

APPENDIX F

ENVIRONMENTAL SCREENING PROCESS FORMS

MACEMP FORM A

ENVIRONMENTAL SCREENING OF SUB-PROJECTS

PART A: GENERAL INFORMATION

1. Name of sub-project: _____
2. Sector: _____
3. Name of the Village/Mtaa/Shehia: _____
4. Name of Ward: _____
5. Name of District: _____
6. Name of Executing Agent: _____
7. Name of the Approving Authority: _____
8. Individual Responsible for Completion of Form A
Name: _____
Job title: _____
Telephone Number: _____
Fax Number: _____
E-mail Address: _____
Date: _____
Signature: _____

PART B: DESCRIPTION OF THE ENVIRONMENTAL SITUATION AND IDENTIFICATION OF ENVIRONMENTAL AND SOCIAL IMPACTS

Describe the sub-project location, siting and surroundings (include a map, even a sketch map)

Describe the marine and coastal environment in/adjacent to the sub-project (e.g., types of habitats – mangrove forest, coral reef, tidal mudflat, etc.; animal life and vegetation; topography).

Estimate and indicate where vegetation might be cleared, or structures placed in the water.

1. Environmentally Sensitive Areas or Threatened Species

S/No	Description	Yes	No	Not Known
	Are there any environmentally sensitive areas or threatened species that could be adversely affected by the project (specify below)?			
1	Intact natural forests			
2	Riverine forests			
3	Surface water courses or natural springs			
4	Wetlands (lakes, swamps, seasonally inundated areas)			
5	Coral reefs			
6	Seagrass beds			
7	Area of high biodiversity			
8	Habitats of endangered/threatened species for which protection is required under Tanzania law.			

2. Contamination and Pollution Hazards

S/No	Description	Yes	No	Not Known
1	Is there any possibility that the project will be at risks of contamination and pollution hazards from latrines, dump sites, industrial discharge, water discharge, etc.?			

3. Geology and Soils

S/No	Description	Yes	No	Not Known
1	Is there any possibility of soil instability in the project area (e.g., black cotton soil, landslide, subsidence)			
2	Is there any possibility of the area having risks of large scale increase in soil salinity?			
3	Based on inspection, is there any possibility of the area being prone to floods, poorly drained, low-lying, depression or block run-off water?			

4. Lands

S/No	Description	Yes	No	Not Known
1	Are there farm lands in the project area?			
2	Will the project result in more or improved farm lands?			
3	Will the project result in less or damaged farm land?			
4	Will the project result in loss of crops, fruit trees or household infrastructures (e.g., livestock shed, toilets, granaries)?			
5	Will the project interfere or block land access or routes (e.g., for people, livestock)?			

5. Soil Erosion

S/No	Description	Yes	No	Not Known
1	Will the project help to prevent soil loss or erosion?			
2	Will the project directly cause or worsen soil loss or erosion?			
3	Could the project indirectly lead to practices that could cause soil loss or erosion?			
4	It is necessary to consult a solid scientist?			

6. Slope Erosion

S/No	Description	Yes	No	Not Known
1	Does project involve modification of slopes?			
2	Will project affect stability of slopes directly or indirectly?			
3	Should project cause people or property to be located where existing unstable slopes could be a hazard?			
4	It is necessary to consult a geotechnical engineer?			

7. Surface Water Quantity

S/No	Description	Yes	No	Not Known
1	Do surface water resources exist in project area?			
2	Will the project increase demand or cause loss of available surface water?			
3	Is it necessary to consult a hydrologist?			

8. Surface Water Quality

S/No	Description	Yes	No	Not Known
1	Will the project lead to additional natural or man made discharges into surface water courses or water bodies?			
2	Could the project cause deterioration of surface water quality?			
3	It is necessary to consult a water quality expert?			

9. Ground Water Quantity

S/No	Description	Yes	No	Not Known
1	Do ground water resources exist in project area?			
2	Will the project increase demand or cause loss of available ground water?			
3	Is it necessary to consult a hydrologist?			

10. Ground Water Quality

S/No	Description	Yes	No	Not Known
1	Will the project cause any natural or man-made discharge into ground aquifer?			
2	Could the project cause deterioration of ground water quality?			
3	Is it necessary to consult a hydrologist?			

