

ACRONYMS

AECID	Spanish Agency for International Cooperation for Development
CA	Collective Actions
CAA	Competent Administrative Agencies
CoM	Collaborative Management
DANIDA	Danish International Development Agency
EEAA	Egyptian Environmental Affairs Agency
GOPP	General Organization for Physical Planning
IAA	Integrated Agriculture-Aquaculture
ICOM	Integrated Coastal and Ocean Management
ICZM	Integrated Coastal Zone Management
IEIA	Integrated Environmental Impact Assessment
IWMD	Integrated Water Management District
IWRM	Integrated Water Resources Management
LCA	Local Competent Authority
MAP	Mediterranean Action Plan
MCO	Matruh Coastal Observatory
MICZMC	Matruh ICZM Committee
MRAG	Matruh Research Advisory Group
MRMP	Matruh Resources Management Project
MSICZM	Integrated Coastal Zone Management Plan for the coastal areas between Marsa Matruh and El Sallum
MSSD	Mediterranean Strategy for Sustainable Development
MWRI	Ministry of Water Resources and Irrigation
NWC	Northwest Coast
NWCIS	Northwest Coast Indicator System
NWCP	Northwest Coast Partnership
NWRP	National Water Resources Plan
PAP/RAC	Priority Actions Programmed Regional Activity Centre of the Mediterranean Action Plan
PPP	Public Private Partnership
PO	Policy Options
SEA	Strategic Environmental Assessment
SPA	Shoreline Protection Authority
TDA	Tourist Development Authority
TS	Technical Secretariat
UNEP	United Nations Environment Programme
WUA	Water User Association
WWII	World War II

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GUIDELINES FOR THE ICZM PLAN FOR THE COASTAL AREAS BETWEEN MARSA MATRUH AND EL SALLUM, EGYPT

VOL.2

GUIDELINES FOR THE ICZM PLAN FOR THE COASTAL AREAS BETWEEN MARSA MATRUH AND EL SALLUM, EGYPT



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GUIDELINES FOR THE ICZM PLAN FOR THE COASTAL AREAS BETWEEN MARSА MATRUH AND EL SALLUM, EGYPT



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ACTION FACTSHEETS



The Action Factsheets are the summary of the MSICZM Plan provisions. They provide the necessary information regarding each action, and they include the following points:

- Strategic Objective
- Operational Objective
- Action and Action Code
- Roadmap

- Description
- Stakeholders involved
- Related Action

- Timeline
- Estimated Costs
- Indicators

- Policy Considerations
- Environmental Objectives

The Action Factsheets are ordered by Strategic and Operational Objectives, but the colour of each Action Factsheets is related to the four time-bounded roadmaps. Actually, the colour legend is as follows:

- Blue is RM01-Establishing an Institutional and Regulatory Framework for ICZM
- Yellow is RM02-Building Local Capacities for Coastal Governance
- Green is RM03-Developing a Research Agenda
- Pink is RM04-Implementing Coastal Stewardship

Strategic Objective	Maximizing COORDINATION AND COOPERATION between administrations and agencies	
Operational Objective	Increasing COORDINATION between Matruh Governorate and Central Administrations	
Action	Establishment of the Matruh ICZM Committee and Technical Secretariat	A.01.01
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>The Matruh ICZM Committee is at the core of the governance model. It is the decision-taking body within the ICZM process. It is to be formed by the main policy-makers of Matruh and one representative of the National ICZM Committee. Both Committees are to work in coordination linking national policies with regional plans. Therefore, Matruh ICZM Committee is a key-element in the nested governance system.</p> <p>The Matruh ICZM Committee will require a Technical Secretariat. The Secretariat will be the most active administrative body. It is to manage daily activities, such as develop the agenda, organize events, communicate with advisory board; and to develop specific regulations, promote the creation of partnerships and associations, build consensus among different interests and ensure sound decisions based on the scientist agenda.</p>	
Stakeholders involved	<p>Composition of the Matruh ICZM Committee: (up to 6)</p> <ul style="list-style-type: none"> > National ICZM liaison Officer > General Secretary of Matruh > Technical Secretariat MICZMC > Central Dpt. of Matruh Admin. > Public Agencies sectorally focused 	
Related actions	<p>Subsequent Actions:</p> <ul style="list-style-type: none"> > Training technical staff in ICZM 	<p>Timeline</p> <p>2013-2014</p>
Timeline	2011-2020	
Estimated Cost (EGP)	Installation Costs	150,000.00
	Employees (Senior officer, 2 officer and Secretary)	100,000.00
	Operational Expenses	10,000.00
	Office Equipment	30,000.00
	TOTAL COSTS IN 10 YEARS	1,730,000.00
Indicators	<p>P: Number of agreements per Committee meeting R: Number of components and institution of origin R: Budget approval for the Technical Secretariat (I.01)</p>	
Policy considerations	>The Matruh ICZM Office is to host the Matruh Coastal Observatory and the technicians working on the Local Agenda to be launched during the ICZM Plan implementation	
Environmental objectives (SEA)		

Strategic Objective	Maximizing COORDINATION AND COOPERATION between administrations and agencies	
Operational Objective	Increasing COORDINATION between Matruh Governorate and Central Administrations	
Action	Formal adoption of ICZM policies and principles by Matruh Administration	A.01.02
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>Matruh Governorate will formally adopt the ICZM principles and develop ICZM policies in coordination with the Central Administration.</p> <p>This formal adoption is to contribute to building mutual trust not just with the Central Administration but also with local communities.</p> <p>The ICZM Protocol for the Mediterranean clearly establishes the main ICZM objectives and principles in articles 5 and 6.</p>	
Stakeholders involved	> Matruh ICZM Committee	
Related actions	Subsequent Actions:	Timeline
	> Development of ICZM regulation	2012
Timeline	2011	
Estimated Cost (EGP)	Included in Action 01	
Indicators	<p>P: Quantifiable objectives and principles for ICZM formally adopted</p> <p>R: Approval of Communication</p>	
Policy considerations	<p>ICZM Objectives (ICZM Protocol):</p> <ul style="list-style-type: none"> > Sustainable development > Preservation > Sustainable use > Integrity > Reducing effects of natural hazards > Coherence between public and private initiatives <p>ICZM Principles (ICZM Protocol):</p> <ul style="list-style-type: none"> > Complementary and interdependent nature of the marine part and the land part > Carrying capacity of the coastal zone > Ecosystems approach > Governance > Institutional coordination > Strategies, plans and programmes > Multiplicity and diversity of activities > Balanced allocation of uses > Preliminary assessments of risks > Restoration of environmental damage 	
Environmental objectives (SEA)		

Strategic Objective	Maximizing COORDINATION AND COOPERATION between administrations and agencies	
Operational Objective	Increasing COORDINATION between Matruh Governorate and Central Administrations	
Action	Coordination of competencies between administrations for the development of ICZM process	A.01.03
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>The role and competencies of each administration (Matruh Governorate and Central Administration) should be clearly differentiated to strengthen coastal management and avoid conflicts and financial resources gaps between both administrations (Legislative Forum-Action 10).</p> <p>The agreement between administrations is to take into account the necessary human and financial resources. Once the agreement upon the distribution of competencies has been achieved, Matruh ICZM Technical Secretariat it to monitor the effective compliance.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Matruh Governorate > Ministry of Finances > Ministry of Local Development > Other Ministries involved in the agreements 	
Related actions	<p>Previous Action</p> <ul style="list-style-type: none"> > Establishment of a Legislative Forum on Distribution of Competencies between Central and Regional administrations: Conflicts and Challenges 	<p>Timeline</p> <p>2011</p>
Timeline	2012-2017	
Estimated Cost (EGP)	Meeting Expenses	36,000.00
	Travel Expenses	10,000.00
	TOTAL COSTS IN 6 YEARS	276,000.00
Indicators	<p>P: Number of agreements between Matruh Governorate and Central Administration (Legislative Forum)</p> <p>R: Functions and actors clearly defined by legislation or administrative acts (1.02)</p>	
Policy considerations	<ul style="list-style-type: none"> > Agreement on competencies distribution > Coordination of the transfer from Central Government to Matruh Governorate of human and financial resources, scaling them to institutional capacity > Links between ICZM and national development goals and priorities > Allocation of economic resources coherently with the development goals and ICZM priorities 	
Environmental objectives (SEA)		

Strategic Objective	Maximizing COORDINATION AND COOPERATION between administrations and agencies	
Operational Objective	Increasing COORDINATION between Matruh Governorate and Central Administrations	
Action	Development of Institutional Agreements between Matruh Governorate and Ministry of Defence to promote common use of military infrastructures and urban coastal areas	A.01.04
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>The Egyptian Army possesses a significant percentage of land in the Northwest Coast. In fact, almost the entire coastline is a military zone, which also includes important areas of urban centers such as El Sallum and Marsa Matruh.</p> <p>These urban military areas are hampering the reasonable growth of the four urban centers. Indeed, some of these urban military areas are surrounded by urban developments (Marsa Matruh) and other areas are impeding the growth of the urban center (El Sallum, Sidi Barrani).</p> <p>Additionally, there are certain military infrastructures, such as the military railway and certain North to South roads in the study area, which are to significantly increase the standards of living conditions of small-householders in southern rural areas.</p> <p>Specific Institutional Agreements are necessary to ensure the common use of those areas of scarce strategic interest for the Army and of special relevance for the proper development of the study area.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Matruh ICZM Committee > Ministry of Defence 	
Related actions		
Timeline	2013-2020	
Estimated Cost (EGP)	Meeting Expenses	5,000.00
	Travel Expenses	10,000.00
	TOTAL COSTS IN 8 YEARS	120,000.00
Indicators	<p>P: Number of meetings per year</p> <p>R: Number of feddans under a shared use agreement</p>	
Policy considerations	<ul style="list-style-type: none"> > Use of these strategic zones for urban services (such as water treatment plants, research stations, desalination plants, green areas, waste management plant, roads...) > Progressive adaptation of El Sallum seafront to urban areas for public uses. > Improve the territorial connection between north and south zones within the study area > To promote railway as a connecting element between the marakaz (for water distribution, livestock transportation and farming uses) 	
Environmental objectives (SEA)		

Strategic Objective	Maximizing COORDINATION AND COOPERATION between administrations and agencies	
Operational Objective	Developing a RESEARCH AGENDA of applied research to support policy-making and management decisions	
Action	Organization of a High Level Workshop on ICZM in Arid Regions	A.01.05
Roadmap	Developing a Research Agenda	
Description	<p>A High Level Workshop on ICZM in Arid Regions is to bring ICZM processes closer to local stakeholders and policy-makers. In fact, the presence of international experts is to promote the interest of local research institutions in ICZM.</p> <p>The Workshops is to be open to any stakeholder interested in it and it will be a meeting point for researchers and policy-makers where useful research outputs are to be discussed between the stakeholders.</p> <p>Moreover, the Workshop will be the starting point to launch the Research Agenda of Matruh Northwest Coast.</p>	
Stakeholders involved	Coordinators: > Matruh ICZM Committee	
Related actions	Subsequent Action > Establishment of the Matruh Research Advisory Group	Timeline 2013-2020
Timeline	2012	
Estimated Cost (EGP)	Others (International Conference)	400,000.00
	TOTAL COSTS IN 1 YEARS	400,000.00
Indicators	R: Number an origin of lectures and participants	
Policy considerations	> Synergies between research institutions - opportunities for collaboration > Test Northwest Coast as a conference tourist destination	
Environmental objectives (SEA)		

Strategic Objective	Maximizing COORDINATION AND COOPERATION between administrations and agencies	
Operational Objective	Developing a RESEARCH AGENDA of applied research to support policy-making and management decisions	
Action	Establishment of the Matruh Coastal Observatory	A.01.06
Roadmap	Developing a Research Agenda	
Description	<p>The Matruh Coastal Observatory is to ensure the free flow of information of coastal issues.</p> <p>It will compile information from diverse sources to periodically update and publish the Northwest Coast Indicators System (see Strategic Environmental Assessment).</p> <p>This Indicators System will evaluate the progressions on ICZM and sustainable development carried out along the Northwest Coast. It will be updated and published for all the interested parties.</p>	
Stakeholders involved	Matruh ICZM Committee	
Related actions	Subsequent Action	Timeline
	> Monitoring progress on ICZM and on Matruh resources stewardship	2013-2020
Timeline	2012-2020	
Estimated Cost (EGP)	Employees (Senior Officer part-time, Officer full time and Officer part-time)	36,000.00
	Operational Expenses	50,000.00
	Office Equipment	100,000.00
	TOTAL COSTS IN 9 YEARS	874,000.00
Indicators	P: Number of institutions that provide and get information to/from the Observatory R: Number of published reports by Matruh Coastal Observatory (I.03)	
Policy considerations		
Environmental objectives (SEA)	> Prepare the NWC Indicator System. > Prepare the Annual Operational Plans. > Perform Data collection, analysis, interpretation, and prepare and present the annual REPORTS to the higher committees.	

Strategic Objective	Maximizing COORDINATION AND COOPERATION between administrations and agencies	
Operational Objective	Developing a RESEARCH AGENDA of applied research to support policy-making and management decisions	
Action	Establishment of the Matruh Research Advisory Group	A.01.07
Roadmap	Developing a Research Agenda	
Description	<p>There is an increasing recognition that management activities and decision-making should be based upon the best available science. However, there are several obstacles to the effective use of science in policy-making, many of which can be attributed to the lack of communication and interaction between the research community (science providers) and coastal practitioners (science users).</p> <p>Coordination and communication of scientific research can be approached by means of active partnerships with universities and the wider research community, through the creation of the Matruh Research Advisory Group. This Group is to be the forum where decision-makers and academia can discuss priorities and management information needs.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Desert Research Center > Matruh Resources Management Programme > Alexandria University- Matruh Faculty > EEAA > CoRI > SPA > NIOF > Matruh officers 	
Related actions	Subsequent Action > Development of Specific Research Projects focussed on the NWCP priorities	Timeline 2014-2020
Timeline	2013-2020	
Estimated Cost (EGP)	Meeting Expenses	20,000.00
	Travel Expenses	20,000.00
	TOTAL COSTS IN 8 YEARS	320,000.00
Indicators	P: Number and character of the participants in the meetings R: Number of agreements per meeting to develop specific priorities	
Policy considerations	> Special focus should be done on development of carrying capacity assessments, cost-efficiency policies and on capacity needs of Matruh administration	
Environmental objectives (SEA)	> Provide environmental legal advice to the MICZC and the partnerships, and ensure that actions are completely legally. > Provide scientific advice to the different policy levels on environmental issues and concerns.	

Strategic Objective	Maximizing COORDINATION AND COOPERATION between administrations and agencies	
Operational Objective	Developing a RESEARCH AGENDA of applied research to support policy-making and management decisions	
Action	Development of Specific Research Projects within the NWCP focussed on the priorities of the Working Groups	A.01.08
Roadmap	Developing a Research Agenda	
Description	<p>Matruh Research Advisory Group, in coordination with the Technical Secretariat of Matruh ICZM Committee, is to launch joint research projects dealing with the lack of knowledge on specific management issues: water management (socio-economic wadi development, reduction of natural risk in urban areas...), integrated farming management system, eco-tourism...</p> <p>Moreover, project selection criteria will be based on the applicability of the research objectives to resources stewardship and the needs raised by the NWCP and Matruh ICZM Committee.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Matruh Research Advisory Group > Matruh ICZM Committee 	
Related actions	Previous Action	Timeline
	> Creation of the Matruh Research Advisory Group	2013-2020
Timeline	2013-2020	
Estimated Cost (EGP)	Others	100,000.00
	TOTAL IN 8 YEARS	800,000.00
Indicators	<p>P: Funds (L.E.) per project</p> <p>P: Average of partners per joint research project</p> <p>R: Ongoing and developed research projects per year (1.04)</p>	
Policy considerations	<ul style="list-style-type: none"> > Develop synergies between research institutions > Promote joint research with national or international research centers with similar management problems > Encourage the creation of partnerships and joint ventures between research institutions and public agencies or private stakeholders > Assessment of the absorption capacity for urban areas > Study options for storing water through recharge into the groundwater system, and suitable dam size to get a better temporary yield/capacity ratio. > Development of farming potential studies > Study of coastal dynamic and climate change effects to prevent environmental impacts; delimit flood-risk areas and regulate their uses; ensure functioning of coastal defences. > Development of threatened fauna and flora recuperation programmes > Pursuit of scientific activities, research and interpretation of the coast and the desert without permanent construction 	
Environmental objectives (SEA)	> Prepare the NWCP Research Plan including priority areas from which thematic action plans shall be developed.	

Strategic Objective	Maximizing COORDINATION AND COOPERATION between administrations and agencies	
Operational Objective	Establishing long-term funding mechanisms	
Action	Ensure International Donors to provide enough funds to maintain ICZM plan	A.O1.09
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>ICZM is a continuous and dynamic process that requires a long-term funding mechanism.</p> <p>In a context of limited financial resources, international donors will be important stakeholders that can significantly contribute to maintain the ICZM plan and promote its goals.</p>	
Stakeholders involved	> Technical Secretariat Matruh ICZM Committee	
Related actions	Previous Action	Timeline
	> Establishment of the Matruh ICZM Committee	2011-2020
Timeline	2012-2020	
Estimated Cost (EGP)	Employees (extra employee at MICZM Secretariat)	18,000.00
	TOTAL COSTS IN 9 YEARS	162,000.00
Indicators	<p>P: Number of agreements between the Technical Secretariat and international agencies</p> <p>R: Number of projects funded by external institutions (I.05)</p>	
Policy considerations	<p>> Demining is to be a priority for long-term funding.</p> <p>> EU-Egypt Innovation Fund represents a good source of funds for small to medium projects related with:</p> <ul style="list-style-type: none"> - Water (efficiency / desalination / wastewater treatment) - Food (processing and packing / quality and sanitary control) - Agriculture (organic fertilizer / sustainable production) - Environment (pollution / environmental monitoring / waste management) 	
Environmental objectives (SEA)		

Strategic Objective	Reconsidering existing LAWS AND REGULATIONS	
Operational Objective	Improve distribution of competencies	
Action	Establishment of a Legislative Forum on Distribution of competences between Central and Regional administrations: Conflicts and Challenges	A.02.10
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>The distribution of competencies between different levels of the administration (central, regional and local) is to be clearly defined and agreed to strengthen coastal management, reduce conflicts and increase financial resources availability.</p> <p>A Legislative Forum is to be established as a framework in which an open dialogue between central and regional administrations can take place. The aim of the Forum is to discuss the current conflicts and the foreseen challenges they are facing when strengthening the administrative capacity and the legal framework, increasing financial resources to respond to community priorities and promoting better local participation in planning and management of natural resources use and exploitation.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Matruh Governorate > Ministry of Local Development > Ministry of Finance > Other Ministries maybe involved 	
Related actions	Subsequent Actions	Timeline
	> Coordination of competencies between administrations for the development of ICZM process	2012-2020
Timeline	2011	
Estimated Cost (EGP)	Others	75,000.00
	TOTAL COSTS IN 1 YEARS	75,000.00
Indicators	<p>P: Number of identified conflict competencies</p> <p>R: Ratio between identified conflicts and agreements to resolve them (II.01)</p>	
Policy considerations	> The Forum is to be convoked as many times as needed to progress on conflict mediation and interagency cooperation.	
Environmental objectives (SEA)		

Strategic Objective	Reconsidering existing LAWS AND REGULATIONS	
Operational Objective	Developing specific ICZM LAW OR REGULATION	
Action	Development of ICZM regulation	A.02.11
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>ICZM process will require a legal and regulatory framework to clarify the objectives, instruments and tools, planning procedures, implementation and monitoring actions, conflict resolution mechanisms and public participation processes.</p> <p>The ICZM regulation is to pay special attention to the definition of the ICZM committees, their composition, roles and competencies, and the relational system between government and societal stakeholders promoted by ICZM policies.</p>	
Stakeholders involved	> Technical Secretariat of Matruh ICZM Committee	
Related actions	Subsequent Actions	Timeline
	> Training of technical staff in ICZM	2012-2013
Timeline	2012	
Estimated Cost (EGP)	Included in Action 01	
Indicators	<p>R: Regulation approved</p> <p>R: Clearly defined interagency process and authority (competences, communication between institutions, committees, etc.) (11.02)</p>	
Policy considerations	<ul style="list-style-type: none"> > Links between ICZM and national development goals and priorities > Definition of roles and communication strategy between ICZM bodies > Considering protection, zoning and management instruments established in the environmental legislation > Public management of beaches, favouring free access and providing services (parking, access, cleaning) for the urban beaches, adequately sited 	
Environmental objectives (SEA)		

