

Implementation Status & Results

Mexico

Adaptation to Climate Change Impacts on the Coastal Wetlands in the Gulf of Mexico (P100438)

Operation Name: Adaptation to Climate Change Impacts on the Coastal Wetlands in the Gulf of Mexico (P100438) Project Stage: Implementation Seq.No: 6 Status: ARCHIVED Archive Date: 24-Feb-2014

Country: Mexico Approval FY: 2011
 Product Line: Global Environment Project Region: LATIN AMERICA AND CARIBBEAN Lending Instrument: Specific Investment Loan
 Implementing Agency(ies):

Key Dates

Board Approval Date	23-Nov-2010	Original Closing Date	31-Oct-2015	Planned Mid Term Review Date	10-Jul-2013	Last Archived ISR Date	09-Jul-2013
Effectiveness Date	07-Oct-2011	Revised Closing Date	31-Oct-2015	Actual Mid Term Review Date	28-May-2013		

Global Environmental Objectives

Global Environmental Objective (from Project Appraisal Document)

The objective of the project is to promote adaptation to the consequences of climate impacts in the coastal wetlands of the Gulf of Mexico, through the implementation of pilot measures that would provide information on the costs and benefits of alternative approaches to reduce their vulnerability. The project also seeks to assess the overall impacts of climate change on national water resource planning, including the identification of potential response options, with a focus on coastal wetlands and associated watersheds. The experience from the project pilots is intended to inform the government's future adaptation strategy and development programs in the Gulf region.

Has the Project Development Objective been changed since Board Approval of the Project?

Yes No

Component(s)

Component Name	Component Cost
Design of Selected Adaptation Measures and Technical Coordination	0.74
Implementation of Pilot Adaptation Measures in Highly Vulnerable Wetlands	2.96
Assessment of the Impacts of Climate Change on Water Resources Planning at a National Level and in Coastal Wetlands including the Id	0.50
Project Management	0.30

Overall Ratings

	Previous Rating	Current Rating
Progress towards achievement of GEO	Moderately Unsatisfactory	Moderately Unsatisfactory
Overall Implementation Progress (IP)	Moderately Unsatisfactory	Moderately Unsatisfactory
Overall Risk Rating	Substantial	Substantial

Implementation Status Overview

During this reporting period, there has been progress in that 8 key processes have been contracted (including the Ecological Zoning for Alvarado and for Tabasco, and the program for the repopulation of coral reefs in the Sian Ka'an Reserve). In addition, key staff at IMTA / INECC has been contracted such as the coastal / biological specialist, and the procurement specialist. These contracts reflect an increase in disbursements since the last review period.

Nonetheless, there continue to be significant delays in implementation. The structure of the project is such that first the design for reforestation activities, infrastructure works, and land management plans has to be carried out, prior to implementing the specific works/investments. Thus, the project continues to suffer delays as some of the studies had to be redesigned and still have to be commissioned.

The Bank carried out a mission in Mexico City, Mexico during October 15-18, 2013, as part of the mid-term review where key aspects for a project restructure have been identified. During the mission, the Bank team met with the new Director of INECC, the new project coordinator, and with the steering committee. The Bank recognized that the project continues to be a high priority for the country and expressed its commitment to this operation, while also expressing its concern about the cumulative delays in implementation which may hinder the implementation of pilot/investments.

Since the mission, the Bank has met on a regular basis with the steering committee (INECC, IMTA, NAFIN, Hacienda, CONANP), in order to closely monitor project implementation, identify bottlenecks and mitigating measures. These meetings have also served to review the project indicators, define a realistic timeline for implementation, and review the disbursement estimates.

Locations

Country	First Administrative Division	Location	Planned	Actual
Mexico	Veracruz-Llave	Estado de Veracruz-Llave		✓
Mexico	Tabasco	Estado de Tabasco		✓
Mexico	Quintana Roo	Estado de Quintana Roo		✓
Mexico	Not Entered	Punta Allen		
Not Entered	Not Entered	Punta Allen		✓
Mexico	Not Entered	Laguna Machona		
Mexico	Not Entered	Laguna del Carmen		
Not Entered	Not Entered	Laguna del Carmen		✓
Mexico	Not Entered	Laguna de Alvarado		
Not Entered	Not Entered	Laguna de Alvarado		✓
Mexico	Not Entered	El Pajonal		
Mexico	Not Entered	Laguna La Escondida		

