

**LEGAL AND POLICY ASSESSMENT FOR EQUITABLE PAYMENT
FOR WATERSHED SERVICES IN TANZANIA**

(Revised Draft Report)

**Prepared by
Sist J. Mramba**

**A Joint WWF, CARE, IIED & PREM Programme in Tanzania
June, 2007**

ACKNOWLEDGMENTS

The work was carried out by the consultant and an assistant researcher Mr Basilius Namkambe. However it wouldn't have been possible without the support and cooperation from various people. We would like to thank Care/WWF for having confidence in and entrusting us to undertake the study. We in particular express our profound thanks to Dr. Thapa Balaram Lopa Desteus, Idd Mwanyoka and Thabit Masoud who provided all the administrative and technical guides needed from CARE Tanzania.

We are also indebted to people from different entities who provided us with crucial information that helped to enrich this report. Special thanks go to the Regional Administrative Secretary Mr. Njovu of Morogoro region and Mr Godwin Mbembela of the Morogoro District for their cooperation.

We appreciate the audience and views of Mr Salmate a water officer and Pendo Hyera a sociologist both of the Ruvu-Wami Authority, Evarist Nashanda of the department of Catchment and Mangroves Management of the FBD and the DAWASCO legal officer Mr Simon. We acknowledge the EPWS national and global teams whose comments and review of the initial draft of this work added substantial value to the report. Finally we are indebted to the leaders and communities' representatives of Kibungo Juu for the information they provided without which the material content of this report would have been invalid and unfounded. However, the normal disclaimer applies.

Executive Summary

1 0 Introduction

CARE International in Tanzania in partnership with WWF Tanzania programme Office are in the process of establishing a project entitled Equitable Payment for Water Services (EPWS) in the Uluguru Mountains focusing on the Ruvu river basin. The project intends to ensure that resources are applied to the priorities and needs of the poor, women, and marginalized groups and ensure that local values, knowledge and practices are incorporated in natural resource management and that the local communities participate and benefit directly from the payment of watershed services.

Equitable Payments for Watershed Services is a mechanism / tool for achieving watershed conservation and improving the livelihoods of environmental-service providers by enabling those who provide watershed services through conserving or restoring watersheds (natural ecosystems) to be compensated / rewarded by the beneficiaries or user of the service. In order to understand the context in which payments for watershed services might take place a broad understanding of environmental policies and legal frameworks is indispensable. The crucial policies and laws include those that deal with environment and natural resources to find out how they support or inhibit watershed services payment.

2.0 Study approach

The Study involved research and review after the development of the conceptual framework: Stage one involved quick review which identified relevant policies, laws and institutions for EPWS. Stage two was a detailed review and analysis of the identified policies, laws and institutions in light of the opportunities and constraints. The detailed review also focused on *inter alia* access; acquisition and ownership of natural resources particularly water resources and different management systems.

As the main focus of the EPWS project is the Uluguru Catchments which is located 200KM west of the Dar Es Salaam where the Ruvu river drains into the ocean the consultant met with community representatives from the participating villages in the area with a view to establish the prevailing local (micro) water policies, institutions and structures.

Apart from the local communities other stakeholders were also consulted to collect information on how they work to implement policies and enforce laws. The study also assessed the relevant institutions in water sector which are engaged in water resources management and utilisations, fee collection and allocation. The review involved the Ministry of Water (department of water resources), Ministry of Natural Resources and Tourism (Forestry and Beekeeping Division-FBD), DAWASCO / DAWASA, Ruvu-Wami Basin Authorities and Local government Authorities (in this case the District Authorities). The idea for establishing intermediaries was also assessed and critically developed with the view of mapping out the relevant institutions. Finally the findings

were submitted to the National Team for review and comments. The comments were finally incorporated as was considered appropriate.

3.0 Structure of the report

Chapter one deals with introduction of the study. Chapter two looks at study approach. Chapter three is on laws and policies pertaining to EPWS in Tanzania. Chapter four is covers institutional frameworks, opportunities and constraints. Chapter five is on the way forward within the purview of the legal, policy and institutional frameworks. Chapter six is on conclusion and recommendations.

4.0 Key Findings

4.1 Cross-cutting issues

Generally there is a plethora of laws and policies that have a bearing on environment and watershed management. These include Acts, by-laws, macro and micro policies. Natural resource legislation are fragmented because environmental management is a cross cutting issue and the legislative framework on environment in Tanzania is mainly sectoral.

The Government of Tanzania in its efforts towards development has formulated and or adopted various strategies plans and programmes. It has also been struggling to alleviate poverty through sustainable management and utilization of our natural resources. The efforts have been carried out through various initiatives. For instance it has formulated the Development Vision, the National Strategy for Growth and Reduction of Poverty (NSGRP) and other processes geared towards improvement of livelihood. The processes are in line with the MDGs. The main goals of the NSGRP in particular, broadly encompass the MDG targets. They are: (i) Improved Growth and Reduction of Income Poverty; (ii) Improved Quality of Life and Social Well Being; and (iii) Good Governance and Accountability.

The Government issued another land mark strategy with severe impacts to both people and environment. The strategy identifies some of the following problems that need efforts for conservation. In view of encroachment of catchment areas by the cattle keepers, the strategy suggests for eviction of the nomadic pastoralists in the catchment areas and river valleys by local government authorities, ministries responsible for natural resources, land and agriculture, regional and District commissioners, private sector and other stakeholders.

The strategy however fails to tap the opportunity of community participation in environmental management and adopted the old school approach that communities are antagonists to conservation. Consequently it focuses on evicting them to other areas without considering their fate. While removing them remains to be one approach involving them in conserving those areas under specific strategies could be a better approach.

4.2 Sectoral Issues

There are multiplicity of policies which focus at watershed management and community participation in resource management. The National Environmental Policy (1997) underscores the fact that environmental management is a multi-sectoral disciplinary, its success depends on the cooperation of the government agencies responsible for various aspects of environment. Local authorities are seen as the most powerful tier of the government to create sustainable conditions of environment management as most of the environmental problems and solutions have their root in local activities. The (Environmental Management Act 2004 (EMA) empowers the Minister upon approval of the minister for finance to prescribe the certain financial measures and incentives for the protection of the environment. Such a provision opens the door for the incorporation of EPWS in watershed management.

The Water Utilization (Control and Regulation) Act (1974) provides for water utilization control and regulation by establishing and mandating authorities to regulate water management and utilization in the country. It further establishes water basins to mean any area of land delimited and declared by the Minister. The Act vests all water in the United Republic to the state. It prohibits any person from diverting, damming, storing, abstracting or use water for any purpose without a water right.

Government Notice number 370¹ made under section 38(f) provides modality for the formation of local water users associations with the capacity to sue or be sued. The members of the association may include villagers, institutions, companies, committees and authorities. The objectives of the association are operation, and conservation of the water catchment area of a given river and its tributaries.

4.3 Institutional Mandates

The important institutions that must be looked at include:- The Vice President's Office through the Division of Environment (DoE), the Ministry of Natural Resources and Tourism (MNRT) through the FBD (Director), the Ministry of Water through the Ruvu-Wami Basin Authority and the Prime Minister's Office Regional Administration and Local Governance (PRO-RALG) through Local Government Authorities, and NGOs.

With the EMA in place environmental management remains in the VPO's Office but with much clear descriptions. Given the legal power vested in the minister for environment and the coordinating functions of the Director of environment in the VPO's Office they have a stake in the carrying out of this programme as provided under sections 13 and 15 respectively. The specific duties of the two are as specified under table 3.

The WUA establishes the office of the Minister for Water who is responsible for: policy formulation and implementation, coordination of all activities pertaining to water projects and programs, water supply and sewerage, regulation and control of water resources, protection of water quality and pollution control. The Act also establishes Water Basin offices which are mandated to oversee the management of water resources. The Ruvu-Wami Basin has the function to *inter alia* oversee the management of water resources in

¹

terms of utilization, allocation and control of water pollution in the Ruvu-Wami designated area. As a result it can charge and collect economic water user fees from different water users in the basin by virtue of the WUA. As the right to use water must be consented by the water officers who are under the basin offices, the water user association must apply for a right to manage the catchment.

Thus, although the Water Regulations (1997) vide section 38(f) of the WUA allows the formation of local water users associations with objectives, legal personality and power to collect and receive any monies due to the association and pay any debts owed, such association must obtain a water right from the Basin Authority.

On the other hand given the jurisdiction of the FBD in forest management in the country, there is a need to have clear collaboration with the Director in order to avoid any possible stand-off in the future. Table 3 does stipulate the possible roles that he may undertake.

Given the mandates of the District Council its involvement is inevitable. Its powers include approving by-laws made by the village councils within its area of jurisdiction; consider, regulate and coordinate development plans, projects and programmes of villages within its area of jurisdiction; and to regulate and monitor the collection and utilization of revenue of village councils. It may also take measures to provide protection and proper utilization of the environment for sustainable development.

In addition, the Village Council has various functions. It can do anything necessary or expedient for the economic and social development of the village. It can initiate and undertake any task, venture or enterprise designed to ensure the welfare and well being of the residents of the village. The Village Council can get its revenue from any industry, works, service or undertaking carried on or owned by the village; monies derived from licences, permits, dues, fees, charges, or tariffs specified by any by-law made by the Village Council; all revenue accruing to the village council from the Government, the District Council or from any private individual or a public institution by way of contributions, grants-in-aid, endowments, or any other manner of payment.

4.4 Land and Natural Resource Tenure

In Tanzania access, ownership and acquisition of land rights is governed by the Land Act Cap 113 and the Village Land Act Cap 114. The latter relates to Village Land while the former relates to all land other than Village Land. The two laws address issues of land ownership and security of tenure as has been discussed in the preceding sections.

On the other hand, natural resource management calls for clear property rights. It is only when people have security of tenure not only of land but natural resources that they can sustainably manage the environmental resources. However, one may note that legally all natural resources in Tanzania are by legislation state property. This applies to water as well as other natural resources such as forests, wildlife, fisheries etc. As with land, water is a public asset with access controlled by rights to use, both formal and customary rights. Despite the fact that all natural resources are state property, specific legislation confers property rights to groups and individuals. It is when people can satisfy their needs, have

control of the resources and secure land tenure that long term objectives of environmental protection can be possible.

Given the multiplicity of laws we have there is possibility of conflicts and overlapping of mandates. However careful legislative process can take care of conflicting scenarios. In Tanzania for instance the EMA is the supreme law on environmental matters. In case of any conflict the provisions of the EMA will prevail by virtue of section 232. Therefore the communities around Kibungo need to be aware and comply with this. On land matters the Land Act is the supreme law. In case of any conflict between the Land Act and any other law including the Village land Act the provisions of the Land Act prevails. Section 181 stipulates that any provisions of any other written law applicable to land which conflict, or are inconsistent with any of the provisions of the Act shall to the extent of that conflict or that inconsistency cease to be applicable to land or any matter connected with land in Mainland Tanzania.

On the operationalization of the scheme, the strategy for EPWS implementation should involve multidisciplinary and participatory methodology. The area socio-economic and cultural context must be considered for EPWS implementation to suit the characteristics of the place, strengthening the weakest socio-economic sectors. At the same time, a political strategy has to be created to facilitate the necessary institutional conditions so that the economic instruments may function efficiently and contribute to an equal distribution of the benefits. Also while focusing on the downstream users the project need to consider other factors that can impair the quality and amount of water flow to the users which may affect the quality and quantity of the service supplied. It is important to consider management of the service from the manager-seller to the buyer. As the service pass through areas of common use, wastages and discharges are likely to occur. If this is not checked it will eventually de-motivate the buyer as the payment made cannot be reflected in the service offered. There has to be a clear cut difference with EPWS and without EPWS.

4.5 Legality and Operationalization of the Scheme

Under the regulatory framework in Tanzania, the EMA 2004 and the Water Regulations of 1997 allows the operationalization of EPWS in Tanzania. Although process for a new Water Law is underway it will as of fact be in harmony with the Water Policy of 2001 which *inter alia* promotes community participation and private sector involvement in water resource management.

Section 80 of the EMA legalizes **financial instruments** and **market creation** in natural resource management in Tanzania. A keen look at this provision reveals that EPWS is embraced within the terms ‘financial instrument’ and ‘market creation’ as stipulated in the section.

The Water Regulations 1997 provides for the formation of water user associations to manage a catchment. It is therefore clear that if a group of people can form themselves into an association and get registered they may apply for the right to manage a catchment. And provided once registered it will attain a legal status to sue / be sued and enter into

contracts it can enter into transactions with other entities to contribute /compensate for the watershed services they get as a result of the efforts of the association. This won't affect the ongoing user fee/abstraction fee being charged as the payment for the former is on the basis of fulfilling certain terms as stipulated in the Memorandum of understanding to be entered into by the buyers and sellers.

Therefore under the existing institutional framework, the association will derive its authority to deal with the catchment from the Ruvu-Wami Basin. Involving the Basin is important as the Basin will have to recognize the efforts of the association and may ease the fee charged from the association.

The Forest Act does empower the Director to enter into joint ventures or agreements for enhancing forest management. Thus where there are forests on village land efforts can be directed at improving and supporting their economic activities in order to ease pressure on the catchment forests. This may involve giving part of their land for conservation purposes or change land use for the sake of the watershed resources. This is vivid as individuals and communities are more inclined to support efforts which take their livelihood concerns into account. This will call for a direct involvement of the Director of FBD. This can be done by one village community or more than one village community. Involving the FBD is important as it will ease any possible conflicts in watershed management between the MoW and the MTNR. For instance there is room for the Minister responsible for forest under section 77 to direct the Forest Managers to charge payment for Water ecosystem services from the MoW if forest authorities can demonstrate that water is a forest product.

This gives us two possible options to operationalise the scheme. It can be as a Village Council through the FBD under the Forest Act or as a Water Association through the Basin Authority under the WUA.

Despite the above two options there is a need to establish a Trust Fund for EPWS. The major advantage of this is that the Fund will easily attract financing from different sources and the buyers will also effect their payments through the same fund. The sellers will be paid basing on the cost benefit analysis. However, instead of creating a separate trust fund, efforts could be taken to liaise with the Eastern Arc Mountains Conservation Endowment Fund (EAMCEF) so that it can facilitate such a role in order to avoid duplicity and managerial costs. It should also be remembered that the Fund is currently working in the Uluguru area. Involving it as an important stakeholder and eventually facilitator will enable the project to draw various lessons from it and perhaps little effort will be needed to engage it.

The parties to the scheme will need to be facilitated by an intermediary or intermediaries as the case may be. The role of the intermediary will be to facilitate the buyer and the seller to make a deal and influence the relevant Government institutions indicated below to support and endorse the scheme. The possible intermediaries are NGOs such as Care-Tanzania, Director of District Council at the District Level. Consider the mandate of the District Council or a Trust Fund.

The question as to the legal basis for receiving payment can be addressed in terms of change in land use and the cost to forego certain village land for the survival of the watershed services. The law provides that every person lawfully occupying land whether under a right of occupancy wherever that right of occupancy was granted, or deemed to have been granted or under customary tenure, occupy and has always occupied that land, the occupation of such land shall be deemed to be property and include the use of land from time to time for depasturing stock under customary tenure. This confers property right over land to individuals. Any forbearance to use the land lawfully owned in order to give way to conservation initiative is a good justification warranting compensation from those benefiting. The 1997 Water Regulations also allows the association to be reimbursed for the expense it incurs in managing the watershed.

