United Nations Development Programme

United Nations Development Programme
United Republic of Tanzania
Annual Work Plan January 2017 to 31st December 2017 (YR 2)

Project Title	**Securing Watershed Services through Sustainable Land Management in the Ruvu and Zigi catchments (Eastern Arc Region), Tanzania**
UNDAP Outcomes	**Outcome 2**: Relevant MDAs, LGAs and Non-State Actors improve enforcement of environment laws and regulations for the protection of ecosystems, biodiversity and the sustainable management of natural resources
UNDP Strategic Plan Outputs and Indicators	**Output 2.5**: Legal and regulatory frameworks, policies and institutional 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. **Indicator 2.5.1**: Number of countries with legal, policy and institutional frameworks in place for conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems.
Executing Entity/Implementing Partner	Ministry of Water and Irrigation (MoWI), Tanzania
Other responsible Partners	VPO-Division of Environment, Ministry of Agriculture, Livestock and Fisheries, Ministry of Energy and Minerals, Ministry of Natural Resources and Tourism, Ministry of Land, Housing, and Human Settlement, Ministry of Finance, and other line Ministries, National Land Use Planning Commission (NLUPC), Tanga Urban Water and Sanitation Authority (Tanga-UWASA), Dar es Salaam Water and Sanitation Authority (DAWASA), Morogoro Urban Water and Sanitation Authority (MORUWASA) , Pangani and Wami-Ruvu Basin Water Boards (PBWB and WRBWB)

Programme period: 5 years	TOTAL BUDGET (US $)
Atlas Award ID: 00086631	**GEF**:3,648,858
Project ID (proposal): 00093855	
PIMS No: 5077	**Government**:22,000,000
Start date: 2016	
End Date: 2021	**UNDP**:2,000,000
Management arrangements: NIM	
PAC Meeting Date:21 July 2015	Other:

Agreed by (Executing Entity/Implementing Partner): MoWI
(Director of Water Resources-DWR)

Date: 17/1/2017

FOR: PERNAMENT SECRETARY
MINISTRY OF WATER
AND IRRIGATION

Agreed by : UNDP
(Country Director)

Date: 17/1/2017

Brief project description:

This project will be implemented in the Uluguru and East Usambara Mountains of Tanzania. These mountains, which give rise to the Ruvu and Zigi Rivers respectively, form part of the Eastern Arc chain, and are amongst the most important catchments areas in the country. The forests in these catchments are recognised as globally important stores of carbon and centres 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.

Despite an impressive baseline of existing interventions, the rate of deforestation and severity of land degradation in the Ruvu and Zigi catchments is unacceptably high. Sustainable Land Management (SLM) offers a comprehensive approach to management and governance of land and water resources and holds the potential to make significant and lasting differences both in the short and long term. 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 investments for SLM; ii) staff, resource and technical capacity deficits; and (iii) inadequate demonstrated experiences in integrated watershed management approaches at the landscape level. It is these barriers that this Project will address.

This project has been organised under ***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.

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.

Component 2 will target 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 will 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.

The total cost of investment in this project is estimated at US$ 27,648,858, of which US$3,648,858constitutes funding from the GEF, US$ 2 million represents co-financing from the UNDP, and a further US$22 million represents co-financing from the Government of Tanzania.

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
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									GEF	UNDP	TOTAL	
Output 1.1: Integrated Land Use Management Plans and Village Land Use Management Plans are developed and implemented in 8 districts (Morogoro Urban, Morogoro Rural and Mvomero, Kisarawe, Chalinze, Kibaha DC and Bagamoyo (Ruvu catchment), and Muheza, Mkinga, Korogwe and Tanga City (in Zigi Catchment), ensuring	1.1.1 Develop Integrated Land Use Management Plans (ILUMPS) for four districts and Village Land Use Management Plans in at least 10 villages in each river catchment (Ruvu and Zigi), using participatory rural appraisal and land-use planning	• Biophysical resource Inventory report for each catchment (Ruvu and Zigi) prepared. • Land use framework plans for 4 districts (Muheza, Korogwe, Morogoro and Kisarawe) developed • 10 integrated village land use plans developed in each catchment		x	x	x	x	55,000.00			55,000.00	NLUPC/LGAs/BWBs
	1.1.2 Review and update existing land use plans in targeted districts and villages, identify and catalyse appropriate measures to activate implementation of existing district/regional plans (Morogoro and Muheza) and village plans that have been developed but whose implementation is not effective.	• Two (2) DLUFP and (20) VLUPs in Zigi and Ruvu Catchment reviewed • Training of PLUM team conducted in Ruvu catchment. • Measures to activate implementation of existing district and village plans identified and used		x	x	x	x	32,500.00			32,500.00	NLUPC

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
optimal allocation of land to generate critical environmental and development benefits	1.1.3 Assess the support needed to build capacity at District and Village levels for planning, monitoring and ongoing implementation of District Plans and Village Land Use Management Plans.	• Capacity needs assessment conducted at basin, district and village levels • Assessment reports		x	x	x	x	20,500.00			20,500.00	NLUPC/LGAs/BWBs
	1.1.4 Identify appropriate measures for adoption and ongoing monitoring of Village Land Use Plans that mitigate land degradation, protect catchment forests and optimise production and living conditions.	• Appropriate measures for adoption and monitoring implementation of VLUP proposed • Meetings to share proposed measures conducted at District level 2 meetings in Zigi Catchment and 3 Meetings in Ruvu Catchment			x	x	x	30,000.00			30,000.00	NLUPC
	1.1.5 Negotiate land-use re-adjustments in accordance with the ILUMPS, with a focus on reducing conflicts and promoting viable alternatives	• Appropriate measures translated into kiswahili (popular version), • Appropriate Measures tested and evaluated through meetings one in each catchment			x	x	x	30,000.00			30,000.00	NLUPC/PCU

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	1.1.6 Develop a GIS-based Land Degradation (LD)/SLM database and land-use decision support tool/ system to make key spatial information available to aid landscape modelling, planning and monitoring of impacts of land-use	• ToR prepared, • Consultant procured		x	x	x	x	45,000.00			45,000.00	PCU
	1.1.7 Set up protocols and systems for monitoring and evaluation of SLM practices and the current and potential effects of degradation on ecosystem services and for tracking land-use change relative to the ILUMPS.	• ToR prepared • Protocols and systems in place • Meetings (2) conducted to share		x	x	x	x	25,000.00			25,000.00	NLUPC/PCU
Output 1.2:Multi-stakeholder committees are established (or strengthened) and active in promoting co-ordination and dialogue and are supporting mainstreaming of SLM into	1.2.1 Facilitate the establishment of appropriate Multi-stakeholder Committee(s) in each catchment (Ruvu and Zigi) and develop an action plan	Procure local facilitator, 2 meetings: Ruvu and Zigi, 2 Action Plan 1 Catchment Committee in Zigi 1 Sub -Catchment Committee in Ruvu(Upper Ngerengere)		x	x	x	x	20,000.00			20,000.00	PCU/LGAs

