



photograph of the workshop participants

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Editor: Dr Mike Moser

"Skilled plagiarism inevitably surpasses inept creativity" Anonymous!

Foreword from Department of Environment

Central and West Asia and the Mediterranean have always been a vital bridgebetween Europe and Asia. Today, it is well understood that the importance of this region is global, and includes commerce, energy, culture, and environment.

During the past several years, international efforts to conserve wetlands have received an exceptional boost throughout the region.

To exchange best practices and lessons-learned regarding conservation and management of wetlands between the project managers, the Conservation of Iranian Wetlands project and the Ramsar Regional Center for training and research in West and Central Asia jointly organized the workshop *Towards a Community of Practice for Wetlands Project Managers* in October 2010.

This resource book which is written based on the mentioned workshop, presents and records the experiences of 11 demonstration projects of wetlands management. It is therefore of relevance to a wide range of situations where wetlands are under some kind of conservation or management regime.

It is my pleasure to invite you to read this book and I hope that you will find that the following pages provide useful insights into new approaches to wetlands management and conservation.

I sincerely hope that what has started will continue to grow into a true cooperation and knowledge exchange between supporting governments and dedicated projects.

Mohammad Bagher Sadough
Deputy Head for Natural Environment,
Department of Environment, Iran

LIST OF ABBREVIATIONS

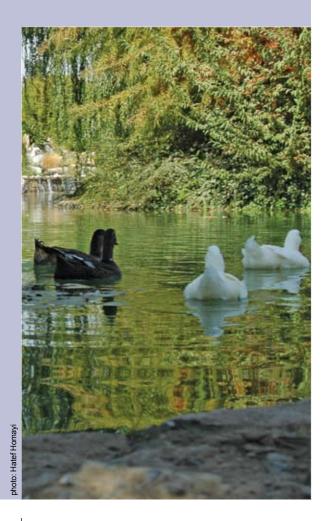
ABS	Access and Benefit Sharing
AEWA	African Eurasian Migratory Waterbird Agreement
BBOP	Biodiversity and Business Offset Programme
CBD	Convention on Biological Diversity
CBO	Community Based Organisation
CEPA	Communications Education and Public Awareness
CIWP	Conservation of Iranian Wetlands Project
CITES	Convention on International Trade in Endangered Species
CMS	Convention on Migratory Species
DOE	Department of Environment, Islamic Republic of Iran
EIA	Environmental Impact Assessment
EU	European Union
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIS	Geographic Information System
GPS	Global Positioning System
ICDP	Integrated Conservation and Development Project
ICZM	Integrated Coastal Zone Management

IUCN	The World Conservation Union
IRBM	Integrated River Basin Management
IWRM	Integrated Water Resources Management
ЛСА	Japanese International Cooperation Agency
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-Governmental Organisation
PES	Payments for Ecosystem Services
PRA	Participatory Rural Appraisal
RAPPAM	Rapid Assessment and Prioritisation of Protected Areas Management
RRA	Rapid Rural Appraisal
RSCN	Royal Society for Conservation of Nature, Jordan
SMART	Specific Measurable Attainable Relevant Time-bound
TEEB	The Economics of Ecosystems and Biodiversity
UAE	United Arab Emirates
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	UN Educational, Scientific and Cultural Organisation
WWF	World Wide Fund for Nature

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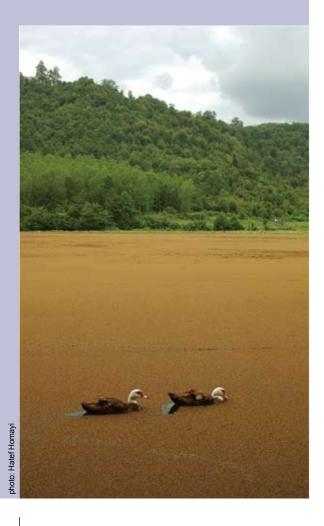
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EXECUTIVE SUMMARY



- 1. A workshop was held from 9-13 October 2010 on the shores of Lake Uromiyeh in the Islamic Republic of Iran, bringing together the managers of 11 case study wetland conservation projects from Central and West Asia and the Mediterranean.
- **2**. The aims of the workshop were to exchange best practices and lessons-learned between the project managers, as the basis for establishing a community of practice to enhance the delivery of these and future projects in the region. This resource book summarises the findings.
- 3. Eight of the eleven projects were supported by large-scale international funding through the Global Environment Facility, one by a bilateral aid agency and one by the private sector. They covered a range of wetland types from peatlands to oases, with a predominance on inland rather than coastal systems. Most had a duration of 5-10 years.
- 4. Despite their multiple values, wetlands across the region are in increasingly critical condition as a result of non-sustainable human activities, both within the wetlands and throughout their upstream catchments. Pressures on water resources, especially for irrigated agriculture and hydropower, are having a particular impact on wetlands in the arid and semi-arid parts of the region. The impacts of climate change are exacerbating these problems.
- **5**. The rationale behind the projects is that new approaches are needed to better manage and restore wetlands. Most of the projects had a common objective in shifting the traditional "sectoral, state-owned" approach to wetland conservation to a more integrated, participatory approach in line with the CBD Ecosystem Approach. Such measures are urgently required to safeguard the biodiversity and local communities that depend on wetlands.
- **6**. The workshop identified success indicators, lessons learned and examples of best practice from the case study projects across eight key implementation themes. Additionally it reviewed lessons learned and best practices in project design, management and exit strategies.

- 7. The scale of the challenge facing wetlands across the region is far greater than can be resolved by individual projects. However, in many cases the projects were having a significant catalytic impact in changing approaches and developing more integrated and participatory ways of working.
- **8**. The greatest challenge for such projects is to ensure a sustainable exit strategy whereby the new approaches that have been demonstrated continue to be implemented by local and national stakeholders after the end of the project. Capacity building and awareness raising are fundamental in this regard, whilst integrated site management plans and national wetland strategies, together with their associated institutional arrangements, provide the mechanisms to drive the process forward.
- **9**. Both project design and implementation could be improved by more attention to sharing experiences, lessons learned and best practices between projects. The workshop concluded that there was great value in continuing to develop a community of practice. Future workshops, hosted by projects in rotation, could usefully focus on particular themes of project implementation and management.
- 10. Multilateral environmental agreements (MEAs) provide an important mandate and technical resource to support project implementation. Conversely, projects provide a great opportunity to enhance implementation of MEAs on the ground. For this reason, MEAs, UNDP, UNEP and GEF should support further development of such communities of practice, and incorporate their findings into their ongoing work.



CHAPTER 1 INTRODUCTION AND AIMS

Background

An international workshop for wetland project managers was held from 9-13 October 2010 at the Bari resort on the shores of Lake Uromiyeh in the Islamic Republic of Iran. The workshop brought together senior managers of 11 case study (mainly GEF) wetland projects from 9 countries in Central and West Asia and the Mediterranean regions, with the aim of sharing experiences and establishing a community of practice for project managers. This publication summarises the findings of the workshop, and is intended to provide a resource both for the participating projects, and for others seeking to develop and implement integrated approaches to wetland conservation locally, nationally and internationally.

The wetland conservation challenge

Wetlands, in their broadest sense, are the ecosystems which contribute most to subsistence and human development, yet are the most threatened by human activities ¹. This paradox arises because of the value of their often rich fertile soils and the vulnerability of their water resources to impacts from upstream human activities. Large areas of wetlands throughout the world have been lost through drainage and conversion mainly for agriculture, whilst upstream dams to provide irrigation and domestic water supplies (or hydropower) have also damaged river systems reducing the environmental flows to downstream wetlands. These problems are at their most acute in arid and semi-arid regions, such as parts of Central and West Asia and the Mediterranean basin.

Lying at the interface between land and water, wetlands are of huge importance for biodiversity, and also for the livelihoods of the local communities around them. These dynamic systems provide a wide range of ecosystem or "life support" services: products such as fish, vegetation and salt; functions such as groundwater recharge, climatic moderation and flood retention; and services such as ecotourism and cultural values. Such ecosystem services are of considerable economic value², and are often crucial to the livelihoods and wellbeing of the people who live near wetlands, particularly the rural poor.

Because of these values, most large wetlands in the region covered by the workshop have been designated as protected areas, often since many decades. Despite this, the classical (sectoral, protectionist) approach to their conservation has failed to safeguard them in the face of rapidly increasing development pressures. The consequences have been dramatic declines in biodiversity, as well as the loss of livelihood options for local people. These trends are being exacerbated by further "global" impacts from climatic changes (droughts and floods) and the arrival of alien invasive species. Today, wetlands across the region are in crisis, and new approaches are urgently needed to secure their future, and the future of those who depend on them.

Integrated conservation and development projects

Addressing the wetland conservation challenge requires multi-

¹⁻ Millennium Ecosystem Assessment, see www.greenfacts.org/ecosystems/#99 and www.milleniumassessment.org.

²⁻ The Economics of Ecosystems and Biodiversity. http://www.teebweb.org/

sectoral and ecosystem-scale approaches unlike the traditional mandates of nature conservation agencies which have tended to focus on the conservation of species and protected areas. For this reason, major capacity building support has been provided in recent decades to governments of developing countries to address the crisis facing wetlands through international organizations such as the Ramsar Convention on Wetlands, the UN bodies, the Global Environment Facility (GEF), bi-lateral aid agencies, and international NGOs such as IUCN, Wetlands International and WWF. On the ground, such support has mainly been delivered with financing and knowledge transfer through integrated conservation and development projects³. These aim to conserve wetlands, while also improving the livelihoods of local communities.

The GEF biodiversity programme has been at the forefront of such work. It aims for the conservation and sustainable use of biodiversity, the maintenance of the ecosystem goods and services that biodiversity provides to society, and the fair and equitable sharing of the benefits arising from the utilization of genetic resources. The strategy is consistent with the integrated approaches to biodiversity conservation and sustainable use promoted by the ecosystem approach, the primary framework for action under the Convention on Biological Diversity. Eight of the eleven projects represented at the workshop were financed in part by the GEF. Although considerable experience

has been amassed by these projects, despite the large sums of money invested there has been little effort to share lessons learned between the project managers, and particularly with those starting new projects.

The Bari international workshop for wetland project managers

Since 2005, the UNDP/GEF/DOE Conservation of Iranian Wetlands Project (CIWP) has been building governmental and community capacity to conserve three internationally important demonstration site wetlands in Iran, and is now preparing to roll out this work at national level. Learning from international best practices has been a key component of the project. Whilst good progress has been made in developing more integrated approaches, major challenges remain to be overcome as a result of the severity of threats to Iranian wetlands – not least due to persistent drought conditions at the project sites.

For this reason, the CIWP with the support of UNDP-Iran and the Ramsar Regional Centre for Central and West Asia decided to organize a Community of Practice workshop for managers of similar projects throughout the region. The workshop aimed:

- To exchange best practices and lessons-learned from related international projects focused on the conservation of wetlands in Central and West Asia and the Mediterranean regions.
- To establish a community of practice of the participating project managers
- To prepare a lessons-learned resource book for practitioners, based on the shared experience

^{3.} Hughes, R. and Flintan, F. (2001) Integrating Conservation and Development Experience: A Review and Bibliography of the ICDP Literature. London: International Institute for Environment and Development.

The workshop was highly participatory, reviewing the experiences of the different projects, and drawing conclusions on various aspects of project management. A short field visit allowed participants to witness problems and approaches on the ground. A number of national and local stakeholders and managers also attended the first days of the workshop to hear the experiences of the international projects.

This resource book describes the eleven participating projects, and summarises the participatory discussions which comprised the bulk of the workshop. The work was structured around nine themes which have been used to structure the resource book:

- Integrated management planning
- Institutional, governance and financial arrangements
- Sustainable water use and catchment management
- Wetland restoration and biodiversity conservation
- Livelihoods and public participation
- Communications, education and public awareness
- Integrated monitoring and information management
- National policies, legislation and roll-out
- Project design, management and exit strategies

For each theme, the success indicators are identified, lessons learned by each of the projects are presented and some best practices are highlighted.

The publication is primarily aimed at current and future wetland project designers and managers, but also for UNDP and UNEP staff and government officials who oversee GEF wetland projects. It is hoped that MEA Secretariats will also be able to use it to improve their guidance on wetlands for Contracting Parties.

Bari Workshop Programme_®



Preparation Day. Saturday 9 October 2010

- Arrival of national participants in Urmia before noon
- Introduction session for national participants
- Arrival of international participants in Urmia before dinner
- Welcome dinner

Day 1. Sunday 10 October 2010

- Registration
- Official opening ceremony
- Review expectations, objectives and program
- Presentation by international projects representatives on their project achievements, lessons-learned, best practices
- Discussion

Day 2. Monday 11 October 2010

- Field visit to Lake Urmia and one of its satellite wetlands
- Wrap-up session for national participants

Day 3. Tuesday 12 October 2010

- Round table discussion on lessons-learned, best practices, and key issues and concerns regarding management and conservation of wetlands
- Evening discussion on project management

Day 4. Wednesday 13 October 2010

- Continue the round table discussion on lessons-learned, best practices, and key issues and concerns regarding management and conservation of wetlands
- Evaluation of the workshop
- Closing session

THE CBD ECOSYSTEM APPROACH

The primary framework for action under the Convention on Biological Diversity

Definition

"A strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way"

12 Principles (Summarised)

- 1. The objectives of management of land, water and living resources are a matter of societal choice.
- 2. Management should be decentralized to the lowest appropriate level
- 3. Ecosystem managers should consider the effects (actual or potential) of their activities on adjacent and other ecosystems.
- 4. Recognizing potential gains from management, there is usually a need to understand and manage the ecosystem in an economic context.
- 5. Conservation of ecosystem structure and functioning, in order to maintain ecosystem services, should be a priority target of the ecosystem approach.
- 6. Ecosystems must be managed within the limits of their functioning.

- 7. The ecosystem approach should be undertaken at the appropriate spatial and temporal scales.
- 8. Recognizing the varying temporal scales and lag-effects that characterize ecosystem processes, objectives for ecosystem management should be set for the long term.
- 9. Management must recognize that change is inevitable.
- 10. The ecosystem approach should seek the appropriate balance between, and integration of, conservation and use of biological diversity.
- 11. The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.
- 12. The ecosystem approach should involve all relevant sectors of society and scientific disciplines.



CHAPTER 2

THE CASE STUDY PROJECTS

Introduction

Representatives from 11 case study projects in 9 countries (see Map 1) participated in the workshop. Summary information about these projects is provided in Table 1, and a short description of each is provided later in this chapter.