Table of Contents

ACKNOWLEDGMENTS	ii
EXECUTIVE SUMMARY	iii
1.0 Introduction	iii
2.0 Study approach	iii
3.0 Structure of the report	iv
4.0 Key Findings	iv
LIST OF ACRONYMS AND ABBREVIATIONS	xii
CHAPTER ONE	1
INTRODUCTION	1
1.0 Conceptual Framework	1
1.1 Objective	1
1.2 Scope of the study	2
1.3 Research Questions	2
CHAPTER TWO	4
STUDY APPROACH	4
2.0 Methodology	4
2.0.1 Review and identification of relevant policies, laws and institutions	4
2.0.2 Fieldwork and institutional assessment	4
2.1 Structure of the report	5
CHAPTER THREE	6
LAWS AND POLICIES GOVERNING WATERSHED MANAGEMENT IN TANZANIA.	6
3.1 Legal and Policy Frameworks	6
3.1.1 Cross-Cutting Laws and Policies	6
3.1.1.1 The Constitution of United Republic of Tanzania of 1977	6
3.1.1.2 Development Vision 2025	7
3.1.1.3 National Strategy for Growth and Reduction of Poverty (NSGR)	7
3.1.1.4 The National Environmental Conservation Strategy of 2006	7
3.1.1.5 The National Environmental Policy and the Environmental Management Act (2004)	8
3.2.1 Sectoral Laws and Policies	10
3.2.1.2 Agricultural & Livestock Policy (1997)	10
3.2.1.3 Water Policy (2002) and the Water Utilization Act (1974)	11
3.2.1.3.3 The Water Utilization (General) Regulations 1997	13
3.2.1.4 The National Irrigation Master Plan (NIMP)	14
3.2.1.5 The Forest Policy and the Forest Act 2002	14
3.2.1.6 The Land and Human Settlement Policies	17
3.3 Land Tenure and Land management	17
3.3.1 Access, acquisition and ownership of land	20
3.4 Ownership, access and natural resource management	21
3.5 Addressing conflicting laws in the EPWS	22
3.6 EPWS benefits and the law in Tanzania	22
CHAPTER FOUR	24
INSTITUTIONAL FRAMEWORKS, OPPORTUNITIES AND CONSTRAINTS FOR DEVELOPING EPWS	24
4.1 Institutional mandates in watershed management and utilization	24
4.1.1 The Vice President's Office (DoE)	24
4.1.1.1 Minister for Environment	24
4.1.1.2 The Director of Environment	24
4.1.3 The Ministry of Water	25
4.1.3.1 Water Basin Authorities	25
4.1.3.1.1 Ruvu-Wami Basin Authority and its roles in water resources management and utilization	26
4.1.4 The Ministry of Natural Resources and Tourism (MNRT- FBD)	26
4.1.5 The Dar Es Salaam Water and Sewerage Authority (DAWASA)	28
4.1.6 The Dar Es Salaam Water and Sewerage Corporation (DAWASCO)	29
4.1.7 The Energy and Water Regulatory Authority (EWURA)	29
4.1.8 The Local Government Reforms and Watershed Management	30
4.1.8.1 The Local Government Reform Policy	30
4.1.8.2 Rural Development Policy and Strategy	30

Equitable Payment for Watershed Services: Making a Business Case

4.1.9 The Urban & District Authorities under Act No 7 & No 8-----	30	
4.2 <i>Opportunities for developing markets for watershed protection services in Tanzania</i> -----	32	
4.2.1 Supportive legal framework -----	33	
4.2.2 Desire to address livelihoods improvement -----	33	
4.2.3 Political will -----	33	
4.2.4 Institutional and policy change-----	34	
4.2.5 Availability of Information -----	34	
4.2.6 On going Projects -----	34	
4.3 <i>Constraints for developing markets for watershed protection services</i> -----	34	
4.3.1 Valuation. -----	34	
4.3.2 Stakeholder awareness and commitment -----	34	
4.3.3 Knowledge transfer -----	34	
4.3.4 Institutional and policy change-----	35	
4.3.5 Limited Public Consultation in Decision-Making -----	35	
4.3.6 Presence of many water users -----	35	
4.3.7 Multiplicity of laws -----	35	
4.3.8 Inability to plan for alternative activities -----	35	
4.3.10 Shortage of land for alternative activities -----	36	
4.3.11 Poor financial management -----	36	
4.3.12 Overriding powers of the Basin Authority -----	36	
4.5 <i>Ensuring fair outcomes to both buyers and sellers</i> -----	37	
4.6 <i>Identifying options for payment scheme design</i> -----	38	
CHAPTER FIVE -----	39	
DISCUSSIONS AND WAY FORWARD -----	39	
5.1 <i>Legality of EPWS</i> -----	39	
5.2 <i>The EPWS Institutional Framework</i> -----	39	
5.3 <i>Processes and / or modalities to be in place for EPWS</i> -----	42	
5.4 <i>Receiving payments for environmental services and signing the MoU</i> -----	47	Deleted: 46
5.6 <i>Criteria for receiving payments</i> -----	48	Deleted: 47
5.7 <i>Legal / Policy Issues to facilitate signing of the MoU</i> -----	48	Deleted: 47
5.8 <i>Application of the Proceeds</i> -----	49	Deleted: 48
5.9 <i>Meeting the expectations of the parties</i> -----	49	Deleted: 48
CHAPTER SIX -----	51	Deleted: 48
CONCLUSION AND RECOMMENDATIONS -----	51	Deleted: 50
6.1 <i>Option I: EPWS Implementation through (FBD)</i> -----	51	Deleted: 50
6.2 <i>Option II: EPWS Implementation through (RBWO)</i> -----	52	Deleted: 50
6.3 <i>Proposal for establishment of EPWS TRUST FUND</i> -----	53	Deleted: 50
6.4 <i>Chronology of Activities</i> -----	54	Deleted: 51
6.7 <i>Checklist for the MOU</i> -----	54	Deleted: 51
<i>Terms of Reference</i> -----	56	Deleted: 52
REFERENCES -----	58	Deleted: 53
LIST OF TABLES		Deleted: 53
TABLE 1: ONGOING ENVIRONMENTAL PAYMENT SCHEMES IN TANZANIA-----	49	Deleted: 55
TABLE 2: WATERSHED MANAGEMENT PARTNERSHIP-----	55	Deleted: 55
TABLE 3: SUMMARY OF EPWS INSTITUTIONAL MANDATES-----	56	Deleted: 57
TABLE 4: ENVISAGED INSTITUTIONAL FRAMEWORKS-----	57	

List of Acronyms and Abbreviations

DUWSAs	District Urban Water and Sewerage Authorities
UWSAs	Urban Water Supply and Sewerage Authorities
Cap	Chapter
CBC	Community Based Conservation
CBFM	Community-Based Forest Management
DAWASA	Dar Es Salaam Water and Sewerage Authority
DAWASCO	Dar Es Salaam Water and Sewerage Company
DOE	Division of Environment
EMA	Environment Management Act
Env	Environment
EPWS	Equitable Payment to Watershed Services
EWURA	Energy and Water Utilities Regulatory Authority
FBD	Forest and Beekeeping Division
GN	Government Notice
Gvt	Government
JFM	Joint Forest Management
LA	Land Act
MDGs	Millenium Development Goals
MF	Ministry of Finance
MALD	Ministry of Agriculture and Livestock Development
MLHSD	Ministry of Land & Human Settlement Development
MNRT	Ministry of Natural Resources and Tourism
MOU	Memorandum of Understanding
MOW	Ministry of Water
MP	Ministry of Planning
NEP	National Environmental Policy
NGOs	Non-Governmental Organizations
NSGRP-MKUKUTA	National Strategy for Growth and Reduction of Poverty- Mkakati wa Kukuza Uchumi na Kupunguza Umaskini Tanzania
PMO-RALG	Prime Minister's Office, Regional Administration and Local Governance
PWS	Payment to Watershed Services
RAS	Regional Administrative Secretary
RBWO	River Basin Water Office
TANAPA	Tanzania National Parks Authority
TBL	Tanzania Breweries Limited
URT	United Republic of Tanzania
VLA	Village Land Act
VPO	Vice President's Office
WEO	Ward Executive Officer
WMA	Wildlife Management Area
WRM	Water Resource Management
WUA	Water Utilization Act

Chapter One

Introduction

1.0 Conceptual Framework

CARE International in Tanzania in partnership with WWF Tanzania programme Office is in the process of establishing a project entitled Equitable Payment for Water Services (EPWS) in the Uluguru Mountains focusing on the Ruvu river basin. The project intends to ensure that resources are applied to the priorities and needs of the poor, women, and marginalized groups and ensure that local values, knowledge and practices are incorporated in natural resource management and that the local communities participate and benefit directly from the payment of watershed services.

The study uses the concepts which were developed and adopted by the EPWS programme. “Watershed services” refer to the natural water that the natural world provides to people. The natural water is regarded as free good and/ or as a gift of nature. This has caused haphazard and over utilization of water resources to the extent that they are declining as time goes on. For instance communities in the project area rely heavily on the watershed to support their livelihoods. As a result there has been unsustainable farmlands expansion and irrigation practices, encroachment to the Forests and deforestation, illegal activities in river systems and within forest reserves.

“Equitable Payments for Watershed Services” is a mechanism / tool for achieving watershed conservation and improving the livelihoods of environmental-service providers by enabling those who provide watershed services through conserving or restoring watersheds (natural ecosystems) to be compensated / rewarded by the beneficiaries or user of the service. In order to understand the context in which payments for watershed services might take place a broad understanding of environmental policies and legal frameworks is indispensable. The crucial policies and laws include those that deal with environment and natural resources to find out how they support or inhibit watershed services payment.

Given the fragmentary nature of the environmental regime in Tanzania, the consultancy involved identifying, collecting and analysing all the relevant natural resource laws and policies and institutional frameworks with a view to establish an understanding of the existing legal and policy frameworks and institutional structures. The analysis also underpinned the possible opportunities for facilitating payments for watershed services and any overlap of mandates with a view to recommend for the valid institutional set up.

1.1 Objective

The prime objective of the policy and legal framework assignment was to review and demonstrate the opportunities and constraints for payments for watershed services in the

context of the existing legal and policy frameworks and the possible ways of addressing such constraints.

1.2 Scope of the study

The study centred on analysing all relevant natural resource laws and policies which pertain to EPWS. The Communities that were consulted are those of programme area in Morogoro region only.

1.3 Research Questions

In conducting the legal and instructional framework analysis the consultant was required to address the following key questions:

- What are the main policy opportunities and constraints for developing EPWS?
- What are the legal opportunities and constraints for developing EPWS? (Property rights, contracts, etc).
- What are the opportunities to ensure that the outcomes are fair to both the buyers and the sellers of watershed services?
- How might the payments be structured?

The study was required to survey the current environmental policy and legal frameworks, to find out the legal and policy opportunities that could make Payments for Watershed Services operational in light of the following;

- ◆ How effective is the current legal and policy framework to provide support in the context of EPWS project (It means understanding the impact on the natural resources management and people's livelihoods).
- ◆ Are there any legal and policy constraints to making payments for watershed services operational in Tanzania? How can these constraints be addressed to provide room for EPWS? What legal mechanism should be put in place to ensure that the EPWS mechanism outcomes are fair to both the buyers and the sellers of watershed services?

Who can really pay or sell the watershed services? (Whether policies/laws allow buyers (downstream water users) to pay to sellers (upland communities) or sellers to be paid by buyers? In particular is DAWASCO capable of contracting with sellers for provision of watershed services, i.e. is it empowered under its charter or government legislation to make payments to upper catchment farmers as envisaged under the EPWS scheme?

- ◆ What processes and/or modalities of payments for watershed services may need to be put in place/completed in order to have a successful EPWS mechanism? How the required type of payments system should be structured to bring fair outcomes?
- ◆ Assess whether communities (individuals or in groups) can receive payments for environmental services directly or not (It is important to understand legal rights to manage funds)

Equitable Payment for Watershed Services: Making a Business Case

Indicate who among the community can legally sign the MoU and the contract for equitable payments for watershed services (look at individual, groups, community, authority levels, buyers and sellers).

- ◆ What would be the legal/policy issues that need to be considered to facilitate this signing?

Assess the roles of different management systems modern and traditional/indigenous management and how can they be involved to guarantee successful operationalisation of the EPWS mechanism?

Chapter Two

Study Approach

2.0 Methodology

The Contribution of the Uluguru mountains forests to water supply in the Dar Es Salaam city cannot be overstated. Involving the poor land managers in protecting the resource not only for this generation but also the future is increasingly important. Through development of market for watershed services beneficiaries will compensate the land managers in the management of the water catchment. This approach inevitably calls for the need to explore public-private partnership deal in Tanzania. This required a thorough study to be conducted to fully address legal and policies issues regarding this initiative.

After the development of the conceptual framework the study used library research and field work as the key modalities to carry out the task. Stage one involved quick review which identified relevant policies, laws and institutions for EPWS. As the ToR point out several issues that needed to be comprehensively addressed there was a need for reviewing national legislatives which are related to environmental and natural resources management in Tanzania and the institutional framework for the management of watershed (catchment) services. Stage two was a detailed review and analysis of the identified policies, laws and institutions in light of the opportunities and constraints. The detailed review also focused on *inter alia* access; acquisition and ownership of natural resources particularly water resources and different management systems in light of the ToR.

2.0.1 Review and identification of relevant policies, laws and institutions

The study analysed laws and policies and assessed the relevant institutions in water sector which are engage in water resources management and utilisations, fee collection and allocation. The analysis included the Ministry of Water (department of water resources), ministry of Natural resources and tourism (Forestry and Beekeeping Division-FBD), DAWASCO / DAWASA, Ruvu-wami water basin authorities and local authorities (such as district and community authorities).

The quick review helped to establish the existing laws, policies and institutions that have a bearing on the subject. It also assisted to know which laws, policies and institutions need special attention in the analysis and will also help the programme unit to have a quick guide on the regulatory framework.

2.0.2 Fieldwork and institutional assessment

After the library review the study also conducted field visits to national and local institutions, and communities under this programme with the view to establish the prevailing local (micro) water policies, institutions and structures at the grass root level.

In particular, as the main focus of the EPWS project is the Uluguru Catchments which is located 200KM west of the Dar Es Salaam where the Ruvu river drains into the ocean the consultant met with community representatives from the participating villages in the area with a view to establish the prevailing local (micro) water policies, institutions and structures.

The fieldwork involved collecting information from the institutions and communities on how they work to implement policies and enforce laws pertaining to watershed management. It also assessed the relevant institutions in water sector which engage in fee collection and water allocation. The institutional survey was further intended to establishing intermediaries for the programme.

2.1 Structure of the report

Chapter one deals with introduction of the study. Chapter two looks at study approach. Chapter three is on laws and policies pertaining to EPWS in Tanzania. Chapter four is covers institutional frameworks, opportunities and constraints. Chapter five is on the way forward against the legal, policy and institutional frameworks. Chapter six is on conclusion and recommendations.

Chapter three

Laws and Policies Governing Watershed Management in Tanzania.

3.1 Legal and Policy Frameworks

In addressing the legality of the EPWS scheme in Tanzania, it is vital to bear in mind that the country has got plethora of laws and policies relating to natural resources management. It is within such existing legal and policy framework that the legality of EPWS is to be implemented.

Despite the varied natural resources laws most of them are sectoral while a few are cross-cutting. In assessing the legality of the EPWS it is therefore crucial to look at both sectoral and cross-sectoral laws to find out how does the Tanzanian framework support or accommodate the scheme. This analysis concentrates on the processes that supports or hampers the scheme in Tanzania.

3.1.1 Cross-Cutting Laws and Policies

3.1.1.1 The Constitution of United Republic of Tanzania of 1977

The URT Constitution of 1977 as amended several times provides legitimacy to all laws. Any law that conflicts with the Constitution is liable to be declared unconstitutional. The constitutional jurisprudence of the country placed the question of environmental management under Articles 14 and 27. The constitution as the fundamental law of the land and source of all laws sets the basis for all laws with respect to natural resources conservation and management. This is clear as provided under article 27 (1) which places obligation on all persons to protect and conserve the country's natural resources. The article provides that 'every person has the duty to protect the natural resources of the United Republic, the property of the state authority, all property collectively owned by the people, and also to respect another person's property'. The assertion here is that, the main source of laws relating to the natural resources management in Tanzania is the constitution of United Republic of Tanzania.

Article 14 provides for the right to life as one of the basic human rights. In respect to that, the High Court of Tanzania reaffirmed in effect that the right to clean environment is implied in the right to life². Article 145 establishes the local government authorities in each region, district, urban area and village with specific functions under article 146. The local government authorities are therefore a creature of the Constitution. The analysis must take into account such constitutional framework.

The Government of Tanzania in its efforts towards development has formulated and / or adopted various strategies plans and programmes as discussed below.

² Reference is made to the case of *Joseph D. Kessy & others v. the City Council of Dar es Salaam (High court of Tanzania at Dar es salaam, civil case no 299 of 1988)*.

3.1.1.2 Development Vision 2025

The government has been struggling to alleviate poverty through sustainable management and utilization of natural resources. The efforts have been carried out through various initiatives. In 2004 the government formulated the **Development Vision 2025** which aims *inter alia* at achieving high quality livelihood for its people through ensuring absence of abject poverty³ and addressing degradation of environmental resources such as forests, fresh water soils biodiversity etc.

3.1.1.3 National Strategy for Growth and Reduction of Poverty (NSGR)

Apart from Vision 2025 the government formulated the **National Strategy for Growth and Reduction of Poverty (NSGRP)**. The aim of the Strategy is the growth and reduction of income poverty. It aims at improving the quality of life and social well being of Tanzanians and to make people have access to clean, affordable and safe water, sanitation, decent shelter and safe sustainable environment so as to reduce vulnerability from environmental risk.

The operational targets of the strategy includes reducing negative impact on environment and people's livelihood and reducing income poverty to both men and women in rural areas by increasing food production from 9million tones in the year 2003/4 to 12million tones in the yea 2010 as well as increasing access to clean and safe water to the rural population from 53% in 2003 to 65% in 2009/10 and the same to the urban population from 73% in 2003 to 90% in 2009/10. In essence, the NSGRP is the national strategy for achieving Millennium Development Goals. It has thus far helped in identifying quick wins in each sector to fast track the achievements of the MDGs. The NSGRP differs markedly with its predecessors in that it is much broader and deeper in addressing poverty problem and also takes environmental issues on board; it is outcome-based and has recognised the role of economic growth and good governance and accountability in poverty reduction. The main goals of the Strategy broadly encompass the MDG targets. The goals are: (i) Improved Growth and Reduction of Income Poverty; (ii) Improved Quality of Life and Social Well Being; and (iii) Good Governance and Accountability.

