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Project Midterm Review Report

Project: Securing Watershed Services Through SLM in the Ruvu and Zigi Catchments (Eastern Arc Region), Tanzania

UNDP GEF PIMS 5077 / GEF ID 5436; Atlas Award 00086631/ Atlas Project ID 00093855

Evaluation Period: August – September 2018; Report Date 13th September, 2018

Implementing Partner: Ministry of Water and Irrigation, United Republic of Tanzania

GEF Focal Area – Land Degradation Program 3: *Reduce pressures on natural resources from competing land uses in the wider landscape.*

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Project Information Table

Project Title:	Securing watershed services through SLM in the Ruvu and Zigi catchments (Eastern Arc Region).
UNDP PIMS# and GEF project ID#s	UNDP GEF PIMS 5077 / GEF ID 5463; Atlas Award 00086631/ Atlas Project ID 00093855
GEF Focal Areas	GEF Operational Focal Area ¹ : Land Degradation, LD 3; <i>Reduce pressures on natural resources from competing land uses in the wider landscape.</i>
Executing Agency/Implementing Partner	Ministry of Water and Irrigation (MOWI), Tanzania
UNDAP Outcomes and outputs:	<p><u>Cluster 1</u>: Growth for reduction of income poverty</p> <p><u>Component 2</u>: <i>Environment and Climate Change</i></p> <p>Outcome 2: Relevant MDAs, LGAs and Non-State Actors improve enforcement of environment laws and regulations for the protection of ecosystems, biodiversity and sustainable management of natural resources.</p> <p><u>Output 2.5</u>: Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation.</p>
Project Period	5 years: Start Date 2016: End Date - 2020
Project Cost	US\$27,648,858: GEF – US\$ 3,648,858; UNDP: 2,000,000; Gov Co-fin US\$ 22,000,000

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¹ This project is from GEF 5 where the concept of programmes is absent.

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ABBREVIATIONS AND ACRONYMS

APR	Annual Project Report
BWB	Basin Water Board
BWO	Basin Water Office
CO	(UNDP) Country Office
CSO	Civil Society Organisation/ Community Based Organisation
DAWASA	Dar es Salaam Water and Sanitation Authority
DAWASCO	Dar es Salaam Water Supply Company
DC	District Council
DoE	Division of Environment (in the Vice President's Office)
EAMCEF	Eastern Arc Mountains Conservation Endowment Fund
EPWS	Equitable Payments for Watershed Services
FNR	Forest Nature Reserve
GEF	Global Environment Facility
GIS	Geographical Information System
IFS	Integrated Funding Strategy (for SLM in Tanzania)
IGA	Income Generating Activities
ILUMP	Integrated Land Use Management Plan
INRM	Integrated Natural Resource Management
IUCN	International Union for the Conservation of Nature
IWRM	Integrated Water Resource Management
JUWAKIHUMA	<i>Jumuiya ya Wakulima wa Kilimo Hai Usambara Mashariki</i> (Organic Spice Grower's Association)
JUWABODOMVU	<i>Jumuiya ya Watumia Maji Bonde Dogo Mvuha</i>
LD	Land degradation
LGA	Local Government Authority
M&E	Monitoring and Evaluation
MAFC	Ministry of Agriculture
masl	Metres above sea level (altitude)
MDA(s)	(Government) Ministries, Departments and Agencies
MDG	Millennium Development Goal
MLFD	Ministry of Livestock and Fisheries Development
MLHSD	Ministry of Lands, Housing and Human Settlements Development
MNRT	Ministry of Natural Resources and Tourism
MORUWASA	Morogoro Urban Water Supply Authority
MOWI	Ministry of Water and Irrigation
NAWAPO	National Water Policy
NGO	Non-Government Organisation
NIM	National Implementation (Modality)
NLUPC	National Land Use Planning Commission
PBWB	Pangani Basin Water Board

PBWO	Pangani Basin Water Office
PC	Project Coordinator
PCU	Project Co-ordination Unit
PES	Payment for Ecosystem Services
PIR	Project Implementation Report
PLUM	Participatory Land Use Management
PPG	Project Preparation Grant
PO-RALG	President's Office – Regional Administration and Local Government
PSC	Project Steering Committee
RAS	Regional Administrative Secretary
RCU	Regional Co-ordination Unit (of the UNDP)
REDD	Reduced Emissions from Deforestation and Forest Degradation
SLM	Sustainable Land Management
SRF	Strategic Results Framework
Tanga-UWASA	Tanga Urban Water and Sanitation Authority
TFS	Tanzania Forest Service
TZS	Tanzanian Shilling
UNDAP	United Nations Development Assistance Plan
UNDP	United Nations Development Programme
UWABODOMVU	<i>Umoja wa Watumia Maji Bonde Dogo Mvuha</i>
UWAMAKIZI	<i>Umoja Wa Wakulima Wahifadhi Mazingira Kuphuhwi-Zigi</i> (Farmers Association)
UWASA	Urban Water Supply and Sanitation Authority
VFMP	Village Forest Management Plans
VNRC	Village Natural Resource Committee
VPO	Vice Presidents Office(of the Government of Tanzania)
WAKUAKUVYAMA	<i>Wakulima wa Kuhifadhi Ardhi na Kutunza Vyama vya Maji</i> – or ‘farmers for soil and water-source conservation’, a farmer’s association and registered NGO
WRBWB	Wami-Ruvu Basin Water Board
WRBWO	Wami-Ruvu Basin Water Office
WUA	Water User Association
WWF	World Wide Fund for Nature

Executive Summary

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Brief Project Description

1. The project was designed to remove the barriers hindering the water resources and related sectors from using sustainable land management technologies to address the drivers and threats to watershed services of the Uluguru and East Usambara Mountains of Tanzania. These mountains give rise to the Ruvu and Zigi Rivers respectively, form part of the Eastern Arc chain, and are amongst the most important catchment areas in the country. The Ruvu supplies water to the city of Dar es Salaam while the Zigi services the city of Tanga. The watershed services are threatened by deforestation; uncontrolled use of fire in ecologically sensitive habitats; inadequate soil and water conservation measures and other inappropriate farming techniques; over-stocking and overgrazing; population pressure and encroachment in riparian zones; unsustainable harvesting for firewood, charcoal production and building; unregulated and illegal water abstractions (and lack of compliance with water basin regulations); illegal gold mining; and encroachment into riparian zones (linked to increased population pressure). These lead to increased erosion and sedimentation; pollution and eutrophication; decreased water flows (and increased water demand).
2. Although the Government of Tanzania is committed to addressing the interconnected issues of land degradation, water security and poverty, its ability to resolve these problems by integrating SLM into watershed management is limited by: (i) lack of a collaborative institutional framework that enables water basin authorities and stakeholders to effectively plan, monitor and adapt land management and leverage

² This project is from GEF 5 where the concept of programmes is absent.

investments for SLM; ii) staff, resource and technical capacity deficits; and (iii) inadequate demonstrated experiences in integrated watershed management approaches at the landscape level.

3. The barriers will be addressed via two **components**, the first focussed on building institutional capacity and strengthening co-ordination amongst Water Basin Authorities and other relevant stakeholders, and the second on implementing practical Sustainable Land Management (SLM) interventions to address land degradation in forests, rangelands and farmlands, with the overall purpose of securing watershed services and improving livelihoods.
4. **Component 1** provides for several areas of project support, including: (i) development and implementation of Integrated Land Use Management Plans (ILUMPS) and Village Land Use Plans; (ii) establishing or strengthening multi-sectoral stakeholder committees whose role will be to co-ordinate dialogue and action amongst stakeholders, and raise awareness about SLM; (iii) forming and strengthening Water User Associations and capacitating them to perform their roles effectively; (iv) improving compliance and enforcement; and, (v) increasing the funds available for SLM.
5. **Component 2** targets the widespread adoption of SLM practices within agricultural and livestock production systems and the conservation and rehabilitation of degraded forests in the two river basins. Key areas of project support include working with selected communities and relevant basin management authorities to: (i) reduce human-induced pressures (e.g. illegal harvesting and mining and unwise use of fire) and promote sustainable forest management and forest restoration both within and outside of protected areas; (ii) develop and test sustainable livestock management technologies; and (iii) increase household food production and incomes through uptake of SLM and Sustainable Rangeland Management practices, and the development of diversified, alternative sustainable livelihoods.

Table 1: Summary of Project Components, Outcomes and Outputs

Component 1: Establishing a collaborative framework for water basin authorities to effectively plan, monitor and adapt land management and leverage national and regional investments for integrating SLM into watershed management	
Outcome 1: Enabling institutional arrangements are in place to support mainstreaming of SLM into Integrated Water Resource Management in the Ruvu and Zigi catchments	Output 1.1: Integrated Land Use Management Plans and Village Land Use Management Plans are developed and implemented in 7 districts, ensuring optimal allocation of land to generate critical environmental and development benefits
	Output 1.2: Multi-stakeholder committees are established (or strengthened) and active in promoting co-ordination and dialogue in support of mainstreaming of SLM into other sectors, programmes and policies
	Output 1.3: Water User Associations (WUAs) and River Committees are established and capacitated to perform their roles effectively in all key sub-catchments within the Wami-Ruvu and Pangani river basins
	Output 1.4: Wami-Ruvu and Pangani River Water Basin Authorities and water users understand water basin regulations and are capacitated to identify and prosecute water and land-use infringements and harness greater compliance
Outcome 2: Finances available for SLM investments are increased by accessing new streams of public finance and more effective alignment of existing sectoral contributions	Output 2.1: New streams of public finance are identified and accessed
	Output 2.2: Sectoral (forestry, agriculture and water) allocations to SLM are re-aligned
	Output 2.3: The effectiveness of SLM investments is improved
Component 2: Reducing the effects of land degradation on watershed services and improving livelihoods through landscape-level uptake of SLM measures	
Outcome 3: Developing institutional capacity	Output 3.1: The institutional capacity (staff and resource requirements for promoting SLM) is strengthened in the Wami-Ruvu and Pangani Water Basin Offices, regional offices of line ministries and local government institutions

for promoting sustainable forest and land management in support of IWRM	Output 3.2: The technical knowledge and skills for integrating SLM into IWRM are increased amongst relevant staff of Water Basin Offices, relevant line ministries, and local government institutions
	Output 3.3: Extension services are capacitated to promote uptake of SLM and promote sustainable livelihoods
Outcome 4: Increasing the uptake of sustainable land management practices to secure watershed services and improve livelihoods	Output 4.1: Sustainable land management practices promoted and natural rehabilitation facilitated in 10,000 ha of forest
	Output 4.2: Household food production and incomes increased by 30% (for actively participating villages) through promotion of sustainable income generating activities in participating villages
	Output 4.3: Sustainable livestock management technologies developed and tested and infrastructure developed to operationalize SLM in rangelands

6. The total cost of project is estimated at US\$ 27,648,858, with the GEF providing 13.2 percent (\$3,648,858); UNDP contributes 7.2 percent (\$ 2 million) and the Government provides 79.6 percent (\$22 million).
7. Project implementation is led by the Ministry of Water and Irrigation in close collaboration in close partnership with the ministries responsible for land, forestry, environment, and other Natural Resources, National Land Use Planning Commission, the Wami-Ruvu and Pangani Basin Water Boards Offices, Morogoro, Tanga and Dar es Salaam Urban Water and Sanitation Authorities, Division of the Environment in the Vice President's Office, the Prime Minister's office – Regional and Local Government (represented by the Local Government Authorities of the four target Districts) and several Water Users Associations along the two rivers.

Project Progress Summary

8. Overall project implementation is rated Satisfactory. The project has delivered about 57 percent of the end of project targets with a budget expenditure of 54 percent and a co-finance mobilization of 17.48 percent.
9. **Progress towards Outcome 1 – Satisfactory (75% delivery):** Four District Land Use Management Plans integrating SLM have been developed for Morogoro, Mvomero, Mkinga and Muheza District Councils; from which sixteen 16 village land use management plans integrating SLM have been developed and approved by village and district authorities. The District Land Use Framework Plans developed include ones for Morogoro, Mvomero, Mkinga and Muheza District Councils. Villages include (2 in Mkinga, 4 in Muheza, 6 in Morogoro DC and 4 in Mvomero District).
10. **Progress towards outcome 2 – Moderately Unsatisfactory (40% delivery):** The project objective is to move SLM funding away from project to systemic mode (via budgets and a dedicated fund) – but despite the huge amount of work done, this hasn't happened. There is an 8% increase in SLM fund allocation by LGAs and aligned ministries involved in the project. However, this has not increased funding for SLM because the budgets have not been financed; hence the allocated amount was largely not available. Three funding proposals have been submitted to the National Water Fund, with one of them recently funded worth about US\$ 977,777.78³. It is expected that the other two will be financed soon, worth US\$ 805,010 (TZS 1,811,272,500) and US\$ 1,118,876 (TZS 2,517,470,022). In addition, Tanga-UWASA has nearly doubled its periodic contribution to UWAMAKIZI (part of co-finance) from TSh 100 million to 180 million (US\$ 44,400 to US\$ 80,000) under its payment for ecosystems services initiative. The Government has also contributed 17.48 percent of its committed co-finance, pointing at improved alignment of the current sectoral funding towards SLM. It is however difficult to rate the percentage achievement of this outcome because the baseline value of SLM funding was estimated at zero yet the target was given as 15 percent increase. The public expenditure review estimated public expenditure for SLM related activities ranged from 0.5% -7% for the SLM sector ministries and around 20% for sector departments at Local Government

³ Tsh 2.2 billion at an exchange rate of 2,250 Tsh to the US\$

Authorities (with a 20.46% high for Muheza). SLM expenditure was 1.86 percent for Ministry of Agriculture and Livestock, 0.47 percent for the Ministry of Water and Irrigation, and 6.83 percent for Tanzania Forestry Service. The report recommended a minimum 3 percent allocation for ministries responsible for sectors that are directly impacted by SLM, and a gradual increase on a yearly basis to 5%, 7%, 9% and 10% in a span of five years. It also recommended a minimum of 20% allocation by departments responsible for sectors that are directly impacted by SLM, with a gradual increase to 30% in five years. Although a great deal of work has been done on this outcome, there is no significant increase in systemic financing of SLM since the SLM Fund will not materialize and the challenges of financing SLM through budgets persist. SLM competes poorly in times of budgetary shortfalls, even when relevant institutions include it in their budgets. Projects still remain the foreseeable vehicle for financing SLM.

11. **Progress towards Outcome 3 – Moderately Satisfactory (44% delivery):** Two mini automated weather stations (measuring Temperature, rainfall, relative humidity, wind speed and wind direction) have been installed in Zigi, one in the upstream at the National Institute Malaria Research (NIMR) and the other station installed downstream at Mabayani Dam, rehabilitation of 15 river gauging stations for river flow monitoring in Ruvu and Zigi catchments, 10 GPS procured and distributed to Implementing Partners (IPs). The National Land Use Planning Commission (NLUPC) has acquired GIS capacity, including GIS software licences for 3 users, 2 GIS processing heavy duty computers and 1 Map/Graphic printer (with capacity of printing A3 size). Sixteen people have been trained on GIS and its use as decision making support tool. They were 14 male and 2 female from NLUPC, Ministry of Minerals, Basin Water Boards, Ministry of Water and Irrigation and LGA.
12. Wam/Ruvu and Pangani Basin has improved data collection and processing, and has developed rating curves for eight monitoring/measurement stations consistently; no rating curve for any of the 18 stations had been developed at project inception due to lack of consistence in data collection and capacity to collect sufficient amount of data for doing the analysis. The number of staff with knowledge and skills for integration of SLM into resource use and management practices has increased from 104 at project inception to 242 (165 male and 77 female), an increase of 43%. In addition, awareness was conducted and practical trainings on integrating water resources management involving LGAs, WUA management Committees and SLM piloting farmers.
13. **Progress towards Outcome 4 – Satisfactory (70% delivery):** 22,143 ha have been put under improved management (4,727 ha of agriculture land, 15,452 ha of rangeland, 917 ha of forest land outside the protected forest and 1,047 ha of protected forest). A total of 8,000 Seedlings have been planted over an area of 207 ha to encourage and catalyse natural regeneration (7,000 in Zigi catchment 1,000 in Ruvu). Three hundred permanent beacons have been installed in strategic places marking the sixty meter radius of the river channels. This protects 152 hectares (101 ha in Zigi and 51 ha in Ruvu) of river buffer with about 31,830 surrounding community members sensitized on protection of reserved land. In Zigi catchment, about 30 sites in 8 villages have been replanted with 5,400 tree seedlings of natural species including *Allanblackia* spp, *Newtonia* spp, *Tabana*, spp, *Beilchmedia* spp and *Draceana* spp. Covering an area of 225 ha outside the protected forests.
14. In Zigi Catchment, the project demonstrated use of alternative energy sources and fuelwood efficient stoves; 80 energy saving stoves installed in 7 villages have catalysed construction of over 950 stoves on demand from inspired households in the villages and surrounding communities. These stoves have efficiency of 50 to 65%, cutting firewood demand drastically. Other IGAs include fishponds and bee keeping. About eight percent of livestock keepers are adapting sustainable rangeland management practices; three cattle water troughs have been constructed in Zigi catchment, serving 88 families of livestock keepers with a livestock population of 4,600 which previously negatively impacted 150 ha of riverbanks. Three village (Mashewa, Kimbo and Shebomeza) community gravity water projects have been completed; providing these communities with clean water away from the river bed.

15. Income generating activities have been demonstrated: Two fish-farming groups have been established with a total of 63 members (50 male, 13 female) and provided with improved fish ponds whose capacity can produce 27 tons of fish per year with a local market value of 175 million Tanzanian Shillings. In Ruvu catchment 350 members (266 male, 124 female) from 9 groups and 5 WUAs have established beekeeping learning sites, with a total of 360 beehives. These farmers need extension support to improve honey production, processing and marketing. In Zigi catchment production levels for cereals in Muheza District has increased slightly for participating farmers from 2.0 tons/ha at project inception to 2.2 tons/ha.
16. The MTR finds that the project design was based on a clear and highly participatory analysis of the threats, root causes and barriers to the use of SLM for watershed management that simultaneously improves livelihoods; and that the project was developed with the full support of the Government and is in line with all the key policies relevant to the water resources sector. It addressed urgent priorities identified in the country's key economic development policies and programs. However, a new barrier to the effectiveness of the Water Users Associations has emerged, in the form of the new directive on revenues. The government has directed that all revenue generated by government units be remitted to the Central Treasury to be allocated via the budgetary process. This will make it difficult for the Water Users Associations to retain revenues raised through fines and part of fees for legal water abstractions. The MTR finds that the Project M&E has generated several best practices.

MTR Ratings and Achievement Summary Table

Measure	Achievement Rating		Achievement Description
Project Strategy	Satisfactory		
Progress Towards Results – the average delivery is estimated at 52%, which gives an overall rating satisfactory at MTR; however because of the low score for Outcome 2, the MTR rates this as <u>Moderately Satisfactory</u>	Project objective	Satisfactory	See key impacts in para 9 above
	Outcome 1	Satisfactory	Estimated at 75% delivery (see key deliverables in para 9 above);
	Outcome 2	Moderately Unsatisfactory	Estimated delivery at 40% (see key deliverables in para 10 above);
	Outcome 3	Moderately Satisfactory	Estimated delivery at 44% (see key deliverables in para 11 above);
	Outcome 4	Satisfactory	Estimated delivery at 70% (see key deliverables in para 13 above);
Project Implementation & Adaptive Management – Overall rating is <u>Satisfactory</u>	Management Arrangements	Satisfactory	There is a strong sense of ownership of the project amongst the government partners, who have appointed a technical person as focal point for the project. There is a strong and effective PCU supported by a technical committee; there is clear evidence of an active and engaged PSC
	Work Planning	Satisfactory	There is clear evidence of participatory work planning processes; work plans are in line with government, UNDP and GEF.
	Finance and co-finance	Moderately Unsatisfactory	Project budget is US\$ 27,648,858 of which US\$ 3,648,858 (13%) is from GEF, US\$ 2,000,000 (7%) from UNDP and US\$ 22,000,000 (80%) Government co-finance. There are strong financial management systems. The project has spent 54.2% of the total budget (US\$ 3,061,788.72), of which US\$ 2,679,733.98 (73.44%) is from the GEF and US\$ 382,054.74 (19.1%) is from UNDP co-finance. Government has mobilized 17.48 percent of its committed co-finance (TSh 8,781,675,033.00 or

Measure	Achievement Rating		Achievement Description
			US\$ 3, 844,866.5 out of US\$ 22 million committed). UNDP should provide the remaining co-finance and should grant the project a two year no-cost extension to allow the utilization of those funds to support the IGAs and secure WUAs.
	Project-level Monitoring and Evaluation Systems	Highly Satisfactory	Project had a fairly strong M&E plan at design, which has been implemented fairly well. The PCU has an M&E advisor; all partner institutions and Water Users Associations are engaged in M&E, making it cost-effective.
	Stakeholder Engagement	Highly Satisfactory	Project design was informed by a detailed stakeholder analysis; project design (PPG) was highly participatory and project implementation is also highly participatory. Majority of relevant stakeholders understand the project and their roles in it, and are fulfilling these roles.
	Reporting and communication	Moderately Satisfactory	Reporting is done in accordance with UNDP and GEF requirements. The project has produced several technical products, which, however, need technical editing before being shared widely.
Sustainability – overall rating is <u>Unlikely</u>	Financial risks to sustainability	Significant	Inadequate finance for SLM was recognized as a key barrier to its adoption in watershed management. However, although the project stakeholders have done some work to mobilize additional finances, these efforts have not borne fruit yet; no additional finance has been mobilized. The eight percent increase in institutions that have SLM budgets has not led to additional funds since these budgets are inadequately financed and SLM competes poorly when there is budget deficits. The proposed SLM Fund won't materialize because there is no legal backing for it. The Water Use Associations will need to generate revenue to sustain themselves after the project ends; the new government directive on centralization of all government revenues means that the WUAs cannot start charging for any services until the acquire the government issued electronic cash register and that they have to submit all revenues to Central Government and request for allocation.
	Socio-economic risks to sustainability	Significant	The project has started work on income generating activities; beehives have been distributed and three fisher-groups supported. However, these income generating activities are at a very small scale and are unlikely to provide adequate replacements to the livelihood options that communities are giving up by vacating the sixty meter radius of river channels. Project experience so far shows that communities are willing to comply with the Water Act as long as there are clear incentives and disincentives for compliance.

Measure	Achievement Rating		Achievement Description
	Institutional Framework and Governance risks to sustainability	Significant	The Water Users Associations are critical for local level enforcement of the Water Act along the important river channels. However, these community based organizations are still young and have serious capacity deficits, and unclear sustainability options since the income generating activities are still rudimentary and the SLM Fund will not materialize. There is need to focus on empowering these organizations to transition them into resilient institutions.
	Environmental risks to sustainability	Not significant	The interventions of the project are aimed at restoring ecosystems integrity and functionality, hence increasing its resilience.

Summary of conclusions, recommendations and lessons learnt

Conclusions

17. The stakeholders have demonstrated a very high degree of collaboration and coordination; credited to the strong PCU and senior management of partner institutions who have demonstrated high commitment and drive. The project has made significant progress towards the objective of integrating the use of sustainable land management to alleviate land degradation, maintain ecosystem services and improve livelihoods in the Ruvu and Zigi Catchments. Implementation of the project is in substantial compliance with the expected results, and it can be taken as an example of **‘good’ project**. The project is well-integrated systemically in the partner institutions, particularly the Ministry of Water and Irrigation, Pangani and Wami-Ruvu Basins Water Boards as well as the Local Government Authorities within the project area. The project has been well-managed and has demonstrated commitment to gender mainstreaming. The implementation and governance arrangement, stakeholders’ participation and M&E have been rated as *‘Highly Satisfactory’*. The project is highly relevant, meeting a felt need at the local, national and international level.
18. Despite challenges with disbursements, project implementation has progressed fairly well with about 57 percent progress towards indicators with about 54 percent budget spent; this is evidence of an appropriate implementation arrangement. Early impacts are significant: sediments loads measured at 11 stations in Ruvu catchment and 6 stations in Zigi catchment registered an average of 27 percent reduction in soil erosion (exceeding the end of project target of ten percent). This is impressive as it happened concurrently with increase in mean annual river flow rate, which rose by 20 percent for Ruvu River (from 60 m³/sec at project inception to 72 m³/sec and 21.64 percent for Zigi River (from 5m³/s at project inception to 6.082m³/s) measured between January and December 2017). This is double the end of project target. There is a three percent improvement in household welfare for households adopting income generating activities; yields of maize have increased from 2.5 tons/ha at project inception to 3.8 ton/ha for farmers adopting SLM measures, with concurrent increase in income from TZS 480,000 to TZS 550,000 per year. The project has therefore effectively demonstrated that SLM is a powerful tool to address complex IWRM and Development Plan challenges, and that communities are ready and willing to play their part in IWRM when the incentives and disincentives are clear.
19. However, there are a few challenges. With four outcomes, 13 outputs and 69 groups of activities covering a large area (over the two basins), the project was ambitious. Thus the scale of the implementation/piloting is very small given the huge magnitude of the challenge in each basin. In addition, at MTR the returns from income generating activities are too low to adequately compensate the lost opportunities for those vacating the sixty meter radius of the river channels. This is against a background of heightened expectations from participating communities and WUAs. It is therefore not advisable to scale down the project to one basin to consolidate impacts. This is because the project has demonstrated best practices in community

participation in IWRM via WUAs, including engaging WUAs in M&E processes; engaging previous practitioners of illegal activities in the WUAs and therefore guardians of the watershed. However, this could be reversed if the project is withdrawn from one basin or benefits from IGAs continue to be limited, with serious reversals to the impacts already demonstrated.

20. The proposed SLM Fund is unlikely to materialize because it lacks a legal basis. Both UNDP and Government have been slow in providing committed co-finance, compounding financial access as a barrier, and limiting the potential for upscaling. The project sustainability is still threatened by inadequate socio-economic benefits and weak Water Use Associations.