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
other sectors, programmes and policies.												
	1.2.2 Establish and maintain a comprehensive stakeholder database for each Water Basin Office,	• ToR for local expert • Local expert procured • 2 Stakeholder database designed and developed for Ruvu and Zigi		x	x	x	x	15,000.00			15,000.00	PCU
	1.2.3 Develop and implement a catchment-wide communications and awareness-raising strategy that will identify information/awareness needs	• Develop and disseminate popular communication materials		x	x	x	x	8,000.00			8,000.00	BWB
	1.2.4 Work with Water Basin Offices and District Councils to develop a joint vision and strategy for promotion of SLM and protocols for monitoring the uptake of SLM and its impacts of SLM on land degradation and watershed services in the two catchments.	• ToR to develop/review a joint vision and strategy • Team of experts working meetings (2) • Stakeholders meetings in Ruvu and Zigi.			x	x	x	25,000.00			25,000.00	BWB/LGA
Output 1.3:Water User Associations (WUAs) and River Committees are established and	1.3.1 Address the gaps identified during the SWOC of existing WUAs in the Zigi Mkulumuzi, Mfizigo, Ngerengere Upper (A&B) and Lower sub-catchments.	• SWOC analysis verified by M&E • Develop capacity development plan • 2 Meeting to share the capacity development plan		x	x	x	x	15,000.00			15,000.00	PCU/BWB/NGO

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
capacitated to perform their roles effectively in all key sub-catchments within the two river basins	1.3.2 In the Zigi River Basin, engage with all relevant stakeholders to clarify roles and responsibilities for the Zigi-Mkulumuzi WUA relative to UWAMAKIZI and develop and implement a communication strategy for raising awareness of these roles amongst communities within the Basin.	2 Awareness meetings on harmonizing their roles and responsibilities of WUAs and UWAMAKIZI		x		x		10,000.00			10,000.00	BWB
	1.3.3 Using participatory means develop Sub-catchment Committees in the 3 sub-catchments of the Zigi River (using the UWAMAKIZI model), establish a learning exchange through which the lessons learnt in the establishment of UWAMAKIZI can be transferred to the new Associations.	• One lesson learning tour for UWAMAKIZI and WUA leaders regarding Water Resources; allocation, protection, conservation, conflict resolution, law enforment, and best practice on SLM. • Members of TC and PCU to visit LVEMP for lesson learning on the best IGAs project implemented		x	x			25,500.00			25,500.00	PCU/TC/BWB

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	1.3.4 Develop an operational model through which the sub-catchment committees work co-operatively with WUAs to manage water use and monitor the impact of land management practices on water resources	• Operational model developed based on WUA, Catchment and Sub-catchment regulations • 2 Training for WUA leaders (Ruvu and Zigi) • 2 Meeting for WUA members (Ruvu and Zigi)			x	x		20,000.00			20,000.00	MoWI
	1.3.5 In the Ruvu Catchment establish 2 new WUAs (Mvuha and Kibungo), 2 new sub-catchment committees (Ruvu and Zigi).	1 Cathment Water Committee in Zigi, 1 Sub-Cathment Water Committee Ngerengere and 2 WUAs Mvuha and Kibungo established in Ruvu		x	x	x	x	65,000.00			65,000.00	BWB
	1.3.6 Strengthen the existing WUAs in the Mfizigo, Ngerengere Upper (A&B) and Lower Ngerengere.	Implement the plan for capacity development needs			x	x	x	15,000.00			15,000.00	BWB

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	1.3.7 Conduct annual training for all Water User Associations and Sub-catchment Committees 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.	Meetings 2 Ruvu and 1 meeting Zigi (Land, Water use regulations, financial Skills)		x	x	x	x	35,000.00			35,000.00	BWB
	1.3.8 Provide office equipment, means of transport and tools to equip at least 4 WUAs to do its job (based on the resource needs assessment conducted at the start of the project), starting with existing WUAs and then extending to the new ones to be established during the project.	Procurement of 7 Motorcycles		x	x	x		15,000.00			15,000.00	PCU/UNDP

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	1.3.9 To provide support for the co-ordination of land use planning processes (working alongside NLUPC facilitators and District Authorities); assess the support needed to build capacity for planning; monitor ongoing implementation of plans.	• ToR • Local NGO engaged		x	x	x	x	30,000.00			30,000.00	PCU/NLUPC/NGO
Output 1.4:Wami-Ruvu and Pangani River Water Basin Board and water users understand water basin regulations and are capacitated to identify and prosecute water and land-use infringements and harness greater compliance	1.4.1 Conduct a water use audit in each Basin, including a survey of water users, use and needs; water permit allocations; and payment compliance (including spatial depiction).	• Verification of the water use audit • Training on water resources legislation		x	x	x	x	7,000.00			7,000.00	MoWI/BWB
	Completion of Rapid Zigi Environment Flow Assessment study (YR 1)	Rapid EFA for Zigi report 1 Workshop		x	x	x	x	25,000.00			25,000.00	BWB/PCU
	Continuation of EFA Wet or Dry seasons sampling and reporting (YR 2)	ToR, Consultant engaged		x	x	x	x	48,000.00			48,000.00	BWB/PCU

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	Flow measurement and water quality analysis	At least 2 round of flow measurement and WQ sampling		x	x	x	x	52,000.00			52,000.00	BWB
	Ruvu River health assessment	ToR, Consultant engaged,Report		x	x	x	x	25,000.00			25,000.00	PCU/BWB
	1.4.2 Provide the staff of Water Basin Offices, District Facilitation Teams, WUAs and other community governance structures (such as Village Natural Resource or Environmental Committees) with training in the provisions of all relevant Acts and legislation.	Training provided as per capacity development plan		x	x	x	x	20,000.00			20,000.00	BWB/MOWI
	1.4.3 Establish multi-stakeholder Enforcement Teams to work alongside LGAs, WBOs, WUAs and Village leaders to enforce legislation and bylaws; identify, monitor and prosecute infringements and track changes in use over time.	2 Multi stakeholders Enforcement team established		x	x	x	x	30,000.00			30,000.00	BWB/LGA/PCU

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	1.4.4 Develop and disseminate information in popular and appropriate formats (e.g. printed media, meetings, focal visits, mobile technology) about water use permits and responsibilities, water- and land use regulations.	Develop and disseminate informations in popular format in line with activity 1.2.3			x	x	x	10,000.00			10,000.00	BWB
	1.4.5 Develop and implement a monitoring and data management system for payment compliance, and the fair and transparent allocation of funds received.	• ToR developed • Monitoring and Data Management system for payment compliance developed			x	x	x	20,000.00			20,000.00	BWB/PCU
Outcome 2:Finances available for SLM investments are increased by accessing new streams of public finance and more effective alignment of existing sectoral contributions												