It is therefore vivid that tackling poverty is one of the priority issues for the government and efforts that focus at addressing this malady like the EPWS scheme are welcome within this framework.

3.1.1.4 The National Environmental Conservation Strategy of 2006

In 2006 the Vice President's Office issued another land mark strategy with severe impacts to both people and environment.⁴ The strategy identifies some of the problems

³ See pg 24.

⁴ In his monthly Speech the President of URT Hon. J. Kikwete lauded that the Government has taken various efforts against destruction of water sources including formulation of a National Strategy for the

that need efforts for conservation. In view of encroachment of catchment areas by the cattle keepers, the strategy suggests for eviction of the nomadic pastoralists in the catchment areas and river valleys by local government authorities, ministries responsible for natural resources, land and agriculture, regional and District commissioners, private sector and other stakeholders.

It provides that agricultural activities in mountain slopes, valleys and catchments areas of rivers such as Uluguru, Udzungwa, Kilimanjaro, Livingstone Usambara, pare etc causes destruction of environment. In view of this it points out the short term and long term solutions which are:- declaring the areas to be national reserve areas, stop agricultural activities which result into the problem, evict the farmers from the areas affected and create boundaries of the these areas; encourage the use of modern agriculture using an appropriate technology which is environmentally user friendly, and design projects which will assist to encourage the use of modern technology in agriculture.

On destruction of water source areas due to fire burning, the strategy identify areas that are seriously affected which include the **Uluguru mountains**, Kilimanjaro, Udzungwa and Livingstone. The strategy aims to award citizens who disclose information on events of fire and those who assist fire extinguishing activities. The task is assigned to local government authorities, ministries responsible for natural resources, finance, legal affairs etc.

The strategy is silent on measures to remedy or pay compensation to those who will be evicted or conserve the catchment for the benefits of the down stream users. The only payment is in terms of award to those who disclose information about fire breaking and who will assist in identifying offenders. Also there is a presidential award to be designed for awarding those who conserve the environment. The strategy however fails to tap the opportunity of community participation in environmental management and adopted the old school approach that communities are antagonists to conservation. Consequently it focuses at evicting them to other areas without considering their fate. While removing them remains to be one approach involving them in conserving those areas under specific strategies could be a better approach.

3.1.1.5 The National Environmental Policy and the Environmental Management Act (2004)

In 1997 the Government formulated the National Environmental Policy of 1997. The Policy is substantially relevant to EPWS as it highlights on the relationship between poverty and environmental degradation, where the later undermines people's capacity to manage resources including water. It denotes that, all players on environmental issues should consistently engage in addressing land degradation, lack of accessible, good quality water for both urban and rural areas, deterioration of aquatic systems and others etc.

Conservation of Environment and Catchment Areas. Speech delivered on 31st March 2006 before Elders of Dodoma Region.

The Policy highlights the reasons for the current deterioration of natural resources which include: inadequate water and land management at various management levels, inadequate financial and human resources, lack of institutional coordination, rapid population growth, inadequate involvement of stakeholders i.e. local communities NGOs and private sectors and inadequate capacity to implement programs. It considers local communities as having knowledge and skills thus should be involved through induced incentives.

On fiscal instruments the Policy provides that, the Government will initiate institution of appropriate user charges that reflect the full value of water resources and that resource prices are the economic instruments that can play a critical role in environmental management. Furthermore the policy emphasizes that user-charges will be applicable for the use of collective goods and services. Such charges should match the cost of supplying the services so that the consumers have incentives not to overuse the services or abuse it.

It underscores the fact that environmental management is a multi-sectoral disciplinary, its success depends on the cooperation of the government agencies responsible for various aspects of environment. Local authorities are seen as the most powerful tier of the government to create sustainable conditions of environment management as most of the environmental problems and solutions have their root in local activities.

In 2004 the Parliament of Tanzania enacted framework legislation, the Environment Management Act (EMA) Act No. 20 of 2004 to provide for principles guidelines and objectives of environment management in Tanzania. The Act which is of its kind in Tanzania on environmental management addresses generic issues related to the environment. In particular it emphatically provides that every individual has the right to clean, safe and healthy environment under section 4. Under S.7 (3) (i) the Act provide that environment and natural resources are vital to be used sustainably in order to achieve **poverty reduction**. The Act also stipulates the principles and tools that must be applied by individuals and entities for sustainable environmental management.

Such principles include the polluter pays principle which is an economic instrument geared towards changing polluters' behaviours.⁵ Section 80 provides that the Director of Environment shall prepare proposals on packages of economic instruments and financial incentives and forward them to the Minister. The Act defines economic instrument as '*instrument for environmental and natural resources management designed to influence behaviour of economic agents in order to ensure sustainable use and protection of biophysical resources and includes, fiscal instruments, charge systems, property rights, **market creation**, performance bonds and deposit refund systems, liability systems, provision of information and **financial instruments***'

The aim of the instruments is to oblige individuals or firms to consider environmental consequences when investing, producing and consuming. This is through providing non-pricing measures to internalize environmental costs, providing price based measures, user charges and subsidies to internalize environmental costs and benefits, **special grants** for

⁵ S.7 (3) (d) of the EMA

particular programmes and projects including environmental projects, subsidies, tax deductions and rebates to be paid to advance environmental protection, encourage return of bottles, plastics and metals for recycling and proper disposal, and any other measure the Minister may impose as an economic instrument.

The Act empowers the Minister upon approval of the Minister for Finance to prescribe the following financial measures and incentives for the protection of the environment. (a) Effluent charges depending on content and quantity of discharge, (b) User charge fee for using natural resource and other services, (c) Product charges to discourage disposal of or encourage recycling, (d) Sales and excise taxes that reward environmentally friendly products.

From the specified section of the EMA, it is clear that the Act covers a broad array of financial mechanisms that can be used to manage the environment. The definition of Economic Instruments is wide enough to include payment schemes for environmental services. It particularly involve mechanisms designed to influence behaviour of economic agents in order to ensure sustainable use and protection of biophysical resources and includes, **fiscal instruments**, charge systems, **property rights**, **market creation**, performance bonds and deposit refund systems, liability systems, provision of information and **financial instruments**. Such an open ended definition provides room for the incorporation of EPWS mechanisms in the ongoing conservation endeavours.

Nonetheless, the above formulation calls for the Director of environment to recommend to the Minister the instrument he considers to be adopted for environmental management. As EPWS is a new set of mechanisms the Director of environment has to forward it to the Minister to be opted and tried. The Minister will have to seek approval of the Minister for Finance for the adopted scheme to be operational.

Apart from the cross-cutting laws and policies that have been covered there are sectoral laws and policies which re vital to this study. The following section focuses at such laws and policies.

3.2.1 Sectoral Laws and Policies

A discussion on payment for watershed services entails consideration of the agricultural sector. Poor farming and livestock keeping practices contribute largely to poor water quality and quantity. In the alternative, sound agricultural methods such as terracing, intercropping can enhance agricultural production and improve environmental management. The Policy of the agricultural sector covers various issues which are relevant to this analysis.

3.2.1.2 Agricultural & Livestock Policy (1997)

The Policy states that in the medium term and long-term agriculture will continue to play a central role in Tanzania's economy. It addresses the issues of land and environment management. In particular, agriculture is critically dependent on environmental resources such as land, **water** forest, air etc. The use of these resources can affect directly or

indirectly other natural resources. Wrongly use of water, land and forest in crop production can have far-reaching affects on environmental integrity. Hence the agricultural sector policy must fit in the overall environmental policy for environmental management.

Water is one of the crucial needs for sustaining life. Sustainable water management relies on *inter alia* effective and implementable Policy. A clear policy though non-binding shapes the government plans and efforts towards managing water resources. The Water Policy of 2002 is one of the remarkable developments in the water sector in Tanzania.

3.2.1.3 Water Policy (2002) and the Water Utilization Act (1974)

3.2.1.3.1 The Water Policy

The 2002 Policy is one of the recent developments in the water sector. The Policy stipulates that water is an integrated party of the environment. Water sustainability is threatened by human-induced activities. Water scarcity is perceived at many places due to multiplicity of competing uses leading to degradation of sources and catchments.

The Policy calls for a new vision that “the country needs equitable and sustainable use and management of water resource for socio-economic development and maintenance of environment.” It is thus high time that beneficiaries participate fully in planning, construction, operation and maintenance and management of community to engage in domestic water supply schemes.

In addressing cross sectoral interests in water the policy identifies that there is a heavy dependence of the poor on environment (soil, water and forest). Water is therefore a key factor in the socio-economic development and the fight against poverty.

It further provide six instruments for implementation which are:-Technical instruments to control water uses, economic instruments which include water pricing charges and incentives, administrative instruments which include water source protection plans, legal instruments which include restrictions, regulatory instruments include appropriate management structures and procedures and participatory instruments which include sensitization and community consultations.

On the principles of water resource management it states that all water use for economic purposes will be charged. The level of the charges and criteria to be used will be reviewed from time to and will base on studies to be conducted. In addition, the polluter pays principle shall apply as a policy issue on water resource management, fair procedures in access and allocation of water resources balance between social productive sectors and the environment, ensure financial sustainability and autonomy of basin water bodies. The Policy in ensuring that water resources are used sustainability under takes to have water management approaches that will focus on how best water can be used beneficially and efficiently and trading of water rights, application of economic

incentives and pricing for water use to be built into the management system as a means or strategy for demand management and water conservation.

The Policy divides Tanzania into nine river basins that do not follow administrative boundaries. It places the management of water resources under five levels. National level, Basin level, Catchments level, District level and Community or water user association level which is the lowest. The national level has the ministry responsible for water whose functions are to determine policies, legislating and preparing conclusive environment sectoral coordination and integration. The functions of the basin level include collecting, processing and analyzing data, also, pollution control, collection of various fees and charges and resolving various water related conflicts. Catchments water committees and sub catchment's water committees will be composed of representatives from the public and private sectors and from water user associations within the respective basin.

It provides the roles of catchments water Boards which are preparation and implementation of catchments plans and resolution of conflicts within the catchments. As an evidence of decentralization district councils are involved in Basin Boards and catchments committees. The role of the districts is to plan and develop water resources in accordance with basin plans, protection and conservation of natural resources in village and wards and establishment of by laws on the management of water resources. The policy calls for establishment of the Water users association (WUA) and Water users groups (WUG). The two will be the lowest appropriate level of management. Their Roles are to solve disputes, collect various data and information and participate in preparation of water utilization plans and protecting catchment areas. Despite this Policy the water sector remain to be governed at large by the Water Utilization and Control Act of 1974. The Policy provides opportunity for the operationalization of payment scheme in the water sector through involving various stakeholders.

It has been a tendency that in most cases governments are active in policy formulation but rather slow in legislating. There might be multifarious reasons but it remains that up-to-date laws can address new and old challenges unlike old laws. The water sector saw its current legislation in 1974. Despite several amendments the law is fairly old. It remains to be the principal law that regulate the sector by creating institutions and confer them with powers. The following section discusses this law.

3.2.1.3.2 The Water Utilization (Control and Regulation) Act (42 /1974)

The Act provides for water utilization control and regulation by establishing and mandating authorities to regulate water management and utilization in the country. It defines water as all water flowing over the surface of the ground or contained in or flowing in or from a spring or stream or natural lake, or swamp or in or beneath a watercourse and all water made available from subterranean sources by means of works but does not include any tidal water, nor water which is used solely for the purpose of extracting minerals there from.⁶

⁶ Section 2 of the Water Utilization (Control and Regulation Act (1974).

It further establishes water basins to mean any area of land delimited and declared by the Minister in relation to any river or other water source.⁷ The Act vests all water in the United Republic to the state.⁸ The Act prohibits any person from diverting, damming, storing, abstracting or use water for any purpose without a water right.

Water officers are empowered to grant to any person a water right. The right may be for diverting, damming, storing, abstracting and using water in specified quantities, for a specified period and purposes under terms and conditions which have to be complied with.⁹ The Act departs from the common law riparian right that a grant by the water officer of a water right does not automatically confer right to the bordering land. It is only where a water right or existing right has been declared to be appurtenant to any land, when the benefit of the right can be enjoyed and the right can be enforced by person entitled in possession of the land. Where a water right or existing right has been declared appurtenant he the occupier of the land may abstract and use proportion of the water in quantities permitted.¹⁰

Generally the Act introduces the system of charges levied on water consumed whether for domestic or other purposes. One of the concrete formulations of this law is the vesting of all water in the State. Therefore for a community or a person to be able to manage water as a resource he must have been granted a user right. Although this law is not specifically mandating payment scheme in the sector it can still accommodate it. It does not curtail efforts which are eventually geared towards improving water resources although it does not vest such water to an individual or a community or group of communities save for the 1997 Regulations.

3.2.1.3.3. The Water Utilization (General) Regulations 1997

Government Notice No. 370 published on 25/7/97) made under section 38(f) of the WUA provides modality for the formation of local water user's associations. The members of the association may include villagers, institutions, companies, committees and authorities. The objectives of the association are operation, and conservation of the water catchment area of a given river and its tributaries. The members may decide at the Annual General Meeting the principles to govern conservation, maintain river water works and assess amount to be levied for such costs. Such an association once formed has a legal status and can sue or be sued in its capacity. In addition it can form a management committee with the power to enter into contracts. The contracts once entered bind the association. Together with such power it has the duty to collect and receive any monies due to the association and pay any debts owed to the association. The committee is required to maintain a Bank account through authorized officers and submit audited accounts to the association. EPWS can be implemented through the use of water user associations. *The Water User Associations once formed can apply for a right to operate and conserve a water catchment. It can in turn enter into agreements with various*

⁷ Ibid.

⁸ Ibid section 8.

⁹ Ibid section 15.

¹⁰ Ibid section 17.

beneficiaries for subsidizing the cost it incurs to manage the catchment which adds up into the river flow and quality.

3.2.1.4 The National Irrigation Master Plan (NIMP)

The NIMP aims at sustainable development through effective use of national resources. The NIMP is geared towards supporting the Agricultural Sector Development Strategy (ASDS) which has the objective to create an enabling and favourable environment for improving productivity and profitability of the agricultural sector. The Plan underscores the need for farmers to form water user associations and apply for registration. Such associations will enable them to apply for water user right to manage catchments and maintain project facilities as provided in the 1997 Water Regulations.

3.2.1.5 The Forest Policy and the Forest Act 2002

Although the Water Act does not confer water to individuals it impossible to address water issues without addressing catchment management. There is a clear nexus between water supply and watershed or catchment management. The link between the natural environment of forests on highlands and the flow of water is undisputable and has long been established by scientists and researchers. Forested land absorbs rain, refills underground aquifers, cools and cleanses water. Also forests slow storm run off, reduce flooding, sustains watershed stability and resilience and provide critical habitat for fish, wildlife, allows water-based recreation and other benefits that improve the quality of life. Effective management of watershed areas guarantees water supply amidst other services. Hence forests as irreplaceable part of nature provide an array of benefits including continuous water flow. Since the repeal of the Forest Ordinance of 1957 the Water sector has been regulated by the 1998 Forest Policy and the Forest Act of 14/2002.

3.2.1.5.1 The Forest Policy (1998)

In terms of the Forest Policy, about 1.6 million hectares are under water catchment management. However, effective conservation of ecosystems has been impaired by the lack of sufficient coordination between the sectors concerned. The goal of the Policy is to enhance the contribution of the forest sector to the sustainable development of Tanzania and the conservation and management of her natural resources for the benefit of the present and future generations. It further directs that new forest reserves should be established for biodiversity protection, watershed management and soil conservation.¹¹ The policy suggests a participatory approach in ensuring that local communities in the surrounding areas are fully involved in the establishment and management of the reserves.¹²

The Policy emphasises that population pressure and inefficient forest management and protection have contributed to the deterioration of catchment forests. Clearing forests for

¹¹ Forest Policy directions p. 24

¹² Policy statement 16, 20 & 22

agricultural purposes, cutting trees for fuel-wood and charcoal burning, overgrazing, and uncontrolled logging, are some of the environmental concerns in Tanzania. Deterioration of catchment forests alters the runoff and infiltration characteristics, increases soil erosion resulting in sedimentation in rivers and water resources infrastructure such as reservoirs and irrigation systems, and causes changes in the hydrological regime and water shortages. The Policy advocates the establishment of new catchment forest reserves for watershed management and soil conservation in critical watershed areas.