11. Marine Water Quality

S/No	Description	Yes	No	Not Known
1	Will the project lead to additional natural or man made discharges into marine water bodies?			
2	Could the project cause deterioration of marine water quality?			
3	It is necessary to consult a marine water quality expert?			

12. Freshwater Ecosystems

S/No	Description	Yes	No	Not Known
1	Are there any freshwater ecosystems in the project area such as rivers, streams, lakes or ponds, which might be considered significant?			
2	Will project affect the use or condition and use of such freshwater ecosystems?			

13. Wetland Ecosystems

S/No	Description	Yes	No	Not Known
1	Are there any wetlands ecosystems in the project area such as marsh, swamp, flood plains, or estuary, which might be considered significant?			
2	Will the project affect the use or condition of such wetlands?			

14. Marine Ecosystems

S/No	Description	Yes	No	Not Known
1	Are there any marine ecosystems in the project area such as coral reefs or seagrass beds, which might be considered significant?			
2	Will the project affect the use or condition of such marine ecosystems?			

15. Terrestrial Ecosystems

S/No	Description	Yes	No	Not Known
1	Are there any terrestrial ecosystems in the project area such as forest, savanna, grassland or desert which might be considered significant?			
2	Will project affect the use or condition of such terrestrial ecosystems?			

16. Endangered/Threatened/Rare/Endemic Species

S/No	Description	Yes	No	Not Known
1	Is the existence of endangered, threatened, rare or endemic species in the project area known?			
2	Will project affect the habitat of any such species?			

17. Migratory Species

S/No	Description	Yes	No	Not Known
1	Do migratory fish, birds or mammals use the project area?			
2	Will project affect the habitat and numbers of such species?			

18. Beneficial Plants

S/No	Description	Yes	No	Not Known
1	Do non-domesticated plants occur in the project area which are used or sold by local people?			
2	Will the project affect these species by reducing their habitat or number in any way?			

19. Beneficial Animals and Insects

S/No	Description	Yes	No	Not Known
1	Do non-domesticated animals occur in the project area which are used or sold by local people?			
2	Will the project affect these species by reducing their habitat or number in any way?			

20. Disease Vectors

S/No	Description	Yes	No	Not Known
1	Are there known disease problems in the project area transmitted through vector species?			
2	Will the project increase habitat for vector species?			
3	Is it necessary to consult a public health officer?			

21. Resource/Land Use

S/No	Description	Yes	No	Not Known
1	Are lands in the project area intensively developed?			
2	Will the project increase pressure on land resources?			
3	Will the project result in decreased holdings by small land owners?			
4	Will the project result in involuntary land take?			
5	Should a land use planner be consulted?			

22. Energy Source

S/No	Description	Yes	No	Not Known
1	Will the project increase the local demand for conventional energy sources?			
2	Will the project create demand for other energy sources?			
3	Will the project decrease the local supply of conventional energy sources?			

23. Degradation of Resources during Construction

S/No	Description	Yes	No	Not Known
1	Will the project involve considerable use of natural resources (construction materials, water spillage, land or energy that may lead to depletion or degradation at point source)?			

24. Distribution Systems

S/No	Description	Yes	No	Not Known
1	Will the project enhance inequities in the distribution of agricultural and/or manufactured products?			
2	Will the project increase demand for certain commodities within or outside the project area?			
3	Will the project result in decrease in production or supply of certain commodities within the project area?			
4	Will the project enhance inequities in the distribution of benefits?			

25. Employment and Income

S/No	Description	Yes	No	Not Known
-				
1	Will the project remove job opportunities from the area?			
2	Will the project decrease income sources or means of livelihood?			

26. At-Risk Population

S/No	Description	Yes	No	Not Known
1	Are the adverse impacts of the project unequally distributed in the target population?			

27. Land Acquisition and Livelihoods

S/No	Description	Yes	No	Not Known
1	Will land be acquired?			
2	Will people's assets or livelihoods be impacted?			
3	Will people loose access to natural resources?			