Table 1. Summary of the case study projects

Country		Project title Main partners		Duration (years)	Pilot sites	Main habitats²	Intervention focus ³	National wetlands policy	Livelihoods development
1	Belarus	Restoration of peatlands in Belarus	Min. of Forestry UNDP, GEF	5	15	FW	R	Y	Y
2	Iran	Anzali wetland project	Dept. of Environment, JICA	3+5	1	FW	М	N	Y
3	Iran	Conservation of Iranian Wetlands Project	Dept. of Environment, UNDP, GEF	7	3	FW	M/R	Y	Y
4	Iran	Siberian Crane Project	Dept. of Environment, UNEP, GEF	6	3	FW	М	N	Y
5	Jordan	Management of Azraq wetland, Jordan	RSCN, UNEP, GEF, Dept. of Environment	15+	1	FW	R	N	Y
6	Kazakhstan	Integrated Conservation of Priority Globally Significant Migratory Bird Wetland Habitat in Kazakhstan	Min. of Nat. Res. and Environment Protection, UNDP, GEF	7	3	FW	M	Y	Y
7	Nepal	Conservation and Sustainable Use of Wetlands in Nepal	Min. Forests and Soil Conservation, UNDP, GEF, IUCN	5	2	FW	М	Y	Y
8	Pakistan	Pakistan wetlands project	Min. of Environment, WWF-PK, UNDP, GEF	7	4	FW, C	М	Y	Y
9	Prespa ¹	Integrated Ecosystem management in the Prespa Lakes Basin of Albania, FYR Macedonia and Greece.	Mins. of Environment UNDP, GEF	5	1	FW	M	Y	Y
10	Turkey	Wise use of water resources in the Konya Basin	WWF-Turkey	8+	1	FW	М	Y	Y
11	UAE	Al Warsan Lake – artificial wetland	Private sector (Nakheel)	6+	1	FW	С	N	Υ

¹ Albania, Former Yugoslav Republic of Macedonia, Greece

² FW = Freshwater; C = Coastal; M = Marine

³ M = Management; R = Restoration; C = Creation

All but two of the projects (#10 Konya Basin, and #11 Al Warsan Lake) were supported through large-scale international funding either from the Global Environment Facility or bilateral donors, supplemented by national and other co-financing. In general, execution of the projects was led by a project team located within a lead government Department / Ministry (and in some cases partly by national or international NGOs), with implementation support being provided through UNEP or UNDP.

Whilst the case studies covered a wide range of wetland types from peatlands to oases, they generally focused on freshwater and inland wetlands (particularly lakes), with only the Pakistan project addressing specifically coastal wetlands.

The majority of the projects aimed to improve the management of existing, albeit often highly degraded and threatened wetlands. Two projects, Belarus peatlands and Jordan's Azraq Oasis, were primarily about restoration of wetland systems that had all but lost their former functioning. The Al Warsan Lake project in the United Arab Emirates (UAE) was unique in being an attempt to create an artificial wetland in an urban context, largely with private sector support. The Prespa Lakes project was also unique in addressing the particular challenge of managing a transboundary wetland shared between three countries.

What are the projects trying to achieve?

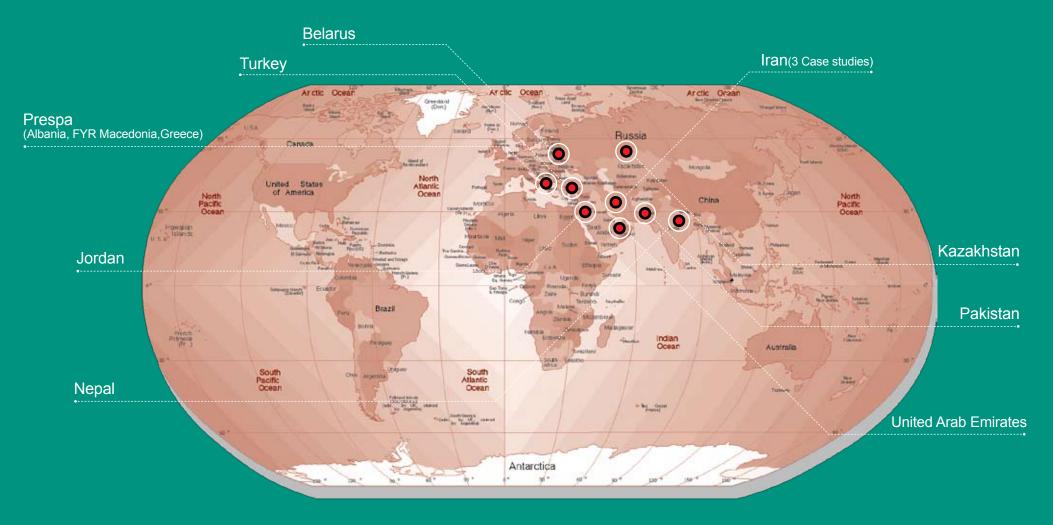
The underlying rationale behind the projects is that traditional approaches have not proven effective in conserving the country's

wetlands in the face of modern development pressures, and that a new ecosystem-based approach is essential for maintaining the functioning of the wetlands and their support for biodiversity and local communities. The projects therefore took the form of an intensive intervention over 5-10 years, with the aim of facilitating significant changes in approaches and institutional arrangements at local and national level.

A major challenge facing such projects is that they involve introducing complex changes to the existing systems. In line with the principles of the ecosystem approach, they aim to promote a strategic shift in the way wetlands and water resources are used. The new approach needs to integrate decision-making across conventional resource sectors, as well as enabling local communities living around the wetlands to participate in decision making and share responsibility for resource use and conservation. This is a marked change from normal practice in most of the countries, where wetlands are owned by the State and each resource sector has been managed sectorally and centrally. If they are to succeed, the projects therefore need to be highly proactive and provide strong intellectual leadership to facilitate the change process.

This change process was pursued through capacity building and awareness-raising, and demonstrating new approaches to wetland conservation at one or more pilot sites on the ground. Several of the projects then used this experience from the pilot sites to mainstream these new approaches into national policies and legislation, and thereby to roll out their experience to wetlands across the whole country.

MAP OF THE CASE STUDIES



CASE STUDY 1 BELARUS

Restoration of Peatlands in Belarus http://www.peatlands.by

This 5 year UNDP/GEF/Ministry of Forestry project works across 15 depleted peatlands and damaged mires totaling 28,207.7 hectares. These peatlands and mires were formerly important for biodiversity, and traditionally the local population worked the peatlands for fuel, and used them for hunting and collecting wild foods. More recently the peat was mined for fuel and other peat products, and they have become seriously degraded. Prior to the project launch in 2006 most degraded peatlands were designated for agriculture or forestry.

The aim of this project is to restore 15 degraded peatland sites to secure international climate change and biodiversity benefits, while respecting the socio-economic development concerns of local communities. A blueprint for sustainable peatland restoration will be developed which will be useful across the world. The project builds on national and international experience to demonstrate the potential for restoring and managing degraded peatlands in a way that generates multiple local and global benefits. To address existing barriers to renaturalising peatlands and ensure long-term commitment, actions are taken at three levels: strategic, research and capacity

development, and the restoration of 15 pilot sites. This approach aims to resolve the decision-making deadlock, which exists around many degraded peatlands. One expected result will be an increase in experienced personnel able to deal effectively with land use and restoration issues.

To date the normative basis in the field of peatland restoration and sustainable use was improved. 15 pilot sites have been restored and appropriate monitoring is in place. Several different re-wetting techniques were tested and peatland restoration projects are now included far more widely in action plans and policy across the country. The results show benefits across four broad areas. For climate change, greenhouse gas emissions have significantly decreased. Biodiversity is greatly enhanced with many wetland plants and birds reappearing, including rarities such as the blacktailed godwit, greater-spotted eagle and bittern. Economic benefits include the reduction of peat fires and the potential to sell carbon credits. And the local population enjoys an improved harvest of (and income from) wetland products (eg berries and mushrooms), the opportunity to hunt or fish and the chance to benefit from the reappearance of medicinal plants.

As the project comes to an end, and in order to ensure continuation of ecological restoration of peatlands, many activities were implemented to ensure capacity building and sustainability of project results. These include dissemination of methodical guidelines on ecological restoration of peatlands, introduction of training programmes into the training system of the forestry sector, a broad information campaign at all levels, and a video file "Mires will live!" was shown through national and international TV channels.





B Bartenikha peatlands A) before restoration 2006. B) After restoration 2009.

CASE STUDY 2. ISLAMIC REPUBLIC OF IRAN

Anzali Wetland Project

http://www.jica.go.jp/project/english/iran/0603927/index.html

This project funded by the Japanese International Cooperation Agency (JICA) and implemented by JICA and the Department of the Environment has been run in two phases. A master plan study ran from 2003-2005, and a five-year ecological management project began in 2007.

Anzali is a freshwater wetland which drains into the Caspian Sea within a basin of 3,610 km2. It is a Ramsar site and a crucial stop-over point for 77 species of migratory birds with waterfowl numbers peaking at around 200,000. Over one million people live and work in this area with important economic activities including fishing, hunting, recreational use and tourism. Anzali is threatened with over-exploitation of fishing, hunting, power-boating and encroaching urban development. The water inflow brings pollution and sediment problems and the level of the Caspian Sea fluctuates yearly.

The goal of this project is to implement integrated environmental management in order to maintain an ecological balance in the Anzali Wetland and its watershed. The first phase objective was the preparation of a master plan for the integrated management and conservation of the wetland, the implementation of pilot projects, impact prevention measures and increased technical capacity of staff and associated organisations. The second phase, which is being led by Iran's Department of Environment focuses on implementation, guided by five expected outputs. These include the establishment of the Anzali Wetland Management Committee, an environmental education awareness campaign and the development of small-scale ecotourism facilities.

The first phase of the project produced a range of draft management plans from watershed to solid waste, and trialled several educational, eco-tourism and economic projects. The second phase has conducted further research to consolidate and improve the management plans, held stakeholder meetings to explain the concept of zoning and is developing sustainable ecotourism using the Anzali Wetland Environmental Centre as a resource.



Anzali Wetland Ecological Management Plan

CASE STUDY 3. ISLAMIC REPUBLIC OF IRAN

Conservation of Iranian Wetlands Project (CIWP)

http://www.wetlandsproject.ir/

This is a 7 year joint initiative between GEF, UNDP and the Iranian government (led by the Department of Environment), which began in 2005. Iran has numerous important wetlands including 83 protected areas and 22 Ramsar sites. Demonstration sites include three of Iran's most significant wetlands: Lake Uromiyeh in the north-west, Shadegan in the south and Lake Parishan in the south-east. The hypersaline Lake Uromiyeh lies in a 51,876 km2 closed drainage basin and supports significant populations of flamingos and white pelicans, while the surrounding freshwater satellite wetlands have higher biodiversity. Shadegan wetland totals more than 500,000 hectares including shallow freshwater, estuarine and coastal habitat. Over 100,000 people depend on Shadegan for their livelihood. Lake Parishan (max. 5,200ha) is a shallow, permanent lake in the southern Zagros mountains, surrounded by eutrophic marshes, reedbeds and halophytic vegetation. It is significant for Dalmation pelican, marbled duck and white-headed duck.

CIWP's aim is to systematically remove or substantially mitigate the threats facing the globally significant biodiversity and sustainability of Iran's wetland ecosystems. Integrated wetland management is being

implemented at the three demonstration sites, and lessons and experiences will be disseminated to other wetlands across Iran. The project ethos is based on the belief that 'decision makers and local communities will support the sustainable management and restoration of wetlands, if they are aware of and benefit from the multiple values of these areas and if they are involved in their management.' There is therefore a strong communication element in the project. Activities have included baseline studies and needs assessments, capacity building and encouraging increased stakeholder participation; management plans have been prepared and approved at the demonstration sites and a toolkit is being developed for dissemination to other wetland sites. There is evidence of a significant shift from sectoral working by government agencies, to more integrated and participatory approaches.

The project is supporting development of a National Wetland Strategy and Action Plan, aimed at improving wetland management throughout the country. A mid-term evaluation in June 2009 recommended extending the project until the end of 2012 so that results could be improved and the wetland management system delivered across the country.



Flamingos at Lake Uromiyeh

CASE STUDY 4. ISLAMIC REPUBLIC OF IRAN

Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Migratory Waterbirds in Asia http://www.scwp.info/ The UNEP/GEF Siberian Crane Wetlands Project (SCWP) aimed to increase the capacity for management of three project sites in Iran, which have different degrees of protection undernational legislation. These protected areas are all designated wetlands of international importance under the Ramsar Convention, in common with a number of other sites in the Caspian Lowlands of Iran, and were crucial for the critically endangered Siberian Crane Grus leucogeranus.

The project aimed to achieve sustainable use of resources and improve conservation and protection at the project sites by actively involving stakeholders, including local communities, in the decision-making procedures for site management; through environmental education and awareness activities; and implementing small-scale pilot projects promoting alternative livelihoods.

The project undertook capacity building programmes for local and provincial staff of the Department of the Environment, Site Management Committees and community-based organizations including trappers associations. Participatory management plans were prepared for the key sites, and a major focus was given to awareness raising including for schools.

A main challenge was to prevent illegal shooting. The project sought control of the area by guards recruited from the local community. The project also worked to monitor the waterbird trapping in the long term, with the view of improving its sustainability while maintaining local traditions and income to local communities.



Educational programme at schools

CASE STUDY 5. JORDAN

Management of Azraq Wetland http://www.rscn.org.jo



While implementation the project gave a new understanding of rehabilitaion and restoration

This long-term project has been funded (among others) by GEF and UNEP and is implemented by the Jordanian NGO, the Royal Society for the Conservation of Nature. The Azraq oasis lies at the heart of an inland drainage basin and was once part of a much larger system of spring-fed marshes comprising the most extensive freshwater ecosystem in Jordan. Before the 1980s, this oasis, in the middle of the vast, arid, Arabian Desert was a major stopover for migratory birds on the African-Eurasian flyway and an important breeding site. The wetland also hosts the red jackal, the Asian fox and numerous fish species including Jordan's only endemic vertebrate the Azraq killifish Aphanius sirhani, which is on IUCN's critically endangered list. Traditionally a large number of local people depended on this wetland ecosystem for their livelihood. In 1978 the Azraq wetland reserve was established and gained Ramsar status. Yet water extraction continued and the wetland dried up completely in 1993.

The restoration project began in 1994 with the aim of restoring 10% of the water level of the oasis. The project also aimed to establish an environmental impact

assessment unit within the Department of the Environment and improve implementation of the Ramsar Convention within Jordan. The restoration process was designed to include local community participation, awareness programmes, and fund raising.

Groundwater resources were surveyed and guidelines established for sustainable agricultural development. Long term research, monitoring and management plans were developed. To date the 10% target for increasing the water level has not been reached. However about five percent of the original oasis has been restored and many of the rare birds have begun to return. Boardwalks, bird hides and a visitor centre have been built to encourage ecotourism. Recently a new 12 year project to rescue the Azraq killifish from extinction was started and huge efforts have been put into captive breeding, scientifically based habitat restoration and water redistribution. School children are taking part and this project is already yielding benefits in that the number of killifish is increasing.

CASE STUDY 6. KAZAKHSTAN

Integrated Conservation of Priority Globally Significant Migratory Bird Wetland Habitat. http://www.wetlands.kz

This 7 year UNDP/GEF/Ministry of Natural Resources and Environment Protection. project is working at three demonstration sites, which are all globally significant for migratory birds. The Ural River Delta including part of the Caspian coast hosts internationally important populations of pelicans and spoonbill, the rare Caspian seal and crucial economic species such as sturgeon. The Alakol-Sasykkol lakes are significant for waterbirds and rare species like the Persian Gazelle. The Tengiz-Korgalzhyn lakes have the largest population of Dalmation pelican, while saiga, wild boar and wolves frequent the margins of the lakes. Threats to these areas include unsustainable exploitation of wetland products, overuse of water and unregulated tourism.

The project uses the demonstration sites to reveal the benefits of an integrated approach to conservation and sustainable use of biodiversity. The project improves the regulatory framework and strengthens the management of protected areas and species. It is raising public awareness of the significance of wetlands, actively seeking stakeholder support and participation, demonstrating opportunities for sustainable use of biodiversity and establishing a Biodiversity

Conservation Trust Fund.