Results

Global Environmental Objective Indicators

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Indicator Name	Core	Unit of Measure		Baseline	Current	End Target
Design documents for pilot adaptation measures that facilitate prompt implementation and include sustainability strategy as well as monitoring provisions	<input type="checkbox"/>	Number	Value	0.00	0.00	6.00
			Date	23-Nov-2010	04-Feb-2014	30-Oct-2015
			Comments	Pilots identified require surveys and studies to design adaptation measures	Draft TORs prepared for the reforestation efforts for Alvarado (Veracruz, PP2) and Carmen-Pajonal (Tabasco, PP3); for coastal infrastructure measures in PP2 and PP3; and coral restoration and hydrology restoration in el Playon (for Pilot Project 4, in Sian Ka'an, Quintana Roo). Only one study under implementation, while procurement process for three studies has been canceled and TORs are currently under review and update.	Design of four pilots finalized (although the Pilot in Tamaulipas will be canceled upon request from State Gov.)
Three wetland management plans, a revised protected area management plan, and land zoning regulations prepared	<input type="checkbox"/>	Text	Value	Limited availability of WMP (exception Sian Kaan); existing ones do not consider CC information or expected impacts	This indicator will be modified to reflect a change the development of WMP for OET.	At least one WMP updated based on relevant climate change data. At least three WMP prepared, and a protected area management plan revised
			Date	23-Nov-2010	04-Feb-2014	30-Oct-2015
			Comments		The project will not support Wetland mgt plans (WMP) but rather, an operational ecological zoning (OET) will be developed for the pilot sites: For Sian Ka'an, which is already an established PA, the PA plan will be updated according to the indicator. OET studies for Alvarado and	

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					Tabasco are currently under implementation with results to be expected by October 2014.				
New conservation plans, reforestation, coastal stabilization, and coral repopulation	<input type="checkbox"/>	Text	Value	No adaptation measures in pilot sites	Given implementation delays, this indicator will not be met within the current lifetime of the project, and will have to be modified accordingly.	Conservation plans presented for a target of 15,000 ha to Municipal Councils; a target of 5,000 ha reforested with native species; a target of 3,000 m of coastal stabilization works finished; a target of genetically diverse temperatureresistant coral patches established in 6 locations (3,750 m2) achieved			
							Date	23-Nov-2010	04-Feb-2014
							Comments		These products will be the result of the design studies, and they are not yet expected. Nevertheless, it is already known that reforestation and stabilization of coastal bars targets won't be achieved as they are not realistic based on the project budget and implementation time. Therefore indicator targets will be modified as part of the proposed restructuring.
Production and dissemination of practical guidance document on cost and benefits of adaptation measures in coastal wetlands as a basis for replication efforts	<input type="checkbox"/>	Text	Value	0	This indicator will be modified since the measures will not be implemented within the current life of the project.	Guidance document is being disseminated			

						and serves as basis for replication efforts
			Date	23-Nov-2011	04-Feb-2014	
			Comments	Costs and Benefits of adaptation measures in coastal wetlands to be prepared	Given the short time left and the lack of pilot measure implementation, a cost estimate of pilots will be possible only ex-ante. Also benefits will have to be estimated ex-ante.	Costs and Benefits of adaptation measures in coastal wetlands finalized
Climate change impact scenarios developed for selected basins and for coastal wetlands supporting knowledge base required to mainstream CC into water resources and wetland management and planning	<input type="checkbox"/>	Text	Value	No response options defined yet on cc impacts in national water resources management	IMTA is currently working on CC impact scenarios for the selected wetlands.	At least one national water resources management response option identified that considers CC impact scenarios
			Date	23-Nov-2010	04-Feb-2014	30-Oct-2014
			Comments		IMTA is currently working on the development of the climate change scenarios. These will then be translated into hydrology impacts and could be considered for OETs	

Intermediate Results Indicators

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Indicator Name	Core	Unit of Measure		Baseline	Current	End Target
At least 6 pilot adaptation measures with sound technical design documents including analysis of financial, economic, social and environmental aspects are ready for implementation	<input type="checkbox"/>	Text	Value	0	This indicator will be modified to reflect that given implementation delays, the adaptation measures (pilot investments) will not be able to be implemented within the life of the project.	Implemented measures provide results on adaptation approaches in wetlands
			Date	23-Nov-2010	04-Feb-2014	30-Oct-2015
			Comments		In spite of this limitation, the project will aim to contribute to its design and possible implementation after a project extension. Likewise the project will be restructure to accommodate the implementation of small scale investments/adaptation measures that could be implemented within the life of the project with existing information.	
Modeling, generation of data, analysis, and access to information and long-term remote sensing (though the ALOS satellite)	<input type="checkbox"/>	Text	Value	Limited monitoring of pilot wetlands, limited monitoring of CC data in pilot site areas	IMTA continues to work on developing modeling and issuing of data for analysis.	Modeling, generation of data, analysis, and access to information and long-term remote sensing (though the ALOS satellite)
			Date	23-Nov-2010	04-Feb-2014	30-Oct-2015
			Comments		IMTA, however, will use SPOT images, not ALOS as INECC already possess those images.	
Technical report on sustainability strategy for pilot adaptation measures	<input type="checkbox"/>	Text	Value	No adaptation pilots	This indicator will be modified since, the adaptation measures will not be implemented within the life of the project.	Sustainability strategy updated based on Project results seeking continuation of results
			Date	23-Nov-2010	04-Feb-2014	30-Oct-2015
			Comments			

