drinking Water Supply sector, 11 positions (10 professionals and 1 supporting staff) for planning and programming department and 6 professional positions for Urban water services improvement, community participation and training service. There are three departments under drinking water supply sector; these are water supply Study and Design Department, water resource department and operation and maintenance department. The number of staffs in each department, according to the structure is 19 positions (18 professionals & 1 supporting staffs) for water supply study & design department, 21 positions (20 professionals & 1 supporting staff) for water resource department and 30 positions (29 professionals & 1 supporting staffs) for operation and maintenance department. Of these total professional positions 53 positions (79%) are occupied and 14 positions (21%) are vacant; and all the supporting staff positions are occupied. In planning, programming and civil service reform service the allowed positions are 11 (10 professionals and 1 supporting staff), of these positions 7 positions (63%) are occupied. In urban water supply improvement, community participation and training service out of the allowed 6 professional positions only 3 positions (50%) are occupied at present.

The plan in the strategic plan was to reach 100% in human power, until mid of 2008, in the above mentioned departments and services (table 3.7). Out of the 88 professional positions 73 positions (82.9%) are occupied and the rest 15 positions (17.1%) positions are vacant. The plan implementation is 17.1% below what was planned.

Respondents have given few but similar reasons for this problem, and they are grouped in three; i) high professional turn over ii) lack of budget in some departments iii) misconception of Heads about some sections. In 2006 & 2007 the bureau has lost many (nine) experienced professionals, who have been working for more than 10 years in the bureau, to private consultants, NGOs and other government organizations. Respondents have addressed this problem to the attractive salary and other advantages in NGOs and private consultants on the one hand the inconvenient working environment, which is becoming more visible, in the bureau. This has been expressed in the irresponsive nature of the management, the discrimination of professionals due to their outlook & political stand and lack of coordination of works. Some professionals are being favored, due to their political view, by giving them positions without any competition and vice versa, and this has created an environment which is repulsive for the disbenefited professionals. Some departments, such as water resource department, are not allocated with adequate budget to carry out their responsibilities and works are being contracted out for private consultants. According to key informants, since there is no much burden on the existing professionals there was no urgent need to hire new man power for the department. Professionals in the planning and program section believe that the bureau does not have the right understanding about the section. The section does not have vehicle, adequate office equipments and budget to carry out monitoring evaluation works.

Table 3.7 Human Power Plan in the water bureau strategic document

Sr. No.	Office/department/ service	Human power need according to the new organizational structure		Existing staff		Five years human power plan									
						1998		1999		2000		2001		2002	
		Professional (P)	Supporting Staff (S)	P	S	P	S	P	S	P	S	P	S	P	S
1	Office of Bureau Head	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2	Water quality service, community participation and training service	6		4		4		6		6		6		6	
3	Planning and civil service reform service	10	1	7	1	7	1	10	1	10	1	10	1	10	1
4	Drinking water sector deputy head office		1		1		1		1	1	1		1		1
5	Water resource development department	20	1	11	1	13	1	18	1	20	1	20	1	20	1
6	Water Supply study and design department	18	1	10	1	13	1	18	1	18	1	18	1	18	1
7	Scheme operation and maintenance department	29	1	21		22	1	26	1	29	1	29	1	29	1

N.B. The figure for the supporting staff does not include drivers, cleaners, guards and office girls/boys

Source: WRDB 2007

The woreda water office human power structure shows that a total of 31 staffs are needed, for water supply, irrigation and mines & energy sections; including the supporting staffs (Annex 6). Out of the total positions eight positions (25.8%) are for supporting staffs and the rest 23 positions are for professionals and technical persons. Of the total positions 21 positions (74.2%) are vacant, which indicate the worse condition of human capacity in the office. If we exclude the supporting staffs and Mines & Energy section staffs which are not, directly, involved in water supply and sanitation activities, there are 18 positions for professionals and technicians that are responsible to carry out water supply study & design, water quality control, water scheme maintenance and community participation promotion & training (irrigation and water supply works are done jointly). Out of these positions only 8 positions (44.4%), 3 professional experts, 3 community participation promoters & trainers and 2 technicians, are occupied and the rest 10 positions (55.6 %) are vacant.

When we look the educational level and work experience of the existing staffs: three have advanced diploma, three diploma, and two twelve grade complete. The three advanced diploma holders are one civil & two water resource engineers who are graduates of Arba Minch University. The three diploma holders are one mechanic, one electrician and one water laboratory technician who are graduates of TVET. Regarding their work experience except two of the engineers who has six & four years of relevant experience, the other staffs have less than three years of relevant experiences. Table 3.8 shows educational level, qualifications and work experience of the staffs.