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
Output 2.1: New streams of public finance are identified and accessed	2.1.1 Undertake an economic evaluation of the costs/benefits of different SLM practices and production systems and use the results to develop a business case for leveraging new streams of public finance.	• ToR for Local consultant/NGO, developed • Business case developed, • 2 Meetings conducted		X	X			15,000.00			15,000.00	PCU
	2.1.2 Identify likely sources of additional public finance and other financing mechanisms that can be tapped for the implementation of SLM in the Ruvu and Zigi Catchments and develop a strategy and action plan for accessing these.	ToR for Local consultant/NGO, Strategy and action plan for access public finance for SLM, 2 Meetings Local consultant/NGO procured		x	x	x	x	15,000.00			15,000.00	PCU
	2.2.3 Lobby for the inclusion of SLM as a component of Integrated Water Resource Management in national development and environmental policies, programmes and strategies.	• Meetings and Discussions with VPO-DoE and UNCCD Focal point conducted • Opportunity for accessing fund identified		x		x		15,000.00			15,000.00	PCU

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	2.2.4 Enhance research capacity in the key water resource management institutions to determine degradation trends and the impacts of adaptation strategies in order to access financing for mitigation strategies identified in the National Action Plan (NAP).	• ToR • Partnership Agreement with Ardhi University • Study to determine degradation trends and impact of adaptation • Study for Zigi and Ruvu • 2 Workshop for each catchment		x	x	x	x	22,500.00			22,500.00	PCU
	2.2.5 Provide technical support, technology transfer and training to enable Technical team, Basin water board to develop bankable SLM and IWRM project proposals.	Training workshop conducted for technical team, BWBs, PCU and other stakeholders institutions				X	X	25,000.00			25,000.00	PCU
Output 2.2: Sectoral (forestry, agriculture and water) allocations to SLM are re-aligned	2.2.1 Conduct a Public Expenditure Review of the agricultural, forestry, livestock development and water sectors to quantify the sources and amounts of funding currently available for SLM in the Ruvu and Zigi catchments, identify duplications, redundancy and negative trends in expenditure and recommend measures for overcoming these and aligning	• ToR for Local consultant/NGO, • Expenditure review report, • 2 Meetings		x	X	X	x	22,000.00			22,000.00	PCU

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	finance streams.											
	2.2.2 Facilitate the co-ordinated engagement of water basin bodies and other stakeholders in budgeting for SLM in the two river basins.	2 Stakeholders workshop		x			x	9,500.00			9,500.00	PCU
	Output 2.3: The effectiveness of SLM investment is improved											
	2.3.1 Facilitate linkages and opportunities for joint financial planning by sectoral departments, as well as donors, NGOs, business and private enterprises that provide funding for SLM in the Ruvu and Zigi catchments.	• Opportunities for Joint financial Planning identified • 2 Workshop meeting to develop linkages • 2 Follow up meetings			x	x	x	20,000.00			20,000.00	PCU/TC
Subtotal (Component 1-1)											915,500.00	
Component 2:Reducing the effects of land degradation on watershed services and improving livelihoods through increased landscape level adoption of SLM measures in the Ruvu and Zigi catchments												
Outcome 3: Institutional capacity is built for promoting sustainable land and forest management in support of IWRM in the Ruvu and Zigi Catchments												
Output 3.1:The institutional capacity (staff and resource requirements	3.1.1 Undertake an expanded staff and resources needs assessment.	• ToR, • Local Consultant engaged, • 4 Meetings,		X	x	x	x	30,000.00			30,000.00	PCU/MOWI

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
for promoting SLM) is strengthened in the Wami-Ruvu and Pangani Water Basin Offices, regional offices of line ministries and local government institutions		• Staff and resource needs report										
	3.1.2 Work closely with stakeholders to design and implement a multi-pronged, staffing and resource development plan that addresses the current staff and resource deficits and better enables the target institutions to integrate SLM into watershed management.	• ToR, • Resource development Plan and implementation strategy developed		X	x	x	x	10,000.00			10,000.00	PCU/MOWI
	3.1.3 In accordance with the resources-development plan, equip each Water Basin Office and other implementing partners with the necessary GIS software, Project Management Software and hardware, water monitoring kits, other basic tools and equipment required to deliver the project outputs.	• Equipment Specifications and quantity required for each IP, • Procurement				x	x	30,000.00			30,000.00	PCU/UNDP

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
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	3.2.1 Based on the institutional capacity assessment (described under Outcome 3, above), confirm the technical knowledge and skills development needs of the target institutions (for integrating SLM into watershed management), and use this to develop and implement a multi-pronged and reflexive targeted training and skills development programme.	• Technical knowledge and skills development needs confirmed • List of priotized trainings, trainees, trainers and venue • Trainings conducted				x	x	25,000.00			25,000.00	PCU
	3.2.2 Develop a skills and knowledge development monitoring and sustainability plan	Development monitoring and sustainability plan in place			x	X	x	10,000.00			10,000.00	PCU
Output 3.3: Extension services are capacitated to promote uptake of SLM and promote sustainable livelihoods	3.3.1 Conduct a full assessment of extension capacity (staff, resources, levels of technical skill) in 7 districts (within the project footprint) and use this as the basis to develop a capacity-building programme for extension services.	Resources Assessment for extensions officers conducted as per output 3.1 and 3.2		x	x	x	x	18,500.00			18,500.00	PCU/MALF/MOWI

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	3.3.2 In collaboration with NGOs, CSOs and other relevant institutions, develop a locally contextualised best practice guideline on modern SLM technologies, principles of integrated water resource management and alternative sustainable Income Generating Activities(IGAs), and use the guidelines as part of a training programme	• ToR, • Coordinating editor engaged, 2 Workshops, • Best Practices Guideline developed		x	x	x	x	40,500.00			40,500.00	PCU/MOWI
	3.3.3 Expand extension services by providing incentives for non-extension staff to participate in extension delivery (e.g. farmer's associations; other CSOs and NGOs, model farmers).	• Non-extension staff identified in each catchment • Criteria for assessment of best practice farmers developed • Type of incentives identified • Assessment conducted and best practice farmers selected • Incentives for model farmers		x	x	x	x	15,000.00			15,000.00	PCU/MALF (A)
	3.3.4 Promote farmer to farmer extension by showcasing and rewarding farmer innovations and strengthening the activity of farmer field schools, with particular attention	• Farmer-to-farmer extension promoted through showcasing and rewarding farmer innovations • At least 5 farmers field schools in each catchment			x	x	x	10,000.00			10,000.00	PCU/MALF (A)

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	given to women farmers.	strengthened										
Subtotal (Component 2-1)											189,000.00	
Component 2:Reducing the effects of land degradation on watershed services and improving livelihoods through increased landscape level adoption of SLM measuresin the Ruvu and Zigi catchments												
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												
Output 4.1: Sustainable land management practices promoted and natural rehabilitation facilitated in 10,000 ha of forest	4.1.1 Convene an information-gathering workshop with all relevant institutions to pool knowledge and capture lessons learnt	• Information gathering workshop conducted • 1 Workshop report		x	x			15,000.00			15,000.00	TFS/PCU
	4.1.2 Work with the Tanzania Forest Service (TFS) -ANR, UNR and forest-adjacent communities to develop forest management plans and to develop strategies to manage fire, illegal logging, illegal alluvial gold mining, firewood collection and riverbank conservation.	• Forest management plans and strategies reviewed				x	x	20,000.00			20,000.00	TFS/PCU

