

NATIONAL WETLAND POLICY AND STRATEGY

**MINISTRY OF ENVIRONMENT
CENTRAL ENVIRONMENTAL AUTHORITY**

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FORWARD

Wetlands, both natural and man-made, were the centers of Sri Lanka's ancient hydraulic civilization, which thrived in the island for over 2000 years and formed the hub of its cultural, economic and social evolution.

Therefore, even our ancestors have realised the importance of managing the wetlands. They have considered water as something "holy" that should not be spoiled by human activities. With the advancements in the scientific field we have now realised that wetlands possess not only ecological significance but biological economic as well.

However, at present a majority of the wetlands in Sri Lanka are adversely affected by human activities such as unauthorised filling, waste disposal, pollution due to effluent discharge, clearing of natural vegetation in and around wetlands, spread of invasive exotic species etc. Recognizing the continuous pressures on the wetlands and also to ensure the protection of wetlands, this National Policy on Wetlands and the Conservation Strategies would be helped to carryout the sustainable development in the country.

This document also sets out the outcomes that we should eventually aim to achieve in relation to the wetlands through the effective application of the policy. Implementation of wetland policy places a responsibility on all sectors of development to incorporate wetland strategies into their development programmes. Accordingly, wetland strategies relevant to the different sectors have been included like wise the strategic approach for ensuring sound management of the wetland resources has been presented. The role of civil society in maintaining the integrity of the environment has been emphasized.

When Sri Lanka signed the International Convention of Wetlands (the Ramsar Convention) on 22 June 1990, the country committed itself to preserve ecological values and functions in the country's wetlands. The Central Environmental Authority (CEA) being the main agency established to protect the environment under took a major role to conserve wetlands in 1991 by formulating the Wetland Conservation Project in order to preserve Sri Lanka's variety of wetland eco systems.

In 2005, when National Wetland Policy & Strategies were prepared, the CEA was identified as the main state agency that should coordinate all wetland related activities in the country since the CEA has very good experience handling the wetland management activities in Sri Lanka for more than 15 years. Accordingly, the Wetland Management Unit was established in CEA with the consent of other relevant stakeholders in 2005.

It is of utmost importance that the provincial administration be actively involved in implementing the National Wetland Policy. The provincial administrations have been included as implementing agencies for many of the activities set out in the programme of Action.

We would like to take this opportunity to thank the Netherlands Government which provided funds through the Institutional Strengthening and Capacity Building for Environmental Programmes, particularly on wetland conservation implemented at the CEA. Finally, we thank all **stakeholder**

groups, professionals who wholeheartedly supported in many ways to bring this valuable document forward as a basement for wetland conservation.

Ministry of Environment

Central Environmental Authority

NATIONAL POLICY ON WETLANDS

1. INTRODUCTION

- 1.1 *Wetlands*, which are national heritage, need to be conserved, restored and sustainably managed for the benefit of present and future generations, recognizing that they are environmentally sensitive and ecologically important.
- 1.2 Wetlands provide important *ecosystem* services including flood retention and detention areas; sediment traps; source of water; aquatic habitats; source of groundwater replenishment; source of natural products and raw materials and sites for recreation and tourism.
- 1.3 Wetlands also, represent a unique *biodiversity* and they are green lungs of the cities, kidneys of the landscape, field laboratories of nature and provider for agriculture.
- 1.4 This policy seeks to be consonant with and give effect to the National Environment Policy and other relevant national policies, while respecting national commitments towards relevant international conventions, protocols, treaties and agreements to which Sri Lanka is a party, including the Ramsar Convention on Wetlands of International Importance (1971); the Convention on Conservation of Migratory Species of Wild Animals (1979) and the Convention on Biological Diversity (1992).

2. THE NEED FOR A NATIONAL POLICY ON WETLANDS

- 2.1 Wetlands are threatened by human activities including reclamation, waste disposal, industrial and domestic effluent discharge, harvesting of vegetation for firewood and other uses and invasive exotic species. The degradation of wetland habitats carries a high economic, social and ecological cost.
- 2.2 Although a number of legislative and policy instruments impact on wetland management, a separate policy framework is desirable in view of the specific threats these ecosystems face and their potentials for sustainable management.

3. PRINCIPLES

- 3.1 Principles of *sustainable use*; acknowledgement of interdependence; “*polluter pays*”; recognition and use of traditional knowledge will guide this policy.
- 3.2 While taking socio-economic necessities into consideration, the application of the *precautionary principle* will help resolve issues relating to the management and wise use of wetlands.

- 3.3 Wetland management including both planning and implementation will involve participation of all stakeholders and especially local communities.
- 3.4 The need to conserve the downstream wetlands is recognized when designing and implementing upstream development projects.
- 3.5 Awareness of values of wetlands and benefits that can be accrued by their sustainable management is ensured among all stakeholders including the general public.

