

### Summary Data

Name of Assessment:	Caribbean Sea Ecosystem Assessment
Scale:	Regional
Region:	Wider Caribbean Region
Country:	Not Applicable
Acronym:	CARSEA
Full Reference:	No Information Entered
Full Text Reports/Output URL:	<a href="http://www.thecropperfoundation.org/carsea_upd.htm">http://www.thecropperfoundation.org/carsea_upd.htm</a>
Assessment reviewed by GoE member:	Yes
Classification/Type of Activity:	Broad Assessment
Organisation:	The Cropper Foundation
Justification/Context of the Assessment:	CARSEA sets out a detailed picture of the condition and trends of the ecosystem; it then develops a number of scenarios aiming to simulate the likely outcome of different plausible future paths for the region; and finally reviews the responses available to decision-makers. It applies the same conceptual framework to ecosystems and human communities as the MEA.
Objectives of the Assessment:	To monitor and assess the condition of the Caribbean Sea as an ecosystem, and to use that information to inform policy in the region; To assess the effectiveness of existing programmes at all levels, and to offer advice as to how they may be improved and better coordinated; To initiate studies on specific policy options available to decision makers in the region, for example economic policy instruments to enhance the protection of ecosystem functions; To act as a catalyst to achieve better coordination between the disparate institutions whose decisions affect the Caribbean Sea, and to promote greater co-operation with states outside the region, whose activities have an impact on its ecosystem; To provide continuing analysis of the impacts of policies and programmes, so that the correct lessons can be fed back into better design of future measures.
Status of Activity:	Completed
Is the assessment repeated:	No
Start Date:	No Information Entered
Finish Date:	2006

### Detailed Data

Institutional Arrangements	
Organisation Type:	TBA
Organisation Contact:	No Information Entered
Organisation URL:	<a href="http://www.thecropperfoundation.org/carsea.htm">http://www.thecropperfoundation.org/carsea.htm</a>
Other Collaborating Organisations:	University of the West Indies, United Nations Environment Programme Regional Office for Latin America and the Caribbean.
Was the assessment a result of an initiative by the body carrying it out:	No
Additional comments:	CARSEA is an approved sub-global study of the Mill
Funding Arrangements:	No Information Entered
Client or Commissioning Body:	No Information Entered
Orientation / Justification	

Objectives URL:	No Information Entered																
What is the relation of the assessment to the policy cycle?:	This assessment will attempt to contribute to the scientific and conceptual basis of the decision-making framework in which policy and management decisions are taken and governance arrangements designed.																
Is the target audience specified?	Yes																
Target Group:	<table border="1"> <tr> <td>Decision Makers:</td> <td>✓</td> </tr> <tr> <td>Civil Society:</td> <td>✗</td> </tr> <tr> <td>Scientists/Researchers:</td> <td>✗</td> </tr> <tr> <td>Teachers:</td> <td>✗</td> </tr> <tr> <td>Students:</td> <td>✗</td> </tr> <tr> <td>Other:</td> <td>✗</td> </tr> <tr> <td>If other, please specify:</td> <td>No Information Entered</td> </tr> </table>	Decision Makers:	✓	Civil Society:	✗	Scientists/Researchers:	✗	Teachers:	✗	Students:	✗	Other:	✗	If other, please specify:	No Information Entered		
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If other, please specify:	No Information Entered																
Coverage & Source of Information																	
Geographic Coverage (detailed):	No Information Entered																
Reasons for selecting geographic area:	The area corresponds roughly to the Caribbean LME and is a geopolitical entity																
How often will assessments of this kind be produced:	one off process																
What period of time does the assessment cover:	All available data up to the date of the assessment																
On what information is the assessment based?	The assessment uses existing environmental, economic and social data from other assessment sources (e.g. Global International Waters Assessment). No new technical research was undertaken in the name of this assessment; rather, a compilation of existing published and unpublished data and information relating to the Caribbean environments comprised the project's input. However, given the large number of participants in the process, the scenarios built can be considered as new information based on expert judgement.																
Is there spatial data:	No Information Entered																
Is there access to environmental, economic or social data?	No																
Environmental, economic or social data URL:	No Information Entered																
Additional information:	No Information Entered																
Are metadata available on the data series used?	No specific details are given on what metadata is available.																
Assessment methods used:	<table border="1"> <tr> <td>Collection of Primary Data:</td> <td>✗</td> </tr> <tr> <td>Synthesis of Secondary Data:</td> <td>✓</td> </tr> <tr> <td>Spatial Data Analysis:</td> <td>✗</td> </tr> <tr> <td>Statistical Analysis:</td> <td>✗</td> </tr> <tr> <td>Creation of Case Studies:</td> <td>✗</td> </tr> <tr> <td>Creating Meta Data:</td> <td>✗</td> </tr> <tr> <td>Modelling:</td> <td>✗</td> </tr> <tr> <td>Expert Opinion:</td> <td>✓</td> </tr> </table>	Collection of Primary Data:	✗	Synthesis of Secondary Data:	✓	Spatial Data Analysis:	✗	Statistical Analysis:	✗	Creation of Case Studies:	✗	Creating Meta Data:	✗	Modelling:	✗	Expert Opinion:	✓
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Statistical Analysis:	✗																
Creation of Case Studies:	✗																
Creating Meta Data:	✗																
Modelling:	✗																
Expert Opinion:	✓																