Table 3.8 Qualification & work experience of the existing staff, in MAW water office

number	qualification	Educational level	Relevant* work experience (years)	remark
	Water resource engineer	12 + 3	6	
	Water resource engineer	12 + 3	4	
	Civil engineer	12 + 3	2	
	mechanic	10 + 3	1	
	electrician	10 + 3	2	
	Water quality technician	10 + 3	2	
	Community promoter	12	2	
	Community promoter	12	2	

*Some workers have additional work experiences in other fields (e.g. teaching)

The existing human resource potential analysis result of the woreda water office expresses the weak human resource capacity of the office to carry out its responsibilities. Some very important positions are vacant and some are not even included in the structure. The important, but vacant, positions in the office include the department head, administration officer, community training expert and water resource development team leader. In addition the structure did not include positions like planning and program officer and geologist. Especially the planning and program officer is very important in the plan preparation, monitoring and evaluation of implementation processes, to control budget, human and material resources allocation and utilization. Geologists are responsible to study and design sites for well drilling (shallow and deep wells), with out these professionals there will be risk of resources wastage due to failure of well drilling and sustainability of wells due to improper site and well design.

Generally the number of vacant spaces, the educational level & work experience of existing staffs and the neglect of some important positions in the structure are important that testify the existing weak human resource of the woreda water office.

The reasons given by the respondents, from the office, for the weak human power in the office include financial constraint to hire new employees, unwillingness of professionals to work at woreda level, absence of professionals in the market (specially B.Sc. & above), the low salary payment and the misunderstanding of the woreda administration about water sector. Financial problems are given priority by all respondents and they correlate the problem with the misconception in the woreda administration; that is the administration considers water supply as the duty of NGOs, which leads to low budget allocation to the office. Absence of adequate budget leads to low work activity that results in unwillingness of new professionals to be employed and discourages the existing to continue in the office. At the beginning of this year one water resource engineer has left the office after he completed his B.Sc. study in Arbaminch University.

3.4. 2 Material Resource of the Regional Water Bureau

Effort has been made to assess the available material resources of the major WSS implementing body, regional Water Resource Development Bureau. Material resources that are necessary to carry out the responsibilities of the water sector are mapped. These materials are divided in to four groups: i) office equipments ii) professional equipments iii) machineries & vehicles iv) Spare parts for scheme maintenance. The resources mapping is held only for the departments of the Drinking water supply sector, planning, programming and civil service reform service and urban water services improvement and community participation and training service (see Annex 7).

The results obtained from the resource mapping in the regional water bureau give a clue about the resource potential of the bureau (resource mapping did not include pool center office, irrigation sector and mining & energy Agency). There is a very high difference between the bureau material resource and woreda office material resources (see annex 8). Respondents from the bureau have indicated that the bureau is well equipped with the necessary materials; there is a significant problem/ shortage of materials in the zonal and woreda water offices. Respondents added there was a trend, previously, to build the material resources of zone and woreda offices by purchasing and distributing equipments, tools and used vehicles. But this effort has become less and less in the last few years. Respondents from the woreda water office have blamed the bureau to follow a very centralized administration in material and financial resources utilization. They said the bureau is always building its own material capacity with out giving any attention to the low capacity of woreda offices and it is not giving adequate services when ever needed from the center. This fact is also confirmed by the absence of action plan in the strategic document of the bureau to build material capacity of zone and woreda offices.

The woreda water office has correlated its weak material resource capacity with the absence of financial resource allocated to the office to purchase materials. The lack of major mechanical and electrical maintenance tools has created a significant problem on the effort minimize the proportion of non-functional schemes. The absence of transportation facility (vehicle) has limited their over all activity. Since some kebeles are very far from the woreda center it is not safe to use motor cycles and in areas which are accessible by motor cycles it is difficult to transport operation and maintenance tools and spare parts using motor cycles. The other problem is absence of spare part suppliers with in a reasonable distance from the woreda. When community water committee tries to maintain their schemes they are not able to purchase

spare parts in near by areas, especially for hand pumps. Since it is beyond their capacity to purchase spare parts from Addis Ababa their schemes will stay for long period of time with out maintenance.

3.5. Analysis of Monitoring and Evaluation

3.5.1 Monitoring & evaluation in the strategic document

The regional strategic planning document has enumerated list of indicators for monitoring and evaluation of performance which are clear, measurable, and time bounded. Monitoring is planned to be done on three aspects: (1) achievement of objectives, (2) implementation of the strategic plan and (3) Assumptions and risks.

Under the three aspects of monitoring and evaluation specific points have been identified and who will monitor, what to monitor, when to monitor are clearly planned.

The woreda strategic plan document has not included the monitoring and evaluation plan. There are no clearly identified activities, indicators, responsible body and time frame for monitoring and evaluation.

3.5.2 Monitoring & Evaluation System

The water resource bureau has got department of planning and program which is responsible to evaluate all the activities of the organization. Woredas have also autonomous power to evaluate and monitor their own activity. In addition, BoFED is also responsible to carry out semi-annual evaluation of project implementations.