Lessons learnt

- *Working through government structures and systems creates a good platform for the political commitment in SLM interventions as demonstrated in the restoration of the Amani plateau in the Zigi catchment through consolidated engagement from national to community levels, with demonstrable wider incentives and disincentives and the observation of the rule of law.*
- *Commitment without finance is not enough: Implementation of SLM through government structures and systems imply the respective institutions owning and meeting the necessary costs. Although the institutions – MDAs, LGAs and Basin level institutions have demonstrated commitment including inclusion of SLM interventions in their plans, funding has remained limited. The risk is that gradual loss of results after the project if these institutions remain resource handicapped.*
- *Timing of disbursements of funds for SLM is critical because many of the activities are time sensitive – missing one rainy season may mean a whole year lost for project implementation;*
- *Involving communities via awareness raising is a cost effective way of protecting watersheds, but is highly dependent on clear incentives;*
- *Many people are aware of the local level laws governing watershed management but they will not comply unless there is a clear disincentive;*
- *Multidisciplinary collaboration is a powerful tool, but it can be difficult and expensive. It requires patience and negotiation skills, backed by commitment by senior management; as well as broad understanding of costs and benefits of sector specific interventions/activities on overall watershed services; it needs champions.*
- *IGAs can be a clear incentive for watershed management but they have to be adequate and delivered early in the process.*

Recommendations

Review Issue	Recommendation	Responsible Party	Timeline
Project strategy	Indicators and risks: Although the strategic results framework has too many indicators and targets, many of them worded as outcomes and/or outputs, it is noted that the PIR has streamlined the outcome level indicators, selecting only a few robust ones. The project could therefore modify the SRF indicators to reflect those in the PIR. It could also keep all of them if they are deemed necessary as an annual project monitoring tool.	PMU	Immediate ly
	The indicator for Outcome 2 (% increase in SLM funding) with a target of 15 percent increase is problematic because the baseline was given as zero; meaning any amount would already be a huge increase in percentage. The logframe and PIR	PMU	Immediate ly

	<p>should be updated to reflect the baseline values established by the public expenditure review.</p> <p>Risks: the project design identified nine risks, with only one accorded a moderately high probability of occurrence. This placed the project in the Low risk category. The probability rating of two risks should be upgraded from Low to Moderately High. These are: a) Government institutions lack the resources and/or capacity to implement the project or to sustain gains once external project support has been withdrawn; and b) Local level economic growth fails to provide adequate returns on investment in SLM, or the economic gains of SLM are eroded by external factors such as rampant inflation. There should have been two additional risks: a) that the livelihood and income generating alternatives offered by the project may fail to provide adequate incentives for long-term adoption of SLM practices, despite the demonstration by the project; b) That the SLM Fund may lack the Law supporting its establishment and capitalization. Previous experience of establishing the Environment Fund (under the VPO) and attempt to establish the REDD+ Fund (under Forestry) have proven that these Funds need special provisions in the Law to enable their creation and capitalization.</p>	PMU	Immediately
Management implementation	<p>Stakeholder engagement: Implementation of the SLM project through multidisciplinary collaboration has created great synergies and also expectations from the partners. This collaboration requires effective management with clear partnership mechanisms for continued partnerships beyond the project. Operationalization of the Catchment and sub-catchment committees is the best starting point. Other arrangement would include the planned Trust Fund.</p> <p>The project newly formed Sub-catchment Committees should be empowered further to provide an effective coordination and reporting mechanism for the Water Users Associations at the local level.</p> <p>Work planning and reporting: It is recommended that the project improve the quality of all its publications and awareness raising materials before sharing them widely. The PCU would benefit from the services of a part time Technical Advisor, provided for at design but not yet hired. This has been demonstrated as a best practice by PIMS 5106 - Enhancing the Forest Nature Reserves Network for Biodiversity Conservation in Tanzania.</p> <p>Finalization of the Village Landuse Plans, facilitation of established WUAs, restoration of watersheds and facilitation of the established IGAs require uninterrupted funding. UNDP should step up its fundraising efforts to meet its committed co-finance to ensure that these interventions are completed and the project outcomes are realized by the end of the project. The MTR notes that the delayed disbursement was likely to affect conclusion of the project activities by 2021 closing date considering the lengthy consultation processes required to finalize the VLUPs through steps 5 and 6. The MTR feels that the established institutions – WUAs and catchment Committees, and the IGAs will require time to mature and therefore cannot be fast tracked in the remaining period even if funding was made available fully. A 2-years no-cost extension period will be required for logical completion of the remaining activities.</p> <p>Financial planning and co-finance: Overall expenditure as of August 2018 was 54.2% with component 1 registering a 21.07% over expenditure mainly because of the additional activities included in 2016. This component will therefore require revision on the remaining activities and prioritization of funding for this critical component.</p>	<p>PMU with support of PSC</p> <p>PMU with support of PSC</p> <p>UNDP and PSC</p> <p>UNDP</p>	<p>Immediately</p> <p>Soonest possible</p> <p>Immediately</p> <p>Soonest possible</p>

	Review of the project scope: The Project workplan/activities should be revised to focus on priorities that will consolidate impacts. For instance the establishment of the SLM Fund should be dropped and emphasis focussed on further fund raising to provide funds for upscaling the initiatives throughout the basins. Empowering WUAs, expansion of the income generating activities and completion of steps 5 and 6 of the land use plans should also be prioritized.	PMU with support of the PSC	Immediately
	UNDP to identify and to communicate transparently the reasons for the regular disbursement delay to inform proper planning.	PMU with support of the PSC	Soonest possible
	There exists a potential for engagement of the private sector. The MoWI and the other implementing partners should forge and promote partnerships with private sector and increase efforts on new funding options including development of high quality proposals to access the significant funds from the Water Fund, negotiating and engaging new stakeholders such as the large water users – cement factories in Tanga and Dar es Salaam, breweries, cold drinks companies, etc. The planned process to establish Water Trust Fund should be hastened as there is interest for the private sector to contribute to such initiatives as part of their Corporate Social responsibility CSR.	UNDP	Immediately
	Link and work with other government agencies i.e. the VPO, MoFP, Ministry of Agriculture – for the Smart Agriculture Window and the respective National Implementing Entities (NIEs) on preparations to access GEF 8 funds targeting the Land Degradation Neutrality (LDN) angle, GCF and Adaptation Fund;	PMU with support of the PSC	Soonest possible
	Most implementing partners have included SLM activities in their workplans and budgets. However financing of such activities from own sources remains poor. Lobbying should continue through the PSC and the Focal Points to ensure SLM is prioritized during financial planning.	UNDP CO and RCU	Soonest possible
	The income generating activities should take on a value chain approach. The PCU should acquire additional capacity in this field, especially enterprise development.	PSC	Soonest possible
Sustainability	The Water Users Associations are critical for delivering project results and sustaining them after the project ends. Majority of the old and newly formed WUAs still require a lot of support to make them effective. Many still face challenges with basics; they lack offices, transport or operational funds. This is exacerbated by unclear sources of revenue. With the proposed SLM fund unlikely to materialize, it is important to focus attention on raising additional funds from other sources, including providing income generating activities for the WUAs.	PMU with support of PSC	Soonest possible
	In addition, the institutional capacity building work should not be rushed once UNDP co-finance is availed. It is recommended that the project be extended by two years to increase the probability of creating resilient WUAs. It is particularly important to support them through the local and general elections of 2021 when political considerations might undo most of the benefits from the project if it is closed earlier, and if the benefits from income generating activities are still considered inadequate compensation for the opportunity cost of the sixty meter radius along the river channels.	UNDP and PSC	Soonest possible

	<p>The National Water Fund is perceived as an alternative to the proposed SLM Fund, and has already provided close to 1 million US\$ under one proposal, with two more in the pipeline. However, the project partners should engage high gear in mobilizing additional funds for supporting SLM implementation, especially empowering Water Users Associations and advancing income generating activities. It is recommended that the project develop an exit strategy immediately, to provide ample time to discuss it with potential funders, identify additional potential sources of funding for SLM and provide material/information for crafting a business case for private sector investment in SLM.</p> <p>Other options to be considered as part of the exit strategy include lobbying Local Government Authorities and other implementing institutions to continue budgeting for and financing initiated interventions, especially support to Water Users Associations and income generating activities; Fast track establishment of the Tanga Trust Fund; formulate a clear business case for private investment into watershed management; develop concepts for available international climate and Disaster Risk Reduction funds such as GEF 8, GCF, LDCF, Adaptation Fund, involving the Vice President's Office as the GEF Focal Point; develop concepts and sell them to bilateral donors (NORAD, Dutch, CIDA); improve quality of technical advice to produce bankable funding proposals.</p>	<p>PMU with support of PSC</p> <p>PMU with support of PSC</p>	<p>Soonest possible</p> <p>Soonest possible</p>
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MTR Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Name of Consultant: _____ Veronica Nyawira Muthui _____

Signed at *Leverkusen, Germany*, on 13th September, 2018

Name of Consultant: _____ Stephen Mariki _____

Signed at Dar es Salaam, Tanzania on 13th September, 2018

I also approve this MTR report

1) Veronica Muthui, signed at Leverkusen on 13th September, 2018

2) Stephen Mariki, signed at Dar es Salaam, Tanzania on 13th September, 2018

1 INTRODUCTION

1.1 PURPOSE OF THE MID-TERM REVIEW (MTR)

1. All GEF agencies are required to conduct a Mid-Term Review (MTR) half-way through implementation of GEF-funded, full-sized projects (FSP). The Terms of Reference are detailed in Annex 1. The overall purpose of the MTR is to assess progress towards the achievement of the project objectives and outcomes, identify early signs of project success or failure and specify any necessary changes required in order to set the project on-track to achieve its intended results. The MTR is an integral part of the project's monitoring and evaluation cycle, contributing to knowledge-sharing and reflexive, experiential learning. It should serve as an agent of change and play a critical role in promoting accountability and continual improvement.
2. The specific objectives of the MTR are:
 - a. Assessment of **progress** towards results;
 - b. Monitoring of **implementation** and **adaptive management** to improve outcomes;
 - c. Early identification of **risks to sustainability**; and,
 - d. Provide supportive recommendations to improve implementation of the second half of the project.
3. The information presented in the MTR Report will feed into the GEF IEO (Independent Evaluation Office), UNDP IEO, and other UNDP databases for aggregation and analysis.

1.2 MTR APPROACH AND METHODOLOGY

4. The MTR was conducted in close coordination with the Ministry of Water and Irrigation, Wami-Ruvu and Pangani Basin Water Boards and UNDP. The MTR took place from 13th August to 30th Sept 2018. The Inception Report (Annex 2) contains the methodologies and activity schedule used to conduct the review. It was prepared in consultation with UNDP and the Project Coordination Unit. The list of persons consulted is given in Annex 3.
5. The review was undertaken in a participatory approach using a mix of desk reviews, in-depth interviews (face-to-face, and by Skype) and physical observation of results on the ground. Data was triangulated from these different sources to arrive at findings, conclusions and recommendations.

Desk review of documents

6. The key documents reviewed are contained in Annex 4. They include the UNDP Project Document, the Project Inception Report, the two Project Implementation Reports (PIRs), Minutes of the Project Board Meetings, Strategic Plans of the Wami-Ruvu and Pangani Basin Water Boards, UNDP and GEF strategic program documents. The document review provided a basis for the analysis and enabled the determination of how the project is contributing to national development programs, plans and policies. The review of UNDP and GEF documents was necessary to establish linkages of the project with the umbrella programmes, such as United Nations Development Assistance Framework (UNDAF), Country Programme and the GEF Strategic Objectives.

Data collection and analysis

7. The evaluators spent ten days visiting the intervention sites in Ruvu and Zigi Catchments to assess progress and appreciate the difficulties faced by the project implementers concerning the huge geographic area covered by the project (Review itinerary is in Annex 5). At each site, the reviewers observed the progress on the SLM

activities of the Water User Associations (demarcation of river beds and reserve areas, tree nurseries and bee keeping) and held structured group discussions with the members of the Water User Associations and technical staff responsible for water resources management in the catchments. The reviewers also held discussions with staff of other project partners including the Tanga UWASA, Tanzania Forest Service (Amani and Uluguru Nature Reserves) and Project Steering Committee.

Evaluation Rating Criteria

8. The main dimensions of project performance that were rated are: outcomes, quality of monitoring and evaluation (M&E), quality of implementation and execution, and sustainability (environmental, social, financial and institutional). Project performance was evaluated and rated using the standard rating scales set out in the GEF IEO (2017) and UNDP (2012) guidelines (see Box 1 for a summary). The primary reference points for assessing performance were the indicators and targets set in the Strategic Results Framework, with consideration given to contextual factors. The actual evaluation was guided by the issues outlined below:
9. **Project Strategy (Project design and Results Framework/Logframe):** The MTR examined the problem addressed by the project and the underlying assumptions; reviewed the effect of any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document; reviewed the relevance of the project strategy and assessed whether it provides the most effective route towards expected/intended results; checked if lessons from other relevant projects were properly incorporated into the project design; examined how the project addresses country priorities and reviewed country ownership. The MTR also reviewed decision-making processes to determine if the planning phase took the perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources; and, the extent to which relevant gender issues were raised in the project design.

Box 1: Progress towards results rating scale

<p><u>Highly Satisfactory (HS)</u> --- The objective/outcome is expected to achieve or exceed all its end-of-project targets, without major shortcomings. The progress towards the objective/outcome can be presented as “good practice”.</p> <p><u>Satisfactory (S)</u> -- The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.</p> <p><u>Moderately Satisfactory (MS)</u> -- The objective/outcome is expected to achieve most of its end-of-project targets but with significant shortcomings.</p> <p><u>Moderately Unsatisfactory (MU)</u> -- The objective/outcome is expected to achieve its end-of-project targets with major shortcomings.</p> <p><u>Unsatisfactory (U)</u> -- The objective/outcome is expected not to achieve most of its end-of-project targets.</p> <p><u>Highly Unsatisfactory</u> -- (HU) The objective/outcome has failed to achieve its midterm targets, and is not expected to achieve any of its end-of-project targets.</p>
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10. **On Progress Towards Outcomes Analysis:** The MTR reviewed the logframe indicators against progress made towards the end-of-project targets; undertook comparison and analysis of the GEF Tracking Tools at the Baseline with the one completed right before the Midterm Review; identified remaining barriers to achieving the project objective in the remainder of the project; reviewed the aspects of the project that have already been successful, identifying ways in which the project can further expand these benefits.
11. **On Management Arrangements:** The MTR reviewed overall effectiveness of project management as outlined in the Project Document, determined if changes have been made and if they are effective. It assessed if responsibilities and reporting lines are clear and if decision-making is transparent and undertaken in a timely manner. Further, it reviewed the quality of execution of the Executing Agency/Implementing Partners along with the quality of support provided by the GEF Partner Agency (UNDP).
12. **On project implementation,** the review assessed if there have been delays in project start-up and implementation, identifying the causes and examining if they have been solved; it also examined if work-

planning processes are results-based, and if changes have been made to the original logframe and if it is being used as a management tool.

13. **On finance and co-finance** - the review assessed; i) Whether strong financial controls have been established that allow the project management team to make informed decisions regarding the budget at any time, and allow for the timely flow of funds and the payment of satisfactory project deliverables; ii) Variances between planned and actual expenditures; iii) Whether the project demonstrates due diligence in the management of funds, including annual audits; iv) Any changes made to fund allocations as a result of budget revisions and the appropriateness and relevance of such revisions; v) Whether co-finance has been delivered in accordance with expectations laid out in the project document, and if the Project Team has made effort to pursue delivery of co-finance.
14. **On stakeholder engagement**, the review assessed whether the project management team developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders; whether local and national government stakeholders support the objectives of the project and continue to have an active role in project decision-making; whether public awareness has been created to support the project and how stakeholder involvement and public awareness contributes to the progress towards achievement of project objectives.
15. **On reporting and Communication**, the review assessed how adaptive management changes have been reported by the Project Team and shared with the Project Board; how well the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly-rated Project Implementation Reports (PIRs) and how these have been shared with the Project Board and other key stakeholders; in addition, it assessed how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners and incorporated into project implementation.
16. **On financial risks to sustainability**, the MTR assessed the likelihood of financial and economic resources being available once the GEF assistance ends, examining the opportunities for financial sustainability and additional factors needed to create an enabling environment for continued financing.
17. **On socio-economic risks to sustainability**, the MTR assessed whether there are social or political risks that may jeopardize sustainability of project outcomes; whether there is a risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained; whether lessons learned are being documented continually; and whether successful aspects of the project are being transferred to appropriate parties, potential future beneficiaries, and others who could learn from the project and potentially replicate and/or scale it in the future.
18. **On institutional framework and governance risks to sustainability**, the MTR assessed; whether the country's legal frameworks, policies, governance structures and processes pose risks that may jeopardize project benefits; whether the project has in place frameworks, policies, governance structures and processes that will create mechanisms for accountability, transparency, and technical knowledge transfer after the project's closure; whether the project has developed appropriate institutional capacity (systems, structures, staff, expertise, etc.) that will be self-sufficient after the project closure date; and how the project identified and involved champions (i.e. individuals in government and civil society) who can promote sustainability of project outcomes; and whether the project leadership have the ability to respond to future institutional and governance changes (i.e. foreseeable changes to local or national political leadership) – thus can the project strategies effectively be incorporated/mainstreamed into future planning?
19. **On environmental risks to sustainability**, the MTR assessed whether there are environmental factors that could undermine and reverse the project's outcomes and results, including factors that have been identified by project stakeholders.
20. **Conclusions & Recommendations:** The MTR offers evidence-based conclusions, in light of the findings. Recommendations made are succinct suggestions for critical intervention that are specific, measurable, achievable, and relevant. Ratings along the objectives will be provided in accordance with the guidelines in Box 1 (below).

Responding to comments:

21. All comments from the stakeholders were addressed as summarized in Annex 10.

Ethics

22. This evaluation was conducted without bias, in accordance with the UNEG *Ethical Guidelines for Evaluators* (signed Evaluation Consultants Code of Conduct Agreement attached in **Annex 8**). The confidentiality of stakeholders was ensured and consultation processes were appropriately contextualised and culturally-sensitive, with attention given to issues such as gender empowerment and fair representation for vulnerable groups, wherever possible. To provide stakeholders uninhibited opportunities for providing feedback, project staff and UNDP representatives were not present during the interviews.
23. Whilst every effort has been made to reflect the inputs of stakeholders fairly and accurately in this Report, the evaluation ratings, conclusions and key recommendations are those of the Evaluators, and are not binding on any individual or institutional stakeholder.

1.3 LIMITATIONS OF THE MTR

24. The project covers an extensive area of the country (See Map in Figure 1). The MTR team visited a set of representative villages selected by the project staff to present a cross section of the villages benefitting from the project. The Islamic Holiday of Eid Al-Adha was announced for the Wednesday 22nd August, forcing the mission to bring forward the schedule for field visits for the Zigi catchment. The review team does not believe that this compromised the MTR findings as all the villages on the schedule were visited on the Tuesday 21st August, albeit with shorter discussions in the field. The findings were however cross referenced with other documents such as the PIR, the M&E plan, the minutes of the Project Board meetings, financial and audit reports as well as technical publications of the project.

1.4 STRUCTURE OF THE MTR REPORT

25. The MTR Report is in line with the UNDP-GEF Evaluation guidelines. The first page presents the details of the project. This is followed by an executive summary, highlighting the key findings, evaluation ratings, lessons learnt and recommendations. Chapter One – Introduction – presents the purpose and objectives of the MTR, the scope and methodology. Chapter Two presents the project description, background and context. Chapter Three presents the evaluation findings, while Chapter Four presents the conclusions and recommendations. Annexes are found in Chapter Five.

2 Project Description and Background Context

2.1 DEVELOPMENT CONTEXT

26. The project aims to utilize sustainable land management technologies to secure watershed services of the important Eastern Arc Mountains. Arising from the central plateau of the country these mountains extend in a broad arc from Mount Kilimanjaro in the north to south-western Tanzania, giving rise to numerous rivers and drainage systems, including those serving the cities of Dar es Salaam and Tanga. The project targeted two of these mountains: a) the Uluguru Mountains located in Morogoro and Mvomero Districts (Morogoro Region); and b) the East Usambara Mountains, located almost entirely within Muheza District with small parts in the Mkinga (Nilo) and Korogwe Districts (all of them in the Tanga region).
27. *The Eastern Arc Mountains* are recognised internationally as one of the world's most important repositories of biodiversity (a Global 200 Ecoregion), exhibiting extra-ordinarily high levels of species richness and endemism for plant and animal groups. In addition, the *The East Usambara and Uluguru Mountains* are amongst the few parts of the country (less than 4% of it) that regularly receive more than 1,250 mm of rain per year, making them critically important watersheds in a largely semi-arid landscape

28. Figure 1: Maps of the Project Area showing the two River Catchments.

29.

30.

31. There are an estimated 151,000 people living in the Upper reaches of the Ruvu and about 200,000 people living in the Zigi catchment, with an estimated annual growth of about 1.5 percent per annum. In both catchments, population density increases with increase in altitude, and is highest at upper elevations in the Uluguru Mountains where it reaches 250 – 300 people per km², compared to an average for other Eastern Arc Mountains (100 people/km²) and for lower lying parts of the Wami-Ruvu Basin where population density averages 35 – 40 people/km².
32. In both catchments, average household sizes are large, falling in the range of 3-5 people in the Ruvu and 6 - 10 people in the Zigi. Literacy rates are about 65% in the Ruvu and 71% in the Zigi but in all cases are highest for urban males, and lowest for rural women. A dual land tenure system of village and customary land user rights operates in the both the Zigi and Ruvu catchments. In principle, the Village Council is the allocating authority and villagers only have a derivative right on land use and occupancy. However, once a villager has been allocated land by the Village Council, then customary land user rights come into effect, although in most cases no formal title deeds are held by the customary owner. Through customary land user rights the land can be accessed by clan members through inheritance. Land can also be accessed by non-clan members through renting or sale, but neither of these practices is common in the Ruvu and Zigi catchments and it is difficult for outsiders who have no clan associations to acquire land.

2.2 THEORY OF CHANGE (TOC) OF THE PROJECT

33. A **Theory of Change** is a hypothesis about how an intervention can lead to a desired future condition, by bringing about behavioural change⁴. In conservation, a ToC is premised on the concept that environmental threats are created by people's behaviour⁵. It starts by defining a desired future state (i.e. the intended impact) and where this should be achieved. It then identifies the threats or risks that present barriers to achieving the desired state and the people whose behaviour is causing the threats. It describes what needs to be done to change the behaviour, what the likely outcomes will be, and a series of assumptions of how the project will affect the desired change(s)⁶. Whereas a logical framework model is complex, detailed, and time-bound a ToC is usually high-level and lacks specifics.
34. In the context of GEF-financed project, a 'Theory of Change' is also taken to mean the *causal pathway* between outcomes and impact⁷. Applying the 'theory of change' approach to evaluating project impact requires: (i) identifying the project's intended impacts (or the desired end state); (ii) verifying the project logic; and (iii) analysing the impact to outcomes pathway, including consideration of intermediate states. The project had not crafted a ToC during design. One has been retrofitted and presented in Fig. 2. It maps threats to the ecosystems services, barriers to removing them, the results, assumptions and impacts; which are also briefly described below.

Threats to ecosystem services

35. The Uluguru and the Usambara Mountains, like other Eastern Arc Mountains ecosystems have been degraded significantly, with serious loss of ecosystems services, especially watershed services. Threats to land and water resources include: deforestation; uncontrolled use of fire in ecologically sensitive habitats; inadequate soil and water conservation measures and other inappropriate farming techniques; over-stocking and overgrazing; population pressure and encroachment in riparian zones and unregulated and illegal water abstractions (and lack of compliance with water basin regulations); unsustainable harvesting for firewood, charcoal production and building, illegal gold mining; and encroachment into riparian zones (linked to increased population pressure). This has led to increased erosion and sedimentation; pollution and eutrophication; decreased water flows (and

⁴ Morrison, T.A. 2016: in Biological Conservation 195: 9 - 16

⁵ RARE, 2014: Theory of Change for Community Conservation Projects

⁶ GEF IEO, 2015: Impact Evaluation of GEF Support to Protected Areas and Protected Area Systems

⁷ GEF, 2009: OPS4-Handbook on the Review on Outcomes to Impacts (RoTI)

increased water demand). Deforestation is particularly severe with estimates that as much as 80% of the original extent of forest in the Eastern Arc Mountains as a whole has been lost.

36. Approximately 90% of household income in both catchments is earned from agriculture, much of which is practised at a subsistence level on small land-holdings of 2 ha or less. The principal food crops are maize, paddy, sorghum, cassava, millet, bananas, beans, sweet potatoes and nuts, supplemented by other seasonal fruits and vegetables such as tomatoes, Irish potatoes, peppers and pumpkins. Other rural activities include livestock-keeping (goats, cattle sheep and poultry), bee-keeping and, to a lesser extent, fishing. The principal commercial cash crops are sugar cane, sisal and cotton, most of which is cultivated in the lower reaches of the catchments. In the Zigi catchment, and parts of the Ruvu (around Kinole, Kibungo Juu and Kibogwa) cultivation of spices such as cardamom, ginger, cinnamon and cloves, is widespread and there has been an increase in the number of people who keep stall-fed dairy cattle. In the Ruvu catchment charcoal production is commonly practiced, especially by young men. In both the Zigi and Ruvu catchments, mining (for gold and semi-precious stones such as rubies) is practiced, mostly illegally and with serious environmental consequences, especially in wetlands and rivers.

Barriers to removing the threats

37. The ability to address the above threats by the communities dependent on the Ruvu and the Zigi catchments, the government and civil society organizations working in the catchments is hampered by two inter-related barriers:
- i) The absence of an enabling collaborative institutional framework for effective participation of stakeholders in controlling land degradation and upscaling Sustainable Land Management (SLM) in the two watersheds; and
 - ii) Inadequate demonstrated experiences in Integrated Water Resource Management (IWRM) approaches at the landscape level.
38. Under barrier 1, the lack of an enabling collaborative institutional framework for effective participation of stakeholders in controlling land degradation and upscaling Sustainable Land Management in the two watersheds has led to lack of effective land-use plans which would ensure optimal use of land and natural resources while simultaneously addressing conflicts over use of these resources; Conflicts between water users; low compliance and weak enforcement of water basin regulations; Lack of management integration; and weak co-ordination and stakeholder linkages; challenges with community-level administration; inadequate funding for SLM and watershed management. Under barrier 2, insufficient institutional capacity had led to inadequate demonstrated experiences in Integrated Water Resource Management approaches at the landscape level.