To date the legal framework for protecting wetland areas has greatly improved. In May 2007 Kazakhstan ratified the Ramsar Convention and the Tengiz-Korgalzhyn lakes became the country's first Ramsar site. The projecthaspreparedthejustificationforjoining the African-Eurasian migratory Waterbird Agreement and the dossier promoting Korgalzhyn Reserve as a UNESCO World Heritage Site. New protected areas have been established at all three sites. Staff at wetland reserves and officials at local and national level have received extensive training in wetland conservation and monitoring, using an ecosystem approach. Protected areas and species management plans have been prepared.

Extensive effort has been put into improving biodiversity awareness, from celebrating World Wetlands Day and Earth Day to preparing environmental education tools for schools and producing video clips of iconic wetland species. Communities have received demonstrations on sustainable fisheries and agriculture and biodiversity-friendly opportunities for income generation.

The ecotourism infrastructure has been developed with the provision of visitor centres, equipment, trucks and motorboats. Finally the Biodiversity Trust Fund has been established and is already helping biodiversity initiatives across the country.



■ Tengiz-korgalzhyn lakes system

CASE STUDY 7. NEPAL

Conservation and Sustainable Use of Wetlands in Nepal

http://www.wetlands.org.np

This project is a collaboration between the Government of Nepal, GEF and UNDP and is administered by the Ministry of Forests and Soil Conservation. It is set in two globally important Ramsar sites, Koshi Tappu Wildlife Reserve and Ghodaghodi Lake Area. Koshi Tappu and its buffer zone is a riverine flood plain stretching across 348,000 hectares. It hosts the largest heronry and the only remnant population of wild water buffalo in Nepal. Ghodaghodi is a mix of natural, permanent and seasonal lakes covering 2,563 hectares. It contains the largest oxbow lake in Nepal and is an important wildlife corridor between the plains and the hills. It is famous for over 140 bird species including the South Asian population of the cotton pygmy goose. Approximately 150,000 people live within the project area. In Ghodaghodi the majority of local communities use the lake for fishing, crop irrigation or other activities and in Koshi Tappu around one third of the population is considered to be dependent on the wetland

The project began in 2008, with the broad goal of the maintenance and enhancement of wetland biodiversity and environmental goods and services to improve local livelihoods.

Expected outcomes include: an increased awareness of the benefits of wetland biodiversity, conservation and sustainable use; the integration of biodiversity values into national policy and planning strategies; the strengthening of national, institutional, technical and economic capacity; and better collaborative management of wetland resources between all user groups and policy makers.

The project has already accomplished a number of tasks. It has improved technical knowledge by gathering baseline information, establishing indicator species and undertaking wetland inventories and management plans. It has prepared a wetland inventory assessment and monitoring tool, economic valuation tools, CEPA strategy and dissemination framework. alien invasive species guidelines, wetland indigenous knowledge documentation methodology, sensitization and awareness building for media and policy people, restoration of critical wetland sites. Indigenous knowledge of wetland products has been collated and livelihood assessment and improvement plans completed. A multistakeholder forum and a high level National Wetland Committee to improve coordination between various sectors have been established. At the same time work has begun on improving the socio economic conditions for local communities by researching opportunities for sustainable economic development of wetland products such as fish, water chestnuts, pater and rattan, promotion of alternative energy such as methane digesters, compost making from weeds and alien species, and reducing crop depredation by wild animals by erecting electric fence across the high impact zone. Thus the local population at both sites have already begun gaining benefits from conservation and livelihood interventions.



■ Technicians learning about wetland products from the local population

CASE STUDY 8. PAKISTAN

Pakistan Wetlands Project
http://www.pakistanwetlands.org

This 7 year GEF/UNDP project began in mid-2005 and is implemented by the Ministry of Environment and WWF Pakistan. Despite its arid climate, Pakistan has more than 225 naturally occurring wetlands, including 19 Ramsar sites. The project has a broad reach across all these wetlands but focuses on four demonstration areas. The Makran Coastal Wetlands Complex is a mix of coral, mangrove swamps and sea grass, home to threatened marine turtles, the endangered Marsh Crocodile, several marine cetaceans and large numbers of migratory birds. The Central Indus Wetlands Complex includes a section of the main Indus River and its floodplain, supports the entire surviving population of the endangered Blind Indus River Dolphin and is a crucial flyway for migrant birds. The Salt Range Wetlands Complex encompasses several saline and freshwater lakes, which are important sanctuaries for wintering birds and hosts the endangered endemic Punjab Urial. And finally, the Northern Alpine Wetlands Complex is characterised by high altitude lakes and a unique collection of plants, found only in the Himalaya, Hindu Kush and Karakoram mountain ranges. Together these four wetland

areas also sustain an estimated 144 million human residents and three to four million displaced people from adjacent countries and conflict zones. Pakistan's wetlands are generally degrading under a broad spectrum of threats that are mainly rooted in poverty but exacerbated by lack of knowledge and mismanagement.

The broad aim of this project is to conserve globally significant wetland biodiversity in Pakistan and to help alleviate poverty. The interrelated objectives are to prepare and disseminate a suite of initiatives designed to create a national environment that will enable enhanced management, conservation and sustainable use of wetlands resources. Consultative management plans will be prepared for the four demonstration sites, which will also serve as replicable models for other wetland areas. Local forums representing all relevant stakeholders will be set up and alternative, sustainable income-generating ventures will be explored. By the end of the programme, public awareness of wetland conservation issues and the technical capacity to manage freshwater and wetlands will have been substantially enhanced.

A national wetlands conservation policy has been formulated. Training courses were offered to different user groups including military personnel and service bureaucrats and material from the courses was used in wetland management manuals. A widereaching nationwide awareness and advocacy campaign worked in schools, celebrated world wetlands day and provided Maulvis serving in wetland dependent communities with material for sermons. Several village conservation committees were formed and the provision of alternative energy sources allowed more communities to examine alternative livelihoods.





■ Teams work in remote areas and continue despite natural disasters

CASE STUDY 9. ALBANIA, FYR MACEDONIA AND GREECE.

Integrated Ecosystem Management in the Prespa Lakes Basin of Albania, FYR Macedonia and Greece.

http://prespa.iwlearn.org; www.undp.org.mk; http://www.prespapark.org

The 1,600 km² Prespa Lakes Basin is shared between the three countries with the majority lying in Macedonia. Approximately 30,000 people live and work in the area in an economy based on agriculture, fisheries and tourism with some employment in factories in FYR Macedonia. The region has been identified as one of Europe's major transboundary 'ecological bricks' and biodiversity 'hot spots' due to the quality of its habitats, the sheer number of species and their rarity value. It provides shelter for over 90 migratory bird species and the rare Dalmatian pelican breeds here. This ecosystem is under threat due to a fall in water levels, pollution, inappropriate waste, poor fisheries, forestry and protected areas management, uncontrolled use of water and a unilateral and piecemeal approach to sharing water and wetland resources.

This 5 year UNDP/GEF funded project is being implemented by three governments through their respective ministries of environment. At the transboundary level the project is overseen by the trilateral Prespa Park Coordination Committee¹, a body comprising

of representatives from the central and local governments, as well as the civil sector of all riparian states in addition to the observers from various national and international organizations.

The slogan for Prespa Park is "three countries, two lakes, one future" and this project is an important step towards a coordinated and integrated transboundary, basin-wide approach to the conservation and management of the shared water resources and biological diversity. Although the States have declared Prespa as a symbolic trans-boundary "Park", it is in fact very much of a productive landscape, where people live and work and impact the ecosystem around them.

The project has worked at national level to strengthen the capacity for restoring the health of the wetlands by piloting ecosystem approaches to spatial planning and water, agriculture, fisheries and protected areas management. It has encouraged the adoption of management practices which integrate ecological, economic and social goals, while

by the establishment of the Prespa Park Management Committee (a replacement of the Prespa Park Coordination Committee), a trilateral body with enhanced competences in the transboundary management of the shared resources.

¹ Following the signing of a formal international agreement on Prespa on 2nd February 2010 (World wetlands day), the transboundary cooperation mechanism will be further upgraded

at the same time conserving biodiversity and reducing pollution. It has mainstreamed best practice, producing effective sectoral policies and a local environmental action plan. Results at national level are a catalyst for better trans-border cooperation. The project has empowered the existing transboundary institutions and piloted new international management and conservation initiatives.



Lake Prespa, a transboundary wetland, dependent on three countries

CASE STUDY 10. TURKEY

Wise Use of Water Resources in the Konya Basin. http://www.wwf.org.tr

WWF-Turkey has been working in the Konva Basin to enable wise use of water resources since 2002. The 50,000 km2 basin covers 7% of Turkey and has been identified by WWF International as a Global 200 ecoregion. It contains a vast salt lake, two Ramsar sites, 16 important bird areas, a national park and the largest fresh water lake in Turkey. It has a wide range of vegetation types associated with the unique salt lakes of Central Anatolia. It's also an important economic region with high agricultural and industrial production. The salt industry produces 60% of Turkey's salt production. The biodiversity of the Konya Basin suffers from increasing competition between the utilisation and conservation of natural resources. There is little planning and policies tend to be short term. Specific problems include a rapid decrease in groundwater levels, loss of wetland habitat and pollution of watercourses and lakes.

The goal of this project is the wise use of water resources in the Konya Basin. In Turkey wetland conservation versus degradation is determined by water management and so the objective is a strategic shift in the way water is managed and used. WWF-Turkey

is working with all the stakeholders in the region in a participatory approach to produce integrated river basin management. Priorities include introducing the concept of integrated management, the preparation of local management plans, raising awareness about the agri-water-environment relationship and the management of water and the introduction of modern irrigation techniques. The aim is also to improve national water policy, reduce the negative impact of infrastructure schemes and promote best practise on a wide scale so that conservation and wise use of freshwater habitats will benefit both nature and people.

To date scientific research and analysis including the impact of climate change has been carried out, reports on the socioeconomic and agricultural structure of the basin have been written, and management plans for Salt Lake and Eregli Marshes have been prepared. Pilot projects on drip irrigation have been carried out in 8 different districts in the basin and 1,500 farmers have been given on-site training. A best practice in public-NGO partnership has been introduced with the collective drip irrigation project that has been implemented with the participation of

100 farmers, resulting in a 25% increase in productivity and 40% in water saving. The Ministry of Agriculture is providing subsidies and drip irrigation has increased by at least 400% in the basin. A big public awareness campaign has made good use of the media. Through workshops and open meetings a healthy dialogue has been established between stakeholders, the public and policy makers. The process of disseminating best practices to other basins has begun.





Lake Meke in the Konya Basin, before and after a drop in water level.

CASE STUDY 11. UNITED ARAB EMIRATES

Al Warsan Lake Project, Dubai http://www.alwarsanlake.com

Al Warsan is an artificial wetland, which was created in the late 1990s when excess treated water from the Dubai Municipal sewage treatment plant was discharged into nearby rock quarry pits. The resulting pools gradually became an important habitat for migratory, indigenous and endangered water birds. This collection of pools is the only freshwater wetland in a large desert area and a crucial stopover point on the African-Eurasian flyway. Birds of international significance include the Houbara bustard, the purple heron and the greater-spotted eagle. The 29 hectare wetland also lies within the perimeter of a new residential development known as International City, with 60,000 inhabitants and is still topped up periodically with treated sewage. However a regular supply is not ensured and the lake loses water due to evaporation, so the amount and quality of the water is not guaranteed.

The development company Nakheel, recognised the importance of this wetland and embarked on a mission to preserve, protect and develop the lake as an international flagship nature reserve and a state-of-the-art tourist attraction. The urban setting of this wetland, in the middle of a desert is seen as a crucial

contribution to its success. Nakheel engaged a Lake Preservation Project Consortium comprised of leading wetland specialists, ornithologists, water treatment experts, landscape architects and land use planners. Their task was to preserve and enhance the environment for migrating birds and seek international recognition and accreditation from the Ramsar Convention.

In order to maintain the lake's water level, salinity, pH, and nutrients at productive levels the consortium designed a sophisticated lake water management system including a Reverse Osmosis Plant. A management plan is in development to ensure the sustainable utilisation of the ecosystem and its resources, in line with Ramsar Convention guidelines. The Lake development uses a creative, innovative approach, which blends an aesthetic landscape with artistic, authentic design components, while ensuring species protection to the highest ecological standards. The plan envisages an education centre and broad stakeholder involvement and cooperation involving local residents, tourists, the private sector, international experts and government. At present, due to the financial

downturn the project is on hold. Unfortunately the lake is gradually turning more brackish and the ecology is changing which is affecting the variety of bird species using it as a sanctuary.



Al Warsan Lake – a man-made wetland in an urban context



CHAPTER 3
LESSONS LEARNED AND BEST PRACTICES

3.1 INTEGRATED MANAGEMENT PLANNING

"The difference between success and failure in management plans is participation of all relevant stakeholders"

Introduction and key questions

Wetlands are dynamic and productive areas, important for biodiversity and delivering a wide range of ecosystem services. However, they are subject to diverse influences from human activities, arising both within and outside their boundaries. Their conservation is therefore a cross-sectoral issue usually requiring inputs from numerous government institutions, the private sector, users, NGOs and community-based organisations. An integrated management plan provides the mechanism to achieve agreement between all of these stakeholders on the long-term objectives of management, and how this will be achieved. The formation of a site management committee with representation from the range of stakeholders is of great assistance in developing the plan and to monitor its implementation (see Section 3.2 below).

All of the case studies used integrated management planning as a key tool for wetland conservation – with the goal of maintaining and restoring "ecological character" of their sites, allowing wetland biodiversity to flourish and enabling wise use of the wetland resources by people.

What lessons have the projects learned in terms of the process for preparing a management plan, obtaining approval, and ensuring implementation?







Management planning meetings with stakeholders in Kazakhstan

What does success look like?

- The integrated management plan has been formally adopted, and is owned by all stakeholders who share a common vision for the future of the site
- The management plan is being implemented successfully without project support.
- Local participation and knowledge is driving planning and implementation
- Stakeholders know their responsibilities
- Local communities are strongly engaged in implementation
- Monitoring, evaluation and adaptive management are being practiced
- Threats are reducing and wetland condition is improving.
- Improved functionality is enhancing delivery of ecosystem goods and services
- Biodiversity is recovering or being rehabilitated
- Local people are receiving enhanced benefits

Useful tools

Guidelines

- CBD Ecosystem Approach 1
- Ramsar Management Planning Guidelines²
- 1. http://www.cbd.int/ecosystem/
- 2 .ttp://www.ramsar.org/cda/en/ramsar-documents-guidelines-new-guidelines-for/main/ramsar/1-31-105%5E20857_4000_0_

- IUCN guidelines³
- AEWA guidelines⁴
- Zoning Guidelines (prepared by the projects in Iran, Kazakhstan)

Problem Analysis

- Log-frame
- Root cause analysis
- Strengths Weaknesses Opportunities Threats (SWOT)
- Prescription proforma
- Appreciative Inquiry (Nepal, Belarus)

Information

- Stakeholder Analysis
- Literature Review
- Baseline Data (biophysical and social)
- Indigenous Knowledge

Participation

- · Creation of local committees
- Workshops
- Training courses
- Field demonstrations for representatives of all levels
- Signing ceremonies (for local communities)

^{3.}http://www.iucn.org/about/union/commissions/wcpa/wcpa_puball/wcpa_bpg/?378/Guidelines-for-Management-Planning-of-Protected-Areas 4.http://www.unep-aewa.org/publications/conservation_guidelines.htm

Legislation and policies

- Laws and regulations on wetlands
- National wetland policies
- Memoranda of Understanding, letters of agreement, terms of partnership, etc.