According to respondents of the section the planning and program department of the bureau is not well organized to carry out all the monitoring and evaluation activities enlisted in the strategic document. There are no enough professionals in the department to monitor and evaluate all the activities of the bureau in the region. The existing four experts are not able to cover the whole work that should be done by more than ten experts. There is also financial constraint due to

misunderstanding of the Heads about the importance of M&E. For every program and project there is a budget allocated for M&E. But during utilization of the budget allocated, it will be transferred for other activities. The section is not well organized in material resources. The only equipments available for the section are computer and office furniture. The section does not have a vehicle to carry out its responsibilities; they are using borrowed cars from other sections. This is one of the major problems in the section. Other respondents from the Bureau also agreed on the points raised by the experts of the planning section.

In general, BoFED has got standard indicators, evaluation and reporting format to assess activity of NGOs working in the region. The indicators include Physical achievement indicators (technical input, number of people benefited, level of community participation, compliance to project agreement, relation with other partners, accomplishment against each activity etc), Financial and material utilization, and impact indicators (linkage with development, sustainability, vulnerability reduction, changes in the environment, assets formed, changes in life of people etc). Respondents from BoFED have also been included into the study to assess how the bureau is evaluating implementation of UAP in the region. However the evaluation team of BoFED is not aware of the presence of such program and midterm evaluation has not been conducted for program.

Regarding NGOs, internal M&E activities are conducted by departments/teams established for this purpose at head offices and regional office level. Nearly all of such organization have baseline and end term surveys to evaluate WSS activities. These are usually conducted by central head office or external consultants. In addition, upon their request, BoFED can also be involved in the terminal evaluation process.

3.5.3 Indicators, Standard format and frequency of collection

The experts in the M&E department agreed in the existence of clearly defined and workable indicators to do M&E works in the bureau. But other respondents didn't agree on this point. Most of them believe the absence of clearly defined indicators which are being used by the section. According to these respondents the monitoring and evaluation lacks clearly stated indicators. They also added that there is no consistency in the indicators used at different times, that is, the indicators are different at different times and for different experts involved in the M&E activity. Respondents were asked to enlist the kind of indicators they use to monitor and evaluate WSS activities; accordingly, their response was not consistent showing the lack of universally agreed indicators. However, indicators like number and types of water points constructed, number of nonfunctional schemes, total population served, number of schools with newly developed water source, were mentioned as indicators more frequently. Even though the strategic plan has identified clear indicators for each activity they are not being used by the M&E section and they are not known by the bureau experts well.

Respondents were also asked about the frequency of collecting and reporting indicators and the existence of standard M&E format. The planning and program department claimed that there have been different formats prepared in the section at different time and now a new standard format is being prepared. But some respondents said that there is no standard format to carry out M&E, the work has been done traditionally based on the personal knowledge and experience of the experts involved in the work. Regarding the frequency of collecting indicators the respondents indicated that indicators are not collected on a regular basis. Even most activities are not totally monitored and evaluated. This is generally attributed to the lack of human, financial and material resources in the section due to the low weight given to M&E by the heads

of the bureau and departments. Generally all respondents agreed that the monitoring and evaluation activity of the bureau is poor.

At woreda level M&E is not considered as a major activity. The woreda water office does not have a plan and program expert that is responsible to monitor and evaluate the activities of the different sections. Each section is responsible to do its jobs and to report its performance directly to the office head. The respondents from the office agree that it is possible to conclude there is no monitoring and evaluation activity in the office. They have tried to correlate the reason with lack of budget, but there is also lack of understanding about M&E - what it is and its benefits. Some have considered the result oriented evaluation of individuals as monitoring and evaluation of activities, and others consider M&E as the responsibility of the woreda Finance and Economic office only.

3.5.4 Reporting and feedback system

i. Reporting With in the water institution (region, zone and woreda offices)

The reporting system for evaluation and monitoring is assumed to be as per the institutional arrangement of the sector. But practically there are some problems in the reporting system. Since the role of Zonal water offices is not clearly set there is confusion in the reporting system; some woreda water offices report directly to regional office while others report through Zonal offices. Respondents have different view about the role of Zonal water Offices. Some respondents believe zones are important because it is difficult and illogical to coordinate and control the works of each woreda from regional center. They added that zones should take all the responsibility to coordinate and control the works of the woredas under them and they should be points of linkage between regional bureau and woreda offices. All reports from the woredas should go through the zonal offices. Other respondents see the zonal offices as points of confusion. They believe if the resources allocated to zonal

offices are shifted to woredas it is possible to build the capacity of the woreda offices. And if woredas have capacities it is possible to coordinate and control them from regional centers. But, in addition to the technical aspects, the establishment of zonal level institutions have political dimension. Zone and special woredas are organized based on the constitutional right given to ethnic groups to have power on the local administration. And also from the practically existing conditions of woredas it seems better to use zonal offices as coordination centers. Some woredas do not have the capacity to carry out M&E works and to report directly to regional bureau, they need assistance from their zonal offices. And some remote woredas also have problems in reporting regularly due to inaccessibility and distance factors. It is better for them to report to zonal centers than to regional bureau. Generally it seems useful to follow the existing institutional structure to minimize confusions.