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	4.1.3 Work with communities and the TFS to develop assisted natural generation and enrichment planting projects to re-vegetate 5,000 ha of riverine forest within the Uluguru and Amani Nature Reserves (and other protected forests), and 5,000 ha of degraded forest outside of protected forests, and put in place a tracking system to monitor impact over time.	• Restoration Sites Identified • 2 Workshops for stakeholders		x	x	x	x	28,000.00			28,000.00	TFS/PCU
	4.1.4 Work with communities, the TFS, WBs and relevant NGOs and CSOs to set-up co-operation agreements and develop an innovative, non-financial incentive scheme for reducing harvesting pressures within protected forests in return for benefits associated with activities that provide viable alternatives to meet daily resource and livelihood needs (such as the provision of simple, reverse-osmosis water	• Identify relevant NGOs and CSOs • Cooperation agreement are in place				x	X	5,000.00			5,000.00	TFS/PCU

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	purification kits in return for protection of forest resources).											
	4.1.5 Undertake an assessment of affordable, viable alternative energy technologies for cooking, heating and lighting; select cost-effective and appropriate technologies for sale and distribution, particularly by women and youth (building on the model tested by CARE in their wPOWER project), and train community members, with a focus on women and youth, and equip them with suitable materials to raise awareness of the environmental and health benefits of using alternative energy technologies and reducing reliance on wood fuel and charcoal.	• ToRs for assessment of affordable, viable alternative energy technologies • Assessment conducted by Technical Team • Criteria for NGO or CSO selection • Train and equip the community members, with a focus on women and youth		x	x	x	x	25,000.00			25,000.00	PCU/TFS/NGO
	4.1.6 Create awareness by training teachers in environmental education and the role of forests in protecting water resources, and by working with cultural groups and performers to incorporate	• Awareness materials prepared • 2 school clubs for natural resources conservation in each catchment formed • Teachers on environmental		x	x	x	x	15,000.00			15,000.00	TFS

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	forest conservation messages in their work.	education trained • Forest conservation messages are incorporated in the works of cultural groups and performers										
	4.1.7 Construction of the police post near Amani NR to support patrol for illegal mining and logging as agreed in the stakeholder meeting	One (1) police post near Amani NR constructed.			x	x		20,000.00			20,000.00	PCU/LGA
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	4.2.1 Undertake a market assessment (building on the data gathered by Sustainable Agriculture Tanzania, TFCG, Care and WWF in other projects) to establish the costs/benefits of different sustainable land management and production systems, quantify current household incomes and production rates and identify, with the community, viable alternatives for economic development (e.g. bee-keeping, zero-grazing dairy farming; organic spice growing; mushroom farming) to be	• Partnership agreement with NGO in place • ToRs for market assessment • Market assessment conducted				x	x	17,500.00			17,500.00	PCU/BWB

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	implemented in targeted villages.											
		To expand UWAMAKIZI traditional conservation knowledge to four (4) other villages (Zigi and Ruvu). (i.e Terace farming, Fanya juu fanya chini, agroforestry, forest restoration, river cleaning, village community based water supply etc)		x	x	x	x	12,500.00			12,500.00	IP
	4.2.2 Work with selected villages to implement bee-keeping, zero-grazing dairy farming, organic spice growing, apiculture, butterfly farming, mushroom farming and so on, and establish markets and competitive pricing strategies for produce.	• Training on apiculture, butterfly, spice farming and entrepreneurship for atleast 10 selected villages in Zigi Catchment • Support atleast 2 best IGAs project • Installation of 350 beehives in Ruvu catchment finalized			x	x	x	35,000.00			35,000.00	PCU/BWB

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
	4.2.3 Enhance ability of communities, particularly women and other vulnerable groups, to engage with micro-finance providers through existing market associations/co-operatives, or through the formation of new associations where none exist, and provide training on best production practices, processing, product development, packing and branding, marketing, financial/business management, contract negotiation and other relevant business skills.	• Women and other vulnerable groups to be capacitated identified.					x	2000.00			2000.00	PCU/BWB/LGAs
	4.2.6 Work with the WRBWB and PBWB and the relevant water and sanitation authorities (Tanga-UWASA, MORUWASA, DAWASA and DAWASCO) to provide improved access to reliable, clean water sources to provide water for dry season cultivation, away from riverbanks.	• Priority Villages for gravity water supply schemes projects identified (1 from each catchment). • Survey, designs and drawing prepared • 2 Contractors procured.				x	x	79,500.00			79,500.00	PCU/UWSA

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
		2 cattle troughs around Mabayani Dam constructed.			x	x		25,000.00			25,000.00	PCU/MALF(L)
Output 4.3. Sustainable livestock management technologies developed and tested and infrastructure developed to operationalize SLM in rangelands	4.3.1 Undertaking a survey to establish the extent of land degradation in each basin under livestock, current stocking rates, seasonal movements and fluctuations in livestock numbers;	Bio-physical resource inventory done in output 1.1 .		x	x			15,000.00			15,000.00	PCU/MALF(L)/NLUPC
	4.3.2 Identifying (by type, location and scale), a suite of prospective sustainable livestock management technologies.	• sustainable livestock management technologies identified in each catchment			x	x	x	20,000.00			20,000.00	PCU/MALF(L) /NLUPC
	4.3.3 Developing indicators that can be used to monitor the impacts of changed livestock management technologies on land cover, soil erosion and the condition of riverbanks, as well as socioeconomic impacts (changes in income and other well-being indicators).	• Indicators prepared. • 2 workshops				x	x	22,500.00			22,500.00	PCU/MALF(L)
Subtotal (Component 2-2)											**357,000.00**	

EXPECTED OUTPUT	PLANNED ACTIVITIES	ANNUAL		TIME FRAME (JAN-DEC,2017)				PLANNED BUDGET 2017				RESPONSIBLE PARTY
		TARGET	ACTUAL	Q1	Q2	Q3	Q4	PLANNED BUDGET	Amount (USD) by source of funding			
Project Management Support	Monitoring and Evaluation of project activities	Field trips to collect data and supervise activity implementation										
		DSA for 4 members of PCU, 84 days times/year each at TZS 120,000		x	x	x	x	20,500.00			20,500.00	PCU
		DSA for 2 Drivers 84 days times/year each @ TZS 80,000		x	x	x	x	6,720.00			6,720.00	PCU
		Fuel 4000 litres		x	x	x	x	5,000.00			5,000.00	PCU
		Participation of Counterparts		x	x	x	x	32,250.00			32,250.00	PCU
	2 PSC Meetings	2 Meetings in the year			x		x	7,500.00			15,000	PCU
	4 Quarterly Reflection Meetings	4 Meetings		x	x	x	x	10,000.00			40,000.00	PCU
	Maintenance of office equipment	Services of photocopying and printer machine		X	X	X	X	1,500.00			1,500.00	PCU
		Purchase one coloured printer		x				350.00			350.00	PCU
		Air tickets		x	x	x	x	6,000			6,000	PCU
	Stationery and other supplies	Various		X	X	X	X	8,000.00			8,000.00	PCU
	Communication	Air time/Internet		X	X	X	X	500.00			500.00	PCU
	Sundries			X	X	X	X	2,000.00			2,000.00	PCU
Subtotal (Project Management)	*(8.5% of the Total Budget)*										**137,820.00**	
Grand Total BudgetGEF+UNDP (USD)											**1,599,320.00**	