Impact pathways and assumptions

39. The project design identified two impact pathways through which the stake holders, led by the Ministry of Water and Irrigation, would collectively address the threats to the watershed services while simultaneously improving the livelihood of the communities dependent on these ecosystems. Under impact pathway 1 (*Component 1*) the project provides the policy and institutional environment required for stakeholders to effectively collaborate and synergize efforts, to improve the overall efficiency of all the resources they individually invest in the watershed management, through SLM. Results to be delivered via this impact pathway include (i) development and implementation of Integrated Land Use Management Plans (ILUMPS) and Village Land Use Plans; (ii) establishment or strengthening of multi-sectoral stakeholder committees whose role is to co-ordinate dialogue and action amongst stakeholders, and raise awareness about SLM; (iii) empowering Water User Associations to coordinate local level watershed management initiatives, including enforcement of the Water Act; (iv) improving compliance and enforcement; and, (v) increasing the funds available for SLM.
40. *Under impact pathway two (Component 2)* the project would facilitate widespread adoption of SLM practices within agricultural and livestock production systems to reduce pressure on the ecosystem and to rehabilitate degraded areas designated as priorities for restoration of watershed services. Working with selected communities and relevant basin management authorities, results would be delivered through: (i) providing incentives and disincentives to curb illegal land use practices within the 60 meter radius, illegal mining and unwise use of fire;

ii) promoting sustainable forest management and forest restoration within and outside of protected areas; (iii) developing and testing sustainable livestock management technologies; and (iii) increasing household food production and incomes through uptake of SLM and Sustainable Rangeland Management practices, and the development of diversified income generating activities

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42. .

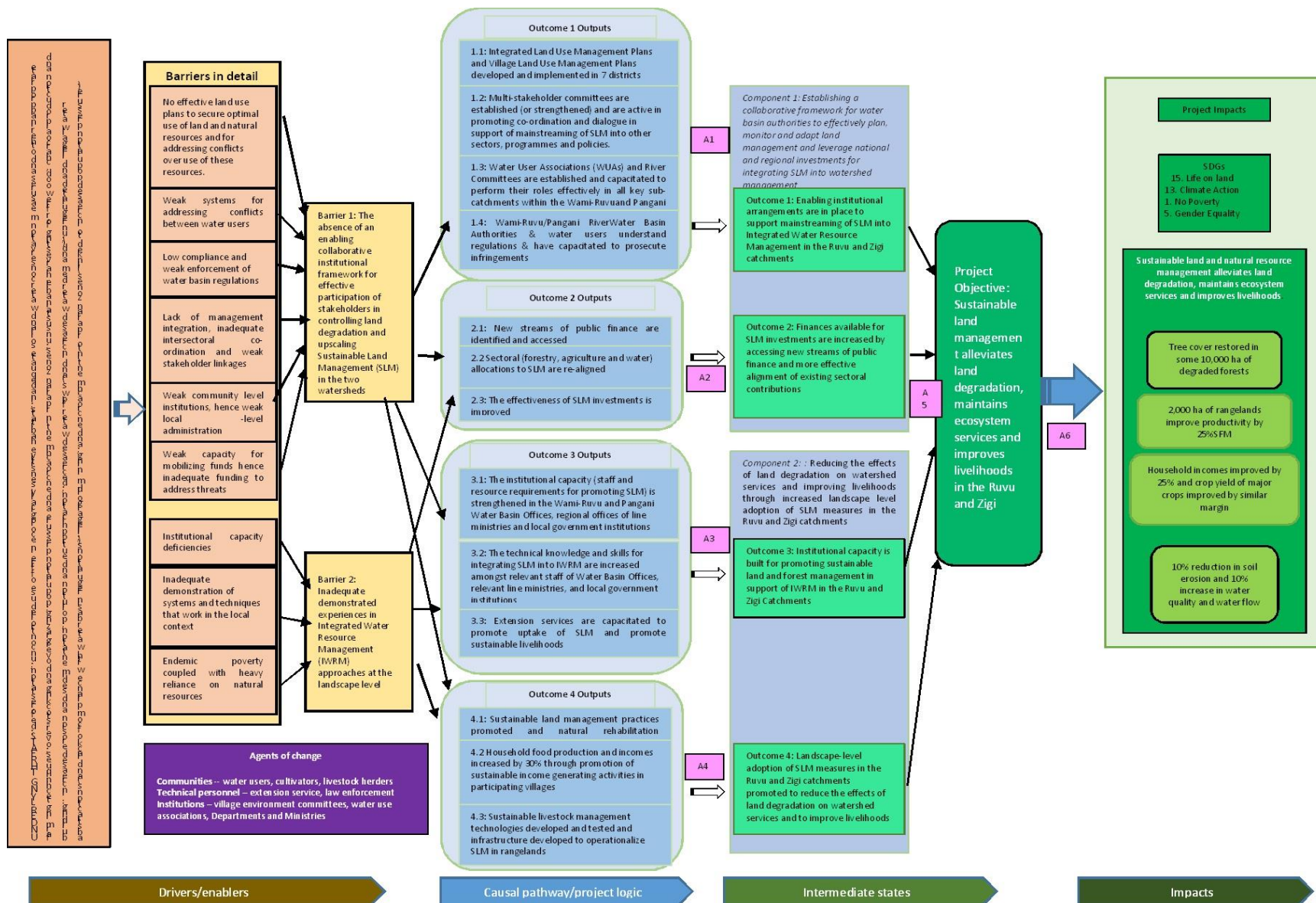


Figure 2: Reconstructed Theory of Change

43. The ultimate impacts sort by the project would manifest at different levels. In the short term, comprehensive integration of SLM as a key component of integrated natural resource management at the watershed level, with the relevant financing to implement it practically. This is because the main objective of SLM is to integrate people's co-existence with natural ecosystems over the long term, in ways that improve livelihoods and food security, mitigate land degradation, relieve water scarcity, maintain ecosystem services and strengthen resilience to climate variation and change. SLM therefore offers a comprehensive approach to management of land and water resources and holds the potential to make significant differences in both the short and long term.
44. In the medium to longer term, the quality of land would improve, reflected by improved land cover on over 10,000 ha of currently degraded forest, improved land cover on over 2,000 ha of rangelands (increasing cover by 25% over baseline) and protection of riparian land. Collectively, these would lead to a 10% increase in water flow in conjunction with a 10% reduction in siltation. Impacts would also manifest in improved productivity of farmlands, reflected by at least 30% increase in annual yields of key crops and 25% increase in household incomes, collectively improved human well-being.
45. The project expected to mobilize additional financial resources (via budgetary processes and creation of special SLM Fund) to upscale the successful initiatives piloted so that in the longer term, it contributes, in a sustainable, gender responsible manner, the country's advance along the Sustainable Development Goals, particularly Goals 1 (No poverty), 5 (Gender Equality), 13 (Climate Action) and 15 (Life on Earth).
46. The project objective is: Sustainable land management alleviates land degradation, maintains ecosystem services and improves livelihoods in the Ruvu and Zigi Catchments of the Eastern Arc Mountains. The objective will be via two components and four outcomes (Table 2).

Table 2: Summary of Project Components, Outcomes and Outputs

Component 1: Establishing a collaborative framework for water basin authorities to effectively plan, monitor and adapt land management and leverage national and regional investments for integrating SLM into watershed management	
Outcome 1: Enabling institutional arrangements are in place to support mainstreaming of SLM into Integrated Water Resource Management in the Ruvu and Zigi catchments	Output 1.1: Integrated Land Use Management Plans and Village Land Use Management Plans are developed and implemented in 7 districts, ensuring optimal allocation of land to generate critical environmental and development benefits
	Output 1.2: Multi-stakeholder committees are established (or strengthened) and active in promoting co-ordination and dialogue in support of mainstreaming of SLM into other sectors, programmes and policies
	Output 1.3: Water User Associations (WUAs) and River Committees are established and capacitated to perform their roles effectively in all key sub-catchments within the Wami-Ruvu and Pangani river basins
	Output 1.4: Wami-Ruvu and Pangani River Water Basin Authorities and water users understand water basin regulations and are capacitated to identify and prosecute water and land-use infringements and harness greater compliance
Outcome 2: Finances available for SLM investments are increased by accessing new streams of public finance and more effective alignment of existing sectoral contributions	Output 2.1: New streams of public finance are identified and accessed
	Output 2.2: Sectoral (forestry, agriculture and water) allocations to SLM are re-aligned
	Output 2.3: The effectiveness of SLM investments is improved
Component 2: Reducing the effects of land degradation on watershed services and improving livelihoods through landscape-level uptake of SLM measures	
Outcome 3: Developing institutional capacity	Output 3.1: The institutional capacity (staff and resource requirements for promoting SLM) is strengthened in the Wami-Ruvu and Pangani Water Basin Offices, regional offices of line ministries and local government institutions

for promoting sustainable forest and land management in support of IWRM	Output 3.2: The technical knowledge and skills for integrating SLM into IWRM are increased amongst relevant staff of Water Basin Offices, relevant line ministries, and local government institutions
	Output 3.3: Extension services are capacitated to promote uptake of SLM and promote sustainable livelihoods
Outcome 4: Increasing the uptake of sustainable land management practices to secure watershed services and improve livelihoods	Output 4.1: Sustainable land management practices promoted and natural rehabilitation facilitated in 10,000 ha of forest
	Output 4.2: Household food production and incomes increased by 30% (for actively participating villages) through promotion of sustainable income generating activities in participating villages
	Output 4.3. Sustainable livestock management technologies developed and tested and infrastructure developed to operationalize SLM in rangelands

47. The assumptions underlying these impact pathways and the lessons that informed the design are discussed in section 3.1.

2.3 PROJECT IMPLEMENTATION ARRANGEMENTS

48. The project is implemented under the National Implementation Modality (NIM) by Ministry of Water and Irrigation (MoWI), as an Implementing Partner (IP). The MoWI collaborates with other responsible parties namely, the National Land Use Planning Commission (NLUPC), the Wami-Ruvu and Pangani Basin Water Boards (WRBWB/PBWB), and the relevant Water Supply and Sanitation Authorities in Dar es Salaam and Tanga (DAWASA, DAWASCO and Tanga-UWASA).
49. The MoWI is responsible for achieving the project goal and objectives and reporting progress and results of the project to the UNDP CO and the Vice President's Office (VPO) - Division of Environment (DoE), the mandated GEF Focal Point for communicating of outcomes to the broader public. The MoWI ensures Government ownership of the project also coordinates activities on a local landscape level with the President's Office-Regional and Local Government (PO-RALG) through direct engagement with Focal Points in the seven local government authorities (LGAs) - Morogoro Urban, Morogoro Rural and Mvomero (in Morogoro Region) and Muheza, Mkinga, Korogwe and Tanga City (Tanga region).
50. Project governance and management involves the UNDP CO (serving as the GEF Implementation Agency). The MTR finds that UNDP CO has provided the necessary facilitation through regular monitoring of the project implementation, review of delivery, ensuring proper use of UNDP/GEF funds. UNDP CO has also provided advice and support on procurement, contracting of service providers and financial management as well as serving as the Project Steering Committee Co-chair.
51. The Project has a Steering Committee (PSC) that provides overall policy input, functional guidance and strategic direction to the project. The Permanent Secretary in the MoWI, serves as the Chairperson of the PSC. The MTR finds that the PSC is well constituted as per the ProDoc and has been functional through its five meetings conducted between 2016 and August 2018.
52. The Project Coordination Unit (PCU) within MoWI carries out the day-to-day administration and management of the project supported by a Technical Team (TT) that among other roles: provides technical inputs and guidance, provides information held by member institutions, and supports stakeholder engagement. The Unit is comprised of full-time National Project Co-ordinator (PC), Project Administrator/Finance Officer (PA) and Evaluation Expert (M&E). The PCU has also been expanded to include three seconded technical staff serving as Community Development Officer, technical officer and an Economist. The PCU is hosted by the MoWI at its former headquarters in Dar es Salaam, two of the seconded members have recently moved to new Government/Ministry Headquarters in Dodoma but the Community Development Officer will be based in Dar es Salaam. The MoWI has also appointed

Assistant Director of Water Resources as the Project Overseer (PO) providing strategic oversight and guidance to project implementation.

2.4 PROJECT TIMING AND MILESTONES

Key Project Dates	
PIF Approval Date	Sep 12, 2013
CEO Endorsement Date	May 19, 2015
Project Document Signature Date (project start date):	Mar 30, 2016
Date of Inception Workshop	Feb 19, 2016
Expected Date of Mid-term Review	Oct 1, 2018
Actual Date of Mid-term Review	1 st to 30 th August
Expected Date of Terminal Evaluation	Sep 29, 2020
Original Planned Closing Date	Mar 29, 2021
Revised Planned Closing Date	N/A

2.5 MAIN STAKEHOLDERS

53. A stakeholder analysis was undertaken during the project preparation stage. It identified key stakeholders and assessed their prospective roles and responsibilities in the context of the project. The MTR finds that the key stakeholder identified were relevant in terms of their direct engagement in the implementation as well as facilitating realization of the planned outcomes. The national levels are more on policy and strategic guidance while the LGAs, Civil Society and communities are more field level implementation. A summary of these stakeholders engaged in the implementation of the project is summarized in Table 3.

Table 3: Summary of Stakeholders and their Roles in the Project

Category	Institution	Role and responsibilities in the project
Ministries, Departments and Agencies (MDAs)	<ul style="list-style-type: none"> Vice President's Office (VPO) - Division of Environment (DoE) National Environmental Management Council (NEMC) Ministry of Water (MOW) The Ministry of Land, Human Settlements and Development (MLHSD) - National Land Use Planning Commission (NLUPC) The Ministry of Natural Resources and Tourism (MNRT) - Tanzania Forest Service (TFS) The Ministry of Agriculture, Ministry of Energy and Minerals (MEM) Ministry of Livestock and Fisheries Development (MLFD) The President's Office – Regional Administration and Local Government (PO-RALG) Regional Administrative Secretariats Urban Water and Sanitation Authorities (UWASAs) – 	<ul style="list-style-type: none"> Co-ordination of matters related to environmental protection and management Focal Point for matters relating to the GEF Alignment and mainstreaming of SLM activities in sector strategies and plans, Technical, policy and legal guidance through Project Steering Committee, Technical Team and Catchment Committees Co-financing project activities Project execution – law enforcement, capacity building, extension services Communication of project results and lessons Providing technical standards, guidelines and quality assurance Providing enabling environment for participatory community resources management Facilitating application of best practices on land and natural resources management Providing necessary data including baselines

Category	Institution	Role and responsibilities in the project
	DAWASA, Tanga-UWASA, MORUWASA and DAWASCO	
Water Resources Management Bodies and institutions	<ul style="list-style-type: none"> • Pangani and Wami-Ruvu Basin Water Boards (BWBs) and their sub-catchments (Water Basin Offices) • Catchment Water Committees (CWCs) • Water User Associations (WUAs) 	<ul style="list-style-type: none"> • Planning, coordinating implementation and monitoring of IWRM activities in the basins
Local Government Authorities	<ul style="list-style-type: none"> • District Councils • Village Councils • Village Natural Resource Committees 	<ul style="list-style-type: none"> • Project execution and beneficiaries relating to land use planning, capacity development, extension services, monitoring and upscaling of lessons generated
Non State Actors	Non-Government Organisations (NGOs) and Civil Society Organisations (CSOs)	<ul style="list-style-type: none"> • Support project activities through complementary activities including awareness-raising and capacity-building in specific communities
	Private sector (Tea estates, Sisal estates, factories)	<ul style="list-style-type: none"> • Co-financing, direct implementation of activities related to SLM
Local communities	Land and resources user groups and communities (UWAMAKIZI; JUWAKIHUMA, WAKUAKUVYAMA)	<ul style="list-style-type: none"> • Direct implementers and beneficiaries of project activities at local level
Development Partners	Bilateral and multilateral agencies, International NGOs	Co-financing and technical support
Academic and research institutions and professional associations		Support research, training and technology for the project

3 EVALUATION FINDINGS

3.1 PROJECT STRATEGY – SATISFACTORY

3.1.1 THEORY OF CHANGE

54. The SLM project, like all other GEF 5 projects, did not include an explicit Theory of Change (ToC). A retrofitted ToC is presented in section 2.2 (and Figure 2).

Relevance to national and international policies, programmes, processes

55. The MTR finds that the project addressed urgent priorities identified in the country's key development and water resources management policies and programs. The project was developed with the full support of the Governments and is in line with all the key Policies of the water and natural resources sectors. Some examples include: the National Water Policy (2002) and the Water Resources Management Act (WRMA), No. 11 of 2009; the Land Act and the Village Land Act, Act 5 of 1999; National Agriculture and Livestock Policy. Other important policies are: a) the National Environment Policy (NEP, 1997), which contributes to priority 5 (reducing deforestation) and mainstreams forest management into productive sectors – agriculture and tourism; b) the Environmental Management Act (EMA, 2004), which provides institutional framework for the effective participation of a broad group of stakeholders in water and forest resources management and conservation; d) the Forest Policy (1998), the Forest Act

(2002) and the National Forest Programme (NFP, 2001), which provide guidelines and regulations for community involvement in Participatory Forest Management across both Forest Reserves;

56. Internationally, it is in line with the following conventions and agreements, all of which Tanzania has ratified: Convention on Biological Diversity (CBD), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the African Convention on the Conservation of Nature and Natural Resources; Agenda 21; and the RAMSAR Convention on Wetlands of International Importance. In addition, the project is aligned with the goal of the GEF's Land Degradation, Biodiversity and International Waters Focal Area Strategies.
57. The relevance of the project to stakeholders was confirmed during the MTR discussions. All the respondents identified various ways in which the project was relevant to their circumstances. The MTR finds the PPG was effective in ensuring that perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process, were taken into account, and influenced the project strategy, stakeholder participation plan and the project implementation arrangements. Although the project design did not benefit from a gender analysis and strategy, there was full recognition of the importance of gender considerations during the implementation. The original indicators have therefore been revised to reflect gender considerations where relevant.
58. **Stakeholder engagement in the formulation process:** The MTR finds that all relevant stakeholders were engaged during the project formulation; and that the process of engagement is well described in the project document Part III. Indeed, during the project preparation stage, a stakeholder analysis was undertaken in order to identify key stakeholders, assess their interests in the project and define their roles and responsibilities in project implementation. Throughout the project's development, close contact was maintained with stakeholders at the national and local levels through the following means, which the MTR judges to have been effective, and effectively utilized:
 - a. **The Project Reference Group** made up of representatives from key agencies involved in watershed management⁸;
 - b. **High-level consultations:** held in Dar es Salaam with the senior management of the MOW, the Vice President's Office (Directorate for Environment), the National Land Use Planning Commission and the UNDP Country Office.
 - c. **Field visits and stakeholder consultations:** A series of site visits and consultative meetings were conducted in each catchment.
 - d. **One-on-one consultations:** Selected NGOs who are implementing related projects in the target areas including Tanzania Forest Conservation Group (TFCG), CARE, Sustainable Agriculture Tanzania (SAT) and WWF;
 - e. A consolidated project document validation workshop and circulation of documentation for feedback.

What Lessons Informed Project Design?

59. The GEF 5 Prodoc Template did not have a section requiring an analysis of the lessons informing project formulation. However, the MTR finds that the project formulation build on lessons generated in the numerous SLM-and water resource - focussed projects previously implemented in the Eastern Arc Mountains in general, and specifically the Uluguru and East Usambara Mountains. They include: (i) the Equitable Payment for Watershed Services projects implemented by WWF/CARE and the Wildlife

⁸ Including MOW, National Land use Planning Commission (NLUPC); Wami-Ravu Basin Water Office (WRBWO), Pangani Basin Water Office (PBWO), Tanga Urban Water and Sanitation Authority (Tanga-UWASA); Dar es Salaam Water and Sanitation Authority (DAWASA); Dar es Salaam Water and Sanitation Company (DAWASCO); Division of Environment (DoE) and Prime Ministers' Office Regional Administration and Local Government (PMO-RALG).

Conservation Society of Tanzania/Royal Society for Protection of Birds in the East Usambara and Uluguru Mountains; (ii) the forest restoration projects run by TFCG (Tanzania Forest Conservation Group), WWF and MJUMITA in the Bunduki Gap in the Uluguru Mountains, and at various locations in the East Usambaras; (iii) the Sustainable Charcoal Project piloted by the TFCG, MJUMITA and TaTEDO in the Kilosa District (Morogoro Region); (iv) the alternative energy technology (brick rocket stoves and solar lanterns) projects implemented by CARE and TaTEDO in various villages; (v) the SLM and alternative livelihood work (e.g. beekeeping, spice-growing) implemented in the Eastern Arc Mountains Conservation Endowment Fund (EAMCEF), TFCG and other NGOs and CSOs in the West and East Usambaras and the Uluguru Mountains; (vi) the ByT project (which promoted organic and SLM farming practices) and farmer training being provided by Sustainable Agriculture Tanzania (SAT); (vii) various agricultural support programmes such as the Uluguru Mountains Agricultural Development Project (UMADEP), and other similar initiatives; (viii) the Infonet-Biovision Project (that maintained a web-based information hub that makes available information on SLM production practices); (ix) the IUCN's Pangani River Basin Management Project (which generated information, supported equitable provision and wise governance of freshwater resources to meet livelihood and environmental needs, and assisted with the formation of participatory forums; and (x) iWASH (Integrated Water, Hygiene and Sanitation) programme, which worked in the Wami-Ruvu Basin to provide training in principles of Integrated Water Resources Management, and supports the development of Water User Associations

3.1.2 RESULTS FRAMEWORK/ LOGFRAME

60. The review finds that the results framework has several strong points, which can be viewed as best practices in project design:
 - a. The threats to the watershed services and the barriers to removing them by the relevant stakeholders were clearly analysed and described;
 - b. The stakeholders, the institutional and policy environments were all clearly described and linked to the threats and barriers, hence the proposed project strategy was well founded and relevant to the challenges of securing watershed services and improving livelihoods;
 - c. The design and implementation arrangements benefitted from relevant lessons from other projects, strengthening the results strategy and increasing the probability of its effectiveness.
 - d. There is general coherence between the objective, components, outcomes, outputs, activities and indicators; indicators and targets are well articulated and largely SMART.
61. However, the strategy is weakened slightly by covering an extremely broad geographic area, over two basin catchments, resulting in a dilution of impacts that could be achieved at each basin. Large distances also demand extensive travel by project staff, and have the potential to erode budgets available for direct support at each of the intervention sites.

Objective, components and outcomes

62. The project objective is clearly articulated; placing emphasis on sustainable land management as a tool to alleviate land degradation, maintain ecosystem services and improve livelihoods in the Ruvu and Zigi Catchments. It identified the specific ecosystem services to be targeted as regulation of hydrological flows (reducing or buffering runoff, improving soil infiltration and maintaining base flows), securing fresh water supply (quantity and quality of water); soil protection and control of erosion and sedimentation; natural hazard mitigation (flood prevention, peak flow regulation and reduction of landslides) and crop and livestock production.

63. Two components are described clearly to be implemented via four clear outcomes. The first component is focussed on building enabling institutional capacity and leveraging funding for integrating SLM into watershed management, as well as strengthening co-ordination and collaborative planning, monitoring and enforcement amongst basin management authorities. Work under the second component is focussed on implementing practical Sustainable Land Management (SLM) interventions that address land degradation and degradation of watershed services in forests, rangelands and on arable land, whilst improving livelihoods through the uptake of sustainable land use management practices and alternative sustainable livelihoods. Each of the four outcomes has adequate outputs through which they would be implemented to deliver results and achieve the objective. Components and outcomes are reflected in the Results Framework in a coherent manner.

Indicators and targets

64. In general, the indicators and targets are SMART. However, there should be a second indicator at the objective level to reflect improvements in livelihoods; the project has far too many indicators, some are compound indicators while others are worded like outcomes or outputs or activities. A detailed analysis is presented in the Table below.

Table 4: Detailed Analysis of Indicators and Targets

<p>Objective: Sustainable land management alleviates land degradation, maintains ecosystem services and improves livelihoods in the Ruvu and Zigi Catchments of the Eastern Arc Mountains in Tanzania.</p> <p>Objective indicator: Reduction in land degradation in the Ruvu and Zigi catchments as measured by at least a 25% increase in land cover in forests and rangelands</p> <p>Analysis: The objective level indicator should reflect the impacts expected from the project; which should be on ecosystems services and livelihoods. There should be two indicators at this level: one reflecting the changes in quality and quantity of water; the second reflecting improvements in the livelihoods. These aspects are currently included in the targets set for the indicator. While reduction in land degradation is a relevant indicator, the absence of the other two aspects (improved water and livelihoods) results in the current slight disconnect between the main indicator and the targets.</p> <p>The targets are far too many; some are stated as outputs/activities - e.g. at least 10,000 ha of degraded forest restored (5,000 in protected forest and 5,000 ha outside of protected areas); or as outcomes – e.g. at least 30% of livestock keepers adopt sustainable rangeland management practices, with a 25% improvement in land cover over 2,000 ha of rangeland. The indicator for these two processes would be increase in quality and quantity of water.</p>
<p>Outcome 1: Enabling institutional arrangements are in place to support mainstreaming of SLM into Integrated Water Resource Management in the Ruvu and Zigi catchments;</p> <p>Indicators: a) SLM integrated into land use and water management plans at catchment management and district levels; b) Planning/budgeting guidelines for integrating SLM into water resource management developed and adapted</p> <p>Analysis: The project strategy description gives only one indicator while the results framework adds a second indicator. Both indicators are worded like outputs or outcomes.</p>
<p>Outcome 2: Finances available for SLM investments are increased by accessing new streams of public finance and more effective alignment of existing sectoral contributions: Indicators - % increase in public funds allocated to SLM interventions in the Ruvu and Zigi catchments</p> <p>Analysis: This indicator is appropriate. The target of 15 percent increase is however problematic because the baseline was given as zero; meaning any amount would already be a huge increase in percentage. The public expenditure review estimated public expenditure for SLM related activities ranged from 0.5% -7% for the SLM</p>

sector ministries and around 20% for sector departments at Local Government Authorities (with a 20.46% high for Muheza). SLM expenditure was 1.86 percent for Ministry of Agriculture and Livestock, 0.47 percent for the Ministry of Water and Irrigation, and 6.83 percent for Tanzania Forestry Service. The report recommended a minimum 3 percent allocation for ministries responsible for sectors that are directly impacted by SLM, and a gradual increase on a yearly basis to 5%.7%, 9% and 10% in a span of five years. It also recommended a minimum of 20% allocation by departments responsible for sectors that are directly impacted by SLM, with a gradual increase to 30% in five years. The logframe and PIR should be updated with these findings.

