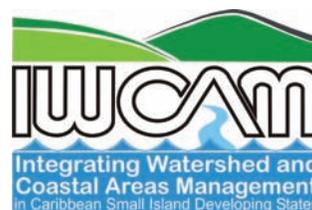


Toolkit for Institutional, Policy, and Legislative Improvements

IWCAM Approach in Caribbean SIDS



Toolkit for Institutional, Policy and Legislative Improvements in Support of the IWCAM Approach in Caribbean SIDS

Prepared by Environmental Advisors Inc. for the Global Environment Facility-funded Integrating Watershed and Coastal Areas Management in Caribbean Small Island Developing States (GEF-IWCAM) Project.



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FOREWORD

Watershed management and coastal area management have traditionally been viewed as distinct areas of discipline, managed by professionals and other technocrats on a sectoral or departmental basis. Whereas this approach might have made sense in large, continental countries, where “upstream” can literally mean hundreds or thousands of kilometres inland, the same cannot be said for most islands, especially those islands known in the international community as Small Island Developing States (or SIDS).

The issues of SIDS have always needed to be considered in a special way, bearing in mind their sizes, environmental and other vulnerabilities, and their limited natural resource bases. With this recognition, the Global Environment Facility (GEF), in collaboration with its Implementing Agencies and other partners, has made special effort to support these SIDS, within the context of wider efforts to address the global environment.

The GEF has funded a number of full sized Projects for SIDS in all regions of the globe. Among these is a regional flagship project, known as GEF-IWCAM, which seeks to improve the management of watersheds and coastal areas in Caribbean small islands, in an integrated manner. The “Integrating Watershed and Coastal Areas Management Project” (IWCAM) focuses on the demonstration of effective, comprehensive, integrated watershed and coastal area management systems, based on an intersectoral management approach, in 13 participating Caribbean Small Island Developing States (Antigua and Barbuda, Bahamas, Barbados, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent & the Grenadines and Trinidad & Tobago). It is specifically supporting pilot demonstration activities in IWCAM to address priority issues at the national level with potential for replication across the region and in other SIDS regions.

The overall objective of the GEF-IWCAM Project is to strengthen the commitment and capacity of the participating countries to implement an integrated approach to the management of watersheds and coastal areas, with a long-term goal of enhancement of the capacity of the countries to plan and manage their aquatic resources and ecosystems on a sustainable basis. At the same time, the Project builds regional capacity so as to ensure sustainability of the IWCAM practices and principles beyond the life of the Project.

The project recognises the highly integrated and closely interlinked nature of watersheds and coastal areas in small islands and aims to develop a more sector-coordinated management approach, both at the national and the regional level, with a strong emphasis on an expanded role for all stakeholders within a participatory management framework. The project further recognises the constraints on the development and implementation of such an integrated and sectoral-coordinated management approach in the absence of applicable and cost-effective solutions to many of the primary threats and their root causes at the grass-roots level. In this respect, the Project aims to develop and secure a more effective landscape for coastal and watershed management in the Caribbean SIDS through a logical framework of components and activities. To this effect, project components have focused on, *inter alia*, overall national and regional policy and legislative reforms (using experiences developed through Demonstration projects), alongside institutional improvements. High priority is given to assisting the countries to meet the commitments required in the ratification process for important regional legal agreements such as the Cartagena Convention and its protocols, especially the Protocol on Land-Based Sources of Pollution or the LBS Protocol).

Among the efforts of the project to address the requirements for institutional and infrastructural realignment, the IWCAM project has supported the LBS Protocol of the Cartagena Convention (administered by the Caribbean Environment Programme – CEP UNEP/RCU) which requires that Parties use integrated approaches in developing national programmes and effective measures to prevent, reduce and control marine pollution from land-based sources and activities.

A significant challenge however to achieving the objectives of the IWCAM Project is the legal and institutional framework that supports them. Meeting the objectives of the Project requires some changes to be made to the existing legal and institutional framework in participating countries. In this regard, a review of national policies and institutional structures related to integrated watershed and coastal area management has been conducted. Beyond simply a review, the work has proposed remedial activities, and prepared guidance material to assist Caribbean countries in amending legislation and by so doing, advance ratification of the LBS Protocol to the Cartagena Convention.

In this publication, you will find a Toolkit which allows national legislative draftspersons and technocrats to work together in amending and/or drafting appropriate legislation in support of the core objectives of the LBS Protocol. This guideline document, although prepared with direct relevance to the LBS Protocol, can be used in other SIDS regions, as a reference document when amending legislation in support of other Multilateral Environmental Agreements (MEAs).

The mandate of the GEF includes supporting implementation of MEAs. Along with its partners, the GEF very much looks forward to this document assisting interested countries advance ratification of the LBS Protocol and other MEAs.

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PART I

1.0 Glossary of Terms

- **appropriate financial mechanisms** — the provision, through various mechanisms within the United Nations system and through multilateral financial institutions, of support at the national, sub-regional and regional levels for activities that enable developing country Parties to meet their obligations;
- **appropriate institutional framework** — institution building from a development management perspective that functions in relation to the environments in which organizational structures and procedures match the tasks, products, people, resources and the contexts it deals with;
- **best available techniques** — ‘the most effective and advanced stage in the development of activities and their methods of operation which indicates the practicable suitability of particular techniques for providing the basis for emission limit values designed to prevent, and where that is not practicable, generally to reduce the emissions and the impact on the environment as a whole’;
- **best environmental practice** — the application of the most appropriate combination of measures to control and minimize land-based pollution of the marine environment bearing in mind that what is “best environmental practice” for a particular source will change with time in the light of appropriate combination of measures, economic and social factors, as well as changes in scientific knowledge and understanding;
- **economic, social and cultural values of the marine environment** — a marine system that aims to contribute to the long-term ecological viability of marine and estuarine systems, to maintain ecological processes and systems, and to protect biological diversity at all levels;
- **liability and compensation for damage (enforcement and penalties)** — a comprehensive regime of penalties for damage resulting from environmental harm;
- **national planning for protected areas and species (including environmental impact assessment)** — a ‘tool’ to guide managers and other interested parties on how an area should be managed, today and in the future.
- **polluter pays principle** — principle that person causing pollution should pay for the cost of removing it, and/or provide compensation to those who have been affected by it
- **precautionary principle** — if an action or policy may cause severe or irreversible harm to the public, in the absence of a scientific consensus that harm would not ensue, the burden of proof falls on those who would advocate taking the action;
- **public education and awareness** — public education, awareness and training including formal education should be recognized as a process by which human beings and societies can reach their fullest potential;
- **public participation in decision-making** — at the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall also be provided;
- **rights of future generations** — each generation has the responsibility of ensuring that the needs and interests of future generations are fully safeguarded;
- **sustainable development** — an ongoing process to improve the living conditions of the present generation that does not compromise the ability of future generations to do so and that ensures an harmonious integration of the economic, social and environmental dimensions of development;
- **technical and scientific cooperation** — capacity-building support to developing countries, including training on information systems technologies and exchange of data and information that will allow them to take advantage of the recent developments in technical and scientific advancements;
- **transboundary damage** — damage caused by or originating in one State and affecting the territory of another;

1.1 Acronyms

- **ANB** – Antigua and Barbuda
- **CBH** – Central Board of Health (Antigua and Barbuda)
- **CEHI** – Caribbean Environmental Health Institute
- **CITMA** – Ministry of Science, Technology and the Environment (Cuba)
- **DOM** – Dominica
- **DR** – Dominican Republic
- **EHS** – Environmental Health Services
- **EIA** – Environmental Impact Assessment
- **GEF** – Global Environment Facility
- **GND** – Grenada
- **GPA** – Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities
- **IWCAM** – Integrating Watershed and Coastal Areas Management
- **LBS** – Land-Based Sources of Marine Pollution (Protocol)
- **MEA** – Multilateral Environmental Agreement
- **NCEPA** – National Conservation and Environmental Protection Act, as amended (SKN)
- **SKN** – St. Kitts and Nevis
- **SVG** – St. Vincent & the Grenadines
- **TNT** – Trinidad and Tobago
- **UNCLOS** – United Nations Convention on the Law of the Sea
- **UNDP** – United Nations Development Programme
- **UNEP** – CAR/RCU – United Nations Environment Programme Caribbean Regional Coordinating Unit

1.2 Background

Adequate laws and appropriate institutional arrangements are important instruments for integrating watershed and coastal areas management to control marine pollution. The Global Program of Action for the Protection of the Marine Environment from Land-Based Activities (GPA) is a driver for marine pollution issues in the Caribbean. As a policy instrument it is designed to be a source of conceptual and practical guidance for national and/or regional authorities to devise and implement sustained actions to prevent, reduce, control and/or eliminate marine degradation from land-based activities. On November 5, 1995, the GPA was adopted at an intergovernmental meeting in Washington, DC. The aims of the GPA are:

“preventing the degradation of the marine environment from land-based activities by facilitating the realization of the duty of States to preserve and protect the marine environment.”

The GPA is designed to assist States in taking actions individually or jointly within their respective policies, priorities and resources, which will lead to the prevention, reduction, control and /or elimination of degradation of the marine environment, as well as to its recovery from the impacts of land-based activities. Achievement of the aims of the programme will contribute to maintaining and, where appropriate, ensuring the protection of human health, as well as promoting the conservation and sustainable use of marine living resources.

In furtherance of this, the GEF-funded “Integrating Watershed and Coastal Areas Management” (GEF-IWCAM) Project¹ was conceived as an actionable project designed to assist participating countries in embracing the GPA ideals.

¹The Global Environment Facility-funded Integrating Watershed and Coastal Areas Management (GEF-IWCAM) Project, is co-implemented by the United Nations Environment Programme (UNEP) and the United Nations Development Programme (UNDP), and co-executed by the Secretariat of the Cartagena Convention, UNEP Caribbean Regional Coordinating Unit (UNEP-CAR/RCU) and the Caribbean Environmental Health Institute (CEHI). See www.iwcam.org for more information.

The Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (Cartagena Convention) was adopted in Cartagena, Colombia on 24 March 1983 and entered into force on 11 October 1986, for the legal implementation of the Action Plan for the Caribbean Environment Programme.