28. Existing Population

S/No	Description	Yes	No	Not Known
1	Are there currently any people living in or near the project area?			
2	Will the project affect people in or near the project area?			
3	Will community participation in project design and implementation be necessary?			
4	It is necessary to consult a sociologist?			

29. Migrant Population

S/No	Description	Yes	No	Not Known
1	Are there currently any mobile groups in the target population?			
2	Will the project result in the movement of people in or out of the area?			
3	Is it necessary to consult a sociologist?			

30. Cultural and Religious Values

S/No	Description	Yes	No	Not Known
1	Will the project adversely affect religious and/or cultural attitudes of area residents?			
2	Are there special beliefs, superstitions or taboos that will affect acceptance of the project?			

31. Tourism and Recreation

S/No	Description	Yes	No	Not Known
1	Is there at present a significant degree of tourism in the area?			
2	Is there unexploited tourism or recreation potential in the area?			
3	Will the project adversely affect existing or potential tourist or recreation attractions?			

32. Maintenance and Repairs

S/No	Description	Yes	No	Not Known
1	Will the project require frequent maintenance and repair?			

PART C: CONCLUSION

Summary	Safeguard Requirements
<input type="checkbox"/> All the above answers are “No”	If the above answers are “No”, there is no need for further action.
<input type="checkbox"/> There is at least one “Yes”	If there is at least one “Yes”, then either a Simple Environmental Review (MACEMP Form C), Limited Environmental Review (MACEMP Form D), or Environmental Impact Assessment is to be completed.

Which course(s) of action do you recommend?

- No further action if sub-project has no impacts.
- Environmental Review (ER) if sub-project may create a few minor mitigatable impacts – to be conducted by District Environmental Officer.
-
- Full Environmental Impact Assessment (EIA) if the sub-project may result into potentially significant direct or indirect adverse impacts – further consultation with NEMC (the Mainland) or Department of Environment (Zanzibar) required.
- Any other recommendation (explain).

This form has been completed by:

Name: _____
 Title: _____
 Date: _____
 Signature: _____

Approved by DOE TASAF Focal Person & TASAF Coordination Office

Name:	_____	_____
Title:	_____	_____
Date:	_____	_____
Signature:	_____	_____

MACEMP FORM B

CHECKLISTS FOR SUB-PROJECTS

1. ENVIRONMENTAL CHECKLIST FOR CONSTRUCTION SUB-PROJECTS

(e.g., cold storage facilities, processing facilities, markets, and wharfs or other marine structures)

<i>Stage</i>	<i>Potential Negative Environmental Impact</i>	<i>Tick Relevant</i>	<i>Mitigation Measure</i>	<i>Tick Relevant</i>	<i>Responsible Person</i>
Before Construction	Displacement of land		Prepare Resettlement Action Plan as per OP 4.12		
	Sloping land and hilly site, landslide and erosion		Terracing		
			Excavation to level		
			Control of water flows		
	Pit formation from sand mine		Use of sand from located areas		
			Backfill pits		
	Pit formation from clay soil demand for brick moldings		Backfill pits		
Pressure on fire wood demand for brick curing (deforestation)		Planting fuel wood fast growing trees			
		Buying fuel wood from recognized dealers			
Cement dust pollution during block making		Use of masks			
During Construction	Noise during construction		Use of ear protectors		
	Cement dust pollution during construction		Dust control by water or other means		
	Pressure on existing water sources		Provision of more local wells		
	Pressure on timber required for supports door/windows and furniture (deforestation)		Planting of fast growing tree species		
			Buying poles, timber and furniture from recognized dealers		
			Use of steel and iron material/furniture		
	Large number of laborers to the site (human waste)		Building of latrines		
	Alteration of bottom substrate in marine environment		Minimise footprint of marine structures		
Loss of important habitat (e.g., mangroves, corals, seagrass beds)		Site location to avoid important habitat			
		Habitat restoration elsewhere as compensation			
After Construction	Solid waste of concrete, bricks, blocks, colors stains, etc.		Demolition of concrete batching sites		
			Removal of all paints remains		
	Used tools and equipments		Removal from site		
	Odour problem (market, fish offal, etc.)		Appropriate design and siting		
			Install fish cleaning basin		
Unpleasant odours (latrines)		Introduce odour control technology in design			
Sewage gas leaks and vent pipe		Monitoring programs and community participation			