Outcome 3: Institutional capacity is built for promoting sustainable land and forest management in support of IWRM in the Ruvu and Zigi Catchments:

Indicator: Increase in awareness and capacity of local communities and institutions (e.g. extensions services, district authorities, Basin Water Offices) for integration of SLM into resource use and management practices (measured as per UNDP Capacity Scorecard).

Analysis: These are two indicators in one; and they both sound like outcomes.

Outcome 4: Landscape-level adoption of SLM measures in the Ruvu and Zigi catchments promoted to reduce the effects of land degradation on watershed services and to improve livelihoods: Indicator -- Reduction in extent of degradation in the Ruvu and Zigi catchments and improvement in the livelihoods of basin communities due to increased benefits from adoption of SLM practices.

Analysis – this is a compound indicator (reduction in land degradation; and, improvement in livelihoods). Improvement in livelihoods is generic as an indicator; increase in household incomes and/or increase in yields of crops could have been more specific indicators.

3.1.3 ASSUMPTIONS AND RISKS

65. Assumptions are crucial elements of the project strategy. Assumptions are the *necessary elements that allow for a successful cause-and-effect relationship between different levels of results*. This means that an assumption should be a necessary condition very likely to be present, but beyond the influence of the project. The MTR assessed the assumptions against assumptions validity criteria, i.e. Assumptions must not be a project result; they must be necessary for project success, outside project control and very likely or certain to occur. As shown in Table xx, the assumptions made by the project design were in general true Table xx: Project assumptions against assumptions validity criteria. T=True; F = False

Table 5: Project assumptions against assumptions validity criteria

Assumption	Not project result	Very likely to occur	Outside project control	Necessary for project success
The current high level of support for SLM as a component of watershed management by Government and development partners is maintained	T	T	T	T
Public institutions, private sector partners, NGOs and resource users will be willing to adopt a partnership approach and work collaboratively to plan and implement SLM in the Ruvu and Zigi catchments	T	T	T	T
Staff have the required baseline competency baseline	T	T	T	T

66. **Risks:** the project design identified nine risks, with only one accorded a moderately high probability of occurrence. This placed the project in the Low risk category. Risks are similar to assumptions in that they are necessary factors for project success but differ in that the likelihood of occurring is higher and the negative impact on the results is significant. The MTR finds that while the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module are

important, two of the risks accorded a low probability of occurrence should have been rated Moderately High. These are: a) Government institutions lack the resources and/or capacity to implement the project or to sustain gains once external project support has been withdrawn; and b) Local level economic growth fails to provide adequate returns on investment in SLM, or the economic gains of SLM are eroded by external factors such as rampant inflation.

67. There should have been two additional risks: a) that the livelihood and income generating alternatives offered by the project may fail to provide adequate incentives for long-term adoption of SLM practices, despite the demonstration by the project; b) That the SLM Fund may lack the Law supporting its establishment and capitalization. Previous experience of establishing the Environment Fund (under the VPO) and attempt to establish the REDD+ Fund (under Forestry) have proven that these Funds need special provisions in the Law to enable their creation and capitalization.
68. A detailed analysis of the status of the risks is provided in Annex 9.

3.2 PROGRESS TOWARDS RESULTS

69. Overall project implementation is rated Satisfactory. The project has delivered about 57 percent of the end of project targets with a budget expenditure of 54 percent and a co-finance mobilization of 17.48 percent. Due to the high number of indicators, the Table analysing project delivery is fifteen pages; it is therefore provided in Annex 11, while the level of delivery is summarised in the summarised in the paragraphs below and presented in Text Box 3. Also we note that the project did not set MTR targets; hence that column has been populated with N/A.

Box 2: Truncated Presentation of Progress Towards Achievements

Strategy /result	Progress towards indicators	Justification for rating/ Key deliverables
Project Objective: Sustainable land and natural resource management alleviates land degradation, maintains ecosystem services and improves livelihoods in the Ruvu and Zigi sub-catchments of the Eastern Arc Mountains in Tanzania		The project has surpassed several end of project target (land under SLM by over 2000 ha; decline in sedimentation, livelihood improvements). The only target not yet achieved is - At least 30% of livestock keepers adopt sustainable rangeland management practices, with a 25% improvement in land cover over 2,000 ha of rangeland. It is likely that the targets for these objective indicators will be completely surpassed by the TE
Outcome 1: Enabling institutional arrangements are in place to support mainstreaming of SLM into Integrated Water Resource Management in the Ruvu and Zigi catchments		4 out of 5 District Land Use Management Plans Frameworks (DLUMPF) developed; 16 village land use management plans (VLUMPs) have been developed. However, all of these have reached stage 4 out of 6 necessary stages. It is noted that stages 5 and 6 of the VLUMPs are far more difficult to achieve; they provide better security of tenure to villages; and, their completion is not fully in the control of the project. These steps need to be taken over by line ministries, with the support of the project. Eleven new Water Users Associations have been established, surpassing the end of project target by six.

		<p>Eighteen village natural resources committees/environmental committees ((VNRC/EC) have been formed, reaching the end of project target.</p> <p>Thirteen village forest management plans with their By-laws have been developed, surpassing the end of project target</p>
<p>Outcome 2: Finances available for SLM investments are increased by accessing new streams of public finance and more effective alignment of existing sectoral contributions</p>		<p>Six proposals have been developed and submitted for funding; so far US\$ 977,777.789 additional funding realized. Tanga-UWASA has doubled its periodic contribution to UWAMAKIZI from TSh 100 million to 180 million (US\$ 44,400 to US\$ 80,000). Although SLM is increasingly being reflected in the budgets of water management institutions, none of these budgets have been financed yet. The proposed SLM Fund will not materialize because it lacks legal backing. In conclusion, although the project has mobilized some funding, financing of SLM is still project based; it has not made a significant shift to more secure sources.</p>
<p>Outcome 3: Institutional capacity is built for promoting sustainable land and forest management in support of IWRM in the Ruvu and Zigi Catchments</p>		<p>Extensive training events organized as explained in Annex 11.</p>
<p>Outcome 4: Landscape-level adoption of SLM measures in the Ruvu and Zigi catchments promoted to reduce the effects of land degradation on watershed services and to improve livelihoods</p>		<p>60 metre river buffer has been demarcated in an area covering 152 hectares; Forest cover restored has been done in an area of about 2,000 ha of the expected 5,000 ha. However, percentage decline in illegal harvesting practices being reported has exceeded the end of project by over 4 times.</p> <p>Although 2 types of income generating activities have been piloted, the percentage of the population involved is very small and they are unlikely to be contributing ten percent household income (assessment need to be done)</p>

70. **Progress towards Outcome 1 – Satisfactory (75% delivery):** Four District Land Use Management Plans integrating SLM have been developed for Morogoro, Mvomero, Mkinga and Muheza District Councils; from which sixteen 16 village land use management plans integrating SLM have been developed and approved by village and district authorities. The District Land Use Framework Plans developed include ones for Morogoro, Mvomero, Mkinga and Muheza District Councils. Villages include (2 in Mkinga, 4 in Muheza, 6 in Morogoro DC and 4 in Mvomero District).
71. **Progress towards outcome 2 – Moderately Unsatisfactory (40% delivery):** The project objective is to move SLM funding away from project to systemic mode (via budgets and a dedicated fund) – but despite the huge amount of work done, this hasn't happened. There is an 8% increase in SLM fund

⁹ Tsh 2.2 billion at an exchange rate of 2,250 Tsh to the US\$

allocation by LGAs and aligned ministries involved in the project. However, this has not increased funding for SLM because the budgets have not been financed; hence the allocated amount was largely not available. Three funding proposals have been submitted to the National Water Fund, with one of them recently funded worth about US\$ 977,777.78¹⁰. It is expected that the other two will be financed soon, worth US\$ 805,010 (TZS 1,811,272,500) and US\$ 1,118,876 (TZS 2,517,470,022). In addition, Tanga-UWASA has nearly doubled its periodic contribution to UWAMAKIZI (part of co-finance) from TSh 100 million to 180 million (US\$ 44,400 to US\$ 80,000) under its payment for ecosystems services initiative. The Government has also contributed 17.48 percent of its committed co-finance, pointing at improved alignment of the current sectoral funding towards SLM. It is however difficult to rate the percentage achievement of this outcome because the baseline value of SLM funding was estimated at zero yet the target was given as 15 percent increase. The public expenditure review estimated public expenditure for SLM related activities ranged from 0.5% -7% for the SLM sector ministries and around 20% for sector departments at Local Government Authorities (with a 20.46% high for Muheza). SLM expenditure was 1.86 percent for Ministry of Agriculture and Livestock, 0.47 percent for the Ministry of Water and Irrigation, and 6.83 percent for Tanzania Forestry Service. The report recommended a minimum 3 percent allocation for ministries responsible for sectors that are directly impacted by SLM, and a gradual increase on a yearly basis to 5%, 7%, 9% and 10% in a span of five years. It also recommended a minimum of 20% allocation by departments responsible for sectors that are directly impacted by SLM, with a gradual increase to 30% in five years. Although a great deal of work has been done on this outcome, there is no significant increase in systemic financing of SLM since the SLM Fund will not materialize and the challenges of financing SLM through budgets persist. SLM competes poorly in times of budgetary shortfalls, even when relevant institutions include it in their budgets. Projects still remain the foreseeable vehicle for financing SLM.

72. **Progress towards Outcome 3 – Moderately Satisfactory (44% delivery):** Two mini automated weather stations (measuring Temperature, rainfall, relative humidity, wind speed and wind direction) have been installed in Zigi, one in the upstream at the National Institute Malaria Research (NIMR) and the other station installed downstream at Mabayani Dam, rehabilitation of 15 river gauging stations for river flow monitoring in Ruvu and Zigi catchments, 10 GPS procured and distributed to Implementing Partners (IPs). The National Land Use Planning Commission (NLUPC) has acquired GIS capacity, including GIS software licences for 3 users, 2 GIS processing heavy duty computers and 1 Map/Graphic printer (with capacity of printing A3 size). Sixteen people have been trained on GIS and its use as decision making support tool. They were 14 male and 2 female from NLUPC, Ministry of Minerals, Basin Water Boards, Ministry of Water and Irrigation and LGA.
73. Wam/Ruvu and Pangani Basin has improved data collection and processing, and has developed rating curves for eight monitoring/measurement stations consistently; no rating curve for any of the 18 stations had been developed at project inception due to lack of consistence in data collection and capacity to collect sufficient amount of data for doing the analysis. The number of staff with knowledge and skills for integration of SLM into resource use and management practices has increased from 104 at project inception to 242 (165 male and 77 female), an increase of 43%. In addition, awareness was conducted and practical trainings on integrating water resources management involving LGAs, WUA management Committees and SLM piloting farmers.
74. **Progress towards Outcome 4 – Satisfactory (70% delivery):** 22,143 ha have been put under improved management (4,727 ha of agriculture land, 15,452 ha of rangeland, 917 ha of forest land outside the protected forest and 1,047 ha of protected forest). A total of 8,000 Seedlings have been planted over an area of 207 ha to encourage and catalyse natural regeneration (7,000 in Zigi catchment 1,000 in Ruvu). Three hundred permanent beacons have been installed in strategic places marking the sixty meter radius of the river channels. This protects 152 hectares (101 ha in Zigi and 51 ha in Ruvu) of river buffer with about 31,830 surrounding community members sensitized on protection of reserved land. In Zigi

¹⁰ Tsh 2.2 billion at an exchange rate of 2,250 Tsh to the US\$

catchment, about 30 sites in 8 villages have been replanted with 5,400 tree seedlings of natural species including *Allanblackia* spp, *Newtonia* spp, *Tabana*,spp, *Beilchmedia* spp and *Draceana* spp. Covering an area of 225 ha outside the protected forests.

75. In Zigi Catchment, the project demonstrated use of alternative energy sources and fuelwood efficient stoves; 80 energy saving stoves installed in 7 villages have catalysed construction of over 950 stoves on demand from inspired households in the villages and surrounding communities. These stoves have efficiency of 50 to 65%, cutting firewood demand drastically. Other IGAs include fishponds and bee keeping. About eight percent of livestock keepers are adapting sustainable rangeland management practices; three cattle water troughs have been constructed in Zigi catchment, serving 88 families of livestock keepers with a livestock population of 4,600 which previously negatively impacted 150 ha of riverbanks. Three village (Mashewa, Kimbo and Shebomeza) community gravity water projects have been completed; providing these communities with clean water away from the river bed.
76. Income generating activities have been demonstrated: Two fish-farming groups have been established with a total of 63 members (50 male, 13 female) and provided with improved fish ponds whose capacity can produce 27 tons of fish per year with a local market value of 175 million Tanzanian Shillings. In Ruvu catchment 350 members (266 male, 124 female) from 9 groups and 5 WUAs have established beekeeping learning sites, with a total of 360 beehives. These farmers need extension support to improve honey production, processing and marketing. In Zigi catchment production levels for cereals in Muheza District has increased slightly for participating farmers from 2.0 tons/ha at project inception to 2.2 tons/ha.
77. The MTR finds that the project design was based on a clear and highly participatory analysis of the threats, root causes and barriers to the use of SLM for watershed management that simultaneously improves livelihoods; and that the project was developed with the full support of the Government and is in line with all the key policies relevant to the water resources sector. It addressed urgent priorities identified in the country's key economic development policies and programs. However, a new barrier to the effectiveness of the Water Users Associations has emerged, in the form of the new directive on revenues. The government has directed that all revenue generated by government units be remitted to the Central Treasury to be allocated via the budgetary process. This will make it difficult for the Water Users Associations to retain revenues raised through fines and part of fees for legal water abstractions. The MTR finds that the Project M&E has generated several best practices.

3.3 PROJECT IMPLEMENTATION AND ADAPTIVE MANAGEMENT

78. **Summary finding:** The MTR finds that the implementation arrangement housed within MoWI with clear coordination of implementing partners provides a mechanism for mainstreaming implementation of the project activities in the formal structures and building capacity of respective institutions. MTR finds that this implementation arrangement provides room for sustainability as will guarantee ownership of project activities by respective stakeholders when the project ends. However, upscaling of the project initiatives within the basin is not guaranteed without additional funding, due to the fact these institutions are poorly resourced.

3.3.1 MANAGEMENT ARRANGEMENTS

79. A detailed description of the management arrangements is provided in section 3.3. The MTR finds that this implementation arrangement has worked well with MoWI managing its role and responsibilities by mainstreaming implementation of the project into its structure which guarantees ownership of project activities. The MTR notes that PCU has collaborated well with all partner institutions to link the project with complementary initiatives in the basins and the Technical Team has been convened quarterly for joint planning and progress review. The MTR finds that all the partners in the two basins have collaborated adequately including the NLUPC; the Ministry of Agriculture; Ministry of Livestock and Fisheries Development, TFS, LGAs, the Pangani and Wami-Ruvu Basin Water Boards (PBWB and

WRBWB) offices, DAWASA, DAWASCO, Tanga-UWASA, NGO and CBOs. The MTR notes that government's commitment has been demonstrated through payment of respective staff remuneration for the PCU and focal points in the respective institutions.

80. As per the ProDoc, the roles of the other responsible parties were to be captured in a Memorandum of Understanding drawn up at project inception, and signed by the Project Steering Committee Chairperson. This has not been implemented but rather has operated through mutual agreement (UWAMAKIZI), TFS (Amani NR, Uluguru NR). The MTR finds that the absence of the MoU might be negatively affecting the delivery of extension service to the communities adopting income generating activities as an incentive for engaging in watershed friendly land use practices. MTR notes that although support for these IGAs form part of the routine functions of the respective extension staff in the Basin offices and LGAs, they were not fully owned and mainstreamed in the LGAs and basins plans and budgets. In Mvuha (Morogoro District) for instance, two beekeeping groups have not received extension services since their establishment in 2016 resulting to poor production.
81. The project document had made provisions for a Technical Advisor in the first two years to support the PCU with technical issues, and to specifically lead the SLM funding mobilization. The TA was expected to develop a business case for leveraging funding for SLM, conduct the Public Expenditure review, identify new/alternative financing mechanisms and a plan of action for accessing these; conduct the feasibility study for establishing an SLM Fund and identify measures for its establishment; and work with stakeholders to develop a joint SLM investment strategy and monitoring plan. The Technical Advisor has not yet been recruited; although the public expenditure review was undertaken and the SLM funds mobilization activities are currently being implemented, the MTR finds the absence the Technical Advisor is reflected in the quality of the technical products developed by the project to date. Many of the reports – e.g. the Biophysical Inventory Report, the Income Generating Activities Report, etc., are technically weak.
82. **Responsibilities and reporting lines:** The roles and responsibilities of the project implementing partners are described in the Implementation arrangement and the project Monitoring and Evaluation (M&E) system. The PCU consolidates Quarterly Progress Reports (QPR) and Annual Project Review/Project Implementation Reports (APR/PIRs) from implementing partners. The reports are reviewed and endorsed by the PSC and submitted to UNDP CO building into the ATLAS. The APR/PIRs combine both UNDP and GEF reporting requirements. MoWI is responsible for reporting progress and results of the project to UNDP CO and also to the Vice President's Office (VPO) through the Division of Environment (DoE). The MTR notes that orientation of the planning partners was carried out in 2016 and the reporting lines and responsibilities are adhered to.
83. **Decision making and project execution:** The project's decision-making structures involve the UNDP CO as the GEF Implementation Agency, the MoWI as the main implementing partner, and the PSC as an oversight body and the Technical Team. Planning and review of progress are undertaken in a participatory process involving all key stakeholders. The agreed plans are then executed by respective partners using own structures. The MTR finds that decision-making has been transparent through these institutions and structures and has been undertaken in a timely manner.

3.3.2 WORK PLANNING

84. **Implementation timeline:** The project agreement was signed in March 2016 while the Inception Workshop was held a month earlier, in February 2016. The MTR finds that the implementation has been on schedule for most outcomes. The project has produced and implemented workplans quarterly based on the project logframe. The workplans are jointly prepared by the Technical Team and timely approved by the PSC and submitted to UNDP for endorsement and disbursement of funding. The MTR noted timely disbursement of the GEF funding to the Implementing partner with 87.52% of the GEF funding disbursed as of the August 2018.

85. From the Project progress reports (PIR), the MTR finds that the project has made good progress in its outcomes as indicated in the updated Tracking Tool. The field visits made in the Wami-Ruvu and Zigi catchments during this MTR process confirmed the progress reported in the PIRs mainly in the development of District Land Use Framework Plans, VLUPs, establishment of WUAs, restoration of watersheds, establishment of IGAs, hydrological flows monitoring and introduction of friendly land use practices in the 60 metres riparian buffer areas. The MTR however, noted serious under disbursement of the UNDP contribution with only 7% of its commitment made available as of the MTR. The MTR notes that UNDP was unable to meet its co-financing owing to a reduction of TRAC resources in the last two years and the large financial demand to conclude other projects that were due to close in the same period that TRAC resources diminished. The limited disbursement has led to delay in completion of the VLUPs where 16 of the 20 VLUPs were concluded to step 4 and underplayed implementation of steps 5 and 6 in the VLUPs. Steps four and five are crucial because they provide detailed planning on resources, implementation of the land use plans, watershed conservation interventions and the support to respective IGAs. The limited UNDP disbursement has also resulted in over-expenditure of 21.07% mainly on Outcome 1. The MTR notes that the delay was likely to affect conclusion of the project activities by 2020. The MTR agrees with the PCU's assessment that once the remaining UNDP co-finance is availed, the project will require a 1-2 years no-cost extension to complete the remaining activities. This is especially because most of the remaining work relates to empowering the Water Users Associations and implementing income generating activities. These types of activities require time. Throwing a lot of money at them in a bid to conclude the project within a tight timeline might cause more damage to sustainability issues than they achieve.
86. **Adaptive management:** The PIF was developed in 2011/12 and the PPG in 2014/15 and implementation started in March 2016. The MTR notes that the first year (2016) workplan included additional activities under Component 1 that were not adequately captured in the ProDoc. These were related to development of baseline information for water quality and quantity in the Ruvu catchment to help identification of appropriate interventions and monitor impact. To allow monitoring, this also necessitated rehabilitation of the gauging stations. MTR notes as well that development of the VLUPs and establishment of the WUAs was critical for effective delivery of the other outcomes and that these activities were not adequately planned and budgeted for during the project design. The MTR notes that the PCU solicited the necessary approval from the PSC, provided in 2017.
87. **Planning processes is results-based:** The project prepares quarterly workplans based on the project logframe with clear linkage to the Outcomes and respective indicators. The MTR notes that this has facilitated tracking of results in the Tracking Tool. The MTR notes that the M&E plan was updated and the logframe has been used to monitor project progress as part of the QPRs and the APRs.

88.

3.3.3 FINANCE AND CO-FINANCE

89. **Level of expenditure to-date:** The total costs of investment as indicated in the ProDoc is estimated at US\$ 27,648,858 of which US\$ 3,648,858 (13%) constitutes grant funding from GEF, US\$ 2,000,000 (7%) from UNDP and US\$ 22,000,000 (80%) comprises the GoT co-financing. The MTR notes that the project implementing partners committed substantive co-finance for direct and complementary activities and operational costs. The government co-financing constitute of US\$ 13.0m (MoWI), US\$ 6.5m (Tanga UWASA) and US\$ 2.5m (NLUPC).
90. The MTR notes that the GEF disbursement was done effectively (87.52%), however the UNDP disbursement was challenging with only 12.48% of its budget released (Table 2). The MTR notes that these variances between planned and actual disbursement have been discussed in the PSC with commitment from UNDP to continue fundraising noting its shrunk TRAC portfolio. The MTR notes that the project had an over-expenditure of 21.07% mainly on Outcome 1. The MTR notes that the PCU solicited and justified approval of the variance from UNDP.

91. **Cost effectiveness:** The project has delivered 57 % of the physical implementation using 54.2% of the budget. This was made possible through complementary resources from implementing partners including staff time and transport facilities. The project also benefited from matching activities implemented by partners in the watersheds including TFS in the Uluguru and Amani Nature Reserves; land use plans supported by the NLUPC and the respective LGAs and the Ministry of Livestock and Fisheries Development through the SRMP. In addition, voluntary engagement by communities in various activities including law enforcement by WUAs and VECs reduced the costs that would have been incurred by the project.

92.

93.

Table 6: Total Project Expenditure as at 02-08-2018

Project Outcomes	Budget as per the Project Document	Annual Expenditure (US\$)			Total Expenditure - As at 02-08-2018	Total Fund Balance - as at 02-08-2018	% Expenditure vs Budget	% Balance vs Budget
		YEAR 2016	YEAR 2017	YEAR 2018				
	GEF&TRAC	GEF&TRAC	GEF&TRAC	GEF&TRAC	GEF&TRAC	GEF&TRAC	GEF&TRAC	GEF&TRAC
Outcome 1	1,263,000.00	534,644.24	621,097.58	373,355.03	1,529,096.85	(266,096.85)	121.07	-21.07
Outcome 2	597,000.00	1,114.21	80,664.55	34,196.59	115,975.35	481,024.65	19.43	80.57
Outcome 3	1,570,000.00	217,273.57	85,981.19	98,863.25	402,118.01	1,167,881.99	25.61	74.39
Outcome 4	1,900,103.00	166,588.08	232,480.73	272,096.25	671,165.06	1,228,937.94	35.32	64.68
Outcome 5	318,755.00	1,016.65	59,068.82	283,347.98	343,433.45	(24,678.45)	107.74	-7.74
TOTAL	5,648,858.00	920,636.75	1,079,292.87	1,061,859.10	3,061,788.72	2,587,069.28	54.20	45.80

SOURCE: Combined Delivery Reports (CDRs)

Table 7: Project Expenditure for the GEF and UNDP Funding

Source	Budget as per the Project Document	2016	2017	2018	Total Expenditure Aug 2018	Total Balance Aug 2018	% Expenditure	% Balance
GEF	3,648,858.00	920,706.34	983,501.52	775,526.12	2,679,733.98	969,124.02	73.44	26.56
TRAC	2,000,000.00	(69.59)	95,791.35	286,332.98	382,054.74	1,617,945.26	19.10	80.90
Total	5,648,858.00	920,706.34	1,079,292.87	1,061,859.10	3,061,788.72	2,587,069.28	54.20	45.8

94. **Financial controls:** MTR noted that there are adequate financial controls that allow the project management team to make appropriate decisions and allowing timely flow of funds. The project used both the GoT and the UNDP financial systems as appropriate to facilitate expenditures and reporting. Disbursements were made based on prudent reporting against workplans and expenditures and also on adequate funds management. The expenditure reports were routinely reviewed and approved by the PSC and UNDP CO. The project received annual audits for 2016 and 2017.

95. **Mobilized extra funding:** The MTR notes that the project mobilized new partnerships in the project area including the Sustainable Range Management Programme (SRMP) in Wami-Ruvu Basin, Sustainable Minerals Resources Management Programme (SMRMP), WARIDI and the EAMCEF in the Eastern Arc Mountains and ONGAWA within Pangani Basin supporting IGAs mainly through value addition. The MTR notes however that contributions from the private sector have not been established notably because private sector investments were not adequately analysed and documented in the ProDoc.
96. **Co-financing:** The PCU has co-opted a half time staff to track co-financing on a regular basis (a best practice!). The MTR finds evidence that the partners in the co-financing arrangement implemented respective activities directly and also in collaboration with the MoWI in the Wami-Ruvu and Pangani Basins. Most of the implementing partner's funding was in-kind, covering costs incurred to implement respective activities including operations and staff salaries. The MTR finds that despite efforts made to engage additional implementing partners that were not identified in the ProDoc, GoT contribution was still low. Total GoT's co-financing as of the MTR was TZS 8,781,675,033.00¹¹ equivalent to USD 3,844,866.50 which was 17.48 % of the committed funding (Table 8).