The Convention is supplemented by three Protocols:

- Protocol Concerning Co-operation in Combating Oil Spills in the Wider Caribbean Region which was also adopted in 1983 and entered into force on 11 October 1986.
- Protocol Concerning Specially Protected Areas and Wildlife (SPA) in the Wider Caribbean Region which was adopted on 18 January 1990. The Protocol entered into force on 18 June 2000.
- Protocol Concerning Pollution from Land-Based Sources and Activities (LBS Protocol) which was adopted on 6 October 1999 but is not yet in force.

The Cartagena Convention has been ratified by 23 United Nations Member States in the Wider Caribbean Region. Its area of application comprises the marine environment of the Gulf of Mexico, the Caribbean Sea and the areas of the Atlantic Ocean adjacent thereto, south of 30° north latitude and within 200 nautical miles of the Atlantic Coasts of the States.

The legal structure of the Convention is such that it covers the various aspects of marine pollution for which the Contracting Parties must adopt measures. Thus, the Convention requires the adoption of measures aimed at preventing, reducing and controlling pollution of the following areas:

- pollution from ships
- pollution caused by dumping
- pollution from sea-bed activities
- airborne pollution
- pollution from land-based sources and activities

In addition, the Parties are required to take appropriate measures to protect and preserve rare or fragile ecosystems, as well as the habitat of depleted, threatened or endangered species and to develop technical and other guidelines for the planning and environmental impact assessments of important development projects in order to prevent or reduce harmful impacts on the area of application. The Secretariat of the Cartagena Convention is UNEP CAR/RCU.

The aforementioned LBS Protocol is the principal instrument on marine pollution and is consistent with the GPA objectives on marine pollution. The Protocol covers a broad range of issues — from cross-cutting issues, to setting discharge limits to establishing an appropriate institutional framework — that a country faces in controlling marine pollution. It provides an opportunity for States to take action to protect inland and coastal areas from water pollution. No matter the legal approach, countries which are parties to the Cartagena Convention, under which the LBS protocol falls, are required to implement the Protocol and establish certain requirements in their legal and institutional frameworks that are consistent with its provisions. GEF-IWCAM countries face many challenges in discharging this requirement. This Toolkit was developed by the GEF-IWCAM project in response to those challenges to assist the 13 Caribbean SIDS in developing a road map for making the changes to their legal, policy and institutional framework to improve the integration of watershed and coastal areas management, with a specific focus on preventing and/or reduction of marine pollution.

1.3 Scope and Objectives of Toolkit

Text Box 1: What is the Toolkit?

The Toolkit is a resource that:

- Lays out tools and instruments for key government officials
- Assists in building capacity at regional and national levels to understand the requirements of the **LBS Protocol**
- Increases the understanding, awareness and skills of personnel responsible for drafting laws for protecting watershed and coastal and marine areas
- Facilitates the adoption of regional standards and thereby promotes best practices in IWCAM
- Enhances synergies between legal, technical and managerial approaches to implementing IWCAM
- Offers you information to update your knowledge and skills with fact sheets, checklists and practical examples from other jurisdictions.

The ultimate goal of the toolkit is to:

- promote the ratification of the **LBS Protocol** as a comprehensive tool to control, prevent, and/or reduce marine pollution;
- propose a mix of legal, institutional and capacity-building options that countries may exercise to implement the Protocol;
- recognise the influence and relationship of other MEAs in the control of marine pollution;
- resolve the biggest practical challenge of inadequate resources — both human and financial — to harmonise domestic and international legal instruments on marine pollution.

Text Box 2: Challenges to Change

Government agencies face some of the following challenges in the promotion and implementation of an IWCAM approach:

- the lack of political will and support;
- inadequate funding;
- low technical capacities;
- obsolete policies, and
- weak management of available resources.

These challenges faced by governments remain a significant impediment to achieving substantive progress in making the legislative and institutional changes to implement IWCAM.

1.4 Who uses this Toolkit?

The Toolkit is intended to be both an educational guide, and a reference document or a series of stand-alone modules to be used by practitioners such as technocrats, policy makers, legislative draftsmen, planners, developers and water managers. It can be used to introduce newcomers to integrated watershed and coastal area management systems. It can also be used as a reference source for case studies and model laws. The model laws provide a framework or starting point for countries to draft the necessary laws within the practiced legislative drafting style of the participating countries. They contain recommended regulatory language as well as annotations which provide guidance on how to customize the laws to best fit individual country needs.

It is acknowledged that when dealing with capacity building in the area of legislation, institutional frameworks and policy there can be no “one size fits all” product. It is also important to recognise that in many cases each GEF-IWCAM participating country has its own initiative including policies, governance guidelines and protocols related to IWCAM. The Toolkit therefore is designed as a flexible tool to complement activities already in progress in the respective countries and to track a country’s progress towards IWCAM. The actions that each country takes will therefore change as a country tries to keep up with policy and other modifications as they occur. The model laws are therefore not intended to be adopted as is, but rather provide an approach that each country may adopt in developing its own legal framework. We strongly recommend involving a team of technical, policy and legal experts in developing the final law. To promote regional implementation, users of this Toolkit are encouraged to exchange experiences with other GEF-IWCAM participating countries in their efforts to build capacity and improve their legal and institutional frameworks for IWCAM.

The Toolkit is presented in seven parts: an introduction; five parts which promote actions — enabling laws, subsidiary legislation, policies, capacity-building and public awareness initiatives or institutional reform — that may be undertaken either individually or simultaneously depending on a country's circumstances, to establish a legal, policy and institutional framework for integrating watershed and coastal areas management to control and manage the pollution of inland and coastal waters; and a conclusion.

Part I

- This section provides introductory and background information.

Part II

- States face many challenges in implementing MEAs due to many factors including the sheer numbers and the high degree of overlap among MEAs themselves. In an effort to rationalise this, Part II of the Toolkit has selected the shared, fundamental principles from MEAs that are relevant to IWCAM. Examples of ways to incorporate the related principles in IWCAM national legislation are included.

Part III

- The LBS Protocol is listed among the principal global instruments designed to control, prevent, and/or reduce marine pollution. It covers a broad range of issues — from cross-cutting issues, to setting discharge limits to establishing an appropriate institutional framework. Part III organises the main requirements of the Protocol that should be translated into national legislation in the form of a checklist and makes an assessment of compliance within existing laws.

Part IV

- Multiple agencies discharge IWCAM functions. Part IV has divided the participating countries into groups according to their institutional similarities and examined the institutional responses that each group has in place for IWCAM. Using this examination as a guide, countries may make fitting changes based on it.

Part V

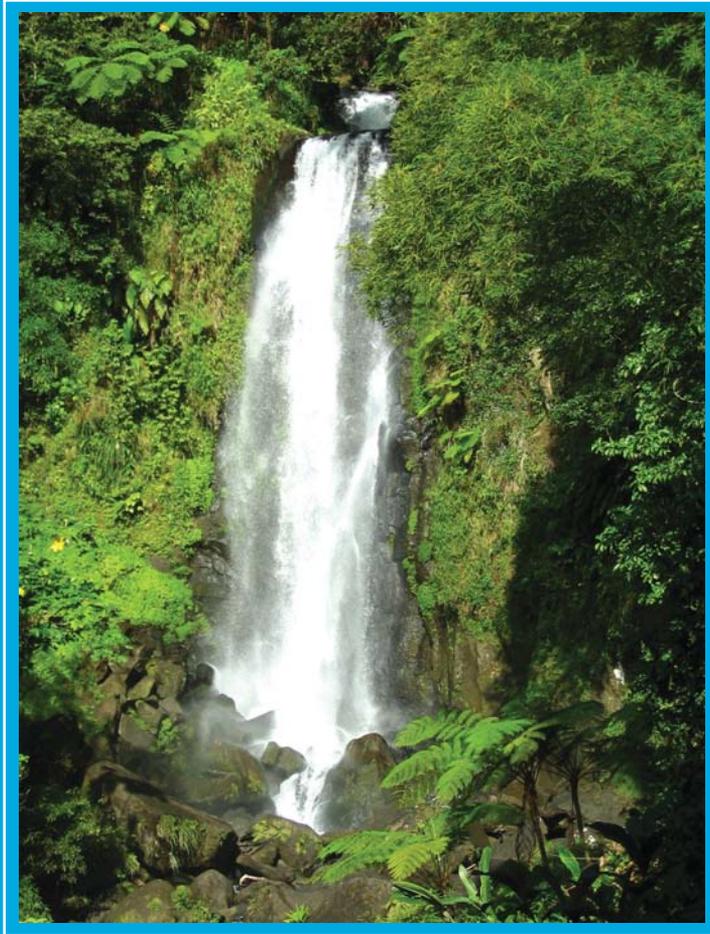
- Because the project's approach to control, prevent, and/or reduce marine pollution focuses on activities in watersheds and coastal areas, the corresponding legislative and institutional framework for IWCAM may be spread over a flexible variety of legislative types depending on what is appropriate for each country. Part V puts forward similarly reflective legislative templates to implement the LBS Protocol and meet IWCAM objectives.

Part VI

- This Part illustrates, in a Table, the actions that countries may take towards establishing institutional arrangements for IWCAM. It does so by listing the law that may be considered and suggesting a corresponding institutional response. As a tool, it advocates benchmarks against which a country may assess its progress.

Part VII

- The final part contains the conclusion and bibliography.



PART II

2.0 International Standards for IWCAM

Summary: Part II highlights the MEAs that are relevant to activities in watersheds and marine and coastal areas, their shared, fundamental principles and provides examples of how to incorporate these principles in national laws.

GEF-IWCAM Caribbean countries are parties to several multilateral environmental agreements (MEAs) and regional Protocols that concern themselves with the control, prevention, and/or reduction of marine pollution. The Cartagena Convention (1983) is the premier Caribbean MEA and is supplemented by three Protocols. The LBS Protocol is one of its protocols. This Protocol is the first of its kind to set effluent limits on discharges to the marine environment. Like most MEAs, it establishes an obligation for countries to enact national legislation to implement its provisions. Different countries have different approaches to giving effect to an MEA depending on their legal systems. Regardless of the approach, some specific action is required whether political, policy, new legislation or institutional arrangement to implement an MEA. A non-exhaustive list of the key marine pollution MEAs that countries should consider when framing their implementing laws is suggested below.