3.2.1.5.2 The Forest Act No 14 of 2002.

The objectives of the Act are *inter alia*: encouraging and facilitating the active participation of citizens in planning, management, use and conservation of forest resources by developing user rights, ensuring ecosystem stability through conservation of forest biodiversity, water catchments and soil fertility, ensuring sustainable supply of services by maintaining sufficient forest area under efficient and effective management, and promoting coordination and cooperation between the forest sector and other agencies and bodies in the public and private sector in respect of the management of the natural resources of Tanzania.¹³

Under section 4 it classifies forests into four categories *viz.* (a) national forests reserve which include forest reserves or nature forest reserves and forests on general land (b) local authority forests reserve *viz.* local authority forest reserves, forests on general land (c) Village forests *viz.* village land forest reserves, community forest reserves created from village forests, unreserved forests on village land vested in village councils, (d) private forests *viz.* forests on village land held under customary right of occupancy, forests on general or village land of which the rights of occupancy or lease has been granted to a person or persons for the purposes of managing the forest.

The Act provides various management tools including management plan at different levels. There can be management plans for village land forests and private forests. As provided under sections 14 and 15 respectively. Where the need arises the Act provides room for the formation of joint management agreement between:- the Director and any person, organization in the public or private sector, community groups or group of persons living adjacent and deriving their livelihood from a national forest reserve; a district council and a village council, a community group or any person or an organization in the public or private sector providing for management within a local authority forest reserve; a village council and a community group providing management within a village land forest reserve; the manager of a private forest and community groups or other groups of persons living adjacent to and deriving their livelihood from or adjacent to the private forest.¹⁴

According to section 32(1) a village land forest reserve can be (a) a declared village land forest reserve; or (b) a *gazetted* village land forest reserve. All village forest reserves in existence at the commencement of the Act were declared to be declared village land

¹³ Section 3 of the Forest Act.

¹⁴ *Ibid* section 16.

forest reserves. A village land forest reserve may be owned and managed by one village or more villages which are within one local authority or more local authorities.¹⁵ The Act allows a village council to (a) declare an area of village land to be a village land forest reserve; by submit an application to the Director through a local government authority for a declared village land forest reserve to be *gazetted* as a village land forest reserve.

The Village Council may negotiate a joint management agreement or other arrangement with the Director, some other person or body with respect to the management of a village land forest reserve. It may also establish a committee to manage a village land forest reserve or allocate the duties of managing a village land forest reserve to an existing committee of the village council.

Also under section 36 (1) the village council having jurisdiction over the *gazetted* village land forest reserve and the Director and such other persons and bodies may negotiate and agree a joint management agreement or other arrangement for the management of a *gazetted* village land forest reserve.

According to section 39(1) a village council may submit an application to the Director or a local authority having jurisdiction in the area where such village is situate for consent to manage the whole or a part of or an activity within a national or local authority forest reserve managed, in the case of a national forest reserve by the division or an Executive Agency established in relation to a department of the Ministry concerned with forestry and in the case of a local authority forest reserve by such local authority on the basis of a joint management agreement or other arrangement between that village council and the Director, or Executive Agency or that local authority.

A national or local authority forest reserve over which the section applies shall be known as a village forest management area. Before submitting an application to the Director or the local authority for consent to manage, a village assembly must by resolution (a) approve the application which is to be submitted; and (b) where such a committee¹⁶ has not been established (i) establish a village forest management committee; or (ii) allocate the responsibilities of forest management to an existing village council committee.

Where there has been a joint management of village land forest reserve by two or more villages as per section 36(1) any of the villages can inspect a copy of such a joint agreement management.

As stated earlier natural resource legislation are fragmented because environmental management is a cross cutting issue. The next section looks at land and human settlement and their relation to water resource management.

¹⁵ Ibid sections 33 & 41.

¹⁶ Sect 32.

3.2.1.6 The Land and Human Settlement Policies

3.2.1.6.1 National Land Policy and National Human Settlements Development Policy

The National Land Policy, 1995, aims to ensure a secure land tenure system, to encourage optimal land use, and to facilitate sustainable social and economic development. Land management is seen as one of the cornerstones of development policy. Land is to be publicly owned, and held by individuals only through rights of occupancy. Right of occupancy may be certificated and subject to terms and conditions (Granted Right), or customary (Deemed Right). Specific objectives of the Policy include equitable access to land, protection of existing land rights, prevention of concentration of land ownership, and promotion of land use planning and management for optimal but sustainable productivity.

As with land, water is a public asset with access controlled by rights to use, both formal and customary rights. Water supply, both quantity and quality, is influenced by the management of land. Water resources management is also influenced by the range of legislation and regulations affecting land. On the relationship of water and the growing urbanisation, both the National Land Policy and the National Human Settlement Development Policy, 2000, recognise the existence of unplanned settlements in most urban areas in Tanzania, which call for social services infrastructure upgrading such as roads, water supply and sanitation.

3.3 Land Tenure and Land management

The Land Act, Act No 4 of 1999 and the Village Land Act, Act No 5 of (1999) are the principal statutes for land management in Tanzania. Among the principles of the National Land Policy is to ensure that use of land is productive and complies with the principles of sustainable development.¹⁷ According to section 22 (2) of the Land Act, (LA) granted right of occupancy does not confer any water rights over the shores to the holder. The Act provide for compensation when right of occupancy or customary sue of land is revoked or interfered by the state. The basis of the compensation is that land has value and therefore its value must be paid regardless of any improvements.¹⁸ The compensation which is prompt, full and fair covers even land that is used from time in memorial for depasturing stock. The payment must be paid before he vacates the land. The factors that must be considered when assessing compensation are: (i) market value of the real property; (ii) disturbance allowance, (iii) transport allowance; (iv) loss of profits or accommodation, (v) cost of acquiring or getting the subject land, (iv) any other loss or capital expenditure incurred to the development of the subject land and (vii) interest at market rate will be charged.¹⁹ It is worthy noting that compensation is not only financial it includes allocation of new land.²⁰

¹⁷ Section 3 (1) (e) of the Land Act

¹⁸ Ibid sect 3(1) (f) & (g) LA & 3(1) (h) VLA.

¹⁹ Ibid sect 3(1) g (i)-(vii) LA

²⁰ Land Acquisition Act No 47 of 1967.

Section 20(1) of the Village Land Act (VLA) provides that the law applicable on any matter concerning customary rights and obligations of a person, or a right of group of persons occupying land under customary right of occupancy is customary law. In view of that any rule of customary law and any decision taken in respect of land held under customary tenure, must take into account customs, traditions, and practices of the community concerned to the extent that they are in accordance with the provisions of sections 9 and 9A of the Judicature and Application of Laws Ordinance. Any decision that denies women, children or persons with disability lawful access to ownership, occupation or use of any land held under customary tenure is void and inoperative.

Section 7(1) of the VLA defines village land as consisting of any of the following categories of land: (a) land within the boundaries of a village registered in accordance with the provisions of section 22 of the Local Government Act No.7 (District Authorities) Acts of 1982, (b) land designated as village land under the- Land Tenure Act No-27 (Village Settlements) Act, of 1965; (c) land, the boundaries of which have been demarcated as village land under any law or administrative procedure, (d) land, the boundaries of which have been agreed upon between the village council claiming jurisdiction over that land and (i) the village council of the contiguous village; (ii) the Commissioner; or (iii) the official or public organization for the time being responsible for the reserved land; or (iv) the local authority having jurisdiction over that urban land or peri-urban land; or (v) a person or body; (e) land, other than reserved land, which the villagers have been, during the twelve years preceding the enactment of the VLA regularly occupied and used as village land, in whatever manner including land used for depasturing cattle.

The Commissioner is required under section 7(6) to issue to every village in respect of and which the boundaries to village land have been demarcated or agreed, a certificate of village land. As per section 7 (7) the certificate confers the functions of management of the village land; affirm the occupation and use of the village land by the villagers, for various purposes including depasturing cattle to the Village Council. According to 7 (8) the Village Council is responsible to manage the village land on the basis of a trust with due regard to the principle of sustainable development. It is therefore vital for villages to secure certificate for their village land. Such a certificate confers security and enables the Village Council to deal with the land more pragmatically and confidently for the welfare of the entire village.

In the bid to address the historical inequality between customary right of occupancy and granted right of occupancy, the VLA provides under section 18 (1) that customary right of occupancy is in every respect of equal status and effect to a granted right of occupancy and is capable of being allocated by a village council to a citizen, a family of citizens a group of two or more citizens whether associated together under any law or not a partnership or a corporate body the majority of whose members or shareholders are citizens and is liable to prompt payment of full and fair compensation upon acquisition by the state. Not every land can be held for a customary right of occupancy. The land which may be held for a customary right of occupancy is any village land or any general land occupied occupancy by persons who immediately before the coming into operation of the

VLA were occupying that land under and in accordance with a deemed right of occupancy.

So, customary right of occupancy includes the deemed right of occupancy²¹. The deemed right is acquired through historical clearance of virgin forests or inheritance from ancestors and is therefore not capable of allocation by the village council. The village council retains the managerial power over all land in its area of jurisdiction together with land held under the deemed right of occupancy.

Section 11(1) of the VLA permit joint land management arrangements between (a) two or more villages; or (b) between one or more village and the District Council having jurisdiction in the area where the village or villages which are to be part of an arrangement of joint management are situated; or (c) between one or more village and an urban authority within whose boundaries that village or those villages are situated, and that arrangement may provide for the Commissioner to be involved in that joint management of village land. Villagers have standing under sub-section (12) to sue the village council for poor management of village land including management by a village council of any joint land.

Section 11 (5) recognizes agreement(s) reached by villagers of two or more villages about the use, by those villagers jointly of village land which falls within the jurisdiction of two or more villages or an agreement reached between the traditional leaders of a group of persons using village land which falls within the jurisdiction of two or more villages. The village councils of those villages may decide to adopt and approve them as a joint village land use agreement by the village assembly of the village of those villagers or, of that village council.

The Act empowers the Minister to declare any area of a village land to be hazard land. Also where the local authority having jurisdiction in any village considers it to be necessary, it may advise the Minister to declare any of the Village Land as hazard land. For the purposes of the section **hazard land is land the development of which is likely to pose a danger to life or to lead to the degradation of or environmental destruction on that or contiguous land and includes but is not limited to** (a) mangrove swamps and coral reefs; (b) wetlands and offshore islands in the sea and lakes; (c) land designated or used for the dumping of hazardous waste; (d) **land within sixty metres of a river bank or the shoreline of an inland lake**; (e) **land on slopes with a gradient exceeding any angle which the Minister shall, after taking account of proper scientific advice, specify**; (f) land specified by the appropriate authority as land which should not be developed on account of its fragile nature; (g) land specified by the appropriate authority as being land which should not be developed on account of its environmental significance.²²

Acting under the powers of section 6 above, the Minister responsible for land matters may declare an area to be hazardous land or prone to environmental degradation. The

²¹ Sect 14 of the Village Land Act..

²² Ibid section 6.

effect of the declaration is to restrict activities conducted in such area including carrying out of farming activities within sixty metres of a river bank or high slopes. With the enactment of the EMA however, where the Minister for Land has not done so the Minister responsible for environment may do so. In either case people evicted must be paid compensation as required under Article 24 of the URT Constitution of 1977 as amended and the Land Acts of 1999 as stated elsewhere in this report.

Where the Minister considers that an area of land should be declared to be hazard land he must publish a notice in the *Gazette* specifying (a) the location of the proposed hazard land (b) the boundaries and extent of the proposed hazard a brief statement of the reasons for the proposed declaration;(d) the date being not less than sixty days from the date of the publication of the notice, when the declaration may be made.

3.3.1 Access, acquisition and ownership of land

In Tanzania access, ownership and acquisition of land rights is governed by the Land Act Cap 113 and the Village Land Act Cap 114. The latter relates to Village Land while the former relates to all land other than Village Land. The two laws address issues of land ownership and security of tenure as has been discussed in the preceding sections. In case of any conflict between the Land Act and any other law regarding land management in Tanzania, the Land Act prevails. The Acts contains important principles of land management.

As noted people can access land through purchase, allocation/grant inheritance or clearance of virgin forest. All are considered valid methods of land acquisition. Both the Land Act and the Village Land Act also provide for gender neutral provisions on acquisition of land rights. Any Tanzanian citizen (man or woman equally) may apply for a granted right of occupancy or customary right of occupancy. Section 23 (3) of the Village Land Act further requires Village Council when determining whether to grant a customary right of occupancy or not, to have special regard in respect of the equality of all persons such as an application from a woman or group of women not less favorable to an application from a man, a group of men or mixed group of men and women. Where an application is refused by the Village Council it must furnish reasons for the refusal. As indicated in the livelihood report land in the case study villages is held under customary right of occupancy which can either be through allocation by the village council or inheritance (deemed).²³

In the Uluguru area most farming systems do not use adequate external inputs. Fertility is mainly restored through fallows. However, such restored fertility is steadily reduced by population pressure. Soil erosion is consequently spreading throughout all parts of the Uluguru. Most of the cultivated area is used for small-scale farming by land holders who cultivate the land mainly under customary tenure. There is competing land clearing due to (i) competition for plots especially in and around highland where land is very fertile (ii)

²³ See p 30 of the Report.

extension of cultivation to marginal land areas (iii) increased movement of large herds of livestock.²⁴

Therefore, an appropriate soil and land management will play a crucial role in enabling the agricultural sector to be promoted. The EPWS projects should consider formulating strategic plans so that farmers are encouraged to be involved in sustainable agricultural production practices including proper land management.²⁵

3.4 Ownership, access and natural resource management

Natural resource management calls for clear property rights. It is only when people have security of tenure not only of land but natural resources that they can sustainably manage the environmental resources.

However, all natural resources in Tanzania are by legislation state property. This applies to water as well as other natural resources such as forests, wildlife, fisheries etc. The Government exercises control and regulatory powers in harvesting and utilization of such resources through permits and licences. Natural resources are also a major source of revenue both to the Central Government and Local governments which have more responsibilities under the Local Government Reform Programme. The local government authorities are required to raise substantive amount of revenue to finance their activities and the services they offer. This has exerted pressure on the natural resource where local authorities collect fees and produce cess.

The ownership of land and natural resources, access and the right to use them are of fundamental importance. Despite the fact that all natural resources are state property, specific legislation confers property rights to groups and individuals. It is when people can satisfy their needs, have control of the resources and secure land tenure as stated in the NEP (1997) that long term objectives of environmental protection can be possible. For instance the communal tenure of village lands can provide a good legal foundation for the development of community-based watershed management on village land.

It is clear that Village Land Forest Reserve and Community Forest Reserve can be created on village land and the whole village owns it. The village at the governance level is represented by the Village Assembly as the supreme body and at the executive and the Village Council which is accountable to the Village Assembly. It is the Village Land Act (1999) that governs village land under which Village Land Forest Reserve and Community Forest Reserves can be established. The Village Council is responsible to manage the village land on the basis of a trust with due regard to the principle of sustainable development.

²⁴ Ibid, p 37

²⁵ Ibid p 38

3.5 Addressing conflicting laws in the EPWS

Where there are myriads of laws on the same subject, conflicts are bound to occur. However careful legislative process can take care of conflicting scenarios. In Tanzania for instance the EMA is the supreme law on environmental matters. In case of any conflict the provisions of the EMA will prevail by virtue of section 232.

On land matters the Land Act is the supreme law. In case of any conflict between the Land Act and any other law including the Village land Act the provisions of the Land Act prevails. Section 181 stipulates that any provisions of any other written law applicable to land which conflict, or are inconsistent with any of the provisions of the Act shall to the extent of that conflict or that inconsistency cease to be applicable to land or any matter connected with land in Mainland Tanzania.

However, with the enactment of the EMA 2004 environmental laws are subject to the principles and guidelines of the EMA. In case of any conflict between the EMA and sectoral laws the provisions of the EMA prevails. Section 50 of the EMA provides that management and utilization of land will be according to the prevailing land laws but where there is any conflict on environmental aspect of land management, the EMA prevails. For instance the EMA provides that no human activities which by their nature are likely to compromise or affect conservation or protection of *inter alia* riverbanks or ocean can be carried out within 60 metres of the protected area. A similar distance is provided by section 7(1) (d) of the Land Act and section 6(3) (d) of the Village Act. However the Water Regulation of 1997 provides that no human activities can be conducted within 200 meters of a river bank or within 500 meters of the shore line of a natural lake dam or reservoir. With such a provision it is apparent that the responsible officers need to be aware of the EMA and its overriding mandates on environmental issues in the country.

Also where a subsidiary legislation (eg by-law) contravenes a principal Act it will automatically be *void* under the *ultra vires* doctrine.

3.6 EPWS benefits and the law in Tanzania

Generally the ever increasing need for payment for watershed services is based on multifarious reasons. EPWS serves as an instrument to educate the population about the value of the natural resources. It sets a price for environmental services, which were previously priceless and encourage users of water to contribute towards management of the watersheds. This causes users and providers to associate a market value to such services, which should lead to a more efficient use of the water resource, and recognition of the benefits of particular land uses which provide the required environmental service. It can contribute to solving conflicts about the alternative uses of land and water resources by fostering the information flow between providers and users of the services and considering economic compensation mechanisms.