Monitoring and Evaluation (M&E) Workplan and Budget

M&E Activity	Responsible parties	Budget US$ (excluding PCU staff time)	Time frame
Project Inception Workshop and Launch Event	PCU UNDP CO, UNDP GEF	5,000	Within 3 months of project start-up
Project Inception Report	PCU, UNDP CO	Nil	2 weeks after the Inception Work
Internal Progress monitoring by implementation team	PC to oversee hiring of specific studies and institutions and delegate responsibilities to team members	Nil (Any consultancy fees to be determined at Project Inception and confirmed under the relevant project outputs in the full project budget)	At start, mid-term and end of project evaluation cycle and annually when required
Measurement of means of verification for Project Progress (on output and implementation)	UNDP GEF Regional Technical Advisor and PC to oversee measurements by regional field officers and local Implementing Agencies (IAs)	To be determined as part of annual work plan preparation	Annually, prior to Annual Progress Report (APR)/Project Implementation Report (PIR) and according to annual work plans
APR/PIR	PCU UNDP CO UNDP RTA UNDP GEF RCU	Nil	Annually
Tri-partite Review (TPR) and TPR Report	Government counterparts, UNCP CO, UNDP GEF-RCU and Project Team	Nil	Annually, after receipt of APR
Steering Committee Meetings	PCU, UNDP CO	15,000	Following Inception Workshop and subsequently at least once a year ahead of APR
Periodic status/ progress reports	PCU	Nil	Quarterly
Technical Reports	Project team Consultants, as needed	consultancy fees built into the project budget under individual outputs	To be determined according to need as agreed by Project Team (PT) and UNDP CO
Mid-term evaluation	PC UNDP CO UNDP RCU External consultant(s) – evaluation team	40,000	Mid-point of project implementation period
Final External Evaluation	PC UNDP CO UNDP RCU External Consultants (Evaluation team)	40,000	At least 6months before end of project
Project Terminal Report	PCU UNDP CO	Nil	At least 3months before end of project
Lessons learnt report	Project Team, UNDP GEF RCU	5,000	Annually
Audit	UNDP CO Project manager and team	17,500 (3,500 per year)	Annually
Field visits	UNDP CO UNDP RCU (if required) Government representatives	Paid from IA fees and operational budgets	Annually
TOTAL COSTS		122,500US$	

*Note: This cost included in the main budget above

ANNEX1: **M&E MATRIX**

STRATEGIC RESULTS FRAMEWORK (SRF)

This project will contribute to achieving the following UNDAP Outcome: **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.
UNDAP Outcome Indicators: Indicator 1: Tools, models and best practices deployed Indicator 2: Number of successful Green Economy models introduced in target sectors
GEF Focal Area: Land Degradation
Applicable GEF Strategic Objective: LD-3: Reduce pressures on natural resources from competing land uses in the wider landscape
Applicable GEF Expected Outcomes: Outcome 3.1: Cross-sectoral enabling environment for integrated landscape management (in support of SLM) Outcome 3.2: Integrated landscape management practice adopted by local communities Outcome 3.3: Increased investments in integrated landscape management
Applicable GEF outcome indictors: Integrated land management plans developed and implemented INRM tools and methodologies developed and tested Appropriate actions to diversify the financial resource base

Objective/Outcome	Indicator	Baseline (2013/2014)	Target(s) End of project	Means of Verification	Risks and Assumptions
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.	Extent of uptake of SLM practices	To be determined at project inception	At least 20,000 ha of land managed more sustainably as a result of the project , 20% of farmers in target villages using at least 2 to 5 SLM practices	Field assessments Extension Reports Project M&E Reports	**Assumptions**: The current high level of support for SLM as a component of watershed management by Government and development partners is maintained 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 **Risks**: Future Government administrations may be reluctant to allocate budget for SLM and integrate SLM into watershed management policies, legislation and practice Production sectors and land users may be reluctant to embrace land-use zoning and setting aside of areas for no-development or rehabilitation Local communities may show reluctance to shift land-use practices, comply with laws or pursue alternative sustainable livelihoods
	% increase in land cover	To be determined at project inception	At least 25% improvement in land cover and, 10% improvement in soil organic matter	Project Review of Land degradation scorecard Field assessments of land cover and soil quality Land Cover maps	
	Extent of forest cover restored	Current rate of forest loss estimated at 1% per annum; The extent and level of degradation in the two catchments will be mapped at project inception	At least 5,000 ha of riverine forest in protected areas and 5,000 ha of forest outside of protected areas restored	Tanzania Forest Service (TFS) annual reports Field surveys and mapping Seedling regeneration and survival counts Project Monitoring Reports	
	Extent of rangelands under improved livestock management practices	To be determined at project inception	At least 30% of livestock keepers adopt 2 – 3 sustainable livestock management technologies At least 25% improvement of land cover in 2,000 ha of rangelands	Extent of rangelands under improved livestock management practices as determined by field assessment Extension reports	
	Percentage improvement in water quality and quantity at monitoring points	Current mean annual flow rate in the Zigi River is $5m^3$/sec and sediment load is 14mg/l Current mean annual flow rate in Ruvu River is $60m^3$/ sec and sediment load is 50 ton/km^2	At least a 10% improvement in flow rates, and 10% reduction in sediment loads	Flow and sediment data recorded by Water Basin Offices in annual hydrological reports Project Monitoring Reports	
	Improvement in systemic Capacity Development	Capacity Result (CR)Area CR1: 33%	CR1: 100% CR2: 100%	Project Review of Capacity Development	