Table 1: MEAs Relevant to IWCAM

Multilateral Agreement	Subject area it governs
Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, adopted in Cartagena, Colombia in March 1983 (Cartagena Convention).	Marine and coastal activities in the Wider Caribbean Sea.
Protocol Concerning Pollution from Land-Based Sources and Activities (LBS Protocol) to the Cartagena Convention, 1999.	Protection of the marine environment from pollution from land-based sources.
Protocol Concerning Specially Protected Areas and Wildlife (SPAW) to the Cartagena Protocol, 1990 (adoption) and 2000 (entry into force).	Protects rare and fragile ecosystems and habitats thereby assisting with regional implementation of the global and more demanding Convention on Biological Diversity.
United Nations Convention to Combat Desertification, 1994.	Encourages the global community to take action to combat desertification (particularly in Africa) and adopts a Plan of Action for accomplishing this.
United Nations Convention on the Law of the Sea, 1982 (UNCLOS).	Establishes principles for the management of the resources of the sea and its Articles 207 and 213 coincide with the objectives of the Global Plan of Action.
United Nations Framework Convention on Climate Change, 1992 (UNFCCC).	Recognises the vulnerability of SIDS to the adverse effects of climate change and seeks global support in reducing harmful emissions that cause climate change.
United Nations Convention on Biological Diversity, 1992 (CBD).	Promotes the conservation of, inter alia, marine resources and provides common ground between MEAs, because it concerns the conservation and sustainable use of marine and coastal biodiversity.
Convention on Wetlands of International Importance, 1971 (RAMSAR).	Requires parties to formulate and implement their planning so as to promote the conservation and wise use of wetlands in their territories.
Convention for the Control of Transboundary Movement of Hazardous Wastes, 1989 (Basel Convention).	Regulates the transboundary movement of hazardous wastes.
International Convention for the Prevention of Pollution from Ships, as amended in 1978 (MARPOL 73/78).	Prohibits the operational discharge of marine pollutants from ships.
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other matter, 1972 (the London Convention).	Governs the disposal of wastes or harmful substances by dumping at sea.
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, 2004.	Promotes shared responsibility and cooperative efforts among Parties in the international trade of certain hazardous chemicals in order to protect human health and the environment from potential harm.

Table 2 shows the record of acceptance of these instruments by GEF-IWCAM countries.

Table 2: MEA Record of Acceptance

	Cartagena Convention	SPAW	LBS	UNCLOS	CBD	UNFCCC	RAMSAR	UNCCD	Basel Convention	MARPOL 73/78	The London Convention	Rotterdam Convention
Antigua & Barbuda	*	*		*	*	*	*		*	*		
Bahamas		*		*	*	*	*	*	*	*		*
Barbados	*	*		*	*	*	*	*	*	*		
Cuba	*	*		*	*	*	*	*	*	*		*
Dominica	*	*		*	*	*		*	*			*
Dominican Republic		*		*	*	*		*	*	*		*
Grenada	*	*		*	*	*		*				
Haiti	*	*		*	*	*		*	*	*	*	
Jamaica	*	*		*	*	*	*	*	*		*	
St. Kitts & Nevis	*	*		*	*	*		*	*		*	
St. Lucia	*	*	*	*	*	*	*	*	*			
St. Vincent & the Grenadines	*	*		*	*	*		*	*		*	
Trinidad & Tobago	*	*	*	*	*	*	*	*	*			

These MEAs enshrine a bundle of common principles and actions, which provide the source of a coherent international practice that should be incorporated within national laws and translated into actionable programmes and activities to control, prevent, and/or reduce marine pollution. They are as follows:–

- sustainable development
- appropriate financial mechanisms
- economic, social and cultural values of the marine environment
- rights of future generations
- appropriate institutional framework
- national planning for protected areas and species (including environmental impact assessment)
- precautionary principle
- polluter pays principle
- public participation in decision-making
- best available techniques
- best environmental practices
- technical and scientific cooperation
- liability and compensation for damage (enforcement and penalties)
- duty not to cause transboundary damages
- public education and awareness

The most effective legislative strategies to implementing these principles are those which lay out sound but practical environmental standards, provide practical mechanisms of control, set wise mechanisms to detect unlawful and/or sub-standard conducts, outline thorough programmes of remediation and, when executive power and institutional arrangements complement legislative action, establish strong, trained, well-capacitated, effective and appropriate enforcement provisions. The strategy may be established in several fields of law such as land use planning, forestry, pollution control, water resources management, waste management, public health and tourism. The following provides examples of ways in which they may be incorporated into national legislation for IWCAM.

Issue 1: How to incorporate sustainable development principles within the legislation?

Option: Legislative provisions must go beyond stating them as a general principle. The provisions should establish linkages with existing national development policies and programmes for relevant sectors such as tourism, agriculture, forestry, health and water resources. This will go a long way in showing how they are critical to long-term, sound national development. Some countries such as Bangladesh have included sustainable development principles in their constitutional provisions or, in the case of Palau, as a preamble in a sectoral law.

Text Box 3: Constitution of Bangladesh

Article 31 and 32 of the Constitution of Bangladesh²

A 1996 court ruling on Articles 31 and 32 of the Constitution held that the right to life as a fundamental right in Bangladesh encompasses within its ambit, the protection of and preservation of environment, ecological balance free from pollution of air and water, and sanitation without which life can hardly be enjoyed. Any act or omission contrary thereto will be violative of the said right to life (48DLR).

*Preamble in sectoral law: Palau, Marine and Freshwater Quality Regulations (1998)*³

²IWCAM/LBSA-Caribbean SIDS

³IWCAM/LBSA-Caribbean SIDS

It is the policy of the Republic of Palau that the maintenance of water quality for aquatic life propagation and recreation is a “historical and legitimate right of the people”. It also recognizes the need to balance water quality regulations with economic and social development... “these goals should not represent an unreasonable barrier to economic or social development”.

In English-speaking Caribbean countries however, the preamble does not form part of the law and therefore is of limited (if any) effect as regards enforceability.

Examples of ways to incorporate sustainable development principles

The legislation should:

- (a) clearly define the objectives of watershed and coastal areas management;
- (b) require that all projects be implemented in accordance with the defined objectives;
- (c) call for watershed and coastal areas to be managed in a holistic way taking into account the social, environmental and economic impacts of development;
- (d) include awareness-raising measures and community involvement in project formulation;
- (e) include provisions to provide adequate funds and institutional structures to sustain the programmes that are in place.

Issue 2: How to incorporate the rights of future generations?

Option: These rights are not secured by simply stating that they exist in the law. To secure them the law should establish provisions for environmental impact assessments, effective waste management and reliance upon such principles as the polluter pays and precautionary principles and should take account of the ecological, cultural, religious, archaeological, historic and scientific significance of proposed development sites.

Examples of ways to incorporate rights of future generations

The legislation should:

- (a) establish a requirement that any development in coastal or inland areas needs to provide a study that explains the physical and biological processes;
- (b) provide guidelines on how the study should be conducted;
- (c) take into account contingency measures to be undertaken in the event of environmental disaster or emergency;
- (d) consider the provisions of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (UNECE Aarhus Convention).

Text Box 4: Features of the Aarhus Convention

- Links governmental accountability and environmental protection
- Grants the public rights and imposes on Parties and public authorities obligations regarding access to information, public participation and access to justice
- Refers to the goal of protecting the right of every person of present and future generations to live in an environment adequate to health and well-being,
- Sets out the activities and the timeframes in which the public must be involved; includes EIAs and the grant of permits and licences,
- Requires the public to be involved in the setting of programmes, projects and activities on the environment including pollution control.

Issue 3: How to incorporate the polluter pays principle, the duty not to cause transboundary damage or transforming one type of pollution to another?

Option: Comprehensive enforcement of legislation goes beyond instituting penalties but also involves the instituting of innovative measures that ensure it. Such measures may include compensation for damage caused, “name and shame” and suspension of licences and permits of polluters.

Examples of ways to incorporate the polluter pays principle, etc.

- (a) comprehensive revision of the regime for fines and penalties to make them serve as a deterrent;
- (b) utilise alternative enforcement measures e.g. the investigation of offences, inspections, monitoring, enforcement notices, the issuance of tickets, compounding of offences, the use of incentives to promote enforcement and the use of administrative measures to resolve or “name and shame” techniques.

Text Box 5: Use of Alternative Enforcement Measures

Under section 43 of the Environmental Protection Act, 1996 of Guyana the court may direct an offender to:

- (a) publish the facts related to the conviction;
- (b) notify any person aggrieved by the offender’s conduct of the facts relating to the conviction;
- (c) post such bond or pay an amount of money into court as will ensure compliance with any order made pursuant to the conviction
- (d) perform community service.

- (c) Introduce a system of permits, for example, in Trinidad and Tobago an application for a Certificate of Environmental Clearance (CEC) for development purposes also includes an application for a discharge permit where the activity for which the application is sought is likely to cause discharges.

Text Box 6: Procedure for Obtaining a CEC

- ✓ Apply for CEC to EMA containing information on operations, with fees
- ✓ EMA may ask for further information, including EIA
- ✓ EIA submitted for public comment
- ✓ EMA establishes conditions for all discharges
- ✓ EMA grants CEC (with conditions)

- (d) Implement monitoring system that will inform managers that pollution levels have exceeded regulated levels (indicating illegal or unregulated discharges are occurring).

Text Box 7: Belize Environmental Protection (Effluent Limitations) Regulations

Contains provisions for:

- (a) the control of discharges of effluents into the marine environment;
- (b) acceptable conditions of discharge into inland waters;
- (c) the discharge of sludge onto land;
- (d) the establishment of a licensing system, fees and penalties.

Issue 4: What is an appropriate institutional structure for IWCAM?