Table 8: Project co-financing summary

No	Institution	Commitment (US\$)	Expenditure		% Expected Amount
			(TZS)	Eqvl (US\$)	
1	National Project Coordination Unit		243,570,000	106,642	5.22
2	Ministry of Water and Irrigation	13,000,000	1,305,975,600	571,796	
3	Ministry of Energy and Minerals		366,190,080	160,329	
4	Tanga City Council		47,800,000	20,928	
5	Wami - Ruvu Basin Water Board		1,517,188,800	664,271	
6	Pangani Basin Water Board		629,726,900	275,714	
7	Morogoro District Council		373,120,000	163,363	
8	Mvomero District Council		249,360,000	109,177	
9	Muheza District Council		235,920,000	103,293	
10	Mkinga District Council		235,840,000	103,258	
11	Korogwe District Council		187,120,000	81,927	
12	Amani Nature Reserve		451,639,923	197,742	
13	Uluguru Nature Reserve		453,582,250	198,592	
14	Tanga UWASA	6,500,000	669,895,585	293,301	4.51
15	MORUWASA		77,004,839	33,715	
16	National Land Use Planning Commission	2,500,000	1,094,220,656	479,083	19.16
17	Livestock and Fisheries Development		62,528,400	27,377	
18	Ministry of Agriculture		143,520,000	62,837	
19	Vice President's Office		437,472,000	191,538	
	Total	22,000,000	8,781,675,033	3,844,883	17.48

97. The MoWI and the implementing partners have endeavoured to develop financing opportunities. These include establishment of Water Fund to finance both the water resources management and water supply

¹¹ Exchange rate US\$ = TZS 2,283.99

projects. The Fund will raise most of its resources from the gasoline taxation. Through the project, a study was carried out on the feasibility of establishing SLM Fund. The findings indicated that such Fund was not feasible because there is no Law to support its establishment. This is the same fit that befell the proposed Environmental Fund and the REDD+ Fund.

3.3.4 PROJECT-LEVEL MONITORING & EVALUATION SYSTEMS

98. The Strategic Results Framework (SRF) is the basis of the project M&E, which consists of the project inception, quarterly reporting, annual reporting, periodic monitoring through site visits, and mid-term and end-of-project evaluations (Table 9). The PSC and UNDP Country Office oversee the project M&E with technical assistance from the UNDP/GEF Regional Coordination Unit. A UNDP M&E officer, who is part of the PCU, trains and facilitates the PCU, the Project Focal Points within the partner institutions and the Officials of the Water User Associations to undertake monitoring and evaluation of the project.

Table 9: The Project M&E Plan at Project Start

M& E Component	Responsible parties	Timeframe
Inception workshop and Inception report	Project Manager, UNDP CO (with support from UNDP RSC)	Within first two months of project start-up
Measurement of means of verification for objective indicators	Oversight by project manager, project team	Start, mid-term and end
Measurement of means of verification for progress and performance	Oversight by Project Manager, M&E Officer, Project Team	Annually
Annual Progress Reports/Project Implementation Reports (PIRs)	Project Team, UNDP CO, UNDP RSC	Annual
Quarterly Progress Reports	Project Team	Quarterly
Maintenance of Issues, Risks and Lessons logs	Project Manager, UNDP-CO	Quarterly
Combined Delivery Reports	Project Manager	Quarterly
MTR	Project Team, UNDP CO, UNDP RSC, Consultant(s)	Project mid-term
Terminal Evaluation	Project Team, UNDP CO, UNDP RSC, Consultant(s)	Within 6 months of project end
Terminal Project Report	Project Team, UNDP CO, Local consultant	One month before project end
Lessons learnt	Project Manager, UNDP CO	Annual
Financial Audit	Project Manager, UNDP CO, Consultants	Annual
Oversight visits (field)	UNDP CO, UNDP RTC, PMU, PSC, Government representatives	Annual

99. The *quality of the M&E system at project inception* is rated as *Moderately Unsatisfactory (MU)*, primarily because there were too many indicators many of them without baseline values. The strategic results framework indicated that the baseline values would be found in the Land Degradation Tracking Tool. However an examination of the Tracking Tool does not show baseline values for the targets suggested for the objective indicator.
100. The *quality of the M&E system during implementation* is rated as Highly Satisfactory (HS), with the following best practices identified: a) Members of the PCU and the Technical Committee (comprising of Focal Points from partner ministries) were already in place at the time of the inception workshop. They benefited from a proper induction process to familiarize them with the project's SRF and the project results-based monitoring; b) the project benefitted from proactive and consistent backstopping from UNDP, with the M&E Officer seconded to the PCU on a full time basis (for the first two years of the project); c) concerted effort to engage partner institutions in undertaking M&E, including the community based organizations (WUAs), makes M&E cost effective; d) Allocating a

specific individual (one of the Technical Committee members) with the responsibility of tracking of co-finance; e) Tabling the PIR as an item on the PSC meeting for discussion and approval¹². Collectively, these measures have made it easy for the PCU and the project partners to understand and use UNDP-GEF reporting formats. This is reflected in the quality of data captured for the PIR and other reports, track record of supervisory field missions, maintaining the ‘Risks and Issues Log’, general knowledge-sharing, and the excellent organization of the MTR mission;

101. **Inception Workshop:** The Inception Workshop took place nine months after the project approval, in February 2016. This falls within the normal duration for UNDP-GEF projects? It was well-attended by representatives from a wide ranging group of relevant stakeholders, and was held back to back with the first project PSC meeting. As per the Inception Workshop Report, the project was re-endorsed without any changes.
102. **Project Reporting:** The project has produced two high quality PIR reports. It has also conducted a series of assessments accompanied by eight reports including Biophysical Resource Inventory for Ruvu and Zigi Catchments; Assessment of Income Generating Activities; Gender Diagnosis, Assessment of SLM Financing, Ruvu River Health Baseline Report. These reports however need technical editing before they can be shared widely with external audiences.
103. **Tracking Tools:** The project made use of the relevant Land Degradation Tracking Tool, which was updated just before the MTR.
104. **Project Steering Committee Meetings:** The PSC has met twice a year as prescribed in the project management arrangement. The MTR draft findings were presented to the PSC on 27th August, at which meeting it was decided that the second PSC meeting for this year will debate the findings of the MTR, once the report is submitted. Meetings were routinely organized and run, minutes were produced, and follow-up actions were monitored. Although no issues of quorum have been raised, the 27th August meeting noted the frequent absence of the VPO and tasked the PSC chair to follow up. The presence of VPO at the PSC is important due to the emphasis on raising additional funding to replace the revenue stream which would have been provided via the proposed SLM Fund that is unlikely to materialize. VPO is as well the Focal Point of the GEF and GCF funds, which will be a potential source, especially targeting GEF 8.
105. **Annual audits:** The project was audited annually by a reputable firm of auditors, and received a clean audit report each year.
106. **Mid-term Review:** The MTR was carried out two months ahead of schedule.
107. **Oversight visits:** Oversight visits were carried out at irregular intervals, and back to office reports prepared, showing needed action, where necessary.
108. Considering all of these factors, the **overall quality of the project’s M&E system** is rated as Satisfactory to Highly Satisfactory range.

3.3.5 STAKEHOLDER ENGAGEMENT

Leveraging partnerships with stakeholders

109. The project works closely in partnership with MDAs, LGAs, NGOs and CSOs for complementarity of its activities in related projects and programmes. The MTR noted that the project involves and touches on an array of stakeholders. During the project preparation stage, a stakeholder analysis was undertaken that identified key stakeholders and assessed their prospective roles and responsibilities in the context of the project.

¹² However, the PSC members should be briefed adequately about the PIR and their role in its approval; and the PIR should not replace the annual reports in the format that PSC requires.

110. The MTR finds that the key stakeholder identified were relevant in terms of their direct engagement in the implementation as well as facilitating realization of the planned outcomes. The PCU has developed and leveraged the necessary partnerships both at the national level and also within the basins and catchment areas including working with MDAs, LGAs, and CBOs. The national levels MDAs have facilitated policy and strategic guidance (i.e. on sustainable financing, interpretation of laws in integrated land uses) while the LGAs, Civil Societies and communities have been engaged in field level implementation such as the land use planning, formation of Catchment/sub-catchment Committees, Water User Associations and resources user groups.
111. The MTR also confirmed the engagement of other category of stakeholders indirectly involved in Integrated Water Resource Management (IWRM) but whose role in the project is critical. These include the Division of Environment (DoE) in the Vice President's Office (VPO) as the Focal Point in matters relating to Global Environment Facility (GEF), the Ministry of Natural Resources and Tourism (MNRT) through The Tanzania Forest Service (TFS) responsible for the Amani and Uluguru Nature Reserves that form the critical watersheds. The Ministry of Agriculture has also facilitated agricultural extension services and farming practices while the Ministry of Livestock and Fisheries Development (MLFD) supports livestock and rangeland management. The President's Office-Regional Administration and Local Government (PO-RALG) through the Regional Secretariats (RS) works in close collaboration with the LGA structures in Tanga and Morogoro Regions to facilitate physical planning, formulation and enforcement of by-laws and preparation of district land use plans. The MTR notes that the seven participating LGAs have appointed Focal Points to the project and are actively involved in the workplanning, review of progress and implementation of respective activities. Village Councils have been responsible for planning and coordinating development activities at the local level including setting up village governance structures i.e. Village Natural Resource Committees -VNRC, Village Environmental Committees – VECs, and the PLUM teams responsible for overseeing the protection, conservation, lawful utilisation of natural resources (including water) and village land uses at the village level. Communities have been fully engaged in the VLUPs process, formation of WUAs and VECs, identification and implementation of IGAs and enforcement of laws.
112. The Community Associations/institutions that play an important role in using and managing water and land resources have also been engaged. They include (i) UWAMAKIZI (Umoja Wa Wakulima Wahifadhi Mazaringira Kuphuhwi-Zigi), a farmer's association engaged in an Equitable Payment for Watershed Services (EPWS) supported by Tanga-UWASA. They implement sustainable land management practices in the Zigi catchment. (ii) The JUWAKIHUMA (Jumuiya ya Wakulima wa Kilimo Hai Usambara Mashariki) Organic Spice Grower's Association in Muheza District. (iii) WAKUAKUVYAMA (Wakiluma wa Kuhifadhi Ardhi na Kutunza Vyanzo vya Maji – farmers for soil and water-source conservation), and (iv) The JUKUMU, a community wildlife Management association in the Ruvu catchment.
113. The MTR notes that the stakeholders' engagement has leveraged efforts and resources for implementation synergies in the two basins. The MTR notes that engagement of the private sector has not been significant but notes potential for further engagement through respective Basins and Water Authorities as demonstrated by the Tanga-UWASA.
114. **Active role in project decision-making:** The MTR notes that key stakeholders have been fully involved in the decision making through the Project Steering Committee and the Technical Team, which has technical representatives from key implementing institutions. The Technical Team has maintained institutional linkages within the catchments and supported setting up the multi-stakeholder forums for stakeholders' collaboration. The Catchment and Sub-catchment Committees are also geared towards the same objectives. The MTR however noted the absence of stakeholders' coordination at catchment and sub-catchment levels as the respective committees were yet to be operational. At the community level, respective institutions were not coordinated. For instance, there was no platform for WUAs and VEC/VNRC in Village governments that are legally established and implementing complementary functions to consult, plan and monitor SLM interventions.

115. **Stakeholder involvement and public awareness:** The MTR finds that all stakeholders were actively involved in the decision making through the PSC, joint planning and reviews through representation in the TT and the VLUP process in all the seven LGAs. The MTR further finds that the project and its partners have publicised the SLM interventions in the two catchments, taking advantage of the biodiversity richness in the Amani plateau and Uluguru Nature Reserve with their huge water catchment services and contribution to the local and national economy.

3.3.6 REPORTING AND COMMUNICATION

116. The MTR finds that the few changes that have been made to the project design have been reported to the relevant authorities using the right channels. The MTR noted some implementation challenges that included a delay in the project operationalization (in June 2016) and irregular disbursement where funding for the period of March – June 2016 and July – December 2017 were substantially delayed. MTR notes that the PCU through the Project Steering Committee (PSC) reviewed the respective Work Plans based on the available funding for implementation of priority activities. The MTR also notes that the PCU facilitated complementary partners' interventions implementation including the Tanga UWASA that support Zigi catchment conservation, facilitating the Mabayani Dam Conservation Committee, support to community services and provision of technical support to UWAMAKIZI. Others are the DAWASA, NLUPC, TFS and other NGOs/CBOs in the catchments.
117. The PCU also reviewed and included in the 2016 workplan, priority activities that were not adequately addressed in the ProDoc. The PCU also reviewed the monitoring framework and updated the indicators, and also facilitated development of the key baselines for water quality and quantity monitoring. These changes were presented and endorsed by the PSC.
118. **Understanding of UNDP reporting requirements:** The project team has reported to UNDP routinely on the physical Progress through Quarterly Reports (QPR) indicating progress made towards the project objective and project outcomes. The Annual Project Review/Project Implementation Reports (APR/PIRs) that combine both UNDP and GEF reporting requirements captures lesson learnt, good practice, and expenditures reports, Risk and adaptive management. The MTR finds that the PSC has regularly endorsed the QPRs and APR/PIRs, which have subsequently been approved by UNDP and the GEF Regional Unit. The UNDP and PCU have maintained accountability on the quality, timeliness and effectiveness on the delivery of quarterly operational reports, Annual Progress Reports (APR/PIR) and FACE reports as per the GEF and UNDP requirements and standards.
119. **Documentation and sharing of Lessons learned:** The MTR notes that project lessons learned were documented as part of the Annual Project Review/Project Implementation Reports (APR/PIR) and shared through the partners review meetings and the PSC. One of the lessons documented was the joint/integrated management in the Amani Nature plateau within Zigi catchment where critical priority activities were endorse including revocation of mining licenses and eviction of illegal miners that resulted in full recovery of the watershed and main of regular water flows. As a result of this success case, the MoWI has endorsed upscaling of the joint planning approach in the other basins. The MTR notes limited publication of the project lessons

Communication

120. Under Outcome 1, the project planned to develop and implement a catchment-wide communications and awareness-raising strategy. The MTR noted that the communications strategy will facilitate identification of information/awareness needs for various stakeholders, and enable development and dissemination of communications/awareness-raising materials. Some awareness materials including documentaries and publications/reports have been produced. The MTR notes that there have been regular PSC and TT meetings that besides overseeing the project, have also served as stakeholders platform for sharing relevant updates.

121. The MTR notes, however, that such platforms are not effective at Catchment, sub-catchment and WUAs levels. These institutions have met on irregular basis, with no clear facilitation and reporting and feedback mechanisms. Functioning of these structures has been opportunistic. The MTR noted that there is no dedicated Communications personnel within the PCU of the key implementing partners dedicated to communicate project interventions and stories. As such, communications of project stories has remained a mandate of the implementing institutions. The MTR noted also that the Water Basin Offices and District Councils were yet to develop a joint vision and strategy for promotion of SLM and protocols in the two catchments.
122. The project has also implemented and supported various awareness-raising initiatives including establishment of environmental clubs in schools, establishment of cultural groups, and various signage and publications. These initiatives have raised awareness of the project and the necessity of sustainable land management practices for watershed management, especially the role of water conservation friendly land use practices along the sixty meter radius of the river channel.
123. The MTR finds that the project has demonstrated several best practices and generated several lessons that it has not effectively shared. Although the results are reported in the project reports such as the PIR, they are not synthesized and communicated widely to national, regional and global audiences in promoting the IWRM approach in pursuit of additional resources including the private sector, bilateral donors and global financing windows.
124. The MTR notes that in the project design, various stakeholders were identified. The MTR notes an existing potential for engagement with the large water users in the private sector namely the Coca Cola, Breweries, Cement factories and Water Supply and Utility Agencies either as direct beneficiaries of the watersheds or as part of their CSRs.
125. **Awareness campaign:** The project has supported various awareness raising initiatives including participation in the national events such as the Water week, the World Environmental day, the farmers day (Nanenane and the Sabasaba). These have increase communities capacity in managing their IGAs and improvement in land use practices.

3.4 SUSTAINABILITY

3.4.1 FINANCIAL RISKS TO SUSTAINABILITY

126. The project design identified inadequate financing for SLM as a key threat to the uptake of SLM in watershed management. The project made great effort to identify additional sources of funding and to equip the project stakeholders to access these funds, including: a proposal to establish and capitalize an SLM Fund; assist stakeholders with technical skills to write proposals to the National Water Fund; empower Water User Associations to charge fines for illegal water abstractions and to keep a percentage of the Water Use Fees to contribute towards financial sustainability at WUA-level. Some progress has been made towards increasing funds for SLM: The National Water Fund has recognized the WUA model as an effective innovative management tool for watersheds and has welcomed proposal by WUAs nation-wide for income generating activities. Some ministries (such as Min of Agriculture, Water and Irrigation) are including SLM in their national budgets. However, the MTR considers the financial risk to sustainability high for the following reasons:
127. The model adopted by the project – building the capacity of the Water Use Associations so they can be guardians of the Water Resources Management Act (2009) provisions of conserving water sources; coupled with mainstreaming SLM as a tool for securing watershed services into the relevant sectors is highly effective. However, the scale of the project intervention is very small compared to the magnitude of the challenge in the two Water Basins. For SLM to impact watershed services at the two Watershed Basins there is need to replicate the project pilots at scale, which will be a resources intensive process.

128. Although SLM is now being included in budgets of some Ministries, most Ministries do not get 100% of their budget requests financed; SLM is still amongst the top items to be dropped when budgets are not fully financed.
129. The proposed SLM Fund is unlikely to be formed within the lifetime of the project because there is no Law in the country to support it. Although the National Water Fund, the Urban Water Authorities and the private sector are being pursued, the effort is yet to yield significant funds;
130. There is also a high probability that the local level economic growth will not provide adequate returns on investment in SLM within the lifetime of the project, due to the high levels of poverty prevalent in the project areas, and in the areas where replication is necessary to ensure long-term impacts on watershed services. Alternative livelihood activities are being introduced, in the form of commercial tree crops (cacao, spices, and sugar cane), bee keeping and fish farming. While these alternatives have potential to increase household incomes for those participating, the challenge here is the small scale of implementation, where they are benefitting a small percentage of the land users. There is also need to adopt a value-chain approach, to anticipate challenges related to value addition and marketing.
131. Financing WUAs through fines and part of fees from Water Fees paid for legal abstractions is proving difficult because of the new directive from the government that all government revenues be channeled through the treasury. The WUAs currently active are still waiting for the electronic device which enable them to transact. Besides, channeling the money to the treasury and having to apply for it (through the Water Basins) is likely to cause delays and increase transaction costs for little amounts of money.
132. There is need for the PSC to find an alternative source of funding for SLM in the same amounts and flexibility that would have been provided by the SLM Fund – which is unlikely to be the case with the National Water Fund or the Pangani Water Trust. The Pangani Water Trust actually provides an example of accessing Payment for Watershed Services, but it will finance SLM activities in the Pangani Basin only. Other sources of funds should be pursued such as the Bilateral Development Partners in Tanzania (such as NORAD, CIDA, etc.), GEF 8, Green Climate Fund and other Disaster Risk Reduction Funds. In addition, the project should formulate an exit strategy at the earliest opportunity, so as to provide an opportunity to understand the magnitude of additional funds needed to replicate the project initiatives at a scale that will make a significant difference at the Basin-level as well as potential sources of such funds and the actions needed now to advance the opportunities of mobilizing such funding.

3.4.2 SOCIO-ECONOMIC RISKS TO SUSTAINABILITY

133. The project design and implementation have been highly participatory. The project is implementing an awareness strategy that has already raised awareness amongst relevant stakeholder groups on the importance of SLM as a tool for watershed management; the provisions of the Water Act and the importance of conserving sources of water for the national economy and local livelihoods. At the local level, the Water Use Associations have spearheaded the adoption of water-conservation friendly activities within the 60 meter radius of water channels. These processes have raised the expectations of the local communities significantly, and they are now expecting incentives for adopting these good practices. The MTR finds that although the alternatives livelihood activities introduced will in the long-run provide incentives, the benefits are less than the communities expect. If not addressed, this is likely to be a source of socio-economics risk to sustainability.

3.4.3 INSTITUTIONAL FRAMEWORK AND GOVERNANCE RISKS TO SUSTAINABILITY

134. The project has taken several measures to remove institutional and governance risks to sustainability. The first one is enhancing collaboration between institutions that deal with water and natural resources, ensuring that they all build requisite awareness of the importance of SLM in water catchment management, and the capacity to improve management practices. This has also led to mainstreaming of the concept of SLM as a tool for watershed management into important sectors

including agriculture, livestock, water, land, planning, and community development. The second is the creation of community based organizations – the Water Users Associations – to spearhead the enforcement of the Water Act at the local level. The project is implementing initiatives to improve sources of revenues for these WUAs. Despite these positive developments, the MTR finds that institutional risk to sustainability still remains high for the following reasons.

135. WUAs are inadequately resourced: many WUAs have only limited resources lacking offices, transport and communications resources. A few WUAs have been provided with machines to make bricks to contribute towards the construction of offices, but they have limited sources of funds to meet other costs of construction. The few that have received motor cycles have no sustainable means of running and maintaining them. WUAs are expected to raise revenues from income generating activities and charging fines and part fees from Water Use Fees. As explained in the previous sections, the income generating activities under implementation have not yet provided significant returns, and WUAs are still waiting to receive the electronic device that would enable them to transact officially. Secondly, these WUAs are still in the early stages of establishment and will require support to build themselves from organizations into resilient institutions. The stakeholders with mandate to build these local level institutions are willing but have limited budgets for the task. In addition, the coordination between WUAs and the Village Environment Committees at the local level needs to be formalized and improved. WUAs report to basin offices while the Village Environment Committees report to the Local Government Authorities, through the Village Committees. WUAs still need coordination at the local level; the project has established two sub-catchment committees, one in each catchment (Ruvu and Zigi) to play the role of umbrella coordination bodies. These are however still very new and not yet effective.

3.4.4 ENVIRONMENTAL RISKS TO SUSTAINABILITY

136. The project has adopted three measures to address environmental risks to sustainability: integrated land use plans, use of SLM as tool for watershed management and the use of spatial decision-support systems that make it possible to track the impacts of SLM on land degradation and watershed services. Sixteen villages have land-use plans, but majority of them go up to step four. These plans need to go through steps five and six in order to secure SLM benefits to watershed services. This is especially important in very steep areas where whole villages, government tea plantation and tea plantations are still located within the 60 meter diameter of the river channels – especially in Zigi.

4 Conclusions, Lessons and Recommendations

4.1 CONCLUSIONS

137. The stakeholders have demonstrated a very high degree of collaboration and coordination; credited to the strong PCU and senior management of partner institutions who have demonstrated high commitment and drive. The project has made significant progress towards the objective of integrating the use of sustainable land management to alleviate land degradation, maintain ecosystem services and improve livelihoods in the Ruvu and Zigi Catchments. Implementation of the project is in substantial compliance with the expected results, and it can be taken as an example of *‘good’*. The project is well-integrated systemically in the partner institutions, particularly the Ministry of Water and Irrigation, Tanga and Morogoro Water Basins Authorities as well as the Local Government Authorities within the project area. The project has been well-managed and has demonstrated commitment to gender mainstreaming. The implementation and governance arrangement, stakeholders’ participation and M&E have been rated as *‘Satisfactory’*. The project is highly relevant, meeting a felt need at the local, national and international level.
138. Despite challenges with disbursements, project implementation has progressed fairly well with about 57 percent progress towards indicators with about 54 percent budget spent; this is evidence of an

appropriate implementation arrangement. Early impacts are significant: sediments loads measured at 11 stations in Ruvu catchment and 6 stations in Zigi catchment registered an average of 27 percent reduction in soil erosion (exceeding the end of project target of ten percent). This is impressive as it happened concurrently with increase in mean annual river flow rate, which rose by 20 percent for Ruvu River (from 60 m³/sec at project inception to 72 m³/sec; measured between January and December 2017). This is double the end of project target. There is a three percent improvement in household welfare for households adopting income generating activities; yields of maize have increased from 2.5 tons/ha at project inception to 3.8 ton/ha for farmers adopting SLM measures, with concurrent increase in income from TZS 480,000/- to TZS 550,000/- per year. The project has therefore effectively demonstrated that SLM is a powerful tool to address complex IWRM challenges, and that communities are ready and willing to play their part in IWRM when the incentives and disincentives are clear.

139. However, there are a few challenges. With four outcomes, 13 outputs and 69 groups of activities covering a large area (over the two basins), the project was ambitious. Thus the scale of the implementation/piloting is very small given the huge magnitude of the challenge in each basin. In addition, at MTR the returns from income generating activities are too low to adequately compensate the lost opportunities for those vacating the sixty meter radius of the river channels. This is against a background of heightened expectations from participating communities and WUAs. It is therefore not advisable to scale down the project to one basin to consolidate impacts. This is because the project has demonstrated best practices in community participation in IWRM via WUAs, including engaging WUAs in M&E processes; engaging previous practitioners of illegal activities in the WUAs and therefore guardians of the watershed. However, this could be reversed if the project is withdrawn from one basin or benefits from IGAs continue to be limited, with serious reversals to the impacts already demonstrated.
140. The proposed SLM Fund is unlikely to materialize because it lacks a legal basis. Both UNDP and Government have been slow in providing committed co-finance, compounding financial access as a barrier, and limiting the potential for upscaling. The project sustainability is still threatened by inadequate socio-economics benefits and the still weak Water User Associations.