Strategic Objective	Reconsidering existing LAWS AND REGULATIONS	
Operational Objective	Developing specific ICZM LAW OR REGULATION	
Action	Incorporation of Collaborative Management into Matruh regulation	A.02.12
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>Local users alone can hardly manage most natural resources in the complex contemporary world, and even centralized systems are dependent on the local level for example for the knowledge and skills of local users. Since many resource management systems are cross-scale, different management problems must be solved simultaneously at different levels and some kind of allocation of tasks is necessary (Berkes, 2002).</p> <p>Collaborative management is a continuous problem-solving process, rather than a fixed state, involving extensive deliberation, negotiation and joint learning within problem-solving networks (Carlsson, 2005). In other words, co-management is the approach to solving resource management problems through partnerships and it is good for approaching a variety of tasks, from providing linkages to risk-sharing and conflict resolution.</p> <p>Therefore, to implement the proposed Plan a specific regulation setting the basis and procedures for Collaborative Management (CoM) must be developed. This regulation is to determine the Groups and Committees that will take part in the CoM during its different stages.</p> <p>It is very important that this regulation clearly determines the communication strategy between all the groups and Committees as well as duties and responsibilities of the different groups taking part in Collaborative Management.</p>	
Stakeholders involved	> Technical Secretariat of Matruh ICZM Committee	
Related actions	Previous Action	Timeline
	> Development of ICZM regulation	2012
Related actions	Subsequent Action	
	> Training of technical staff in Collaborative Management	2013-2015
Timeline	2013	
Estimated Cost (EGP)	Included in Action 01	
Indicators	R: Regulation approved R: Interagency process and authority defined clearly (II.03)	
Policy considerations	> Proposal of a set of Collective Actions: Local Agenda and Issue-driven Working Group > Proposal of a set of Policy Options: Technical Secretariat of Matruh ICZM Committee > Implementation of Collectives Actions: Local Associations and Partnerships, Private sector/Entrepreneurs, Public administrations and agencies, Inter-organizational partnerships. > Monitoring of Collective Actions implementation: Competent Authority	
Environmental objectives (SEA)		

Strategic Objective	Reconsidering existing LAWS AND REGULATIONS	
Operational Objective	Simplifying REGULATIONS concerning resource use and exploitation	
Action	Establishment of a Single-Point-of-Contact in Matruh administration	A.02.13
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>Egyptian regulation and administration is strongly sectoral and natural resource users are frequently discouraged due to dense administrative procedures. Management of Matruh coastal resources requires an increased dialogue to promote wise use and stewardship.</p> <p>The establishment of a Single-Point-of-Contact in Matruh administration will facilitate the dialogue between administration and users. Specific resource users requiring the Single-Point-of-Contact are aquaculture investors, tourism entrepreneurs, local associations and fishermen and farmers.</p> <p>A Single-Point-of-Contact will facilitate administrative information and compile user suggestion to reconsider specific regulations</p>	
Stakeholders involved	> Matruh Governorate	
Related actions		
Timeline	2014-2020	
Estimated Cost (EGP)	Employees	6,000.00
	Operational Expenses	5,000.00
	Office Equipment	5,000.00
	TOTAL COSTS IN 7 YEARS	82,000.00
Indicators	R: Applications received in the Single Point of Contact (II.04)	
Policy considerations	<ul style="list-style-type: none"> > Correction of existing overlaps or gaps in the regulation of natural resource use and exploitation > Promotion of the sustainable exploitation of marine and coastal resources > Make easier the authorisation of agriculture related installations 	
Environmental objectives (SEA)		

Strategic Objective	Reconsidering existing LAWS AND REGULATIONS	
Operational Objective	Simplifying REGULATIONS concerning resource use and exploitation	
Action	Development of specific regulations to solve detected problems and incoherencies during Collaborative Management implementation	A.02.14
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>ICZM is a continuous and dynamic learning-process; indeed Olsen concluded that ICZM is about learning.</p> <p>Once the CoM regulation is part of Matruh regulation and the approval and development of Collective Actions have taken place, a revision and adaptation of the existing regulation will take place to update those aspects of the regulation that presented difficulties during the planning process.</p> <p>Technical ICZM Secretariat is to compile the suggestions and complaints of all the stakeholders taking part in the Collaborative Management process.</p>	
Stakeholders involved	> Technical Secretariat of Matruh ICZM Committee	
Related actions	Previous Action	Timeline
	> Incorporation of Collaborative Management into Matruh regulation	2013
Timeline	2017-2020	
Estimated Cost (EGP)	Operational Costs	5,000.00
	TOTAL COSTS IN 4 YEARS	20,000.00
Indicators	<p>P: Number of incoherencies detected</p> <p>R: Ratio between modifications in CoM regulation and problems detected (I1.05)</p>	
Policy considerations		
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Conserve the natural status of the environment. > Sustainable use of natural resources. > Address any legal conflicts among environmental regulations and develop a mechanism to overcome such conflicts. 	

Strategic Objective	Ensuring stakeholder INVOLVEMENT	
Operational Objective	Developing effective MECHANISMS for stakeholders' involvement	
Action	Establishment of Northwest Coast Partnership (NWCP)	A.03.15
Roadmap	Building Local Capacities for Coastal Governance	
Description	<p>The Northwest Coast Partnership represents the democratic body of the nested governance system. The Partnership will embrace those stakeholders with interest in the study area, including administrations, research institutions, users, associations, private sectors and NGOs.</p> <p>It will represent the forum of the ICZM process, where all the issues and priorities for coastal resources stewardship will be discussed.</p> <p>Progressions on consensus building and conflict resolution will be the main targets of the Northwest Coast Partnership. This consensus is required during the definition of priorities, lines of action and issues to be agreed upon.</p>	
Stakeholders involved	<p>Composition of NWCP:</p> <ul style="list-style-type: none"> > Technical Secretariat of Matruh ICZM Committee > Public Administrations and Authorities... > Local associations > NGOs > Markaz representatives > Matruh Research Advisory Group > Private sector / Entrepreneurs 	
Related actions	Previous Action	Timeline
	> Development of ICZM regulation	2012
	Subsequent Action	
	> Establishment of Working Groups within the NWCP	2014-2015
Timeline	2013-2020	
Estimated Cost (EGP)	Operational Expenses	5,000.00
	Meeting Expenses	
	Travel Expenses	10,000.00
	TOTAL COSTS IN 8 YEARS	200,000.00
Indicators	<p>P: Number and origin of partners participating in the meetings</p> <p>R: Ratio between agreements achieved and issues discussed within the NWCP (III.01)</p>	
Policy considerations		
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Ensure stakeholders' involvement > Ensure sustainable use of the coastal and marine resources > Ensure conservation of sensitive areas of habitats and ecosystems > Ensure conservation of the area's biodiversity 	

Strategic Objective	Ensuring stakeholder INVOLVEMENT	
Operational Objective	Developing effective MECHANISMS for stakeholders' involvement	
Action	Establishment of specific access to micro-credits for Collective Actions Implementation	A.03.16
Roadmap	Building Local Capacities for Coastal Governance	
Description	<p>Specific access to micro-credits is very important for a successful coastal stewardship in the Northwest Coast. The scarce availability of public funds for plan implementation requires an increased participation of the private sector.</p> <p>Therefore, the establishment of specific micro-credits for the implementation of Collective Actions will significantly contribute to engage more stakeholders to participate actively in the Plan and the TS will be the agency in charge of advising the different stakeholders and mediate with the commercial banks.</p>	
Stakeholders involved	Coordinating: > Technical Secretariat Matruh ICZM Committee	
Related actions	Required Actions	Timeline
	> Training local communities in organisational and technical capabilities	2013-2016
	Subsequent Actions	
	> Implementation of Collective Actions	2017-2020
Timeline	2013-2020	
Estimated Cost (EGP)	Others (2% of interest reduction)	200,000.00
	TOTAL COSTS IN 8 YEARS	1,600,000.00
Indicators	P: Agreements between Technical Secretariat and Banks P: Number of families favoured by micro-credits R: Percentage of Projects and Collective Actions raised by micro credits versus request (III.02)	
Policy considerations	> Develop guidelines regarding the use of micro-credits for Collective Actions implementation.	
Environmental objectives (SEA)		

Strategic Objective	Ensuring stakeholder INVOLVEMENT	
Operational Objective	Developing conflict resolution tools	
Action	Development of Conflict Resolution Guidelines and Procedures	A.03.17
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>The implementation of ICZM policies will require an important effort in consensus building and conflict resolution.</p> <p>The creation of diverse Working Groups (Local Agenda and Issue-Driven) will be useful means to discuss and contrast different interests and management options. It is expected that during their work many conflicts are to arise.</p> <p>The provision of Guidelines and the establishment of a certain Code of Conduct are to facilitate negotiation and decision-making processes within the different Working Groups and Workshops.</p>	
Stakeholders involved	> Technical Secretariat of Matruh ICZM Committee	
Related actions	Previous Action > Development of ICZM regulation > Incorporation of Collaborative Planning into Matruh regulation	Timeline 2012 2013
	Subsequent Actions > Training of technical staff in ICZM	2012-2013
Timeline	2012	
Estimated Cost (EGP)	Operational Costs	15,000.00
	TOTAL COSTS IN 1 YEAR	15,000.00
Indicators	R: Number of meetings in which Guidelines are used to mediate in specific conflicts R: Percentage of changes in the identified conflicts (III.03)	
Policy considerations		
Environmental objectives (SEA)	> Ensure stakeholders' involvement > Ensure sustainable use of the coastal and marine resources > Ensure conservation of sensitive areas of habitats and ecosystems > Ensure conservation of the area's biodiversity > Ensure fair benefit share of environmental resources > Resolve any potential land use conflict	

Strategic Objective	Ensuring stakeholder INVOLVEMENT	
Operational Objective	Promoting COLLABORATIVE MANAGEMENT	
Action	Creation of Markaz-driven Working Groups in the Northwest Coast	A.03.18
Roadmap	Building Local Capacities for Coastal Governance	
Description	<p>ICZM and Collaborative Planning are to approach Governmental Agencies and decision-takers to private sector, local communities, associations and NGOs.</p> <p>Matruh ICZM Technical Secretariat requires human resources permanently working with the stakeholders present in each Markaz. ICZM Delegates are to carry out many activities during the ICZM Plan implementation within the marakaz area, and they will work hand in hand with the Issue-Driven Working Groups during the Collective Actions proposal.</p> <p>Many of the activities of ICZM Delegates, such as awareness raising campaigns, supporting the creation of local associations, local partnership and consortia promotion, are to play a very active role in creating social constituency, in encouraging behavioural changes and finally in promoting the success of the Collaborative Management within the Northwest Coast ICZM Plan.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Matruh ICZM Technical Secretariat - Delegates > Marakaz representative > Local associations/Entrepreneurs > Tribes representatives 	
Related actions	Previous Action	Timeline
	> Development of ICZM regulation	2012
	Subsequent Actions	
	> Proposal of a set of Collective Actions	2014-2015
Timeline	2014-2016	
Estimated Cost (EGP)	Employees (2 Officers)	24,000.00
	Operational Costs	5,000.00
	Office Equipment	5,000.00
	Travel Expenses	20,000.00
	TOTAL COSTS IN 3 YEARS	152,000.00
Indicators	<p>P: Number of local stakeholders participating in Local Agendas R: Collective Actions proposed by local stakeholders per markaz (III.04)</p>	
Policy considerations	<ul style="list-style-type: none"> > ICZM Delegates responsible for local Agendas development, represent the necessary link between ICZM process and Collaborative Management process > Local Agenda should consider: <ul style="list-style-type: none"> - Needs on strategic infrastructures - Improving waste management - Building connecting roads between urban areas and railway, and roads to avoid traffic congestion, as an external bypass in Marsa Matruh 	
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Ensure stakeholders' involvement > Ensure sustainable use of the coastal and marine resources > Ensure conservation of sensitive areas of habitats and ecosystems > Ensure conservation of the area's biodiversity 	

Strategic Objective	Ensuring stakeholder INVOLVEMENT	
Operational Objective	Promoting COLLABORATIVE MANAGEMENT	
Action	Establishment of Issue-driven Working Groups for ICZM Priorities	A.03.19
Roadmap	Building Local Capacities for Coastal Governance	
Description	<p>Coastal resources stewardship requires the joint effort of the different stakeholders. The creation of different Working Groups within the Northwest Coast Partnership will promote administrative coordination and cooperation. The working Group is chaired or co-chaired by the local competent authority(ies) and they are open to any other representative of an involved public authority or agency, academia, private sector, local associations, local representative or NGOs.</p> <p>Working Groups are to facilitate stakeholder debate, mutual understanding and consensus building regarding prioritized issues and management options. Moreover they are to agree upon the proposal of policy options to be considered by the competent authority when developing a new Sectoral Plan.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Public administrations and authorities > Research institutions > Local Committees 	<ul style="list-style-type: none"> > Private sector / entrepreneurs > Local Associations > NGOs
Related actions	Required Action	Timeline
	> Establishment of the Northwest Coast Partnership	2013-2020
	Subsequent Actions	
	> Proposal of Policy Options	2015-2016
Timeline	2014-2016	
Estimated Cost (EGP)	Employees (2 Officers)	24,000.00
	Operational Expenses	15,000.00
	Office Equipment	5,000.00
	Travel Expenses	10,000.00
	TOTAL COSTS IN 3 YEARS	152,000.00
Indicators	<p>P: Number of meetings</p> <p>P: Number and origin of participants in Working Groups</p> <p>R: Policy Options proposed per Working Group (III.05)</p>	
Policy considerations	<ul style="list-style-type: none"> > Contribution of the Research Agenda as part of the Working Group to coastal management > Considering a balanced urban system with different levels and specialisations: Marsa Matruh: main tourist area and administrative centre; Neguila: agricultural services; Sidi Barrani: rural tourism; El Sallum: a duty-free zone, port and border area. 	
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Ensure stakeholders' involvement > Ensure sustainable use of the coastal and marine resources > Ensure conservation of sensitive areas of habitats and ecosystems > Ensure conservation of the area's biodiversity 	

Strategic Objective	Implementing policies and measures included in the NATIONAL WATER RESOURCES PLAN	
Operational Objective	Creating CONSTITUENCY for Water stewardship	
Action	Constitution of the Northwest Coast Water User Association	B.01.20
Roadmap	Implementing Coastal Stewardship – Water resources	
Description	<p>The National Water Plan establishes the need for Water User Associations to encourage water governance and collaborative water management.</p> <p>Water User Associations are supposed to promote the creation of partnerships and joint ventures. These partnerships will leverage water management enabling significant improvement in water supply, drainage and water use efficiency.</p> <p>Moreover, Water User Associations are to promote conflict resolution and mobilize local resources to develop water infrastructures.</p>	
Stakeholders involved	<p>Composition of the Northwest Coast Water User Association:</p> <ul style="list-style-type: none"> > Marakaz representatives > Farmers associations > Private sector / Aquaculture 	
Related actions	Previous Action	Timeline
	> Training local communities in organisational and technical capabilities	2013-2016
	Subsequent Actions	
	> Proposal of a set of Collective Options for Integrated Water Management > Implementation of Collective Actions for Integrated Water Management	2014-2015 2016-2020
Timeline	2013-2020	
Estimated Cost (EGP)	Operational Expenses	10,000.00
	Office Equipment	5,000.00
	TOTAL COSTS IN 8 YEARS	85,000.00
Indicators	<p>P: Number and type of stakeholders involved (companies, users, etc)</p> <p>R: Initiatives and projects carried out by WUA (IV.01)</p>	
Policy considerations		
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Ensure proper integrated water resources management. > Ensures resolution of water use conflicts > Ensure stakeholders involvement in decision- making process and water planning 	

Strategic Objective	Implementing policies and measures included in the NATIONAL WATER RESOURCES PLAN	
Operational Objective	Creating CONSTITUENCY for Water stewardship	
Action	Creation of the Integrated Water Management District in Matruh Governorate	B.01.21
Roadmap	Implementing Coastal Stewardship – Water resources	
Description	<p>The competencies related with irrigation, drainage and groundwater are to be integrated into one management authority (IWDM).</p> <p>This authority is to create the framework within which participatory and demand-driving is to be developed.</p> <p>They will approve the Operational Plan, including the Collaborative Actions. They are also responsible of the implementation and monitoring of the Integrated Water Management Plan.</p>	
Stakeholders involved	> Matruh Water Authority (upgraded with irrigation, drainage and groundwater competencies)	
Related actions		
Timeline	2013-2020	
Estimated Cost (EGP)	Corresponds to Water Authorities	
Indicators	<p>R: Establishment of the IWMD</p> <p>R: Agreements achieved between IWMD and WUA (IV.02)</p>	
Policy considerations	<p>> Control of discharges into the sea and their required treatments, ensuring bath water quality</p> <p>> Flood management</p>	
Environmental objectives (SEA)	<p>> Ensure proper integrated water resources management.</p> <p>> Ensures resolution of water use conflicts</p> <p>> Ensure stakeholders involvement in decision- making process and water planning</p> <p>> Prepare and propose local water initiatives</p>	

Strategic Objective	Implementing policies and measures included in the NATIONAL WATER RESOURCES PLAN	
Operational Objective	Developing Water COLLABORATIVE PLANNING	
Action	Proposal of a set of Collective Actions for Integrated Water Management	B.01.22
Roadmap	Implementing Coastal Stewardship – Water resources	
Description	<p>ICZM Delegates are to facilitate public dialogue and develop agreements between local stakeholders. Identification of common interests and priorities will be done to catalyze private and public joint ventures or Collective Actions.</p> <p>Technical Secretariat is to ensure data and information sharing between Water Management Working Group and local stakeholders involved in water planning and management.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Water User Association > Local Agenda > Local partnership > Technical Secretariat 	
Related actions	Previous Action	Timeline
	<ul style="list-style-type: none"> > Constitution of the Northwest Coast Water User Association > Creation of Local Agenda per markaz in the Northwest Coast 	2013 2014-2020
	Subsequent Actions	
	<ul style="list-style-type: none"> > Implementation of Collective Actions for Integrated Water Management 	2016-2020
Timeline	2014-2015	
Estimated Cost (EGP)	Operational Expenses	5,000.00
	Meeting Expenses	10,000.00
	TOTAL COSTS IN 2 YEARS	40,000.00
Indicators	P: Number of stakeholders participating in Collective Actions proposal R: Collective Actions per markaz presented to Technical Secretariat (IV.03)	
Policy considerations	<ul style="list-style-type: none"> > Links between ICZM and national development goals and priorities > Allocation of economic resources coherently with the development goals and ICZM priorities > Public Workshops especially important to discuss priorities, alternatives and to propose Collective Actions to implement by local partnership. > Developing techniques to improve the use of flooding waters, reducing negative impacts: construction of earth bunds to convey runoff to small depressions; contour ridging; construction of small earth check dams in depressions, etc. > Developing techniques to optimise use of available water resources: construction of cisterns below wadi beds, either from concrete or dug in limestone; techniques to store water through recharge into groundwater system, etc. 	
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Ensure proper integrated water resources management. > Ensures resolution of water use conflicts > Ensure stakeholders involvement in decision- making process and water planning 	