Process

How did the assessment control the quality of the data used?	Mostly published official statistics and information were used and all was reviewed and synthesised by a group of experts.
Were models used?	Yes
Additional comments:	Quantitative models were not explicitly used, however, scenarios were used to simulate using various policy options in important sectors (fishing, tourism).
Were indicators used?	Yes
Additional comments:	The assessment did use indicators from previous studies, and new indicators were developed for the scenarios, many borrowed from the MA.
If traditional knowledge was used, what quality control was used?	Traditional knowledge was not directly used in the report as it was based mainly on existing published information.
If expert opinion was used, what quality control was used?	All the parts of the assessment based on expert opinion were exposed to wide-ranging comment by other experts, and revised in the light of their comments.
Was a conceptual framework used?	Yes
Additional comments:	The assessment looked at pressures, their likely development, the measures that had been taken, their effectiveness and possible future options for action (through scenarios for the major sectors).
How was the involvement of different scientific specialisms organised?	Working groups were established which brought together the different disciplines
How was interaction organised between scientists and policy makers?	Scientists and policy makers took part in mixed groups to develop the assessment. The policy-makers /scientists who participated in the assessment provided the economic and social input.
How were non-official stakeholders enabled to participate?	The group of experts numbered more than 60 and came from a variety of institutions throughout the region, however, there was limited representation from stakeholders groups such as the fishing and tourism industries.
Did differences of opinion arise over the conclusions of assessment? If so how were these resolved?	No differences in opinion were reported.
Was there peer review?	Yes
Additional comments:	The report was reviewed before the text was published in a primary journal.
Were any specific links made to other contemporary processes?	The assessment aimed to contribute to the work that was already in train on behalf of the Caribbean Sea by the Caribbean Community, the Association of Caribbean States and the Caribbean office of the United Nations Economic Commission of Latin American and the Caribbean.
Were specific efforts made to strengthen institutional, scientific or technical capacity for the assessment?	Reliance was placed on the general network of support for scientific development between the participating governments and institutions.

#### Communications

How was the output of the assessment presented?

Database:	✗
Technical Report:	✓
Policy Synthesis:	✗
Manuals:	✗
Maps:	✗
Data Set:	✗
Website:	✗
Bulletins and Newsletters:	✗
Other:	✗
If other, please specify:	No Information Entered

In what languages are materials available?	Arabic:	✗
	Chinese:	✗
	English:	✓
	French:	✗
	Russian:	✗
	Spanish:	✗
	Other:	No Information Entered

Was there a communications strategy for disseminating the results? Yes

Additional comments: Copies were sent to the relevant Ministries and participating organisations, a flyer and poster was developed for general distribution, and the report was published in a journal.

Future Actions

How did the assessment control the quality of the data used? Mostly published official statistics and information were used and all was reviewed and synthesised by a group of experts.

Does the assessment rank or prioritise problems identified? No

Additional comments: No Information Entered

Does the assessment evaluate future policy options? Yes

Additional comments: The assessment looked at a range of possible future policies and evaluated their likely outcomes both for the state of the marine environment and in relation to socio-economic factors.

Were information gaps identified? No

Additional comments: No Information Entered

Were gaps in scientific understanding identified? No

Additional comments: No Information Entered

Review

Was there a review or evaluation to draw lessons for future assessments? No

Additional comments: No Information Entered

URL of review or evaluation: No Information Entered

Thematic Focus (A) What aspects of the marine ecosystem are covered?

ISSUES RELATED TO THE NON-HUMAN MARINE ENVIRONMENT			
	Covered in detail	Covered in general terms	Not relevant
Physical and chemical background of the marine environment			
A1 Hydrography (sea bed)	✗	✓	✗
A2 Hydrology (salinity, currents)	✗	✓	✗
A3 Influence of major freshwater inputs	✗	✓	✗
A4 Water quality – nutrient levels	✗	✓	✗
A5 Water quality – contamination and pollution	✗	✓	✗
A6 Water quality – turbidity	✗	✓	✗