ii. Reporting between BoFED and NGOs

The NGO desk in BoFED is responsible to manage and control the activities of all NGOs through M &E and reporting systems. The major problem here, according to experts of the desk, is NGOs do not submit annual plan of action and quarterly reports to BoFED regularly and timely despite they are expected to submit quarterly report 15 days after the end of each quarter, as per GOs-NGOs operational guideline. There are 21 NGOs, which are involved in the WSS activities in the region; and there are about 42 WSS projects being implemented by these NGOs since 2005. Out of the total NGOs only 5 (11.9%), 1(2.3%) and 6 (14.2%) NGOs have submitted their 2005, 2006 and 2007 operation plans, respectively. Similarly in 2007, 26 NGOs (50%) have not submitted all the four quarterly reports, while 12 (28.5%) sent only one of their quarterly reports. These figures show the weak capacity of the desk to control the activities of the NGOs. And respondents attributed the problem to lack of operational rules that enable to take measures on the NGOs on the one

hand and the limited number of professionals in the desk and M & E department to manage the over all activities of all NGOs that work in different sectors.

iii. Feedback system in the bureau

According to respondents of the regional water bureau, the feedback system is said to be very poor in the sector. M&E reports collected from zone, woreda and the bureau's planning & program section will be used to fill shelves. There is no trend of analyzing reports and incorporating findings in the next implementation phases. Reports are prepared and submitted as formality not as necessary documents. This has a very negative impact on the whole monitoring and evaluation activity; experts are discouraged when their effort and findings didn't get due consideration.

iv. Feedback system in BoFED and NGOs

The feedback system is also facing the same problem in BoFED and NGOs. Respondents from BoFED mentioned that their organization is not giving feedback to the different government institution based on the findings of their monitoring and evaluation activity. Except the comments given at the sites the trend of giving written feedback is uncommon.

However, M&E system in NGOs also suffers from similar problems in the government sector. This includes lack of clearly stated indicators, lack of standard monitoring, evaluation and reporting format, and non existence of feedback system. The organizations also lack established system to report their activity to regional water bureau.

3.5.5 Summary

Inline with the above discuss the following M&E problems were identified in the sector:

- Lack of clearly stated indicators nearly among all stakeholders,

- Lack of standard reporting and monitoring format nearly among all stakeholders,
- Absence of clearly indicated time frame to carry out evaluation and monitoring
- Presence of critical confusion on the role of Zonal Water Department in evaluation, monitoring and reporting system,
- Absence of established feedback system in all stakeholders
- Weak reporting link between governmental and nongovernmental organizations
- Lack of awareness on the side of BoFED even about the presence or UAP program, especially the M&E department.
- There is no monitoring and evaluating body (expert) in the woreda water office.
- There is only quarterly reporting system presented from the sections (teams) to the office.
- There is no guide line or format to monitor and evaluate the activities of persons or sections.
- There is output oriented evaluation approach used to evaluate every individuals in six months period, some times confusing it with M&E by some workers
- For projects studied, designed and implemented by NGOs there is no way to supervise / monitor and evaluate their implementation – their communication is only through report.
- Even though the NGOs are willing to involve government bodies in monitoring evaluation, there is no capacity to do this from the government side

CHAPTER FOUR

CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

This study aims at assessing and examining major issues and challenges in the implementation of UAP in SNNPR, with particular reference to Mirab Abaya woreda. The data collected through KID and FGD are analyzed qualitatively with the help of some quantitative interpretations. The planning process in the preparation of the regional and woreda strategic plan, participation and integration of stakeholders in the sector, human and material resources capacity at regional water bureau and woreda office and monitoring & evaluation systems and practices in the sector are analyzed.

The planning process in the preparation of the regional water bureau and woreda water office was not participatory. That is, stakeholders including the user communities were not invited to participate or consulted to share their experience. The planners are more of technical persons in their profession at both levels. Some of them do not have relevant work experience. Lack of previous planning experience and poor understanding about UAP has worsen the problem at woreda level. Adequate resources and time were not allocated for the planning process and lack of data was one of the major problems in the process. Due to these major defects the implementation of the plan is facing challenges.

The major stakeholders in the sector include GOs like BoFED, Health, Education and Women Affairs Bureaus; Donors like UNICEF, WB, JICA, ADB, etc; NGOs like Water-Aid, SNV, NCA, etc; Private sector and the user community, Water bureau being the major responsible body in the region. The integration among these stakeholders is generally found to be very weak. There is no defined line of communication between the stakeholders, e.g. Water bureau and NGOs. The bureau is not taking the

leading in coordinating the works carried out by the different stakeholders; efforts are highly fragmented.