Strategic Objective	Implementing policies and measures included in the NATIONAL WATER RESOURCES PLAN	
Operational Objective	Developing Water COLLABORATIVE PLANNING	
Action	Proposal of Policy Options to be included into the Water Operational Plan	B.01.23
Roadmap	Implementing Coastal Stewardship – Water resources	
Description	<p>Integrated Water Management District is to develop a Water Operational Plan.</p> <p>Technical Secretariat is supposed to collect and filter those policy options raised by Water Management Working Group and other stakeholders participating in water planning.</p> <p>A formal Proposal of Policy Options will be delivered to the Local Competent Authority and to be answered before the approval of the Water Operational Plan.</p> <p>Matruh ICZM Committee must evaluate the Water Collaborative Planning process, the coherence between Regional and National policies and objectives and the commitments regarding funds availability and budget distribution.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Water Working Group > Local Agendas > Technical Secretariat 	
Related actions	Previous Action	Timeline
	<ul style="list-style-type: none"> > Establishment of Working Groups within the NWCP > Creation of Local Agenda per markaz in Northwest Coast 	2014-2015 2014-2020
Timeline	2015-2016	
Estimated Cost (EGP)	Operational Expenses	5,000.00
	Meeting Expenses	10,000.00
	Travel Expenses	5,000.00
	TOTAL COSTS IN 2 YEARS	40,000.00
Indicators	R: Percentage of Policy Options integrated into Water Operational Plan versus proposed (IV.04)	
Policy considerations	<ul style="list-style-type: none"> > Develop Water Use Rights and co-funding mechanisms for leveraging water management and conflict resolution. 	
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Ensure proper integrated water resources management. > Ensures resolution of water use conflicts > Ensure fulfilment of Water Millennium Development Goals > Ensure stakeholders involvement in decision- making process and water planning 	

Strategic Objective	Implementing policies and measures included in the NATIONAL WATER RESOURCES PLAN	
Operational Objective	Implementing Water COLLABORATIVE MANAGEMENT	
Action	Implementation of Collective Actions for Integrated Water Management	B.01.24
Roadmap	Implementing Coastal Stewardship – Water resources	
Description	<p>Technical Secretariat is to assist local consortia and partnerships to implement and develop their Collective Actions. Technical assistance is to ensure information sharing and promote stakeholder coordination throughout the implementation.</p> <p>Water User Association is a necessary stakeholder actively participating in Collaborative Water Management to encourage local governance and to meet local needs and Millennium Development Goals.</p> <p>The establishment of specific access to micro-credits will enable stakeholders to launch Collective Actions and increase the participation of private sector in Water Management.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Water User Association > Local consortia 	
Related actions	Previous Action	Timeline
	> Proposal of Policy Options to be included into the Water Operational Plan	2015-2016
	Subsequent Actions	
	> Monitor progress on water resources stewardship	2020
Timeline	2016-2020	
Estimated Cost (EGP)	Included in Actions 09, 16 and 48	
Indicators	<p>P: Ratio between Collaborative Actions funded by micro-credits, by agreements with IWMD and self financed</p> <p>R: Percentage of Collective Actions implemented or ongoing versus proposed (IV.05)</p>	
Policy considerations	<ul style="list-style-type: none"> > Appropriated funding available for implementation activities > Other forms of funding mechanisms: specific agreements between local associations and water authorities regarding land-tenure, distribution of cost and benefits 	
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Ensure proper integrated water resources management. > Ensure stakeholders involvement in decision-making process and water planning > Ensures resolution of water use conflicts 	

Strategic Objective	Implementing policies and measures included in the NATIONAL WATER RESOURCES PLAN	
Operational Objective	Implementing Water COLLABORATIVE MANAGEMENT	
Action	Monitor progress on Water Resources Stewardship	B.01.25
Roadmap	Implementing Coastal Stewardship – Water resources	
Description	<p>The Integrated Water Management District in Matruh is to monitor the implementation of the Water Operational Plan.</p> <p>The Technical Secretariat is to monitor the progress on water resources stewardship achieved through Water Collaborative Management. Conclusions are to be raised to Matruh ICZM Committee to fulfil the first learning-cycle.</p> <p>Conclusions, namely Progress Report, are to stress lessons-learned, constraining factors and potential actions to be considered by Matruh ICZM Committee and Northwest Coast Partnership.</p>	
Stakeholders involved	> Technical Secretariat Matruh ICZM Committee	
Related actions	Previous Action	Timeline
	> Implementation of Collective Actions in Integrated Water Management	2016-2020
Timeline	2017-2020	
Estimated Cost (EGP)	Operational Expenses	50,000.00
	Travel Expenses	15,000.00
	TOTAL COSTS IN 4 YEARS	260,000.00
Indicators	<p>P: Appropriated indicators to assess the progress of water stewardship</p> <p>R: Progress Report effectively raised up to NWCP and MICZMC</p> <p>R: Conclusions of Progress Report positively integrated into Collaborative Water Planning (IV.06)</p>	
Policy considerations	<p>> Finish learning cycle providing conclusions and results for the following management cycle</p> <p>> Matruh Coastal Observatory is to ensure the information and data flow.</p>	
Environmental objectives (SEA)	<p>> Ensure proper integrated water resources management.</p> <p>> Ensures resolution of water use conflicts</p> <p>> Ensure stakeholders involvement in decision- making process and water planning</p> <p>> Ensure the proper implementation of the integrated water resources management operational plan, and provide information to decision making on the plan progress.</p>	

Strategic Objective	Developing INTEGRATED PRIMARY ACTIVITIES MANAGEMENT	
Operational Objective	Creating CONSTITUENCY for Integrated Primary Activities stewardship	
Action	Constitution of the Northwest Coast Farmers Association	B.01.26
Roadmap	Implementing Coastal Stewardship – Integrated Primary Activities	
Description	<p>Farming activities direct and indirectly involve a significant proportion of local population within the study area. Farming activities include crops, trees and animal production, and despite the diversity of stakeholder interests, the constraining environmental factors call for the collaboration and cooperation of all the stakeholders involved.</p> <p>The Farmer Association's aim is to raise and support farmer needs and requirements. A large and stable association, it will assume important responsibilities in developing farming resources governance. The existing farmer association is not strong enough although it might be the base for an enlarged one.</p> <p>The Northwest Coast Farmer Association will give a boost in mobilizing local resources to adapt farming management practices and production to land requirements and market needs. Local farmers who organize collectively are better to negotiate for desired benefits and conflict remediation.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Farmers (agricultural; herds; fish farmers) > Land users 	
Related actions	Previous Action	Timeline
	> Training local communities in organisational and technical capabilities	2013-2016
	Subsequent Action	
	> Proposal of a set of collective Options for implementing Integrated Farming Management	2014-2015
Timeline	2013-2020	
Estimated Cost (EGP)	Operational Expenses	25,000.00
	Office Equipment	10,000.00
	TOTAL COSTS IN 8 YEARS	210,000.00
Indicators	<p>P: Number and origin of farmers associated</p> <p>R: Agreements achieved between farmer's association and Public Authorities (V.01)</p>	
Policy considerations	> Encourage cooperation between stakeholders involved in the Farmer Association	
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Improve socioeconomic conditions of local communities > Integrate farming industries including agriculture, animal production and aquaculture > Develop agriculture practices to maintain local/existing plants such as medicinal plants 	

Strategic Objective	Developing INTEGRATED PRIMARY ACTIVITIES MANAGEMENT					
Operational Objective	Creating CONSTITUENCY for Integrated Primary Activities stewardship					
Action	Coordinating management of a seedbed adapted to Aridlands conditions	B.02.27				
Roadmap	Implementing Coastal Stewardship – Integrated Primary Activities					
Description	<p>The seeds adaptation to the specific environmental conditions of the Northwest Coast is a priority issue. Egyptian agriculture is highly productive due to Nile shores and delta soils fertility; however Northwest Coast aridlands require specific farming adaptation to extreme environmental conditions.</p> <p>Seeds and crops adaptation is to require the creation of a local seedbed. This seedbed is to be jointly managed by Agriculture Administration and Farmer Associations and it will be located at the Northwest Coast (might be Neguila).</p> <p>Moreover, adapting crops and implementing wise agricultural practices are meaningful measures to content soil erosion and water scarcity.</p>					
Stakeholders involved	<ul style="list-style-type: none"> > Agriculture administration > Farmers Associations 					
Related actions	<table border="1"> <thead> <tr> <th>Previous Action</th> <th>Timeline</th> </tr> </thead> <tbody> <tr> <td>> Constitution of Northwest Coast Farmers Association</td> <td>2013</td> </tr> </tbody> </table>	Previous Action	Timeline	> Constitution of Northwest Coast Farmers Association	2013	
Previous Action	Timeline					
> Constitution of Northwest Coast Farmers Association	2013					
Timeline	2014-2020					
Estimated Cost (EGP)	Operational Expenses	20,000.00				
	Travel Expenses	5,000.00				
	TOTAL COSTS IN 7 YEARS	175,000.00				
Indicators	<p>P: Agreements between farmers association and competent authorities about seed provision</p> <p>R: Number of farmers that receive adapted seeds at appropriated time</p>					
Policy considerations	<ul style="list-style-type: none"> > Developing small scale nursery for local varieties adapted to arid conditions > Co-finance between the parties to successfully develop local seedbed. 					
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Maintain and protect endemic species of flora, and ariland plants > Develop new agricultural practices to promote endemic species and low-water demand species 					

Strategic Objective	Developing INTEGRATED PRIMARY ACTIVITIES MANAGEMENT	
Operational Objective	Creating CONSTITUENCY for Integrated Primary Activities stewardship	
Action	Training Farmers Association on Integrated Farming Management	B.02.28
Roadmap	Implementing Coastal Stewardship – Integrated Primary Activities	
Description	<p>Local farmer communities operate and survive in the changeable and hazardous desert environment they are surrounded with.</p> <p>Overexpansion of crops in Northwest coast arid lands and the human expansion and increasing demographic pressure are to amplify poverty expansion in rural areas, which are highly dependent on farming resources (either agriculture or animal husbandry).</p> <p>Mixed farming (crops, livestock and trees) are to be managed as an integrated system to reduce conflicts and increase synergies between activities. Specific training is required for water-use efficiency, drylands soil management (soil degradation process, organic matter and fertility), crops and cultivar selection and environment-friendly farming practices.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Agriculture administration > Integrated Water Management District > Desert Research Center > Farmers association 	
Related actions	Previous Action	Timeline
	> Constitution of the Northwest Farmers Association	2013
	Subsequent Action	
	> Proposal of a set of Collective Options for Integrated Farming Development	2014-2015
Timeline	2014-2016	
Estimated Cost (EGP)	Meeting Expenses	5,000.00
	Others (Training courses)	24,000.00
	TOTAL COSTS IN 8 YEARS	87,000.00
Indicators	<p>P: Number of farmers trained</p> <p>R: Projects and initiatives related to training courses raised by trained farmers (V.02)</p>	
Policy considerations	<ul style="list-style-type: none"> > Providing expertise to farmers will allow them to be aware of their specific needs. > Training in integrating agriculture surface with livestock production (herd size and pasture lands) > Training in management of soil, water, crops and plant nutrients > Guidelines and Criteria for adoption of IAA System > Training on techniques to optimise use of available water resources, and to improve the use of flooding waters, reducing its negative impact. 	
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Develop training programs on integrated farming management > Implement and monitor achieving these training programs 	

Strategic Objective	Developing INTEGRATED PRIMARY ACTIVITIES MANAGEMENT	
Operational Objective	Developing Integrated Primary Activities COLLABORATIVE PLANNING	
Action	Proposal of a set of Collective Actions for developing Integrated Primary Activities Management	B.02.29
Roadmap	Implementing Coastal Stewardship – Integrated Primary Activities	
Description	<p>ICZM Delegates are to facilitate public dialogue and develop agreements between local stakeholders. Identification of common interests and priorities will catalyze private and public joint ventures or Collective Actions.</p> <p>Assistance to Farmer association will be especially important to meet local needs for development and improvement of farming practices and management system.</p> <p>The Technical Secretariat is to ensure data and information sharing between Integrated Primary Activities Working Group and local stakeholders involved in primary activities planning and management.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Local partnership > Farmers association > Technical ICZM Secretariat 	
Related actions	Previous Action	Timeline
	> Constitution of Northwest Coast Farmers Association	2013
	Subsequent Action	
	> Implementation of Collective Actions for Integrated Farming Management	2016- 2020
Timeline	2014-2016	
Estimated Cost (EGP)	Operational Costs	5,000.00
	Meeting Expenses	10,000.00
	Travel Expenses	5,000.00
	TOTAL COSTS IN 2 YEARS	40,000.00
Indicators	<p>P: Number of stakeholders participating in Collective Actions proposal R: Collective Actions per markaz presented to Technical Secretariat (V.03)</p>	
Policy considerations	<ul style="list-style-type: none"> > Management of mixed farming system includes paying careful attention to plant-nutrient balance and the proper size of the herds in relation to the graze area and agriculture surface and production. > The rural system is to be managed integrating cropping and livestock production in order to obtain the maximum benefits of both activities and avoid the potential conflicts. > Developing small-scale integrated agri-aquaculture system in desert areas is to be an option to improve living standards of small-holders farmers (EDAPPWM). > To set up processing and packing plants for local products in Neguila and Sidi Barrani > To preserve the agricultural function of the wadis, avoiding urban occupation 	
Environmental objectives (SEA)		

Strategic Objective	Developing INTEGRATED PRIMARY ACTIVITIES MANAGEMENT									
Operational Objective	Developing Integrated Primary Activities COLLABORATIVE PLANNING									
Action	Proposal of Policy Options to be included into the Integrated Primary Activities Operational Plan	B.02.30								
Roadmap	Implementing Coastal Stewardship – Integrated Primary Activities									
Description	<p>Competent authorities in developing Integrated Farming will include competencies on water, land, agriculture, animal production and environment. Therefore Matruh ICZM Committee is to play an important role to coordinate them and construct consensus upon the Operational Plan to be approved.</p> <p>Technical Secretariat will collect and filter policy options raised by Integrated Primary Activities Working Group and other stakeholders participating in planning and management. A formal Proposal of Policy Options is to be delivered to the Local Competent Authorities and to be answered before the approval of the Integrated Primary Activities Operational Plan.</p> <p>Matruh ICZM Committee is to evaluate the Integrated Primary Activities Collaborative Planning process, the coherence between Regional and National policies and objectives and the existing commitments regarding funds availability and budget distribution.</p>									
Stakeholders involved	<ul style="list-style-type: none"> > Integrated Primary Activities Working Group > Farmers Association > Technical Secretariat 									
Related actions	<table border="1"> <thead> <tr> <th>Previous Action</th> <th>Timeline</th> </tr> </thead> <tbody> <tr> <td>> Constitution of the Northwest Coast Farmers Association</td> <td>2013</td> </tr> <tr> <td>> Establishment of Working Groups within NWCP</td> <td>2014-2015</td> </tr> </tbody> </table>	Previous Action	Timeline	> Constitution of the Northwest Coast Farmers Association	2013	> Establishment of Working Groups within NWCP	2014-2015			
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Timeline	2015-2016									
Estimated Cost (EGP)	<table border="1"> <tbody> <tr> <td>Operational Costs</td> <td>5,000.00</td> </tr> <tr> <td>Meeting Expenses</td> <td>10,000.00</td> </tr> <tr> <td>Travel Expenses</td> <td>5,000.00</td> </tr> <tr> <td>TOTAL COSTS IN 2 YEARS</td> <td>40,000.00</td> </tr> </tbody> </table>	Operational Costs	5,000.00	Meeting Expenses	10,000.00	Travel Expenses	5,000.00	TOTAL COSTS IN 2 YEARS	40,000.00	
Operational Costs	5,000.00									
Meeting Expenses	10,000.00									
Travel Expenses	5,000.00									
TOTAL COSTS IN 2 YEARS	40,000.00									
Indicators	R: Percentage of Policy Options integrated into Integrated Primary Activities Operational Plan versus proposed (V.04)									
Policy considerations	<ul style="list-style-type: none"> > Development of programmes supporting modernisation of operations, improving agricultural yields and providing infrastructures, such as fishing ports in El Sallum and Sidi Barrani > Establishing legal mechanisms to protect agricultural land > Regulation of non-farming uses and a ban on new urban development > Collaboration between stakeholders is to enable agreements regarding land-tenure and co-funding mechanisms > To promote military railway for livestock and agricultural uses > To protect the coastal multi-cropping zones threatened by tourism growth (Neguila, Sidi Barrani, west of Marsa Matruh and Badr camp urbanisation) > To prevent construction and the loss of agricultural land 									
Environmental objectives (SEA)										

Strategic Objective	Developing INTEGRATED PRIMARY ACTIVITIES MANAGEMENT	
Operational Objective	Implementing Integrated Farming COLLABORATIVE MANAGEMENT	
Action	Implementation of Collective Actions for Integrated Primary Activities Management	B.02.31
Roadmap	Implementing Coastal Stewardship – Integrated Primary Activities	
Description	<p>Technical Secretariat will assist local consortia and partnerships in implementing and developing their Collective Actions. Technical assistance is to ensure information sharing and promote stakeholders coordination during the implementation.</p> <p>Farmer Associations are necessary stakeholders actively participating in Collaborative Primary Activities Management. They are to encourage local governance and meet specific local needs.</p> <p>The establishment of specific access to micro-credits will enable stakeholders to launch Collective Actions and increasing the participation of private sector in Primary Activities Management.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Farmers Associations > Local consortia partnerships 	
Related actions	Required Actions	Timeline
	> Proposal of a set of Collective Actions for developing Integrated Primary Activities Management	2014-2015
	Subsequent Actions	
	> Monitor progress on Farming Stewardship	2020
Timeline	2016-2020	
Estimated Cost (EGP)	Included in Actions 09, 16, 48	
Indicators	<p>P: Ratio between Collaborative Actions funded by micro-credits, by agreements with local competent authorities and self financed</p> <p>R: Percentage of Collaborative Actions implemented or ongoing versus proposed (V.05)</p>	
Policy considerations	<ul style="list-style-type: none"> > Other funding mechanisms are: specific agreements between local associations and public authorities regarding land-tenure and co-funding mechanisms > Ensure local stakeholders involvement 	
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Improve socioeconomic conditions of local communities > Develop agriculture practices to maintain endemic and existing plants such as medicinal plants > Encourage organic farming > Promote farming production diversification, integrating small-scale fishfarming and small vegetable garden. 	