4. OBJECTIVES

The objectives of this policy are;

- 4.1 to protect and conserve wetland ecosystems;
- 4.2 to prevent illegal utilization of wetlands;
- 4.3 to restore and maintain the biological diversity and productivity of wetlands;
- 4.4 to enhance ecosystem services from wetland habitats;
- 4.5 to assure sustainable use of wetlands and traditional practices by local communities; and
- 4.6 to meet national commitments as a signatory to the Ramsar Convention on Wetlands.

5. POLICY DIRECTIONS

5.1 Wetland Management

- 5.1.1 All wetlands will be zoned and classified according to the levels of ecological, utilitarian, international, national and local significance, inventorised with clearly defined ownership through legal reforms where necessary and managed sustainably on the basis of appropriate management mechanisms.
- 5.1.2 Privately owned wetlands will be brought under appropriate management systems, if necessary through legal reforms.
- 5.1.3 Wetland management will be integrated into land use plans at all levels.
- 5.1.4 The restoration of degraded wetlands will be given priority.

- 5.1.5 Sustainable use and equitable benefit sharing, habitat *conservation* and integrated management at all stages will involve participatory and collaborative processes.
- 5.1.6 Active and informed participation of civil society in the conservation of wetlands will be encouraged.
- 5.1.7 Sustainable financing mechanisms through local and foreign sources will be developed for the management and *wise use* of wetlands.

5.2 Institutional Arrangement

- 5.2.1 Local level Wetland Management Committees will be established under the provisions of the National Environment Act, with the assistance of government agencies responsible for wetlands and divisional, district and provincial level committees will be established as appropriate to facilitate these committees.
- 5.2.2 A multi-stakeholder National Wetland Steering Committee will be established for the purpose of advising on wetland issues and a National Wetland Management Units will be established by the Ministry in-charge of the subject of environment to oversee and facilitate policy implementation.
- 5.2.3 Existing legislation will be revised as necessary to bring it into conformity with this policy.

5.3 Inter-sectoral Linkages

- 5.3.1 The principles of sound wetland ecosystem management will be integrated into sectoral plans at all levels. Development activities in wetland areas will be required to be consistent with such plans.

5.4 Research, Development and Education

- 5.4.1 Research programmes that facilitate conservation, sustainable use, restoration and adaptive management of wetlands will be promoted. The results of such research will be integrated into the management process.
- 5.4.2 Training, education and awareness on wetland conservation will be promoted at various levels on a continuous basis.

6. EXPLANATION OF KEY CONCEPTS

Biodiversity: The total variety and variability of all living things, including their genetic constituents, interrelationships and habitats and the ecosystems and landscapes of which they are part.

Conservation: The wise use and management of nature and natural resources for their inherent value and for the benefit of society, bearing in mind that future generation have as much right to these resources as our own.

Ecosystem: A complex of living communities of organisms and their non-living environment interacting as an entity of its own.

“Polluter pays” principle: Everybody is responsible to pay for cleaning up the mess he/she makes.

Precautionary principle: The principle that when an activity carries a potentially high environmental risk that cannot be fully assessed (e.g. for lack of time, money or information) action should be taken to prohibit or restrict the activity before the uncertainty is resolved.

Protection: (As opposed to conservation) the prevention of harm, usually by passive means, without intervention and active management.

Ramsar Convention: Convention on Wetlands of International Importance especially as Waterfowl Habitats was signed in 1971 at Ramsar, Iran. The mission of the Convention is the conservation and wise use of wetlands by national action and international cooperation as a means to achieving sustainable development throughout the world.

Sustainable utilization: Human use of a resource so that it may yield the optimum continuous benefit to present generation while ensuring its potential to meet the needs and aspirations of future generations.

Wetlands: Areas of marsh, fen, peat land or water, where natural or artificial, permanent or temporary with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters and may incorporate riparian and coastal zones adjacent to the wetlands and islands or bodies of marine water deeper than six meters at low tide within the wetlands.

Wise use: Sustainable utilization of resources for the benefit of mankind in a way compatible with the maintenance of the natural properties of the ecosystem while ensuring that future generations have access to the same resources as the present generation.