Even though there are constraints in some departments and sections, the human and material resources capacity at regional level is good. Of the allowed positions in the water supply sector of the bureau 82.9% positions are occupied. There are adequate office equipments, professional equipments, operation and maintenance tools & equipments and machines & vehicles; except for some sections like plan & programming.

The human and material resources capacity at woreda level is very weak. In the water supply & Irrigation sections less than 45% of the positions are occupied and some crucial positions like office head, team leader, plan & program, etc are vacant. Lack of office, professional and technical equipments & tools incorporated with poor office building have made the condition worse. The bureau is criticized to follow a very centralized resource management system and to give no attention about building the capacity of woreda offices.

Monitoring and evaluation of implementation activities is also very weak at both levels. At regional level plan & programming section, which is responsible to carry out M&E, is not well equipped with material and human resources. Lack of adequate budget is also a major problem. At woreda level M&E of activities can be concluded as non-existent. There is no responsible body, no budget and/ or transportation facility to carry out M&E activities.

At both levels BoFED has been found to be reluctant to actively participate in M&E activities and coordinating stakeholders.

Generally the implementation UAP is facing a complex and multi-faced challenges in SNNPR. If the situation continues with past and present trends it will be very difficult to meet the objectives of the plan/program.

4.2 Recommendations

Based on the major findings of the study the following recommendations, which are thought to have significant importance for future implementation activities, are forwarded.

The regional water bureau is now half way through implementation of the strategic plan. To examine past performances and to identify strategies to tackle obstacles the bureau needs to conduct overall evaluation of the plan implementation through out the region.

There are critical capacity constraints of human and material resources at woreda water offices. The regional water bureau, woreda government and other concerned stakeholders should take measures to solve the major capacity problems at woreda water offices.

Water bureau, the major responsible body in the sector, is expected to design and implement means of participation, to create enabling environment and raise awareness of stakeholders to fully participate in the whole service delivery process.

The activities of the different actors in the sector must be coordinated and integrated to bring significant change in water supply service provision. Therefore, the bureau should play a leading role in coordinating the activities of stakeholders to deracinate the problem of low safe water coverage.

Sections and/or individuals who are responsible to carry out M&E activities need strengthening their capacity at region and woreda level. The planning and programming section of WRDB should be reorganized & capacitated in such a way that it can perform its responsibilities in a better quality & quantity. Plan & program expert is very crucial at woreda water offices to monitor & evaluate activities; therefore, the positions need to be occupied by relevant professionals.

The bureau has produced and collected huge data, but it is also responsible to handle the data in safe & usable manner. Therefore the

bureau is expected to design a means to solve data management problems.

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Annex 1: KID & FGD participants and their Organizations

No	Organization	Position	Quantity
	Regional Water Resource Development Bureau		
1		Bureau Head	1
2		Water Supply and Sanitation Department Head	1
3		Planning and program Officer	1
4		Experts	5
5		Human Resource Department	1
6		Operation an Maintenance Department Head	1
	BoFED		
7		Monitoring and Evaluation Department Head	1
8		NGO Desk	1
9		Planning and Programming Department	1
13	Regional Health Bureau	Expert, Family Health Department	1
14	Regional Education Bureau	Partner Coordination, Monitoring and Evaluation	1
15	Regional Women Affairs Bureau	Expert	1
16	South Water Work Construction Enterprise	experts	2
	NGOs		
17	World Vision	Program Officer	1
18	SNV	Project Officer	1
19	IRC	Program Manager	1
20	Consultant Firms	Expert	1
	Mirab Abaya Woreda		
21	MAW Water Resource Development Office	Head, Delegate	
22		Experts	2
23		Technicians	2
24		Community promoters	2
25	MAW OoFED	M & E Experts	2
26	MAW Education Office	Teaching Program Expert	1
27	MAW Health Office	Team leader	1
28	WVE, MAW ADP	PROGRAM Manager	1
		Planning & program officer	1
TOTAL			34

FGD Participants at regional water bureau

No	Organization	Position	Number
	WRDB		
1		planners	4
2		Experts	3
Total			7

FGD Participants at woreda level

No	Organization	Position	
1	Water Office		
2		Experts	3
3		Technicians	2
4		Community promoter	2
5	Health Office		
6		Team leader/Expert	2
Total			9

Annex 2: Questionnaire for KID and FGD

1. General Information:

- 1.1 Name of the Organization: _____
- 1.2 Type of the organization ☐ GO ☐ NGO
- 1.3 Sex : _____
- 1.4 Age: _____
- 1.5 Years of service: _____
- 1.6 positions: _____, Dep't _____
- 1.7 Qualification: _____
- 1.8 Your Responsibility in WSS activities: _____

2. KAP Related Questions

2.1 Do you know what UAP, for water supply & sanitation, is? Yes/No

(Interviewer: if the answer is no, please go to question no. 2.5)

2.2 What are the Goals/ Objectives of UAP?

2.3 What are the strategies of UAP?

2.4 What is the time frame for UAP?

[Interviewer: please explain the goal, strategy and time frame of UAP for those who do not yet know UAP]

2.5 Do you think that UAP goals and objective are really achievable in the specified period of time? Why?

2.6 Do you think that UAP is really important while there are other national and international goals for WSS sector?

2.7 Do you think that UAP is well communicated in your organization and other possible stakeholders?

2.8 Does your office own the potentials to implement the stated UAP in the specified time-frame?

2.9 Is UAP institutionalized in your organization? (i.e. in planning, Implementation and Evaluation process)

3 Process Related Question

3.1 Were you involved in the development of the strategic plan of your bureau/ office? If yes, specify your role and responsibilities and specify the stage of your involvement. If no go to question no. 3.5.