Strategic Objective	Developing INTEGRATED PRIMARY ACTIVITIES MANAGEMENT	
Operational Objective	Implementing Integrated Primary Activities COLLABORATIVE MANAGEMENT	
Action	Monitor progress on Integrated Primary Activities Stewardship	B.02.32
Roadmap	Implementing Coastal Stewardship – Integrated Primary Activities	
Description	<p>Local Competent Authorities are to monitor the implementation of the Integrated Primary Activities Operational Plan.</p> <p>Technical Secretariat will monitor the progress achieved through Collaborative Management on Primary Activities (including soil management, water use, crop selection, waste production, use of selectivity gears, integration of agriculture and animal husbandry activities). A Progress Report will be raised to Matruh ICZM Committee to complete the first learning-cycle.</p> <p>This Progress Report is to stress lessons-learned, constraining factors and potential actions to be considered by Matruh ICZM Committee and Northwest Coast Partnership.</p>	
Stakeholders involved	> Technical Secretariat of Matruh ICZM Committee	
Related actions	Previous Action	Timeline
	> Implementation of Collective Actions for Integrated Primary Activities Management	2016-2020
Timeline	2017-2020	
Estimated Cost (EGP)	Operational Expenses	50,000.00
	Travel Expenses	15,000.00
	TOTAL COSTS IN 4 YEARS	260,000.00
Indicators	<p>P: Appropriated indicators to assess the progress of Integrated Primary Activities stewardship</p> <p>R: Progress Report effectively raised up to NWCP and MICZMC</p> <p>R: Conclusions of Progress Report positively integrated into Integrated Primary Activities Collaborative Planning (V.06)</p>	
Policy considerations	<p>> Finish learning cycle providing conclusions and results for the following management cycle</p> <p>> Matruh Coastal Observatory is to ensure the information and data flow.</p>	
Environmental objectives (SEA)		

Strategic Objective	Implementing SUSTAINABLE TOURISM ACTIVITIES									
Operational Objective	Creating CONSTITUENCY for Tourism stewardship									
Action	Constitution of diverse Associations with interest in tourism development	B.03.33								
Roadmap	Implementing Coastal Stewardship – Sustainable Tourism Development									
Description	<p>Tourism is an opportunity to introduce an integral and sustainable development in the whole study area (coastal zone and rural areas). But it requires the integration and harmonization of tourism into the economic, social and ecological environments.</p> <p>Tourism development will require the active participation of many stakeholders, and local associations are to play a key role in such integration and harmonization process. Moreover, local associations are to encourage tourism governance by collaborating in tourism planning and management, mobilizing resources to develop local initiatives and provide market products and services to national and international tourists.</p>									
Stakeholders involved	Targets: > Women associations > Family business > Handicrafts production > Tourism activities > Cultural associations > Nature Conservation associations	Coordinator: > Technical Secretariat								
Related actions	<table border="1"> <thead> <tr> <th>Previous Action</th> <th>Timeline</th> </tr> </thead> <tbody> <tr> <td>> Training local communities in organisational and technical capabilities</td> <td>2013-2016</td> </tr> <tr> <th>Subsequent Action</th> <td></td> </tr> <tr> <td>> Proposal of a set of Collective Options for Northwest Coast Tourism development</td> <td>2014-2015</td> </tr> </tbody> </table>	Previous Action	Timeline	> Training local communities in organisational and technical capabilities	2013-2016	Subsequent Action		> Proposal of a set of Collective Options for Northwest Coast Tourism development	2014-2015	
Previous Action	Timeline									
> Training local communities in organisational and technical capabilities	2013-2016									
Subsequent Action										
> Proposal of a set of Collective Options for Northwest Coast Tourism development	2014-2015									
Timeline	2017-2020									
Estimated Cost (EGP)	Operational Expenses	30,000.00								
	Office Equipment	10,000.00								
	TOTAL COSTS IN 3 YEARS	120,000.00								
Indicators	P: Number and origin of stakeholders associated R: Number and type of established local associations (VI.01)									
Policy considerations	> Developing new tourism activities in desert areas, employing local folklore and traditional style, integrating tourist market into agriculture and handicrafts activities, developing tourism as a tool for improving the infrastructure services (waste management, sewage system, natural parks) > Involvement of local stakeholders: widows, handicraft woman, environmental conservation agencies, food and drinks producers, etc.									
Environmental objectives (SEA)	> Promote eco-tourism and community-based eco-tourism rather than massive tourism > Develop best management practices for main issues (impacts) including solid waste, energy efficiency and water conservation. > Encourage tourist investors to use renewable energy through investment incentives.									

Strategic Objective	Implementing SUSTAINABLE TOURISM ACTIVITIES	
Operational Objective	Creating CONSTITUENCY for Tourism stewardship	
Action	Public Workshops “Creation and Development of the brand Northwest Coast Tourism”	B.03.34
Roadmap	Implementing Coastal Stewardship – Sustainable Tourism Development	
Description	<p>Workshops are to raise awareness between local stakeholders (communities and entrepreneurs) regarding tourism development potential and opportunities to take into account.</p> <p>The workshops should agree upon a specific model of tourism development, creating a local brand, based on characteristics such as market quality, eco-friendly, socially and culturally based.</p> <p>Agreements regarding long-term objectives and priority issues (waste management, property rights, environmental protection measures, military control) are highly recommended.</p>	
Stakeholders involved	<p>Coordinator:</p> <ul style="list-style-type: none"> > ICZM Technical Secretariat <p>Targets:</p> <ul style="list-style-type: none"> > EEAA > TDA > Entrepreneurs > Academia > Local Associations 	
Related actions	Subsequent Actions	Timeline
	> Proposal of a set of Collective Options for Northwest Coast Tourism development	2014-2015
Timeline	2013	
Estimated Cost (EGP)	Operational Expenses	15,000.00
	Travel Expenses	35,000.00
	Others	70,000.00
	TOTAL COSTS IN 1 YEAR	120,000.00
Indicators	<p>P: Number and character of stakeholders participating in the Workshop</p> <p>R: Agreements achieved regarding long-term objectives and priority issues (VI.02)</p>	
Policy considerations	<ul style="list-style-type: none"> > Promoting the landscape like a tourism resource based on the coastal and agricultural space > Promoting historical and cultural heritage like a tourism resource > Developing eco-tourism > Developing local products consumption > Local population involvement > To promote scientific understanding of the coast and publish it > Development of infrastructures of common use > Defining a tourism model considering the territory values 	
Environmental objectives (SEA)		

Strategic Objective	Implementing SUSTAINABLE TOURISM ACTIVITIES	
Operational Objective	Developing Tourism COLLABORATIVE PLANNING	
Action	Proposal of a set of Collective Actions for the Northwest Coast Tourism development	B.03.35
Roadmap	Implementing Coastal Stewardship – Sustainable Tourism Development	
Description	<p>ICZM Delegates are to facilitate public dialogue and develop agreements between local stakeholders. Identification of common interests and priorities will catalyze private and public joint ventures or Collective Actions.</p> <p>Collaboration between stakeholders aims to mobilize public and private resources to contribute in the development of the study area, to create employment and to increase per capita income.</p> <p>Technical Secretariat will ensure data and information sharing between Sustainable Tourism Working Group and local stakeholders interested in actively participating in tourism activities.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Local Associations > Local Agenda 	<ul style="list-style-type: none"> > Local partnership and consortia > Technical Secretariat
Related actions	Previous Action	Timeline
	<ul style="list-style-type: none"> > Constitution of diverse associations with interest in tourism development > Creation a Local Agenda per markaz in the Northwest Coast 	2013 2014-2020
Related actions	Subsequent Actions	
	<ul style="list-style-type: none"> > Implementation of Collective Actions for Northwest Coast Tourism Development 	2016-2020
Timeline	2014-2015	
Estimated Cost (EGP)	Operational Costs	5,000.00
	Meeting Expenses	10,000.00
	Travel Expenses	5,000.00
	TOTAL COSTS IN 2 YEARS	40,000.00
Indicators	P: Number of stakeholders participating in Collective Actions proposal R: Number of local initiatives raised up by local partnership R: Agreements developed between different stakeholders and associations R: Collective Actions per markaz presented to Technical Secretariat (VI.03)	
Policy considerations	<ul style="list-style-type: none"> > Links between ICZM and national development goals and priorities > Allocation of economic resources coherently with the development goals and ICZM priorities > Development of environmental and landscape recuperation measures > Developing manufactures industries (handicrafts, food and drinks, etc.) > Developing business initiatives > Developing of infrastructures: waste and sewage system, etc. > To use and promote the cultural value of Second World War scenarios > Rehabilitation of the historical and acultural heritage > To design natural and cultural tourist routes promoting local heritage > Developing cultural tourism in contact with population 	
Environmental objectives (SEA)		

Strategic Objective	Implementing SUSTAINABLE TOURISM ACTIVITIES	
Operational Objective	Developing Tourism COLLABORATIVE PLANNING	
Action	Proposal of Policy Options to be included into the Operational Plan for the Northwest Coast Tourism development	B.03.36
Roadmap	Implementing Coastal Stewardship – Sustainable Tourism Development	
Description	<p>Preparation of a Sustainable Tourism Operational Plan requires a strong administrative coordination to agree priorities upon different Administrative Sectors and jointly develop synergies that contribute to other economic and social areas, positively affected by tourism development.</p> <p>Matruh ICZM Committee will play an important role in coordinating them and building consensus upon the Operational Plan since competent authorities in developing Sustainable Tourism activities and services are to include competencies on water, land-use, urban planning, waste disposal, and environmental management.</p> <p>The Technical Secretariat will collect and filter policy options raised by Sustainable Tourism Working Group and other stakeholders participating in tourism planning and management. A formal Proposal of Policy Options will be delivered to the Local Competent Authorities and to be answered before the approval of the Sustainable Tourism Operational Plan.</p> <p>Matruh ICZM Committee is to evaluate the Sustainable Tourism Collaborative Planning process, the coherence between Regional and National policies and objectives and the existing commitments regarding funds availability and budget distribution.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Sustainable Tourism working Group > Local Agendas > Technical Secretariat 	
Related actions	Previous Action	Timeline
	<ul style="list-style-type: none"> > Establishment of Working Groups within the NWCP > Creation a Local Agenda per markaz in the Northwest Coast 	2014-2015 2014-2020
Timeline	2015-2016	
Estimated Cost (EGP)	Operational Costs	5,000.00
	Meeting Expenses	10,000.00
	Travel Expenses	5,000.00
	TOTAL COSTS IN 2 YEARS	40,000.00
Indicators	R: Percentage of Policy Options integrated into the NWC Tourism Operational Plan versus proposed (VI.04)	
Policy considerations	<ul style="list-style-type: none"> > Sustainable planning of recreational activities with soft constructions > To draw up a sustainable tourism renewal plan in Matruh city centre adapted to the territory's fragility, capacity and singular characteristics > To preserve the environmental and economic value of the wetlands (lagoons, sebkhas) > Development of environmental and landscape recuperation measures > Protection of coastal zones without significant urban pressure (Agiba beach, etc.) > Delimit natural parks and protected areas > To avoid growth on coastal frontage, directing it inland > Developing of infrastructures: waste and sewage system, roads, etc. 	
Environmental objectives (SEA)		

Strategic Objective	Implementing SUSTAINABLE TOURISM ACTIVITIES	
Operational Objective	Implementing Tourism COLLABORATIVE MANAGEMENT	
Action	Implementation of Collective Actions for Northwest Coast Tourism development	B.03.37
Roadmap	Implementing Coastal Stewardship – Sustainable Tourism Development	
Description	<p>The Technical Secretariat is to assist local consortia and partnerships in implementing and developing their Collective Actions. Technical assistance will ensure information sharing and promote stakeholder coordination during the implementation process.</p> <p>The establishment of specific access to micro-credits will enable stakeholder to launch Collective Actions and increasing the participation of private sector in Sustainable Tourism Development.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Local Associations > Local partnership > Entrepreneurs / Private sector 	
Related actions	Previous Action	Timeline
	> Proposal of a set of Collective Actions	2014-2015
	Subsequent Action	
	> Monitor progress on tourism stewardship	2020
Timeline	2016-2020	
Estimated Cost (EGP)	Included in Actions 09, 16, 48	
Indicators	<p>P: Ratio between Collaborative Actions funded by micro-credits, by agreements with tourism authority and self financed</p> <p>R: Percentage of Collaborative Actions implemented or ongoing versus proposed (VI.05)</p>	
Policy considerations	> Other funding mechanisms are: specific agreements between local associations and public authorities regarding land-tenure, distribution of cost and benefits...	
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Promote ecotourism and community based ecotourism rather than massive tourism > Develop best management practices for main issues (impacts) including solid waste, energy efficiency and water conservation > Encourage tourist investors to use renewable energy through investment incentives > Monitor the implementation of the sustainable tourism operational plan 	

Strategic Objective	Implementing SUSTAINABLE TOURISM ACTIVITIES	
Operational Objective	Implementing Tourism COLLABORATIVE MANAGEMENT	
Action	Monitor progress on Tourism Stewardship	B.03.38
Roadmap	Implementing Coastal Stewardship – Sustainable Tourism Development	
Description	<p>Local Competent Authorities are to monitor the implementation of Sustainable Tourism Operational Plan.</p> <p>Technical Secretariat will monitor the progress achieved through Collaborative Management on Sustainable Tourism development and produce a Progress Report to be raised to Matruh ICZM Committee to fulfil the first learning-cycle.</p> <p>This Progress Report is to stress lessons-learned, constraining factors and potential actions to be considered by Matruh ICZM Committee and Northwest Coast Partnership.</p>	
Stakeholders involved	> Technical Secretariat Matruh ICZM Committee	
Related actions	Previous Action	Timeline
	> Implementation of Collective Actions for Northwest Coast Tourism Development	2016-2020
Timeline	2017-2020	
Estimated Cost (EGP)	Operational Expenses	50,000.00
	Travel Expenses	15,000.00
	TOTAL COSTS IN 4 YEARS	260,000.00
Indicators	<p>P: Appropriated indicators to assess the progress of tourism stewardship</p> <p>R: Progress Report effectively raised up to NWCP and MICZMC</p> <p>R: Conclusions of Progress Report positively integrated into Collaborative Tourism Planning (VI.06)</p>	
Policy considerations	<p>> Matruh Coastal Observatory is to ensure the data and information flow.</p> <p>> Finish learning cycle providing conclusions and results for the following management cycle</p>	
Environmental objectives (SEA)		

Strategic Objective	Improving living conditions of SOUTHERN small-holders	
Operational Objective	Creating CONSTITUENCY for Southern small-holders stewardship	
Action	Public Workshops “Improving Infrastructures and Living Conditions of southern small-holders”	B.04.39
Roadmap	Implementing Coastal Stewardship – Living Conditions of Southern Small-holders	
Description	<p>In the study zone, southern rural areas are characterized by infrastructures isolation, lack of water supply and sanitation, energy shortage and progressively extreme environmental conditions.</p> <p>Raising awareness on their current situation and providing management options for poverty alleviation, safe water and energy supply and increase their territorial connection with the urban centres are necessities.</p> <p>The Workshops will agree upon a shared vision regarding the northwest coast living conditions in the near future. Agreements regarding long-term objectives and priority issues (poverty alleviation, water supply and sanitation, energy supply and efficiency-use, territorial connection, provision of urban services, co-use of military zones, property rights, and environmental protection measures) are highly recommended.</p>	
Stakeholders involved	<p>Coordinator:</p> <ul style="list-style-type: none"> > Technical Secretariat of Matruh ICZM Committee and Delegates <p>Target:</p> <ul style="list-style-type: none"> > Public Authorities (Environmental Affairs, General Planning, Veterinary) > Marakaz authorities > Research institutions > Private sector > Local population > Local Associations and NGOs 	
Related actions	Subsequent Actions	Timeline
	> Proposal of a set of Collective Actions for Northwest Coast Tourism Development	2014-2015
Timeline	2013	
Estimated Cost (EGP)	Operational Expenses	15,000.00
	Travel Expenses	35,000.00
	TOTAL COSTS IN 1 YEAR	120,000.00
Indicators	<p>R: Number and character of stakeholders participating in the Workshop (VII.01)</p> <p>R: Agreements achieved in the Workshop agenda (VII.02)</p>	
Policy considerations	<ul style="list-style-type: none"> > Provide examples of communities facing similar circumstances and debate different policy options > Speeches from Academia and inter-governmental (UN) organizations are recommended > To enhance living conditions in existing settlements by introducing facilities, services and infrastructures > Promoting rail as a connecting element between the marakaz > To support and fund demining 	
Environmental objectives (SEA)		

Strategic Objective	Improving living conditions of SOUTHERN small-holders	
Operational Objective	Developing COLLABORATIVE PLANNING in southern small-holders	
Action	Proposal of a set of Collective Actions for the improvement of Infrastructures and Living Conditions in southern small-holders	B.04.40
Roadmap	Implementing Coastal Stewardship – Living Conditions of Southern Small-holders	
Description	<p>ICZM Delegates will facilitate public dialogue and develop agreements between local stakeholders. Identification of common interests and priorities are to catalyze private and public joint ventures or Collective Actions.</p> <p>The assistance of Matruh ICZM Delegates to rural communities will be especially important to promote communication platform for local development needs and poverty alleviation. Collaboration between stakeholders is to mobilize public and private resources to boost poverty reduction and progressions to food security and safe water supply.</p> <p>Technical Secretariat is to ensure data and information sharing between Infrastructures and Living Conditions Working Group and local stakeholders interested in actively participating in collaborating with local populations.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Technical Secretariat > Local Agendas > Local associations > Cooperation Agencies/NGOs 	
Related actions	<p>Previous Action</p> <ul style="list-style-type: none"> > Public Workshops “Improving Infrastructures and Living Conditions of southern Rural Areas” > Creation a Local Agenda per markaz in the Northwest Coast <p>Subsequent Actions</p> <ul style="list-style-type: none"> > Implementation of Collective Actions for Infrastructures and Living Conditions improvement in southern rural areas 	<p>Timeline</p> <p>2013 2014-2020</p> <p>2016-2020</p>
Timeline	2014-2015	
Estimated Cost (EGP)	Operational Costs	5,000.00
	Meeting Expenses	10,000.00
	Travel Expenses	5,000.00
	TOTAL COSTS IN 2 YEARS	40,000.00
Indicators	<p>P: Number of stakeholders participating in Collective Actions proposal</p> <p>R: Collective Actions per markaz presented to Technical Secretariat (VII.03)</p>	
Policy considerations	<ul style="list-style-type: none"> > Developing roads and communication infrastructures 	
Environmental objectives (SEA)		

Strategic Objective	Improving living conditions of SOUTHERN small-holders									
Operational Objective	Developing COLLABORATIVE PLANNING in southern small-holders									
Action	Proposal of Policy Options to be included into the Operational Plan for Infrastructures and Living Conditions improvement in southern small-holders	B.04.41								
Roadmap	Implementing Coastal Stewardship – Living Conditions of Southern Small-holders									
Description	<p>Local Competent Authorities are to improve the living conditions of southern rural communities by preparing an Operational Plan, and Matruh ICZM Committee is therefore to play an important role in coordinating authorities and building consensus.</p> <p>The Technical Secretariat is to collect and filter policy options raised by Infrastructures and Living Conditions Working Group and other stakeholders participating in poverty alleviation, food security and safe water supply. A formal Proposal of Policy Options is to be delivered to the Local Competent Authorities and to be answered before the approval of the Integrated Primary Activities Operational Plan.</p> <p>Matruh ICZM Committee is to evaluate the Integrated Primary Activities Collaborative Planning process, the coherence between Regional and National policies and objectives and the existing commitments regarding funds availability and budget distribution.</p>									
Stakeholders involved	<ul style="list-style-type: none"> > Infrastructure and Living Conditions Working Group > Local Agendas > Technical Secretariat 									
Related actions	<table border="1"> <thead> <tr> <th>Required Actions</th> <th>Timeline</th> </tr> </thead> <tbody> <tr> <td>> Establishment of Working Groups within the NWCP</td> <td>2014-2015</td> </tr> <tr> <td>> Creation a Local Agenda per markaz in the Northwest Coast</td> <td>2014-2020</td> </tr> </tbody> </table>	Required Actions	Timeline	> Establishment of Working Groups within the NWCP	2014-2015	> Creation a Local Agenda per markaz in the Northwest Coast	2014-2020			
Required Actions	Timeline									
> Establishment of Working Groups within the NWCP	2014-2015									
> Creation a Local Agenda per markaz in the Northwest Coast	2014-2020									
Timeline	2015-2016									
Estimated Cost (EGP)	<table border="1"> <tbody> <tr> <td>Operational Costs</td> <td>5,000.00</td> </tr> <tr> <td>Meeting Expenses</td> <td>10,000.00</td> </tr> <tr> <td>Travel Expenses</td> <td>5,000.00</td> </tr> <tr> <td>TOTAL COSTS IN 2 YEARS</td> <td>40,000.00</td> </tr> </tbody> </table>	Operational Costs	5,000.00	Meeting Expenses	10,000.00	Travel Expenses	5,000.00	TOTAL COSTS IN 2 YEARS	40,000.00	
Operational Costs	5,000.00									
Meeting Expenses	10,000.00									
Travel Expenses	5,000.00									
TOTAL COSTS IN 2 YEARS	40,000.00									
Indicators	R: Percentage of Policy Options integrated into the Operational Plan for “Infrastructures and Living Conditions Improvement in Southern Rural Areas“ versus proposed (VII.04)									
Policy considerations	<ul style="list-style-type: none"> > Developing roads and communication infrastructures > Promoting rail as a connecting element between the marakaz > Boosting medium sized urban areas to provide services to southern livelihoods 									
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Cultural heritage of local communities is to be taken into account during planning and implementing Infrastructures and Living Conditions in Southern Rural Areas Operational Plan. Local populations are to be involved during these stages to encourage the sense of project's ownership. 									