It can enhance efficiency in the allocation of natural, social and economic resources on the assumption that the use of market mechanisms increases the efficiency in resources

allocation. As in other markets, efficiency can be increased if the required institutional conditions are in place, including a sufficient degree of competition, information availability and the lack of externalities, among others. The design of EPWS schemes should make certain that these conditions are met to ensure that market mechanisms have a positive effect on the efficient allocation of resources.

EPWS schemes can generate new sources of funding for the conservation, restoration and valuation of natural resources. The appropriate implementation and execution of a EPWS scheme requires an important number of preliminary studies to establish relations between the land use and the water resources, and to estimate the economic value of the service. These studies may constitute a significant contribution to the knowledge of the ecosystems involved, as well as an important input for its conservation. On the other hand, ideally EPWS schemes should be self-financed and hence ensures funding sustainability. Therefore, they should constitute a local - and mostly private - financing source for the better use or protection of the natural resources.

It creates indicators for the relative importance of natural resources by means of the valuation of environmental services. EPWS allow the transfer of resources to socio-economically vulnerable sectors providing environmental services. In many cases, upstream service providers belong to marginalized social groups. Therefore, a financial compensation might help to raise low incomes to a certain extent.

From the foregoing in this report it is clear that EPWS as conservation and as a social rewarding tool is accommodated in the laws of Tanzania. As to the appropriate forum to operationalize it will be covered in the next chapter.

Chapter Four

Institutional frameworks, Opportunities and constraints for developing EPWS

4.1 Institutional mandates in watershed management and utilization

In order to have a workable arrangement for the EPWS scheme the institutional framework must be analyzed to find out how it impacts on watershed management and the manner it can be utilized to facilitate the scheme. The important institutions that must be looked at include:- The Vice President's Office through the Division of Environment (DoE), the Ministry of Natural Resources and Tourism (MNRT) through the FBD (Director), the Ministry of Water through the Ruvu-wami Basin Authority and the Prime Minister's Office Regional Administration and Local Governance (PRO-RALG) through Local Government Authorities, and NGOs.

4.1.1 The Vice President's Office (DoE)

4.1.1.1 Minister for Environment

The Minister is responsible for all matters relating to environment and is responsible to articulate policy guidelines for the promotion, protection and sustainable management of the environment. He may issue general guidelines necessary for implementing the EMA. He may issue directives for the performance or prohibiting any activity detrimental to the environment.²⁶ Since before the enactment of the EMA all functions related to environmental management were vested in the Vice President's Office Division of Environment. With the EMA in place environmental management remains in the VPO's but with much clear descriptions. Since environment management nationally has been institutionalized, it is difficult to undertake any environment related activity without the involvement of the Ministry responsible for environment. Section 13(1) provides:

“The Minister shall be overall responsible for matters relating to environment and shall in that respect be responsible for articulation of policy guidelines necessary for the promotion, protection and sustainable management of environment in Tanzania”.

4.1.1.2 The Director of Environment

The Director is responsible for coordinating environmental management activities and promoting integration of environment considerations in policies, plans etc. He advises the Government on legislative and other measures for environmental management, monitor and assess activities carried out by other agencies, prepare state of environment report, coordinate environmental aspects of other sectors and implementation of the National Environmental Policy.²⁷

²⁶ EMA sections 13 (1),(2) & (3).

²⁷ Ibid section 15.

4.1.3 The Ministry of Water

The management of water resources under the WUA is the responsibility of the Ministry of Water. The Minister is responsible for: formulation and implementation of water policies, coordination of all activities pertaining to water projects and programs, water supply and sewerage, regulation and control of water resources, protection of water quality and pollution control.

Apart from the Minister other actors in this ministry are the Principal Water Officer, Basin Water Boards, (with a Basin water officer and Regional Water Officers) where there is no Basin Water Board. Water Officers are responsible for granting and registration of water rights and effluent discharge consents and the collection of water user fees. The Ministry of Water through its designated “Water Basin offices” is mandated to oversee the management of water resources in terms of utilization, allocation and control of Water pollution.

The duty of water supply is carried out by Urban Water and Sanitation Authorities. The Authorities derive their functions from various laws such as the Water Works Ordinance, Cap 281, Public Health (Drainage and Sewerage Ordinance Cap 336 and the Local Government (Urban and District Authorities Acts (No 7 & 8 of 1982). The legislation enables the authorities to construct and maintain public sewers and sewerage disposal works and construct and maintain any works for the supply of water.

4.1.3.1 Water Basin Authorities

The Minister has been empowered to declare any area of land to be a water basin for any river under section 7 of the WUA. Each water basin must have a Board appointed by the Minister. Basin Boards are financially and administratively autonomous and their functions are control and regulation of pollution and to advise the principal water officer. The Water Basin Authority is through its designated organs “Basin Water Offices” mandated to oversee the management of water resources in terms of utilization, allocation and control of water pollution as stipulated in the Water Utilization (Control and Regulation) Act, No. 42 of 1974.

It is by virtue of this power that one has right to use water through Water rights issued by Basin Water offices. The Country is divided into 9 hydrological units or Basins. **Through Government Notice No. 370 of 1997, Water Basin Board as shown earlier on have the mandate to charge and collect economic water user fees from different water users in the basin.** Basin Water Offices can charge economic water user fees except for Forest / Mining lease / License within the area of its jurisdiction but the amount abstracted and used should not exceed 22,700 litres per day.

Under the current legislation (The Waterworks Regulations, 1997, and the Water Laws (Miscellaneous Amendments) Act, 1997), the Minister responsible for Water may designate and declare a Water Supply and Sewerage Authority for certain areas. This legal provision has been used to establish 19 Urban Water Supply and Sewerage

Authorities (UWSAs) in the areas of municipal councils throughout the country, and for town councils where these are also regional centres.

In addition, the Minister responsible for Water has declared 92 District Urban Water and Sewerage Authorities (DUWSAs) for towns which are also district headquarters, and 62 of these have been established. All these UWSAs and DUWSAs are accountable to, and monitored by, MoW although the respective local authority has representation on the Board. However, the UWSAs and DUWSAs are not responsible for on-site sanitation, which remains with the respective local government authority.

Both UWSAs and DUWSAs are defined in three categories dependent on their ability to meet all or part of their operation and maintenance costs. The organisations are encouraged to improve their performance so as to achieve a higher category status. Where the organisations are still reliant on the Government for part of their costs, annual budgets are subject to endorsement by MoW.

MoW is also responsible for assessing the need for and securing capital investment finance for water supply and sewerage schemes irrespective of whether they are run by UWSAs, DUWSAs or the local government authorities.

The Minister may also approve the formation of Water User Associations for specified areas. Where the Associations have been established, MoW is responsible for performance monitoring and support.²⁸

MoW secures investment finance for rural water supply schemes where it is responsible, or where it has approved the establishment of Water User Associations. Where investment is required for new rural schemes, MoW may react to requests from the relevant District Council.

4.1.3.1 1 Ruvu-Wami Basin Authority and its roles in water resources management and utilization

As stated above the country has been divided into 9 river basins. The Ruvu-Wami Basin is one of the 9 established basins. It has the function to *inter alia* **oversee the management of water resources in terms of utilization, allocation and control of water pollution in the Ruvu-Wami designated area**. As Basin Boards are financially and administratively autonomous it can **charge and collect economic water user fees from different water users in the basin**. The Basin Authority is therefore an important stakeholder in the envisaged scheme.

4.1.4 The Ministry of Natural Resources and Tourism (MNRT- FBD)

The main institutions established under the Act are the office of the Minister who is responsible for policy formulation and ensuring implementation of the Act²⁹, the Director

²⁸ See Water Strategy

²⁹ Op.cit section 5(1)

of forests who is appointed by the President to advise the Government on all matters related to forests management³⁰, and the National Forestry Advisory Committee to advise the Minister.³¹ The other institution is the forest officers including licensing and registration officers, enforcement officers and inspectors.³²

In terms of section 77, the Minister responsible for Forest is empowered to charge fees and royalties by prescribing services and permits for which fees would be charged by forest managers.

Section 49 has listed permits and licenses which are issued for variety of services

- Fell or extract timber
- Mining
- Operate saw Mills
- Camping, tourist facilities, tourism photographic
- Enter to hunt or fish
- Allow domestic animals to enter and graze etc.

Unlike the Water Act which does not give power to the Minister to enter into arrangement with communities, the Forest Act does empower the Director to enter into joint ventures or agreements for enhancing forest management³³. It is under this power that various joint forest programs have been formed in the country.

Thus although the Water Act does not provide ample room for vesting of rights to communities save for formation of water user associations, the relevant authorities can utilize the opportunity in the Forest Act where communities may be conferred property rights to manage watersheds. This can be done by one village community or more than one village community. But where there are forests on village land, efforts can be directed at improving and supporting their economic activities in order to ease pressure on the catchment forests. This is vivid as individuals and communities are more inclined to support efforts which take their livelihood concerns into account.

Conversely, there is room for the Minister responsible for forest under section 77 to direct the forest managers to charge payment for water ecosystem services from the MoW if the forest authorities can demonstrate that water is a forest product. This requires negotiation between the two ministries so that the seemingly conflict will not result into a management *lacunae*.

As it has been stated, there have been various efforts to ensure that environmental resources are sustainably managed and that they do produce maximum benefits. Such efforts include vesting powers in regulatory authorities to oversee management of certain resources. The Dar es Salaam Water Supply and Sewerage Authority (DAWASA) (2001) was created to regulate water, water supply, sewerage services and water resource conservation in its designated Area. A further analysis of the law has been made below.

³⁰ Ibid section 5(3)

³¹ Ibid section 10.

³² Ibid section 6.

³³ Ibid section 16.

4.1.5 The Dar Es Salaam Water and Sewerage Authority (DAWASA)

The Dar Es Salaam Water and Sewerage Authority (DAWASA) Act 20 of 2001 provides for the functions, powers and privileges of DAWASA. Its aim is to enhance regulatory framework for the Dar es Salaam designated area.

Section 6 provides the functions of DAWASA to include (a) supply of water for all lawful purposes; (b) developing and maintaining waterworks; (c) promoting the conservation and proper use of water resources; (d) advising the Government in the formulation of policies; (e) planning and executing new projects for the supply of water, (f) educating and providing information to the public on water management; (g) liaising with other authorities on matters relating to waste disposal (h) collecting fees and levies (including any regulatory levy) for water and sewerage services supplied to consumers, (i) providing amenities or facilities which it considers necessary or desirable (j) **doing anything or enter into any transaction which, in the opinion of the Board, is calculated to facilitate the proper exercise of its functions.**

Section 7 empowers DAWASA to appoint an Operator to perform the functions and exercise the powers which are vested on it under terms and for a period specified in a concession, contract or agreement entered into with the Operator. Such power includes leasing and temporary transfer its fixed and landed assets to the Operator for the purpose of providing water supply and sewerage services. The concession or agreement may include providing services over the whole of the DAWASA Designated Area in accordance with a plan which may be developed pursuant to the concession.

During the term of the concession, the Operator will be required to exercise and perform the powers, duties and functions of DAWASA in the areas specified in the concession. DAWASA will retain the powers to perform the functions and discharge its responsibilities in areas where the Operator does not provide services.

Under section 22 (1), DAWASA is the principal body for the implementation of Government policy in relation to water, water supply and sewerage services as well as water resource conservation in the DAWASA Designated Area. Water resource conservation implies that it can also deal with catchments.

DAWASA is allowed under section 23 to operate commercially the service it provides to the public and ensure that revenues of DAWASA are sufficient to meet its outgoings, including payment of debt service charges. Section 24 (1) empowers DAWASA to charge and collect tariffs, fees or other charges for water supplied, sewerage or other services rendered or facilities availed to consumers in accordance with the rates authorized by EWURA and published.

The funds and resources of DAWASA consist of: sums appropriated by Parliament, sums or property which is vested in DAWASA, sums which DAWASA receives as fees, rates

or charges for water supplied or any services rendered by it; and (d) the donations, grants, bequests and loans as the Board may, receive from any person or body of persons.³⁴

4.1.6 The Dar Es Salaam Water and Sewerage Corporation (DAWASCO)

According to the Public Corporations Act No 2 of 1992 the President may by Order published in the *Gazette* establish a public corporation for functions / purposes he may specify in the Order. Any such public corporation established shall be a corporate body with perpetual succession and can sue and be sued and may be capable of purchasing and acquiring and of alienating any property movable or immovable. It is on such a legal basis that the DAWASCO was established in May 2005.

As noted the DAWASA is allowed to enter into contract with an operator under section 7 of the DAWASA Act. By virtue of such a provision it made a concession with DAWASCO which is a corporate body. The role of DAWASCO as lessee of the DAWASA is to operate water and sewerage services to its commercial and domestic users. DAWASCO pays a **rental fees** to DAWASA for the infrastructures it uses in the provision of service. As the DAWASCO gets its water from the Ruvu-Wami Basin, it pays abstraction fees to the Ruvu-Wami Basin Authority for the amount of water it draws from the basin. Although the payment is payable to the basin the tariff is regulated by the EWURA. However, none of the fees payable to the Ruvu-Wami Basin is set aside for contributing to the management of the watershed.

4.1.7 The Energy and Water Regulatory Authority (EWURA)

The Energy and Water Regulatory Authority Act No 11/ 2001 establishes a Regulatory Authority in relation to energy and water utilities. Section 6 provides the principles that the Authority must consider in carrying out its functions. It must strive to enhance the welfare of Tanzania society by promoting effective competition and economic efficiency; protect the interests of consumers and protect the financial viability of efficient suppliers.

The functions of the Authority are provided under section 7(1). They include: to perform the functions conferred on the Authority by legislation; issue, renew and cancel licenses; establish standards for goods and services and the terms and conditions of supply of goods and services. It is also mandated **to regulate rates and charges**. In addition under section 26 it has licensing and regulatory function; and can issue guidelines on tariffs chargeable for provision of water and sewage services and examine and approval of tariffs chargeable for the provision of water supply.

It has been vested with power under section 17(1) **to carry out regular reviews of rates and charges**. In making any determination to set rates and charges, or establish the method for regulating such rates and charges, the Authority is required to take into account socio-economic factors.

³⁴ Section 33 of the Dar Es Salaam Water Supply and Sewerage Authority Act.

However EPWS is not dependent on the determination of the EWURA, as this body is mainly intended to protect consumers who do not have room to bargain the services they get from the supplier. Provided the EPWS depends on an understanding between buyers and sellers it does not fall in the purview of the EWURA.

4.1.8 The Local Government Reforms and Watershed Management

4.1.8.1 The Local Government Reform Policy

The overall objective of the Local Government Reform Policy, 1998, is to improve service delivery by making local authorities more democratic and autonomous within the framework established by the central government. The policy identifies provision and facilitation of water services as an important responsibility of local government. The objectives of the reforms are to create viable entities, develop required local government / central government relations, establish the necessary legal framework, and develop the necessary capacities for effective performance by local government organisations.

4.1.8.2 Rural Development Policy and Strategy

The Rural Development Policy acts as a platform on which sector ministries' policies are coordinated, harmonised, and integrated to give rural development process a holistic view.³⁵ In the case of the Water Sector, the Rural Development Policy states that:

- central government and local governments will pursue and / or promote an integrated approach to rural water supply and sanitation, productive activities and human consumption;
- central government, local governments and other stakeholders will mobilise funds and attract private resources to ensure increased supply of safe water within household proximity; and
- central government will create a conducive environment for private sector participation in developing rainwater-harvesting technology appropriate for rural areas.

Consequently under the Local Government Reform Program local government authorities have been given wide powers in the day to day activities. The reforms which aimed at decentralize the previously Central Government duties take the course of the Local Government Urban Authorities Act 8/1982 and the Local government (District Authorities) Act No. 7 of 1982. Also as the initiative entails empowering or delineating certain roles to communities it is crucial to examine their power to enter into agreements, manage funds and appropriate the same in local government structure.

4.1.9 The Urban & District Authorities under Act No 7 & No 8

The Local Government Authorities are ultimately accountable to the Prime Minister's Office, Regional Administration and Local Governance (PMO-RALG). The Local Government Acts of 1982 for both District and Urban Authorities give the respective District and Township Authorities, powers to establish, maintain, operate and control public water supplies drainage and sewerage works. The Local Government (Urban

³⁵ MoW National Water Sector Development Strategy 2006-2015 at 67.

Authorities) Act No. 8 of 1982 provides that it is the duty of the urban authority to take measures for the conservation of natural resources, prevention of soil erosion and the prohibition and control of cultivation.³⁶ The authority is duty bound to collect all refuse and filth from any public or private place and provide for the disposal of sewage from all premises and houses in its area, so as to prevent injury to health.³⁷ The local authority has legislative power in relation to all matters.³⁸

The Local government (District Authorities) Act No. 7 of 1982 establishes a Village Council and a Village Assembly in every village under sections 24 and 25 respectively. The Village Council is a body corporate with perpetual succession and can sue or be sued, enter into contracts.³⁹

Section 56 provides the composition of a Village Council. It must consist of not less than 15 but not more than 25 members. The composition includes, a chairperson to be elected by the village assembly, the chairperson of all the Vitongoji (hamlet) within the village, members elected by the village assembly one fourth of who must be women. The village executive officer is the secretary to the village council.