Lessons learnt

- *Working through government structures and systems creates a good platform for the political commitment in SLM interventions as demonstrated in the restoration of the Amani plateau in the Zigi catchment through consolidated engagement from national to community levels, with demonstrable wider incentives and disincentives and the observation of the rule of law.*
- *Commitment without finance is not enough: Implementation of SLM through government structures and systems imply the respective institutions owning and meeting the necessary costs. Although the institutions – MDAs, LGAs and Basin level institutions have demonstrated commitment including inclusion of SLM interventions in their plans, funding has remained limited. The risk is that gradual loss of results after the project if these institutions remain resource handicapped.*
- *Timing of disbursements of funds for SLM is critical because many of the activities are time sensitive – missing one rainy season may mean a whole year lost for project implementation;*
- *Involving communities via awareness raising is a cost effective way of protecting watersheds, but is highly dependent on clear incentives;*
- *Many people are aware of the local level laws governing watershed management but they will not comply unless there is a clear disincentive;*
- *Multidisciplinary collaboration is a powerful tool, but it can be difficult and expensive. It requires patience and negotiation skills, backed by commitment by senior management; as well as broad understanding of costs and benefits of sector specific interventions/activities on overall watershed services; it needs champions.*

- *IGAs can be a clear incentive for watershed management but they have to be adequate and delivered early in the process.*

Recommendations

Review Issue	Recommendation	Responsible Party	Timeline
Project strategy	Indicators and risks: Although the strategic results framework has too many indicators and targets, many of them worded as outcomes and/or outputs, it is noted that the PIR has streamlined the outcome level indicators, selecting only a few robust ones. The project could therefore modify the SRF indicators to reflect those in the PIR. It could also keep all of them if they are deemed necessary as an annual project monitoring tool.	PMU	Immediately
	The indicator for Outcome 2 (% increase in SLM funding) with a target of 15 percent increase is problematic because the baseline was given as zero; meaning any amount would already be a huge increase in percentage. The logframe and PIR should be updated to reflect the baseline values established by the public expenditure review.	PMU	Immediately
	Risks: the project design identified nine risks, with only one accorded a moderately high probability of occurrence. This placed the project in the Low risk category. The probability rating of two risks should be upgraded from Low to Moderately High. These are: a) Government institutions lack the resources and/or capacity to implement the project or to sustain gains once external project support has been withdrawn; and b) Local level economic growth fails to provide adequate returns on investment in SLM, or the economic gains of SLM are eroded by external factors such as rampant inflation. There should have been two additional risks: a) that the livelihood and income generating alternatives offered by the project may fail to provide adequate incentives for long-term adoption of SLM practices, despite the demonstration by the project; b) That the SLM Fund may lack the Law supporting its establishment and capitalization. Previous experience of establishing the Environment Fund (under the VPO) and attempt to establish the REDD+ Fund (under Forestry) have proven that these Funds need special provisions in the Law to enable their creation and capitalization.	PMU	Immediately

Management implementation	<p>Stakeholder engagement: Implementation of the SLM project through multidisciplinary collaboration has created great synergies and also expectations from the partners. This collaboration requires effective management with clear partnership mechanisms for continued partnerships beyond the project. Operationalization of the Catchment and sub-catchment committees is the best starting point. Other arrangement would include the planned Trust Fund.</p>	PMU with support of PSC	Immediately
	<p>The project newly formed Sub-catchment Committees should be empowered further to provide an effective coordination and reporting mechanism for the Water Users Associations at the local level.</p>	PMU with support of PSC	Soonest possible
	<p>Work planning and reporting: It is recommended that the project improve the quality of all its publications and awareness raising materials before sharing them widely. The PCU would benefit from the services of a part time Technical Advisor, provided for at design but not yet hired. This has been demonstrated as a best practice by PIMS 5106 - Enhancing the Forest Nature Reserves Network for Biodiversity Conservation in Tanzania.</p>	UNDP and PSC	Immediately
	<p>Finalization of the Village Landuse Plans, facilitation of established WUAs, restoration of watersheds and facilitation of the established IGAs require uninterrupted funding. UNDP should step up its fundraising efforts to meet its committed co-finance to ensure that these interventions are completed and the project outcomes are realized by the end of the project. The MTR notes that the delayed disbursement was likely to affect conclusion of the project activities by 2021 closing date considering the lengthy consultation processes required to finalize the VLUPs through steps 5 and 6. The MTR feels that the established institutions – WUAs and catchment Committees, and the IGAs will require time to mature and therefore cannot be fast tracked in the remaining period even if funding was made available fully. A 2-years no-cost extension period will be required for logical completion of the remaining activities.</p>	UNDP	Soonest possible
	<p>Financial planning and co-finance: Overall expenditure as of August 2018 was 54.2% with component 1 registering a 21.07% over expenditure mainly because of the additional activities included in 2016. This component will therefore require revision on the remaining activities and prioritization of funding for this critical component.</p>		
	<p>Review of the project scope: The Project workplan/activities should be revised to focus on priorities that will consolidate impacts. For instance the establishment of the SLM Fund should be dropped and emphasis focussed on further fund raising to provide funds for upscaling the initiatives throughout the basins. Empowering WUAs, expansion of the income generating activities and completion of steps 5 and 6 of the land use plans should also be prioritized.</p>	PMU with support of the PSC	Immediately
	<p>UNDP to identify and to communicate transparently the reasons for the regular disbursement delay to inform proper planning.</p>	PMU with support of the PSC	Soonest possible
	<p>There exists a potential for engagement of the private sector. The MoWI and the other implementing partners should forge and promote partnerships with private sector and increase efforts on new funding options including development of high quality proposals to access the significant funds from the Water Fund, negotiating and engaging new stakeholders such as the large water users – cement factories in Tanga and Dar es Salaam, breweries, cold drinks companies, etc. The planned process to establish Water Trust Fund should be hastened as there is interest for</p>	UNDP	Immediately

	<p>the private sector to contribute to such initiatives as part of their Corporate Social responsibility CSR.</p> <p>Link and work with other government agencies i.e. the VPO, MoFP, Ministry of Agriculture – for the Smart Agriculture Window and the respective National Implementing Entities (NIEs) on preparations to access GEF 8 funds targeting the Land Degradation Neutrality (LDN) angle, GCF and Adaptation Fund;</p> <p>Most implementing partners have included SLM activities in their workplans and budgets. However financing of such activities from own sources remains poor. Lobbying should continue through the PSC and the Focal Points to ensure SLM is prioritized during financial planning.</p> <p>The income generating activities should take on a value chain approach. The PCU should acquire additional capacity in this field, especially enterprise development.</p>	<p>PMU with support of the PSC</p> <p>UNDP CO and RCU</p> <p>PSC</p>	<p>Soonest possible</p> <p>Soonest possible</p> <p>Soonest possible</p>
Sustainability	<p>The Water Users Associations are critical for delivering project results and sustaining them after the project ends. Majority of the old and newly formed WUAs still require a lot of support to make them effective. Many still face challenges with basics; they lack offices, transport or operational funds. This is exacerbated by unclear sources of revenue. With the proposed SLM fund unlikely to materialize, it is important to focus attention on raising additional funds from other sources, including providing income generating activities for the WUAs.</p> <p>In addition, the institutional capacity building work should not be rushed once UNDP co-finance is availed. It is recommended that the project be extended by two years to increase the probability of creating resilient WUAs. It is particularly important to support them through the local and general elections of 2021 when political considerations might undo most of the benefits from the project if it is closed earlier, and if the benefits from income generating activities are still considered inadequate compensation for the opportunity cost of the sixty meter radius along the river channels.</p>	<p>PMU with support of PSC</p> <p>UNDP and PSC</p>	<p>Soonest possible</p> <p>Soonest possible</p>

5 Annexes

5.1 ANNEX 1: MTR TOR

Introduction

United Nations Development Programme (UNDP) and Global Environment Facility (GEF) Monitoring and Evaluation Policies (M&E) policies and procedures stipulate that any full-size project must undergo an independent Mid-Term Review (MTR) at the mid-point of project implementation. The five-year project, “**Securing Watershed Services through Sustainable Land Management in the Ruvu and Zigi catchments (Eastern Arc Region), Tanzania**” (PIMS 5077) that is being implemented through Ministry of Water and Irrigation as Implementing Partner, was endorsed on 30th March 2016 and the project is presently entering its third year of implementation. In compliance with the UNDP-GEF Monitoring and Evaluation policies and procedure above-mentioned project shall undergo a Mid-Term Review by mid-2018. The MTR process must follow the guidance outlined in the document: [Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects](#).

These Terms of Reference (ToRs) set out the expectations for the mid-term review. Essentials of the project to be reviewed are Table 1 below.

Table 1: Essential Data and Information on the Watershed Project

Project Title:				
UNDP Project ID:	PIMS 5077	Project financing	<i>at endorsement (Million US\$)</i>	<i>at MTE (Million US\$)</i>
ATLAS Award ID	00086631			
ATLAS Project ID:	00093855	GEF financing:	3,648,858.00	
Country:	Tanzania	IA/EA own:	2,000,000	
Region:	RBA	Government (MOWI):	13,000,000	
Focal Area:	Land Degradation / Integrated Water Resources Management	Other:	Tanga-UWASA 6.5M NLUPC 2.M	
GEF Focal Area Strategic Program	Sustainable Land Management at the National Level (SP 1)	Total co-financing:	22,000,000	
Executing Agency:	Office of the Vice President	Total Project Cost in cash:	27,648,858	
Other Partners involved:		ProDoc Signature (date project began):	30 th March 2016	
			Planned closing date: December 2020	Revised closing date:

Project Background Information

The Global Environment Facility (GEF) in collaboration with UNDP has committed US\$ 5.65 million to support the “Securing watershed services and improving livelihoods in the Ruvu and Zigi catchments” by addressing land degradation in forests, rangelands and farmlands through implementation of practical sustainable land management (SLM) interventions. This is a five-year project implemented in the Uluguru and East Usambara Mountains, which give rise to the Ruvu and Zigi Rivers respectively. The forests in these catchments are globally recognized as important stores of carbon and centers of species diversity and endemism. They also provide critical watershed services, the continued functioning of which is being compromised by a host of human-induced pressures and poor land-use practices that are causing rapid land use change and land degradation. The situation is made worse by high levels of poverty and population growth; inadequate infrastructure for providing clean water to communities, low levels of compliance with water-use regulations and a lack of co-ordination amongst the various institutions and programmes operating in the catchments. The combined results of this are that both the quantity and quality of water in the Ruvu and Zigi river catchments is declining, undermining ecosystem services and functions and resulting in water shortages for people and the environment.

Objective of the Mid-Term Review (MTR)

The MTR will assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document, and assess early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results. The MTR will also review the project’s strategy, its risks to sustainability.

Detailed Scope of the MTR

The MTR team will assess the following four categories of project progress. *See the Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for extended descriptions.

4.1 Project strategy

Project design:

- Review the problem addressed by the project and the underlying assumptions. Review the effect of any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document.
- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results. Were lessons from other relevant projects properly incorporated into the project design?
- Review how the project addresses country priorities. Review country ownership. Was the project concept in line with the national sector development priorities and plans of the country (or of participating countries in the case of multi-country projects)?
- Review decision-making processes: were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process considered during project design processes?
- Review the extent to which relevant gender issues were raised in the project design. See Annex 9 of Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects for further guidelines.
- If there are major areas of concern, recommend areas for improvement.

Result Framework/Log frame

- Undertake a critical analysis of the project’s Log frame indicators and targets, assess how “SMART” the midterm and end-of-project targets are (Specific, Measurable, Attainable, Relevant, Time-bound), and suggest specific amendments/revisions to the targets and indicators as necessary.

- Are the project's objectives and outcomes or components clear, practical, and feasible within its time frame?
- Examine if progress so far has led to, or could in the future catalyse beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc...) that should be included in the project results framework and monitored on an annual basis.
- Ensure broader development and gender aspects of the project are being monitored effectively. Develop and recommend SMART 'development' indicators, including sex-disaggregated indicators and indicators that capture development benefits.

Progress towards outcomes analysis

Review the log frame indicators against progress made towards the end-of-project targets using the Progress Towards Results Matrix and following the *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*; colour code progress in a "traffic light system" based on the level of progress achieved; assign a rating on progress for each outcome; make recommendations from the areas marked as "Not on target to be achieved" (red).

Progress towards Results Matrix (Achievement of outcomes against End-of-project Targets)

Project Strategy	Indicator ¹³	Baseline Level ¹⁴	Level in 1 st PIR (self-reported)	Mid-term Target ¹⁵	End-of-project Target	Midterm Level & Assessment ¹⁶	Achievement Rating ¹⁷	Justification for Rating
Objective:	Indicator (if applicable):							
Outcome 1:	Indicator 1:							
	Indicator 2:							
Outcome 2:	Indicator 3:							
	Indicator 4:							
	Etc.							
Etc.								

Indicator Assessment Key

Green= Achieved	Yellow= On target to be achieved	Red= Not on target to be achieved
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In addition to the progress towards outcomes analysis:

- Compare and analyse the GEF Tracking Tool at the Baseline with the one completed right before the Midterm Review.
- Identify remaining barriers to achieving the project objective in the remainder of the project.
- By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

Project Implementation and Adaptive Management

This category will consider the following:

¹³ Populate with data from the Logframe and scorecards

¹⁴ Populate with data from the Project Document

¹⁵ If available

¹⁶ Colour code this column only

¹⁷ Use the 6 point Progress Towards Results Rating Scale: HS, S, MS, MU, U, HU

Management Arrangements:

- Review overall effectiveness of project management as outlined in the Project Document. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement.
- Review the quality of execution of the Executing Agency/Implementing Partner(s) and recommend areas for improvement.
- Review the quality of support provided by the GEF Partner Agency (UNDP) and recommend areas for improvement.

Work Planning

- Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved.
- Are work-planning processes results-based? If not, suggest ways to re-orientate work planning to focus on results?
- Examine the use of the project's results framework/ logframe as a management tool and review any changes made to it since project start.

Finance and co-finance

- Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions.
- Review the changes to fund allocations because of budget revisions and assess the appropriateness and relevance of such revisions.
- Does the project have the appropriate financial controls, including reporting and planning, that allow management to make informed decisions regarding the budget and allow for timely flow of funds?
- Informed by the co-financing monitoring table to be filled out, provide commentary on co-financing: is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly to align financing priorities and annual work plans?

Monitoring and Evaluation Systems

- Review the monitoring tools currently being used: Do they provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? How could they be made more participatory and inclusive?
- Examine the financial management of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively?

Stakeholder Engagement:

- Project management: Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders?
- Participation and country-driven processes: Do local and national government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation?
- Participation and public awareness: To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives?

Reporting

- Assess how adaptive management changes have been reported by the project management and shared with the Project Board.

- Assess how well the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly-rated PIRs, if applicable?)
- Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners.

Communications:

- Review internal project communication with stakeholders: Is communication regular and effective? Are there key stakeholders left out of communication? Are there feedback mechanisms when communication is received? Does this communication with stakeholders contribute to their awareness of project outcomes and activities and investment in the sustainability of project results?
- Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?)
- For reporting purposes, write one half-page paragraph that summarizes the project's progress towards results in terms of contribution to sustainable development benefits, as well as global environmental benefits.

Sustainability

- Validate whether the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module are the most important and whether the risk ratings applied are appropriate and up to date. If not, explain why.
- In addition, assess the following risks to sustainability:

Financial Risk to Sustainability

What is the likelihood of financial and economic resources not being available once the GEF assistance ends (consider potential resources can be from multiple sources, such as the public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project's outcomes)?

Socio-economic risks to sustainability:

- Are there any social or political risks that may jeopardize sustainability of project outcomes?
- What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained?
- Do the various key stakeholders see that it is in their interest that the project benefits continue to flow?
- Is there sufficient public / stakeholder awareness in support of the long-term objectives of the project?
- Are lessons learned being documented by the Project Team on a continual basis and shared/ transferred to appropriate parties who could learn from the project and potentially replicate and/or scale it in the future?

Institutional Framework and Governance risks to sustainability:

- Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits?
- While assessing this parameter, also consider if the required systems/ mechanisms for accountability, transparency, and technical knowledge transfer are in place.

Environmental risks to sustainability:

Are there any environmental risks that may jeopardize sustenance of project outcomes?

MTR Approach and Methodology

The MTR must provide evidence based information that is credible, reliable and useful. The MTR team, comprised of an international and national expert, will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Environmental & Social Safeguard Policy, the Project Document, project reports including Annual Project Review/PIRs, project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the team considers useful for this evidence-based review). The MTR team will review the baseline GEF focal area Tracking Tool submitted to the GEF at CEO endorsement, and the midterm GEF focal area Tracking Tool that must be completed before the MTR field mission begins.

The MTR team is expected to follow a collaborative and participatory approach¹⁸ ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), the UNDP Country Office(s), UNDP-GEF Regional Technical Advisers, and other key stakeholders.

Engagement of stakeholders is vital to a successful MTR¹⁹. Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to executing agencies, senior officials and task team/ component leaders, key experts and consultants in the subject area, Project Board, academia, local government and CSOs and project stakeholders

Additionally, the MTR team is expected to conduct field missions to selected sites in the two basins to review progress on the ground.

The MTR consultants will be expected to work jointly as a team to produce one single MTR report that describes the full MTR approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the review.

Mid-Term Review Deliverables

	Deliverable	Content	Timing	Responsibilities
1	Inception Report	Review team clarifies timing and method of review	No later than 2 weeks before the review mission	Review team submits to UNDP Country Office, Ministry of Water and Irrigation & Project Coordination Unit (PCU)
2	Presentation	Initial Findings	End of review mission	To Project Coordination Unit (PCU), MOWI, VPO-DE and UNDP Country Office
3	Draft Final Report	Full report (see template in Appendix 3) with annexes	Within 3 weeks of the review mission	Sent to UNDP CO, reviewed by PCU, GEF
4	Final Report	Revised report with audit trail detailing how all received comment have (and have not) been addressed in the final review report).	Within 1 week of receiving UNDP comments on draft	Sent to UNDP CO, MOWI/Project Coordination Unit (PCU)

¹⁸ For ideas on innovative and participatory Monitoring and Evaluation strategies and techniques, see [UNDP Discussion Paper: Innovations in Monitoring & Evaluating Results](#), 05 Nov 2013.

¹⁹ For more stakeholder engagement in the M&E process, see the [UNDP Handbook on Planning, Monitoring and Evaluating for Development Results](#), Chapter 3, pg. 93.

Conclusions & Recommendations

The MTR team will include a section of the report setting out the MTR's evidence-based conclusions, considering the findings.²⁰

Recommendations should be succinct suggestions for critical intervention that are specific, measurable, achievable, and relevant. A recommendation table should be put in the report's executive summary. See the *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for guidance on a recommendation table.

The MTR team should make no more than 15 recommendations total

Ratings

The MTR team will include its ratings of the project's results and brief descriptions of the associated achievements in a *MTR Ratings & Achievement Summary Table* in the Executive Summary of the MTR report. See Annex C for ratings scales. No rating on Project Strategy and no overall project rating is required.

MTR Ratings & Achievement Summary Table

Measure	MTR Rating	Achievement Description
Project Strategy	N/A	
Progress Towards Results	Objective Achievement Rating: (rate 6 pt. scale)	
	Outcome 1 Achievement Rating: (rate 6 pt. scale)	
	Outcome 2 Achievement Rating: (rate 6 pt. scale)	
	Outcome 3 Achievement Rating: (rate 6 pt. scale)	
	Etc.	
Project Implementation & Adaptive Management	(rate 6 pt. scale)	
Sustainability	(rate 4 pt. scale)	

MTR Implementation Arrangements

The principal responsibility for managing this review exercise resides with the UNDP CO in Dar Es Salaam, Tanzania in collaboration with MOWI. The UNDP CO will contract the consultants and ensure the logistical arrangements are in place in collaboration with the project team. The project team shall be responsible for logistical arrangements to the field visits. In consultation with the review team, PCU will assist in setting up stakeholder interviews; arrange field visits and consultation with leadership of all collaborating partners.

In preparation for the review mission, the Project Coordinator with assistance from UNDP CO will arrange for the completion of the tracking tools (M&E, SLM tracking tool at mid-term stage). The tracking tools will be completed/endorsed by the relevant implementing agency or qualified national research /scientific institution, and not by the international consultant or UNDP staff. The tracking tools will be submitted to the mid-term review team for comment. These comments will be addressed by the project team, and the final version of the tracking tools will be attached as appendices to the Mid-term Review report. The Project team will be responsible for liaising with the MTR consultants to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

²⁰ Alternatively, MTR conclusions may be integrated into the body of the report.

Timeframe

The total duration of the MTR will be within a period approximately 12 weeks (24 effective working days) starting from June 2018 according to the following plan:

TIMEFRAME	ACTIVITY
20 th April 2018	Finalize TOR and requisition
25 th April to 15 th May 2018	Recruitment for the MTR Team
Late May 2018	Engage the consultant and handover of Project Documents and prepare MTR inception report
1-13 th June (13 days)	MTR mission: stakeholder meetings, interviews, field visits
14-15 th June (3 days)	Consultations with stakeholder in Dar and Morogoro
16 th June (1 day)	Mission wrap-up meeting & presentation of initial findings-earliest end of MTR mission – probably in Dar
17-20 th June	Preparation of the draft report and submit to UNDP CO
25 th June to 10 th July	Allow time for stakeholders to provide comments
11-14 th July (3 days)	Incorporating comments including audit trail from feedback on draft report/Finalization of MTR report and submit to UNDP
15-20 th July	Preparation & Issue of Management Response
30 July 2018	Expected date of full MTR completion

Options for site visits should be provided in the Inception Report

Team Composition

A team of two independent consultants will conduct the MTR – a team leader (with international experience and exposure to projects and evaluations in other regions globally) and a national expert. The international consultant will serve as overall Team Leader and be responsible for the final quality of report submitted to UNDP. The two consultants will form a team making a joint presentation at the end of the in-country field visits and submission of a joint final report at the end of the assignment. The consultants cannot have participated in the project preparation, formulation, and/or implementation (including the writing of the Project Document) and should not have a conflict of interest with project's related activities.

Competencies of the National Consultant

- Recent experience with result-based management evaluation methodologies;
- Experience applying SMART indicators and reconstructing or validating baseline scenarios;
- Competence in adaptive management, as applied to SLM and conservation and Natural resources management
- Work experience in relevant technical areas for at least 10 years;
- Excellent communication skills;
- Demonstrable analytical skills;
- Project evaluation/review experiences within United Nations system will be considered an asset;
- Experience working in East Africa

Required Skills and Experience

Education

- Masters in a relevant area such as Environmental Economics, Environmental Sciences, Land and Water resources management, Landscape ecology, Geography, Environmental policies, Environmental governance, Biodiversity Management, Protected Area development and Sustainable Land Management and other related subjects.

- Postgraduate diploma/certificate in Project Planning and Management is added advantage.

Experience

- 10 years relevant work experience in the area of Environmental Economics, Biodiversity Management, Protected Area development, Sustainable Land management
- Must be a Tanzanian national with knowledge in environmental, water resources and biodiversity management experience and context in Tanzania
- Project development and design experience, experience in developing projects, specific experience in GEF project Evaluation and understanding will be an added advantage;
- Experience in and comfortable with working in different socio-cultural settings.

Language

- Fluent in written and spoken English
- Swahili will be added advantage

PAYMENT MODALITIES AND SPECIFICATIONS

- 10% of payment upon approval of the final MTR Inception Report (**deliverable 1**)
- 30% upon submission of the draft MTR report (**deliverable 3**)
- 60% upon finalization of the MTR report and approved by the RTA and CO (**deliverable**

5.2 ANNEX 2: MTR INCEPTION REPORT – IN DROPBOX

5.3 ANNEX 3: LIST OF PEOPLE INTERVIEWED

Name	Organization	Position	Contact
Eng. Emanuel N.M Kalobelo	Ministry of Water and Irrigation	Deputy Permanent Secretary	0784678484
Hosea Sanga	Ministry of Water and Irrigation	Ag Assistant Director, Water Resources	0767456779
Dr. George Lugomela	Ministry of Water and Irrigation	Ag Director, Water Resources	0784574422
Naomi Lupimo	Ministry of Water and Irrigation	Assistant Director Water Resources	0713222022
Callistus Mponzi	Ministry of Water and Irrigation	Economist	Callistus.mponzi@maji.go.tz
Maximillian Sereka	Ministry of Water and Irrigation	SLM Project Coordinator	maximilliansereka@gmail.com
Damas Masologo	SLM Project Coordination Unit	M&E Specialist	0787637742
Flora A. Muro	Ministry of Water and Irrigation	Community Development Officer	0715423557
Stella G. Lyimo	Ministry of Water and Irrigation - Project Coordination Unit	Accountant	0754672942
Hild Lazaro	Ministry of Water and Irrigation	Engineer	0785482271
Eng. S.M. Aloys	Ministry of Water and Irrigation	SLM Project Coordination	0755981396
Suzana Honero	Ministry of Water and Irrigation - Dodoma	PO/A	0764832486
Faiza Dollah	Ministry of Water and Irrigation	P/Secretary	0755536105
Julius Nyadok	Ministry of Water and Irrigation	Pangani Basin - MA	0658648336
David Manyama	Ministry of Water and Irrigation	Hydrologist	0782415254
Mtoi Kanyawanah	Ministry of Water and Irrigation	Outgoing Basin water Officer	0754596122
Eng. S.M. Aloys	Ministry of Water and Irrigation	Project Coordination Unit	0755981396
Isaac Emmanuel	SLM Project	Focal Point	0757357235
Eng Enock Nyando	President's Office –Regional Administration and Local Government	Assistant Director	0789496202
Sanford Kwayi	President's Office –Regional Administration and Local Government	Principal Forest Officer	0754290074
Johanes Jovin	Ministry of Finance & Planning	Principal Economist	0754434540
Victor C. Mwita	Ministry of Livestock and Fisheries Development	Assistant Director	0717977977
Mary Simbeye	Ministry of Agriculture	Ag Asst. Director LUP	0754949623
Nathanael Mbwambo	Ministry of Livestock and Fisheries development	Ag DPM	0754471138
Joseph Ngulumwa	Ministry of Mines	Geologist	0753387931