STRATEGIES & ACTION UNDER THE NATIONAL POLICY ON WETLANDS

Strategy	Action	Responsibility	Priority
1. Strategies to support institutional arrangements			
1.1.1 Establish Wetland Management Committees (WMCs) for each sensitive wetland or group of wetlands, whether surveyed, demarcated and mapped or not, situated in each Grama Niladhari Division (GN Division), with the participation of all stakeholders. Representatives of relevant government agencies will be ex-officio members of these committees. Frequency of committee meetings will be decided by the Wetland Management Committees (WMCs).	<p>1.1.1</p> <ul style="list-style-type: none"> a) Collect information on sensitive wetlands from available records and other sources b) Develop criteria to identify sensitive wetlands c) Name sensitive wetlands according to such criteria and information d) Central Environmental Authority (CEA) Provincial Offices (PO) and District Offices (DO) / Provincial Environmental Authorities to form WMCs to sensitive wetlands with the assistance of DSs. e) CEA Provincial Offices (PO) and District Offices (DO) / Provincial Environmental Authorities to collect information regarding other wetlands which should be considered as sensitive f) CEA Provincial Offices (PO) and District Offices (DO) Provincial Environmental Authorities to form WMCs to newly identified wetlands with the assistance of DSs. 	<ul style="list-style-type: none"> a) WMU b) WMU c) WMU d) CEA PO & DO/ Provincial Environmental Authorities and WMU e) CEA PO & DO/ Provincial Environmental Authorities and WMU f) CEA PO & DO/ Provincial Environmental Authorities and WMU 	<ul style="list-style-type: none"> a) Immediate b) Immediate c) Immediate d) Immediate e) Immediate f) Short-term

Strategy	Action	Responsibility	Priority
1.1.2 Recognize the committees already established under any government agency for the management of wetland as "Wetland Management Committees" of respective wetlands for the purposes of this polity.	<p>1.1.2</p> <ul style="list-style-type: none"> a) Collect information about committees already established under government agencies for wetlands b) Liaise with those govt. agencies to recognize them as Wetland Management Committees c) Announce such committees as Wetland Management Committees for the purposes of this policy 	<ul style="list-style-type: none"> a) CEA PO & DO/ Provincial Environmental Authorities and WMU b) WMU c) WMU 	<ul style="list-style-type: none"> a) Immediate b) Immediate c) Immediate
<p>1.1.3 Recognize role and functions of WMCs as prepare Basic Wetland Programmes for respective wetlands in order that the immediate dangers to the particular wetland are eliminated and protected against unlawful activities, with the assistance of the government agencies and NGOs until Wetland Management Plans are prepared by the WMU.</p> <p>b) Implement these programmes with the assistance of the Div WFCs.</p> <p>c) Assist WMU through WFCs in the preparation of Wetland Management Plans for respective wetlands.</p> <p>d) Review management and protective activities of government agencies and point out lapses to those agencies.</p>	1.1.3 Provide list of role and functions to Divisional Secretariats, District Secretariats, Chief Secretariats	WMU	Immediate

Strategy	Action	Responsibility	Priority
e) Assist government agencies in eliminating the lapses.			
1.1.4 Select Executive Committees of WMCs, from among the WMC members, through consensus as far as possible for each wetland.	1.1.4 Select ECs of WMCs already identified.	CEA PO & DO / Provincial Environmental Authorities	Immediate
1.1.5 Establish Wetland Facilitating Committees (WFCs) at Divisional, District, Provincial levels as required	1.1.5 Establish WFCs at Div. Dist. & Prov. levels as necessary	CEA PO & DO / DSs, Dist. Ss, Chief. Ss	Immediate
1.1.6 Recognize role and functions of the WFCs as: a) Assist in resolving issues raised by WMCs and WFCs under purview. b) Facilitate the protection and development programmes proposed by the committees under purview. c) Coordinate activities of government agencies, NGOs and other stakeholders at the respective level. d) Assist the WMU in the preparation of Wetland Management Plans	1.1.6 Provide list of role and functions to DSs. Dist Ss, Chief Ss	WMU	Immediate
1.1.7 Identify members of these WFCs i.e. the officials of the relevant govt. agencies and representatives of WMCs, LAs and registered CBOs & NGOs at the respective level.	1.1.7 Provide guidelines to DSs. Dist Ss, Chief Ss. Issue instructions to DSs, Dist Ss, and Chief Ss on identifying members.	WMU	Immediate