Lessons learned from the case studies

Developing the Management Plan

- Start actions on the ground even while the management plan is being prepared, otherwise partners will become frustrated.
- Establish a site management committee with a range of relevant stakeholders to help in developing the plan and monitor its implementation (Section 3.2 below).
- Start planning with whatever information is available do not use the need for research as an excuse for inaction.
- Mapping is a very useful tool for discussing management implications, and provides the basis for zonation which is a key tool for implementation of management measures
- Develop the plan at local level and then take to governmental level (Nepal and Pakistan) or simultaneously at local and governmental level (Iran).
- Include an early and continuous awareness programme for all stakeholders.
- Use NGOs and CBOs to enable community participation.
- Secure wide and strong participation and ownership of all key stakeholders - be careful not to force the pace of management plan development to be faster than is necessary to bring stakeholders on board.

- Participatory development of the management plan is a very important hands-on capacity building process avoid speeding up the process by the project team writing the management plan.
- "Stay close to your friends and even closer to your adversaries!" This means investing even more time with those stakeholders who are sceptical or hostile about the management planning process.
- Be ready to compromise to achieve a common vision (eg for water rights or for boundaries of protected areas).
- Initially, focus on those components of the management plan which are relatively easy to implement in order to build community confidence.
- Responsibilities for implementation must be SMART.
- Be realistic in the planned actions and focus them on key threats/objectives.
- Include a Risk Analysis and an Emergency Plan.
- Capture the history of management plan development in writing and on camera.

Approval and amendment of the plan

- Consider the legal implications and requirements of the plan at an early stage, since a legal basis is usually needed to guarantee implementation.
- Resolve local conflicts early, and gain everyone's ownership or the plan will not be approved or accepted.
- Gain the early support of champions, such as local Governors, community leaders, NGOs.
- Ensure both national and local level approval.

- Once approved, distribute a short summary of the plan widely, showing key elements and who is responsible for what.
- The management plan should be mainstreamed into other sectoral and master plans for the region.
- Arrange a less formal process for approving amendments to the management plan.

Some best practices

Environmental crises can be turned into opportunities for securing better wetland management: floods and earthquakes (Pakistan), drought (Iran, Turkey), peat fires (Belarus).



Peat fires (Belarus)

The management plan for Lake Uromiyeh (Iran) was approved through an MOU signing ceremony between Ministers and Province Governors.







Lake Uromiyeh signing ceremony, Iran

The Governor and the Provincial Directorate of Environment in Isparta (Turkey) are champions of the Lake Egirdir Management Plan; therefore it is the best wetland management plan in Turkey in terms of implementation.



Key conclusions

Management plans are a crucial and effective tool for wetland site management in a water basin context, but their implementation is more important than the plan itself. The Ramsar Convention's management planning guidelines provide an excellent framework and learning resource.

Projects can be very effective in enabling the development of management plans, providing an "honest broker" between stakeholders who are often conflicting at the start. Securing a common vision and plan amongst all stakeholders takes much time, and projects are often too short to ensure a sustainable exit (ie. the stakeholders are fully owning, running and financing the plan). Management planning is an adaptive process, and the plan is never "finished". A formal mechanism for future modification of elements of the plan should be included in it.

3.2 GOVERNANCE, INSTITUTIONAL AND FINANCIAL ARRANGEMENTS

"Management should be decentralised to the lowest appropriate level" (Principle of the CBD Ecosystem Approach)



Lake Parishan local management committee meeting, Iran

Introduction and key questions

Because of the cross-sectoral nature of the issues affecting wetlands, many different sorts of organisations need to be involved in their management. Whilst management plans provide the framework for action, there needs to be effective governance, institutional and financial arrangements to supervise and operationalise the implementation. Good governance delivers transparency and accountability.

Horizontal coordination mechanisms are needed to bring together different governmental sectors, of which the most important are usually water, agriculture and environment departments. Coordination is also needed between these groups and the non-governmental/community and private sectors. This is usually achieved through a local management committee, which will be responsible for ensuring implementation of the management plan. The complexity of coordinating and keeping informed so many stakeholders demands that a secretariat is established or appointed to organise meetings, centralise and communicate information

Vertical coordination through the different layers of government (local, district, provincial, national (and even international for transboundary sites)) is also essential to ensure that policies and planning are aligned, legislation is supportive, and financing is made available.

Most of the case studies have made significant progress in establishing operational mechanisms at their sites. What lessons have they learned about the governance, coordination and financing mechanisms, to ensure the sustainability of project interventions.

What does success look like?

- Local (and/or river basin level) Management Committees operating effectively without project support.
- Key stakeholders engaged, trained and working together for a common vision
- Appropriate balance of governmental and non-governmental/community representation
- •oles and responsibilities are well understood, and stakeholders are implementing actions in their regular duties
- Committee and working group meetings occurring, and minutes being circulated, without project intervention
- National (and sometimes provincial/district) committee is providing effective support to the local management committee.
- Sustainable financing mechanisms are in place.
- A Secretariat function has been assigned to one body to service the local management committee and be a central point for information and communications.

Useful tools

Guidelines

- The CBD Ecosystem Approach ¹
- Ramsar management planning guidelines²
- Ramsar Convention handbook #3 on Laws and Institutions ³

Mechanisms

- Local wetland management committees
- National Wetland Committees
- Transboundary coordinating committees
- Coordinating Secretariats
- Technical working groups
- Learning visits

Financing

- Existing and new budget lines
- Trust funds
- Payments for Ecosystem Services (eg. tourism fees, carbon credits)
- Biodiversity and Business Offset Programmes
- Corporate sponsorship

Lessons learned from the case studies

Establishing the governance mechanisms

- Appropriate government-endorsed management committees are needed at: Micro (local); Meso (District/Province), and; Macro (national) levels (3Ms). For transboundary sites, international coordinating committees are also necessary.
- The local management committee should comprise an appropriate balance of governmental and non-governmental/community representatives.
- Rapid changes in government officials can cause serious continuity problems
- It takes time to build trust between governmental and nongovernmental representatives, where there is little history of such cooperation.
- Indigenous knowledge can be very important for improving governance (Nepal).
- Local community members need to be clear about their roles and who they represent in local committees and working groups. This may require training.
- Incompatibilities in structures and legislation among states covering transboundary wetlands are inevitable (Prespa).
- Learning visits to demonstration sites are very helpful as a capacity building tool for committees, legislators, community representatives and other stakeholders.

Secretariats

• It is more sustainable for an existing organisation to host the

^{1.}http://www.cbd.int/ecosystem/

^{2.}http://www.ramsar.org/cda/en/ramsar-documents-guidelines-new-guidelines-for/main/ramsar/1-31-105%5E20857_4000_0__

^{3.}http://www.ramsar.org/cda/ramsar/display/main/main.jsp?zn=ramsar&cp=1-30%5E21323_4000_0

management Secretariat. However, in special circumstances (eg transboundary or very large wetlands), a new body may be needed.

- Communication of information is one of the most important roles of a Secretariat, and for this an effective communications plan is essential.
- •Websites are an excellent communications tool, although not available to all stakeholders.
- Prepare targeted publications to advocate management plans among policy makers (eg summary "State of the Wetland" reports).
- Make regular briefings for high-level officials.

Sustainable financing

- Financial sustainability for implementation is likely to be most secure if it is achieved through existing national and local government budgets; additional project funding can be sought through private sector and international sources.
- A good case for enhanced budgets should be developed based on management needs
- In special cases, government may be convinced to create a special budget line
- Corporate sponsorship failed in Pakistan and stalled at Al Warsan (UAE) due to the economic downturn
- Fundraising will only be successful if awareness levels are high
- Trust funds have potential as a funding source, either through a large-scale capitalisation grant, or if there is significant potential through tourism user fees, or even carbon financing.

- Carbon credits were secured in Belarus from reduced CO2 emissions; Nepal has traded biogas.
- In Nepal, financial management of the project budget was audited at local community as well as national levels.
- Explore the potentials of innovative financial mechanisms to increase funding and conservation incentives. For example, mechanisms to promote Payment for Ecosystem Services (PES), and Biodiversity and Business Offset Program (BBOP), innovative taxation models and fiscal incentives, markets for green products or wetland services, investments in biodiversity contracts, etc. These sustainable instruments have been introduced at the CBD under resource mobilization and are already being implemented in developed countries and need to be expanded in developing countries.

Some best practices

The Prespa project reviewed international case studies, and adapted the existing transboundary governance model. In addition, the project supported the establishment of a watershed management body (Prespa Watershed Management Council) at national level in FYR Macedonia comprising of representatives of many sectors influencing water quantity and quality within the basin.

In Nepal, finance for implementation of the management plan and livelihoods development was secured from Buffer Zone revenue from protected areas visitor fees and Biodiversity Conservation Fund, a revolving loan facility run through local cooperatives.



Prespa Lake

In Turkey (Lake Egirdir), a significant portion of the finance for implementation of the management plan is secured from a league formed by the municipalities of surrounding districts. 0.5% of the annual budget of the respective municipalities is allocated to the budget of the 'municipalities league' to be used for the implementation of the management plan.

Key conclusions

A good governance mechanism for wetlands must demonstrate both horizontal integration between sectors, as well as vertical integration from local to national (and even international, for transboundary wetlands).



Lake Egirdir (Turkey)

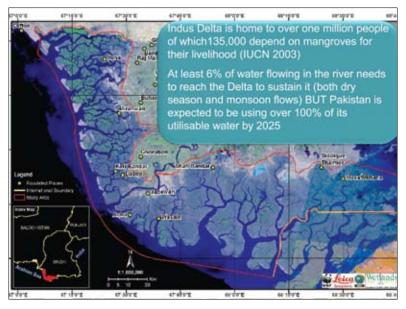
The governance of transboundary wetlands is particularly challenging, because it multiplies the number of organisations involved, and there may be significant differences in institutional structures, legislation and policies.

Good and regular communications by a common secretariat is essential for maintaining the interest, cohesion and effective participation of multi-stakeholder groups.

Financing for implementation is usually most sustainable if delivered through existing mechanisms. However, new and innovative mechanisms should also be explored.

3.3 SUSTAINABLE WATER AND LAND USE MANAGEMENT

"If the community is aware of the importance of water, they will conserve it"



Indus Delta (Pakistan)

Introduction and key questions

The availability and effective management of surface and ground water resources is usually the most important factor in the management of wetlands, particularly in arid and semi-arid environments. Competition for water for irrigated agriculture, domestic and industrial uses has led to severe problems for downstream wetlands in several of the case studies, most notably at the Indus Delta (Pakistan), Lake Urmia (Iran), the Konya Basin (Turkey), and Azraq Oasis (Jordan).

Effective water resources planning and management requires new approaches and institutional arrangements at river basin / catchment scale, which unfortunately rarely concur with administrative boundaries. Integrated Water Resources Management (IWRM), Integrated River Basin Management (IRBM) and the EU Water Framework Directive are key tools for improving ecosystem-based management of water and land.

What lessons have the projects learned about the complex process of securing adequate allocations of water for wetlands, and better management of upstream catchments?

What does success look like?

- Water requirements of the wetland are known: quantity, timing, quality
- Agreement providing adequate water allocations to downstream wetlands has been legally secured
- Agreed environmental flows are delivered to wetlands (and rigorously monitored) and wetland functioning is secured

- Alignment of national, basin and local water plans, as well as regional development plans for agriculture, water resources and hydropower.
- The price of water reflects its true value
- Agriculture is adapted to water availability and patterns of climate change

Useful tools

Guidelines

- CBD Ecosystem Approach¹
- Ramsar Convention handbook #7 on River Basin Management ²
- Ramsar Convention handbook #8 on Water Allocation and Management³
- Ramsar Convention handbook #9 on Managing Groundwater 4
- Ramsar Convention handbook on Impact Assessment⁵
- EU Water Framework Directive⁶

6 . http://ec.europa.eu/environment/water/water-framework/index_en.html

Information and analyses

- Baseline data collection (hydrology, water use by sectors, water quality)
- Modelling
- Water allocation tools
- Case studies of other river basin approaches and authorities

Mechanisms

- IWRM Integrated Water Resources Management
- IRBM Integrated River Basin Management
- Water Laws and agreements
- Master plans for Water and Agriculture
- Inter-sectoral working groups
- Water User Associations

Lessons learned from the case studies

Water allocations

- A crucial first step is to ensure recognition of the water right of downstream wetlands by the governmental bodies (as was achieved for the Indus delta and Lake. Uromiyeh). A good awareness of the ecosystem services provided by wetlands will help this process.
- Water rights of wetlands must be secured in legislation or regulations.
- Good baseline data is required for IWRM/IRBM; descriptive data is not enough and modelling different scenarios will usually be necessary.
- Groundwater use can be even more serious than surface water use, and must always be considered

^{1.} http://www.cbd.int/ecosystem/

^{2.}http://www.ramsar.org/cda/ramsar/display/main/main.jsp?zn=ramsar&cp=1-30%5E21323 4000 0

 $^{3.} http://www.ramsar.org/cda/ramsar/display/main/main.jsp?zn=ramsar&cp=1-30\%5E21323_4000_0_$

^{4.}http://www.ramsar.org/cda/ramsar/display/main/main.jsp?zn=ramsar&cp=1-30%5E21323_4000_0_

^{5.}http://www.ramsar.org/cda/en/ramsar-pubs-handbooks/main/ramsar/1-30-33 4000 0

- Hands-on engagement in the process is the best way to build the capacity of stakeholders to implement IWRM/IRBM. The establishment of multi-sectoral Water & Agriculture working groups proved very effective in Iran and Macedonia.
- Good governance is required at basin level to oversee implementation and allocate necessary resources (eg. Lake Uromiyeh Regional Basin Council (Iran), Prespa Watershed Management Council (Macedonia).
- Implementation of water allocations must be monitored rigorously.

Water efficiency

- If the community is aware of the importance and value of water, they will conserve it.
- Water price is a key factor in ensuring sustainable water use.
- Farmers require knowledge and technology transfer to make their water / land use more sustainable.
- Developing the capacity of water user cooperatives / associations can be very effective.
- Use farmer champions to promote water saving and the use of modern irrigation techniques (Turkey).
- Use pipelines/lining canals and modern irrigation techniques to improve water efficiency (Turkey/ Pakistan).
- Improving irrigation efficiency is not a panacea: many wetlands depend on waste water flows from irrigated farmland. If irrigation efficiency climbed to 100%, this source of water would be lost.
- Manage vegetation to remove non-native and invasive species which consume too much water.

Catchment management

- Good management of forests, pastures, rangelands and upstream wetlands can greatly help sustainable water management, reducing the impacts of floods and droughts. Watershed management plans are a useful tool for engaging the key stakeholders.
- •The 2010 floods in Pakistan led to government acknowledging the importance of management of the catchment area and the consequences of development in river floodplains.
- Crop patterns and land use should be adapted to the environment of the area, taking into account projections of climatic change.
- River naturalness and ecological flows upstream of the wetlands need to be conserved and restored.