3.2 Explain the plan preparation process (the planning stages, frequency of meetings, etc).

3.3 who were involved? What were the criteria for selecting participants? What time it takes? What resources are allocated? Were resources adequate?

3.4 were there adequate data? What are the sources of data and methods of collecting data?

3.5 was the planning process transparent and participatory? Was it open for comments & dialogue? Have stakeholders involved in the different stages of the process

3.6 What are your comments about the planning process (the participants, transparency, participatory) and the plan prepared?

4. Stakeholder analysis

4.1 list the stakeholders according to their priority which have got direct & indirect link with your organization in relation with water and sanitation programs?

4.2 What are the major roles and responsibility of the major stakeholders?

4.3 Discuss your organization's interaction and work with partners and stakeholders. (What are the system of communication, frequency etc)

4.4 Do you think that the stakeholders are having valuable contribution to water and sanitation activities of your organization (Especially NGOs, Private sectors & the community)? Discuss.

4.5 what are your comments about the existing coordination between the different stakeholders?

5. Input Related Questions

5.1 Resource mapping: list the materials (office equipments, professional equipments, machineries, vehicles, technical tools, etc) your section / department has.

No.	item	unit	quantity	status	remark

5.2 How do you describe the resources mentioned above in terms of adequacy of the resources?

5.3 What are the major materials that your department/ section/office currently lacks to implement the strategic plan? What the major material related problems?

5.4 list the number of man power working in your section/ department/ office.

position	qualification	Level of education	Year of experience	No of yrs in your org.	sex

5.5 Are there adequate professionals, technicians & supporting staffs in your organization? Do professional stay long in the organization? If no. why?

5.6 Have you attended any training/seminars/workshop etc aiming at building your capacity? If yes please mention.

5.7 Discuss the major problems related to man power management in your organization.

4.7 How do you assess the technical backstopping and assistance offered to WSS project/schemes at all level of the system?

6. Monitoring and Evaluation Question

6.1 How do your organization monitor and supervise WSS related activities?

6.1.1 Who is responsible to monitor and evaluate WSS activities?

6.1.2 are there common indicators for monitoring and evaluation? If yes list.

6.1.3 is there a planned schedule to do M & E?

6.2 Is there a standard monitoring and evaluation guideline & format? If yes specify the source.

6.3 Do your organization provide feedback to it's subordinates based on monitoring and evaluation findings?

6.4 Is there a trend to incorporate findings from monitoring & evaluation in the next implementation phase?

6.5 what are the major problems related to monitoring evaluation in your organization?

7. SWOT Analysis

6.1 What are the strengths of your organization to implement UAP (the strategic plan)? Discuss according to priority.

6.2 What are the weaknesses of your organization to implement UAP (the strategic plan)? Discuss according to priority.

6.3 What are the potentials opportunities to implement UAP (the strategic plan)? Discuss according to priority.

6.4 What are the potential threats to implement UAP (the strategic plan)? Discuss according to priority.

6.5 What are the challenges your organization facing in the implantation of UAP? Discuss according to priority

6.6 Discuss attempts against the weakness, threats and challenges.

FGD Questions

1. Do you think that there is awareness about UAP in your institution? What do you know about? Is UAP institutionalized in your organization?
2. How do you assess the availability and adequacy of financial and logistic resource at all levels of your organization for water supply and sanitation activities?
3. How do you assess the qualification, adequacy and distribution of professionals all levels of your organization for water supply and sanitation activities?
4. Who are involved in the planning process for water supply and sanitation programs? At what level? Who has the decision-making power?
5. How do you assess the availability of time, information, qualified manpower and other resources for the planning process?
6. How do you evaluate the level of participation of the community and stakeholders at all level of the system? (planning implementing ,and monitoring)
7. How do you judge the decentralization of decision making, allocation of manpower, material and financial resources in the region specifically in the area of water supply and sanitation?