This form has been signed by:

Chairperson of the Village/Shehia/Mtaa
(Full Name):

Signature:

Date:

Village Executive Officer (Full Name):

Signature:

Date:

Chairperson of the Community Project
Committee (Full Name):

Signature:

Date:

Member of Community Project Committee
(Full Name):

Signature:

Date:

2. ENVIRONMENTAL CHECKLIST FOR NURSERY/AFFORESTATION/REFORESTATION SUB PROJECTS

<i>Potential Negative Environmental Impact</i>	<i>Tick Relevant</i>	<i>Mitigation Measures</i>	<i>Tick Relevant</i>	<i>Responsible Person</i>
Pressure on existing water sources due to watering seedlings		Provisional of more local wells		
Large number of labourers on the site (human waste)		Building of latrines for labourers		
Pollution of polyethylene paper during tree planting		Collection of all polyethylene papers Use of alternative local materials.		
Social conflicts (ownership of resources unclear)		Ownership and responsibilities to be established during project design		
No net increase or even loss of forest cover (clearing of existing vegetation to establish woodlots)		Alternative site to be considered		
Loss of productive agriculture land		Productive agricultural land to be avoided Use of agro forestry techniques Consider use of already cleared or barren land for tree planting		
Introduction of exotic species		Use of indigenous species		
Displaced human settlements		Avoid area that requires significant or involuntary resettlement		
Description of sites of cultural, religious or historical importance		Avoid such sites, or incorporated them in the project sensitively and to the satisfaction of local people		
Unsuitable forest production		Use a variety of multi purpose and fast growing indigenous tree species to enhance. <ul style="list-style-type: none"> • Effective use of site microclimates and soil conditions • Soil and water conversation • Draw upon local central and knowledge and values in planning and operating forests • Adapt imported technology (erosion control, forest management and harvesting) to local conditions 		
Soil erosion		Avoid areas of fragile or unstable soils/slopes Avoid any project activity within 20-40m of streams or ponds Leave existing grass/shrub cover on lands that are very steep or have shallow soils Use soil conversation measures to prevent soil erosion		
Pollution of groundwater and surface waters and habitats		Avoid our using fertilizers, herbicides and pesticides Avoid any use near water bodies		

This form has been signed by:

Chairperson of the Village (Full Name):

Signature:

Date:

Village Executive Officer (Full Name):

Signature:

Date:

Chairperson of the Community Project
Committee (Full Name):

Signature:

Date:

Member of Community Project Committee
(Full Name):

Signature:

Date:

3. ENVIRONMENTAL CHECKLIST FOR SMALL-SCALE ANIMAL HUSBANDRY

<i>Potential Negative Environmental Impact</i>	<i>Tick Relevant</i>	<i>Mitigation Measures</i>	<i>Tick Relevant</i>	<i>Responsible Person</i>
Introduction of disease to humans and contamination of water supplies for human use by animal manures and urine		<ul style="list-style-type: none"> • Collection and store manure for composting and later application to fields • Keep manure and urine away from households and water bodies • Consider using biogas system 		
Pollution and environmental disruption from inappropriate use of agro-chemicals		<ul style="list-style-type: none"> • Provide protective clothes to minimize danger to field workers applying agro chemicals • Avoid over use of fertilizers • Apply herbicides and pesticides at recommended times and doses 		
Transformation and indigenous tenure systems and organizations		<ul style="list-style-type: none"> • Comprehensive community participation and attention to right and needs of all groups 		
Increased soil erosion due to animal paths scarring hillsides and triggering erosion, sediment-laden run off		<ul style="list-style-type: none"> • Restrict animal access to unstable areas (<i>e.g.</i>, by defining and fencing off critical slopes) 		
Increased rapid run off due to: <ul style="list-style-type: none"> • Vegetation clearing • Soil compaction diminishing infiltration capacity 		<ul style="list-style-type: none"> • Use soil erosion control measures (<i>e.g.</i>, reforestation, reseeding of grasses, land preparation, tracing) 		
Increase muddiness of surface watercourse due to soil disturbances from grazing and increased soil erosion		<ul style="list-style-type: none"> • Fence of water bodies from grazing animals 		