Option: The two major responsibilities of an institution responsible for IWCAM are (a) coordination of the multiple agencies that discharge IWCAM-related activities and (b) pollution control. It may become necessary to establish, a central co-ordinating entity in law and vest it with responsibility for policy, goal-setting, programme development and delivery to ensure a comprehensive approach in all related areas.

Examples of ways to provide for an appropriate institutional structure

Vest entity with power to:

- (a) Lead and coordinate all sectors on IWCAM-related issues including pollution control in, inter alia, programming, policy-making and delivery for pollution control;
- (b) Promote collaboration with relevant sectors and stakeholders;
- (c) Identify and allocate the responsibilities of each primary stakeholder for specific actions including those of communities, local governments and non-governmental organisations having regard to gender equality ;
- (d) Consider applications for environmental authorizations/permits/licenses;
- (e) Carry out inspections;
- (f) Adopt programmes (such as on capacity building/scientific research) and action plans coordinating the participation of all stakeholders;
- (g) Encourage communities to establish themselves into organisations and community groups;
- (h) Administer sanctions.

Issue 5: How should the precautionary approach be incorporated?

Option: Environmental impact assessments (EIAs) provide a fundamental tool for preventing and controlling activities in watersheds and coastal areas that result in marine pollution. It implements the precautionary principle and incorporates a systematic, holistic approach to the consideration of socioeconomic, cultural as well as biophysical systems (taking account of non-quantified values and using ecological information and concepts); gives consideration to indirect effects; and involves public participation in the evaluation of proposed changes and impacts of policies, programmes, and projects.

Examples of actions to incorporate EIAs

This legislation should:

- (a) require the conduct of an EIA to assess impacts on watershed and coastal and marine areas
- (b) provide opportunities for the public to participate in the process e.g. through public hearings to ensure that the effect of proposed developments on biodiversity, indigenous knowledge and traditions and other cultural conditions are appraised;
- (c) provide for mitigation measures and the minimisation of conflicts with other inland and coastal activities as a fundamental principle;
- (d) include provisions to cooperate with regional partners to address concerns;
- (e) require local government authorities to adopt LBS- compliant discharge standards when they issue appropriate building permissions;
- (f) institute the taking of remedial action to restore the environment when it has been degraded.

Issue 6: How should provisions for best practices, monitoring systems and technical scientific cooperation be incorporated?

Option: The watershed and coastal and marine areas are of economical, ecological and social importance to Caribbean SIDS and require the application of scientific techniques to protect these fragile ecosystems.

Examples of actions to incorporate scientific techniques etc.

The legislation should:

- (a) rely upon such tools as ecological, economic and social indicators in developing programmes to respond to adverse changes; feasibility studies to reassess the relevance and appropriateness of the step-by-step project/ programme and, if necessary, reformulate it and /or modify it accordingly; risk assessments; and valuation methods;
- (b) require contingency plans to take mitigation measures in a timely manner;
- (c) include early warning systems capable of detecting serious or irreversible damage and unacceptable cumulative impact to coastal or marine ecosystems based on appropriate indicators;
- (d) encourage cooperation with other governments, international and regional organisations, industry and related NGOs in the development and transfer of appropriate environmentally sustainable methodologies and technologies.

Issue 7: How to incorporate exchange of data and provide information to the public?

Option: There are many IWCAM-related agencies and the task of ensuring that all actors have access to relevant information and are functioning at the same policy and technical standard is quite a daunting one that must be given priority.

Examples of actions to incorporate exchange of data and provide information to the public etc.

The legislation should:

- (a) require that all EIAs submit/post data collected as part of the investigation (along with meta data on methodology, adherence to standards, etc.);
- (b) establish access to information as a right of citizens;
- (c) establish registers of information to which the public has access (on the payment of a prescribed fee);
- (d) promote consolidated reporting on compliance requirements to Secretariats of MEAs that countries are party to, including harmonised document cover sheets;
- (e) promote the development of information system models that would explore synergies between the multiple MEAs;
- (f) adopt standard definitions.

Text Box 8: Non-legislative Techniques for Exchange of Data and Providing Information to the Public

- harmonising web sites
- developing a meta-database to indicate the information that is available and its location
- developing an inter-Protocol web site and search engine, satellite images, as well as a lessons-learned network to encourage the sharing of experience
- developing interactive function to provide flexibility and promote timely responses to stakeholders
- exchange experiences among participating Caribbean States.

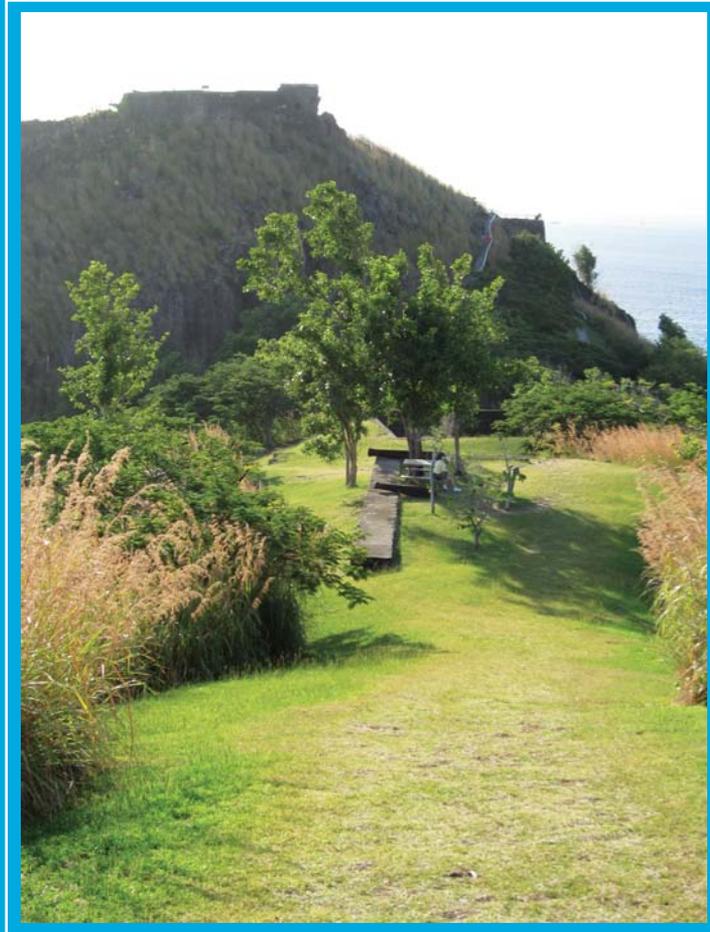
Issue 8: How should IWCAM responsibilities be discharged in a timely manner?

Option: Timeliness is a critical factor in the taking of measures to prevent pollution discharges and ultimate damage to the environment. Legislative regimes should give powers to act as the circumstances require.

Examples of actions to incorporate timeliness

The law should:

- (a) set time frames within which governmental actions are to be taken and completed;
- (b) establish powers to issue stop orders, closures, notices at administrative level;
- (c) establish powers to institute interim remedial measures and the recovery of costs.



PART III

3.0 LBS Protocol Requirements and the Legislative Framework of GEF-IWCAM Countries

Summary: Part III sets out a checklist of provisions that should be established in national legislation to implement the LBS Protocol. As a pre-requisite, countries should assess their existing laws to avoid duplication or inconsistencies. Countries should always consult the provisions of the Protocol in conjunction with the checklist as it is the text of the Protocol which prevails.

Global concern over the sources and impacts of marine pollution is borne out in the increasing number of MEAs and international policy instruments on this significant development issue. Notable policy instruments appear below:

Text Box 9: Other United Nations Initiatives to Control, Prevent, and/or Reduce Marine Pollution

Agenda 21, Chapter 17, 18
Global Programme of Action⁴ Chapters 9,10 and 12
Millennium Declaration
Johannesburg Plan of Implementation
Mauritius Strategy

These Guidelines point to the several MEAs that concern themselves with marine pollution. When Caribbean SIDS become parties to MEAs they confront the responsibility to enact legislation to implement them. The **LBS Protocol** establishes a comprehensive framework for controlling landbased sources of marine pollution and should be incorporated in the framework to control, prevent, and/or reduce marine pollution. Caribbean SIDS should ratify the instrument and take steps to enact national legislation to implement its requirements.

The Checklist pinpoints the most fundamental matters that should be included in national legislation to implement the **LBS Protocol**. It does not, however, address all matters that a legislator could choose to address in national legislation. The Checklist is aimed at the legislator who will be drafting the national implementing legislation. Accordingly, it does not address the obligations of States under the **LBS Protocol** which would normally be implemented administratively, such as ensuring the availability of adequate laboratories for sampling of water quality, as these would not normally be addressed in domestic legislation. However, it does address some obligations that could be implemented through legislation or administrative measures. For example, it may be useful to ensure that both governmental and private sector are required to comply with the regulations and therefore are subject to national law. There may be additional measures that may be appropriate under national law to support the enforcement of such laws implementing the Protocol. These models are included as part of the Toolkit. In addition to the present Checklist, the legislator should also refer to the Model Legislation that has been prepared as part of this Toolkit to implement the **LBS Protocol**.