	Indicator scores	CR2: 33% CR4: 33%	CR4: 100%	Scorecard at mid-term and project end	The effects of external factors such as climate change may exacerbate land degradation and water supply and limit production despite the uptake of SLM at the project sites
	% increase in household incomes and food production as a result of SLM and alternative livelihoods	Currently not quantified, but at least 30% of households at or below the UN poverty line in the Ruvu and Zigi catchments Baseline values for incomes and production to be assessed at project inception in selected villages	At least 20% increase in annual income in at least 40% of households in participating villages At least 10% increase in production for 2 – 3 crops for at least 20% of all farmers taking up SLM practices	Farmer's records of income Interviews Socio-economic survey reports (wellness indicators to be developed during study at project inception) Tons or kg produced per year for selected crops	
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	Outputs: Output 1.1: Integrated Land Use Management Plans (ILUMPS) and Village Land Use Management Plans developed and implemented in 7 districts, ensuring optimal allocation of land to generate critical environmental and development benefits Output 1.2: Multi-sectoral stakeholder committees are established (or strengthened) and are active in promoting co-ordination and dialogue in support of mainstreaming SLM into other sectors, programmes and policies Output 1.3: Water User Associations (WUAs) are formed and strengthened and capacitated to perform their roles effectively Output 1.4.: Water Basin authorities are capacitated to identify and prosecute water- and land-use infringements and harness greater compliance				
	Indicator	**Baseline 2014**	**Target (project end)**	**Means of Verification**	Risks and assumptions
	Number of District and Village Land Use Plans developed and operationalised	3 District Plans (Morogoro DC, Muheza and Mkinga) developed but not implemented, 1 (Mvomero) initiated but need resources needed to continue 9 Village Land Use Plans developed but not operational in Zigi Basin 5 Village Land Use Plans developed but not operational in Ruvu Catchment	Integrated Land Use Plans updated or developed and implemented in 7 districts within the project footprint (Morogoro DC, Morogoro Urban; Mvomero DC, Muheza DC; Tanga; Korogwe DC and Mkinga DC) Village Land use Plans completed for at least 10 villages each in the Ruvu and Zigi catchments – exact number and selection of villages to be determined at project inception	District Land Use Plans District Land Use Registries Village Land Use Plans and Village Land Use Registries are used to inform decision making Project Progress Reports	**Assumptions:** Efficient,multi-sectoral district PLUM teams are formed and operational in each target area Resources are allocated and a plan of operation is in place for implementing Participatory Rural Appraisal in the selected villages An efficient Village Land Use Management Committee with a good understanding of village land uses is in place and

					uses the plan **Risks**: Production sectors and other land users may not be willing to comply with land-use zonation or to adjust land use in accordance with ILUMPS – this will be mitigated by following participatory planning procedures and through awareness raising
	Number of District Officers and Village Committee members trained in implementation and monitoring of land use plans	To be determined at project inception	At least 75% of District Officers (with representation from 7 Districts) and all Village committees in each village for which a plan is developed)	Quarterly Annual Reports of District Offices shows evidence of improved decision making and enforcement Project Reports	**Risk**: turnover of staff in District offices makes it difficult to meet the target for training **Assumption:** Trained leaders will apply their knowledge and will not be swayed by community/user pressure for inappropriate land use.
	Number of multi-sectoral stakeholder landscape co-ordination committees (Catchment Forums) formed and operational in each Basin	Process to form Catchment Forum in Zigi has been initiated, but not formed yet No Catchment Forums in the Ruvu catchment In both catchments, numerous sectoral planning or facilitation teams, farmer's associations and other groupings exist, but co-ordination amongst them is weak	Zigi: 1 Catchment Forum/Landscape Co-ordination Committee formed and meeting at least twice per year Ruvu: At least 1 Catchment Forum/Landscape Co-ordination Committee formed and meeting at least twice per year	Project Reports MOU between diverse stakeholders Catchment Forum Constitution and Committee meeting agendas and minutes detailing not only joint decision making but also progress in implementation of IWRM/SLM	**Assumption:** Stakeholders are willing and motivated to form a Catchment Committee/Forum
	Number of registered, operational Water User Associations and Sub-catchment Committees in each catchment	Zigi: 1 WUA- Zigi-Mkulumuzi (functional, but requires strengthening) 2 Environmental	Zigi: 1 WUA strengthened (Zigi-Mkulumuzi) 1 new WUA formed 2 new sub-catchment committees formed	WUA and Sub-catchment Committee registrations, constitutions and Terms of Reference	**Assumptions:** Effective and democratically elected leadership is in place to provide group cohesion

		Committees – Mabayani Dam 1 Community Association - Uwamakizi Ruvu: 4 WUAs– Mfizigo Sub-catchment; Lower Ngerengere and Upper Ngerengere A & B (all are non-functional) 1 Community Association - Wakuakuvyama	Ruvu: 4 – Mfizigo operationalised; and at least 4 new WUAs formed – in the Mvuha, Kibungo, Mtumbizi and Mgeta sub-catchments) 2 sub-catchment committees formed	WUA and River Committee meeting minutes Project M&E Reports	Effective planning ensures that all stakeholders are involved in establishment/activities of WUAs **Risks**: Some users are reluctant to form a WUA because they regard water as a common good for which they are reluctant to pay WUAs relate to hydrological units and this might conflict with how communities live and are distributed in the landscape (e.g. shifting pastoralists) – this can be managed by allowing dual membership of different WUAs
	Number of basin and district officers, front line extension workers and community associations trained in use of decision-support tool to strengthen land use planning and monitor land degradation	No decision-support tool currently available	At least 75% of all relevant staff/members trained	Annual Reports of Water Basin and District Offices WUA meeting records Project Reports	**Assumption:** The GIS-based decision-support tool is developed and available for use and that the necessary infrastructure is maintained
	Number of staff and members of community associations trained in provisions of land and water-use legislation	226 (Ruvu) and 162 (Zigi)people trained in basic provisions of water-use legislation No people trained in provisions of relevant land-use legislation	75% of all staff in target institutions, all WUAs and VNRCs trained	Annual Reports of Basin and District Offices Project M&E reports	**Assumption**: There is not a high turnover of members
	% increase in rates of compliance with water basin regulations	Currently not known, although rates are generally low. To be determined at project inception.	At least 50% of water users issued with water use permits and 60% of industries and commercial farming operators complying with water discharge permits	Water Basin Office records (permit applications received and granted; payments for water rights received) Site inspections and	**Assumption**: Water Basin Offices have an up-to-date register of water users and an effective monitoring tool for tracking and enforcing compliance

				quality assurance reports (from UWASAs) Project M&E Reports	**Risk**: Communities remain unwilling to pay for water as they view it as a common good
	Joint vision for SLM and IWRM developed and guiding co-operative governance	Interagency co-operation is currently very weak or non-existent, no joint vision for SLM in place	Joint SLM/IWRM Strategy for each catchment developed and guiding decision-making	Inter-agency agreements Catchment Forum Minutes Project M&E Reports	**Assumption:** Capacity and will to develop cooperative governance approach is in place - this will be mitigated by capacity development and support will be provided to manage conflict constructively **Risk:** Conflicts and misunderstandings among public institutions, private sector partners , NGOs, CSOs and resource users undermine partnership approaches and co-operative governance arrangements
	Number of promotional leaflets, programmes and other awareness-raising tools and applications developed and distributed to pilot villages	Currently not quantified	Catchment-wide communications strategy developed and in place, with a minimum of 2,000 promotional leaflets distributed in target villages. Other targets to be set at inception, based on Strategy	Communications strategy monitoring systems Leaflets and communications products	**Assumption:** Appropriate communication tools are selected **Risks:** Material is not appropriate and is not well received.
Outcome 2: Finances available for SLM investments are increased by accessing new streams of public finance and more effective alignment of existing sectoral contributions	2.1.New streams of public finance for SLM are brokered by incorporating economic valuation of different SLM production systems into decision-making 2.2. Sectoral funding available for SLM is increased (by 10%) through re-alignment of existing streams of public finance 2.3. The effectiveness of SLM investments is improved through the development of guidelines and criteria for resource distribution				
	Indicator	**Baseline**	**Target**	**MoV**	**Risks and Assumptions**
	% increase in allocations from national fiscal or MTEF to SLM, by source in the Ruvu and Zigi catchments	No SLM funds currently allocated to water resource management agencies	At least a 10% increase in government funding available for SLM by mid-cycle and 15 % increase by project end	Public Finance Expenditure Reviews; Annual MTEF budgets and reports; Financial sustainability scorecard	**Risk:** Political goodwill and high levels of in-principle support for SLM declines – mitigated by demonstrating significant well publicised returns