Some best practices

The Prespa project developed an ecosystem-based watershed management plan and supported the establishment of an appropriate responsible cross-sectoral management structure (watershed management council), which will be endorsed by the highest level of the government, thus providing strong legal basis for continuation of the restoration work and future sustainable wetlands management.

For Anzali wetland, Iran, JICA developed a specific catchment management plan, including watershed management, wastewater treatment plan and solid waste management plan.



Once the allocation of water to Lake Uromiyeh (Iran) had been agreed, stakeholders identified a set of social and economic indicators to determine how the remaining water would be shared between the 3 provinces (Iran).

LU WATER SHARING PLAN									
<u>Criteria</u>									
	Economic				Social			Allocation (MCM)	
	Potential irrigation areas	RDP/cap	Potential surface water	Per capita investment in water	Population	Consump- tion per capita		Allocation	To Lake
W-Azerbai- jan	2.81	35	4.24	6.0	1.7	4.0		2035.6	1870.5
E-Azerbaijan	2.94	31	1.66	2.0	2.7	3.0		1079.3	270.3
Kurdistan	0.205	7.5	1.38	1.0	0.4	1.0		585	959
Total/ Aver- age	5.955		7.28	9.0	4.8			3700	3.1

In Kazakhstan, 8 Water Users' Associations were established and equipped to rehabilitate irrigation systems to facilitate rational water use at the Alakol- Sasykkol lakes System.





In the Konya Basin (Turkey), a pilot project with 100 farmers covering 500ha was established to install modern drip irrigation. It led to a 40% water saving and 25% increase in productivity.

Key conclusions

Formal recognition that the environment is a legitimate and essential user of water is a crucial step in better wetland management. However, agreeing how water can be shared is a very complex process. Water laws, requiring minimum allocations of water to wetlands are an essential tool.

Measures such as water-pricing and more efficient irrigation techniques can help to bring water use to more sustainable levels, but it is important that some of the water saved is allocated to wetlands, rather than simply used to develop more agriculture. There is a critical need to move towards more sustainable land and water management, and particularly agricultural practices and crops that are adapted to the area and to climatic changes.

3.4 BIODIVERSITY CONSERVATION AND WETLAND RESTORATION



Introduction and key questions

Conserving biodiversity is a primary objective of each of the case study projects, and almost all of the project sites supported globally significant biodiversity. Most projects started with a situation where the biodiversity was already seriously degraded through non-sustainable human activities. The assumption is that by reducing the threats, biodiversity (habitats and species) will recover, and these wetlands will deliver enhanced ecosystem services for the benefit of people.

The different projects used many different techniques for biodiversity conservation, ranging from targeted actions for individual species, to broader ecosystem based management measures, restoration of heavily degraded habitats, and even the creation of artificial wetlands (UAE and Pakistan).

What lessons have the projects learned in terms of the relative importance of ecosystem management, versus habitat and species conservation measures for conserving biodiversity? How effective is wetland restoration?

What does success look like?

- Evidence-based system for improving the status of key biodiversity is established as part of legally enforced integrated management plan
- Action plans are being implemented for critically threatened species or habitats
- Emergency plans in place
- Biodiversity and ecosystem functioning is enhanced and threats reduced
- Use of biodiversity is sustainable
- Alien invasive species avoided, effectively used and managed

Useful tools

Guidelines

- CBD Ecosystem Approach¹
- Management Planning guidelines (Ramsar)²
- Zoningguidelines (prepared by the projects in Iran, Kazakhstan)
- IUCN Alien Invasive species guidelines³

Baseline information

- Objective, target-oriented scientific research
- Indigenous knowledge

Mechanisms and tools

- Legislation and standards (including EU Birds, Habitats and Water Framework Directives)
- IUCN/ Red Lists, CITES and CMS Appendices, Red data books
- Montreux Record of Ramsar Convention
- Technical Advisory Groups
- Local management committees
- NGO activities
- Wetland inventory and assessment tools
- Restoration plans
- Environmental Impact Assessment
- Emergency plans (eg for drought or pollution incidents)
- 1. http://www.cbd.int/ecosystem/
- 2 . http://www.ramsar.org/cda/en/ramsar-documents-guidelines-new-guidelines-for/main/ramsar/1-31-105%5E20857 4000 0
- 3. http://www.iucn.org/dbtw-wpd/edocs/Rep-2000-051.pdf

- Mapping: GPS/GIS tools
- Exclosures
- Ex-situ conservation
- Flagship species

Lessons learned from the case studies

Biodiversity conservation

- Ecosystem-based management will always be more effective than species-focused management in the long-term.
- Targeted short-term measures may be needed to conserve endangered habitats or species. Avoid leaving species until their status becomes critically endangered for Siberian crane in Iran the project came too late.
- In Jordan, conservation of the endemic fish Aphanius sirhani was much more successful using habitat restoration, rather than captive breeding and release.
- The lack of information and awareness about biodiversity was the greatest constraint in Pakistan.
- In Prespa, because of the lack of transboundary consensus on priority habitats and species, a systematic protocol was proposed to identify species for immediate conservation actions and action planning process.
- Involvement of local communities in species conservation (and wetland restoration) ensures ownership and is cost-effective. In Iran and Jordan, local people helped to rescue endemic fishes and turtles during drought periods by augmenting water level.
- Make full use of flagship species such (eg the Indus Dolphin

- and Himalayan Brown Bear, Pakistan) to publicise less attractive elements such as fresh water turtles, insect life and other invertebrates.
- The Siberian Crane project focused on a critically endangered flagship species, and the Kazakhstan projects focused on migratory waterbirds more generally, but both pursued an integrated ecosystem-based approach to management of the key sites.
- In heavily over-utilised areas (eg grazing or fishing), exclosures or no-use areas. can help demonstrate biodiversity restoration potentials which can then be extended more widely.
- Emergency plans should be adopted to allow rapid response to protect biodiversity from fires, drought, floods, earthquakes, pollution incidents.

Wetland Restoration

- Be brave and bold when making plans for wetland restoration, including the development of a clear vision with local communities (Jordan endemic fish).
- Act before it is too late (ecosystem collapse), because restoration can then be very expensive (Azraq oasis (Jordan), Lake Uromiyeh (Iran)).
- Science is as important as local knowledge in any restoration efforts: both are essential for success.
- Highly qualified specialists should be involved, particularly for modelling, hydro- engineering, construction design documentation, etc.
- Low technology solutions using local products and materials

are cheaper and more sustainable and reduce costs substantially; high technology should only be used as a last resort.

- Crises can provide a good opportunity for initiating wetland restoration measures
- Placing a wetland on the Ramsar Convention's Montreux Record can be a very valuable stimulus for action (Azraq wetland (Jordan), Anzali wetland and Lake Uromiyeh, Iran)
- Constructed wetlands can provide some ecosystem services where they are absent (eg urban areas) and can partially mitigate for wetland losses elsewhere; however, such systems often require more intensive (and expensive) management in order to achieve their objectives



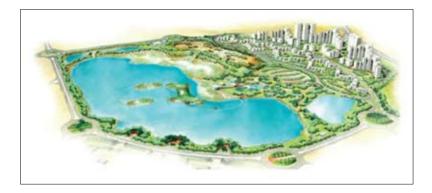
Some best practices

In Belarus, peatland restoration mainly used local, low-cost and easily accessible materials (peat and wood), but also called in specialized machinery where necessary for peatland management.

In Nepal, clearance of alien invasive plants restored wetland functioning, provided materials for livelihoods and encouraged breeding and recovery of key species such as the Asian Cotton Pygmy Goose Nettapus coromandelianus and the first breeding record of common moorhen Gallinula chloropus in the country.



In the United Arab Emirates, the Al Warsan project sought to create a wetland in an urban context.



Key conclusions

Ecosystem-based management of wetlands will always be the most effective way of conserving biodiversity in the long-term, but needs to be backed up by targeted short-term measures to conserve endangered habitats or species, or to deal with emergency situations. Conservation measures for flagship species can also be an important tool for raising awareness and engaging local people.

Wetland restoration should gather key stakeholders around an ambitious vision for the area and can deliver large returns in terms of restored ecosystem services. However, the priority should be to intervene before ecosystem functioning has collapsed, since it can become very complex and expensive to restore it effectively. Constructed wetlands can deliver ecosystem services, replacing those lost from other wetlands, but their management brings special challenges since they are often closed systems, highly dependent on human intervention.

3.5 LOCAL COMMUNITY PARTICIPATION AND LIVELIHOODS

"Communities should play a provocative role sometimes"



Introduction and key questions

When conservation and development projects start, human activities are often impacting the wetland at unsustainable levels, and there may also be significant conflicts for natural resources between different users, or between communities and

government. Similarly, biodiversity conservation projects may meet considerable resistance when local people are in poverty and struggling to meet their everyday needs. Coping with such issues can pose serious challenges for project implementation and, if not addressed appropriately, may lead to the project failing to meet its goals.

The development of alternative or supplementary livelihoods, to reduce unsustainable pressures on natural resources is a common feature of almost all the case studies. Wetlands deliver a wide range of ecosystem services that it may be possible to use sustainably both to improve the income and wellbeing of local people.

What lessons have been learned about facilitating the participation of local communities in natural resource management and decision-making processes, and how successful have projects been in enhancing people's livelihoods?

What does success look like?

- Local people are influencing management through active participation in their local management committee
- Communities are benefiting (income and wellbeing) from better functioning wetlands, and/or through the development of supplementary/alternative livelihoods
- Impacts on wetlands from local communities are more sustainable

- Communities are supporting better wetland management by advocacy, action and financial support
- Government agencies respect and support community engagement and traditions

Useful tools

Guidelines

- CBD Ecosystem Approach¹
- Ramsar Management planning guidelines²
- Ramsar Convention Handbook #5 on Participatory skills³
- CBD Access and Benefit Sharing protocol⁴

Information

- Stakeholder Analysis
- Participatory (or Rapid) Rural Appraisal (PRA / RRA)
- Social Mapping
- · Livelihood needs assessment
- Socio- economic surveys, economic valuation tools
- Traditional knowledge

Mechanisms

- Conflict resolution
- 1. http://www.cbd.int/ecosystem/
- 2.http://www.ramsar.org/cda/en/ramsar-documents-guidelines-new-guidelines-for/main/ramsar/1-31-105%5E20857_4000_0_
- 3.http://www.ramsar.org/cda/en/ramsar-documents-guidelines-new-guidelines-for/main/ramsar/1-31-105%5E20857_4000_0_
- 4.http://www.cbd.int/abs/

- Multi Stakeholder Forums
- User cooperatives and licensing
- Incentives: buffer zone revenue and Biodiversity Conservation Funds (micro-credits) (eg Nepal), revolving loans, grants
- Zoning and codes of practice
- Branding of products (eg "Prespa Park Products")

Lessons learned from the case studies

Engagement, participation and conflict resolution

- Choose the right person to represent the project they must be impartial
- Empower local NGOs as facilitators they are cost-effective, efficient, close to the ground and remain on site after the project ends
- Use existing mechanisms to engage with communities: village councils, local bodies, community gatherings, public meetings
- Do not leave any stakeholders out of the process inclusion goes hand in hand with exclusion
- Creating groups and drawing boundaries can be a delicate issue
- Participation is not only about NGOs, indigenous people, local communities. You have to simultaneously maintain the participation of the private and public sector
- Avoid false commitments and do not raise expectations
- Find solutions to some basic livelihood issues to help develop trust and cooperation, for example installing renewable electricity micro-generation (Pakistan, Kazakhstan) or

establishing sewage systems in villages (Prespa), or boat repair shops (Pakistan) using community funds match-funded by the project, or erecting electric fence to reduce crop depredation from wild animals, and wetland based livelihood enterprise for increasing household income for wetland dependent communities (Nepal)

- Submission of proposals by community members to management plan committees not only impressed the latter but also helped build self-confidence for people (Iran).
- Involve the local communities themselves early in the project design
- Respect traditional uses, knowledge and culture
- Employ simple language, simple messages
- Engage women as far as possible; in Nepal there is a mandatory representation of women for decision-making
- Train local environment guards and NGOs in community engagement and participatory processes
- Try to resolve conflicts at local level, and as early as possible; for more serious conflicts, establish a transparent conflict resolution process (Iran, Pakistan)
- Where they don't already exist, the formation of locally representative CBOs can be very helpful (Pakistan, Iran, Nepal)
- Participation is not just about changing local community behaviour, it is also about changing the attitude of local government officials toward community participation

Alternative (and supplementary) livelihoods

• Alternative livelihoods must be backed up by supportive

government policies, regulations and incentives

- Community women often have a greater aptitude for taking on new ideas than men
- Market research should precede any involvement in alternative livelihoods, particularly organic products or ecotourism
- In order to reduce damaging activities, modern and best practice tools and training were provided to local farmers, fishermen (e.g. drip irrigation and new nets, Pakistan, Turkey)
- Establish cooperatives and user-group associations to manage (and license) natural resource use (eg fishing)
- Zoning can be an important mechanism for managing natural resource use to sustainable levels
- Different types of alternative/supplementary livelihoods were trialled by the case study projects:
 - Organic agriculture, orchards, integrated crop production, integrated pest management, mushroom cultivation, fishfarming, goat raising
 - Ecotourism, handicrafts
 - Use alien invasive species for biogas, bio-briquettes, handicrafts, fertilizers, compost (Nepal, Anzali (Iran))
 - Promote seasonal employment opportunities to fill gaps (eg. employing fishermen during the off-season for mangrove planting (Pakistan) or ecotourism visits
- Provide training in business management
- Train women as facilitators on alternative farming issues (Iran), and as ecotourism accommodation providers (Prespa)
- Attract funds to help local people develop livelihoods. For example, in Nepal a 1.5M USD micro-credit scheme was established for communities in the buffer zones

Some best practices

In Belarus, wetland restoration improved opportunities for (and incomes from) hunting, collection of berries and fishing.





At the Iranian demonstration sites and Prespa the organisation of festivals was a key element in gaining public support to participate.



Lake Parishan Festival (Iran)

In Nepal, targets were set to increase the household income of wetland dependent communities by 15% by the end of the project. Poor households were provided with various livelihood options: fish farming, pig raising, goat raising, natural fiber processing.

Water hyacinth, an alien invasive species, was turned from a weed to an asset by using it for making compost fertilizer, as fuel for methane digesters, and for use in handicrafts.







A solar-powered electric fence was erected at Koshi Tappu (Nepal) to reduce the worst impacts of crop damage by buffalo straying out of the reserve.

Key conclusions

Achieving a high level of community participation is a complicated and lengthy process, which requires patience, skills, adequate resources, time, and budget. However, participation is the only way for sustainability of the project's results. When community members are involved from the beginning, a greater sense of ownership, accountability and participation can be expected.

Whilst conflicts between stakeholders often characterise the start of a project, the development of a common and positive vision for the wetland, and an increase in participation and community-based activities can often result in increasing levels of trust, goodwill and cooperation.

It is essential to address the socio-economic priorities of local communities as the entry point for biodiversity recovery and environmental restoration. Delivering modest improvements in livelihoods will go a long way to securing community support for the project.

A cautionary note is that best intentions to enhance livelihoods can easily be ruined by natural disasters, such as drought (Iran) and floods (Pakistan).

3.6 COMMUNICATIONS, EDUCATION AND PUBLIC AWARENESS

"Success is when other people deliver your message, believing it is their idea".