⁴Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities

Table 3: Land Based Sources of Marine Pollution Protocol - Checklist of Mandatory Requirements for the Legislative Draftsman

	Legislative, Administrative or Other Measure Required	Relevant Protocol Provision	Notes
<p>SCOPE OF THE MEASURE AND GENERAL PROVISIONS</p>	<p>Define the scope and purpose of the legislative or administrative measure, for example, to introduce measures to prevent, control and reduce pollution from land-based sources and activities, develop plans, programmes and measures including regional and sub-regional plans.</p>	<p>See Article III</p>	<p>For most jurisdictions this can be found in the provisions of Environmental Health Acts or their equivalent or implied in dated Public Health Acts.</p>
	<p>Identify the source categories that are covered and associated pollutants of concern. Establish activities that are excluded e.g. household discharges. May wish to define "land-based sources", "inland and coastal waters/territorial waters".</p>	<p>See Article IV, also para. (3), Article I (4). Annexes I, II & III Article XVII</p>	<p>It should be noted that Annexes to the Protocol are subject to amendment from time to time by the Conference of the Parties. Such amendments become effective for all Countries in the absence of a notification by a Party to the contrary (see para. 2 and 3 of Article 19 of the Cartagena Convention). Accordingly, Countries may wish to ensure that the waste lists are adopted in a form that will minimize the legislative procedures for incorporation of amendments e.g. include provision for amendment by negative resolution if measures are introduced as enabling legislation.</p>
	<p>Define which activities are covered, i.e. "point" and "non-point" discharges into the marine environment including primary pollutants of concern.</p>	<p>Article IV, Annex I A-C, Annex III E.</p>	<p>May wish to examine legislation for Water Authorities as regards ensuring sewage collection systems are constructed to prevent contamination of groundwater and surface waters.</p>
	<p>Make general provision requiring persons to take such steps as are necessary to prevent pollution due to discharges into the marine environment and if such pollution occurs, to minimize the consequences for human health and the environment. Also may have legislation bind the State.</p>	<p>Article 4(2)(c)</p>	<p>Countries should identify the ministries, departments or agencies that will be responsible for monitoring and ensuring compliance with pollution control requirements. It may be that existing legislation already designates such authorities and should be cross-referenced. Legislation may also establish punitive measures in respect of failure to control discharges.</p>
<p>DISCHARGES</p>	<p>Specify types and constituents of discharges prohibited and the classification of receiving waters.</p>	<p>Annex I C, Annex III A, C</p>	

Table 3: Land Based Sources of Marine Pollution Protocol - Checklist of Mandatory Requirements for the Legislative Draftsman

	Legislative, Administrative or Other Measure Required	Relevant Protocol Provision	Notes
DISCHARGES		<p>Article XII Annex II C 1 and 2</p>	<p>Annex II B. recognises that States may decide to introduce more stringent measures, source controls or management practices to take account of e.g. receiving water characteristics, discharge site, capacity of marine environment. These enhanced measures should be notified to the Secretariat for onward transmission to all Countries pursuant to Article XIV. The Secretariat should list these measures on their website to benefit all Countries.</p>
	<p>For determining effluent discharges, elaborate the Protocol requirements. These requirements, including the application of environmental impact assessments, should be laid out.</p>	<p>Article IV Article VII Annex II</p>	<p>Provision may be made for a general requirement for environmental impact assessments. Legislation should also demand the performance of Science Assessment and Risk Assessment. Provisions should be made to streamline the process and facilitate the interchange of information among relevant agencies. Physical Planning and Development Acts should be crossreferenced to avoid duplication. Legislation may introduce a system of permits or other written authorisation for discharges. The permit will establish monitoring and other requirements for the permit holder. The application form to be used outlining the information required to make a sound assessment should be annexed to the legislation. A sample permit, may be found as a Schedule to the Model Regulations.</p>
INFORMATION SYSTEMS	<p>The agency issuing the permit should formulate and implement monitoring programmes.</p>	<p>Article VI</p>	<p>Countries should collaborate with existing regional agencies such as CEHL to develop harmonised approaches and avoid duplication of effort. The issuing agency should be entrusted with this task.</p>
	<p>Countries should consult other Countries in cases of transboundary pollution of their coastal and marine environment.</p>	<p>Article IX</p>	<p>Countries will need to consider how to ensure that generally accepted and recognized international rules and standards are known by those who will be discharging into the marine environment. In addition, the agency issuing the permit should be vested with the power to halt discharges that cause transboundary pollution and the duty to verify compliance with the Convention Secretariat.</p>

Table 3: Land Based Sources of Marine Pollution Protocol - Checklist of Mandatory Requirements for the Legislative Draftsman

	Legislative, Administrative or Other Measure Required	Relevant Protocol Provision	Notes
INFORMATION SYSTEMS	<p>May wish to promote the establishment of information systems and networks. Ensure the allocation of funds for this purpose.</p> <p>Data must be freely available.</p> <p>Developers must submit their data to national data base.</p>	<p>Article VIII</p> <p>Article V</p>	<p>For countries that have established Registers of information under their respective environmental Acts, information on the country's compliance initiatives with regard to the LBS Protocol may also be included. Countries will need to consider who will verify the information that is placed on the register.</p> <p>Countries may request assistance from the Secretariat to establish in-country information systems.</p>
PARTICIPATION	<p>Countries should promote access to relevant information and documentation concerning pollution and public participation in decision-making processes.</p>	<p>Article X</p> <p>Article XI</p>	<p>EIA legislation should involve all stakeholders from the beginning and ensure transparency in management and decision-making processes. They could also be members of any Intersectoral Committee established to implement provisions of the Protocol.</p> <p>Communities and non-governmental organisations should be included in pollution control programmes.</p>
NATIONAL AUTHORITIES	<p>Any legislation, administrative or other measure must clearly set forth a competent ministry, department or agency to be responsible for controlling and monitoring discharges, to comply with the procedures to be followed under the Protocol. Examples of these duties are established in Appendix III to this report.</p>	<p>Article XIII</p> <p>Article XIV, XV</p>	<p>Countries may choose from a variety of administrative options taking into account such determining factors as availability of human resources, experience and existing institutional structures.</p>
ENFORCEMENT	<p>Consider establishing an obligation on various types of generators to have insurance, bond or other form of guarantee.</p> <p>Provide for offences for discharges exceeding the prescribed parameters as defined in the Protocol.</p> <p>Establish appropriate procedures and penalties to prevent and punish offences.</p>		<p>More stringent measures may be considered to promote enforcement e.g. closure, stiffer penalties, continuing offences, liability of company leadership, retaining guarantees in the event of intentional breach. Establish a regime of strict liability offences and breaches which may be remedied administratively.</p> <p>There is no specific requirement for a country Party to require insurance, bond or other form of guarantee under the Protocol; this is a matter of national law.</p>

Table 3: Land Based Sources of Marine Pollution Protocol - Checklist of Mandatory Requirements for the Legislative Draftsman

	Legislative, Administrative or Other Measure Required	Relevant Protocol Provision	Notes
ENFORCEMENT			Countries should explore the use of financial incentives to facilitate compliance with the Protocol's obligations and enable improved enforcement of national legislation and regulations. Care should be taken to formulate the appropriate penalties. Judiciary should be aware of the importance of environmental protection to the public welfare, the compatibility of environmental protection with traditional legal values, and a consequent willingness to strictly enforce environmental law.
SECRETARIAT DUTIES	Parties are required to attend meetings of the Parties, and submit reports to a Scientific, Technical and Advisory Committee.	Article XIV, XV, XVI	Countries should commit human and financial resources for implementing the requirements of the Convention.

3.1 Summary Checklist for incorporation of LBS Requirements into National Legislation

- ✓ Retain suitable drafting skills and technical expertise
- ✓ Where possible seek assistance of Secretariat of the Convention(s) for technical assistance
- ✓ Ensure that the implementing legislation provides for institutional, policy-making and administrative tools and mechanisms
- ✓ Ensure that the implementing legislation provides for adequate enforcement measures including incentives to promote compliance
- ✓ Resolve conflict between MEA principles and domestic legislation
- ✓ Ensure that the national legislation implements all of the mandatory MEA obligations (at a minimum)
- ✓ Conditions may change and provisions may become inadequate. Include provisions in the national legislation for MEA amendments, to vary fines and penalties or policy changes when they occur.
- ✓ Harmonise LBS Protocol and other related MEAs requirements into a single enactment to ensure comprehensive approach to controlling, preventing, and/or reducing marine pollution.



PART IV

4.0 Guidelines for Institutions for Integrating Watershed and Coastal Areas Management

Summary: Activities to control, prevent, and/or reduce marine pollution are governed by sectoral laws relating to the nature of the activity being pursued rather than its location. This division is echoed in administrative arrangements at government level. The issues are wide ranging so many government ministries, agencies and individuals are involved in the subject area. Each of them acting alone has led to fragmented institutional responses. This Part shows the current status of the institutional framework for IWCAM in the project countries and proposes ways to enhance opportunities to improve the planning and management of sectoral development activities for IWCAM.

The existing laws and regulations on the management of inland and coastal and marine areas in GEF-IWCAM countries have influenced the institutional structure that governs the area. A preview of the World Water Assessment Report, acknowledged that the world water crisis is largely a governance crisis, in which the major problems are lack (or multiplicity) of institutions, weak legal frameworks, limited human and financial resources and limited involvement of major stakeholders. The effectiveness of such legislation will be dependent upon the institutional arrangements to implement the changes they propose. The laws make no explicit reference to the need for integrated management of coastal areas and resources and for the most part if at all, emphasize instead the environmental vulnerability of these areas. Therefore although laws can be effective, they do require an institutional vehicle upon which they can be implemented. IWCAM is therefore complementary to the resolution of marine pollution issues. Coordination issues associated with policies and laws concerning IWCAM will also have to be addressed. These institutions need to be embedded in national and regional policies and strategies. Integration is key- both bottom-up and top-down. In its functioning, the institution should strive to ensure the participation of all relevant stakeholders, the provision of adequate financial resources to perform necessary tasks and the availability of human and technological resources.

The Tables below examine the varieties of institutional responses that discharge IWCAM-related responsibilities, none of which are comprehensive. The exercise points to the weakness in the laws and institutions and suggests a corresponding institutional response. There appears to be no deliberate attempt, within these institutions, to integrate activities to produce the common objective of managing watersheds and coastal areas to control, prevent, and/or reduce marine pollution. The result is a “patchwork quilt” of organisations that lack a cohesive policy for IWCAM but whose duties and responsibilities may be refocused in an effective manner through the creation or alignment of appropriate institutional strategies to achieve greater impact.