Strategy	Action	Responsibility	Priority
1.1.8 Ensure representation of WMCs, Local Authorities, relevant govt. agencies, registered CBOs and NGOs at the Divisional WFCs.	1.1.8 Identify the membership of WFCs at Div. level	DSs	Immediate
1.1.9 Ensure representation of all WMCs by their Chairman at the Div. WFCs and by a selected WMC Chairman from each Division/District at the District/Provincial WFC, respectively.	1.1.9 Identify the representation of WMCs at WFCs at Dist. & Prov. levels	DSs, Dist. Ss, Chief Ss	Immediate
1.1.10 Ensure representation of relevant Local Authorities by their Chairman at the Div. WFCs and by a selected LA Chairman from each Division/District at the District/Provincial WFC, respectively.	1.1.10 Select LA Chairman to represent at Dist. & Provincial levels	DSs, Dist. Ss, Chief Ss	Immediate
1.1.11 Provide for Divisional Secretaries, District Secretaries and Chief Secretaries as appropriate to chair the WFCs at respective level.	1.1.11 Provide guidelines to WFCs	WMU	Immediate
1.1.12 Ensure conduct of WFC meetings periodically. Provincial WFCs quarterly and other WFCs as required.	1.1.12 Provide guidelines to WFCs	WMU	Immediate
1.1.13 Ensure to pay the role of catalyst by the government agencies responsible for wetland management in addition to their mandatory functions.	1.1.13 Issue instructions to WFCs	WMU	Immediate

Strategy	Action	Responsibility	Priority
1.1.14 Ensure assistance of the regional structure of the CEA to establish institutional arrangements at all levels of wetland management.	1.1.14 a) Issue instructions to heads of CEA Regional Offices b) Inform WFCs	a) My. of Envt. b) My. of Envt.	a) Immediate b) Immediate
1.2.1 Establish a National Wetland Steering Committee (NWSC) at the national level under the Ministry in charge of the subject of environment to provide policy guidance and to deal with implementation problems and to coordinate at the national level.	1.2.1 a) Reconstitute NWSC b) Obtain Cabinet approval	a) My. of Envt. b) My. of Envt.	a) Immediate b) Immediate
1.2.2 Provide for the Secretary to the Ministry in-charge of the subject of environment to chair the NWSC. Members are the Secretaries of the Ministries in-charge of the subjects of natural resources. environment, urban development, regional development, lands, agriculture, agrarian development, provincial councils, home affairs, local government, industries, tourism, irrigation or their representatives, all Chief Secretaries or their representatives, two representatives from NGO sector, an environmental economist, an environment lawyer, an expert on land use, an expert on biodiversity, a representative from the Chamber of Commerce to represent the	1.2.2 Identify members of NWSC	My. of Envt.	Immediate

Strategy	Action	Responsibility	Priority
private sector and any others co-opted by the NWSC as required, NWSC to meet quarterly.			
1.2.3 Transform the current Wetland Management Secretariat of the CEA as the Wetland Management Unit (WMU)	1.2.3 a) Establish WMU b) Build capacity of WMU	a) CEA b) CEA	a) Immediate b) Medium term
1.2.4 Recognize role and functions of the WMU as: (a) Function as the Secretariat for NWSC (b) Ensure follow up action on the decisions taken by the NWSC (c) Review the progress of Prov. WFCs. (d) Provide general guidelines to WMCs in the preparation of Basic Wetland Programmes (e) Ensure preparation of Wetland Management Plans by respective agencies responsible for the management of wetlands as per the guidelines issued by WMU (f) Ensure that the national commitments of international conventions	1.2.4 Announce to the NWSC members and CEA	NWSC	Immediate
1.3.1 Review existing legal provisions applicable for wetland management and protection	1.3.1 Review legal provisions	My. of Envt.	Immediate
1.3.2 Prepare regulations for wetland management under the NEA, if necessary	1.3.2 a) Prepare Regulations b) Gazette Regulations	a) My. of Envt., CEA b) My. of Envt.	a) Immediate b) Immediate

Strategy	Action	Responsibility	Priority
1.3.3 Introduce amendments urgently needed to the existing legal provisions in the NEA, if deemed necessary	1.3.3 a) Draft amendments to NEA b) Submit to Cabinet c) Present before Parliament	a) CEA b) My. of Envt. c) My. of Envt.	a) Immediate b) Short term c) Medium term
1.3.4 Draft a new law exclusively for wetland management.	1.3.4 a) Draft new Law b) Submit to Cabinet c) Present before Parliament	a) My. of Envt. b) My. of Envt. c) My. of Envt.	a) Medium term b) Medium term c) Medium term
2. Strategies to support inter-sectoral linkages			
2.1.1 Ensure integration of wetland ecosystem management principles into all sectoral plans by respective planning bodies.	2.1.1 Request planning bodies through appropriate channels	WMU	Immediate
2.1.2 Provide for WMCs to coordinate and communicate matters related to respective wetlands with relevant government institutions, registered NGOs, local community and private sector. WFCs at divisional, district and provincial levels to act in the same manner at the respective levels.	2.1.2 a) Issue instructions to WMCs & WFCs b) WMCs confirm action to Div. WFCs c) Div WFCs confirm action to Dist WFCs d) Dist WFCs confirm action to ProvWFCs e) ProvWFCs confirm action to NWSC	a) WMU b) WMCs c) DivWFCs d) DistWFCs e) ProvWFCs	a) Immediate b) Immediate c) Immediate d) Short-term e) Short-term
2.1.3 Provide for NWSC to coordinate wetland related issues at the national level (Ref. 1.2.3 above)	2.1.3 Coordinate at national level	NWSC	Immediate
2.1.4 Provide for WMCs and WFCs at respective levels to observe that the Local Government Authorities follow the accepted norms of reservations of water bodies related to wetlands.	2.1.4 a) Issue instructions to WMCs &WFCs b) WMCs confirm action to DivWFCs c) DivWFCs confirm action to DistWFCs d) DistWFCs confirm action to ProvWFCs	a) WMU b) WMCs c) DivWFCs d) DistWFCs	a) Immediate b) Immediate c) Immediate d) Short-term