This form has been signed by:

Chairperson of the Village (Full Name): Signature: Date:

Village Executive Officer (Full Name): Signature: Date:

Chairperson of the Community Project
Committee (Full Name): Signature: Date:

Member of Community Project Committee
(Full Name): Signature: Date:

4. ENVIRONMENTAL CHECKLIST FOR SMALL SCALE AQUACULTURE

<i>Potential Environmental Effects</i>	<i>Tick Relevant</i>	<i>Mitigation Measures</i>	<i>Tick Relevant</i>	<i>Responsible Person</i>
Land use conflicts		Avoid project sites that require <ul style="list-style-type: none"> • Resettlement • Displacement of other important land uses • Encroachment of historical cultural or traditional use area • Encourage use of existing depressions, hollows and ditches • Limit areas converted to ponds • Good pond design and construction and maintenance to avoid pre-mature abandonment 		
Water supply conflicts by: <ul style="list-style-type: none"> • Social and economic disruptions to existing community water management practices and relationship • Conflicting demand on surface or ground water supplies 		<ul style="list-style-type: none"> • Ensure adequate community participation in the planning and operation of the project • Site ponds to avoid disrupting existing/traditional use of water • Develop ponds with other activities to combine water use 		
Creating habitats for disease carriers such as mosquitoes and snails and increasing the prevalence of water related disease (<i>e.g.</i> , malaria, schistosomiasis)		<ul style="list-style-type: none"> • Assess ecology of disease carriers in the project area • Employ suitable privation and mitigation measures including education of local people • Monitor disease occurrences and public health indicators and take corrective measures as needed 		
Loss of ground cover and erosion at project sites		<ul style="list-style-type: none"> • Restrict area cleared for ponds • Construct ponds during dry season • Stabilize exposed soil with grasses and other ground cover • Ensure good drainage and erosion around ponds 		
Depletion of local fuel wood to process fish		<ul style="list-style-type: none"> • Careful project planning and management to ensure sustainable source of fuel wood • Consider the need for small, complimentary forestry project 		

<i>Potential Environmental Effects</i>	<i>Tick Relevant</i>	<i>Mitigation Measures</i>	<i>Tick Relevant</i>	<i>Responsible Person</i>
Pollution of surface waters with aquaculture wastes		<ul style="list-style-type: none"> • Keep fish densities at moderate levels to reduce disease risk and need for antibiotics • Pump air through the water to speed up decomposition • Release pond water into water body with adequate dilution and dispersal capability • Dilute pond water prior to release 		
Loss of wetlands (especially mangrove forests)		<ul style="list-style-type: none"> • Site project well away from wetlands • Design project features to prevent water flows to and from wetlands 		

This form has been signed by:

Chairperson of the Village (Full Name): Signature: Date:

Village Executive Officer (Full Name): Signature: Date:

Chairperson of the Community Project
Committee (Full Name): Signature: Date:

Member of Community Project Committee
(Full Name): Signature: Date:

MACEMP FORM C

ENVIRONMENTAL REVIEW OF SUB-PROJECTS

TYPE OF EXPECTED IMPACT	DESCRIPTION OF IMPACT	PROPOSED MITIGATION MEASURE
PHYSICAL ENVIRONMENT:		
Increased soil erosion?		
Increased sediment load into receiving water?		
Likely contamination of marine or freshwater (surface or sub-surface)?		
Excessive dust or noise during construction?		
BIOLOGICAL ENVIRONMENT:		
Removal or disturbance of natural vegetation?		
Sub-project in core area, buffer area or protection area?		
Disturbance of animal or any locally important habitat?		
SOCIAL ENVIRONMENT:		
Aesthetic degradation of a landscape?		
Degradation or disturbance of a cultural site?		
Transport or use of toxic substance that pose a risk to human health?		
Involuntary displacement of individuals or households?		
Economic losses to individuals or households?		

Report prepared by:

Recommended Monitoring Responsibility (Indicate): DEO / CMC

Name: _____

Position: _____

Signature: _____

Date: _____

Report approved by:

Name: _____

Position: _____

Signature: _____

Date: _____