Strategic Objective	Improving living conditions of SOUTHERN small-holders	
Operational Objective	Implementing COLLABORATIVE MANAGEMENT in southern small-holders	
Action	Implementation of Collective Actions for Infrastructures and Living Conditions improvement in southern small-holders	B.04.42
Roadmap	Implementing Coastal Stewardship – Living Conditions of Southern Small-holders	
Description	<p>Implementation of the Collective Actions for Infrastructures and Living Conditions improvement in southern rural areas is to be jointly carried out by competent authorities, local associations, NGOs and local partnership ad hoc created.</p> <p>Technical Secretariat is to assist local consortia and partnerships to implement and develop their Collective Actions. Technical assistance is to ensure information sharing and promote stakeholders coordination during the implementation.</p> <p>The establishment of specific access to micro-credits will enable stakeholders to launch Collective Actions and increasing the participation of private sector in Infrastructures and Living Conditions development.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Local Associations > Local Agenda > Local partnership > Cooperation Agencies/NGOs 	
Related actions	Previous Actions	Timeline
	> Proposal of a set of Collective Actions for the improvement of Infrastructures and Living Conditions in southern rural areas	2014-2015
	Subsequent Actions	
	> Monitor progress on southern livelihoods stewardship	2020
Timeline	2016-2020	
Estimated Cost (EGP)	Included in Actions 09, 16, 48	
Indicators	<p>P: Ratio between Collaborative Actions funded by micro-credits, by agreements with competent authorities and self financed</p> <p>R: Percentage of Collaborative Actions implemented or ongoing versus proposed (VII.05)</p>	
Policy considerations		
Environmental objectives (SEA)	<ul style="list-style-type: none"> > Promote cultural heritage of local communities > Promote community based small business such as ecotourism > Ensure traditional knowledge is respected and integrated in development plans and initiatives 	
Mitigation Measures		

Strategic Objective	Improving living conditions of SOUTHERN small-holders	
Operational Objective	Implementing COLLABORATIVE MANAGEMENT in southern small-holders	
Action	Monitor progress on southern small-holders Stewardship	B.04.43
Roadmap	Implementing Coastal Stewardship – Living Conditions of Southern Small-holders	
Description	<p>Local Competent Authorities are to monitor the implementation of the Infrastructures and Living Conditions improvement in southern rural areas Operational Plan.</p> <p>Technical Secretariat will monitor the progress achieved through Collaborative Management on Infrastructures and Living Conditions in southern rural areas (including poverty alleviation, food security and safe water supply). A Progress Report will be raised to Matruh ICZM Committee to fulfil the first learning-cycle.</p> <p>This Progress Report is to stress lessons-learned, constraining factors and potential actions to be considered by Matruh ICZM Committee and Northwest Coast Partnership.</p>	
Stakeholders involved	<ul style="list-style-type: none"> > Technical Secretariat Matruh ICZM Committee > Matruh Coastal Observatory 	
Related actions	Required Actions	Timeline
	> Implementation of Collective Actions for Infrastructures and Living Conditions improvement in southern rural areas	2016-2020
Timeline	2017-2020	
Estimated Cost (EGP)	Operational Expenses	5,000.00
	Travel Expenses	15,000.00
	TOTAL COSTS IN 4 YEARS	260,000.00
Indicators	<p>P: Appropriated indicators to assess the progress of southern livelihoods stewardship</p> <p>R: Progress Report effectively raised up to NWCP and MICZMC</p> <p>R: Conclusions of Progress Report positively integrated into Collaborative Planning in southern livelihoods (VII.06)</p>	
Policy considerations	<ul style="list-style-type: none"> > Matruh Coastal Observatory is to ensure the data and information flow. > Finish learning cycle providing conclusions and results for the following management cycle 	
Environmental objectives (SEA)		

Strategic Objective	Promoting INSTITUTIONAL CAPACITY BUILDING in ICZM to strengthening effective coastal management	
Operational Objective	Adaptation of administrative structures to ICZM process driven by the National ICZM Committee	
Action	Assessment in Capacity Needs of public administrations to successfully develop ICZM processes	C.01.44
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>The ICZM Plan requires new activities and duties from different officers and representatives of Matruh administration. Moreover, new communication channels are to be created to promote administrative coordination and cooperation.</p> <p>To adapt Matruh administration to ICZM principles and procedures requires a comprehensive assessment in Capacity Needs of public administrations. This study aims to analyse the existing capacities versus the upcoming needs required by the ICZM approach.</p>	
Stakeholders involved	> Matruh Governorate	
Related actions	Previous Actions	Timeline
	> Establishment of a Legislative Forum on distribution of competences between central and regional administrations: Conflicts and Challenges	2011
Related actions	Subsequent Action	
	> Training technical staff in ICZM	2012-2013
Timeline	2012	
Estimated Cost (EGP)	Others	15,000.00
	TOTAL COSTS IN 1 YEAR	15,000.00
Indicators	P: Number of administrations assessed R: Number of seminars and training courses proposed R: Modifications in administrative bodies (human, financial or operational resources) (VIII.01)	
Policy considerations	> Gain efficiency in plan implementation > Increase cost-effective of management actions	
Environmental objectives (SEA)		

Strategic Objective	Promoting INSTITUTIONAL CAPACITY BUILDING in ICZM to strengthening effective coastal management	
Operational Objective	Promoting ICZM capacity building to technicians working in administrative authorities and public agencies	
Action	Training of technical staff in ICZM	C.01.45
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>There is many administrative staff involved in ICZM process. This staff includes a broad range of officers and technicians coming from the Technical Secretariat and other Directorates of Matruh government. All of them are to be trained as to allow them to successfully fulfil the requirements of the ICZM process.</p> <p>The MICZMC Secretariat will be in charge of many technical activities, requiring qualified and trained personnel. The training of this Secretariat will be progressively developed to provide continuous support to their activities.</p>	
Stakeholders involved	<p>Coordination:</p> <ul style="list-style-type: none"> > Technical Secretariat of Matruh ICZM Committee <p>Target:</p> <ul style="list-style-type: none"> > Technical staff of the Secretariat of Matruh ICZM Committee > Officers from other Directorates of Matruh Administrations taking par in the ICZM process. 	
Related actions	<p>Previous Actions</p> <ul style="list-style-type: none"> > Assessment in Capacity Needs of public administrations to successfully develop ICZM processes 	<p>Timeline</p> <p>2012</p>
Timeline	2012-2013	
Estimated Cost (EGP)	Others (training courses)	70,000.00
	TOTAL COSTS IN 2 YEARS	70,000.00
Indicators	<p>P: Number of participants in training courses and workshops</p> <p>R: Trained staff working in the ICZM process (Technical Secretariat, etc) (VIII.02)</p>	
Policy considerations	<ul style="list-style-type: none"> > Seminar on ICZM planning and management concepts > Seminar on science integration in decision-making processes > Training in ICZM tools > Training in exploration and conflicts remediation > Support over time to ICZM technical staff and sectoral officers to avoid loss in capacities. 	
Environmental objectives (SEA)		

Strategic Objective	Promoting INSTITUTIONAL CAPACITY BUILDING in ICZM to strengthening effective coastal management	
Operational Objective	Promoting ICZM capacity building to technicians working in administrative authorities and public agencies	
Action	Training of technical staff in Collaborative Management	C.01.46
Roadmap	Establishing an Institutional and Regulatory Framework for ICZM	
Description	<p>Collaborative management consists of the establishment of a variety of concerted agreements between communities and agencies so as to build a foundation for more effective resource management.</p> <p>Since collaborative management represents a new approach to current Matruh planning and management activities, comprehensive training is required.</p> <p>Specific training to encourage their work during the collaborative process is to be provided to technical staff of Local Agendas and Issue-driven Working Groups, key players in Collaborative Management.</p>	
Stakeholders involved	<p>Coordination:</p> <ul style="list-style-type: none"> > Technical Secretariat of Matrouh ICZM Committee <p>Target:</p> <ul style="list-style-type: none"> > Officers from Matruh Administration > ICZM Delegates 	
Related actions	Previous Actions	Timeline
	> Incorporation of Collaborative Management into Egyptian regulation	2013
Related actions	Subsequent Actions	
	> Development of specific regulations to solve detected problems and inconsistencies during Collaborative Actions implementation and monitoring	2017-2020
Timeline	2013-2015	
Estimated Cost (EGP)	Others	105,000.00
	TOTAL COSTS IN 1 YEAR	105,000.00
Indicators	<p>P: Number of participants in training courses and workshops</p> <p>R: Trained staff working in the CoM process (Matruh Administration, etc.) (VIII.03)</p>	
Policy considerations	<ul style="list-style-type: none"> > Seminar in Collaborative Management > Training in inter-organizational planning and administrative cooperation and coordination > Training in Conflict Management. 	
Environmental objectives (SEA)		

Strategic Objective	Promoting PUBLIC EDUCATION AND AWARENESS programmes to create constituency for coastal management	
Operational Objective	Increasing education on sustainable development	
Action	Raising awareness campaigns on sustainable development in schools	C.02.47
Roadmap	Building Local Capacities for Coastal Governance	
Description	<p>The concept and the relevance of sustainable development as new paradigm of our societies should be explained and discussed with the youngest generations. They should be aware of the actual trends of environmental degradation and of increasing restrictions of the coastal ecosystems in providing the same services than years ago.</p> <p>Specific questions regarding the Northwest Coast, such as water availability, vulnerable biodiversity, natural risks and potential resources are to be discussed during raising awareness campaigns.</p> <p>Children are to play a crucial role in raising awareness their families. Behavioural changes are to be looked for.</p>	
Stakeholders involved	> Technical Secretariat	
Related actions	Previous Actions	Timeline
	> Establishment of the Matruh ICZM Committee and Technical Secretariat	2011-2020 2014-2020
Timeline	2014-2020	
Estimated Cost (EGP)	Others	15,000.00
	TOTAL COSTS IN 1 YEAR	15,000.00
Indicators	P: Number of carried out campaigns P: Number of schools involved R: Children actively participating on campaign activities (IX.01)	
Policy considerations	> Raising awareness on historical and cultural heritage > Raising awareness on the value of agricultural and natural resources > Raising awareness on the value of landscape	
Environmental objectives (SEA)	> Identify volunteers from hotels and private sectors to provide incentives, places and facilities to school students > identify sources of information for public education, and prepare appropriate operational plans > Prepare educational materials using the available budgets > Monitor and evaluate the results	

Strategic Objective	Promoting PUBLIC EDUCATION AND AWARENESS programmes to create constituency for coastal management	
Operational Objective	Increasing education on sustainable development	
Action	Establishment of an Annual Matruh Coastal Stewardship Award	C.02.48
Roadmap	Building Local Capacities for Coastal Governance	
Description	<p>The organization of an annual award will allow bringing public attention to the progress made in the region regarding integrated coastal management.</p> <p>The call will be open for Initiatives raised by local stakeholders (consortia, associations, families, private sector, research group, NGOs). These Initiatives are to contribute to develop coastal economic opportunities that sustainably contribute to both local and national development and diversify employment opportunities, and forge partnerships between Matruh stakeholders.</p> <p>The winner will receive 100,000 L.E. to support the initiative.</p>	
Stakeholders involved	Coordinating: > Technical Secretariat Matruh ICZM Committee	
Related actions	Previous Actions	Timeline
	> Training local communities in organizational and technical capabilities	2013-2016
Timeline	2014-2020	
Estimated Cost (EGP)	Others	100,000.00
	TOTAL COSTS IN 7 YEARS	700,000.00
Indicators	P: Number of sponsors R: Increasing in the number of applications	
Policy considerations	> Marketing > Sponsoring > Executive Board	
Environmental objectives (SEA)		

Strategic Objective	Promoting PUBLIC EDUCATION AND AWARENESS programmes to create constituency for coastal management	
Operational Objective	Improving the involvement of local population in the decision-taking process	
Action	Raising awareness campaign regarding stakeholder involvement in the decision-making processes	C.02.50
Roadmap	Building Local Capacities for Coastal Governance	
Description	<p>The introduction of a nested governance system in the Northwest Coast requires an important effort on the creation of the necessary social constituency to carry out ICZM policies.</p> <p>In each markaz, several public campaigns are to inform on the new procedures available for the local communities to get involved in the ICZM process and become an active part of the nested governance system.</p>	
Stakeholders involved	<p>Coordinator: > Matruh ICZM Technical Secretariat</p> <p>Target: > Local population > Private sector > Local associations > NGOs</p>	
Related actions	Previous Actions	Timeline
	> Formal adoption of ICZM policies and principles by Matruh Administration	2011
	Subsequent Action	
	> Development of ICZM regulation	2012
Timeline	2012-2013	
Estimated Cost (EGP)	Others	15,000.00
	TOTAL COSTS IN 1 YEAR	15,000.00
Indicators	<p>P: Number of carried out campaigns R: Number of locals participating in the NWCP (IX.03)</p>	
Policy considerations	<p>It is required a strong effort on advertisement campaigns to reach a broad range of local stakeholders Radio and religious institutions are to play a significant role in involving local population</p>	
Environmental objectives (SEA)	<p>> Encourage effective involvement and engagement of local communities in decision making progress > Involve locals in project and community-based initiatives and programs</p>	



ROADMAPS FOR MSICZM PLAN IMPLEMENTATION



This Section presents the Schedule of the four time-bounded Roadmaps described in Chapter 5. In fact, the information herein provided includes the contribution of each Roadmap to the Strategic and Operational Objectives' achievement. The four time-bounded are namely:

- Establishing an Institutional and Regulatory Framework for ICZM
- Building Local Capacities for Coastal Governance
- Developing a Research Agenda
- Implementation of Coastal Stewardship

The fourth roadmap is related to effective coastal resources planning and management and therefore it includes the four issues addressed by the Area of Activity B. These are as follow:

- Water Resources
- Integrated Primary Activities
- Sustainable Tourism Development
- Living Condition of Southern Small-holders

ROADMAP01 – ESTABLISHING AN INSTITUTIONAL AND REGULATORY FRAMEWORK FOR ICZM		
100% achieved operational objectives through RM01	Achievement percentage of strategic objectives	Area of Activity
Increase COORDINATION between Matruh Governorate and Central Administrations	66% A.01: Maximizing COORDINATION AND COOPERATION between administrations and agencies	A – Strengthening ICZM policies
Establishing long-term FUNDING mechanisms		
Improving distribution of COMPETENCIES	100% A.02: Reconsidering existing LAWS AND REGULATIONS	
Developing specific ICZM LAW OR REGULATION		
Simplifying existing REGULATION concerning resource use and exploitation		
Developing CONFLICT RESOLUTION tools	33% A.03: Ensuring stakeholder INVOLVEMENT	
Adaptation of administrative structures to ICZM process driven by the NATIONAL ICZM STRATEGY	100% C.01: Promoting INSTITUTIONAL CAPACITY BUILDING in ICZM to strengthening effective coastal management	C– Promoting Stakeholders' Awareness
Promote ICZM capacity building to technicians working in administrative authorities and public agencies		

ROADMAP01 – ESTABLISHMENT OF AN INSTITUTIONAL AND REGULATORY FRAMEWORK FOR ICZM											
Code Action	Action	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
A.01.01	Establishment of the Matruh ICZM Committee and Technical Secretariat										
A.02.10	Establishment of a Legislative Forum on Distribution of competences between Central and Regional administrations: Conflicts and Challenges										
A.01.02	Formal adoption of ICZM policies and principles by Matruh Administration										
C.01.44	Assessment in Capacity Needs of public administrations to successfully develop ICZM processes										
A.02.11	Development of ICZM regulation										
A.01.03	Coordination of competencies between administrations for the development of ICZM process										
A.01.09	Ensure International Donors to provide enough funds to maintain ICZM plan										
A.03.17	Development of Conflict Resolution Guidelines and Procedures										
C.01.45	Training of technical staff in ICZM										
A.02.12	Incorporation of Collaborative Management into Matruh regulation										
C.01.46	Training of technical staff in Collaborative Management										
A.01.04	Development of Institutional Agreements between Matruh Governorate and the Ministry of Defence to promote the common use of military infrastructures and urban coastal areas										
A.02.13	Establishment of a Single-Point-of-Contact in Matruh administration										
A.02.14	Development of specific regulations to solve detected problems and incoherencies during Collaborative Management implementation										

ROADMAP02 – BUILDING LOCAL CAPACITIES FOR COASTAL GOVERNANCE

Achieved operational objectives through RMO2	Achievement percentage of strategic objectives	Area of Activity
Developing effective MECHANISMS for stakeholders' involvement	66% A.03: Ensuring stakeholder INVOLVEMENT	A– Strengthening ICZM policies
Promoting COLLABORATIVE ENVIRONMENTAL PLANNING		
Increasing education on sustainable development	100% C.02: Promoting PUBLIC EDUCATION AND AWARENESS programmes to create constituency for coastal management	C – Promoting stakeholder's awareness
Providing capacity building for collaborative and organizational development		
Improving the involvement of local population in the decision-taking process		

ROADMAP02 – BUILDING LOCAL CAPACITIES FOR COASTAL GOVERNANCE

Code Action	Action	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
C.02.50	Raising awareness campaign regarding stakeholder involvement in the decision-making processes										
C.02.49	Training local communities in organisational and technical capabilities										
A.03.16	Establishment of specific access to micro-credits for Collectives Actions implementation										
A.03.15	Establishment of the Northwest Coast Partnership (NWCP)										
A.03.18	Creation of Markaz-driven Working Groups in the Northwest Coast										
A.03.19	Establishment of Issue-driven Working Groups for ICZM Priorities										
C.02.47	Raising awareness campaigns on sustainable development in schools										
C.02.48	Establishment of an Annual Maturuh Coastal Stewardship Award										

ROADMAP03 – ESTABLISHMENT OF A RESEARCH AGENDA		
Achieved operational objectives through RM03	Achievement percentage of strategic objectives	Area of Activity
100 % Developing a RESEARCH AGENDA of applied research to support policy-making and management decisions	33% A. 01: Maximizing COORDINATION AND COOPERATION between administrations and agencies	A – Strengthening ICZM Policy

ROADMAP03 – ESTABLISHMENT OF A RESEARCH AGENDA											
Code Action	Action	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
A.01.05	Organization of a High Level Workshop on ICZM in Arid Regions										
A.01.06	Establishment of the Matruh Coastal Observatory										
A.01.07	Establishment of the Matruh Research Advisory Group										
A.01.08	Development of Specific Research Projects within the NWCP focussed on the priorities of the Working Groups										

ROADMAP04 – IMPLEMENTATION OF COASTAL STEWARDSHIP – WATER RESOURCES		
100% achieved operational objectives through RM04	Achievement percentage of strategic objectives	Area of Activity
Creating CONSTITUENCY for Water stewardship	100% B.01: Implementing policies and measures included in the NATIONAL WATER RESOURCES PLAN	B – PLANNING A SUSTAINABLE USE OF COASTAL RESOURCES
Developing Water COLLABORATIVE PLANNING		
Implementing Water COLLABORATIVE MANAGEMENT		

ROADMAP04 – IMPLEMENTATION OF COASTAL STEWARDSHIP – WATER RESOURCES											
Code Action	Action	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
B.01.20	Constitution of the Northwest Coast Water User Association										
B.01.21	Creation of the Integrated Water Management District in Matruh Governorate										
B.01.22	Proposal of a set of Collective Actions for Integrated Water Management										
B.01.23	Proposal of Policy Options to be included into the Water Operational Plan										
B.01.24	Implementation of Collective Actions for Integrated Water Management										
B.01.25	Monitor progress on Water Resources Stewardship										

ROADMAP04 – IMPLEMENTATION OF COASTAL STEWARDSHIP – INTEGRATED PRIMARY ACTIVITIES		
100% achieved operational objectives through RM04	Achievement percentage of strategic objectives	Area of Activity
Creating CONSTITUENCY for Integrated Primary Activities stewardship	100 % B.02: Developing INTEGRATED PRIMARY ACTIVITIES MANAGEMENT	B – PLANNING A SUSTAINABLE USE OF COASTAL RESOURCES
Developing Integrated Primary Activities COLLABORATIVE PLANNING		
Implementing Integrated Farming COLLABORATIVE MANAGEMENT		