The supreme authority on all matters of general policy making in relation to the affairs of the village is vested in the village assembly. The Village council is the executive organ in the village and is accountable to the village assembly.⁴⁰

Section 122 empowers the District Council to consider and approve by-laws made by the village councils within its area of jurisdiction; consider, regulate and coordinate development plans, projects and programmes of villages within its area of jurisdiction; and to regulate and monitor the collection and utilization of revenue of village councils. It may also take measures to provide protection and proper utilization of the environment for sustainable development.

It is further provided under section 122 (2) that District Councils have the power to take all necessary measures for prevention of soil erosion, prohibit / regulate the cultivation of certain crops, prohibit / regulate the cultivation of poisonous plants, prohibit the use of any agricultural land, regulate livestock husbandry and may prohibit or regulate the movement of any livestock in or through an area, prescribe methods of husbandry in relation to the keeping or grazing of any livestock, restrict the kinds or number of livestock which may be kept on any agricultural land etc.

The Village Council has various functions⁴¹. **It can do anything necessary or expedient for the economic and social development of the village. It can initiate and undertake any task, venture or enterprise designed to ensure the welfare and well being of the**

³⁶ Section 55 (1) b Local Government (Urban Authorities) Act No. 8 of 1982.

³⁷ Ibid section 55 (1) g.

³⁸ Ibid sections.79 & 80.

³⁹ Section 26 of the Local Governments (District Authorities) Act No 7 of 1982.

⁴⁰ Ibid section 146.

⁴¹ Ibid section 147.

residents of the village. It can plan, coordinate activities and give assistance and advice to villagers. **Also, it can enter into economic partnerships, joint ventures or otherwise with other village councils.** Where appropriate the village council can do **anything** which seems proper for the general advantage of its functions. By virtue of section 110 it can delegate its functions to any established permanent committee. Where the Village Council delegates any of its functions and powers to a committee it will have the mandate to review the performance and exercise of the functions and powers by the committee on regular intervals. Apart from the above executive functions a village council has power under section 168 to legislate. The legislative power is regulated by sections 169 and 172.

On revenue and management of funds and resources for local government authorities the Local Government Finances Act Cap 290 provides among other things for the sources of revenue and management of funds for local government authorities. Section 7 (1) provide the sources of revenue for District Councils. The sources include moneys derived from any trade, industry, works, service or undertaking carried on or owned by the District Council; and moneys derived from licences, permits, dues, charges or fees specified by any by-law made by the District Council.

Under section 9 (a), (b) and (e) the sources of revenue of Village Council consist of all receipts derived from any trade, industry, works, **service or undertaking carried on** or owned by the village; monies derived from licences, permits, dues, fees, charges, or tariffs specified by any by-law made by the Village Council; **all revenue accruing to the village council from the Government, the District Council or from any private individual or a public institution by way of contributions, grants-in-aid, endowments, or any other manner of payment.** Section 9(2) allow Village Councils to make by-laws prescribing reasonable fees, charges and tariffs for any licence or permit issued by the village council. **Before a Village Council prescribe the fees, charges or tariffs it must take into account any limitation imposed by any written law rates prescribed by the District Council as provided under section 9(3).** Section 9(5) requires that where the monies have been lawfully derived by the Village Council but are not expressly specified under section 9(1) it will also form part of the revenues, funds and resources of the Village Council and must be paid into **the general fund** of the Village Council. However, *receipts derived from any trade, industry, works, service or undertaking carried on or owned by the village council in whole or in part may be paid into a separate fund for the purpose of that trade, industry or undertaking* as per section 9(6).

4.2 Opportunities for developing markets for watershed protection services in Tanzania

The following opportunities and constraints were identified for developing markets for watershed protection.

4.2.1 Supportive legal framework

The EMA provides opportunity for community participation and inclusion of financial instruments in conservation. It also recognizes the role of Local government Authorities in conservation. The Local (District Authorities) Act allows village councils to manage natural resources, enter into agreements, and collect revenue.

It is assumed that land use practices have significant impacts on water resources and affect the downstream population in the watershed. Payments by the downstream population to the upstream population for "hydrological services", such as a good quality of water, less sediments or a more regular flow regime are discussed as mechanisms to internalize these impacts. The Land Act and Village Land Act provides better principles for assess, acquisition and management of land in Tanzania. They provide for compensation, modalities of acquiring land in general and village land. Village Council is the manager of village land and can allocate customary right of occupancy to persons. The law also allow formation of joint land management between two or more villages.

The 1997 Water Regulations call for the formation of water user associations which can be utilized to spearhead the scheme. The Forest Act also allows user rights in forests. It provides for private forest, Forests on Village Land i.e. community forests and joint forest management plans. Such opportunity can be taped to facilitate the creation of village land forests and where the need arise the village council may apply to the forestry and Beekeeping Division to enter into joint agreement to manage catchment forests. Such a step will give them more legitimacy to collect revenue from the buyers as they will be managers of a greater part of the watershed which contribute to continued watershed services.

The DAWASA Act which establishes DAWASA, vest it the power to enter into transaction for better management of water resources. The TBL and COCA COLA as registered Companies have legal personality. They can therefore enter into binding agreements through their Directors, sue or be sued. For such companies what is important is the willingness to pay to the watershed managers over and above what they are currently paying as a charge for the water it uses. Effective articulation of the associated benefits and the apparent profit they will realize over time is paramount.

4.2.2 Desire to address livelihoods improvement

The Constitution and many of the related laws and policies emphasizes on the improvement of quality of life through poverty reduction. Market-based instruments have the potential to set up systems that result in payments flowing directly to the poor and thereby addressing quality of life.

4.2.3 Political will

In his 31st of March monthly speech made in Dodoma the URT President lauded the commitment of his Government to deal with environmental degradation. Such efforts resulted in the National Strategy on Environmental Management which put particular

emphasis on watershed management. On the 1st of April the VPO's Office issued the Government Notice on Land Degradation and Water Catchments.

4.2.4 Institutional and policy change

The Environmental Management Act (EMA) (2004), Environmental Policy, Water Policy, provides an avenue for incorporating market-based mechanisms into the legal framework. The 1990s+ generation of policies provide opportunities for watershed payments schemes to take place.

4.2.5 Availability of Information

Many catchments have been well researched and there exists good data and good expert opinion on watersheds.

4.2.6 On going Projects

There is opportunity to build on existing projects. For instance the Eastern Arc Mountains conservation project through the Eastern Arc Mountains Conservation endowment Fund (EAMCEF) could be involved as one of the partners as its activities include the Uluguru Mountains. The goals of the project are to establish a conservation fund sufficiently to provide the resources necessary to ensure effectively long term conservation and management; and catalyze resources to conserve forest biodiversity through investment in sustainable community development.

4.3 Constraints for developing markets for watershed protection services

4.3.1 Valuation.

There is little understanding of the value attached to commodities and services within watersheds. However, the current water legislation is in place and makes provision for the adoption of economic instruments and pricing for example through the adoption of efficiently and equitably determined user charges, the levels of these charges is still under discussion.

4.3.2 Stakeholder awareness and commitment

The potential for water "rights" and the implications of decisions are not currently well understood by users. The sellers (villagers) may fail to fulfill the will be agreed terms in MoU.

4.3.3 Knowledge transfer

Information and understanding of the full implications of markets and the external effects of trade decisions are still not fully understood by many.

4.3.4 Institutional and policy change

There is a perception of a lack of consensus among policy makers and researchers. There is a need for broader discussion on the gains and losses of adopting certain approaches to address watershed management.

4.3.5 Limited Public Consultation in Decision-Making

Crucial government decisions have been carried out without the involvement of the stakeholders to be affected. This has led to mistrust and misunderstanding among community members. For instance while citizen involvement or community participation in resource management is one of the key tools being advocated by the Government Policies, Jan 2006 saw the VPO issuing a public notice requiring livestock keepers and farmers to vacate fragile areas without compensation or considering their livelihood.

4.3.6 Presence of many water users

The sustainability of the project cannot rely on the upstream managers only, due to the various water users along the basin. It is crucial to involve such other users. If they are not involved the aim of getting quality and enough volume of water may be far from reality.

4.3.7 Multiplicity of laws

There are many laws which villagers are ignorant of them especially those dealing with environmental conservation. The initiative need to take into account other facilitative approaches which includes dissemination of legal knowledge to the participating communities.

4.3.8 Inability to plan for alternative activities

Villagers need to be facilitated to formulate and achievable and profitable alternative activities that will boost watershed management.

4.3.9 Record of previous projects

Villagers are skeptical as to the sustainability of the scheme. They seem to have memories of previous projects which lacked clear sustainable strategies. It is therefore crucial that before the scheme is implemented carefully study has to be conducted in particular to underpin the possible loopholes and focus on the available opportunities.

4.3.10 Shortage of land for alternative activities

Given the nature of the terrain of the Uluguru area, communities have no vast land suitable for agricultural production. People have thus been forced to concentrate on the limited arable land. But due to the hilly nature of the area soil erosion is rampant leading to soil infertility. Such a phenomenon has forced people to practice shifting cultivation in search for fertile land. If anything is to be attained, improved methods of agriculture have to be employed without compromising land-use planning. For land-use plan to be effective however it is important to carry out land survey. This is possible with the assistance of the technical staff of the district council. Failure to emphasize on effective utilization of village land will result into continued destruction of the watershed.

4.3.11 Poor financial management

Although Village Councils have the mandate to manage funds, they have limited financial knowledge which leads into mismanagement and misappropriation. A system has to be in place to ensure that the revenue collected is properly managed and there is a clear means of reporting and accountability. Any failure will ultimately de-motivate the community members and the result is continued destruction of the watershed.

4.3.12 Overriding powers of the Basin Authority

The valley authority (Ruvu-wami) has tremendous statutory powers over the basin area. Success of the initiative in the basin and any other area in the country require support from the basin authority. Support can be obtained through various tools of advocacy such as lobbying, discussions and dialogues. It can assume a facilitative role as it is mandated to manage the basin.

Despite the above challenges there is still chance for this scheme to be implemented successfully by focusing more on the opportunities and minimize the seemingly challenges. It is also important to bear in mind that payment scheme is not a new innovation in Tanzania. There have been environmental service payment initiatives in various sectors in Tanzania. The only difference is that EPWS is much more formalized, intended to enhance public-private partnership and is based on equity.

Table 1: Ongoing Environmental Payment Schemes in Tanzania

The Case of Wildlife Management

For instance the Wildlife Conservation Act No 12 of 1974 empowers the Minister to declare authorized Associations (which may include any body of persons, whether corporate or unincorporated, or Ujamaa Village for the purpose of granting game license sects 26 & 27). Such a provision has enabled communities to form Association which upon registration becomes an Authorised Association. The Authorised Association can apply to the Director of Wildlife for a user right to establish a WMA where it can have right to manage e.g. in Liwale, Tunduru, Namtumbo, Rufiji and Morogoro districts. All participating villages have prepared land use plans.

- The villages have set aside areas for wildlife conservation.

- Each WMA receives an annual hunting quota from the Wildlife Division. The revenue generated by the utilization of the quotas is used for wildlife conservation and community development.
- There has been job training of villagers and village leaders on management, accountability, awareness and sensitization on CBC and WMA Regulations.
- Crop protection has been improved in all areas due to increased involvement of villages and their scouts.

TANAPA which stands for the Tanzania National Parks Authority established by an Act of Parliament has been transferring the benefit it reaps from the national Parks it manages to local communities. The benefits are in form of contributions to infrastructure developments as the communities consider of key priority. However the payments from TANAPA are channelled through the District Councils where communities are marginally involved.

The Case of Forest Conservation

For the forest sector there have been CBFM and JFM initiatives in various places in Tanzania in the bid to involve communities to participate in forest management and earn some benefits. In case of JFM the benefit is shared among the district Council, Central Government and Village Communities while for CBFM the village communities appropriate the entire benefit. This is a case of conferring user rights to communities over natural resources.

The Case of Mining

In the recently mining companies started paying tribute to the neighbouring communities and the district councils where the minerals are found on the basis of good neighbourhood and commitment to the mining contracts. However the contributions are made through the District Council and at times they do not trickle down to the communities.

In a nutshell there have been payment schemes in various sectors in Tanzania. The EPWS though specific to the water sector is not a completely new innovation. Community participation today is the model for sustainable resource management. However, some caution especially on the role of each stakeholder need to be taken to avoid possible grievances from stakeholders.

4.5 Ensuring fair outcomes to both buyers and sellers

Integrated watershed management strategies can improve people's social welfare. This includes the implementation of economic alternatives which allow sustainable development of resources by means of a payment for watershed services (EPWS). The strategy for EPWS implementation should involve multidisciplinary and participatory methodology. The area socio-economic and cultural context must be considered for EPWS implementation to suit the characteristics of the place, strengthening the weakest socio-economic sectors. At the same time, a political strategy has to be created to

facilitate the necessary institutional conditions so that the economic instruments may function efficiently and contribute to an equal distribution of the benefits. In addition cost-benefit analysis must be considered.⁴² The opportunity cost should base on the cost of change in land-use to sustainable production styles.

While focusing on the downstream users the project need to consider other factors that can impair the quality and amount of water flow to the users which may affect the quality and quantity of the service supplied. It is important to consider management of the service from the manager-seller to the buyer. As the service pass through areas of common use, wastages and discharges are likely to occur. If this is not checked it will eventually de-motivate the buyer as the payment made cannot be reflected in the service offered. There has to be a clear cut difference with EPWS and without EPWS.

For instance studies have indicated that water in Tanzania is polluted from both point and non-point sources.⁴³ Pollution emanates from industrial effluents, mining operations, pesticides (irrigation schemes) agricultural practices, sewage, chemical and organic substances etc. Although the Water Utilization (Control and Regulation) Act (1974) and its subsequent amendments contain provisions⁴⁴ that aim at controlling such sources of pollution its remains to be a major challenge. It is important that for the initiative to be viable and sustainable the general water flow should be checked and monitored through the assistance of the basin authority and other enforcement agents. It is not only through mobilizing the communities that change in practices will result in improved flow but all water resource stakeholders.

4.6 Identifying options for payment scheme design

Examples exist from around the world of how market-based mechanisms result in changes in choices and behaviour that benefit the environment. The essential point is to enable and motivate those who benefit from watershed services and to reward those who supply them. Maintaining and restoring these services becomes an integral part of planning and decision making around land and water resources. If well designed plans are integrated into land-use plans, payment schemes can serve the interests of both those who benefit from ecosystem services and those who manage and supply them. Payment schemes for watershed services are thus an important tool for water resources and river basin management. Payment schemes are most likely to succeed if the type of scheme chosen is suited to the stakeholders involved, their motivations and capacities.

⁴² Refer the Livelihood Study.

⁴³ Vice President's Office, Report on Institutional Mandates and Legal Framework for Environmental Management in Tanzania by LEAT (1999) p 75

⁴⁴ Eg Sects. 15A, 17 18 (A) & (B) of the WUA.

Chapter Five

Discussions and Way Forward

5.1 Legality of EPWS

Under the regulatory framework in Tanzania, the EMA 2004 and the Water Regulations of 1997 allows the operationalization of EPWS in Tanzania. Based on this sentence, does it imply that PWS is legal in TZ? Would you also indicate the sections in the EMA and the Water Regulations that allow the operationalisation of the concept. Although process for a new Water Law is underway it will as of fact be in harmony with the Water Policy of 2001 which *inter alia* promotes community participation and private sector involvement in water resource management.

Formatted: Highlight

Deleted: .

Section 80 of the EMA legalizes **financial instruments** and **market creation** in natural resource management in Tanzania. A keen look at this provision reveals that EPWS is embraced within the terms ‘financial instrument’ and ‘market creation’ as stipulated in the section.

The Water Regulations 1997 provides for the formation of water user associations to manage a catchment. It is therefore clear that if a group of people can form themselves into an association and get registered they may apply for the right to manage a catchment. And provided once registered it will attain a legal status to sue / be sued and enter into contracts it can enter into transactions with other entities to contribute /compensate for the watershed services they get as a result of the efforts of the association. This won't affect the ongoing user fee/abstraction fee being charged as the payment for the former is on the basis of fulfilling certain terms as stipulated in the Memorandum of understanding to be entered into by the buyers and sellers.

This arrangement is not only legal in Tanzania but it also brings into reality the MDGs and the objectives of MKUKUTA, through active involvement of potential actors from the private sector in alleviating poverty and improving rural livelihoods.

However as environment management is a cross-cutting issue ie involving various ministries for instance Vice President's Office, Ministry of Water (Basin Authorities), Ministry of Tourism and Natural Resources (FBD) etc, will have to be involved in different capacities in order to ensure that the scheme is undertaken within the existing framework.

5.2 The EPWS Institutional Framework

With the EMA in place environmental management remains in the VPO's Office but with much clear descriptions. Given the legal power vested in the minister for environment he must be involved as per sect 13 EMA.