Strategy	Action	Responsibility	Priority
	e) ProvWFCs confirm action to NWSC	e) ProvWFCs	e) Short-term
2.1.5 Provide for WMCs and WFCs at respective levels to review development activities related to the wetland under their purview and inform adverse impacts, if any to the government and other agencies responsible in order to take suitable action.	2.1.5 a) Issue instructions to WMCs & WFCs b) WMCs confirm action to DivWFCs c) DivWFCs confirm action to DistWFCs d) DistWFCs confirm action to ProvWFCs e) ProvWFCs confirm action to NWSC	a) WMU b) WMCs c) DivWFCs d) DistWFCs e) ProvWFCs	a) Immediate b) Immediate c) Immediate d) Short-term e) Short-term
2.1.6 Provide for WMCs and WFCs at respective levels to be vigilant that the government and other relevant agencies respect and comply with the views expressed by WMCs in regard to the enforcement of law and implementation of development activities in wetland areas and that those agencies take remedial and suitable action as necessary.	2.1.6 a) Issue instructions to WMCs & WFCs b) WMCs confirm action to DivWFCs c) DivWFCs confirm action to DistWFCs d) DistWFCs confirm action to ProvWFCs e) ProvWFCs confirm action to NWSC	a) WMU b) WMCs c) DivWFCs d) DistWFCs e) ProvWFCs	a) Immediate b) Immediate c) Immediate d) Short-term e) Short-term
3. Strategies to support management of wetlands			
3.1.1 Ensure assistance of Working Groups (WGs) already formed under the NWSC with regard to identified subjects such as zoning, mapping, land use, preparation of management plans, inventory, resettlement, research, training, education, awareness etc.	3.1.1 Instruct WGs	NWSC	Immediate
3.1.2 Recognize role and functions of WGs as: (a) Act as per directives of the NWSC and fulfill the tasks within a given time period (b) Assist WMU in specific	3.1.2 Issue instructions to WGs	NWSC	Immediate

Strategy	Action	Responsibility	Priority
areas identified by NWSC (c) Identify priority wetlands in respective areas (d) Prepare guidelines on the subjects identified by the NWSC.			
3.1.3 Adopt zoning criteria of environmentally sensitive areas and conservation areas in respect to wetlands in collaboration with the NPPD, LUPPD, UDA, Irrigation Department, Provincial Councils and Local Government Authorities.	3.1.3 Prepare criteria on zoning	WGs	Immediate
3.1.4 Ensure definition of zonation is based on best management practices that incorporate onsite and offsite impacts.	3.1.4 Define zonation	WMU	Immediate
3.1.5 Determine extents of wetlands in terms of biodiversity, hydrologic, socio-economic requirements and cultural values, through criteria applicable to respective areas.	3.1.5 Determine extents of wetlands	WGs	Immediate
3.1.6 Survey, map and demarcate identified wetlands	3.1.6 <ul style="list-style-type: none"> a) Liaise with Surveyor General b) Employ personnel i.e. Govt. / Licensed Surveyors etc. c) Survey map & demarcate identified wetlands d) WG to overlook 	<ul style="list-style-type: none"> a) WMU b) WMU c) WMU d) WG 	<ul style="list-style-type: none"> a) Medium / Long term b) Medium / Long term c) Medium / Long term d) Medium / Long term
3.1.7 Declare the identified priority wetlands for management purposes and	3.1.7 <ul style="list-style-type: none"> a) Declare priority wetlands 	a) WMU	a) Medium & Long term