Name	Organization	Position	Contact
Ludovick Uromu	Ministry of Natural Resources and Tourism	Ag Director Forestry and Beekeeping	0764838345
Amon M. Manyama	UNDP	HOR/PC	0752578684
Getrude Lyatuu	UNDP	Program Specialist	0784622088
Zena A. Said	Regional Administrative Secretary - Tanga	Regional Administrative Secretary	0754272922
D.J. Ndomba	Regional Administrative Secretary - Morogoro	Ag Regional Administrative Secretary	0715911165
Segule Segule	Pangani Basin Water Board	Basin Water Officer	0713032993
Mohamed S. Swaleh	Pangani Basin Water Board	Hydro geologist	0718536665
Bakari Pamba	Pangani Basin Water Board	Hydrologist	0714683077
Arafa Maggidi	Pangani Basin Water Board	Environmental Engineer	0652469001
Baltazar J. Assey	Pangani Basin Water Board	Technician	0784284980
Zamla Msangi	Pangani Basin Water Board	Technician	0715799036
Yusuf Ndwela	Pangani Basin Water Board	Technician	0784923724
Yakunda Kessy	Pangani Basin Water Board	Technician	0716436644
Rose Kimambo	Muheza District Council	Focal person	0712890663
Ramadhani Nyambuka	Tanga UWASA	Quality Assurance Officer and Project Focal Point	0719723657
Zuena Kilavo	Tanga City Council	Focal person	0715890621
Rashid Lihapa	Mkinga District Council	Focal person	0713006899
Isaac Emmanuel	Korogwe District Council	Focal Person – Technical Officer	0767357235
Mlega Sosela	Amani Nature Reserve	Principal Assistant Forest Officer	0787429580
Eng. Modester Mushi	Dar es Salaam Water and Sanitation Authority	Project Focal Person	0683689685
Albina Burra	National Land Use Planning Commission	Ag Director - LCCP	0784562412
Farles Aram	Tanga UWASA	Ag Managing Director	0713531215
Eng Halima Mbiru	Morogoro Urban Water Supply Authority	Technical Manager	0784185001
Eng. Jane Marwa	National Irrigation Commission	Environmental Engineer	0713465812
Jerome Nchimbi	National Land Use Planning Commission	Project Focal Point	jeromenchimbi@gmail.com
Joseph John Osen	National Land Use Planning Commission	Ag Director of Physical Planning	Osenajj2016@gmail.com
Dr. Charles Mkalawa	National Land Use Planning Commission	Town Planner	Charles.cosmas@yahoo.com
Joseph Paul	National Land Use Planning Commission	Ag Director General	chucujose@yahoo.co.uk
Albina Bura	National Land Use Planning Commission	Ag Director Land CC	Albinaburra00@gmail.com
Eng. Ephraim Mushi	Ministry of Mines	SME	0752024337
Jackson E. Biore	Ministry of Mines	Environmental Officer	0683962330
Johannes Jovin	Ministry of Finance & Planning	Principal Economist	0754434540

Name	Organization	Position	Contact
Fares E. Mahuha	Ministry of Agriculture	Assistant Director, Land Use Planning	mmmahuha@yahoo.com
Mary Simbeye	Ministry of Agriculture	Project Focal Point	Msimbaye63@yahoo.com
Helena Mkuba	Ministry of Agriculture	Agricultural Engineer	0754091454
Natanael J. Msengi	Ministry of Agriculture	Land Surveyor	0712003138
Joseph. K. Malongo	Vice President's Office	Permanent Secretary	0754644485
Timotheo Mande	Vice President's Office	Forest Officer	0745819197
Ester Makwaia	Vice President's Office	Ag Director -DoE	0784222298
Magdalena Gerald Ngotolainyo	Vice President's Office	GEF Desk Officer	
Simon Ngonyani	Wami –Ruvu Basin	Water Officer	0759590026
Rosemary Masikini	Wami –Ruvu Basin	Focal Point	0764348161
Rehema Omino	Wami –Ruvu Basin	Community Development Officer	0655059071
Paschal J. Qutaw	Wami –Ruvu Basin	Engineer	0764805213
Nickbar M. Ally	Wami –Ruvu Basin	Community Development Officer	0755491077
Fortina J. N.	Wami –Ruvu Basin	Technical Officer	0657622075
Joyce Mkwiche	Wami –Ruvu Basin	Technical Officer	0767307416
Japhet Mwasanyamba	Wami –Ruvu Basin	Technical Officer	0655401843
Yulian F. Mizola	Wami –Ruvu Basin	Community Development Officer	0683633088
Joseph Kwitiga	Wami –Ruvu Basin	Engineer	0687241622
Martha Masangya	Wami –Ruvu Basin	Technician	0712202707
Mbangi S. Ramadhani	Mvomero District Council	Focal Point	0767158008
Mary M. Kayowa	Morogoro District Council	Focal Point	0754038989
John F. Makota	Morogoro Municipal Council	Focal Point	0655126612
Gibson Mwakoba	Morogoro Municipal Council	Community Development Officer	
Mohamed Msumari	WUA KIHUHWI	Chairperson	
Aisha A. Bendera	UWAMAKIZI	Secretary	
Twaha R M	UWAMAKIZI	Chairperson	
Simon Mzava	UWAMAKIZI	Vice Chairperson	
William Masimba	UWAMAKIZI	Executive Secretary	
Community/Village Council	Mashewa/Kimbo Villages	12 Members of the Village Council/ User Groups	Chairperson 0622869147
Rosaldo Saimoni	JUWABODOMVU	Chairperson	
Said Masea	UWABODOMVU	Member	
Mohamed Sela	UWABODOMVU	Member	
Musa Mgamba	UWABODOMVU	Treasurer	
Hubert Omari	UWABODOMVU	Member	
Ally Mbega	UWABODOMVU	Member	
Farida Shomari	UWABODOMVU	Member	
Juma Kitindi	UWABODOMVU	Member	
Fatuma Mumba	UWABODOMVU	Member	
Juma Sume	UWABODOMVU	Member	

Name	Organization	Position	Contact
Hatima Athumani	UWABODOMVU	Member	
Hadija Athumani	UWABODOMVU	Member	
Ngamo Ngamo	UWABODOMVU	Member	
Saad Kibalage	Mvuha	Chairperson	
Riziki John	Mvuha	Secretary	
Jumanne Ally	Mvuha	Member	
Tuhuma John	Mvuha	Member	
Michael Gerald	Mvuha	VEO	
Luungu Bonsolima	Mvuha	Forest Officer	
Pendo Saidi	Mvuha	Member	
Ashura Sija	Mvuha	Dalla	
Shazrati Saidi	Mvuha	Dalla	
Sharifa Elena	Dalla	Secretary	
Iddi Kiwembela	Dalla	Member	
Ramadhani Kitwiku	Dalla	Chairperson	
Sima Mngole	Dalla	Member	
Japhet Videlis	Dalla	Treasurer	
Omari Masembe	Dalla	Member	
Evaqueen Maje	Dalla	Village Executive Officer	
Raheli Mlay	Dalla	Teacher	
Bertha Temba	Mvuha Primary School	Teacher	
Chibya Environmental Club Students	Mvuha Primary School	19 Students	
Mbarangwe Fish Farming Group	Mbarangwe Fish Farming Group	18 Members Chair Person/Secretary	0785273481 0787157767
Kibwana Rajabu	Nige Twikinde Group	Member	
Hamis Diroroma	Nige Twikinde Group	Member	
Roman Nyingi	Nige Twikinde Group	Chairperson	
Hadei Mkude	Nige Twikinde Group	Member	
John Mponda	Nige Twikinde Group	Secretary	
Maria Matei	Nige Twikinde Group	Member	
Omary Mbaya	Nige Twikinde Group	Member	
Matius Habib	Nige Twikinde Group	Member	
Leila Swai	Nige Twikinde Group	Member	
Selina Kifyega	Nige Village	Village Executive Officer	
Juma Mkoba	Kingile Maendeleo Group	Chairperson	
Juma Mkombo	Kingile Maendeleo Group	Secretary	
Tamimu Yahaya	Kingile Maendeleo Group	Treasurer	
Shaibu Yahaya	Kingile Maendeleo Group	Member	
Kobelo Kobelo	Mgolole Water Users Association	Chairperson	
Subira Abdul	Kingile Maendeleo Group	Treasurer	

Name	Organization	Position	Contact
Benedict Mweve	Kingile Maendeleo Group	Member	
Siasa Mkundwa	Kingile Maendeleo Group	Kingile Maendeleo Group	
Ambrose Rocky	Kingile Maendeleo Group	Kingile Maendeleo Group	
John Kilimo	Kingile Maendeleo Group	Kingile Maendeleo Group	
Hubert Kikoti	Kingile Maendeleo Group	Kingile Maendeleo Group	
Ramadhani Ng'amba	Kingile Maendeleo Group	Kingile Maendeleo Group	

5.4 ANNEX 4: LIST OF DOCUMENTS REVIEWED

- Project Documents:
 - PIMS NO: 5077 Project Document - Securing Watershed Services through Sustainable Land Management in the Ruvu and Zigi Catchments (E. Arc Region), Tanzania
 - PIMS NO: 5077 Inception Report
 - Project Annual and Quarterly Work plans and Financial plans (2016, 2017 and 2018)
 - Local Project Appraisal Committee (LPAC) Meeting Minutes
 - PIMS NO: 5077 Project Monitoring and Evaluation Plan
- Progress Reports:
 - Technical Implementation Reports (QPRs/APR/PIRs for 2016 to 2018)
 - Finalized M&E Tracking Tool
 - Management Effectiveness (METT) and Financial Score Cards (FSC) Reports
 - M&E baselines and reports
 - Monitoring Mission Reports
 - M&E Operational Guidelines, Monitoring reports prepared by the project
 - Project Operational Guidelines, Manuals and systems
 - Minutes of the SLM PSC Committee and the Technical Committee Meetings held between 2016 and 2018
 -
- Financial Reports
 - Project Combined Delivery Reports (CDRs)
 - Project Audit Reports (2016 and 2017)
 - Financial and Administration Guidelines
- Technical Publications and Reports
 - Biophysical Resource Inventory for Ruvu-Zigi Catchments
 - Assessment of Alternative Income Generating Activities Zigi Catchment
 - Financial Investments In Sustainable Land Management Programmes And Planning In Tanzania
 - Gender Diagnosis For Zigi Catchment
 - Best Practices Guidelines for SLM, IGAs and IWRM
 - Training Reports
 - SLM Profiles, Posters, Leaflets
 - Water Users' Associations Constitutions
 - Uluguru NR Forest Management Agreements
 - Project site location maps
 - Branding, information and awareness raising materials and sign boards
- National Policy Documents Legal Frameworks and Strategies
 - The National Environment Policy (NEP, 1997)
 - The Environmental Management Act (EMA, 2004)

- The Land Act (1999) and the Village Land Act (1999)
- The Forest Policy (1998) and the Forest Act (2002)
- Water Policy (2002)
- Water Act (2009)
- Water Resources Management (Water Resources Classification System) Regulations, 2018

5.5 ANNEX 5: MTR MISSION ITINERARY

Timeframe	Activity	Responsible
Mid July 2018	Handover of Project Documents and preparation of MTR Inception report	Consultants
1 st to 3 rd August 2018	Review of documents	Consultants
	Meetings with PCU and Project team - MOWI-Dar es salaam	Consultants
06 th August 2018	Meetings with DAWASA and National Land Use Planning Commission in Dar es Salaam	Consultants
13 th August 2018	Travel to Dodoma	Consultants and the PCU
14 th - 15 th August 2018	Curtsey call and Consultations in Dodoma: <ul style="list-style-type: none"> • Ministry of Water and Irrigation • Ministry of Agriculture • Ministry of Livestock and Fisheries Development • Ministry of Mines • Ministry of Natural Resources and Tourism • Ministry of Finance and Planning • President Office - Regional Administration and Local Government • Vice President's Office (VPO) • Tanzania Forest Service 	Consultants and PCU
	Project implementation review and updates	Consultants and PCU
16 th August 2018	Travel to Morogoro	Consultants and PCU
16 th – 18 th August 2018	<ul style="list-style-type: none"> • Meetings and consultations with stakeholder - progress review from Wami-Ruvu Basin Focal Points • Field visits and interviews in Ruvu Catchment – Mvuha Chini WUA, JUWABODOMVU), Mvuha Primary School Environmental Club, Mbarangwe Fish farming Group, Kibagile Group, Nige-Twikinde Group, Mgolole WUA 	Consultants and WRB Office team
	<ul style="list-style-type: none"> • Wrap up with WRB Office and PCU 	Consultants
19 th August 2018	Travel to Tanga	Consultants and PCU
20 th August 2018	Meetings and consultations with stakeholders in the Zigi Catchment – Tanga <ul style="list-style-type: none"> • Progress review with Pangani Basin Water Office and Focal Points 	Consultants, PRB Office team and PCU
21 st August 2018	Field visits and interviews in Zigi Catchment – JUWAMAKIHU, Water gauge station, - Mashewa,	

Timeframe	Activity	Responsible
	UWAMAKIZI, VLUP and restoration of Sakale Village watershed, Village Environmental Committees, JUWAMAZIJU, Tukangale Group, Improved Energy saving stoves	
23 rd August 2018	Travel back to Morogoro	
24 th – 25 th August 2018	Preliminary analysis of MTR findings and preparation of presentation to the PSC	Consultants
27 th August 2018	Mission wrap-up meeting and presentation of initial findings of MTR to PSC in Morogoro	Consultants
28 th August - 2 nd September 2018	Preparation of MTR Report	Consultants
12 th – 13 th September	Finalization of MTR and incorporation of Comments	Consultants
14 th September 2018	Submission of MTR Report	Consultants

5.6 ANNEX 6: CO-FINANCE TABLE

See Table 10: Project co-financing summary

5.7 ANNEX 7: EVALUATION QUESTIONS

141. See evaluation matrix in the MTR Inception Report – Annex 2.

5.8 ANNEX 8: EVALUATION ETHICS SIGNATURE

142. See First page of this MTR Report.

5.9 ANNEX 9: STATUS OF RISKS AND THE IMPACT ON IMPLEMENTATION AND PROGRESS TOWARDS OUTCOMES

Risk	Rating	Mitigation Strategy	
Institutional			
The current high levels of Government commitment to IWRM and SLM diminishes	Low risk	This is considered unlikely, given the large number of policies, programmes and strategies introduced by government to promote integrated approaches to water resource management and the adoption of SLM as a key means for combating land degradation. The project has been designed to give catalytic effect to prioritised interventions under these policies, which should contribute to maintaining Government support for them. The project will establish a Project Steering Committee, membership of which will be drawn from high-ranking officials (Permanent Secretary and Director level) from key Ministries and other government agencies responsible for watershed management. Through the Project Steering Committee (PSC), a strong sense of Government ownership of the project will be nurtured thus enhancing the opportunities for ensuring on-going support.	<p>This risk was well articulated, was relevant and the measures designed to address it were specific and adequate.</p> <p>The political support to the management of watersheds in general seems to have increased; increased support of the use of SLM as a tool for watershed management is reflected by inclusion of SLM in the budgets of some Ministries.</p>
Government institutions lack the resources and/or capacity to implement the project or to sustain gains once external project support has been withdrawn	Low risk	The project will have a strong focus on building the staff, resource and technical capacity of water basin authorities, across the water resource management spectrum, to ensure that they are adequately capacitated to design and manage SLM interventions and raise funds from a variety of sources. This will strengthen both the financial and institutional sustainability of the project and effectively mitigate against this risk. The project will focus specifically on growing and diversifying the funding base for SLM interventions and on equipping staff of relevant institutions to develop bankable funding proposals. It will create opportunities for joint financial planning and will develop an integrated investment framework for each catchment, which should lead to more effective deployment of resources. In addition, Memoranda of Understanding (MoUs) will be put in place between the project and the various implementing partners to secure on-going commitment.	<p>The risk of inadequate funds should be separated from that of capacity. The risk of inadequate funds should be rated moderately high. Although SLM is now being included in budgets of some Ministries, most Ministries do not get 100% of their budget requests financed; SLM is still amongst the top items to be dropped when budgets are not fully financed.</p> <p>The proposed SLM Fund is unlikely to be formed within the lifetime of the project because there is no Law in the country to support it. Inadequate funding is likely to negatively affect the sustainability of project results. However, the project stakeholders are putting a lot of effort in identifying and mobilizing additional funds from the National Water Fund, the Urban Water Authorities and the private sector. The effort is yet to yield significant funds</p>
Conflicts and misunderstanding among public	Low	A major focus of this project will be on building social capital and facilitating opportunities for linkage and collaboration	This is a precondition for the project strategy to succeed, and is the focus of component 1. The risk management

Risk	Rating	Mitigation Strategy	
institutions, private sector partners, NGOs and resource users undermine partnership approaches and implementation of cooperative governance arrangements		between different stakeholder groups. Where appropriate, formal agreements/MOUs will be used to define roles and responsibilities of implementing partners to avoid misunderstandings. The project will strengthen stakeholder linkages and create opportunities for dialogue, collective planning and problem solving at numerous levels including: The Project Steering Committee will bring high-level representatives of key implementing institutions together, ensuring that they remain in regular communication and have opportunities for dealing with any potential conflicts; The Technical Team (which will include representatives from numerous institutions), will provide another opportunity for maintaining positive institutional linkages; at the catchment level, the project will set up multi-stakeholder forums/committees/associations for bringing stakeholders together around a common vision for each catchment and providing regular opportunities for co-operation, collective problem-solving, reviewing plans, activities and achievements and resolving conflict; the project will develop and implement a basin-wide communication strategy that will ensure that all stakeholders remain well-informed about the project.	<p>strategy described outcomes 1 and 2; they are therefore appropriate and relevant.</p> <p>The high level of coordination has had a positive impact – there is evidence of effective collaboration and high levels of awareness of the importance of multidisciplinary approach to management of watershed services amongst all stakeholders; including the community based organizations (Water Use Associations, Village Government and Village Environment Committees).</p>
Conflict or lack of commitment within the Project Co-ordination Unit or Project Steering Committee hampers implementation.		The Project Board will play a facilitatory role and establish an independent facilitation function to ensure the effective functioning of the Project, holding a six monthly review of operational dynamics and intervening more intensely if necessary in the case of crisis.	<p>This risk was well articulated, was relevant and the measures designed to address it were specific and adequate.</p> <p>The PCU has functioned effectively, which has contributed to the fast paced implementation, despite disbursement challenges.</p> <p>However, there is also evidence of capacity inadequacies that should be addressed to improve technical outputs in the second half of the project.</p>
Socio-economic			
Poor households and other vulnerable members of the communities (women – especially	Low risk	SLM is labour intensive and may involve higher input costs than is usual in traditional farming practices. This may mean that only more ‘well-off’ farmers with more resources to invest will be able to adopt SLM and that the poorest of the poor, and other vulnerable farmers (such as women	<p>This risk was well articulated, was relevant and the measures designed to address it were specific and adequate.</p> <p>The project has focused largely on land use planning and formation of WUAs.</p>

Risk	Rating	Mitigation Strategy	
<p>widows, youth, the elderly and tenant farmers) may not be able to share in benefits of the project and may have no other alternative but to drive further land and forest degradation through unsustainable practices</p>		<p>and the elderly), will be ‘missed’. This can be mitigated by developing a specific strategy for targeting the very poor and other vulnerable groups. Elements of this strategy will include: building group cohesion to enable collective savings schemes and labour pooling; focussing at sub-village level to make it easier for poorer farmers to attend gatherings (shorter travelling distances); convening focal group discussions (women, youth, tenant farmers) to identify and address their barriers to participation.</p>	<p>It has now started implementing SLM practices and will do more during the second half. There is evidence that the extension service, with the support of the project, has used a genderized approach, and has made effort to reach all relevant gender groups. This risk needs to be monitored further during the second half of the project.</p>
<p>Land owners/users may continue to flout planning regulations leading to further encroachment of river beds, mining in the river beds, burning of forests and expansion of agricultural areas into forest reserves</p>	<p>Moderate risk</p>	<p>People-centred, participatory methods that foster collaboration will be followed during the development of land use plans under Outcome 1 of the project. This means that local communities will be integrally involved throughout the land-use planning process; they will participate fully in identifying the parameters within which plans should be developed and the community needs to which they should respond, and will have ample opportunity to raise concerns that they may have. They will also be involved in enforcement of the plans. This should ensure that the resulting plans strike the right balance between meeting stakeholder interests and safeguarding ecosystems. In parallel to the planning process, the project will make a strong ecological and economic case for sustainable land management as the basis for socio-economic development, and will communicate this through the various multi-stakeholder forums that it will establish. The project will develop and implement a comprehensive communication strategy and stakeholder involvement plan to improve co-operation with, and secure the buy-in of, local communities, and it will empower community members to lead the process of mainstreaming SLM. The project will simultaneously work with communities to identify alternative income generating activities, which should create an incentive for supporting forest restoration activities and limiting pressure in riparian zones.</p>	<p>This risk was well articulated, was relevant and the measures designed to address it were specific and adequate.</p>

Risk	Rating	Mitigation Strategy	
Local level economic growth fails to provide adequate returns on investment in SLM, or the economic gains of SLM are eroded by external factors such as rampant inflation	Low risk	At the macro-economic scale, the economic outlook for Tanzania over the lifespan of the project is expected to be good, so this has been categorised as a 'low' risk. The project can mitigate against this risk by addressing structural inefficiencies in markets to ensure that farmers realise the best possible prices and attain maximum access to markets. By providing training in financial management and budgeting, improving access to micro-credit and savings schemes, and diversifying the income base using SLM production systems, the project can empower farmers to buffer themselves against periodic downturns in the local economy.	<p>Although this risk was well articulated, was relevant and the measures designed to address it were specific and adequate, it should have been rated high. This is due to the high rates of poverty in the project areas, with limited prospects of economic growth at the local level without serious injection of cash from outside the communities.</p> <p>Cash crops are being introduced within the 60 meter radius such as cacao, spices (black pepper, others), sugar cane and other tree crops. However, there are issues related to accessing lucrative and reliable markets for the produce, value addition, processing and packaging. This risk should be rated moderately high.</p>
Environmental			
Predicted or unexpected effects of climate change further compromise the delivery of watershed services and limit agricultural production, despite adoption of SLM	Low	As best as can be predicted at this stage, it is likely that in the Uluguru and East Usambara Mountains there will be more marked seasonality of rainfall, with wetter wet seasons and drier dry seasons, and a raised risk of floods and droughts. The project will mitigate against these possible impacts by increasing the resilience of production systems, communities and rivers to impacts, in the following ways: improving land cover and soil quality to enhance the water-storage functions in the catchments; introducing soil and water conservation measures, and practices that improve water-use efficiency; introducing climate smart crops and agricultural practices including improved agro-forestry systems. Throughout the project, the Project Co-ordination Unit will maintain close links with relevant academic and research institutions that are studying climate change, in order to identify any additional adaptation or mitigation measures that should be adopted to safeguard agricultural or livestock production systems, forests or river systems against the undesired effects of climate change.	This risk was well articulated, was relevant and the measures designed to address it were specific and adequate.

Risk	Rating	Mitigation Strategy	
Invasive alien plants and animals negatively impact the biological diversity and watershed functions of the targeted catchments	Low	The project will ensure that none of its own interventions result in the spread of invasive alien species, it will include control of invasive alien plants as an integral part of integrated catchment management and will include material on the potential negative impacts of invasive alien species in educational material that it is producing for local stakeholders.	<p>This risk was well articulated, was relevant and the measures designed to address it were specific and adequate.</p> <p>While the project has introduced water friendly species, there are government teak plantations along the Zigi, tea plantations and eucalyptus along the riverine that have not been tackled.</p> <p>There should be an additional risk referring to these existing water unfriendly plants along the rivers such as: the project fails to convince government and tea estate owners to comply with the Water Act and therefore to remove the tea bushes, eucalyptus and teak plantations from the 60 meter radius of the river channel.</p>

5.10 ANNEX 10: AUDIT TRAIL PROVIDED IN A SEPARATE FILE.

SECURING WATERSHED SERVICES THROUGH SUSTAINABLE LAND MANAGEMENT IN THE RUVU AND ZIGI CATCHMENTS (EASTERN ARC REGION), TANZANIA

5.11 ANNEX 11: PROGRESS TOWARDS RESULTS

Indicator	Baseline level (2014/2015)	Level in 1 st PIR (self-reported)	Mid-term Target ²¹	Target at End of Project (December 2020)	Status as of 30 th June 2018 (MTR)	Achievement rating	Justification for the Rating	Source of verification
Project Objective: Sustainable land and natural resource management alleviates land degradation, maintains ecosystem services and improves livelihoods in the Ruvu and Zigi sub-catchments of the Eastern Arc Mountains in Tanzania.								
Reduction in land degradation in the Ruvu and Zigi catchments as measured by at least a 25% increase in land cover in forests and rangelands	Tracking Tool (land degradation within the project area is significant and the current land use practices and management approaches lack integration and targeted financing to promote INRM and SLM)		N/A	<ul style="list-style-type: none"> A 10% reduction in soil erosion, improved soil organic matter as reflected in the GEF LD Tracking Tool. 20,000 ha under direct SLM practices A 10% improvement in water quality and quantity in rivers at intervention sites as measured by water flows, annual rainfall, sediment load, using methods including analysis of flow, rainfall and sediment loads measured during low, mid and high flows at selected. 	<ul style="list-style-type: none"> 22,143 ha restored/directly under SLM practise Decrease in sediments in Ruvu catchment from by 20% and 35 % in Zigi catchment On livelihood improvement production levels for participating farming households: <ul style="list-style-type: none"> 52% increase in maize crop from 2.5 tons/ha to 3.8 ton/ha, in Ruvu catchment 14.5% household incomes increase from TZS 480,000/- to TZS 550,000/- per year. Three (3) cattle water troughs have been constructed in Zigi. Biophysical resource assessment for both Zigi and Ruvu catchment was 		The project has surpassed several end of project target (land under SLM by over 2000 ha; decline in sedimentation, livelihood improvements). The only target not yet achieved is - At least 30% of livestock keepers adopt sustainable rangeland management practices, with a 25% improvement	<ul style="list-style-type: none"> Updated project M&E Matrix PIRs

²¹ Mid term targets were not developed in the ProDoc and neither included in the revised Result Matrix in the Inception

Indicator	Baseline level (2014/2015)	Level in 1 st PIR (self-reported)	Mid-term Target ²¹	Target at End of Project (December 2020)	Status as of 30 th June 2018 (MTR)	Achievement rating	Justification for the Rating	Source of verification
				<ul style="list-style-type: none"> At least 10,000 ha of degraded forest restored (5,000 in protected forest and 5,000 ha outside of protected areas) At least 25 % improvement in household welfare and 10% increase in annual food production for at least 40% of the households in pilot villages, measured as a percentage increase in household incomes, percentage reduction in the number of food insecure days per year, and production level of main crops (tons/ha) At least 30% of livestock keepers adopt sustainable rangeland management practices, with a 25% 	completed; and a biophysical resource data collection tool using open data kit (ODK) was developed to strengthen data collection and monitoring		t in land cover over 2,000 ha of rangeland. It is likely that the targets for these objective indicators will be completely surpassed by the TE	