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Panuco: A target of 1,800 ha of Panuco-Altamira Wetlands reforested with native species, and 1,000 m of land barrier strengthened	<input type="checkbox"/>	Text	Value	Lagoon la Escondida has limited adaptation efforts	Since this pilot has been canceled, this indicator will be eliminated.	Adaptation measures implemented on 1,800ha; cost and benefits of stabilization barrier assessed
			Date	23-Nov-2010	04-Feb-2014	30-Oct-2015
			Comments	This indicator corresponds to pilot project 1	This cancellation will be reflected in the project restructuring, and a reallocation of grant proceeds will also be undertaken.	
Coastal zoning regulation taking into account anticipated climate impacts submitted for approval to deciding authorities	<input type="checkbox"/>	Text Sub Type Supplemental	Value	Coastal zoning does not take CC impacts into consideration and unsustainable practices continue weakening ecosystem's resilience	This indicator will not apply as the pilot side has been cancelled	Climate resilient coastal zoning regulation considered for adoption by deciding authorities
Papaloapan: Alvarado Lagoon under management plan incorporating CC impacts Implementation of buffer zone around the lagoon including reforestation with a target of 1,400 ha	<input type="checkbox"/>	Text	Value	Conservation management plans do not take CC impacts into consideration and unsustainable land use practices in the buffer zone prevail	This indicator will be modified to reflect that an ecological zoning (OET) will be developed instead of a management plan, and also indicate that the adaptation measures (reforestation) will not be undertaken within the life of the project.	Conservation management plan considered for adoption by deciding authority
			Date	23-Nov-2010	04-Feb-2014	
			Comments	This indicator corresponds to pilot project 2.	The project will contribute to develop a Land Zoning Plan, not a management plan as initially planned. This is mainly due to the fact that this area is not an established natural protected area and therefore there is no designates entity which could implement the management plan. An OET can be instrumentalized by the local municipality.	

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Construction of a target length of 1,000 m pilot stabilization barrier to buffer extreme weather events and future sea level rise	<input type="checkbox"/>	Text Sub Type Supplemental	Value	Surveys indicate active erosion along coastal bar	Given delays in launching key design studies, this activity will not be undertaken within the life of the project.	A target of 1,000m of the stabilization barrier concluded
Implementation of buffer zone around the lagoon including reforestation with a target of 1,400 ha	<input type="checkbox"/>	Text Sub Type Supplemental	Value	No buffer zone around the Lagoon	If current information exists at the local level and at INECC/ CONANP, the buffer zone will be implemented within the life of the project.	50% of the buffer zone under recommended practices; a target of 1,400 ha reforested with native species
Tabasco: Land zoning regulations revamped including climate change considerations	<input type="checkbox"/>	Text	Value	Deforestation and land conversion are frequent	the OET for Tabasco is expected to be finished by August 2014	A revised land zoning regulation prepared and submitted for approval to deciding authorities
			Date	30-Nov-2010	04-Feb-2014	30-Oct-2015
			Comments	This indicator corresponds to pilot project 3.	The local land zoning plan (OET) is currently developed and results are expected for late 2014.	
A target of 1,800 ha of the Carmen-Pajonal-Machona Wetlands reforested with native species for biological corridors	<input type="checkbox"/>	Text Sub Type Supplemental	Value	Fragmentation between natural vegetation	This indicator needs a revision, as the designation will not take place within the project life.	A target of 1,800 ha reforested with native species
A target of 1,000 m of Sandbars separating the coastal lagoons from the sea stabilized	<input type="checkbox"/>	Text Sub Type Supplemental	Value	Sandbar in process of destabilization	This indicator needs a revision, as the designation will not take place within the project life.	Performance evaluation of activities to strengthen sandbar conducted and recommendations shared among participating agencies and stakeholders
Sian Ka'an: Protected area monitoring system strengthened including climate change parameters	<input type="checkbox"/>	Text	Value	Monitoring of wetland does not include CC data	This activity is under implementation and delivery is expected within a month.	CC data part of monitoring program of the wetland
			Date	23-Nov-2010	04-Feb-2014	30-Oct-2015