	Amount of SLM funds accessed through NAP, Water conservation policies and climate change adaptation sources	Currently not quantified	At least 10% of total funding available to be sourced via NAP, water conservation policies	Budgets Project investment strategy M&E reports	**Assumption**: NAP, the WSDP and Water Resources Protection Strategy secure the necessary funds from donors **Risk**: Government priorities change **Risk:** High transaction costs and complex approval procedures hinder efforts to access funds
	Amount of funding accessed for SLM through new streams of public finance and other financing mechanisms	Not quantified	At least 2 new funding streams or financial mechanisms accessed	Business Case Report and Integrated Financing Strategy M&E reports Approved funding proposals	**Risk:** lack of understanding of importance of SLM by leaders leads to lack of motivation to allocated funds – can be mitigated by providing accessible information on the benefits of SLM
	Number of staff in target institutions trained in the development of SLM projects and funding proposals	Current levels of capacity need to be strengthened	All members of Technical Team (including at least 1 member each of MOW; PBWO; WRBWO; Ta-UWASA; DAWASA; DAWASCO; PMO-RALG; NLUPC, MAFC) as well as Morogoro DC; Muheza DC; Mkinga DC; Mvomero DC; Korogwe DC;Tanga City; each WUA (at least one quarter of target to be women)	Annual Reports from Water Basin and District Authority Offices Reports from training workshop(s) Training manual and materials Project Progress Reports	**Risk**: Transfer, retirement or resignation of trained staff **Assumption:** Staff have appropriate levels of competence in writing
Component 2:	***Reducing the effects of land degradation on watershed services and improving livelihoods through increased landscape level uptake of SLM measures***				

Outcome 3: Institutional capacity is built for promoting sustainable land and forest management in support of IWRM in the Ruvu and Zigi Catchments	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 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 3.3.Extension services are capacitated to promote uptake of SLM and promote alternative sustainable livelihoods				
	Indicator	**Baseline**	**Target**	**MoV**	**Risks and assumptions**
	Number of technical staff in Water basin Offices, District and local government institutions, WUAs and Village structures completing skills and knowledge improvement training programmes	Not quantified	At least 4 relevant staff/officials in each target institution, including Basin Water Offices, District Authority Offices in Morogoro DC, Muheza DC, Tanga-UWASA; DAWASCO, DAWASA; NLUPC and at least 2 representatives of each WUA, Catchment Forum and VNRC (at least one quarter of target to be women and/or youth)	Quarterly/Annual Reports (Basin and District Offices) Project Reports	**Risk**: Transfer, retirement or resignation of trained staff **Assumption:** Staff have the required baseline competency in the sector
	Staffing and resource development plans developed and implemented , for Basin Water Offices, District Authorities, and WUAs	Provisional baseline established during PPG through surveys, to be finalised at project inception	Staff and resource deficits decreased by 75% Equipment and facilities provided (as per the resource development plan to be developed during project implementation)	Project Review of Capacity Development Indicator Scorecard Annual Reports of target institutions Project M&E Reports	**Assumption:** Government continues to allocate enough budget to maintain at least the baseline staffing and physical resource capacity of the target institutions **Risk**: Staff attrition due to resignation, retirement or transfer
	% of population in targeted villages aware of SLM and SLM-related activities in their area (as a result of the project) and satisfied with extension services	N/A	At least 50% of population in target villages with increased awareness and knowledge to carry out SLM (at least one quarter of target to be women and/or youth)	Community surveys Project M& E Reports Awareness raising pamphlets, materials Community surveys to assess satisfaction with extension services	**Risk:** Attrition of extension staff or lack of investment in the extension service by Government negates the impact of project activities to increase awareness **Assumption**: Changes in awareness will be due to the impact of this project, and not other small projects operating in the catchments

	Number of trained extension officers available to provide SLM messages in agricultural and livestock extension services	Ruvu Basin: 36 extension officers with fair levels of technical skill, but not enough officers in each 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	Number of trained extension personnel increased by 50% in the Ruvu and Zigi Basins Number of 'para-professionals' (community members) active in extension increased by 25%	Quarterly/annual Reports from District Offices/regional offices of line ministries Extension reports Project Training Reports Project M & E reports	**Risk:** Budget cuts or failure to fill empty posts leads to a decrease in the number of extension officers

Outcome 4 Increased uptake of sustainable land management practices secures watershed services and improves livelihoods in the Ruvu and Zigi catchments	4.1. Human-induced pressures are reduced and natural rehabilitation facilitated in 5,000 ha of riverine forest within protected areas and 5,000 ha outside of protected forests 4.2. Household food production and incomes increased by 30% (for actively participating villages) through uptake of alternative sustainable income generating activities 4.4. Sustainable livestock management technologies developed and tested and infrastructure developed to operationalise SLM in rangelands				
	Indicator	**Baseline**	**Target**	**MoV**	**Risks and assumptions**
	Extent of land cover over which forest rehabilitation is facilitated	To be determined at project inception	At least 5,000 ha of riverine forest within protected areas and 5,000 ha of forest outside of protected areas	TFS annual reports Project Reports Seedling regeneration and survival counts; % cover of desirable species Number of trees planted	**Risks:** Factors such as climate variability or pests and disease cause degradation or cause tree mortality Ongoing immigration of people into the area leads to increased pressure
	% decline in illegal harvesting from protected forests	Current rates unknown – to be determined at project inception	At least a 25% decline in rates of harvesting from intact or protected forests	TFS annual reports	**Risk:** Adoption of alternative IGAs does not result in a decrease in harvesting form forests
	Improved Threat Reduction scores	Not known, to be assessed at project inception	Threat scores decrease by at least 20%	Field assessments	**Risk:** Threats to forests from other sources (e.g. outbreak of disease, drought, encroachment by invasive alien species)
	Extent of land under direct SLM as a result of the project	To be determined at project inception	Over 15,000 ha under direct SLM as a result of the project	Field surveys Extension agents reports	**Assumption:** Issues relating to land tenure are resolved adequately **Risk:** Farmers lose their