Indicator	Baseline level (2014/2015)	Level in 1 st PIR (self-reported)	Mid-term Target ²¹	Target at End of Project (December 2020)	Status as of 30 th June 2018 (MTR)	Achievement rating	Justification for the Rating	Source of verification
				improvement in land cover over 2,000 ha of rangeland				

Component 1: Establishing a collaborative framework for water basin authorities to effectively plan, monitor and adapt land management and leverage national and regional investments for integrating SLM into watershed management:

Outcome 1: Enabling institutional arrangements are in place to support mainstreaming of SLM into Integrated Water Resource Management in the Ruvu and Zigi

<ul style="list-style-type: none"> Number of land use management plans integrating SLM Planning/budgeting guidelines for integrating SLM into water resource management developed and adapted 	Formal integration of SLM is currently limited or non-existent		N/A	<p>SLM integrated into 7 District Land Use Plans in the Ruvu and Zigi catchments</p> <p>Develop planning guideline for mainstreaming SLM into IWRM in Ruvu and Zigi</p>	<p>4 District Land Use Management Planning Framework (DLUMPF) have been developed for districts of Morogoro, Mvomero, Mkinga and Muheza.</p> <p>16 Village land use management plans VLUMPs have been developed and approved by village and district authorities (2 in Mkinga, 4 in Muheza, 6 in Morogoro DC and 4 in Mvomero District).</p> <p>Different communication messages targeting community members have been developed</p> <p>7 new Water Users Associations (WUAs) have been established; WUAs have been provided with equipment including; 2 pairs of low cost brick making Machines and Mixers, Seven (7) motorcycles</p> <p>18 Village Natural Resources/Environmental Committees (VNRC/EC) have been established and trained to support WUAs</p> <p>13 village forest management plans, Village By-laws have been developed as part of raising awareness on IWRM.</p> <p>Detailed EFA conducted in Zigi River</p>		<p>4 out of 5 DLUMPF developed</p> <p>16 VLUMPs developed</p> <p>7 new WUAs established</p> <p>18 VNRC/EC formed</p> <p>13 VFMPs and By-laws developed</p>	<p>Signed DLUMPFs and VLUPs</p> <p>WUAs registration certificates</p> <p>Village forest management plans</p> <p>Village by-laws</p> <p>PIRs (Project quarterly/annual reports)</p>
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Number of District Land Use Plans developed and operationalised	<p>9 Village Land Use Plans developed but not operational in Zigi Basin</p> <p>5 Village Land Use Plans developed but not operational in Ruvu Catchment</p>	<p>296 villages and 25 wards leaders within Ruvu and Zigi catchments consulted for developing land use plans</p> <p>Two workshops held, - 204 participants from Morogoro and 137 participants from Tanga</p> <p>Trained district coordinators and PLUM teams from Tanga City, Korogwe DC, Muheza DC and Mkinga DC</p>	N/A	<p>District Land Use Plans developed and operationalised in at 7 Districts</p> <p>20 villages (10 from each catchment of Zigi and Ruvu)</p> <p>GIS-based LD/SLM database and land-use decision support-tool/system is in place and at least 50% of land use planning officers, front line extension workers and community associations are trained in the use of the decision-support tool to strengthen land use planning and develop land use maps</p>	<p>4 District Land Use Management Planning Framework have been developed for districts of Morogoro, Mvomero, Mkinga and Muheza.</p> <p>16 village land use management plans (6 in Zigi, 10 in Ruvu) have been developed and approved by village and district authorities as follows: (2 in Mkinga, 4 in Muheza, 6 in Morogoro DC and 4 in Mvomero District).</p> <p>A total of 16 staff (14 male and 2 female) from NLUPC, Ministry of Minerals, Basin Water Boards, Ministry of Water and Irrigation and LGAs were trained on GIS skills and decision support tool</p>		<p>4 out of 5 DLUMPFs developed</p> <p>16 out of 20 VLUMPs developed</p> <p>16 trained staff</p>	
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		for 40 participants Familiarization visits in the project area and consultation with key project players facilitated by Action for Development Society						
Number of multi-sectoral stakeholder landscape coordination committees (Catchment Forums) formed and operational in each Basin with committee members segregated by gender	Interagency co-operation is currently very weak or non-existent, no joint vision for SLM in place 2 Environmental Committees – Mabayani Dam 1 Community Association - Uwamakizi 1 Community Association - Wakuakuvyama	Stakeholder consultation conducted - physical field visit stakeholders' consultations workshop. To facilitate establishment of a Multi Stakeholders	N/A	At least one multi-stakeholder committee established and operating effectively in each basin as a result of the project At least 75% of District Officers (Participatory Land Use Management teams) and Village land use committees trained in participatory land-use planning, monitoring and implementation of land use plans	Joint vision for SLM set through participatory land use planning processes and multi-stakeholders workshop conducted in Zigi catchment All District officers, four (4) District Land Use Management teams (36 officers) and members of the 16 Village land use management committee members trained in participatory land-use planning, monitoring and implementation of land use plans. This is 57% for the District officers for the planned 7 Districts and 80% for village committee members from 20 target villages		Established District Land Use Management Teams and Village land use management committee 57% for the District officers for the planned 7 Districts and 80% for village committee trained on participatory land-use planning,	Training reports PIRs

		Committee will be established after restructuring the existing WUA and formation of Sub catchment committees in Ngerengere					monitoring and implementation of land use plans.	
Number of registered, operational Water User Associations and Sub-Catchment Committees in each catchment with members segregated by gender	Zigi: 1 WUA- Zigi-Mkulumuzi (functional, but requires strengthening) Ruvu: 4 WUAs– Mfizigo Sub-catchment; Lower Ngerengere and Upper Ngerengere A & B (all are non-functional)	3 WUAs were established in Zigi catchment and 1 WUA at Ruvu Catchment. Facilitated the completion of Ngerengere sub – catchments . WUA representative have were selected	N/A	At least 5 new Water User Associations and 2 new sub-catchment committees established, registered and operational and with a plan for upscaling in place All WUAs and Sub-Catchment Committees trained in the principles of SLM and the role of SLM in protection of water resources, provisions of all relevant land and water-use legislation; financial management and the development of funding proposals; entrepreneurship skills; the costs and benefits of alternative sustainable livelihoods	11 WUAs formed and made operational (3 in Zigi, 8 in Ruvu catchment and provided with 7 motorcycles 1 Sub-catchment committee established in Ruvu catchment. All 11 WUAs and 1 sub-catchment committee trained. Five District Facilitation Team with a total of 30 experts (18 male and 13 female).formed and trained in Ruvu Catchment (Bagamoyo, Chalinze, Kisarawe, Kibaha DC and Kibaha Town) he total number of participants were		11 WUAs formed and made operational 1 Sub-catchment committee established 5 District Facilitation Teams out of 7 formed and trained	Training reports PIRs WUA registration certificates

		<p>and trained on WRM issues. Identification of key water users was conducted in the main Zigi River and in Ruvu river; Water use inventory was conducted. 584 water users were identified, whereby over 90% are illegal water users.</p> <p>33 stations were visited to facilitate monitoring and assess pollution Water quality monitoring was</p>		Up-to-date database of stakeholders and projects established for each Basin Water Office				
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		<p>conducted for all 33 stations</p> <p>Rehabilitation of 8 gauging stations was carried out which involved installation of staff gauge, cross section survey, civil works, flow measurement and sediment sampling</p> <p>Flow measurement and sediment sampling was conducted</p>						
<ul style="list-style-type: none"> % increase in rates of compliance with water basin regulations 	In Ruvu Catchment 301 out of 1500 identified water users are complying. In	Communication Strategy for Pangani Basin is	N/A	50 - 75% of all staff in target institutions, all WUAs and VNRCs trained in provisions of water and land-use legislation	23 VNRCs trained in provision of land use and water use legislation (10 Mkinga DC, 8 Morogoro DC, 4 in Morogoro MC and 1 in Korogwe DC)		<p>23 VNRCs trained</p> <p>Increase in compliance by 30%</p>	<p>Training reports</p> <p>PIRs</p>

<ul style="list-style-type: none"> Number of staff and members of community associations (segregated by gender) trained in provisions of land and water-use legislation 	<p>Zigi only 11 users out of 350 are complying; 226 (Ruvu) and 162 (Zigi) people trained in basic provisions of water-use legislation; No. people trained in provisions of relevant land-use legislation</p>	<p>already in place</p> <p>Awareness on Water Resources Management issues has been done in 63 villages in Zigi catchment, 36 villages of Zigi upstream and 27 villages of Zigi downstream through awareness raising meetings in all villages.</p> <p>Distribution of fliers with information on roles of the basin, application for water use permit</p>		<p>At least 50% of water users issued with water use permits and 60% of industries and commercial farming operators complying with water discharge permits</p> <p>Gender-sensitive communications strategy developed and operationalised</p>	<p>The number of water users complying has increased by 30% from 312 at project inception to 406 as of June 2018.</p> <p>Communication strategy for Wami-Ruvu Basin developed in collaboration with GIZ</p>		<p>Communication strategy for Wami-Ruvu Basin developed</p>	<p>The Communication Strategy</p> <p>Publicity messages</p>
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		<p>procedures and WRM in brief were distributed in 63 villages, supplied to 2243 villagers who attended awareness raising meetings (1351 male and 892 female).</p> <p>8 Sign boards for increasing visibility of the basin, protection and conservation of river buffer zone were put, 1 along the main Zigi River, 1 on the confluence</p>						
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		<p>of Zigi and Kihuhwi on the way to Amani and 6 in water monitoring stations.</p> <p>Preparation of 500 copies of Water Resources Management Act in a simplified version was done pending for training and distribution in all 36 villages ward and offices. Few copies have already been distributed to the newly elected WUA</p>						
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		<p>management committees .</p> <p>Facilitated development of WUA constitutions and bylaws and formation of river committees to enhance enforcement at community level.</p> <p>River Health Assessment Monitoring Programme was established</p> <p>Flow measurement and sediment sampling was conducted in Zigi River</p>						
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		Rehabilitati on of gauging stations in Zigi River carried out Sediment Fingerprint study was conducted in Zigi catchment. Bathymetri c survey was conducted in Mabayani dam to determine the reservoir capacity and sedimentati on rate and to establish baseline data						
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Indicator	Baseline level (2014/2015)	Level in 1 st PIR (self-reported)	Mid-term Target ²²	Target at End of Project (December 2020)	Status as of 30 th June 2018 (MTR)	Achievement rating	Justification for the Rating	Source of verification
Outcome 2: Finances available for SLM investments are increased by accessing new streams of public finance and more effective alignment of existing sectoral contributions								
% increase in public funds allocated to SLM interventions in the Ruvu and Zigi catchments	Some sectoral funds available for SLM but not coordinated to finance SLM strategy for Integrated Natural Resources Management		N/A	15% increase in fund earmarked for SLM interventions in the Ruvu and Zigi catchments	2 project proposals for Wami/Ruvu Basin Water Board developed to access local funding from the National Water Fund: One was recently funded worth about US\$ 977,777.7823. It is expected that the other two will be financed soon, worth US\$ 805,010 (TZS 1,811,272,500) and US\$ 1,118,876 (TZS 2,517,470,022). Tanga-UWASA has doubled its periodic contribution to UWAMAKIZI from TSh 100 million to 180 million (US\$ 44,400 to US\$ 80,000)		Most of the funding however has not been approved /disbursed	Endorsed project proposals PIRs Training reports
Amount of funding accessed for SLM through new streams of public finance and other financing mechanisms	0 -The key organisations do not have adequate resources for integrating SLM into watershed management and the financing		N/A	At least 2 new streams of funding for SLM accessed via sources such as Incentive and Market Based Mechanisms (IMBMs), Public Private Partnerships (PPPs)	4 proposals developed and submitted to potential funding sources (one for Wami/Ruvu Basin) and the other three for WUAs in Zigi Catchment. One (1) proposal is focusing on Protection and Conservation of Upper Ruvu Establishment of a Water Trust Fund for Zigi is being		Except for the funding proposals targeting the Water Fund, no real new financial stream identified/in pipeline	Financial reports: Approved budgets and disbursements Approved projects

²² Mid term targets were not developed in the ProDoc and neither included in the revised Result Matrix in the Inceptio

²³ Tsh 2.2 billion at an exchange rate of 2,250 Tsh to the US\$

Indicator	Baseline level (2014/2015)	Level in 1 st PIR (self-reported)	Mid-term Target ²²	Target at End of Project (December 2020)	Status as of 30 th June 2018 (MTR)	Achievement rating	Justification for the Rating	Source of verification
	requirements have not been comprehensively assessed				pursued by Tanga UWASA on a PPP arrangement with water users in Tanga City			
Amount of sectoral allocations aligned to SLM strategies	1 - The resource requirements for integrating SLM into watershed management are known but are not being addressed		N/A	Resource allocation criteria to inform allocation of resources to SLM	SLM investment study was completed detailing possible criteria for allocation of resources for SLM financing and challenges		Limited allocations and disbursements on SLM activities in sector plans. Project co-financing is only 17.48%	SLM investment study report
Increase in the targeted SLM investments	No effective SLM investment strategy in place		N/A	Integrated SLM investment strategy and M&E system in place to track the effectiveness and impact of SLM investments	The project has demonstrated key SLM practices and investment costs necessary to bring about significant positive changes to influence resources allocation for SLM funding from the Water Fund		The proposed SLM Fund is not feasible	PIRs
Outcome 3: Institutional capacity is built for promoting sustainable land and forest management in support of IWRM in the Ruvu and Zigi Catchments								
Outputs								
Increase in awareness and capacity of local communities and institutions (e.g. extensions services, district authorities, Basin Water Offices) for	The required skills and technologies are identified, as well as their sources but are only partially developed	Awareness survey was carried out in Zigi catchment involving 20 villages on SLM practices and identified gaps	N/A	The required skills and technologies are available and there is a nationally-based mechanism for updating the required skills and upgrading technology	In Zigi Catchment; Two mini automated weather station have been installed The National Land Use Planning Commission (NLUPC) has been strengthened through provision of equipment including GIS software		Trainings and equipment provided	PIRs Training reports

Indicator	Baseline level (2014/2015)	Level in 1 st PIR (self-reported)	Mid-term Target ²²	Target at End of Project (December 2020)	Status as of 30 th June 2018 (MTR)	Achievement rating	Justification for the Rating	Source of verification
integration of SLM into resource use and management practices (measured as per UNDP Capacity Scorecard).	As per UNDP Capacity Scorecard	Training of 60 representatives of farmers, LGAs and WUAs from Ruvu and Zigi catchment was conducted. A total of 14 extension officers serving as Training of Trainers (TOT) were trained. Catchment committees of 10 members were formulated in each village and a selection of best practices to be used in target area was done		As per UNDP Capacity Scorecard	licences for 3 users, 2 GIS processing heavy duty computers and 1 Map/Graphic printer (with capacity of printing A3 size). GIS related experts in NLUPC and other relevant stakeholders participating in the project implementation trained in GIS skills and decision making support tool; total of 16 staff (14 male and 2 female) from NLUPC, Ministry of Minerals, Basin Water Boards, Ministry of Water and Irrigation and LGAs were trained. Wami/Ruvu basin has improved data collection. The number of staff with knowledge and skills for integration of SLM into resource use and management practices has increase from 104 at project inception to 242 (165 male and 77 female), an increase of 43%.			

Indicator	Baseline level (2014/2015)	Level in 1 st PIR (self-reported)	Mid-term Target ²²	Target at End of Project (December 2020)	Status as of 30 th June 2018 (MTR)	Achievement rating	Justification for the Rating	Source of verification
Staffing and resources development plans developed and implemented for Basin Water Office, District Authorities and WUAs	The required skills and technologies are identified, as well as their sources but are only partially developed		N/A	Staff and resource deficits for integrating SLM into watershed management decreased by at least 75% in water basin management agencies and other targeted institutions	Trainings provided to members of community-based institutions including 16 VLUM teams (72 members trained), 11 WUAs (66 members trained), 23 VNRCs (144 members trained) and 87 ToT farmers, 300 Village Council members and 12 Village Executive Officers. The trained individuals are used to bridge the gap of SLM extension delivery within their functions		Although training has been provided to staff of relevant institutions and community-based institutions, it is difficult to estimate the percentage of training deficit still left to be addressed. Trainings provided	PIRs Training reports
Number of technical staff in Water Basin Offices, District and local government institutions, WUAs and Village structures completing skills and knowledge improvement training programmes	The required skills and technologies are identified, as well as their sources but are only partially developed			At least 50% of technical officers in Water Basin Management Agencies, extension services and other targeted institutions have received training to enhance their knowledge and skills for integrating SLM into watershed management	A total of 242 technical officers in Water Basin Management Agencies, extension services have received training to enhance their knowledge and skills for integrating SLM into watershed management as compared to 75 officers at project inception			PIRs Training reports
% of population in targeted villages aware of SLM and SLM-related activities in their area (as a result of the	Ruvu Basin: 36 extension officers with fair levels of technical skill, but not enough officers in each		N/A	At least 50 % of land users in the target areas report an improvement in the extension services provided and number of trained extension	Total number extension staff with knowledge and skills and are available to provide SLM messages in agricultural, forestry and livestock extension services in Ruvu and Zigi		The extension service improvement has exceeded end of	PIRs

Indicator	Baseline level (2014/2015)	Level in 1 st PIR (self-reported)	Mid-term Target ²²	Target at End of Project (December 2020)	Status as of 30 th June 2018 (MTR)	Achievement rating	Justification for the Rating	Source of verification
project) and satisfied with extension services Number of trained extension officers available to provide SLM messages in agricultural and livestock extension services	ward and lack knowledge of modern SLM and current water and land-use legislation Zigi (Muheza): 12 extension officers; Technical capacity and knowledge is outdated and there are not enough officers in each ward			personnel increased by 50% Increase of 25% in number of community members trained to serve as 'para professional' extension officers, with equal focus on men and women At least 75% of land-users in targeted areas aware of the benefits of SLM as a result of improved extensions services	Catchments has increased from 104 (69 male, 35 female) at project inception to 242 (165 male, 77 female), which is 57% of the targeted 424 at project end. <ul style="list-style-type: none"> • In Ruvu catchment 148 (95 male, 53 female); Zigi Catchment 94 (70 male, 24 female) • Percentage of land uses in targeted areas aware of the benefits of SLM as a result of improved extensions services was not measured 		project target. However, the project has not yet reached 75% of land users in the project target areas although it is well on the way.	
Outcome 4: Landscape-level adoption of SLM measures in the Ruvu and Zigi catchments promoted to reduce the effects of land degradation on watershed services and to improve livelihoods								
Reduction in extent of degradation in the Ruvu and Zigi catchments and improvement in the livelihoods of basin communities due to increased benefits from adoption of SLM practices	Over 80% of land area under forest, rangeland and agricultural production is being degraded through unsustainable land use practices Limited viable businesses as an avenue for emerging local	The Task Force of 27 members was formed consisting of 12 villagers (two villagers selected in village meetings from each village from the upper Zigi catchment , members UWAMAKIZI, Divisional Secretaries,	N/A	Over 15,000 - 20,000 ha under direct SLM as a result of this project in the target areas in the Ruvu and Zigi catchments Household incomes increased by at least 25% in at least 40% of the households in participating villages, as a result of uptake of SLM practices introduced through the project, with special	8,000 seedlings were planted in Zigi and Ruvu catchments over an area of 207 ha to facilitate natural regeneration Demarcated 60 metre river buffer with 300 permanent/concrete beacons installed in strategic areas covering 152 hectares (101 ha in Zigi and 51 ha in Ruvu) of secured river buffer with about 31,830 surrounding community members		Initiated SLM practices and incomes generating projects	PIRs

Indicator	Baseline level (2014/2015)	Level in 1 st PIR (self-reported)	Mid-term Target ²²	Target at End of Project (December 2020)	Status as of 30 th June 2018 (MTR)	Achievement rating	Justification for the Rating	Source of verification
	economic development complementing SLM	Amani NR, CDO, Agricultural officer and Village Environmental Committees for all 20 villages to work on eviction of the illegal miners that resulted in halting of illegal alluvial gold mining in the inside and outside the upper Zigi catchment area. Awareness raising meetings were conducted in 5 villages 32 participants (30 youth selected in village meetings and 2 Amani NFR staff) in Zigi were provided with tailor made training on patrols; 5		focus on most vulnerable households	sensitized on protection of reserved land In Zigi Catchment, the project demonstrated use of alternative energy sources and fuelwood efficient stoves; One (1) Biogas plant constructed at household level in Shebomeza village and 80 energy saving stoves in 7 villages and constructed have catalysed construction of over 950 stoves on demand from inspired households in the villages and surrounding communities in the villages by trained artisans 45 villagers (14 male, 31 female). Stoves has efficiency of 50 to 65% 36 school environmental clubs have been established In Zigi catchment, identification of badly disturbed forest and water sources have been replanted with 5,400 tree seedlings of natural species including <i>Allanblackia</i> spp, <i>Newtonia</i> spp, <i>Tabana</i> , spp, <i>Beilchmedia</i> spp and <i>Draceana</i> spp. covering an area of 225 ha outside the protected forests.			

Indicator	Baseline level (2014/2015)	Level in 1 st PIR (self-reported)	Mid-term Target ²²	Target at End of Project (December 2020)	Status as of 30 th June 2018 (MTR)	Achievement rating	Justification for the Rating	Source of verification
		members from each VNRC's of forest adjacent communities. In Ruvu; Training on forest patrols was for water committees' members from 5 villages.			In Ruvu catchment 350 members (266 male, 124 female) from 9 groups and 5 WUAs have established beekeeping learning sites, with a total of 360 beehives. Two fish-farming groups have been established with total of 63 members (50 male, 13 female), with improved fish ponds with capacity producing 27 tons of fish per year with a local market value of 175 million Tanzanian Shillings.			
<ul style="list-style-type: none"> % decline in illegal harvesting from protected forests % improvement in land cover in rangelands 	Total of 50,754 ha of protected forest is degraded (including 49,066 ha of 60 m river line, 438 ha Uluguru Nature Forest Reserve and 1250 Amani Nature Forest Reserve)		N/A	Forest cover restored over at least 5,000 ha of riverine habitat in protected forests and 5 000 ha outside of protected areas Land Cover improved by 25% over 2,000 ha of rangelands At least a 25% decline in the rate of illegal harvesting from protected forests	917 ha - forest land outside the protected forest and 1047 ha - protected forest restored Improvement percentage of land cover over 2,000 ha of rangeland is not yet measured Over 90% decrease in the rate of illegal harvesting in Amani Nature Forest Reserve has been achieved		Forest cover restored in less than 2,000 ha of the expected 5,000 ha. However, %age decline in illegal harvesting practices being reported has exceeded the end of project by over 4 times.	PIRs
% increase in household incomes and %	Average household income ranges		N/A	At least 2 new sustainable livelihood practices taken up in	Two new sustainable livelihood practices (Beekeeping and Fish		Although 2 types of income	PIRs

Indicator	Baseline level (2014/2015)	Level in 1 st PIR (self-reported)	Mid-term Target ²²	Target at End of Project (December 2020)	Status as of 30 th June 2018 (MTR)	Achievement rating	Justification for the Rating	Source of verification
increase in production rates as a result of SLM practices	from TZS 480,000 – 550,000 per year			<p>each of the target areas and contributing 10% to production and overall incomes</p> <p>At least a 15 % increase in annual agricultural produce for key crops as a result of SLM practices introduced by the project in the target villages</p> <p>At least 25% of households in target villages using clean energy cooking technology and 75% of households aware of alternative energy solutions through capacity building of men, women and youth</p> <p>At least 25% of farmers in the target villages benefitting from accessing micro-finance and the development of new markets for agricultural products</p>	<p>farming) have been established in Ruvu catchment 14 beekeeping sites have been established with 360 beehives as start-up capital and 350 members (266 male, 124 female) participating.</p> <p>Two groups of fish farmers with 63 members (50 male, 13 female) to establish 3 improved fish ponds to capacity of producing 27,000 Kgs of fish valued at TZS 175,000,000.00 (local market price), this enterprise will benefit 550 families in the targeted area. Households adapting on-farm SLM practices has increased in production levels of cereals as follows: Zigi Catchment: from 2.0 tons/ha to 2.2 tons/ha (10% increase). In Ruvu Catchment: an increase from 2.5 tons/ha to 3.8 tons/ha (an increase of 52%)</p> <p>Number of farmers benefiting from accessing micro-finance and the development of new markets for agricultural products in not yet measured</p>		<p>generating activities have been piloted, the percentage of the population involved is very small and they are unlikely to be contributing ten percent household income (assessment need to be done)</p>	

Indicator	Baseline level (2014/2015)	Level in 1 st PIR (self-reported)	Mid-term Target ²²	Target at End of Project (December 2020)	Status as of 30 th June 2018 (MTR)	Achievement rating	Justification for the Rating	Source of verification
<ul style="list-style-type: none"> % increase in number of farmers using SLM techniques % decrease in undesired movements of livestock in search for pasture and water 	<p>Most livestock keepers do not practice SLM</p> <p>No livestock/rangel and management structures in place</p>		N/A	<p>At least 50% of farmers trained in the use of sustainable land management techniques.</p> <p>At least 30% of livestock keepers adopt alternative livestock management technologies.</p> <p>At least 20% increase in number of farmers in target villages consistently applying 2 to 5 SLM techniques introduced by the project</p>	<p>WUA formation and strengthening, Village Land Use Planning, Demarcation of 60 metre river buffer, Establishment of village forest Management plans, Establishment of SLM demonstration sites and their management, 34, 000 farmers trained on the use of SLM techniques, (10%) of the estimated 350,000 farmers</p> <p>Number of livestock keepers adapting alternative livestock management technologies has not been measured</p>		<p>Limited number of trained farmers</p> <p>No significant livestock keepers using pasture and water management strategies</p>	

Green= Achieved

Yellow= On target to be achieved

Red= Not on target to be achieved

5.12 ANNEX 12: SIGNED MTR REPORT CLEARANCE FORM

MTR Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Name of Consultant: _____Veronica Nyawira Muthui _____

Signed at *Leverkusen, Germany*, on 13th September, 2018

Name of Consultant: _____Stephen Mariki _____

Signed at Dar es Salaam, Tanzania on 13th September, 2018

I also approve this MTR report

3) Veronica Muthui, signed at Leverkusen on 13th September, 2018

4) Stephen Mariki, signed at Dar es Salaam, Tanzania on 13th September, 2018