Table 4: Existing Institutional Arrangements for IWCAM – Antigua and Barbuda, Dominica, St. Lucia, Grenada and St. Vincent and the Grenadines

KEY IWCAM ACTORS	LAWS AND INSTITUTIONAL WEAKNESSES	RECOMMENDATIONS FOR IWCAM
<p>Antigua & Barbuda</p> <p>Central Board of Health (CBH)</p> <p>Pesticides Control Board</p> <p>Forestry Division Soils and Water Conservation Unit</p> <p>Environment Division</p> <p>Development Control Authority</p> <p>Antigua Public Utilities Authority</p>	<p>The institutional powers for marine areas management are established in the outdated Public Health Act which limits the scope of responsibility to the abatement of nuisances. A Draft Environmental Health Act establishes a governance structure for pollution control in the CBH. The Draft Act has been proposed for some time and is itself in need of revision to focus on IWCAM. Although the Environment Division is not yet established in law it shares some enforcement capacity with the CBH. A Draft Environmental Health Act and a Draft Environmental Protection Management Bill have been prepared. Conflicts exist between these two instruments particularly as regards the pollution control.</p>	<p>The choice of institutional arrangement for ANB is wide open. Taking into account the limited available resources and institutional experience, the establishment of an Intersectoral Committee is preferred. The membership should in the first instance be small, limited to the actors that are relevant to pollution control aspects of IWCAM.</p> <p>The DCA could be considered for Chairmanship of the Committee.</p>
<p>Dominica</p> <p>Fisheries Division</p> <p>Forestry and National Parks Division</p> <p>Department of Environmental Health Services (DEHS)</p> <p>Environmental Coordinating Unit (ECU)</p> <p>Dominica Water and Sewerage Co. Ltd. (DOWASCO)</p> <p>Solid Waste Management Corporation</p> <p>Physical Planning and Development Authority</p>	<p>The Forestry Division is active in regulating watersheds.</p> <p>DOWASCO regulates the discharge of wastes in watercourses through a licensing system.</p> <p>The Environment Division monitors activities in the marine environment and there is a high level of interagency cooperation on the management of marine areas.</p>	<p>A high level of environmental stewardship exists in Dominica. Forestry Act should be revised to include responsibility for the management of watersheds. Appropriate management tools should also be developed.</p> <p>The establishment of an Intersectoral Committee is the recommended choice for Dominica. ECU should be given the mandate to chair the Committee and coordinate IWCAM activities. DOWASCO and the Ministry of Agriculture, Fisheries, and Forestry should be involved.</p> <p>The Committee should address land management, deforestation, quarrying and solid waste disposal in watersheds as a priority.</p>

Table 4: Existing Institutional Arrangements for IWCAM – Antigua and Barbuda, Dominica, St. Lucia, Grenada and St. Vincent and the Grenadines

KEY IWCAM ACTORS	LAWS AND INSTITUTIONAL WEAKNESSES	RECOMMENDATIONS FOR IWCAM
<p>St. Lucia</p> <p>Sustainable Development and Environment Unit (SD&EU)</p> <p>Ministry of Planning</p> <p>Water and Sewerage Company (WASCO)</p> <p>Environmental Health Department</p> <p>Coastal Zone Management Advisory Committee</p> <p>Department of Fisheries (DOF)</p> <p>Water Resources Management Unit⁵</p> <p>Department of Forestry</p>	<p>The SD&EU was established as recently as 2000 to coordinate environmental functions.</p> <p>Fisheries Plan focuses on conservation aspects primarily and should be revised to include pollution control.</p>	<p>The SD&EU carries a very large portfolio and there is an acute staff shortage. This appears to be the trend for all the relevant entities.</p> <p>The Coastal Zone Management Advisory Committee is a sectoral body which should be charged with the responsibility to coordinate IWCAM activities and to lead on the initiative.</p>
<p>Grenada</p> <p>Environment Department</p> <p>Forestry Department</p> <p>Coastal Zone Management Unit</p> <p>Watershed Management Unit</p>	<p>The institutional structure for IWCAM appears to be weak. Environmental legislation which is still in draft form does vest the Department with responsibility for coastal and marine pollution. National Water Policy has been approved by Cabinet.</p> <p>There are serious staff shortages.</p>	<p>IWCAM activity in Grenada is significant. The continued execution of IWCAM programmes will face challenges however. Need for Committee to be appointed at the highest political level to give sufficient clout to the organisation. High level of involvement in the agriculture ministry and water sector as regards IWRM has heightened awareness.</p> <p>The Ministry of Agriculture (Forestry Department), should chair an Intersectoral Committee for IWCAM.</p> <p>An MEA Committee should also be established to promote ratification and monitor compliance with MEAs.</p>

⁵At the time of publication of this document, the Water Resources Management Unit was not yet up and running.

Table 4: Existing Institutional Arrangements for IWCAM – Antigua and Barbuda, Dominica, St. Lucia, Grenada and St. Vincent and the Grenadines

KEY IWCAM ACTORS	LAWS AND INSTITUTIONAL WEAKNESSES	RECOMMENDATIONS FOR IWCAM
<p>Grenada</p> <ul style="list-style-type: none"> Physical Planning and Development Authority Solid Waste Management Authority National Water and Sewerage Authority Waste Management Authority 		
<p>St. Vincent & the Grenadines</p> <ul style="list-style-type: none"> Environmental Services Division Physical Planning Unit Fisheries Division Forestry Division 	<p>This country provides yet another example of acute staff shortages making efficient discharge of responsibilities for IWCAM a significant challenge.</p>	<p>An Intersectoral Committee could be appointed to be responsible for IWCAM. The Environmental Services Division could lead the initiative.</p>

Table 5: Existing Institutional Arrangements for IWCAM – The Bahamas, Jamaica, St. Kitts and Nevis, and Trinidad and Tobago

EXISTING INSTITUTIONAL ARRANGEMENTS	INSTITUTIONAL WEAKNESS	RECOMMENDATIONS
<p>Commonwealth of the Bahamas</p> <ul style="list-style-type: none"> Department of Environmental Planning and Protection Department of Physical Planning BEST Commission Department of Environmental Health Services (DEHS) Department of Marine Resources Water and Sewerage Corporation (WSC) 	<p>There is a need to strengthen the DEHS to discharge responsibilities for IWCAM.</p> <p>The involvement of the WSC needs to be enhanced to that of a key partner.</p>	<p>The BEST Commission is the National Focal Point for GEF-IWCAM and because of its institutional structure promotes a multi-stakeholder involvement in environmental matters in the country.</p> <p>The DEHS has a lengthy experience with the regulation, monitoring and control of pollution and has performed functions within the entire ambit of marine pollution control. It issues discharge permits. This agency with improved capacity may be considered for active involvement in IWCAM.</p> <p>The Bahamas has a sufficiently mature institutional framework. An Intersectoral Committee that brings focus to IWCAM considerations could advance the process in a short time.</p>
<p>Jamaica</p> <ul style="list-style-type: none"> National Integrated Watershed Management Council (NIWMC) National Environment & Planning Agency Town Planning Authority Forestry Department National Water Commission 	<p>Jamaica also boasts an accomplished experience with coordinating environmental activities.</p> <p>The NIWMC is appointed at a very high level (Cabinet) but the scope of its governance does not include marine and coastal areas.</p>	<p>The scope of functions of the NIWMC should be expanded to include coastal and marine areas and marine pollution.</p>

Table 5: Existing Institutional Arrangements for IWCAM – The Bahamas, Jamaica, St. Kitts and Nevis, and Trinidad and Tobago

EXISTING INSTITUTIONAL ARRANGEMENTS	INSTITUTIONAL WEAKNESS	RECOMMENDATIONS
<p>St. Kitts and Nevis</p> <p>Ministry of Sustainable Development (Planning and Environment)</p> <p>Department of Forestry</p> <p>Department of Fisheries</p> <p>Nevis Island Department of Physical Planning and Environment</p> <p>Solid Waste Management Corporation</p> <p>Water Services Department (Ministry of Works and Public Utilities)</p>	<p>The main gap exists between coastal zone management and the Water Services Department.</p> <p>There are conflicts between the draft NCEMA and the DC&P Acts</p>	<p>The focus on marine resources is as a result of the importance of tourism to its economy.</p> <p>The Environment Department has benefited from a recent capacity assessment. It is vested with extensive powers and works with NGO's to enlist their support for conservation programmes.</p> <p>An Intersectoral Committee could be established for IWCAM. It should include representation from the Tourism Department and the Water Services Department. The Chairmanship should be established in the Department of Environment.</p> <p>Conflicts between Draft NCEMA and DC &P Act 2000 should be rationalised and clarified.</p>
<p>Trinidad and Tobago</p> <p>Environmental Management Authority</p>	<p>Although no direct legislation addressing IWCAM there is a multiplicity of instruments and institutions that discharge some aspect of it resulting in either inaction or conflict when a remedy is sought.</p> <p>There are multiple policies on IWCAM including the National Environmental Policy, 2005 which proposes mechanisms for integrated management of coastal areas.</p> <p>Although it could be interpreted to be included, the EM Act does not bring sufficient focus to coastal and marine matters.</p>	<p>There is much experience in coordinating efforts in the country.</p> <p>Harmonise and implement policies on marine and coastal areas</p> <p>The EMAs responsibilities for water pollution, the issuance of permits and environmental quality generally makes it appropriate for the discharge of IWCAM responsibilities. The organisation is already vested with adequate responsibility for coordinating entities making it unnecessary to establish another entity for IWCAM. The organisation should be encouraged to expand its programme to include IWCAM.</p>

Table 6: Existing Institutional Arrangements for IWCAM – Cuba, Dominican Republic, Haiti

EXISTING INSTITUTIONAL ARRANGEMENTS	INSTITUTIONAL WEAKNESS	RECOMMENDATIONS
<p>Cuba</p> <p>Ministry of Science, Technology and Environment (CITMA)</p> <p>Ministry of the Fisheries Industry</p> <p>National Coastal and Water Commission</p>	<p>CITMA is responsible with a broad range of IWCAM-related responsibilities including national parks, conservation and all aspects of pollution. Institutional and technical capacity is limited.</p>	<p>The National Coastal and Water Commission combines the work of several institutions but it does not incorporate IWCAM aspects. Efforts are underway to establish a Council for this purpose. These efforts should be supported.</p>
<p>Dominican Republic</p> <p>State Secretariat for Environment and Natural Resources</p> <p>State Secretariat of Agriculture</p> <p>National Institute of Potable Water and Sewerage Systems</p> <p>Urban Planning Office of the Municipal City Councils</p>	<p>There is a lack of coordination among agencies resulting in conflicts in policy implementation. No single entity is responsible for the broad range of IWCAM aspects.</p>	<p>An Intersectoral Committee or a Unit should be established under the National Institute of Potable Water and Sewerage Systems. That agency is responsible for wastewater discharges.</p>
<p>Haiti</p> <p>Le Ministère de l'Agriculture des Ressources Naturelles et du Développement Rural (MARNDR)</p> <p>Le Ministère des Travaux Publics Transports et Communications (MTPTC)</p> <p>Le Ministère de l'Environnement (MDE)</p>	<p>The agencies discharge only narrow aspects of IWCAM — watershed management policy, risks posed by soil erosion, drainage and storm waters which transport sediments, gray waters and wastes of all categories.</p>	<p>Although there are a large number of entities that are charged with relevant responsibilities, there exists a very low level capacity for IWCAM.</p> <p>The country should obtain technical and financial assistance to build the necessary capacity. As a first step a capacity assessment should be conducted to determine what is required for IWCAM.</p>