Annex 3: Organizational structure of the Woreda Water Resource desk

Annex 4. Main activities in the water bureau strategic plan

Strategy	Main activities
1. Explore and develop new water sources from the abundant water resources and rehabilitation of existing water facilities	1.1 Explore and identify feasible water sources and schemes for development 1.2 Construct new water schemes through partnerships and private sector involvement using participatory approaches and by taking into consideration area specific issues 1.3 Explore and identify water facilities that require rehabilitation 1.4 Rehabilitate non functional water schemes through partnerships and private sector participation
2. Standardization of Designs, Equipment, parts & construction method.	2.1 Prepare manuals for designs, equipment, parts & construction method 2.2 Stakeholders forum/debate on standardization of water supply technologies in the region 2.3. Finalize & disseminate manuals. 2.4 Identify & Introduce technologies which are affordable and can easily be maintained 2.5 Training on use and maintenance of the new technologies 2.6 Prepare legal by laws for the management of the industrial and drinking water supply schemes 2.7 Prepare operation and maintenance manuals
3. Strengthen community participation and management capacities	3.1 Facilitate community ownership of the water schemes & training 3.1.1. Establish new water committees 3.1.2. Strengthening the existing water committee 3.1.3. Training of water committee members on scheme management 3.1.4. Training of community organizers 3.1.5. Training of pump and generator operator 3.1.6. Prepare training manuals and guidelines on participatory community participation, utilization and management of water resources, schemes and water catchment areas 3.1.7. Implement water resources conservation measures such as planting trees, fencing of water sources and soil erosion control in collaboration with agriculture bureau 3.1.8. Mainstream gender in the development and management of water resources and schemes 3.1.9. Implement experience sharing visits for community water resources and schemes management teams 3.1.10.. Equip the maintenance team at zone, woreda and kebele level with material, spare parts and manpower 3.1.11 Mainstream gender and HIV/AIDS
4. Promote partnerships and private sector participation in water resources development and management	4.1 Advertise to stakeholders the opportunities and conditions for partnership and private sector participation in water resources development 4.2 Prepare clear guidelines for private sector participation and partnerships in water development and management for the region

Strategy	Main activities
	4.3 Establish mechanisms for coordination and dialogue 4.4 Prepare training manuals for training of local artisans on O&M of water schemes 4.5 Identify and train local artisans on operation and management of water schemes 4.6 Facilitate development of local water supply spares shops 4.7 Experience sharing visits by management and expert staff on partnerships and private sector involvement
5. Participatory development and implementation of policy guidelines and regulations.	5.1 Review and prepare new regional policies and strategies for water sector resources development and management 5.2 Prepare water resources utilization laws and guidelines and enforce and monitor their implementation 5.3 Create awareness on the laws and regulations of the sector at all levels
6. Promote integrated implementation and commitment to safety standards in drinking water, and industrial wastes and sanitation development and management activities	6.1 Identify stakeholders working on water and sanitation activities and facilitate the stakeholders to develop a mechanism/strategy to govern them in their activities 6.2 Facilitate establishment of joint water and sanitation activities implementation committees from the concerned stakeholders at all level 6.3 Develop guidelines and procedures for integration and joint implementation of water and sanitation activities 6.4 Set up a mechanism to monitor and enforce integration of water and sanitation activities 6.5 Establish water quality control systems (lab or what??) at all levels and enforce their implementation 6.6 Prepare quality standards of wastes that can be dumped into the water sources and enforce their implementation 6.7 Prepare a system for water wastage control
7. Research and systematically generate and disseminate data and information in collaboration with the existing and relevant institutions	7.1 Water resource potential study of the region 7.2 Develop an appropriate approach and system for data generation, management and dissemination on planning, management and utilization of water resources in the region 7.3 Generate, manage and disseminate appropriate data and information at all levels 7.4 Design and implement an integrated approach for monitoring and evaluation of water resources utilization and conservation activities.
8. Develop and improve management of human, material and financial resources	8.1 Recruit staff at all levels 8.2 Train newly recruited & existing staff 8.3 Establish participatory human resources management and decision making systems at all levels (Region, Zone, Woreda and Kebele 8.4 Train leaders on responsive leadership and management 8.5. Experience sharing visit to the experts

Strategy	Main activities
	8.6 Develop and implement systems and procedures for enhancing staff motivation and commitment 8.7 Design and implement more efficient and effective systems for management of material resources 8.8 Purchase necessary materials 9.1 Develop guidelines for financing and implementing water activities in the region 9.2 Prepare project proposals and submit them for funding 9.3 Design and implement more efficient and effective systems for transparent planning and management of financial resources received from different donors 9.4 Allocate budgets rationally to meet the demands of the departments/sectors 9.5 Promote and raise more funds from cost sharing

Annex 5: Indicators Monitoring Plan in the water bureau Strategic plan.