Introduction and key questions

People will only support the conservation of wetlands when they are aware of their values. This is as true of decision-makers as it is of the communities living around wetlands, and of the general public. For this reason, a targeted communications programme is a high priority in any wetland conservation project. The Ramsar Convention has developed very helpful "CEPA" Guidelines which have been used by many of the case studies. What lessons have the projects learned when implementing such guidelines, and what success have they had in raising public awareness?



World Wetlands Day in Pakistan

What does success look like?

- A strong CEPA plan, developed with stakeholder involvement, being implemented and monitored
- Local communities, the public and private sectors and decision-makers are aware of the value of wetlands and are demanding and working for their sustainable management

■ The media is providing continuous coverage of wetlands issues

Useful tools

Guidelines

- CBD Ecosystem Approach 1
- Ramsar Convention Handbook #4 on Communications, Education and Public Awareness²
- Ramsar CEPA forum/ wise use library³

Analysis of needs

- Stakeholder analysis and prioritisation
- Analysis of information (knowledge) gaps (Jordan, Kazakhstan)
- Questionnaires / polling to assess levels of awareness

Mechanisms

- Media: TV, Radio, Newsprint, web sites, social networking media
- Study tour programs
- Wetland visitor centres
- World Wetlands Day, Environment Days
- Educational curricula.

^{1.}http://www.cbd.int/ecosystem/

 $^{2.} http://www.ramsar.org/cda/en/ramsar-documents-guidelines-new-guidelines-for/main/ramsar/1-31-105\%5E20857_4000_0_$

^{3.}http://www.ramsar.org/cda/en/ramsar-activities-cepa/main/ramsar/1-63-69_4000_0__

Lessons learned from the case studies

Communications and public awareness

- Develop a strong CEPA plan, using (and adapting where necessary) the Ramsar CEPA guidelines for target groups from decision-makers to the public.
- Seek the help of sociologists to find the most effective means of gaining public awareness in particular target groups.
- Conduct polls of public awareness at the start of the project and regular monitoring to ensure the effectiveness of CEPA activities.
- Use the international importance of a wetland to gain publicity and generate political support.
- Use existing mechanisms and institutions for raising awareness (TV, Radio, newspapers, publications, web sites, social networking).
- Document the results of activities and good practices for dissemination and for use in other projects.
- Use charismatic species such as the Indus Dolphin and Himalayan Brown Bear to publicise less attractive elements such as fresh water turtles, insect life and other invertebrates
- Translate as much as possible of current relevant popular literature into local languages.
- For all publications, prepare a good distribution plan, and also keep a soft copy to put on the website.
- Work proactively with journalists: organise exposure trips and prepare materials for them. Make agreements to secure regular pages on environment.

- Both Kazakhstan and Iranian projects produced a series of short video-clips with specific messages to be played on TV.
- Wetland information centres and facilities can provide information to locals, decision-makers, schools, businesses and visitors, and provide a focus for many activities. In Kazakhstan, the project established visitor centres at each of the 3 demonstration sites
- Local NGOs provide a good mechanism for raising awareness across local communities.
- Festivals, public action days and street theatre can be very effective in raising awareness.
- WWF-Pakistan established "Friends of the Indus Forum".
- Organize targeted events at wetlands sites during national and international festivals, particularly World Wetlands Day.
- Organise Awards programmes for wetland champions, who can then promote awareness activities to their peers.
- Ensure that the management of web sites is handed over before the end of the project.

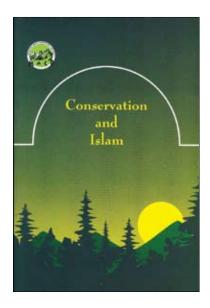
Education

- Work with the Ministry of Education to develop biodiversityrelated curricula for students (eg.working examples related to wetlands can be included in maths and language programmes).
- Work with teachers to develop and roll out the CEPA programmes and materials
- Organise competitions for schools and for students
- Kazakhstan and Nepal have developed "ABC" books on biodiversity for youngsters and others
- For Anzali wetland, Iran, JICA organized environmental

education in schools and universities (materials, programs, wetland education center, eco schools scheme, international "wetland management" masters course etc.)

Some best practices

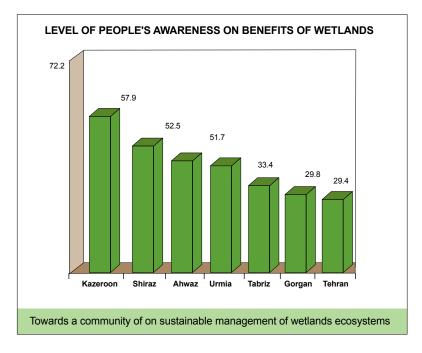
WWF Pakistan developed the publication 'Conservation and Islam' to help Maulvis include environmental issues and biodiversity in their sermons. This is especially important in the case of communities with very low literacy rates.





The Conservation of Iranian Wetlands Project used national TV research centres to undertake surveys of public awareness of

wetlands at the demonstration sites, in Tehran and in a number of cities where the project was not active. It revealed a strong impact from the project's awareness raising activities.



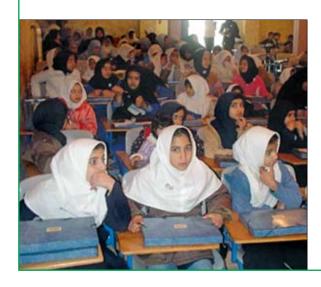
The Siberian crane project in Iran developed a public awareness strategy at three levels: national, provincial and at the two demonstration sites. A "Crane Day Celebration" was organized annually at the main site.

WWF-Pakistan developed conservation and information centres at its main demonstration sites.





Crane Day Celebration in Fereydoonkenar (Iran)





WWF-Pakistan developed conservation and information centres at its main demonstration sites.



■ Keenjhar Conservation & Information Centre, construction work in final stages



Chotiari Conservation & Information Centre, construction work in final stages

Nepal has prepared the National CEPA strategy and its dissemination framework, wetland resource book, training of trainers manual and FAQs

Key conclusions

Raising awareness across all levels of the community, from the local community to students, the private sector and to decision-makers, must be a central pillar of any effective wetland conservation project, and will require the allocation of dedicated personnel and financial resources. The Ramsar Convention CEPA guidelines provide a very effective framework for developing a communications programme, and the Ramsar CEPA Forum and wise use guidelines can be a rich source of shared ideas and materials.

CEPA activities can be almost unlimited in scope and cost. It is therefore essential to develop clear objectives and plans, and to monitor their effectiveness.

3.7 INTEGRATED MONITORING AND INFORMATION MANAGEMENT

"The ecosystem approach should consider all forms of relevant information, including scientific, indigenous and local knowledge, innovations and practices."



■ Using local knowledge and involvement in Jordan

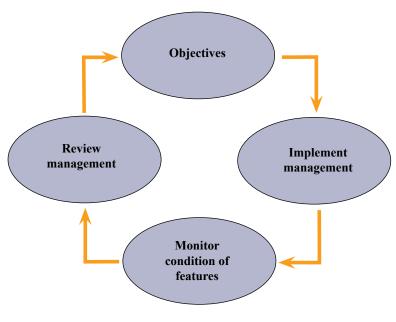
Introduction and key questions

Integrated management planning is an evidence-based approach, and monitoring is a key tool in the adaptive management cycle. Monitoring is the systematic collection of data or information over time in order to ascertain the extent of compliance with a predetermined standard or position.

An effective monitoring programme should be simple, well-designed and affordable. Ideally, the wetland will be subject to an integrated monitoring programme that provides

the information needed to measure the effectiveness of the management being undertaken. Monitoring is only useful if the results are communicated back to managers and decision-makers, and thereby used in adaptive management.

All too often, the importance of monitoring is overlooked, or is undertaken without a clear purpose linked to the management of the wetland. All of the case studies have undertaken baseline studies of conditions at their wetlands, and most have sought to develop integrated monitoring programmes. What lessons have the projects learned with regard to establishing integrated monitoring?



The adaptive management cycle

What does success look like?

- Baseline conditions have been measured and reported
- Integrated monitoring system is established and being sustained after the project
- Indicators, methods and responsibilities agreed in a protocol/plan
- Participatory monitoring by government agencies and NGOs
- Information centre assigned for coordinating monitoring and reporting
- Accessible integrated information management system (database and GIS)
- Integrated annual monitoring report
- Summary report for decision-makers and public
- Monitoring results are being applied through adaptive management
- •Local Management Committee is acting on results of monitoring

Useful tools

Guidelines

- CBD Ecosystem Approach¹
- \bullet Ramsar Convention handbook #11 Inventory, Assessment and Monitoring 2

^{1 .} http://www.cbd.int/ecosystem/

^{2.}http://www.ramsar.org/cda/en/ramsar-pubs-handbooks/main/ramsar/1-30-33_4000_0_

- Ramsar Convention handbook #12 on Wetland Inventory¹
- The UNDP monitoring guidelines²
- WWF management effectiveness tool (RAPPAM³

Mechanisms

- Baseline studies
- Monitoring Strategy /plan and protocols
- Participatory monitoring
- Database (eg MedWet) and GIS system & remote sensing
- MedWet mapping system
- Selected indicators (biological, social and economic)
- Legislation and Regulations
- Website

Lessons learned from the case studies

Integrated monitoring

- Prepare a monitoring plan including selected indicators, methodological guidelines, responsibilities and reporting requirements.
- Select key indicators related to the objectives of the project, keeping the numbers as low as possible to be cost effective and implementable.
- Monitor the indicators regularly to track changes in the

- selected indicators to determine whether management actions are delivering the expected results.
- International expertise, models and guidelines were very helpful for developing the monitoring plan in Prespa and Iran.
- Ensure the monitoring program will be sustained after the project finishes.
- Responsibilities for monitoring and reporting must be explicitly stated in the plan.
- Include the monitoring plan as an annex to the management plan so that it also receives formal approval.
- Many monitoring programmes will already be underway. It is important to build on these and not duplicate efforts.
- Internationally accepted protocols will be available for determining monitoring methodologies for many indicators, but for example the Belarus project had to develop and test a methodology for measuring the emissions and sequestration of greenhouse gases for peatlands.
- Include use of monitoring for adaptive management in the TOR of the local management committee, so that the results are used in further development of the management plans.
- In Prespa, a transboundary integrated monitoring system was established with the support of a special working group. A pilot monitoring stage was helpful before developing the full-scale monitoring programme.
- In Belarus and Iran (for Otters, Lutra lutra) local communities were trained and engaged in the monitoring programs.
- In Nepal, local groups were trained to undertake monitoring of key indicator species such as swamp francolin and cotton pygmy goose

^{1.}http://www.ramsar.org/cda/en/ramsar-pubs-handbooks/main/ramsar/1-30-33 4000 0

^{2.} http://www.undp.org/evaluation/handbook/Annex1.html

^{3.}http://wwf.panda.org/what_we_do/how_we_work/conservation/forests/tools/rappam/

Information management and reporting

- Appoint a coordinator to be responsible for compiling an integrated monitoring report; this function needs financial and institutional support.
- Use a standard format for reporting on each parameter.
- Some sectors refuse to give away information, or might even provide false information. Publish the monitoring report, highlighting the gaps, and use a group of experts to check the quality of the data and reports.
- Rapid feedback of monitoring results is an incentive, and is also required for management, but it can take a long time to have an integrated report.
- Monitoring reports should be disseminated widely, including summaries for the public and decision-makers.
- It is good practice to engage local stakeholders to evaluate the results of the monitoring.
- Ideally, a central data bank should be established through an easily accessible database; projects in Belarus, Iran, Jordan and Prespa all built on international models, such as the MedWet Wetland database.

Some best practices

Kazakhstan published monitoring guidelines for biodiversity.

The lack of information on wetlands was a major constraint to wetland conservation in Pakistan, so a nationwide assessment was undertaken, using large multi-disciplinary field teams.







Nepal developed and published a methodology for documenting Wetland Indigenous Knowledge, and revealed that 210 wetland products were used at Koshi Tappu.



Key conclusions

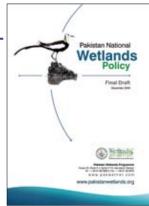
Integrated monitoring should be considered as an integral and important component of management planning, enabling the effectiveness of management actions to be assessed through the tracking of carefully selected indicators. The number of indicators needs to be kept small, and responsibilities assigned within existing organisations to ensure sustainability. An annual, integrated monitoring report is a key tool.

For an integrated monitoring programme it will be necessary to assign an office or an individual to be responsible for coordination, central information management, reporting and communications. Regular and rapid feedback of the results of monitoring is essential, both as an incentive to those who are collecting information, and so that the results can be useful for adaptive management. The monitoring results should be freely available and accessible.

3.8 NATIONAL POLICIES, LEGISLATION AND ROLL-OUT

Introduction and key questions

Because wetlands lie at the interface of land and water, they are frequently omitted from sectoral policies affecting water, land, forests or fisheries – even though they either



depend on, or play a crucial role in, the sustainable management of these natural resources. Similarly, responsibility for the issues affecting the management of wetlands is often dispersed between many organisations, meaning that activities are often not "joined-up".

For this reason, the Ramsar Convention has developed comprehensive guidelines for the development of national wetland policies, arguing that these can play a crucial role in guiding decision-makers towards a wiser use of wetlands, and provide an incentive for coordination between the various sectors.

Several of the project case studies have already supported the development of national wetland policies and strategies, and others are currently working on this. Often these policies are the mechanism for rolling-out the experiences from the demonstration sites across the country. What lessons have been learned?

What does success look like?

- National wetland policy adopted and being implemented, under the supervision of a National Wetland Committee
- National wetland policy has been mainstreamed into relevant sectoral and inter-sectoral policies, making them wetland friendly
- Key wetland conservation measures included in sectoral strategies

- Perverse incentives and laws have been modified
- Experience from demonstration sites is being applied across the country

Useful tools

Guidelines

- CBD Ecosystem Approach¹
- Ramsar Convention handbook #2 on National Wetland Policies²
- Ramsar Convention handbook #3 on Laws and Institutions ³

Mechanisms

- National development policies and plans
- National biodiversity strategy and action plan (CBD, NBSAP)
- National consultative meetings for sectoral policy discussions
- Sectoral policy gap analysis (experts, lawyers, politicians)

Lessons learned from the case studies

Policies and strategies

• The Ramsar Convention handbook #2 on National Wetland

^{1 .} http://www.cbd.int/ecosystem/

 $^{2.}http://www.ramsar.org/cda/en/ramsar-pubs-handbooks/main/ramsar/1-30-33_4000_0_$

^{3.}http://www.ramsar.org/cda/en/ramsar-pubs-handbooks/main/ramsar/1-30-33_4000_0__

Policies was found to have been very helpful by several projects.

- National wetland policies have been developed in many countries and provide a rich source of information and experience to build upon. A full list can be found on the Ramsar Convention website.
- Policy development should be both a bottom-up and topdown approach, learning from the needs and experiences on the ground.
- A road-map should be developed to ensure involvement of all the sectors in the consultative process; NGO representation is also important.
- Once the national policy has been developed, it will be necessary to review and fill the gaps at sectoral level and in other strategic policies. For example a section on degraded peatlands was included in the national strategy to combat land degradation (Belarus).
- A national wetland committee needs to be established as the owner of the National Wetland policy and plan, and should be responsible for monitoring its implementation.
- To be effective, policies should be backed-up by laws, acts and guidelines. The Ramsar Convention handbook #3 on Laws and Institutions provides further information. In Pakistan, the national wetland action plan failed to be implemented due to lack of strategies and policies and implementing legislation
- Being able to refer to effective management at demonstration sites, is very helpful to the process of policy development.
- It is crucial to address the issue of water allocations and managing upstream impacts (including transboundary issues)

in wetland policies

• Projects can provide an important impetus to the implementation of international conventions in the country concerned, such as Ramsar, CMS and the African-Eurasian Waterbird Agreement.