					land rights due to?? **Risk:** Natural disasters such as droughts or floods
	% increase in number of farmers using SLM techniques	To be determined at inception	At least 50 % increase in number of farmers adopting at least 2 new SLM techniques introduced by the project (at least one quarter of target to be women and/or youth)	Commissioned socio-economic study Socio-economic monitoring reports as part of the participatory project monitoring systems	**Risk:** External factors such as poor health, rampant inflation, significant immigration or other social issues beyond the control of the project make it impossible for farmers to take up SLM practices Social resistance to change in tradition slows uptake (to be mitigated through aware-raising and working through champions) **Risk:** Natural disasters such as drought or floods affect the ability of farmers to convert to SLM technologies
	% increase in household incomes and production rates as a result of SLM practices	To be determined at inception	At least a 25% increase in household incomes in 50 % of households in target villages and 15% increase in production of 2 – 3 key crops in those households	Commissioned studies Farmer's financial records	**Risk**: Predicted or unexpected effects of climate change, droughts or floods limit agricultural production despite uptake of SLM **Risk** Local level economic growth fails to provide adequate returns on investments in SLM, or the economic gains of SLM are eroded by external factors such as rampant inflation or lack of markets
	% increase in numbers of farmers accessing micro-finance and benefiting from establishment of new markets for produce (dairy, spice)	Unknown – to be determined	At least 25% of farmers (of which half should be women) benefiting from micro-finance and assisted to benefit from access to new markets	Farmers records Micro-finance agreements District Trade reports	**Assumption:** Farmers will be able to repay loans

	% of households using alternative energy technologies	To be determined	At least 25% of households in target villages using alternative energy solutions and 75% of households aware of options	Community surveys	**Risk:** Villagers are unwilling to change from traditional practices (to be mitigated through awareness raising)
	% improvement in land cover in rangelands	To be assessed at inception – site-level data was not available during PPG	At least a 25% improvement in land cover over 2,000 ha of rangeland	Extension officer reports	**Risk:** Intensified in-migration of pastoralists from outside of the catchments increases grazing pressures and causes further loss of land cover
	Number of water points for cattle	None	Number to be determined in the Sustainable Rangeland Management Plan developed by Project	Monitoring system in Sustainable Rangeland Management Plan Extension Reports Field surveys	**Assumption:** Watering points will be adequately maintained
	% of livestock keepers adopting SLM practices	Unknown, but currently no livestock management infrastructure is in place and most livestock keepers do not practice SLM techniques (winter season fodder, night-corralling, rotational grazing)	At least 20% of livestock keepers adopt at least 2 sustainable livestock management technologies	Extension officer reports	**Assumption**: adequate land is available for livestock-keeping **Risk:** ongoing in-migration of pastoralists from other areas increases grazing pressures not trained in SLM results in ongoing impacts

ANNEX 2: **PROJECT RISKS AND MITIGATION MEASURES UPTODATED TO DEC 2016**

A number of risks that might impede successful delivery of the project outputs were identified during the project design phase. These can be loosely categorised into: institutional, socio-economic and environmental risks. For each of these potential risks, the project has designed a mitigation strategy, as described in the table below.

Risks and mitigation measures

Risk	Rating	Mitigation Strategy	Status at the end of 2016
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 ongoing support.	Government commitment remains high and continue to implement policies, programmes and strategies that promotes integrated approaches to water resource management and the adoption of SLM as a key means for combating land degradation. The project has established a PSC with membership drawn from the Ministry of Finance, VPO-Division of Environment, National Land Use Planning Commission (NLUPC), Tanga Urban Water and Sanitation Authority (Tanga-UWASA), Dar es Salaam Water and Sanitation Authority (DAWASA), Morogoro Urban Water and Sanitation Authority (MORUWASA) , Pangani and Wami-Ruvu Basin Water Boards (PBWB and WRBWB), Ministry of Agriculture, Livestock and Fisheries, Ministry of Energy and Minerals, Ministry of Natural Resources and Tourism, Ministry of Land, Housing, and Human Settlement, Ministry of Water and Irrigation, President Office-Regional Administration and Local Government
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	Capacity building on Integrated Water Resources Management and Sustainable Land Management was conducted. Basin Authorities including LGA have been capacitated in managing SLM interventions. The project has provided a motor vehicles for facilitating the implementation of the project including monitoring and supervision of the project activities Training to basin staff on hydrological and water allocation

Risk	Rating	Mitigation Strategy	Status at the end of 2016
		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 ongoing commitment.	model (SWAT) has been conducted
Conflicts and misunderstanding among public institutions, private sector partners, NGOs and resource users undermine partnership approaches and implementation of cooperative governance arrangements	Low	A major focus of this project will be on building social capital and facilitating opportunities for linkage and collaboration 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.	Collaborations have been engaged between different stakeholders; NGOs such as ONGAWA, TFS, Mohammed Enterprises (Mjesani Sisal Estate), UWAMAKIZI, Amani Nature Reserve, Nilo Nature Reserve etc. Some understanding has been built among stakeholders in Zigi Catchment. Project introduction meetings were conducted with LGAs within Ruvu Catchment Stakeholders Forum was conducted with implementing partners to explain about the Project Different implementing Partners from Wami/Ruvu, SAT and UNR used to present the implemented activities at different project areas.
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.	There is no conflict since fund is enough for project implementation.
Socio-economic			
Poor households and other vulnerable	Low risk	SLM is labour intensive and may involve higher input costs than is usual in traditional farming practices. This may mean that only	There was a problem before at the moment the issue will be dealt with since the study to find the best Income Generating

Risk	Rating	Mitigation Strategy	Status at the end of 2016
members of the communities (women – especially 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		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 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.	Activities (IGA) has been conducted and will be implemented. Together, best farming practice activities are practiced in some selected villages to start with in Zigi Catchment. Different villages which underlay in Mfizigo, Ngerengere WUAs were trained on SLM farming practices followed with the practical training to construct terraces farms in Ruvu Catchment.
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	Moderate risk	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.	Already four (4) Water Users Associations are in place. Through these WUAs of which one of their mandates is environmental conservation it is expected that encroachment will be minimised. Identification of Land Owners in riparian zones in Ruvu Catchment at Kibangile, Nige, Gozo, Uponda, Kilemela, Kiswira and Logo Villages. Where by different groups formed and prioritize different Income generating activities such as; Beekeeping, rearing, fish farming, tree nurseries. Where by beekeeping is being implemented.
Local level economic	Low risk	At the macro-economic scale, the economic outlook for Tanzania	Rampant inflation is not an issue. The economy is expected to

Risk	Rating	Mitigation Strategy	Status at the end of 2016
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		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.	be good through SLM interventions.
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.	Through SLM and best farming practices introduced different climate adaptation measures, effects of climate change will be addressed and effects attenuated thus, limitations of agricultural production will be minimal.
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.	Issue of alien plants is out of question. Ruvu and Zigi catchment lie within nature reserves (Amani and Uluguru Nature Reserve). The negative impacts will occur through anthropogenic activities.