The Director of environment in the VPO's Office will be involved as he is the coordinator of environmental management activities in the country as provided under sect 15 of the EMA. The specific duties of the two are as specified under table 3.

The WUA establishes the office of the Minister for Water who is responsible for: policy formulation and implementation, coordination of all activities pertaining to water projects and programs, water supply and sewerage, regulation and control of water resources, protection of water quality and pollution control. The Act also establishes Water Basin offices which are mandated to oversee the management of water resources. The Ruvu-Wami Basin has the function to *inter alia* **oversee the management of water resources in terms of utilization, allocation and control of water pollution in the Ruvu-Wami designated area.** As a result it can **charge and collect economic water user fees from different water users in the basin by virtue of the WUA.** As the right to use water must be consented by the water officers who are under the basin offices, the water user association (see below) must apply for a right to manage the catchment.

Although the Water Regulations (1997) vide section 38(f) of the WUA allows the formation of local water users associations with objectives, legal personality and power to collect and receive any monies due to the association and pay any debts owed to the association such association must obtain a water right from the Basin Authority.

Therefore under the existing institutional framework, the association will derive its authority to deal with the catchment from the Ruvu-Wami Basin. Involving the Basin is important as the Basin will have to recognize the efforts of the association and may ease the fee charged from the association.

In the alternative, the initiative may utilize the opportunity in the Forest Act where communities can be conferred property rights to manage watersheds. The Forest Act under section 5 stipulates that the Minister of Tourism and Natural Resources is responsible for policy formulation and ensuring implementation of the Act, the Director of forests has the duty to advise the Government on all matters related to forests management by virtue of section 5 of the Act. The Forest Act does empower the Director to enter into joint ventures or agreements for enhancing forest management. Thus where there are forests on village land efforts can be directed at improving and supporting their economic activities in order to ease pressure on the catchment forests. This may involve giving part of their land for conservation purposes or change land use for the sake of the watershed resources. This is vivid as individuals and communities are more inclined to support efforts which take their livelihood concerns into account. This will call for a direct involvement of the Director of FBD. This can be done by one village community or more than one village community. Involving the FBD is important as it will ease any possible conflicts in watershed management between the MoW and the MTNR. For instance there is room for the Minister responsible for forest under section 77 to direct the Forest Managers to charge payment for Water ecosystem services from the MoW if forest authorities can demonstrate that water is a forest product.

The above gives us two possible options to operationalise the scheme. It can be as a Village Council through the FBD under the Forest Act or as a Water Association through the Basin Authority under the WUA. This shall be explained further in this report.

Under section 22 (1), DAWASA is the principal body for the implementation of Government policy in relation to water, water supply and sewerage services as well as water resource conservation in the DAWASA Designated Area. Water resource conservation implies that it can also support efforts aimed at watersheds management

As noted the DAWASA is allowed to enter into contract with an operator under section 7 of the DAWASA Act. By virtue of such a provision it made a concession with DAWASCO which is a corporate body. The role of DAWASCO as lessee of the DAWASA is to operate water and sewerage services to its commercial and domestic users. DAWASCO pays a **rental fees** to DAWASA for the infrastructures it uses in the provision of service. As the DAWASCO gets its water from the Ruvu-wami Basin, it pays abstraction fees to the Ruvu-wami Basin Authority for the amount of water it draws from the basin. Although the payment is payable to the basin the tariff is regulated by the EWURA.

For the envisaged scheme to be achievable the DAWASCO must be involved in the transaction. The law has vested in it the power to levy charges and tariffs to its customers who enjoy the watershed services from upland managers. On equitable basis the upstream managers are entitle to a share in the benefits accrued to DAWASCO. Although the operator DAWASCO pays a rental fee for the DAWASA infrastructure it uses the cost and benefit of purifying water it supply to the customers vests in it. Even if the quality of the water will be improved it is DAWASCO that will enjoy the benefit and not DAWASA. In the course of the process however discussion should involve the Ruvu-Wami Authority so that it does not only remain a revenue collector but also reward the surrounding communities which compromise certain life styles so that the water quality is improved. The sustainability of the watershed and quality of the water require conceited efforts from neighbouring communities. But the fact that DAWASCO is a lessee of the DAWASA does not inhibit separate arrangement with DAWASA as it is also obliged under section 22(1) of the DAWASA Act to support efforts aimed at watershed management.

At the local government level the District Council through the Executive Director will be an important party in the MoU. Section 122 empowers the District Council to consider and approve by-laws made by the village councils within its area of jurisdiction; consider, regulate and coordinate development plans, projects and programmes of villages within its area of jurisdiction; and to regulate and monitor the collection and utilization of revenue of village councils. It may also take measures to provide protection and proper utilization of the environment for sustainable development.

Also District Councils have the power to take all necessary measures for prevention of soil erosion, prohibit / regulate the cultivation of certain crops, prohibit / regulate the cultivation of poisonous plants, prohibit the use of any agricultural land, regulate

livestock husbandry and may prohibit or regulate the movement of any livestock in or through an area, prescribe methods of husbandry in relation to the keeping or grazing of any livestock, restrict the kinds or number of livestock which may be kept on any agricultural land etc.

Section 122 further empowers the District Council to consider and approve by-laws made by the village councils within its area of jurisdiction; consider, regulate and coordinate development plans, projects and programmes of villages within its area of jurisdiction; and to regulate and monitor the collection and utilization of revenue of village councils. It may also take measures to provide protection and proper utilization of the environment for sustainable development.

At the Lowest level the appropriate institution is the Village Council. The Village Council has various functions⁴⁵. It can do anything necessary or expedient for the economic and social development of the village. It can initiate and undertake any task, venture or enterprise designed to ensure the welfare and well being of the residents of the village. It can plan, coordinate activities and give assistance and advice to villagers. Also, it can enter into economic partnerships, joint ventures or otherwise with other village councils through their village chairperson. Any by-laws, management plans that the villages may formulate will have to be approved by the District Council.

Hence the District Council and the Village Council are important entities statutorily mandated to fulfill certain specific tasks at their respective levels of governance and must be involved as stated in table 3.

On the other hand, TBL and Coca Cola are registered companies with legal personality and can therefore sue / be sued and enter into contracts.

5.3 Processes and / or modalities to be in place for EPWS

In order for the scheme to be operation it entails a discussion with the following parties and securing a written understanding on their respective roles in the arrangement.

The Key players

- (a) Village Councils (Water User Associations)
- (b) Participating companies (TBL, COCA COLA and the DAWASCO).

The parties above will need to be facilitated by an intermediary or intermediaries as the case may be. The role of the intermediary⁴⁶ will be to facilitate the buyer and the seller to make a deal and influence the relevant Government institutions indicated below to support and endorse the scheme.

Intermediaries

- (i) Care-Tanzania and other interested NGOs

⁴⁵ Ibid section 147.

⁴⁶ For the purposes of this study it is an institution /authority that can facilitate the parties in the undertaking to achieve their goal / meet their expectations through a set of agreed principles.

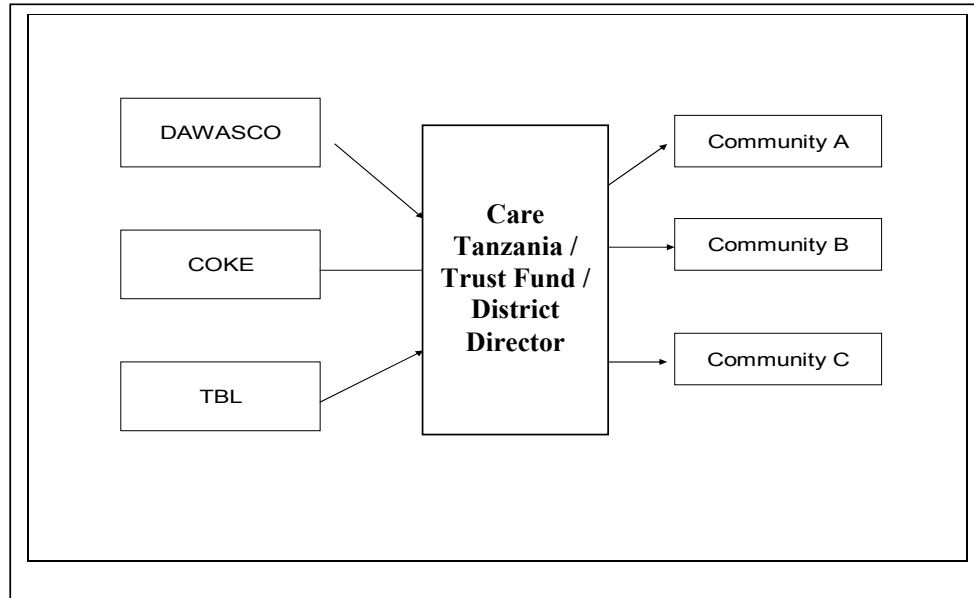
(ii) Director of District Council at the District Level. Consider the mandate of the District Council.⁴⁷

(iii) Trust Fund.

Apart from Care, it is apposite in to establish a *Watershed Management Trust Fund* to oversee the realization of the initiative. Consider the proposal for a trust fund in chapter six.

Each of the above participating parties must have clear roles in the MOU. But their roles will depend on the level of participation.

Table 2: Watershed Management Partnership



⁴⁷ Under section 122 of the Local Government District Authorities Act, the District Council is empowered to consider and approve by-laws made by the village councils within its area of jurisdiction; *consider, regulate and coordinate development plans, projects and programmes of villages within its area of jurisdiction; and to regulate and monitor the collection and utilization of revenue of village councils. It may also take measures to provide protection and proper utilization of the environment for sustainable development.*

Table 3: Summary of EPWS Institutional Mandates

S/N	Institutions	Role in the Scheme	Relevant Authority	Stage	Possible Tools
Central Government					
1	MOW	<ul style="list-style-type: none"> Recognize the village council / Water User Association Issue water right to the Water User association Allocate catchment area to the Local Water User Association Facilitate collection of user fees from buyers Provide technical support for catchment management 	Basin Water Board	Throughout	Lobbying Dialogues Negotiations and Discussions
2	MNRT	<ul style="list-style-type: none"> Facilitate CBFM on Village Land 	Director FBD	Throughout	Lobbying Negotiations and Discussions
	VPO	<ul style="list-style-type: none"> Forward EPWS proposal to the Minister for finance 	Minister for Env	Initial	Lobbying
		<ul style="list-style-type: none"> Facilitate adoption of EPWS as a conservation tool 	Director of Env.	Initial	Lobbying
	MFinance	<ul style="list-style-type: none"> Approve EPWS as a conservation tool 	Minister of Finance	Initial	None
	M Land & HSD	<ul style="list-style-type: none"> Facilitate issuance of Certificate of Village Land Give advice on management of village land 	Commissioner for Land	As appropriate	Lobbying Dialogues Negotiations and Discussions
	MLAD	<ul style="list-style-type: none"> Approval of water (irrigation) projects 	Minister	Throughout	Lobbying Dialogues Negotiations and Discussions
Local government					
3	Regional Administration	<ul style="list-style-type: none"> Political support 	RAS	None	None
	District Council	<ul style="list-style-type: none"> Facilitate the execution of the scheme 	Executive Director	Throughout	Lobbying Dialogue Negotiations and Discussions
		<ul style="list-style-type: none"> Advice on land use patterns Land survey Land registration 	Technical staff	Throughout	
4	Ward	<ul style="list-style-type: none"> Mobilize the villagers 	WEOs & Councilors	Throughout	Dialogues, negotiations & Discussions Building partnerships, mobilizing
	Village	<ul style="list-style-type: none"> Sign the MOU Mobilize the villagers Trustee / manager of 		Throughout	

Equitable Payment for Watershed Services: Making a Business Case

		<ul style="list-style-type: none"> Village Land • Manager of Village Land Forest Reserves • Can enter into (separate) Joint agreements for PFM • Supply the services for buyers 	Village Council		community groups and Building capacity of village councils
		<ul style="list-style-type: none"> • Sign the MOU • Supply the services to buyers 	Water User Association	Throughout	
Private Sector					
5	NGOs	<ul style="list-style-type: none"> • Technical support • Financial Assistance 	Director	Throughout	Dialogues Negotiations & Discussions
	Conservation Funds	<ul style="list-style-type: none"> • Financial Support 	Appropriate	As appropriate	Dialogues Negotiations & Discussions
	Buyers	<ul style="list-style-type: none"> • Pay / compensate for the services 	Manager / Director	Throughout	Dialogues Negotiations and Discussions

Table 4: Envisaged Institutional Framework
Source: National Water Sector Development Strategy 2006-2015

Organisation	Functions and Responsibilities
Minister responsible for Water	<ul style="list-style-type: none"> • Presents national policy and strategy to the Government. • Ensures policies and strategies are implemented. • Appoints Chairman and members of Basin Water Boards. • Determines appeals from all levels in framework.
Ministry responsible for Water	<ul style="list-style-type: none"> • Sectoral co-ordination, monitoring and evaluation. • Policy development and review, including legislation and financing. • Formulates technical standards and WRM guidelines. • Co-ordinates trans-boundary water issues. • Ensures dam safety. • Water Quality Monitoring. • Development of water resources of national interest. • Co-ordinates data collection and assessment of water resources. • Supervises, monitors and evaluates Basin Water Boards. • Supervises the Water Resources Institute. (Agency). • Supervises the Drilling and Dam Construction Agency.
National Water Board	<ul style="list-style-type: none"> • Advises the Minister on: <ul style="list-style-type: none"> - Integration of inter-sectoral planning. - Co-ordination of basin planning and management. - inter-sectoral / inter-basin conflicts. - investment priorities and financing patterns. - interbasin water transfer - transboundary water resources management

Basin Water Boards	<ul style="list-style-type: none"> • Data collection, processing and analysis for WRM monitoring and resource assessment. • Co-ordinates technical aspects of trans-boundary issues in the basin. • Co-ordinate and approve basin WRM planning / budgets. • Approve, issue and revoke water use and discharge permits. • Enforce water use permits and pollution control measures. • Co-operate between sectors at the local level. • Resolve conflicts and co-ordinate stakeholders. • Integrate district plans
Catchment / Sub-catchment Water Committees	<ul style="list-style-type: none"> • Coordination of catchment/sub-catchment integrated water resources management and planning. • Resolution of water resources conflicts in the catchment/sub-catchment, and other delegated responsibilities from Basin Water Board.
Water User Associations	<ul style="list-style-type: none"> • Manage allocation of water resources at local level. • Manage equitable allocation of resources during drought. • Mediate in local disputes.
Regional Secretariat	<ul style="list-style-type: none"> • Representation on Basin Water Boards.
District Councils	<ul style="list-style-type: none"> • Representation on Basin Water Boards. • Representation on Catchment Committees. • Formulate and enforce bylaws • Promote efficient water utilisation • Preparation of district plans

5.4 Receiving payments for environmental services and signing the MoU

The Local Government (District Authorities) Act of 1982 establishes Village Councils. The Village Council is a body corporate with perpetual succession and can sue or be sued, enter into contracts.

As noted the Village Council has various functions. It can do anything necessary or expedient for the economic and social development of the village. It can initiate and undertake any task, venture or enterprise designed to ensure the welfare and well being of the residents of the village. It can enter into economic partnership, joint venture or otherwise with other village councils. Where the Village Council delegates any of its functions and powers to a committee it will have the mandate to review the performance and exercise of the functions and powers by the committee on regular intervals.

The Local Government Finance Act provides under section 9 (a), (b) and (e) for the sources of revenue for village council. They consist of all receipts derived from any trade, industry, works, service or undertaking carried on or owned by the village; monies derived from licences, permits, dues, fees, charges, or tariffs specified by any by-law made by the village council; **all revenue accruing to the village council from the Government, the District Council or from any private individual or a public**

institution by way of contributions, grants-in-aid, endowments, or any other manner of payment. Section 9(2) allow Village councils to make by-laws prescribing reasonable fees, charges and tariffs for any licence or permit issued by the village council. However, before the Village Council prescribe the fees, charges or tariffs it must take into account any limitation imposed by any written law rates prescribed by the District Council as provided under section 9(3). Section 9(5) requires that where the monies have been lawfully derived by the Village Council but are not expressly specified under section 9(1) will also form part of the revenues, funds and resources of the village council and must be paid into **the general fund** of the Village Council. Receipts derived from any trade, industry, works, service or undertaking carried on or owned by the village council in whole or in part may **be paid into a separate fund** for the purpose of that trade, industry or undertaking as per section 9(6).

It is possible to pay cash in the general fund or separate fund but if this option is likely to cause management problems it can be stated in the MOU that payment will be effected in terms of socio-economic activities/projects as will be proposed by the participating villages.

In signing the MOU it is the chairpersons (as the heads of the village government) of the respective villages who will sign on behalf of their village councils but management of any related conservation activity may be undertaken by the environmental committees.