Strategy	Action	Responsibility	Priority
acquire and bring under DWLC or FD as appropriate.	b) Acquire if necessary	b)WMU and DWLC or FD	b)Medium & Long term
3.1.8 Prepare a comprehensive national inventory of wetlands with defined ownership, using existing information, expertise and appropriate criteria under the guidance of the WG.	3.1.8 a) Initiate preparation of National Wetland Inventory b) Identify the WG to guide the inventorization c) Provide guidelines to prepare the inventory d) Employ suitable persons to inventories wetlands e) Monitor the preparation of National Wetland Inventory	a) WMU b) NWSC c) WG d) WMU e) WG	a) Short-term b) Immediate c) Immediate d) Short-term e) Short-term
3.1.9 Review and update the inventory of wetlands periodically.	3.1.9 Update Inventory	WMU	Medium & Long term
3.1.10 Ensure WMCs prepare and implement Basic Wetland Programmes for respective wetlands using urgent and best means of protection and basic systems of managing according to the local conditions in order to arrest further degradation.	3.1.10 a) Issue guidelines to WMCs to prepare Basic Wetland Programmes b) Prepare Basic Wetland Programmes c) Inform DivWFCs regarding action proposed d) Implemented Basic Wetland Programmes e) Inform DistWFCs f) Inform ProvWFCs g) Inform NWSC	a) WMU b) WMCs c) WMCs d) WMCs e) Div WFCs f) Dist WFCs g) Prov WFCs	a) Immediate b) Short-term c) Short-term d) Medium & Long term e) Short-term f) Short-term g) Short-term
3.1.11 Prepare Wetland Management Plans and maps for wetland conservation	3.1.11 a) Prepare Management Plans for	a) WMU	a) Medium term

Strategy	Action	Responsibility	Priority
and management with physical, socio-economic and administrative boundaries in focus by the WMU.	identified wetlands b) WG to overlook	b) Sub-committee	b) Medium & Long term
3.1.12 Ensure Wetland Management Plans are based on land use zoning strategies.	3.1.12 a) Instruct the Planners to base on land use zoning	a) WMU	a) Short-term
3.1.13 Assess environmental impacts of proposed activities of the management plans and incorporate mitigatory measures into the design and implementation activities.	3.1.13 Develop procedures for getting approval from CEA for the proposed activities.	WMU	a) Medium term
3.1.14 Ensure relocation of squatters in wetlands in accordance with the National Involuntary Resettlement Policy.	3.1.14 a) Identify squatters b) Identify alternative sites for squatters c) Implement alternative measures re. squatters d) WG to overlook	a) CEA PO & DO / Provincial Environmental Authority b) CEA PO & DO / Provincial Environmental Authorities c) WMU d) WG	a) Short-term b) Medium-term c) Medium/Long term d) Short / Long term
3.2.1 Include privately owned wetlands in the Basic Wetland Programmes by the WMCs with the active involvement of owners.	3.2.1 Include programmes for private wetlands in Basic Wetland Programmes.	WMCs	Short - term

Strategy	Action	Responsibility	Priority
3.2.2 Incorporate private wetlands in Wetland Management Plans.	3.2.2 Integrate private wetlands in Management Plans	WMCs	Medium / Long term
3.2.3 Introduce legal reforms to bring privately owned wetlands under wetland management plans (Ref. 1.3.4 above)	3.2.3 Draft legal reforms	My. of Envt.	Medium term
3.3.1 Ensure all planning bodies integrate wetland management into land use plans at all levels.	3.3.1 Request planning bodies to integrate wetland management into land use plans	WMU	Immediate
3.3.2 Ensure conversion of priority wetlands only if they bring higher environmental benefits.	3.3.2 Request planning bodies not to convert wetlands.	WMU	Immediate
3.3.3 Ensure vital public infrastructure development activities in wetland areas are undertaken only when they are absolutely necessary in the national interest and subject to adoption of mitigatory measures to address harmful environmental impacts.	3.3.3 Request planning bodies to undertake public infrastructure development when they are absolutely necessary only.	WMU	Immediate
3.3.4 Ensure development activities are permitted only in conformity with the wetland management plan of the respective wetland.	3.3.4 Request planning bodies to adhere to	WMU	Immediate
3.3.5 Ensure inclusion of compensation options in mitigatory measures such as restoration, enhancement and creation of wetlands.	3.3.5 Request planning bodies to adhere to	WMU	Immediate
3.3.6 Ensure storm water drainage systems are designed and detention areas are	3.3.6 Request planning bodies to design and storm water drainage system	WMU	Immediate