Replication and roll-out from demonstration sites

- An action plan, with SMART actions should be adopted with the national wetland policy, and its implementation overseen by the national wetland committee.
- The action plan (certainly) and the policy (sometimes) will need revision at regular intervals
- The UNDP/GEF Small Grants Fund provides a useful mechanism to engage CBOs and NGOs to replicate project activities (eg 5 peatland sites were addressed this way in Belarus)

Some best practices

In Belarus, policies for the sustainable management of depleted peatlands were improved and two new standards were developed and approved: a) on the use of depleted peat deposits; b) on ecological rehabilitation of depleted peat deposits and other damaged mires and prevention of damage to the hydrological regime of natural ecological systems in the process of drainage. The project also successfully linked the conservation biodiversity in degraded peatlands with the national strategy to combat land degradation, and also climate change policies for the reduction of CO2 emissions.

The project in Nepal succeeded in establishing a National



Degraded peatlands, Belarus

Wetland Committee with 11 members from sectoral ministries and National Planning Commission, and supported by a Technical Advisory Committee. The Committee is currently reviewing the 2003 National Wetland Policy and wetland-impacting cross-sectoral policies.

Iran used the WWF Management Effectiveness tool (RAPPAM) to understand the critical needs of wetland protected areas across the country, for inclusion in the national action plan.

Turkey has a Wetland strategy, a Regulation providing a legislative base for the conservation of wetlands, a National Wetland Committee and local wetland committees on the provincial level. However, a recent amendment in the Wetland's Protection Regulation is a major setback to the work on conservation of wetlands.

Key conclusions

Because of the values of wetlands, and the cross-sectoral issues affecting them, it is essential that their conservation and sustainable use is adequately covered in national policies and legislation. The extent to which a separate national wetland policy is required for wetlands (as opposed to all biodiversity) will depend on the issues affecting wetlands in the country concerned, and the effectiveness of the existing policies and legislation. Policies will generally only be effective if they are backed up by appropriate legislation.

Policy development for wetlands should be a participatory process, ensuring cross-sectoral integration, and also learning from field experiences on the ground. The Ramsar convention provides excellent guidance, and there are also many case studies available from different countries.

For projects of limited duration, the combination of successful work at demonstration sites, together with commitments secured through a national wetland policy and implementing legislation, can leave a lasting legacy for the country concerned.



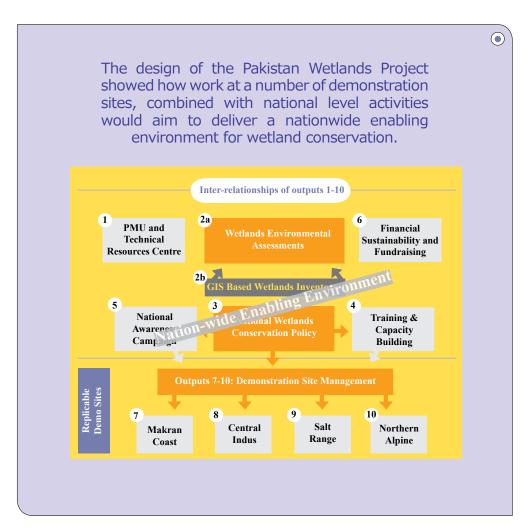
CHAPTER 4

PROJECT DESIGN, MANAGEMENT AND EXIT STRATEGIES

"Don't forget - the principal actors are the basin community, not the project team"

The eleven case study projects considered by the Community of Practice workshop were initiatives to devise new, integrated approaches for the sustainable management of wetlands, which would deliver benefits to biodiversity, to reducing the impacts of climate change, and to people. In most cases, this was approached through developing a model management system to address threats at a small number of demonstration sites, combined with establishing an enabling framework at national level to allow the experiences to be replicated countrywide. Thus, these projects had a very high level of ambition, compared to more traditional approaches focused perhaps on protecting an endangered species or strengthening management of a protected area.

The projects varied in duration but all had a finite lifespan, and it is important to distinguish between the intensive project which aims to design and demonstrate the new system, and the very long-term implementation of that management system which has to be achieved by a whole range of stakeholders who existed both before and after the project. Such projects are therefore just one, very crucial, step in a much longer term process of changing the approach toward the sustainable management of wetlands.



4.1 Project design and development

In designing a project, the challenge is to provide tools which provide both clear direction for implementation, as well as effective monitoring, evaluation and risk management.

Most of the GEF project case studies were formulated using Project Development Facility (PDF A&B) grants. Specialised external consultants were usually commissioned to undertake studies with national stakeholders and these consultants then used the results to prepare the Project Brief that was approved subsequently by the GEF. A Project Document, again usually prepared by international consultants defined the project plan, budget and agreement between UNDP, as the GEF Implementing Agency, and the national Government(s).

Good practice means that large projects (GEF or otherwise) will be subject to an ongoing process of monitoring and evaluation, which aims to support adaptive management. In particular, GEF projects are formally subject to a mid-term evaluation and a terminal evaluation by external consultants.

LESSONS LEARNED IN PROJECT DESIGN AND DEVELOPMENT

- The lengthy process of project development and sometimes substantial delays (up to 2-3 years) between project formulation and the launch of implementation leads to loss of institutional knowledge of the project, and risk of political context changes.
- 2. A well-conducted inception phase is crucial in reengaging the key stakeholders, ensuring the project is still relevant, and sharpening the key outputs. Each of the main elements of the project should be confirmed and any perceived issues or misunderstandings resolved governance and supervision, logical framework, high level outputs, monitoring and evaluation system, budget, administrative procedures.
- 3. Project design is often over-ambitious; projects must be well designed with realistic aims for the funding and timescales available.
- 4. Project documents are often too long and full of jargon, and difficult to understand by those who have to implement the project.
- 5. Log frames are often too complex for the project team to use, with large numbers of indicators making project monitoring and evaluation very difficult. A simpler planning and monitoring framework focusing on the key outputs, rather than outcomes or activities is more useful

4.2 Project governance and staffing

Most of the case study projects were full-sized GEF projects with UNDP or UNEP as the GEF Implementing Agency and the national Government responsible for execution (NEX projects). They typically comprised the following institutional and governance elements:

- A lead Ministry executing the project in partnership with other Ministries, under the direction of a National Project Director
- UNDP country office providing implementation support, budget control and procurement
- A Project Steering Committee (with members from all the key stakeholder groups), sometimes supported by a National Technical Committee
- A Project Coordination Office / Management Unit (with staff also out-posted to demonstration sites), supported by international and national consultants. For most of the projects, the Project Coordination Office was based within the lead Ministry, with the crucial role of supporting the key stakeholders to implement the project plan capacity building, coordination and awareness raising.

LESSONS LEARNED IN PROJECT GOVERNANCE AND STAFFING

- 1. The governance structures typical of GEF projects provide for clear roles and responsibilities, although not all the case studies succeeded in establishing strong project steering committees.
- 2. Frequent changes of focal points in government agencies, including National Project Directors, can be extremely disruptive.
- 3. The project team needs to develop excellent relationships with the key line Ministries, and particularly with the main administrative authority for wetlands.
- 4. Project teams should integrate as closely as possible with government systems (particularly in the lead Ministry), and not be seen as being "different"; issues such as enhanced salaries and new project vehicles can cause jealousies.
- Having access to international funds, and working to international standards of project management enables project teams to innovate in ways which are not usually possible for government officers.
- 6. 6. Members of the project team should avoid chairing committees, as this weakens sustainability.
- Consultants play an important role in project implementation but they must be closely monitored against TORs in order to ensure results are of a high standard.

4.3 Project financing and administration

Most of the case study projects included a substantial international (GEF) budget to be spent over a number of years, with additional (usually much larger) cash or in-kind co-financing from national government or other donors.

Management, accounting and reporting for the use of the GEF funds is handled through the implementing agency (usually UNDP or UNEP).

LESSONS LEARNED IN PROJECT FINANCING AND ADMINISTRATION

- 1. International funding provides the flexibility to tackle difficult inter-sectoral issues
- The Project Document does not provide clear enough responsibilities to ensure the co-financing commitments will be delivered. Often this responsibility is left to the Project team, whereas it should be a clear responsibility of the PSC.
- 3. In-kind co-financing can be difficult to measure and fit into Atlas; good practice is for the project to record all inkind inputs of government officers to project activities.
- 4. Projects need to emphasise the importance of the total package of funding (GEF plus national) being available to deliver the total project.
- 5. The presence of a GEF project can provide opportunities

- for mobilising additional resources, although the administrative issues raised by managing such parallel financing that does not enter UNDP accounts can cause problems.
- 6. GEF financing does not provide adequately for supporting immediate livelihood and infrastructure needs, making it sometimes difficult to "sell" the project to local communities. Additional support through UNDP TRAC and GEF Small Grants Programmes have provide very helpful in this regard.
- 7. Problems can occur where international NGOs have been involved in the project design phase, and then compete with the government agencies for implementation funds.
- 8. Bureaucracy in UNDP and in Ministries can cause inefficiencies. One project manager estimated that he made 26,000 signatures in 5 years!
- 9. There is too much focus by UNDP on using "expenditure" as a measure of achievement.
- 10. 10. The reporting requirements of GEF projects are extremely burdensome, but little use seems to be made of the results.
- 11. A well-conducted Mid-Term Evaluation can be extremely helpful for identifying strong and weak points, and focusing the project onto its exit strategy.
- 12. Conflicts between the project donor and implementer over way of implementation can lead to counterproductive micromanagement.

4.4 Project implementation

With a fully designed project and governance, institutional and financial mechanisms in place, the project team supported by the Project Steering Committee has the challenge of delivering the expected project results on time and within budget. Factors that can affect the success of project implementation may arise both internally or externally.

LESSONS LEARNED IN PROJECT IMPLEMENTATION

- Internationally funded projects raise attention within government and have a major advantage in bringing international experience and good practices into the country.
- Nationally executed (NEX) projects, well integrated within and across government, can provide strong ownership and commitment for implementation and sustainability.
- Such projects can be a significant catalyst for changing governmental approaches: stimulating inter-sectoral cooperation, working in a more participatory way with NGOs and local communities, results based working.
- 4. An approach based on GO and NGO cooperation provides flexibility and the possibility to mobilise

- community support. In Pakistan, the project enabled Government to mandate NGOs to manage a national park.
- 5. Capacity building lies at the heart of successful implementation, and the transfer of international experiences can be one of the most important benefits.
- 6. Projects can be seen by stakeholders as additional burden, not their own responsibility.
- 7. Excellent communications about project objectives and achievements to all stakeholders is essential; regular monthly reporting and newsletters, plus good websites are good tools.
- 8. The fixed time-scale of a project can help keep government to deadlines and objectives, but often the timescale of the project is not sufficient enough to address the external challenges.
- 9. Flexibility on end-date can be important to overcome delays caused by unexpected natural or political events.
- 10. Frequently, there have been previous attempts to introduce similar changes but for one reason or another, these have not been sustained or replicated countrywide. These past projects need to examined further as a source of lessons for the current project.
- 11. Project managers must focus their attention on securing the big outputs / outcomes; often these are blurred by multitudinous "activities".
- 12. The ongoing processes of monitoring and risk management are crucial tools for ensuring that the project keeps on track.

Focus on big outcomes rather than small activities.

In Belarus, practical restoration activities were completed at 15 peatland sites with an area of 28,207.7ha.. This delivered significant enhancement of biodiversity, reduced emissions and increased sequestration of greenhouse gases, economic benefits from the reduction of fires, and livelihood benefits to local people.

In Kazakhstan, 63,645ha was added to the Alakol nature reserve.

4.5 Project exit strategies

Ensuring a sustainable impact is one of the greatest challenges faced by any fixed-term project. There can be a number of reasons why projects fail to deliver sustainable results, including: poor design; failure to deliver the planned outputs by the end of the project; failure to secure ongoing financing; natural disasters; political changes; changes in priorities.

The long timescale of GEF funding (up to 7 years) is a major advantage to tackling the very complex issues of integrated wetland management. However, even these durations may not be enough to ensure that the impacts of the project in terms of biodiversity or livelihood gains, new approaches to management

and new institutional structures are sustained. For this reason the development of a sound exit strategy is paramount. This should focus on who will be responsible for handling each activity, whether they have the necessary training, whether sustainable funding is in place.

LESSONS LEARNED IN PROJECT EXIT STRATEGIES

- 1. Sustainable exit strategies must be planned from Day 1 and reviewed frequently
- If support for the project, or motivation in the government agencies is low, an externally funded project will find it very hard to deliver a sustainable exit strategy. Some of the biggest challenges can lie in dysfunctions within the national executing agency.
- Capacity development is probably the most crucial contribution a project can make to the sustainability of project results. Hands-on learning by doing is the most effective method, but specific training courses were widely used by all of the case study projects.
- 4. The project team will not be in the field after the project ends to give support to the processes that have been established. Empowerment of local NGOs to continue this role is therefore vitally important to ensuring sustainability.
- 5. Whether at the site level (management plans and site management committees) or at the national level (national policies and national wetland committees), the

- establishment of legally adopted plans and functioning governance structures are crucial to sustainability.
- Lack of follow-up funds can be a big problem for sustainability and continuity. It is important to plan mechanisms for sustainable financing in the early stages of the project.
- 7. Development of follow-on projects can sometimes be needed to guarantee greater sustainability of the results. For example the Anzali Wetland project in its first phase developed all the key tools necessary for integrated management, but these were not absorbed adequately by the local stakeholders. A second project is now underway to ensure implementation is led locally.
- 8. Beware or purchasing expensive-to-maintain equipment, or developing facilities that cannot be maintained by the government after the project ends.
- Thought needs to be given to how to secure the often very experienced project staff after the project ends. Otherwise they will simply be lost from the system. One option is for government to take them on in a specialist wetlands unit.
- 10. Project activities, tools and lessons learned must be fully documented so they are easily available to others
- 11. 1A new owner or exit strategy needs to be developed for the project web site.

In Pakistan, many wetlands are in areas under military control, and providing training to military personnel was seen as the most effective way of delivering sustainable results.



In Belarus, the project developed a training system on sustainable use of degraded peatlands, their ecological restoration and maintenance of constructed water regulating devices. The system was introduced into the training system of the forestry sector (as most of the degraded peatlands are on the forest lands), and is available in electronic form on the project web-site.