ROADMAP04 – IMPLEMENTATION OF COASTAL STEWARDSHIP – INTEGRATED PRIMARY ACTIVITIES											
Code Action	Action	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
B.02.26	Constitution of Northwest Coast Farmers Association										
B.02.27	Coordinating management of a seedbed adapted to Aridlands conditions										
B.02.28	Training farmers associations on Integrated Farming Management										
B.02.29	Proposal of a set of Collective Actions for developing Integrated Primary Activities Management										
B.02.30	Proposal of Policy Options to be included into the Operational Plan for Integrated Primary Activities Development										
B.02.31	Implementation of Collective Actions for Integrated Primary Activities Management										
B.02.32	Monitor progress on Integrated Primary Activities Stewardship										

ROADMAP04 – IMPLEMENTATION OF COASTAL STEWARDSHIP – SUSTAINABLE TOURISM DEVELOPMENT

100% achieved operational objectives through RM04	Achievement percentage of strategic objectives	Area of Activity
Creating CONSTITUENCY for Tourism stewardship	100% B.03: Implementing SUSTAINABLE TOURISM ACTIVITIES	B – PLANNING A SUSTAINABLE USE OF COASTAL RESOURCES
Developing Tourism COLLABORATIVE PLANNING		
Implementing Tourism COLLABORATIVE MANAGEMENT		

ROADMAP04 – IMPLEMENTATION OF COASTAL STEWARDSHIP – SUSTAINABLE TOURISM DEVELOPMENT

Code Action	Action	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
B.03.33	Constitution of diverse Associations with interest in Tourism Development										
B.03.34	Public Workshops “Creation and Development of the brand NWC Tourism”										
B.03.35	Proposal of a set of Collective Actions for Northwest Coast Tourism development										
B.03.36	Proposal of Policy Options to be included into the Operational Plan for the Northwest Coast Tourism Development										
B.03.37	Implementation of Collective Actions for the Northwest Coast Tourism development										
B.03.38	Monitor progress on Tourism Stewardship										

ROADMAP04 – IMPLEMENTATION OF COASTAL STEWARDSHIP – SOUTHERN SMALL-HOLDERS		
100% achieved operational objectives through RM04	Achievement percentage of strategic objectives	Area of Activity
Creating CONSTITUENCY for Southern small-holders stewardship	100% B.04: Improving living conditions of SOUTHERN SMALL-HOLDERS	B – PLANNING A SUSTAINABLE USE OF COASTAL RESOURCES
Developing COLLABORATIVE PLANNING in southern small-holders		
Implementing COLLABORATIVE MANAGEMENT in southern small-holders		

ROADMAP04 – IMPLEMENTATION OF COASTAL STEWARDSHIP – SOUTHERN SMALL-HOLDERS											
Code Action	Action	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
B.04.39	Public Workshops “Improving Infrastructures and Living Conditions of southern small-holders”										
B.04.40	Proposal of a set of Collective Actions for the improvement of Infrastructures and Living Conditions in southern small-holders										
B.04.41	Proposal of Policy Options to be included into the Operational Plan for Infrastructures and Living Conditions improvement in southern small-holders										
B.04.42	Implementation of Collective Actions for Infrastructures and Living Conditions improvement in southern small-holders										
B.04.43	Monitor progress on southern small-holders stewardship										

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COSTS ESTIMATION



Action Code	Action	Time Framework	Total Cost (10 ³ EGP)	Installation (10 ³ EGP)	Employees (10 ³ EGP)	Operational Expenses (10 ³ EGP)	Office Equipment (10 ³ EGP)	Meeting Expenses (10 ³ EGP)	Travel Expenses (10 ³ EGP)	Others Expenses (10 ³ EGP)	1st year Cost (10 ³ EGP)	Cost per year (10 ³ EGP)
A.01.01	Establishment of the Matruh ICZM Committee and Technical Secretariat	10	1,730	150	100	10	30	--	--	--	130	160
A.01.02	Formal adoption of ICZM policies and principles by Matruh Administration	1	Included in 01	--	--	--	--	--	--	--	--	--
A.01.03	Coordination of competencies between administrations for the development of ICZM process	6	276	--	--	--	--	36	10	--	--	46
A.01.04	Development of Institutional Agreements between Matruh Governorate and Ministry of Defence to promote common use of military infrastructures and urban coastal areas	8	120	--	--	--	--	5	10	--	--	15
A.01.05	Organization of a High Level Workshop on ICZM in Arid Regions	1	400	--	--	--	--	--	--	400	--	400
A.01.06	Establishment of the Matruh Coastal Observatory	9	874	--	36	50	100	--	--	--	100	86
A.01.07	Establishment of the Matruh Research Advisory Group	8	320	--	--	--	--	20	20	--	--	40
A.01.08	Development of Specific Research Projects within the NWCP focussed on the priorities of the Working Groups	8	800	--	--	--	--	--	--	100	--	100
A.01.09	Ensure International Donors to provide enough funds to maintain ICZM plan	9	162	--	18	--	--	--	--	--	--	18

A.02.10	Establishment of a Legislative Forum on Distribution of competences between Central and Regional administrations: Conflicts and Challenges	1	75	--	--	--	--	--	--	--	--	75	--	75
A.02.11	Development of ICZM regulation	1	Included in O1	--	--	--	--	--	--	--	--	--	--	--
A.02.12	Incorporation of Collaborative Management into Matruh regulation	1	Included in O1	--	--	--	--	--	--	--	--	--	--	--
A.02.13	Establishment of a Single-Point-of-Contact in Matruh administration	7	82	--	6	5	5	5	5	5	5	--	5	11
A.02.14	Development of specific regulations to solve detected problems and incoherencies during Collaborative Management implementation	4	20	--	--	5	5	--	--	--	--	--	--	5
A.03.15	Establishment of Northwest Coast Partnership (NWCP)	8	200	--	--	5	5	10	10	10	10	--	--	25
A.03.16	Establishment of specific access to micro-credits for Collective Actions Implementation	8	1,600	--	--	--	--	--	--	--	--	200	--	200
A.03.17	Development of Conflict Resolution Guidelines and Procedures	1	15	--	--	15	15	--	--	--	--	--	--	15
A.03.18	Creation of Markaz-driven Working Groups in the Northwest Coast	3	152	--	24	5	5	--	20	20	20	--	5	49
A.03.19	Establishment of Issue-driven Working Groups for ICZM Priorities	3	152	--	24	15	15	--	10	10	10	--	5	49
B.01.20	Constitution of the Northwest Coast Water User Association	8	85	--	--	10	10	--	--	--	--	--	5	10

Action Code	Action	Time Framework	Total Cost (10 ³ EGP)	Installation (10 ³ EGP)	Employees (10 ³ EGP)	Operational Expenses (10 ³ EGP)	Office Equipment (10 ³ EGP)	Meeting Expenses (10 ³ EGP)	Travel Expenses (10 ³ EGP)	Others Expenses (10 ³ EGP)	1st year Cost (10 ³ EGP)	Cost per year (10 ³ EGP)
B.01.21	Creation of the Integrated Water Management District in Matruh Governorate	8	Corresponds to Water Authorities	--	--	--	--	--	--	--	--	--
B.01.22	Proposal of a set of Collective Actions for Integrated Water Management	2	40	--	--	5	--	10	5	--	--	20
B.01.23	Proposal of Policy Options to be included into the Water Operational Plan	2	40	--	--	5	--	10	5	--	--	20
B.01.24	Implementation of Collective Actions for Integrated Water Management	5	Included in 09, 16, 48	--	--	--	--	--	--	--	--	--
B.01.25	Monitor progress on Water Resources Stewardship	4	260	--	--	50	--	--	15	--	--	65
B.02.26	Constitution of the Northwest Coast Farmers Association	8	210	--	--	25	10	--	--	--	10	25
B.02.27	Coordinating management of a seedbed adapted to Aridlands conditions	7	175	--	--	20	--	--	5	--	--	25
B.02.28	Training farmers associations on Integrated Farming Management	3	87	--	--	--	--	5	--	24	--	29
B.02.29	Proposal of a set of Collective Actions for developing Integrated Primary Activities Management	2	40	--	--	5	--	10	5	--	--	20
B.02.30	Proposal of Policy Options to be included into the Integrated Primary Activities Operational Plan	2	40	--	--	5	--	10	5	--	--	20
B.02.31	Implementation of Collective Actions for Integrated Primary Activities Management	5	Included in 09, 16, 48	--	--	--	--	--	--	--	--	--

B.02.32	Monitor progress on Integrated Primary Activities Stewardship	4	260	--	--	50	--	--	15	--	--	65
B.03.33	Constitution of diverse Associations with interest in tourism development	3	120	--	--	30	--	--	10	--	--	40
B.03.34	Public Workshops "Creation and Development of the brand Northwest Coast Tourism"	1	120	--	--	15	--	--	35	70	70	50
B.03.35	Proposal of a set of Collective Actions for Northwest Coast Tourism development	2	40	--	--	5	--	10	5	--	--	20
B.03.36	Proposal of Policy Options to be included into the Operational Plan for Northwest Coast Tourism development	2	40	--	--	5	--	10	5	--	--	20
B.03.37	Implementation of Collective Actions for Northwest Coast Tourism development	5	Included in 09, 16, 48	--	--	--	--	--	--	--	--	--
B.03.38	Monitor progress on Tourism Stewardship	4	260	--	--	50	--	--	15	--	--	65
B.04.39	Public Workshops "Improving Infrastructures and Living Conditions of southern small-holders"	1	120	--	--	15	--	--	35	70	70	50
B.04.40	Proposal of a set of Collective Actions for the improvement of Infrastructures and Living Conditions in southern small-holders	2	40	--	--	5	--	10	5	--	--	20
B.04.41	Proposal of Policy Options to be included into the Operational Plan for Infrastructures and Living Conditions improvement in southern small-holders	2	40	--	--	5	--	10	5	--	--	20

Action Code	Action	Time Framework	Total Cost (10 ³ EGP)	Installation (10 ³ EGP)	Employees (10 ³ EGP)	Operational Expenses (10 ³ EGP)	Office Equipment (10 ³ EGP)	Meeting Expenses (10 ³ EGP)	Travel Expenses (10 ³ EGP)	Others Expenses (10 ³ EGP)	1st year Cost (10 ³ EGP)	Cost per year (10 ³ EGP)
B.04.42	Implementation of Collective Actions for Infrastructures and Living Conditions improvement in southern small-holders	5	Included in 09, 16, 48	--	--	--	--	--	--	--	--	--
B.04.43	Monitor progress on southern small-holders stewardship	4	260	--	--	50	--	--	15	--	--	65
C.01.44	Assessment in Capacity Needs of public administrations to successfully develop ICZM processes	1	15	--	--	--	--	--	--	20	--	20
C.01.45	Training of technical staff in ICZM	2	70	--	--	--	--	--	--	35	--	35
C.01.46	Training of technical staff in Collaborative Management	3	105	--	--	--	--	--	--	35	--	35
C.02.47	Raising awareness campaigns on sustainable development in schools	7	700	--	--	--	--	--	--	100	--	100
C.02.48	Establishment of an Annual Matruh Coastal Stewardship Award	7	700	--	--	--	--	--	--	100	--	100
C.02.49	Training local communities in organisational and technical capabilities	4	400	--	--	--	--	--	--	100	--	100
C.02.50	Raising awareness campaign regarding stakeholder involvement in the decision-making processes	2	30	--	--	--	--	--	--	25	--	25
TOTAL	50 ACTIONS	10 YEARS	11,300									

Action Code	Action	2011 (10 ³ EGP)	2012 (10 ³ EGP)	2013 (10 ³ EGP)	2014 (10 ³ EGP)	2015 (10 ³ EGP)	2016 (10 ³ EGP)	2017 (10 ³ EGP)	2018 (10 ³ EGP)	2019 (10 ³ EGP)	2020 (10 ³ EGP)	Total Cost (10 ³ EGP)
A.01.01	Establishment of the Matruh ICZM Committee and Technical Secretariat	290	160	160	160	160	160	160	160	160	160	1,730
A.01.02	Formal adoption of ICZM policies and principles by Matruh Administration	--										Included in O1
A.01.03	Coordination of competencies between administrations for the development of ICZM process		46	46	46	46	46	46				276
A.01.04	Development of Institutional Agreements between Matruh Governorate and Ministry of Defence to promote common use of military infrastructures and urban coastal areas			15	15	15	15	15	15	15	15	120
A.01.05	Organization of a High Level Workshop on ICZM in Arid Regions		400									400
A.01.06	Establishment of the Matruh Coastal Observatory		186	86	86	86	86	86	86	86	86	874
A.01.07	Establishment of the Matruh Research Advisory Group			40	40	40	40	40	40	40	40	320
A.01.08	Development of Specific Research Projects with the NWCP focussed on the priorities of the Working Groups			100	100	100	100	100	100	100	100	800
A.01.09	Ensure International Donors to provide enough funds to maintain ICZM plan		18	18	18	18	18	18	18	18	18	162
A.02.10	Establishment of a Legislative Forum on Distribution of competences between Central and Regional administrations: Conflicts and Challenges	75										75
A.02.11	Development of ICZM regulation		--									Included in O1

Action Code	Action	2011 (10 ³ EGP)	2012 (10 ³ EGP)	2013 (10 ³ EGP)	2014 (10 ³ EGP)	2015 (10 ³ EGP)	2016 (10 ³ EGP)	2017 (10 ³ EGP)	2018 (10 ³ EGP)	2019 (10 ³ EGP)	2020 (10 ³ EGP)	Total Cost (10 ³ EGP)
A.02.12	Incorporation of Collaborative Management into Matruh regulation	--										Included in O1
A.02.13	Establishment of a Single-Point-of-Contact in Matruh administration				16	11	11	11	11	11	11	82
A.02.14	Development of specific regulations to solve detected problems and incoherencies during Collaborative Management implementation							5	5	5	5	20
A.03.15	Establishment of Northwest Coast Partnership (NWCPS)			25	25	25	25	25	25	25	25	200
A.03.16	Establishment of specific access to micro-credits for Collective Actions Implementation			200	200	200	200	200	200	200	200	1,600
A.03.17	Development of Conflict Resolution Guidelines and Procedures		15									15
A.03.18	Creation of Markaz-driven Working Groups in the Northwest Coast				54	49	49					152
A.03.19	Establishment of Issue-driven Working Groups for ICZM Priorities				54	49	49					152
B.01.20	Constitution of the Northwest Coast Water User Association			15	10	10	10	10	10	10	10	85
B.01.21	Creation of the Integrated Water Management District in Matruh Governorate			--	--	--	--	--	--	--	--	Corresponds to Water Authorities
B.01.22	Proposal of a set of Collective Actions for Integrated Water Management				20	20						40
B.01.23	Proposal of Policy Options to be included into the Water Operational Plan					20	20					40

Action Code	Action	2011 (10 ³ EGP)	2012 (10 ³ EGP)	2013 (10 ³ EGP)	2014 (10 ³ EGP)	2015 (10 ³ EGP)	2016 (10 ³ EGP)	2017 (10 ³ EGP)	2018 (10 ³ EGP)	2019 (10 ³ EGP)	2020 (10 ³ EGP)	Total Cost (10 ³ EGP)
B.03.36	Proposal of Policy Options to be included into the Operational Plan for Northwest Coast Tourism development					20	20					40
B.03.37	Implementation of Collective Actions for Northwest Coast Tourism development											Included in 09, 16, 48
B.03.38	Monitor progress on Tourism Stewardship							65	65	65	65	260
B.04.39	Public Workshops "Improving Infrastructures and Living Conditions of southern small-holders"			120								120
B.04.40	Proposal of a set of Collective Actions for the improvement of Infrastructures and Living Conditions in southern small-holders				20	20						40
B.04.41	Proposal of Policy Options to be included into the Operational Plan for Infrastructures and Living Conditions improvement in southern small-holders					20	20					40
B.04.42	Implementation of Collective Actions for Infrastructures and Living Conditions improvement in southern small-holders											Included in 09, 16, 48
B.04.43	Monitor progress on southern small-holders stewardship							65	65	65	65	260
C.01.44	Assessment in Capacity Needs of public administrations to successfully develop ICZM processes		20									20
C.01.45	Training of technical staff in ICZM		35	35								70

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THE MSICZM PLAN PROGRESS INDICATOR SYSTEM



The MSICZM Plan Progress Indicator System consists of one Progress Index for each Strategic and Operational Objective. Actually, these Progress Indexes will monitor the implementation of the MSICZM Plan and its successful development.

The MSICZM Plan Progress Indicator System is made up of Action Indicators (see Action Factsheets) and these Indicators will continuously monitor the action implementation (Progress Indicator) of the MSICZM Plan together with the results (Result Indicator).

Finally, the information of the MSICZM Plan Progress Indicator System is also summarized in factsheets, one per Operational Objective. These factsheets provide the following information:

- Name of the Operational Objective,
- Name of the Indicator,
- Related Action,
- Indicator Code
- Weight of the indicator in relation to its Operational and Strategic Objective
- Values and Thresholds of the indicator,
- Source of information

The Values and Thresholds provided allow normalizing the measurement of each indicator. On the other hand, the Weight, based on its importance for the Plan's implementation, will allow the calculation of each Index.

PROGRESS INDEXES OF ICZM PLAN IMPLEMENTATION

The Progress Indexes have been developed to evaluate the progression in each Strategic Objective. They are named I to IX, depending on the Strategic Objective, and their general formula is as follows:

$$SO_n = \sum (WISO * ISO)$$

Being:

SO_n: the Strategic Objective (n from I to IX)

I_{so}: the value of indicator I of that Strategic Objective

WI_{so}: the weight of indicator I in relation to its Strategic Objective

The value of each Index is always compressed between 1 and 3, since the values of the indicators are normalized (by means of their thresholds)

and their weights are expressed in a fraction of a unit. Therefore, 1 means the minimum progression while 3 represents a successful achievement of the MSICZM Plan Objectives.

The 9 Progression Indexes (one for each Strategic Objective) can be represented all together to monitor the overall progression of the Plan and detect those Strategic Objectives which are facing special difficulties in their implementation. In fact, Figure TA.1 shows the representation of a simulated scenario. In this scenario, the Strategic Objectives V and IX are not progressing adequately, followed by Objectives III and VIII, which show a limited progression.

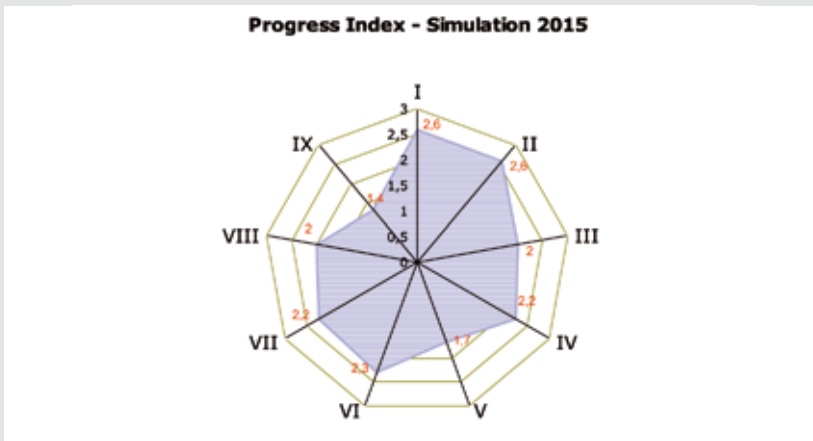


Figure 8.1. Representation of the MSICZM Progress Index

The MSICZM Plan Progress Indicators System also allows individually analyzing each Strategic Objective through their Operational Objectives. Actually, each Operational Objective can develop their own Progress Index, as occurs with the Strategic Objectives. The general formula for the Progress Indexes of the Operational Objectives is as follows:

$$OO_n = \sum (WI_{oo} * I_{oo})$$

Being:

OO_n: the Operational Objective (n from 01 to 27)

I_{oo}: the value of indicator I of that Operational Objective

WI_{oo}: the weight of indicator I in relation to its Operational Objective

The calculation of the Progress Indexes of each Operational Objective is equivalent to the Strategic Objective's Progress Index. In Figure TA.2 the Progress Index corresponding to Strategic Objective I (Maximizing

COORDINATION AND COOPERATION between administrations and agencies) obtained in the previous simulation is analyzed based on its Operational Objectives.