Table 7: Existing Institutional Arrangements for IWCAM – Barbados

EXISTING INSTITUTIONAL ARRANGEMENTS	INSTITUTIONAL WEAKNESS	RECOMMENDATIONS
<p>Barbados</p> <p>Coastal Zone Management Unit (CZMU) of the Ministry of Energy and the Environment</p> <p>Governmental Analytical Services Department</p> <p>Environmental Protection Department</p> <p>Ministry of Economic Affairs Barbados Water Authority</p> <p>National Commission on Sustainable Development</p>	<p>Multiple agencies involved in some aspect of IWCAM resulting in inconsistent policy application.</p> <p>No requirement for CZMU to coordinate its activities with other agencies.</p> <p>Draft Environmental Management Act not yet enacted to equip the Department with the necessary powers to protect coastal and marine resources.</p>	<p>Barbados stands out among its Caribbean IWCAM project neighbours due to that country's historical focus on coastal and marine issues. The country recognises the significance of the oceans and marine life to its economy and well-being of its people.</p> <p>Barbados is at an advanced stage as regards IWCAM. CZMU should lead the IWCAM initiative.</p> <p>Need to rationalise the responsibilities of the Unit with those established for the Department in the Draft Environmental Management Act however.</p> <p>Unit should translate the policies established in National Sustainable Development Action Plan into specific actions that support IWCAM.</p> <p>An MEA Committee should be established to promote the ratification of MEAs and monitor activities to comply with them.</p>

4.1 Summary Checklist of Institutional Requirements for National Legislation

- ✓ Establishes a lead coordinating agency
- ✓ Provides that the mandate of the agency includes coordination and collaboration with othersectoral agencies
- ✓ Provides for public participation including private sector and non-governmental organisations, taking into account gender equality;
- ✓ Identifies financial resources for the implementation of assigned tasks
- ✓ Harmonises the discharge of responsibilities with activities to control, prevent, and/or reduce marine pollution with a particular focus on activities in watersheds and coastal areas
- ✓ Implements a system for regular monitoring, evaluation, and reporting.



PART V

5.0 Legislative Drafting Guidelines for IWCAM

Summary: The objectives of the LBS Protocol are for the most part synonymous with any programme to control marine pollution. It requires national legislation to implement its provisions. As a strategy however, countries may choose from a variety of legislative responses to accomplish this. This Part presents model approaches for legislation on IWCAM.

The watersheds and coastal areas of GEF-IWCAM project countries have experienced a prolonged and intensive level of resource exploitation and unplanned development which has resulted in high levels of watershed and land-based contributions to marine pollution in coastal and marine areas, significant deforestation, diminishing biodiversity and the loss of renewable resources. GEF-IWCAM countries must confront these fundamental environmental issues in the form of new resource management approaches to controlling marine pollution and protecting their resources. Besides changes in policy, public awareness and capacity — building initiatives alluded to earlier, the revision of the legislative framework is another method for accomplishing this.

The following models present options from which a country may choose to facilitate the IWCAM process and enable effective implementation of the LBS Protocol.

Model 1: Regulatory Framework for Marine Pollution

The regulatory framework which follows should be enacted under enabling legislation which at a minimum:

- Establishes an entity and vests it with the duty to coordinate the discharge of functions for the control and monitoring of water pollution in all sectors including watersheds and coastal and inland waters;
- Vests the entity with the power to introduce regulations to implement the LBS Protocol, enforce standards using measures of permitting, sanctions/fines, pollution taxes, and economic incentives as well as the power to close operations that do not comply with discharge standards or pose an immediate threat to human health and/or the environment;
- Incorporates basic principles and directives such as the “polluter pays” principle, the precautionary principle and public participation in decision-making;
- Defines baseline or target levels for marine health, possibly through selected bioindicators that manage all inputs of point source and non-point source pollution such that target levels in bio-indicators are not exceeded.

The enabling legislation could cover such subject areas as environment, forestry, pollution control, planning and development or water resources management.

GENERAL REGULATORY PROVISIONS

These regulations establish general procedures for obtaining permits/licences for any source. It prescribes, inter alia, the permit application process and the information that should be submitted in order to obtain a permit, grant of a permit, duration, whether permit transferable or not, renewal, suspension, modification, cancellation etc. As a stylistic measure, these provisions may be embodied either in the main regulations or in a separate set of regulations. This latter practice was adopted by Jamaica (**Natural Resources and Conservation (Permits and Licences) Regulations, 1996**) and by Guyana (**Environmental Protection (Authorisations) Regulations, 2000**). The attractiveness of this approach is that these procedures are standard and may be referenced for other follow-up regulations that the agency may require, thereby avoiding duplication.

Sample provision

“An application for a permit shall:

- (a) be completed in triplicate and shall be submitted to the Minister together with the fee prescribed in the # Schedule;
- (b) be in accordance with the form prescribed in Form I of the # Schedule;
- (c) be in respect of one facility; and
- (d) include the following information:
 - (i) the company or corporate name, or name of the institution or individual, the names of directors if any, the name and position of the applicant, the name of owner or occupier and the mailing address of the facility;
 - (ii) the location of the facility, including town or village, district, street name and lot number;
 - (iii) a brief description of the process or activity generating the release including principal products, chemicals and raw materials used;
 - (iv) age, energy use and water use of the facility;
 - (v) existing or proposed point source and non-point source volumetric release rates;
 - (vi) pollutant quality monitoring data which shall indicate characteristics of release, including flow rate, quantity, conditions and concentrations of constituents;
 - (vii) an indication of whether or not the facility is proposed or is in existence;
 - (viii) an indication of whether or not other approvals from any other governmental entity are required under written law and whether such approvals have been obtained;
 - (ix) copies of any Environmental Impact Statement or Assessment Reports or environmental study which pertains to the facility;
 - (x) description of any water pollution control programme;
 - (xi) topographic map of the area with a scale of one in twenty-five thousand, extending to at least one kilometre beyond the property boundary;
 - (xii) a description of the receiving environment into which the release is directed;
 - (xiii) any other relevant information deemed necessary.”

MAIN REGULATIONS

In establishing the requirement for a permit the scope and objective of the regulations are set out. It includes:

- Key definitions (in its Interpretation Clause)

Sample provision

“Agricultural activities” means pertaining to horticulture, fruit growing, seed growing, dairy farming, the breeding and keeping of livestock (including any creature kept for the production of food, clothing, or for the purpose of farming of land), the use of land as grazing land, meadow land, osier land, market gardens and nursery grounds, and use of land for woodlands where that use is ancillary to the farming land for other purposes and includes activities for the cultivation of crops and intensive animal-rearing operations;

“Facility” (or point source) means:

- (a) an industrial facility;
- (b) a commercial facility;
- (c) a medical facility;
- (d) an institution; and
- (e) a sewerage facility;

“Inland or coastal waters” means the territorial waters and internal waters of [Country], including all the bays, coves, inlets, sounds, channels, passages, marinas, ports and harbours, directly or indirectly opening adjacent thereto, whether natural or man-made, within the limits of [Country] and includes surface water, sea, groundwater, wetlands or marine areas within the environment; and includes territorial waters;

“Non-process activity” includes the operation of a public carwash, hair salon or plant nurseries.

The definitions contained in the **LBS Protocol** should be considered for inclusion in the interpretation clause but they may need to be modified as appropriate.

- Permit specifications

The regulations will specify that the facility/source must comply with all applicable standards and any other conditions identified by the [Agency]. It will indicate whether and under what conditions a permit may be transferred, establish monitoring and inspection requirements, renewals and temporary extensions. Every facility/point source must perform effluent monitoring. This may be done by setting timetables in the permit or establishing conditions in the permit e.g.

Sample provision

“The [Agency] may establish in each permit, conditions, as required in the case of each facility, including the following requirements:

- (a) that monitoring of the conditions of the permit is conducted in accordance with the methods specified in the permit;
- (b) that measurements taken for the purpose of monitoring shall be representative of the release.”

- Standards

The regulations will specify the standards applicable to new and existing facilities/point sources. The **LBS Protocol** establishes parameters in relation to discharges and receiving waters. The standards should be in accordance with these parameters. The regulations should specify the substances that are to be monitored. The regulations should also set aside a date for compliance in accordance with compliance schedules and may require a “compliance plan” to show that the operations of the facility/ point source will meet the applicable standards.

Sample provision

- (1) The [Minister] shall at any time after the commencement of these Regulations, establish the parameter limits of pollutants that may be discharged into any inland or coastal waters or land of [Country] with respect to any or all of the substances specified in the Second Schedule.
 - (2) No new facility shall discharge any substance, in concentrations greater than those established as parameter limits under paragraph (1).
 - (3) The [Minister], in imposing conditions on a permit shall be guided by the parameter limits established under paragraph (1) [and the considerations established under Annex II of the Protocol].
 - (4) The [Minister] shall, on a case-by-case basis, fix in a compliance schedule, the date and the manner in which every existing facility shall comply with the parameter limits established under paragraph (1).
 - (5) The [Minister] may amend the prescribed parameter limits established under paragraph (1), with respect to any or all of the substances and any other substance not listed anywhere in these Regulations.
 - (6) Any person who contravenes paragraph (2) shall be guilty of an offence and shall be liable to a fine of [insert suitable fine] and imprisonment for [insert suitable term].
- Recordkeeping and reporting

Every facility/point source must keep records of the results of its monitoring up to a period of [x] years. The results must be reported to the [Agency]. The regulations will describe circumstances when violations due to “upsets” may be excused and the procedure that should be adopted in those circumstances. They are usually those beyond the reasonable ability of the facility/source to foresee or prevent. Permit holders should also be required to report instances of non-compliance and exercise due diligence in mitigating damages caused by such noncompliance.