Desired Achievement	What to monitor	Indicator to use and threshold	When to Monitor	How to monitor	Responsible
Increased safe drinking water coverage from 48% to 85% in 5 years and to 100% in 7 years	Coverage	- A 7% increase in no. of water supply schemes in the region/year 100% of the people use each water scheme as per the set standard/yr - All water schemes meet the set drinking water chemical and bacterial content standards of the region.	Yr	- An inventory and data collection exercise - An inventory and data collection exercise, Review of plan documents - Sample collections and from reports of the quality control unit	- Planning unit, O&M - Planning unit, WSS, Community
	Quality		Quarterly		Water resource dept quality control team
Increased sustainability of existing water facilities 76% to 95%	Sustainability of the schemes	- A 4% decrease in failure (non functional schemes) rate/yr - A 4% increase in the number of schemes that have strong committees that regularly maintain them/year 20% increase in the no. of schemes with available local maintenance artisans/yr	Yr	- An inventory and data collection exercise, Review of CPT reports - Review of reports of CPTS, Field visits - Review of reports of CPTS, Field visits	- Planning unit, O&M, CPTs - Planning unit, CPTs, Community - Planning unit, CPTs, Community
Increased management and conservation of water resources in collaboration with Agriculture	- Pollution - Conservation measures	- All water resources meet the set chemical and bacterial content country standards /yr 20% increase in the no. of schemes with surrounding areas conserved (fenced and with good vegetation cover)/yr	Yr	- Review of quality control unit reports, Consultant study reports - Review of reports of CPTs, Field visits	- Planning unit, consultants - CPTs, Community, Planning

Annex 6. MAW water office human power structure

S.No	Job Title	Occupied	vacant	Total	Remark
Woreda Water Development Resource office					
	Woreda Water Dep't resource office Head	0	1	1	
	Secretary	1	0	1	
	Administration officer	0	1	1	
	chief personnel	0	1	1	
	Planning and program officer	0	0	0	
	General Service officer	1	0	1	
	Guard	0	1	1	
	Cleaner	0	1	1	
	Office Girl	0	1	1	
	Gardening	0	1	1	
	Total	2	7	9	
Water improvement service, Community participation and training Section					
	Junior Training expert	0	1	1	
	Water service improvement expert	1	1	2	
	Community participation organizer	2	0	2	
	Total	3	2	5	
water Resource development and quality control team					
	Team leader	0	1	1	
	water engineer	1	0	1	
	Assistant water engineer	1	0	1	
	Surveyor	0	1	1	
	Water laboratory technician	1	0	1	
	Total	3	2	5	
Drinking water schemes maintenance Team					
	Team leader				
	Mechanic	1	0	1	
	Plumber	0	1	1	
	Electrician	1	0	1	

	Total	1	2	3	
Mines Development Desk					
	Mine development Desk Head	0	1	1	
	Alternative energy resource development expert	0	1	1	
	Biomass and Bio gas energy expert	0	1	1	
	Mines recording and permission worker	0	1	1	
	Mines controller	0	1	1	
	Total	0	5	5	
drinking water supply, sanitation, irrigation study and design team					
	Irrigation				
	Irrigation engineer	0	1	1	
	Assistant water engineer	0	1	1	
	Total	0	2	2	
Drinking water and Irrigation schemes Operation and Maintenance team					
	Irrigation engineer	0	1	1	
	Assistant water engineer	0	1	1	
	Total	0	2	2	
	Staff coverage (available in woreda office (32.26 %)Ground Total	10	21	31	

Annex 7: Material Resources in Water Bureau

Office Equipments

Item	Quantity	Status	Remark
Desk top computers	21	FN	
Lap top computers	20	FN	
Printer	16	FN	
Photocopy machine	4	FN	
scanner	3	FN	
Fax machine	1	FN	
Internet server	1	NF	
projector	2	FN	
Blueprint machine	2	1 NF	
Fixed phone lines	8		
Mobile phone lines	6		

Professional equipments & materials

item	quantity	status	Remark
Surveying instruments	5		
Geophysics instrument	2		
GPS	15		
M-scope	2		
Drawing board	-		
Soft wares			
Topographic maps, aerial photos,			For all areas of the region

Operation & maintenance equipments & tools

item	quantity	remark
garage		With full capacity
Rehabilitation rig	2	
Mobile garage	4	
crane	4	
HENO-Car	4	with well equipped garage
Spare parts for vehicles	*	Purchased at the requests of the drivers/ operators
Spare parts for scheme maintenance (at stock)	*	

* there is no new inventory data, the last inventory was held at the end of July 2007

Machines & vehicles

item	quantity	status	remark
Drilling rig	1	FN	
Heavy duty trucks	5	FN	
Vehicles	18	FN	
Bus	1	FN	
Coaster bus	1	FN	
Motor cycles	7	FN	

Annex 9: Qualitative Information System (QIS) result of stakeholder coordination, at regional level, with water bureau

options	score	remark
No communication with the bureau	0	Non-existent
Communicate when ever there is a need or compelled to do so by external body	25	weak
Good communication in very important issues	50	Good
Strong communication in important issues (implementation, M & E)	75	Very good
Very strong communication in all activities	100	Ideal

stakeholder	score	Remark
Donors	75	
NGOs	25	
GOs	25	
Private sector	25	
Total score	37.5	Weak coordination & integration of stakeholders