A7	Other issues relevant to physical and chemical background covered by the assessment	No Information Entered		
Marine Fauna and Flora				
B1	Primary production	✗	✓	✗
B2	Plankton abundance and diversity	✗	✓	✗
B3	Fish populations – wild commercial fish stocks	✗	✓	✗
B4	Fish populations – other populations of demersal and pelagic fish	✗	✓	✗
B5	Fish populations – mariculture	✗	✗	✓
B6	Benthic fauna – wild commercial stocks of molluscs and crustacea	✗	✓	✗
B7	Benthic fauna – other populations of molluscs and crustacean	✗	✓	✗
B8	Benthic fauna – mariculture of molluscs and crustacea	✗	✓	✗
B9	Benthic flora – seaweed	✗	✗	✓
B10	Marine Reptiles	✗	✓	✗
B11	Marine mammals	✗	✓	✗
B12	Seabirds	✗	✓	✗
B13	Marine fauna and flora – identification of threatened and/or endangered species	✗	✓	✗
B14	Other issues relevant to marine fauna and flora covered by the assessment	No Information Entered		
Marine Habitats				
C1	Coral reefs	✗	✓	✗
C2	Other spawning, breeding or nursery areas	✗	✓	✗
C3	Identification of threatened and endangered marine habitats	✗	✓	✗
C4	Other issues relevant to marine habitats covered by the assessment	No Information Entered		

Thematic Focus (B) What aspects of human impacts on the marine environment are covered?

ISSUES RELATED TO INTER-RELATIONS BETWEEN HUMAN ACTIVITIES AND THE MARINE ENVIRONMENT				
		Covered in detail	Covered in general terms	Not relevant
Food				
D1	Scale of commercial capture fisheries (amounts taken of target species)	✓	✗	✗
D2	Pressures from commercial capture fisheries (amounts taken of non-target species and physical impact of fishing gear)	✓	✗	✗
D3	Scale of mariculture	✗	✓	✗
D4	Economic and social aspects of fisheries and mariculture (such as economic value of products and employment)	✓	✗	✗
D5	Proportion of fisheries and mariculture landed within the region	✗	✗	✓
Human health				
E1	Impacts on human health from contaminated sea-water and/or contaminated fish and shell-fish	✗	✓	✗
E2	Impacts on human health and well-being from hydrological events (e.g. the El Niño phenomenon, hurricanes, typhoons, tsunamis)	✗	✓	✗
Energy				
F1	Offshore wave and wind energy generation: environmental aspects (scale and impact on the marine environment)	✗	✓	✗
F2	Offshore wave and wind energy generation: social and economic aspects (such as economic value and employment)	✗	✗	✓
F3	Oil and gas extraction from the seabed: (environmental aspects (scale and aspect on the marine environment))	✗	✓	✗
F4	Oil and gas extraction from the seabed: social and economic aspects (such as economic value and employment)	✗	✓	✗

Solid mineral extraction				
G1	Extraction of aggregates (sand and gravel) from the seabed: environmental aspects (scale and pressure on the marine environment)	✗	✓	✗
G2	Extraction of aggregates (sand and gravel) from the seabed: social and economic aspects (such as economic value and employment)	✗	✓	✗
G3	Extraction of other solid minerals from the seabed: (environmental aspects (scale and pressure on the marine environment)	✗	✓	✗
G4	Extraction of other solid minerals from the seabed : social and economic aspects (such as economic value and employment)	✗	✓	✗
Waste disposal				
H1	Discharge of liquid waste from land to sea – municipal waste water	✗	✓	✗
H2	Discharge of liquid waste from land to sea – industrial	✗	✓	✗
H3	Discharge of liquid radioactive waste from land to sea	✗	✓	✗
H4	Disposal of solid land-generated waste dumped at sea	✗	✓	✗
H5	Disposal of dredged material from navigational dredging	✗	✓	✗
Coastal change				
J1	Siltation	✗	✓	✗
J2	Creation of artificial coastline structures (sea defences, port and harbour construction, etc )	✗	✓	✗
J3	Land reclamation (including changes to Ramsar Convention wetlands)	✗	✓	✗
Maritime transport				
K1	Maritime freight movement (particularly tonnage)	✗	✗	✓
K2	Maritime traffic (particularly numbers of ship movements)	✗	✗	✓
K3	Discharges and emissions from normal operation of vessels (as covered by MARPOL)	✗	✓	✗
K4	Pressures on the marine environment from maritime catastrophes (shipwrecks, groundings and collisions)	✗	✓	✗
K5	Impacts on other human activities from maritime catastrophes (shipwrecks, groundings and collisions)	✗	✓	✗
Land-based development				
L1	Pressures from urban and industrial development	✗	✓	✗
L2	Pressures from agricultural development (including forestry and horticulture)	✗	✓	✗
L3	Coastal tourism activities: environmental aspects (scale and pressure on the marine environment)	✗	✓	✗
L4	Coastal tourism activities: social and economic aspects (such as economic value and employment)	✗	✓	✗
Other				
M1	Marine litter	✗	✓	✗
M2	Other pressures from human activities on the marine environment covered by the assessment	No Information Entered		
M3	Other impacts on humans from changes in the environment covered by the assessment	No Information Entered		