Strategy	Action	Responsibility	Priority
determined considering climatic factors.	determine detention areas after considering climatic factors		
3.3.7 Discourage activities that change the quality of water in wetlands and ensure natural function of the ecological system.	3.3.7 Request planning bodies to discourage activities that change the quality of water in wetlands and ensure natural function of the ecological system	WMU	Immediate
3.3.8 Ensure application of existing laws against encroachments into wetlands and their inter-tidal areas and the clearance of vegetation including mangroves, through respective national, provincial, district and divisional levels of administration and police.	3.3.8 <ul style="list-style-type: none"> a) Request Div. Dist & Provincial level administration and Police stop encroachments. b) Identify encroachments c) Assist these agencies in action 	<ul style="list-style-type: none"> a) WMU b) CEA PO & DO/ Provincial Environmental Authorities c) CEA PO & DO/ Provincial Environmental Authorities 	<ul style="list-style-type: none"> a) Medium term b) Medium term c) Medium term
3.3.9 Ensure preservation and maintenance of canal network of wetlands that serve as flood detention areas.	3.3.9 Request planning bodies to preserve and maintain canal networks in wetlands.	WMU	Immediate
3.4.1 Ensure restoration, rehabilitation and regeneration of essential components of wetlands are an element of planning for wetlands conservation and wise use.	3.4.1 Instruct wetland management planners to include restoration, rehabilitation and regeneration of essential components as elements of planning wetland management	WMU	Immediate
3.4.2 Ensure utilization of technologies and methods and traditional knowledge for	3.4.2 Instruct wetland management planners to include technologies &	WMU	Immediate

Strategy	Action	Responsibility	Priority
the restoration of wetlands in relation to their functions.	methods for restoration.		
3.4.3 Ensure conditions are provided for the sustenance of wetland functions including water balance where wetlands have to be restored.	3.4.3 Instruct wetland management planners to include conditions for sustenance of wetland functions.	WMU	Immediate
3.5.1 Ensure WMCs work in close cooperation with government agencies and interested NGOs in the preparation of management plans and action plans for various types of wetlands.	3.5.1 Instruct WMCs to work in close cooperation	WMU	Immediate
3.5.2 Ensure WMCs adopt mitigatory measures to reduce over-exploitation of wetlands and their natural properties.	3.5.2 Instruct WMCs to adopt mitigatory measures.	WMU	Immediate
3.5.3 Ensure WMCs are vigilant that wetlands are not used for open dumping of any kind of industrial waste and for discharging untreated effluents.	3.5.3 Instruct WMCs to ensure the wetlands are not used for dumping.	WMU	Immediate
3.5.4 Ensure environmental economic tools are used as practical applications where appropriate, in valuing wetland ecosystems to facilitate management.	3.5.4 Instruct wetland management planners to use environmental economic tools.	WMU	Immediate
3.5.5 Ensure activities are permitted in a wetland if they are consistent with the sustainable use and utilization of the wetland and its natural and artificial functions and such permitted activities are monitored.	3.5.5 Request planning bodies to permit activities if they are consistent with sustainable use and utilization.	WMU	Immediate

Strategy	Action	Responsibility	Priority
3.5.6 Promote the collaborating CBOs as of partners in the management.	3.5.6 Instruct Div WFCs	WMU	Immediate
3.6.1 Ensure WMCs mobilize the civil society in managing individual wetlands.	3.6.1 Instruct Div WFCs and planning bodies I	WMU	Immediate
3.6.2 Provide access to information to the general public.	3.6.2 Provide access	WMU	Immediate
3.7.1 Provide for Wetland Fund for the management and conservation of wetlands when the new law is drafted.	3.7.1 a) Draft law for the Fund b) Obtain govt. approval	a) My. of Envt. b) My. of Envt.	a) Long term b) Long term
3.7.2 Develop fund raising programmes locally and internationally to enrich the Wetland Fund.	3.7.2 Prepare programmes to enrich the Fund.	WMU	Long term
3.7.3 Prepare management and conservation plans for individual wetlands and wetlands in general and negotiated with donors for assistance.	3.7.3 a) Prepare project proposals for donor assistance b) Submit proposals to donors	a) WMU b) WMU	a) Short-term b) Short-term
3.7.4 Promote eco-tourism in appropriate wetlands and to utilize earnings for ecosystem management.	Instruct wetland management planners to prepare eco-tourism programmes.	WMU	Long term
4. Strategies for Research & Development, Training and Capacity Building			
4.1.1 Develop and maintain a centralized database of literature available in various agencies by the WMU for sharing among different stakeholders.	4.1.1 a) Create a user-friendly format for database b) Identify and classify data sources c) Collect information, collate and compile the database d) Develop procedures to distribute classified data to different users	a) WMU b) WMU c) WMU d) WMU	a) Medium & Long term b) Medium & Long term c) Medium & Long term d) Medium term