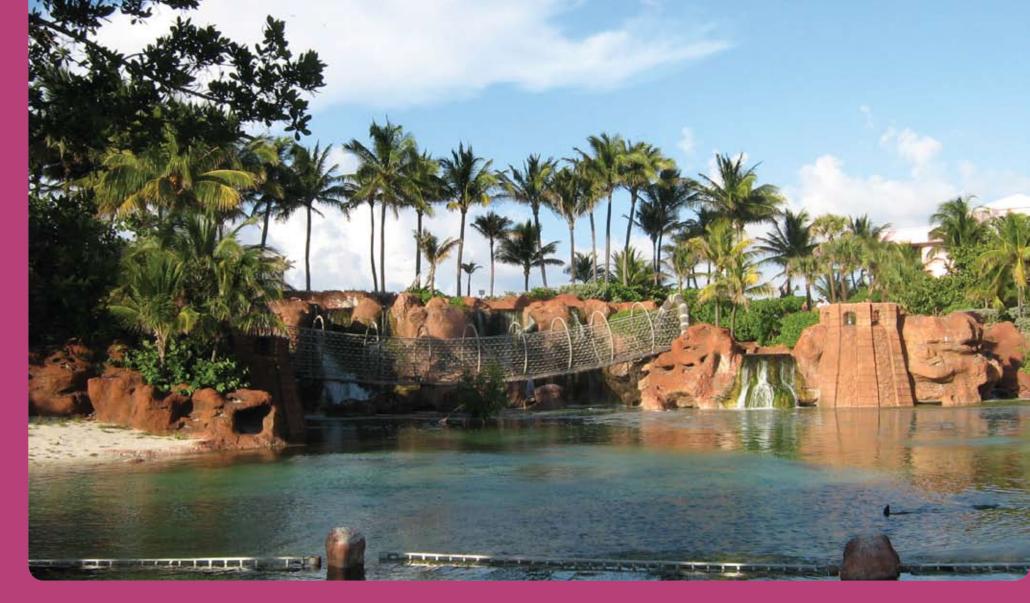








photo: Hatef Homayi



CHAPTER 5 CONCLUSIONS

For most of the project managers, this Community of Practice workshop was their first occasion for sharing practical lessons learned with managers from other large-scale, wetland projects in the region. Despite the wide geographical diversity, the project managers found they were addressing common issues of environmental degradation, balancing of conservation and development, institutional challenges and questions over how to leave a sustainable impact. Similarly, there were many commonalities in the approaches they were employing to address these challenges. This chapter draws out some high level conclusions from the workshop.

1. The challenge of wetland conservation is the challenge of sustainable development

Wetland ecosystems are extremely vulnerable to the impacts of human activities. This is because they provide both rich natural resources for human exploitation, and because their condition reflects human use of land and water throughout their upstream river basins. As wetlands integrate the effects of so many human activities, the state of a country's wetlands can be an indicator of its success in achieving sustainable development.

In many countries, the pace of the degradation of wetland ecosystems has reached alarming levels. The challenge is no longer just to protect the status quo, but to secure a fundamental shift of behaviour to more sustainable land and water management focused on the rehabilitation and restoration of degraded ecosystems and of the life support services they once

provided. For all these reasons, the conservation of wetland ecosystems is more complex and challenging than for other ecosystem types, and requires much time and resources.

2. Large-scale (GEF and other) projects can be a significant catalyst for change

The relatively long duration and substantial funding provided through GEF and similar projects enables, for the first time in many countries, the complex and important challenges facing wetlands to be addressed. Almost all of the case study projects succeeded to some degree in promoting a very positive shift from "reactive-sectoral" management, to "proactive-integrated-participatory" management of wetlands through intensive capacity building. There are many examples where the projects have been a catalyst for significant changes in approaches and behaviour - both at demonstration sites, and at national level.

Evidence that the projects had succeeded in delivering lasting improvements to the wetlands resource (ie Outcomes) was more patchy, reflecting the scale and severity of the challenge, and the fact that this is a very long-term process in which a project is just one step. A clear exception from this point was the peatlands restoration project in Belarus, which had succeeded in restoring over 28,000ha of degraded peatlands.

A clear message is that the wetland agenda is far more serious, fundamental and important than the funds and time that have so far been made available to it from national and international sources. A single project can therefore only be a part of the long process of moving towards more sustainable management of wetlands.

3. The ecosystem approach provides an appropriate and powerful framework for conserving wetlands

Application of the ecosystem approach is proving to be a powerful mechanism for the conservation of wetlands – compared to more traditional species and protected areas approaches. The balance of conservation and development, and the emphases on maintaining ecosystem functionality, on enabling people to benefit from healthy ecosystems, on taking management beyond the boundaries of protected areas, and on participatory approaches are all highly relevant to the conservation of wetlands. While the ecosystem approach provided the framework for the case studies, there were significant differences in how it was applied depending on the situation. One size does not fit all.

Integrated management is an effective tool for implementation of ecosystem approach at wetland site level. The key elements are to bring stakeholders from different sectors (both governmental and non-governmental) and communities together to develop and work towards a common vision for the area, and to resolve conflicts in resource use. Similarly, at national level, the ecosystem approach requires integrated working between sectors through national wetland policies and inter-sectoral institutional mechanisms, thereby supporting the actions that

take place at local level. Both local and national level activities requires significant changes to institutional arrangements.

4. Success in wetland conservation requires sustainable water management and adaptation to climate change

The availability of an adequate quantity of water, of good quality and at the right times is perhaps the most significant factor determining the condition of wetland ecosystems, particularly in arid regions of Central and West Asia and the Mediterranean basin. Increasing demand for water, particularly for irrigated agriculture, but also domestic and industrial uses, and for the generation of hydropower are all having dramatic impacts on wetlands, their biodiversity and life-support systems. Securing a water right for wetlands through legislation, has become one of the most critical issues to be addressed, and was being tackled by several of the project case studies.

The new environmental paradigm of climate change is exacerbating problems of water availability to wetlands, bringing both droughts and flooding. Such events are expected to become more frequent and extreme. Droughts and floods present huge challenges to short-term projects, sometimes destroying the progress made, and negating the chance to deliver the expected results within the project timescale. However, they do also provide opportunities to raise awareness of wetland values and unlock critical decisions for better water management, and to secure governmental commitments and funds for actions to adapt to the changing climatic conditions.

5. Wetland conservation is more about people, than biodiversity

Wetland conservation is more about managing those human activities that impact upon critical natural resources, than about managing the biodiversity itself. Although biodiversity conservation was the ultimate goal of the projects, the more successful project strategies focused on addressing unsustainable resource use and conflicts rather than developing comprehensive knowledge of the biodiversity or declaring more protected species or sites.

6. The primary focus should always be on restoring wetland functionality

Recent advances in understanding of the ecosystem services (= life support systems) provided by functioning wetlands provides a powerful evidence base for convincing people of their values - ecological, economic and cultural. It also provides a strong economic argument for wetland conservation. The provisioning services of wetlands are particularly important for poor, rural communities in developing countries, also offering opportunities for new livelihood options such as ecotourism. The contribution of wetlands to biodiversity support, regulation of river flows and groundwater supplies, microclimate and (in the special case of peatlands) carbon sequestration can all be vital at local, national and international scales. At least two of the case studies demonstrated new options for financing wetland conservation through Payments for Ecosystem Services, and this undoubtedly requires more attention in the future.

7.If there is awareness, there will be public and political support

People - be they decision-makers, communities around wetlands or the general public - will support the conservation of wetlands when they understand how valuable they are. Strong public support and the awareness of decision-makers are both crucial to securing the political commitment that is so essential for a sustainable future for wetlands. For this reason, a strong and effective communications programme must be a major component of any wetland conservation project. The Ramsar CEPA guidelines and tools are a powerful package to support project work in this regard.

8. The scale of the challenge demands ambitious visions

Many of the case studies were dealing with severe ecosystem degradation on a large scale, as exemplified by the situation at the location of the workshop, Lake Uromiyeh in Iran. Despite the challenges, the case studies emphasised the importance of setting ambitious, and innovative visions and plans for the restoration of such areas. The management planning process enables stakeholders to define and gather round such visions and the required institutional mechanisms for the restoration programme. Once agreed, the vision and approach will require communication, advocacy and political championing to secure the highest level of governmental support and financing.

Restoring a highly degraded wetland to a functioning ecosystem, can be extremely complex and expensive. The key

message is that it is far better to intervene before a wetland reaches such a critical state.

9.Multilateral Environmental Agreements (MEAs) provide a strong enabling mechanism for project implementation, while projects provide a significant opportunity to enhance national implementation of MEAs.

The implementation of biodiversity Multilateral Environmental Agreements (MEAs) at the national level and promoting synergy amongst them reinforces the development of harmonized national policies, including wetland policies.

The MEAs and other mechanisms such as European Union Directives are having a significant influence on the attention being given to wetlands, and the approaches being followed. Projects such as those considered in the workshop, provide an excellent opportunity to promote and mainstream the objectives of MEAs by promoting, disseminating and applying their guidelines (such as the CBD Ecosystem Approach), and toolkits (such as the comprehensive suite for wetlands prepared by the Ramsar Convention). The international designation of wetlands can also bring public and governmental attention and funds to address particular problems. Contrary to some perspectives, listing of wetlands on the Ramsar Convention's Montreux Record (of sites at risk) also proved to be a very positive stimulus for remedial action.

10.Sustainability of project results is paramount – and will only be achieved if the project team is no longer needed for the implementation to continue.

The most significant elements of project sustainability are: a) the raised capacity of local and national stakeholders to work in an integrated and participatory way for the conservation of wetlands; and b) a raised awareness among decision-makers, local communities around wetlands and the general public of the values of functioning wetland ecosystems. Without exception, the case study projects were making significant progress on these two points and could be expected to leave long-lasting (although difficult-to measure) benefits.

Two other key mechanisms that emerged from the workshop for project sustainability were c) the successful development and implementation of integrated management plans, under local governance and well integrated into the responsibilities of stakeholders; and d) the adoption of national wetland policies overseen by inter-Ministerial committees. The strengthening of local and national NGOs, respectively, for these items was also important.

Particular threats to project sustainability arose where the project failed to integrate closely enough with, and build the capacity of, the key Ministry(ies) or provincial/territorial agencies responsible for wetland conservation and management, where the project team itself took too strong a lead in developing the integrated management plans, and where mechanisms or

infrastructure were put in place that required funding sources outside normal government procedures.

Future of the Community of Practice

The concluding session of the workshop gathered the views of the participants on the value of the workshop, and whether it would be useful to organise similar events in the future. The views can be summarised as follows:

i. This meeting was a milestone for the various participating projects – in many cases the first chance they have had to share the practical experiences of project implementation (lessons learned, good practice, tools etc) with other project managers.

ii. The project managers noted that it would have been even more helpful to have had the opportunity of participating in such a workshop at the start of their project.

iii. The resource book will be very helpful, and the results should be shared globally, regionally and nationally.

iv.The Community of Practice needs to be made comprehensive, by bringing in other large wetland projects from across the region

v.Representatives of GEF and UNDP should participate in the future, since they provide crucial support to project managers, and several of the recommendations are targeted to them.

vi.The Community of Practice should be maintained as a self-financing network, although it would be helpful if GEF or UNDP could provide some financial support to the host country. UNEP ROWA also expressed its willingness to help with logistics and finances.

vii. The results of this workshop should be used to update the guidelines provided by the international conventions and other international bodies.

viii. The sharing of information between projects should be a continuous process. A mailing group should be established between the participating projects.

ix.International meetings, such as Convention COPs, will provide further opportunities to get together.

x.For future meetings, it would be good to spend more time in the field together, looking at practical issues on the ground.

Following this discussion, the representatives from Nepal expressed their interest to host the next meeting of the Community of Practice. They would investigate this upon their return to Nepal and duly inform the participants. This offer was warmly welcomed.

Annex. List of national participants

No	Name	Organization
1	Abbasnejad Hasan	West Azerbaijan DOE office
2	Abdollahpour Kimia	Journalist
3	Abdollahzade Zahra	West Azerbaijan DOE office
4	Ameri Mohammad-Ibrahim	Department of Environment
5	Arvahi Ali	Conservation of Iranian Wetlands Project
6	Asnaashari Mehri	Conservation of Iranian Wetlands Project
7	Ataee Aziz	West Azerbaijan DOE office
8	Babaei Nadali	West Azerbaijan DOE office
9	Bandpey Omran	Ministry of Mines and Industry
10	Barzegar Hamed	West Azerbaijan DOE office
11	Behnam Mitra	United Nations Development Program
12	Bonabi Omid	Conservation of Iranian Wetlands Project
13	Elmi Amir-mohammad	Department of Environment
14	Etemadfar Roozbeh	Ministry of Agricultural Jihad
15	Farahanirad Hamid	Conservation of Iranian Wetlands Project
16	Ghamkhar Alireza	Journalist
17	Ghorbanbeygi Haide	Department of Environment
18	Ghorbani Mohammad	Cultural Heritage Provincial Office (West Azerbaijan)
19	Habibi Azade	Cultural Heritage, Ecotourism and Handicrafts Organization
20	Hendifar Mitra	Department of Environment
21	Heydarian Javad	Journalist
22	Hoseini Seyed-Ahmad	Forests and Rangelands Organization
23	Hoseini Seyed-Masoud	Department of Environment
24	Jabbari Hojat	West Azerbaijan DOE office
25	Jabbari Mohammad	West Azerbaijan Water Authorities
26	Jalalat Golrokh	West Azerbaijan DOE office
27	Jamshidian Hosein	Journalist
28	Jozaee Javad	Department of Environment



Photograph of the national participants

29	Kakahaji Abdolamir	Ministry of Energy- Water resources management company
30	Karamad Vahidreza	West Azerbaijan DOE office
31	Kasraee Saeed	Ministry of the Interiors
32	Kazemi Morad	Department of Environment
33	Keshvari Zahra	Journalist
34	Khalili Alireza	Department of Environment
35	Khalilollahi Mojgan	West Azerbaijan DOE office
36	Khani Mokhtar	West Azerbaijan DOE office
37	Kharazian Moghadam Majid	Department of Environment
38	Khodaparast Abdolhosein	West Azerbaijan DOE office
39	Khodarahmi Reza	Ministry of Agricultural Jihad
40	Koochaki Sara	Conservation of Iranian Wetlands Project
41	Mahfoozi Mohsen	Department of Environment
42	Makvandi Maryam	Khouzestan DOE Office
43	Margan Leila	Journalist
44	Mohammadi Mehdi	NHK World TV
45	Mohammadi Zahra	Journalist
46	Mohammadian Akbar	Miandoab DOE Office
47	Morteza Farid	Department of Environment
48	Nakayama Hideki	NHK World TV
49	Nazaridoust Ali	Conservation of Iranian Wetlands Project
50	Nazari-Soltan Mehran	Salmas DOE office
51	Noori Seye-kamaleddin	Ministry of the Interiors
52	Parastar Alireza	Ministry of Agricultural Jihad
53	Pesyan Saeed	West Azerbaijan DOE office
54	Rahmani Hosein	West Azerbaijan DOE office
55	Rajabkhah Yasaman	Ramsar Regional Centre
56	Ranaghad Hamid	West Azerbaijan DOE office



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57	Sadeghizadegan Sadegh	Siberian Crane Project
58	Safari Faramarz	Naghade DOE Office
59	Samari Shahin	West Azerbaijan Agricultural Jihad Organization
60	Sanati Mojtaba	NHK World TV
61	Seyed-Ghoreishi Alireza	Conservation of Iranian Wetlands Project
62	Shahand Saeed	West Azerbaijan DOE office
63	Shariat Ali	United Nations Development Program
64	Shoja Moosa	West Azerbaijan DOE office
65	Sokhanvar Farough	Mahabad DOE Office
66	Soleymani Mohsen	Conservation of Iranian Wetlands Project
67	Targhroudi Farahnaz	Department of Environment
68	Yahyazade Miryousef	Artemia Research Centre
69	Yousefi Omid	West Azerbaijan DOE office
70	Zandi Farzad	Department of Environment



Photograph of the national participants