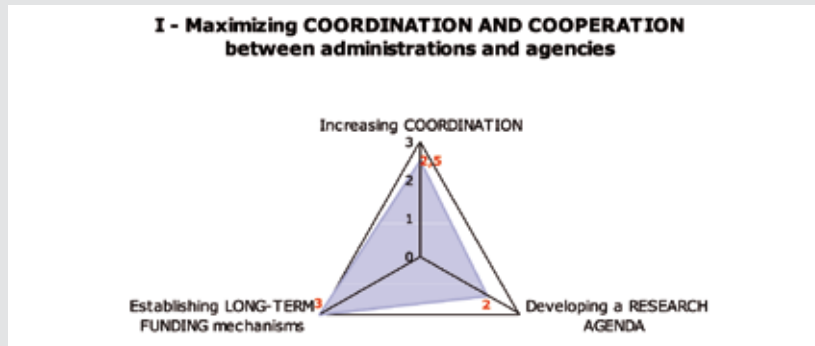


Figure 8.2. Representation of the Strategic Objective Progress Index

Based on the simulation, Progress Index I has a value of 2.6, which is a good value. However, the respective Operational Objective Progress Index showed that the Operational Objective A.02. is not fully developed. On the other hand, the Operational Objective A.03 is being successfully implemented.

Monitoring the progression of each Operational Objective makes easier adaptive learning and management by decision-makers, although the temporal implementation of the MSICZM Plan needs to be considered when monitoring its progression. In fact, the actions will be implemented following four different time-bounded roadmaps, which ensure the temporal coherence of the ICZM Plan implementation.

STRATEGIC OBJECTIVE A.01 – MAXIMIZING COORDINATION AND COOPERATION BETWEEN ADMINISTRATIONS AND AGENCIES

Operational objective	Increasing COORDINATION between Matruh Governorate and Central Administrations	
Indicator	Budget approval for the Technical Secretariat	Functions and actors clearly defined by legislation or administrative acts
Related action	Establishment of the MICZMC and Technical Secretariat	Coordination of competences between administrations for the development of ICZM process
Code	I.01	I.02
Weight O.0	50%	50%
Weight S.0	25%	25%
Thresholds	Measure: EGP. addressed to the Technical Secretariat 1: Not approved 2: Approved but less than 60% EGP 3: Approved and more than 60% EGP	1: Not defined 2: Only drafted 3: Clearly defined
Data Source	Technical Secretariat	General Secretary of Matruh

Operational objective	Developing a RESEARCH AGENDA of applied research to support policy-making and management decisions	
Indicator	N° of published reports by Matruh Coastal Observatory	Ongoing and developed research projects
Related action	Establishment of the Matruh Coastal Observatory	Development of specific research projects focussed on the NWCIP priorities
Code	I.03	I.04
Weight O.0	30%	70%
Weight S.0	4.5%	10.5%
Thresholds	1: No reports 2: Only NWCIP Report 3: NWCIP Report and others	Measure: n° of ongoing and developed projects*100/ n° of allocated projects to Research Advisory Group* year 1: < 20% 2: 20-70% 3: > 70%
Data Source	Matruh Coastal Observatory	Technical Secretariat

Operational objective	Establishing long-term funding mechanisms
Indicator	N° of projects funded by external institutions
Related action	Ensure International Donors to provide enough funds to maintain ICZM plan
Code	I.05
Weight O.0	100%
Weight S.0	35%
Thresholds	Measure: n° of funded projects*100/ n° of approved ICZM projects 1: <30% 2: 30%-70% 3: >70%
Data Source	Technical Secretariat

$$I=0.25*(I.01)+0.25*(I.02)+0.045(I.03)+0.105*(I.04)+0.35*(I.05)$$

STRATEGIC OBJECTIVE A.02. – RECONSIDERING EXISTING LAWS AND REGULATIONS

Operational objective	Improve distribution of competencies
Indicator	Ratio between identified conflicts and agreements to resolve them solutions
Related action	Establishment of a Legislative Forum on Distribution of competencies between Central and Regional administrations: Conflicts and Challenges
Code	11.01
Weight O.0	100%
Weight S.0	30%
Thresholds	Measure: n° of agreements*100 / n° of conflicts*year 1: < 20% 2: 20-70% 3: >70%
Data Source	General Secretary of Matruh

Operational objective	Developing specific ICZM LAWS OR REGULATIONS	
Indicator	Clearly defined interagency process and authority (competences, communication between institutions, committees, etc.)	Interagency process and authorities and roles clearly defined (Coll. Management)
Related action	Development ICZM regulation	Incorporation of CoM into Matruh regulation
Code	11.02	11.03
Weight O.0	60%	40%
Weight S.0	30%	20%
Thresholds	1: Not defined 2: Draft defined 3: Clearly defined	1: Not defined 2: Draft defined 3: Clearly defined
Data Source	Technical Secretariat	Technical Secretariat

Operational objective	Simplifying REGULATIONS concerning resource use and exploitation	
Indicator	Number of applications received in the Single Point of Contact	Ratio between modifications in Collaborative Management regulation and problems detected
Related action	Establishment of a Single Point of Contact in Matruh Administration	Development of specific regulation to solve detected problems and incoherencies during CoM implementation
Code	II.04	II.05
Weight 0.0	40%	60%
Weight S.0	8%	12%
Thresholds	Measure: n° of applications*100/ n° of applications expected by statutes*year 1: < 20% 2: 20-70% 3: >70%	Measure: n° of modifications in CoM*100/ n° problems detected 1: < 20% 2: 20-70% 3: >70%
Data Source	Single Point of Contact	Technical Secretariat

$$II=0.3*(II.01)+0.3*(II.02)+0.2*(II.03)+0.08*(II.04)+0.12*(II.05)$$

STRATEGIC OBJECTIVE A.03. – ENSURING STAKEHOLDER INVOLVEMENT

Operational objective Developing effective MECHANISMS for stakeholders' involvement		
Indicator	Ratio between agreements achieved and issues discussed within NWCP	Percentage of projects and Collective Actions raised by micro credits versus requests
Related action	Establishment of the NWCP	Establishment of specific access to microcredits for CA implementation
Code	III.01	III.02
Weight O.0	40%	60%
Weight S.0	12%	18%
Thresholds	Measure: n° of agreements*100/ n° of issues discussed 1: < 20% 2: 20-70% 3: >70%	Measure: n° of CA funded by microcredits *100/ n° of requested microcredits 1: <50% 2: 50%-70% 3: >70%
Data Source	Northwest Coast Partnership	Bank(s)/ Technical Secretariat

Operational objective Developing conflict resolution tools	
Indicator	Percentage of changes in the identified conflicts
Related action	Development of Conflict resolution Guidelines and Procedures
Code	III.03
Weight O.0	100%
Weight S.0	20%
Thresholds	Measure: n° of changes/n° of identified conflicts 1: <20% 2: 20-70% 3: >70%
Data Source	Technical Secretariat

Operational objective	Promoting COLLABORATIVE MANAGEMENT	
Indicator	Collective Actions proposed by locals per markaz	Policy Options proposed per Working Groups
Related action	Creation of a Local Agenda per markaz	Establishment of the Working Groups
Code	III.04	III.05
Weight O.O	50%	50%
Weight S.O	25%	25%
Thresholds	Measure: n° of CA proposed*100/ n° of CA expected to be proposed in the Local Agenda program 1: < 20% 2: 20-70% 3: >70%	Measure: n° of P.O. proposed*100/ n° of PO expected to be developed within Working Groups 1: < 20% 2: 20-70% 3: >70%
Data Source	ICZM Delegates (Technical Secretariat)	Technical Secretariat

$$III = 0,012*(III.01)+0,018*(III.02)+0,2*(III.03)+0,25*(III.04)+0,25*(III.05)$$

STRATEGIC OBJECTIVE B.01 – IMPLEMENTING POLICIES AND MEASURES INCLUDED IN THE NATIONAL WATER RESOURCES PLAN

Operational objective Creating CONSTITUENCY for Water stewardship		
Indicator	Projects and initiatives carried out by WUA	Agreements achieved between IWMD and WUA
Related action	Constitution of the NWC Water User Association	Creation of the IWDM in Matruh Governorate
Code	IV.01	IV.02
Weight O.0	50%	50%
Weight S.0	16.5%	16.5%
Thresholds	Measure: n° of initiatives and projects carried out*100/ n° of initiatives included in the WUA statutes 1: < 20% 2: 20-70% 3: >70%	Measure: n° of agreements*100/ n° of issues to resolve proposed in the IWMD statutes 1: < 20% 2: 20-70% 3: >70%
Data Source	Water User Association	Integrated Water Management District

Operational objective Developing Water COLLABORATIVE MANAGEMENT		
Indicator	Collective Actions per markaz presented to Technical Secretariat	Percentage of Policy Options integrated into Water Operational Plan versus proposed
Related action	Proposal of a set of CA for Integrated Water Management	Proposal of Policy Options to be included into the Water Operational Plan
Code	IV.03	IV.04
Weight O.0	50%	50%
Weight S.0	16.5%	16.5%
Thresholds	Measure: n° of CA regarding water management presented*100/ n° of CA expected to be proposed by Local Agenda 1: < 20% 2: 20-70% 3: >70%	Measure: n° of policy options proposed*100/ n° of policy options included 1: < 20% 2: 20-70% 3: >70%
Data Source	Technical Secretariat	IWMD

Operational objective Implementing Water COLLABORATIVE MANAGEMENT		
Indicator	Percentage of Collective Actions implemented or ongoing versus proposed	Conclusions of Progress Report positively integrated into Collaborative Water Planning
Related action	Implementation of CA	Monitoring progress on water resources stewardship
Code	IV.05	IV.06
Weight O.0	60%	40%
Weight S.0	20.4%	13.6%
Thresholds	1: <30% 2: 30%-70% 3: >70%	Measure: N° of conclusions integrated*100/ N° of conclusions 1: <20 % 2: 20-50% 3: >50%
Data Source	ICZM Delegates (Technical Secretariat)	Technical Secretariat

$$IV = 0,165*(IV.01)+0,165*(IV.02)+0,165*(IV.03)+0,165*(IV.04)+0,204*(IV.05)+0,136*(IV.06)$$

STRATEGIC OBJECTIVE B.02. – DEVELOPING INTEGRATED PRIMARY ACTIVITIES

Operational objective Creating CONSTITUENCY for Integrated Primary Activities stewardship		
Indicator	Agreements achieved between farmer's Association and Public Authorities	Projects and initiatives related to training courses raised by trained farmers
Related action	Constitution of the NWC Farmers Association	Training farmers on Integrated Farming Management
Code	V.01	V.02
Weight 0.0	50%	50%
Weight S.0	16.5%	16.5%
Thresholds	Measure: n° of agreements*100/ n° of expected agreements to achieve in the association's statutes 1: <20% 2:20-70% 3:>70%	Measure: n° of projects*100/ n° of projects expected to develop after courses 1: <20% 2:20-70% 3:>70%
Data Source	Northwest Coast Farmers Association	Technical Secretariat

Operational objective Developing Integrated Primary Activities COLLABORATIVE PLANNING		
Indicator	Collective Actions per markaz presented to Technical Secretariat	Percentage of Policy Options integrated into Integrated Primary Activities Operational Plan versus proposed
Related action	Proposal of a set of CA	Proposal of Policy Options to be included into the Integrated Primary Act. Operational Plan
Code	V.03	V.04
Weight 0.0	50%	50%
Weight S.0	16.5%	16.5%
Thresholds	Measure: n° of CA regarding primary activities management presented*100/ n° of CA expected to be proposed by Local Agenda 1: <20% 2:20-70% 3:>70%	Measure: n° of policy options proposed*100/ n° of policy options included 1: < 20% 2: 20-70% 3: >70%
Data Source	Technical Secretariat	Local Competent Authority - Agriculture

Operational objective Implementing Integrated Farming COLLABORATIVE MANAGEMENT		
Indicator	Percentage of Collective Actions implemented or ongoing versus proposed	Conclusions of Progress Report positively integrated into Integrated Primary Activities Collaborative Planning
Related action	Implementation of CA on Integrated Primary Activities Management	Monitor progress on Primary Activities stewardship
Code	V.05	V.06
Weight 0.0	60%	40%
Weight S.0	20.4%	13.6%
Thresholds	1: <30% 2: 30%-70% 3: >70%	Measure: N° of conclusions integrated*100/ n° of conclusions 1: <20 % 2: 20-50% 3: >50%
Data Source	Technical Secretariat	Technical Secretariat

$$V=0,165*(V.01)+0,165*(V.02)+0,165*(V.03)+0,165*(V.04)+0,204*(V.05)+0,136*(V.06)$$

STRATEGIC OBJECTIVE B.03.- IMPLEMENTING SUSTAINABLE TOURISM ACTIVITIES

Operational objective Creating CONSTITUENCY for Tourism stewardship		
Indicator	N° and type of established local associations	Agreements achieved regarding long-term objectives and priority issues
Related action	Constitution of diverse associations with interest in tourism development	Public Workshop” Creation and development of the brand NWC Tourism”
Code	VI.01	VI.02
Weight O.0	30%	70%
Weight S.0	9.9%	23.1%
Thresholds	Measure: n° of associations established*100/ n° of associations expected to be established 1: <20% or more if most associations regard similar issues 2: 20-70% 3: >70%	Measure: n° of agreements*100/ n° of priority issues of the workshop agenda 1: <20% 2: 20-70% 3: >70%
Data Source	Technical Secretariat	Technical Secretariat

Operational objective Developing Tourism COLLABORATIVE MANAGEMENT		
Indicator	Collective Actions per markaz presented to Technical Secretariat	Percentage of Policy Options integrated into the NWC Tourism Development Operational Plan versus proposed
Related action	Proposal of a set of CA for NWC tourism development	Proposal of Policy Options to be included into the Operational Plan for NWC Tourism development
Code	VI.03	VI.04
Weight O.0	50%	50%
Weight S.0	16.5%	16.5%
Thresholds	Measure: n° of CA regarding sustainable tourism presented*100/ n° of CA expected to be proposed by Local Agenda 1: <20% 2:20-70% 3:>70%	Measure: n° of policy options proposed*100/ n° of policy options included 1: < 20% 2: 20-70% 3: >70%
Data Source	Technical Secretariat	Local Competent Authority - Tourism

Operational objective	Implementing Tourism COLLABORATIVE MANAGEMENT	
Indicator	Percentage of Collaborative Actions implemented or ongoing versus proposed	Conclusions of Progress Report positively integrated into Collaborative Tourism Planning
Related action	Implementation of Collective Actions for NWC Tourism development	Monitor progress on tourism stewardship
Code	VI.05	VI.06
Weight O.O	60%	40%
Weight S.O	20.4%	13.6%
Thresholds	1: <30% 2: 30%-70% 3: >70%	Measure: n° of conclusions integrated*100/ n° of conclusions 1: <20 % 2: 20-50% 3: >50%
Data Source	Technical Secretariat	Technical Secretariat

$$VI = 0,099*(VI.01)+0,231*(VI.02)+0,165*(VI.03)+0,165*(VI.04)+0,204*(VI.05)+0,136*(VI.06)$$

STRATEGIC OBJECTIVE B.04 – IMPROVING LIVING CONDITIONS OF SOUTHERN SMALL-HOLDERS

Operational objective Creating CONSTITUENCY for Southern Livelihoods stewardship		
Indicator	N° and character of stakeholders participating in the Workshop	Percentage of agreements achieved in the Workshop agenda
Related action	Public workshop “Improving Infrastructures and Living Conditions of Southern Rural Areas”	
Code	VII.01	VII.02
Weight 0.0	40%	60%
Weight S.0	13.2%	19.8%
Thresholds	Measure: n° of stakeholders *100/ n° of invited stakeholders 1: <20% or if only represent some part of society 2: 20-70% 3: >70%	Measure: n° of agreements*100/ n° of priority issues of the workshop agenda 1: <20% 2: 20-70% 3: >70%
Data Source	Technical Secretariat	Technical Secretariat

Operational objective Developing COLLABORATIVE MANAGEMENT in southern livelihoods		
Indicator	N° of Collective Actions per markaz presented to Technical Secretariat	Percentage of Policy Options integrated into the Operational Plan for Infrastructures and Living Conditions
Related action	Proposal of a set of CA for the improvement of Infrastructures and Living Conditions	Proposal of Policy Options to be included into the Operational Plan
Code	VII.03	VII.04
Weight 0.0	50%	50%
Weight S.0	16.5%	16.5%
Thresholds	Measure: n° of CA regarding southern livelihoods presented*100/ n° of CA expected to be proposed by Local Agenda 1: <20% 2:20-70% 3:>70%	Measure: n° of policy options proposed*100/ n° of policy options included 1: <20% 2:20-70% 3:>70%
Data Source	Technical Secretariat	Local Competent Authorities – General Planning

Operational objective	Implementing COLLABORATIVE MANAGEMENT in southern livelihoods	
Indicator	Percentage of Collaborative Actions implemented or ongoing versus proposed	Percentage of conclusions of Progress Report positively integrated into Collaborative Planning in southern livelihoods
Related action	Implementation of CA for Infrastructures and Living Conditions	Monitor progress on southern livelihoods stewardship
Code	VII.05	VII.06
Weight O.0	60%	40%
Weight S.0	20.4%	13.6%
Thresholds	1: <30% 2: 30%-70% 3:>70%	Measure: n° of conclusions integrated*100/ n° of conclusions 1: <20 % 2: 20-50% 3: >50%
Data Source	Technical Secretariat	Technical Secretariat

$$VII = 0,132*(VII.01)+0,198*(VII.02)+0,165*(VII.03)+0,165*(VII.04)+0,204*(VII.05)+0,136*(VII.06)$$

STRATEGIC OBJECTIVE C.01. – PROMOTING INSTITUTIONAL CAPACITY BUILDING IN ICZM TO STRENGTHENING EFFECTIVE COASTAL MANAGEMENT

Operational objective	Adaptation of administrative structures to ICZM process driven by the National ICZM Committee
Indicator	Modifications in administrative bodies versus proposed (human, financial or operational resources)
Related action	Assessment in capacity needs of public administrations to successfully develop ICZM process
Code	VIII.01
Weight O.0	100%
Weight S.0	30%
Thresholds	Measure: n° of carried out modifications*100/ n° of modifications proposed 1: <20% 2: 20-70% 3: >70%
Data Source	General Secretary of Matruh

Operational objective	Promoting ICZM capacity building to technicians working in administrative authorities and public agencies	
Indicator	Trained staff working in the ICZM process (Technical Secretariat, etc)	Trained staff working in the CoM process (Matruh Administration, etc.)
Related action	Training of technical staff in ICZM	Training technical staff in CoM
Code	VIII.02	VIII.03
Weight O.0	50%	50%
Weight S.0	35%	35%
Thresholds	Measure: n° of trained staff*100/ n° of untrained staff 1: <20% 2: 20%-70% 3: >70%	Measure: n° of trained staff*100/ n° of untrained staff 1: <20% 2: 20%-70% 3: >70%
Data Source	Technical Secretariat	Technical Secretariat

$$VIII = 0,3*(VIII.01)+0,35*(VIII.02)+0,35*(VIII.03)$$

STRATEGIC OBJECTIVE C.02 – PROMOTING PUBLIC EDUCATION AND AWARENESS PROGRAMS TO CREATE CONSTITUENCY FOR COASTAL MANAGEMENT

Operational objective	Increasing education on sustainable development
Indicator	N° of schools involved in the awareness raising campaigns
Related action	Awareness raising campaigns on sustainable development in schools
Code	IX.01
Weight O.0	100%
Weight S.0	20%
Thresholds	Measure: percentage of schools involved 1: <20% 2: 20%-70% 3: >70%
Data Source	Schools involved

Operational objective	Providing capacity building for collaborative and organizational development
Indicator	N° of projects or Collective Actions raised by trained people
Related action	Training local communities in organisational and technical capabilities
Code	IX.02
Weight O.0	100%
Weight S.0	45%
Thresholds	Measure: n° of projects raised up*100/ n° projects expected before training courses to be raised up 1: <20% 2: 20-70% 3: > 70%
Data Source	ICZM Delegates (Technical Secretariat)

Operational objective	Improving the involvement of local population in the decision-taking process
Indicator	N° of locals participating in the NWCP
Related action	Raising awareness campaigns regarding stakeholder involvement in the decision making process
Code	IX.03
Weight O.0	100%
Weight S.0	35%
Thresholds	1: No locals 2: Less than 5% of the NWCP stakeholders 3: More than 5% of the NWCP stakeholders
Data Source	Northwest Coast Partnership

$$IX=0,2*(IX.01)+0,45*(IX.02)+0,35*(IX.03)$$

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NORTHWEST COAST INDICATOR SYSTEM



The Northwest Coast Indicator System (NWCIS)¹ provides a dynamic and useful instrument to bring periodically critical ICZM issues to the attention of policy and decision makers and potential end users. In fact, it will monitor and evaluate local changes and impacts, providing very useful information regarding consequences and responses of the coastal system to the ICZM Plan implementation.