Strategy	Action	Responsibility	Priority
	e) Prepare and maintain a website on national wetland database	e) WMU	e) Medium & Long term
4.1.2 Develop a multidisciplinary research programme on conservation and sustainable use of wetlands	4.1.2 a) Identify and prioritize research needs. b) Identify key research areas such as IAS in wetlands, E flows; high priorities; restoration, cumulative impacts etc. c) Identify agencies for research such as Universities, NARA, IUCN d) Incorporate restoration into legislation e) Establish research network on different aspects of wetland conservation and management f) Prepare a time bound research action plan. g) Implement an action plan h) Promote wetland research in the universities	a) WMU b) WMU c) WMU d) WMU e) WMU f) WMU g) WMU h) WMU	a) Short-term b) Medium term c) Medium term d) Medium & Long term e) Long term f) Medium term g) Medium & Long term h) Medium & Long term
4.1.3 Provide research support for adaptive management in wetland conservation.	4.1.3 a) Form research co-ordination mechanism within WMU. b) Establish of effective communication links between WMC's ad WMU. c) Undertake applied research towards adaptive management of wetlands based on the needs of WMCs.	a) WMU b) WMU c) WMU	a) Medium term b) Medium term c) Long term
4.1.4 Conduct research to develop appropriate technologies for wetland	4.1.4 a) Document experience on wetland	a) WMU	a) Long term

Strategy	Action	Responsibility	Priority
restoration.	<p>restoration in other countries of the region.</p> <p>b) Undertake a pilot wetland restoration research project using existing resources.</p> <p>c) Conduct research on different aspects of wetland restoration technologies.</p> <p>d) Work in close cooperation with NARA, IUCN, NAQDA, Universities and other agencies in research activities.</p>	<p>b) WMU</p> <p>c) WMU</p> <p>d) WMU</p>	<p>b) Long term</p> <p>c) Long term</p> <p>d) Short, Medium & Long term</p>
4.1.5 Strengthen capacity of research agencies	<p>4.1.5</p> <p>a) Conduct research training programmes using available resources.</p> <p>b) Introduce an exchange program for scientists with other countries.</p>	<p>a) WMU</p> <p>b) WMU</p>	<p>a) Medium & Long term</p> <p>b) Medium & Long term</p>
4.1.6 Develop a sustainable research funding mechanism	<p>4.1.6</p> <p>a) Identify relevant research funding agencies</p> <p>b) Establish a donor intelligence network with the WMU i.e. through MOUs with RAMSAR, CMS etc.</p> <p>c) Allocate annual budget by WMU for wetland research</p> <p>d) Explore the possibility of obtaining research funds from relevant local agencies such as DWLC</p> <p>e) Facilitate agencies such as NSF, CARP, NSC, etc of submission of research proposals for funding.</p>	<p>a) WMU</p> <p>b) WMU</p> <p>c) WMU</p> <p>d) WMU</p> <p>e) WMU</p>	<p>a) Immediate</p> <p>b) Short-term</p> <p>c) Immediate</p> <p>d) Immediate</p> <p>e) Immediate</p>
4.1.7 Disseminate research findings to relevant agencies and institutions so that	<p>4.1.7</p> <p>a) Organize an annual National Wetland</p>	<p>a) WMU</p>	<p>a) Medium term</p>

Strategy	Action	Responsibility	Priority
such findings are made use of in the sustainable management of wetlands.	Symposium b) Publish journals, news letters, leaflets etc. c) Organize regular discussions on research findings with policymakers.	b) WMU c) WMU	b) Medium term c) Medium & Long term
4.2.1 Design suitable training programmes according to the needs of various wetland types and the personnel involved in respective areas.	4.2.1 a) Prepare a training plan/HR development plan for different target groups b) Prepare training manuals on major wetland types and different aspects. c) Implement training and HRD plans	a) WMU b) WMU c) WMU	a) Short term b) Medium & Long term c) Medium & Long term
4.2.2 Develop effective awareness programmes with the assistance of relevant government, non government agencies and private sector.	4.2.2 a) Establish a Media Unit within WMU b) Prepare and implement a media strategy c) Organize exhibitions, workshops, seminars for general public, policy makers and politicians. d) Involve NGOs and private sector for awareness creation activities.	a) WMU b) WMU c) WMU d) WMU	a) Short term b) Medium term c) Medium & Long term d) Medium & Long term
4.2.3 Promote wetland education in primary secondary and university levels	4.2.3 a) Include relevant aspects of wetlands	a) WMU	a) Long term

Strategy	Action	Responsibility	Priority
	<p>such as ecology, importance and conservation of wetlands in the primary and secondary school curriculum.</p> <p>b) Introduce new course units/modules for existing under-graduate and post-graduate programmes.</p>	b) WMU	b) Long term

Priority:

Immediate - Ongoing and to be completed within 3 months

Short-term - 3-6 months

Medium term - 6-12 months

Long term - More than 12 months