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			Comments	This indicator corresponds to pilot project 4.	The consultant has been hired and the final product will be delivered by February 2014.	
Protected area management plan revised to include climate change considerations	<input type="checkbox"/>	Text	Value	Protected area management plan does not include CC data	Based on the monitoring system, it is expected that the PA will incorporate this information into the Mgt Plan to reflect CC considerations.	First results of the revised management plan collected and reported
		Sub Type Supplemental				
A target of repopulating genetically diverse temperature-resistant coral genotypes in six areas of 25m x 25 m (3,750 m2) in selected locations	<input type="checkbox"/>	Text	Value	Repopulation not included in coral reef conservation programs	This indicator will have to be adjusted. Furthermore, activities will also include the reforestation of mangroves within the PA. In addition, The respective consultancy has been published but could not be hired to that moment as there were serious doubts about the technical capacity of the consultancy firms which applied for the analytical work, therefore a short list could not be established. A new procurement process based on updated ToR will be launched soon.	A target of genetically diverse temperature-resistant coral patches established in 6 locations (3,750 km2)
		Sub Type Supplemental				
Component 3: Climate change impact scenarios developed for national water resources and for coastal wetlands including identification of response options	<input type="checkbox"/>	Text	Value	National policies do not yet incorporate cc impacts on water availability	Work is under way.	At least one national water resources management response option identified that considers CC impact scenarios
			Date	23-Nov-2010	04-Feb-2014	30-Oct-2015
			Comments			

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Component 4: Project management is rated satisfactory.	<input type="checkbox"/>	Text	Value		Project management under this component has been improving, but capacity remains low at IMTA and INECC	Final evaluation finds the project management satisfactory.
			Date		04-Feb-2014	30-Oct-2015
			Comments		Project management has slightly improved but remedial actions are still necessary and have been agreed to assure project implementation.	

Data on Financial Performance (as of 20-Dec-2013)

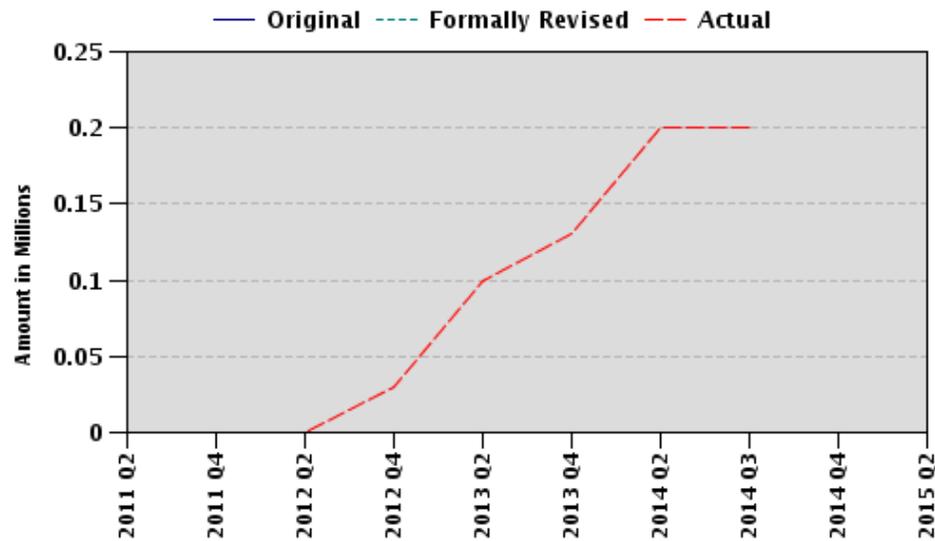
Financial Agreement(s) Key Dates

Project	Ln/Cr/Tf	Status	Approval Date	Signing Date	Effectiveness Date	Original Closing Date	Revised Closing Date
P100438	TF-96681	Effective	10-May-2011	11-May-2011	07-Oct-2011	31-Oct-2015	31-Oct-2015

Disbursements (in Millions)

Project	Ln/Cr/Tf	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P100438	TF-96681	Effective	USD	4.50	4.50	0.00	0.20	4.30	5.00

Disbursement Graph



Key Decisions Regarding Implementation

The project continues to be delayed although remedies are being implemented. As a result, a project restructuring will be undertaken in the upcoming months.

Restructuring History

There has been no restructuring to date.

Related Projects

There are no related projects.