The Matruh Coastal Observatory will then develop reporting products regarding the NWCIS to ensure the exchange of information among users and dissemination of research results to the wider community. These reporting products are to contribute to common understanding regarding the state of the coastal system and consequently facilitate consensus-building regarding long-term environmental and socioeconomic objectives.

This NWCIS is composed of 20 indicators which address the key-issues detected in the study area (Chapter 2.2) and provide the information necessary to support decision-making processes. Besides, the selected indicators contribute to increase the cost-efficiency of the Plan implementation since most of them are produced by other national or local agencies. These indicators are presented in factsheets, which inform about:

- the name of the indicator,
- the measurements,
- its meaning or indication,
- the actual parameters that will be measured,
- the data source.

(1) Strategic Environmental Assessment, Scoping Statement, Deliverable II. MS ICZM Indicators. ENVIRONICS, 2009.

Indicator

Coastal demographic change

Measurements

- | | |
|---|---|
| 1 | No. of inhabitants live in the coastal zone, No. of inhabitants per unit area, growth rate of inhabitants |
| 1 | Ratio of rural vs. urban populations |
-

Indication of measurements

This indicator should provide information on the demographic changes associated with the implementation of the integrated coastal zone management plan. Using the indicator will help monitoring changes in the No. of inhabitant living in the project area as well as their quality of life. The indicator provides information on pressure and impacts on coastal resources. In addition, it could provide indirect information on economic growth. Once the area is developed, the population is expected to increase.

Parameters

- | | |
|-----|--|
| i | No. of inhabitants living in the coastal zone |
| ii | No. of inhabitants per unit area, or density of population |
| iii | Growth rate of inhabitants |
| iv | Proportion of people living in urban areas versus people living in rural areas |
-

Data Source

The Central Agency for Public Mobilization and Statistics performs a general population census every 10 years. The Census data are published and posted over the internet as well via the agency's website: http://www.msrintranet.capmas.gov.eg/pls/fdl/msr_intr. In addition, some agencies may perform census for other management objectives; example is NCS within protected areas.

Indicator

Land cover change

Measurements

- | | |
|---|---|
| 1 | Change detection using Remote Sensing and GIS |
|---|---|
-

Indication of measurements

The measurement is basically areas that could be translated into percentage of change (i.e. % change in urbanization, % loss/gain of arable land, and % of loss in wetlands). Measurements should provide information on any land use and land cover changes, both natural and man-made ecosystems could be monitored. Using Landsat imagery of 15m resolution; information provided may include changes in water bodies, shoreline changes, agricultural land, wetlands, and urbanization.

If higher resolution imagery is used, more detailed information may be collected, such as, crop classification.

Parameters

- | | |
|-----|--------------------------------------|
| i | Area of built-up land "Urbanization" |
| ii | Area of arable land |
| iii | Area of wetlands |
| iv | Area of coastal habitats |
-

Data Source

The change detection is a multipurpose remote sensing tool that is used to estimate local change in land use and land cover. The Matrouh Governorate has a GIS unit, which monitors land use and cover changes. It is expected that the governorate will be helpful and donate the data to the implementing agency (EEAA). In addition, the EEAA has a central GIS sector, which is capable of producing land use and cover change maps and data.

Indicator

Coastal Erosion and Sea Level Rise

Measurements

- 1 Change detection using Remote Sensing and GIS
 - 2 Change in sea level due to climate change and sea level rise
-

Indication of measurements

Coastal erosion is one of the challenges faced by coastal communities. The measurement will provide information on erosion in terms of areas eroded or accreted, if any. Measurement could be achieved using change detection as well. The sea level rise will indicate how climate change will impact coastal area and shorelines.

Parameters

- i Area of eroded land
 - ii Area of accreted, if any
 - iii Level of sea rise, in cm
-

Data Source

The Shore Protection Authority (SPA) is the Egyptian entity in charge of protecting and monitoring shorelines. It is expected that the agency is holding data on shoreline changes and sea level rise, which could be gained through the implementing agency or the committee. Another source of information is Google Earth. It could be downloaded from: <http://earth.google.com/>.

Sea Level Rise in the Mediterranean data can be obtained from the “Monitoring Network System for Systematic Sea Level Measurements in the Mediterranean and Black Sea” (MedGLOSS) website. MedGLOSS is a UNESCO funded project aims at monitoring sea level rise of the Mediterranean and the black sea. The website URL address is: <http://medgloss.ocean.org.il/>

Indicator

Protected areas (annual change in protected areas)

Measurements

- 1 Area added for coastal and marine conservation
-

Indication of measurements

The measurement will provide information on protected areas, and areas allocated for conservation (per year). The project’s geographical region has 4 proposed or potential protected areas, thus it will be necessary to monitor conservation progress objectives consistent with the MSICZM objectives.

Parameters

- i Area of conservation land (protected areas)
 - ii Protected area(s) annual budget
 - iii No. of staff per square area
 - iv Quality of facilities (visitor center, trails, camping, etc.)
-

Data Source

The Nature Conservation Sector (NCS) of the EEAA is the state department in charge of nature and biodiversity conservation. NCS has a database system for conservation issues in Egypt. One of NCS policies is providing access to information for public and private sector organizations. Thus having access to protected areas is an easy task.

Indicator

Species of global concern

Measurements

- Species of global concern are those which have a significant value to international biodiversity conservation. A species becomes of global concern when its survival is threatened directly by physical impacts such as hunting, or indirectly by other factors such as habitat degradation. Species of global concern could be classified generally as: rare, endangered, protected and /or threatened coastal and marine species
- 1
-

Indication of measurements

Species of global concern is an indicator which reflects conservation status and efforts exerted towards the protection of such species.

Parameters

- i No. of Rare and endemic species
- ii No. of Endangered species
- iii No. of Protected species
-

Data Source

The Nature Conservation Sector (NCS) of the EEAA is the state department in charge of nature and biodiversity conservation. National Biodiversity Unit NBU of NCS has a database system of Egyptian fauna and flora.

Indicator

Species of global concern

Measurements

- 1 Tourist arrivals, tourist capacity, and development of tourist facilities
-

Indication of measurements

Tourism is a blooming industry in the Northern coast of Egypt. Marsa Matrouh-Sallum is part of the Northern coast and a potential tourist sector. The measurement should inform about the development of the tourism industry in the project area. This will give information on threats to coastal and marine resources and allow coastal managers to be prepared to better manage these areas. The quality of tourism is also a crucial factor in evaluating coastal issues. Nationality of tourists and the quality of natural and man-man facilities will be used to assess quality of tourists arriving.

Parameters

- i Tourist arrivals, and Nationality
- ii Tourist capacity according to tourist master plans (No. of hotels, rooms, beds as planned)
- iii Existing tourist facilities (No. of tourist facilities, rooms, beds, and classification/quality of tourist accommodations-stars)
- iv No. of classified beaches by an international recognition scheme (e.g. Blue flag)
No. of warded dune systems based on a recognized index system (vulnerability index and/or protection measures index).
-

Data Source

Data on tourist arrivals could be collected from Matrouh governorate. Data on tourist capacity and facilities could be requested from Tourist Development Authority and Matrouh Governorate as well.

Indicator

Fisheries and aquaculture

Measurements

- | | |
|---|--------------------------------|
| 1 | Annual catch, fisheries |
| 2 | Annual production, aquaculture |
-

Indication of measurements

The measurement will provide information on annual catch of fisheries and the annual production of aquafarms in the project area. Periodic monitoring of the annual catch will shed light on the status of fisheries, level of effort for catch, and fisheries management as well. While monitoring annual aquafarms production provides information on the development of aquafarming activity within the project location.

Parameters

- | | |
|-----|---|
| i | Quantity of fish catch, in unit mass |
| ii | Catch per unit of fishing effort (CPUE)/ total catch divided by the total amount of effort used to harvest the catch. |
| iii | No. of aquaculture installations |
| iv | Quantity of fish production, in unit mass |
-

Data Source

The General Egyptian Fisheries Development Authority is the governmental entity in charge of managing fisheries and licensing aquaculture in Egypt. The authority publishes a national report on fisheries status every two years which could be used. (Available data covers the period 1997-2005)

Indicator

Water quality

Measurements

- | | |
|---|------------------------------------|
| 1 | Physical properties |
| 2 | Pathogenic properties |
| 3 | Chemical and Biological properties |
-

Indication of measurements

The measurement will provide information on water quality status which indicates health conditions of coastal waters. Water quality indicators could be used to monitor economic activities that would have impacts on the marine environment such as ports and navigation. Bathing water quality is of special concern for tourist facilities; data will also provide information in this regard.

Parameters

- | | |
|-----|--|
| i | Physical or Hydrographic parameters: salinity, Dissolved Oxygen, and pH |
| ii | Pathogenic parameters : Total coliforms, Fecal coliforms, and E. Coli bacteria |
| iii | Chemical and biological: Nutrient levels (Ammonia, Nitrate, Chlorophyll) |
-

Data Source

The Egyptian Environmental Affairs Agency performs water quality assessment for the Mediterranean on a quarterly basis. The Report is published on the EEAA website: <http://www.eeaa.gov.eg/eimp/cwreports.html>. The selected measurement parameters have been selected to be consistent with the EEAA parameters. The available data covers the period from 2000-2008. GESHA could be also an appropriate source of information.

Indicator	
Educational trends	
Measurements	
1	No. of Schools, types of schools, and classroom density
2	Literacy rate of adult
Indication of measurements	
The measurement will inform about the educational status and development within the project area. Educational status reflects the awareness of local communities to improve literacy and build up a generation that is capable of solving problems using scientific knowledge. The educational development could be monitored using annual status data.	
Parameters	
i	No. of research and development centers
ii	No. of schools, type of schools (governmental, private, experimental) classrooms, and classroom density
iii	No. of technical high schools (industrial, commercial, and agricultural) classrooms, No. of students, and classroom density
iv	No. of adult schools/classrooms, % of adult literacy
Data Source	
The Ministry of Education publishes yearly statistical reports on education status. The report includes data that could be used to monitor educational trends in the project area. The existing data covers the period between 2003-2008. The data are published on the ministry's website: http://services.moe.gov.eg/egov_stat-book.html . In addition Matrouh Governorate holds database on education as well. The data posted include No. of boys and No. of girls registered per school, which could be used as a gender indication.	

Indicator	
Healthcare trend	
Measurements	
1	No. of hospitals (Public, Central, Specialized, Clinic, Medical unit), % of population who have access to public health care, etc
Indication of measurements	
The measurement will provide information on healthcare in the project area. Healthcare is a social needs aspect in any community. The trend in healthcare reflects whether these coastal communities gain the basic needs in terms of enough health services, hospitals, and availability of access to public health care.	
Parameters	
i	No. of hospitals (Public, Central, Specialized, Clinic, Medical unit)
ii	No. of doctors per inhabitants, No. of beds per inhabitants, No. of nurses per inhabitants
Data Source	
Matrouh Governorate keeps track record of medical and healthcare data. This data is available on the Governorate's website: http://www.matrouh.gov.eg/matrouhsite/index.jsp	

Indicator

Utilities

Measurements

1 No. of dwelling units, % access to potable water and sanitation, % access to electric power supply, etc)

Indication of measurements

The measurement will provide basic information on public utilities that are provided to the population. The measurement reflects the quality of life local communities have acquired. Periodical monitoring allows to assess the impacts of implementing the ICZM on the quality of life of coastal community in the project area.

Parameters

- i No. of dwelling units
 - ii % of population who access to potable water and sanitation
 - iii % of population who access to electric power supply
 - iv % of asphalted roads per urban centre or markaz
 - v % of population who have internet access
-

Data Source

Matrouh Governorate is a holding agency for data concerning utilities of cities and villages, which is accessible through the governorate's website.

Indicator

Community participation

Measurements

1 No. of volunteers, No. of NGOs, % of private sector contribution in public services and campaigns

Indication of measurements

Community participation is an essential factor in the planning process. Community awareness on coastal issues will ensure their active participation in ICZM. The measurement will provide information on the degree to which coastal community is aware with coastal issues and problems, and their willingness to participate in solving these problems.

Parameters

- i No. of people who are members to non-for-profit organizations for agriculture/animal production/handicrafts.
 - ii No. of volunteers
 - iii % of private sector contribution in public services and campaign
-

Data Source

The Ministry of Social Solidarity is in charge of social work in Egypt. The ministry holds data on the development of NGO's on the national level, which could be accessed via the ministry's website: <http://www.mss.gov.eg/>

According to the Ministry of Social Solidarity's database on NGO's, there are 44 NGO's in Matrouh Governorate. They could be consulted to provide information on parameters ii and iii.

Indicator

Marine pollution

Measurements

- | | |
|---|---|
| 1 | Urban discharges to the marine environment |
| 2 | Industrial discharges to the marine environment |
| 3 | Volume of agricultural discharges to the marine environment, ratio of treated vs. untreated |
| 4 | Marine pollution incidents |
-

Indication of measurements

The measurement will provide information on activities contributing to marine pollution. This will be an indication of marine economic activities that tend to cause pollution to the marine environment.

Parameters

- | | |
|-----|---|
| i | Volume of urban discharges to the marine environment, ratio of treated vs. untreated |
| ii | Volume and types of industrial discharges to the marine environment, ratio of treated vs. untreated |
| iii | Volume of agricultural discharges to the marine environment, ratio of treated vs. untreated |
| iv | Volume of total wastewater discharges without treatment |
| v | Proportion of total volume of wastewater treated versus not treated |
| vi | Details of urban, agricultural, and industrial wastewaters |
| vii | No. of marine pollution incidents |
-

Data Source

The marine transport sector of the Ministry of Transport collects pollution incidents data, and publishes them periodically on the ministry's website. The existing data covers the period from 2006-2008.
http://www.mts.gov.eg/statistics/casualty/index_ar.aspx

Indicator

Institutional capacity

Measurements

- | | |
|---|--|
| 1 | No. of integrated coastal zone management plans, and the associated capacity building and financial investment |
|---|--|
-

Indication of measurements

The measurement will provide basic information on the extent to which governmental institutions involved in the MSICZM are prepared, financed, and equipped to implement, evaluate, monitor, and follow up the plan. According to the law of environment (Law 4/1994), it is assumed that the leading agency is the EEAA assisted by other institutions such as the SPA, TDA, and Matrouh Governorate.

Parameters

- | | |
|-----|--|
| i | No. of ICZM plans designed/implemented |
| ii | No. of personnel trained in ICZM practices |
| iii | Investment on ICZM plans and strategies |
-

Data Source

Data are assumed to be available at the implementing agency (EEAA) and the other agencies involved (SPA, TDA, and Matrouh Governorate).

Indicator

Solid waste generation

Measurements

- 1 Quantity of generated waste, % managed/recycled, solid waste facilities, etc)
-

Indication of measurements

The measurement will provide basic information on solidwaste management at the project area. Solidwaste management is one of the indicators that are used to assess the quality of life of population. The higher the quantity of generated waste, the higher the quality of life.

Parameters

- i Quantity of generated waste
- ii % of waste which is managed/recycled
- iii No. of solid waste facilities
-

Data Source

Environmental Management Unit of Matrouh Governorate monitors solidwaste management, and thus could be a source of information. In addition, community development associations could be a good source of data.

Indicator

Protection of Cultural heritage

Measurements

- 1 Loss of traditional knowledge
-

Indication of measurements

The measurement will provide basic information on changes in cultural values. Local communities have been developing a unique cultural heritage including traditional knowledge, use of medicinal plants, conventional laws, and handcrafting. The measurements should provide information on the way local communities tend to change their way of life.

Parameters

- i % of youth people migrating
- ii % of youth people working on traditional activities
- iii Public and/or private investment in cultural heritage
- iv % of population uses medicinal plants
- v % of women who are involved in local handcrafting
-

Data Source

The EEAA through NCS staff can provide basic information on the parameters. It is also expected that few community development associations in the project area (or on national level) are involved in projects that could be a good source of data.

Indicator

Agriculture

Measurements

- 1 Status and development of arable lands
-

Indication of measurements

The measurement will provide basic information on agriculture and agricultural land status and development as main economic activities in the project area. Agriculture is one of the main key-issues identified by the coastal diagnosis report. Thus the development of agriculture industry should be monitored,

Parameters

- i % of irrigated land versus rain-fed land
- ii Export/import of agricultural products
- iii % of Agricultural products used in food processing industry
-

Data Source

The ministry of agriculture and land reclamation could be a source of data as well as Matrouh Governorate.

Indicator

Animal Production

Measurements

- 1 Animal production
-

Indication of measurements

The measurement will provide basic information on animal production development as one of the economic activities in the project area that have been previously defined. Animal production is an economic indicator that reflects the development growth of a certain area to meet food requirements of population. Animal export, on the other hand, reflects overproduction of animal production in the area.

Parameters

- i Animal Production, expressed in No. of Head /type or in unit area
- ii Animal export, expressed in No. of Head /type or in unit area
-

Data Source

The ministry of agriculture and land reclamation could be a source of data as well as Matrouh Governorate.

Indicator

National Security and Development

Measurements

- 1 Military zones excluded from development for national security
 - 2 Fine fields clearance
-

Indication of measurements

The measurement will provide basic information on areas of land suitable for development, which have been allocated for defense and national security purpose. As a traditional rule, the more the area is developed, the more demand for land and the fewer military zones in the area. Coupled with the same issue is the mine fields; the more the area is developed, the more supportive governmental efforts to clear mine fields.

Parameters

- i Areas designated for military use excluded from development for national security and defense
 - ii Areas of mine fields: % of mine fields cleared for development
-

Data Source

Access to this information is not guaranteed. Military information is restricted. Information source on the second parameter may be the Matrouh Governorate. The Governorate keeps track record of mine fields, and activities and efforts to clear fields for economic development.

Indicator

Property Rights

Measurements

- 1 Property Rights in the coastal zone
-

Indication of measurements

Property right is one of the main socio-cultural issues identified in the project area. Many of the inhabitants of the project area are made up of tribal communities who claim land acquisition and tenure. The measurement will provide basic information on their areas of influence and the impact of the MSICZMPA on their rights to own land and properties.

Parameters

- i No. of private homes
 - ii No. of development projects owned by the local community
 - iii Areas of lands (for different economic activities) owned by local inhabitants
-

Data Source

Information source on the three parameters may be the Matrouh Governorate. The Governorate keeps track record of land and real estate ownership and investments. Community leaders would also a good source of information.

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