But where water user associations have been formed it will be the management committee of the association that will sign the MoU as stated hitherto in this report. For the buyers, it is their respective Directors/General Managers that will sign.

5.6 Criteria for receiving payments

As it has been noted every person lawfully occupying land whether under a right of occupancy wherever that right of occupancy was granted, or deemed to have been granted or under customary tenure, occupy and has always occupied that land, the occupation of such land shall be deemed to be property and include the use of land from time to time for depasturing stock under customary tenure.⁴⁸ This provision confers property right over land to individuals. Any forbearance to use the land lawfully owned in order to give way to conservation initiative is a good justification warranting compensation from those benefiting. The 1997 Water Regulations also allows the association to be reimbursed for the expense it incurs in managing the watershed.

5.7 Legal / Policy Issues to facilitate signing of the MoU

The legal powers and mandates of the different sectoral institutions must be considered. The scheme must be executed within the existing legal framework. As the scheme is a mechanism to facilitate better management of the water resource advocacy tools can be employed to influence more players to give in. Such tools may include lobbying,

⁴⁸ Sect 4 (3) LA

advocacy, dialoguing and discussions with the potential players. Given the legal framework, it is only through a Memorandum of Understanding that it can be operational. All the key parties must sign before it can be implemented. For remarkable outcomes there need to be developed management plans and by-laws for managing the village land. This could be much effective if it will be done together with formulation of land-use plans.

Under section 9 (a), (b) and (e) of the Local Government Finances Act Cap 290 the sources of revenue of village council consist of all receipts derived from any trade, industry, works, service or undertaking carried on or owned by the village; monies derived from licences, permits, dues, fees, charges, or tariffs specified by any by-law made by the village council; all revenue accruing to the village council from the Government, the district council or from any private individual or a public institution by way of contributions, grants-in-aid, endowments, or any other manner of payment. The Village Council can enter into contracts. Any money obtained must be paid to the general fund or a separate fund. The prerequisite here is to ensure that the village council has an account and signatories approved by the village assembly.

But where the initiative will be undertaken by a water user association the members of the association will have to form a management committee. The committee will open a bank account for depositing any monies received in cash or cheques as per the Water Regulations of 1997.

5.8 Application of the Proceeds

From the foregoing discussion the target of the compensation should focus at addressing the following aspects:

- Invest into catchment and riverbank conservation activities in upland and along the river areas through communities working with other stakeholders in reforestation and other conservation activities;
- Invest in efficient upstream water use activities, socio-economic activities.
- Compensation of communities for upstream nature areas for strict conservation purposes;
- Facilitation of various stakeholder groups involved in specific conservation activities and monitoring;
- Training on entrepreneurship skills, commodity design, marketing, accessing loans, formation and operation of cooperative societies (e.g SACCOS).

5.9 Meeting the expectations of the parties

In a scheme like the one envisaged, buyers have certain expectations as well as the sellers.

If such expectations cannot be realized it may threaten the survival of the scheme. For the sellers they will expect *inter alia*;

- Improved livelihood (sustainable livelihoods)

- Improved social infrastructural facilities eg schools, medical, water etc.

For the buyers they will expect *inter alia*;

- Continued (hydrological services) availability of adequate quantity and quality of water
- Conserved catchment, riverbank and environmental integrity.
- Land-use change through land-use plans.

Chapter Six

Conclusion and Recommendations

From the foregoing, building a case on Equitable Payment Scheme for Watershed Services is viable and legal in Tanzania as provided hitherto in the analysis. It is however important to bear in mind the cross-cutting nature of water resource. The scheme should consider the various roles of different institutions as provided in table 3.

The implementation of EPWS involves a number of stakeholders of which two are major players namely; the Forestry and Beekeeping Division (FBD) in the Ministry of Natural Resources and Tourism and the Ministry of Water through the Ruvu-Wami Basin Water Office (RBWO). These give us two possible institutional and legal avenues for EPWS implementation; namely through the FBD and RBWO.

6.1 Option I: EPWS Implementation through (FBD)

This option will inevitably be implemented under the Village Councils through the FBD under the Forest Act.

The Forest Act provides room for the formation of joint management agreement between:- the Director and a district council and a village council.⁴⁹

(i) The Act allows a village council to (a) declare an area of village land to be a village land forest reserve; by submit an application to the Director through a local government authority for a declared village land forest reserve to be *gazetted* as a village land forest reserve.

The Village Council may negotiate a joint management agreement or other arrangement with the Director, some other person or body with respect to the management of a village land forest reserve. It may also establish a committee to manage a village land forest reserve or allocate the duties of managing a village land forest reserve to an existing committee of the village council.

(ii) According to section 39(1) a village council may submit an application to the Director or a local authority having jurisdiction in the area where such village is situate for consent to manage the whole or a part of or an activity within a national or local authority forest reserve managed, in the case of a national forest reserve by the division or an Executive Agency established in relation to a department of the Ministry concerned with forestry and in the case of a local authority forest reserve by such local authority on the basis of a joint management agreement or other arrangement between that village council and the Director, or Executive Agency or that local authority.

⁴⁹ Ibid section 16.

Deleted: e

Deleted: p

Deleted: s

Deleted: w

Deleted: s

A national or local authority forest reserve over which the section applies shall be known as a village forest management area. Before submitting an application to the Director or the local authority for consent to manage, a village assembly must by resolution (a) approve the application which is to be submitted; and (b) where such a committee⁵⁰ has not been established (i) establish a village forest management committee; or (ii) allocate the responsibilities of forest management to an existing village council committee.

Upon such conservation of the village land forest, the Village Councils may build a case with the beneficiaries of the watershed resources that it is their efforts that contributes to the quality and sustainable flow of water. However, the only justification for the Village Council to bargain for compensation is the cost of change in land use which under the land Act is worthy of compensation.

Local Government Finance Act provides under section 9 (a), (b) and (e) for the sources of revenue for village council. They consist of *inter alia*; **all revenue accruing to the village council from...any private individual or a public institution by way of contributions, grants-in-aid, endowments, or any other manner of payment.** Section 9(5) requires that where the monies have been lawfully derived by the Village Council but are not expressly specified under section 9(1) above will also form part of the revenues, funds and resources of the village council and must be paid into **the general fund** of the Village Council. Receipts derived from any trade, industry, works, service or undertaking carried on or owned by the village council in whole or in part may **be paid into a separate fund** for the purpose of that trade, industry or undertaking as per section 9(6).

The disadvantage of this option is that the Village Council won't have the mandate under the water law to do so. It will just remain to be informal arrangement between the participating villages and the willing to pay consumers.

6.2 Option II: EPWS Implementation through (RBWO)

Government Notice No. 370 published on 25/7/97) provides modality for the formation of local water user's associations. The objectives of the association are operation, and conservation of the water catchment area of a given river and its tributaries. The members may decide at the Annual General Meeting the principles to govern conservation, maintain river water works and assess amount to be levied for such costs. Such an association once formed has a legal status and can sue or be sued in its capacity. In addition it can form a management committee with the power to enter into contracts. The contracts once entered bind the association. Together with such power it has the duty to collect and receive any monies due to the association and pay any debts owed to the association. The committee is required to maintain a Bank account through authorized officers and submit audited accounts to the association.

⁵⁰ Sect 32.

Nonetheless the pertinent question to consider is who will be the members of the Water Association? Is it villagers from the respective villages meaning that each village will have a water user association? Or Is it only one Association that will involve all the villages? For the former option it will be a small association thus easy to manage but it might create problems in ensuring equal commitment to the MoU obligations. The latter will be possible with clear undertaking in the MoU that the respective villages have unanimously consented to form a water user association. But it is important to have equal representation in the management committee otherwise it may be a source of conflict. Also the money received must be equally distributed among the villages and deposited in their village general funds or special funds.

Therefore under this option the association will derive its authority to deal with the catchment from the Ruvu-Wami Basin. Involving the Basin is important as the Basin will have to recognize the efforts of the association and may ease the fee charged from the association.

The advantage of this option is that the Association will derive its legality from the Water Act. Under the existing institutional framework of the water sector it will be the lowest level organ.

6.3 Proposal for establishment of EPWS TRUST FUND

Despite the above two options there is a need to establish a Trust Fund for EPWS. The major advantage of this is that the Fund will easily attract financing from different sources and the buyers will also effect their payments through the same fund. The sellers will be paid based on the cost benefit analysis.

Sources of the Fund will thus include:

1. Payments from the buyers
2. Environment Funds.
3. Contribution from local and foreign donors.
4. Contribution from established water service providers.
5. Others.

However, instead of creating a separate trust fund, efforts could be taken to liaise with the Eastern Arc Mountains Conservation Endowment Fund (EAMCEF) so that it can facilitate such a role in order to avoid duplicity and managerial costs. It should also be remembered that the Fund is currently working in the Uluguru area. Involving it as an important stakeholder and eventually facilitator will enable the project to draw various lessons from it and perhaps little effort will be needed to engage it.

Finally in terms of the National Water Policy 2002, catchment and sub-catchment water committees are to be formed. In that context, Basin Water Boards in the new water legislation are to be mandated with the functions of forming such catchment or sub-catchment water Committees through Orders to be published in the Government Gazette. The committees will help in the management of the sub-catchments at a closer local level

range by involving all the stakeholders in implementation and monitoring of the policy and decisions in collaboration with relevant enforcement authorities.

Since the Basin Water Boards Catchment or Sub-catchment Committees are intended to have legal personality, they can enter into contracts / memorandum of understanding (MOU) with any party for the conservation of the basin catchment area.

As shown in the analysis of different pieces of legislation, it seems “*Payment for Watershed Services*” is an activity of latest development on international environment laws. Although not directly, in terms of general interpretation, some of the sector policies in Tanzania are supportive of the initiative. In terms of the National Water Sector Development Strategy 2006, which has been formulated from the National Water Policy 2002 and which in turn forms the cornerstone of the Water Resources Management Bill, the articulation on the same can be discerned.

6.4 Chronology of Activities

1. Approval of the EPWS initiative

-Discussion with the Director of Environment (VPO’s Office)

2. Written endorsement of the Minister of Water/Director FBD

-Discussions with the Minister for water/ Director of water /Director of FBD

3. Written endorsement of the Basin Authority

-Discussions with the Water Basin Authority

4. Formation of Water User Associations / A written decision of the VC

-Consultative meetings with village councils and Director of the District Council

-Drafting the Constitution of the Association

-Registering the Constitution

-Electing management committee

-Open a bank account

5. Memorandum of Understanding

-Consultative meetings with stakeholders on the contents of the would be MoU

-Drafting of the MoU between Companies and the VCs / Water User Association

-Parties deliberation and review of the Draft MoU

-Final Draft of MoU

-Signing the Memorandum of Understanding

-Monitoring and Evaluation of obligations

6.7 Checklist for the MOU

- ✓ Objective -What environmental services are to be the focus of the program?
- ✓ How are these services to be measured?
- ✓ Who should get the payments?
- ✓ Deciding the amount of the payments?
- ✓ How much will farmers be paid?

- ✓ . How is this link to the “amount” of EPWS provision?
- ✓ . How much is the total payments to be made available?
- ✓ . What is the form of the EPWS provision?
- ✓ . What should farmers be paid to do?
- ✓ . Should payments be based on performance, on the adoption of specific i.e should we charge per cubic meter of water received or hectares of forests or agricultural land cultivated ?/management practices or on a whole farm conservation plan?
- ✓ . What is the appropriate baseline from which to evaluate payments?
- ✓ . What is the EPWS administration going to be?
- ✓ . How will the payments be administered? Should the payment be made directly or through the intermediary
- ✓ . How often will the payments be made?
- ✓ . How will compliance be monitored and enforced?
- ✓ . What monitoring criteria will be used?
- ✓ . What penalty will be imposed for non-compliance? If any?
- ✓ . How will payments be appropriated to/ shared by different beneficiaries?

Appendices

Appendix I

Terms of Reference

In conducting the legal and institutional framework analysis the consultant was required to address the following key questions:

- What are the main policy opportunities and constraints for developing EPWS?
- What are the legal opportunities and constraints for developing EPWS? (Property rights, contracts, etc).
- What are the opportunities to ensure that the outcomes are fair to both the buyers and the sellers of watershed services?
- How might the payments be structured?

The legal and institutional framework analysis includes reference to: environmental / natural resource law and policy, water law and policy, agricultural law and policy, forestry law and policy and poverty reduction policy. Reference was also given to laws establishing DAWASCO and DAWASA and the charters of these companies. Water basin authorities were also considered.

Specifically, the study was required to survey the current environmental policy and legal frameworks, to find out the legal and policy opportunities that could make Payments for Watershed Services operational in light of the following;

- ◆ How effective is the current legal and policy framework to provide support in the context of EPWS project (It means understanding the impact on the natural resources management and people's livelihoods).
- ◆ Are there any legal and policy constraints to making payments for watershed services operational in Tanzania? How can these constraints be addressed to provide room for EPWS? What legal mechanism should be put in place to ensure that the EPWS mechanism outcomes are fair to both the buyers and the sellers of watershed services?

Who can really pay or sell the watershed services? (Do policy/laws allow buyers (downstream water users) to pay to sellers (upland communities) or sellers to be paid by buyers? (Need to be assessed in connection to business Acts/laws). In particular is DAWASCO capable of contracting with sellers for provision of watershed services, i.e. is it empowered under its charter or government legislation to make payments to upper catchment farmers as envisaged under the EPWS scheme?

- ◆ What processes and/or modalities of payments for watershed services may need to be put in place/completed in order to have a successful EPWS mechanism? How the required type of payments system should be structured to bring fair outcomes?
- ◆ Assess whether communities (individuals or in groups) can receive payments for environmental services directly or not (It is important to understand legal rights to manage funds)

Indicate who among the community can legally sign the MoU and the contract for equitable payments for watershed services (look at individual, groups, community, authority levels, buyers and sellers).

- ◆ What would be the legal/policy issues that need to be considered to facilitate this signing?

Assess the roles of different management systems modern and traditional/indigenous management and how can they be involved to guarantee successful operationalisation of the EPWS mechanism?

Assessing institutions which are mandated in water resources management and utilisation.

- ❖ Assess water basin authority establishment and roles to water resources management and utilization specifically Ruvu-wami Basin Authority.
- ❖ Assess ownership and access to natural resource utilisation and management
- ❖ Specifically, assess legally land acquisition and ownership

Provide technical recommendations (legally) on relevance of EPWS mechanism in Tanzania with particular emphasis on the Uluguru Mountains

References

Kessy, J.F. (1998). Conservation and Utilization of Natural Resources in the East Usambara Forest Reserves: Conventional Views and Local Perspectives, Tropical Resource Management Papers 18, Wageningen Agricultural University, Department of Forestry.

Madofe Sand Munishi PK, (2005). Forest Condition Assessment in the Eastern Arc Mountain Forests of Tanzania, FBD, Dar es Salaam

Newmark, W.D. (2002). 'Conserving Biodiversity in East African Forests: A Study of the Eastern Arc Mountains Ecological Studies' Springer-Verlag, Berlin-Heidelberg.

Vice President's Office,(1999) Report on Institutional Mandates and Legal Framework for Environmental Management in Tanzania, DSM.

URT (MNRT) (2006 Nov); A Study to Establishing Mechanism for Payments for Watershed Environmental Services for the Rufiji River Basin in Tanzania Forestry and Beekeeping Division, Dar es Salaam

Yanda Z & Munish T (April, 2007) Hydrological and Land Use / Cover Change Analysis for the Ruvu River (Uluguru) & Sigi River (East Usambara) Watersheds, Care-Tanzania DSM.

Stewfano P, Augustin A, & Gunar P,(2003) 'Ensuring that the Poor Benefit from payments for Environmental Services' paper presented at the Workshop on Reconciling Rural Poverty Reduction and Resource Conservation .

List of Laws and Policies analysed

List of Legislation

URT Constitution of United Republic of Tanzania of 1977

Water Utilization (Control and Regulation) Act (42 /1974)

Water Utilization (General) Regulations 1997

Forest Act No 14 of 2002

Land Act, Act No 4 of 1999

Village Land Act, Act No 5 of (1999

Dar Es Salaam Water and Sewerage Authority (DAWASA) Act 20 of 2001

Public Corporations Act No 2 of 1992

Energy and Water Regulatory Authority Act No 11/ 2001

Local Government Urban Authorities Act 8/1982

Local Government (District Authorities) Act No. 7 of 1982

Local Government Finances Act Cap 290

Environmental Management Act (EMA) 20 of 2004

Wildlife Conservation Act No 12 of 1974

List of Policies

Development Vision 2025
National Strategy for Growth and Reduction of Poverty (NSGR)
National Environmental Conservation Strategy (2006)
Agricultural & Livestock Policy (1997)
Water Policy (2002)
National Irrigation Master Plan (NIMP)
Forest Policy (1998)
National Land Policy (1995)
National Human Settlements Development Policy (2000)
Local Government Reform Policy (1998)
Rural Development Policy and Strategy
National Environmental Policy (1997)
National Water Sector Development Strategy 2006-2015