*Sample provision***Records and information**

- “(1) Every holder of a permit shall keep all records required by these Regulations including records of any environmental monitoring for a period of not less than two years.
- (2) A holder of a permit shall keep records of all sampling and analytical procedures used in meeting the requirements of paragraph (1), including for each sample, the date and time of collection, the sampling procedures used and any incidents likely to affect the analytical results.
 - (3) A holder of a permit shall keep records of the results of all monitoring performed.
 - (4) A holder of a permit shall keep records of all maintenance and calibration procedures and of all problems or malfunctions, including those related to sampling, analysis, acute lethality testing, chronic toxicity testing or flow measurement, that result or are likely to result in a failure to comply with the requirements contained in the environmental authorisation of these Regulations, stating the date, duration and cause of each malfunction including a description of any remedial action.
 - (5) A holder of a permit shall ensure that all records kept under this regulation are available to authorised officers of the Agency at the holder’s facility on request during normal office hours of the facility.
 - (6) A holder of a permit shall keep records required by these Regulations, in an electronic and hard copy format acceptable to the Agency”.

Text Box 10: Major Components of a Permit

1. *Cover page*: Contains name and location of premises, statement authorising the discharges, specific locations for which the discharge is authorised
2. *Effluent limits*: The primary mechanism for controlling discharges to inland and coastal waters. These limits are based on applicable technology-based and water quality-based standards. See LBS Protocol Annexes for guidance. The limits could assess cumulative impact and how the activity may influence the total loads for key contaminants (sediment, nutrients and bacteria) from the watershed and to the receiving waters.
3. *Monitoring and Reporting Requirements*: Used to characterise waste streams and receiving waters, evaluate wastewater treatment efficiency and determine compliance with permit requirements.
4. *Special conditions*: Conditions developed to supplement effluent limit guidelines; one is best management practices.
5. *Standard Conditions*: Pre-established conditions that apply to all permits. These establish the legal, administrative and procedural requirements of the permit.

- Modifications to a Facility/Point Source

Sample provision

“The regulations should require a holder of a permit to notify the [Agency] of any variances/modifications. It should also clarify what kinds of modifications to a facility/source will trigger a need for a new permit.

- (1) A person to whom a permit has been granted may make an application to the Agency to vary any provision thereof on submission of supporting particulars together with the fee specified therefore in the # Schedule.
- (2) The particulars submitted under paragraph (1) shall be based on supported scientific evidence.
- (3) For the purposes of paragraph (1), varying/modifying the provisions of a permit includes:
 - (a) any change in the construction, structure, or arrangement of the facility or any plant, building, equipment, machine, apparatus, mechanism or thing serving the facility or any technology used or installed at the facility from which effluent may be discharged;
 - (b) any change in the construction, structure, arrangement, alignment, direction, or condition of any channelling device, system, or facility serving the premises;
 - (c) any change in the position and design of any outlet at the point or points of discharge of effluent;
 - (d) any change in the quality of the effluent, whether raw or treated at any time or point after it is produced at any facility so as to cause a dilution in the concentration of such effluent;
 - (e) any change in the use of raw materials;
 - (f) any material change in the quality, quantity, composition of the effluent;
 - (g) any change in the process or rate of production or operational procedures;
 - (h) any change in products being manufactured; and
 - (i) any change in waste produced.
- (4) The Agency may approve the application under paragraph (1) if:
 - (a) there is no known practicable means of control to enable compliance with the existing conditions contained in the environmental authorisation; or
 - (b) the estimated cost to be incurred for compliance will be prohibitive having regard to the nature and size of the industry, trade or process being carried out in the permitted premises discharging the effluent; or
 - (c) the design and construction of any plant or other control equipment require a longer period than the period for compliance with these regulations; or
 - (d) the imposition of the conditions as stipulated in the environmental authorisation is not, having regard to all factors, reasonably practicable or is contrary to the intent and spirit of these Regulations.
- (5) Where the Agency approves an application under paragraph (1) the Agency shall cancel the existing permit and re-issue to the applicant a new permit.”

- Non-point sources

Pollutants can enter inland and coastal waters from a variety of pathways including agricultural, domestic and industrial sources. The LBS Protocol seeks to control both point and non-point discharges. Generally, the legislative framework governing water pollution in GEF-IWCAM participating countries exempts non-point sources from regulatory control. To meet the compliance requirements under the LBS Protocol both sources must be regulated. Specific sources should include agricultural runoff and storm water discharges.

Sample provision

- “(1) Where it appears to the [Agency] that any inland or coastal waters have been or are likely to be polluted in consequence of the conduct of agricultural activities, lawn management (fertilizer/herbicide applications), construction and sediment release or any other non-process activity, the [Agency] may, in consultation with the Minister responsible for agriculture, serve on the occupier of the land where the act or omission took place, a notice requesting him to stop or prevent acts or omissions of that kind.
- (2) The [Agency] may at any time after the commencement of these Regulations, direct by notice a person who engages in any of the activities specified in paragraph (1) to submit an application to the [Agency] for a permit.”

- Environmental impact assessment

EIA requirements uphold the precautionary principle and recognise the rights of future generations. The regulations can provide a “one-stop shop” framework whereby a permit is granted as part of the development application process.

Sample provision

- “(1) The [Agency] may by notice in writing require an applicant for a permit or the person responsible for undertaking in a prescribed area, any enterprise, construction or development:
- to furnish to the [Agency] such documents or information as the [Agency] thinks fit; or
 - where it is of the opinion that the activities of such enterprise, construction or development are discharging or are likely to discharge a pollutant, to submit to the [Agency] in respect of the enterprise, construction or development, an environmental impact assessment containing such information as may be prescribed, and the applicant or, as the case may be, the person responsible shall comply with the requirement.
- (2) A notice issued pursuant to subsection (1) shall state the period within which the documents, information or assessment, as the case may be, shall be submitted to the [Agency].
- (3) Where the [Agency] issues a notice under subsection (1), it shall inform any agency or department of Government having responsibility for the issue of any licence, permit, approval or consent in connection with any matter affecting the environment that a notice has been issued, and such agency or department shall not grant such licence, permit, approval or consent as aforesaid unless it has been notified by the [Agency] that the notice has been complied with and that the [Agency] has issued or intends to issue a permit.
- (4) Any person who, not being an applicant for a permit, refuses or fails to submit an environmental impact assessment as required by the [Agency] shall be guilty of an offence and shall be liable on summary conviction to a fine of [insert fine].”

- Regulation of Private Auditors and laboratories

To ensure independent findings, the Agency could rely on private auditors and laboratories. These must be certified/accredited however.

- Register of water effluents

In keeping with the desire to promote public participation in environmental matters the [Agency] should develop a list of water effluents in the form of a register. The register should be accessible to members of the public.

Sample provision

- “(1) The [Agency] shall establish and maintain a Register of water effluents.
- (2) The Register shall contain information identifying the quantity, conditions or concentrations relevant to the identification of each effluent.
- (3) The Agency shall cause the Register to be updated periodically and published from time to time in the Gazette and in one or more daily newspapers.”

- Register of permits

The regulations should provide that permit applications and permits are public documents and should be made available for its review.

Sample provision

- “(1) A Register or Registers of Information, shall be maintained in any form containing the following additional particulars:
- (a) every refusal to grant an environmental authorisation together with the reasons for the refusal;
- (b) every refusal to vary the conditions of an environmental authorisation;
- (c) information supplied under regulation x;
- (d) any other information the [Agency] considers expedient to be included in the Register (this may include information on non-point sources loads such as nutrient runoff from golf courses)
- (2) Every Register to which paragraph (1) refers shall be open to the public for inspection at the [Agency’s] principal office during normal working hours, free of charge, and the [Agency] shall supply a copy on payment of [insert amount] for each page made from such Register.”

- Penalties and Miscellaneous provisions

These could include provisions containing penalties for breach, the requirement for liability insurance requiring companies to purchase insurance to cover potential environmental liability resulting from damage to the environment and other incentive and market-based options.

**Model 2: Provisions for a Framework Act
(to establish a Coordinating Entity for Marine Pollution / LBS Protocol Activities)**

Section

Preliminary

Short title

Interpretation

Part I

Establishment and functions of [Authority]

Establishment of [Authority].

Functions of [Authority].

Permit required.

Revocation of permit.

Power of [Authority] to request environmental impact assessment.

Operations by [Authority] regarding water pollution.

Notice to abstain from agricultural practices.

Part II

Financial Provisions, Accounts and Reports

Article XVI of the LBS Protocol requires Contracting Parties to establishing funding mechanisms for the implementation of programmes. These are standard financial provisions and are not elaborated within the document.

Expenses of Authority.

Borrowing powers.

Minister of Finance may guarantee loans.

Power to invest moneys.

Accounts and audit.

Annual report and estimates.

Exemption from taxes and duties.

Appointment of staff.

Etc.

Part III

General

Regulations

Preliminary

Short title

1. This Act shall be cited as the [Marine Pollution Authority] Act.

Interpretation

Introduces key interpretation clauses contained in Protocol

2. In this Act:

“agricultural activities” means activities originating from the cultivation of crops and rearing of domesticated animals, excluding intensive animal rearing operations that would otherwise be defined as point sources, and animal husbandry and cultivation for domestic purposes;

“Authority” means the [Marine Pollution Authority] established under section 3;

“Chairman” means the chairman of the Authority;

“functions” includes powers and duties;

“inland or coastal waters ” means the territorial waters and internal waters of [Country], including all the bays, coves, inlets, sounds, channels, passages, marinas, ports and harbours, directly or indirectly opening adjacent thereto, whether natural or man-made, within the limits of [Country] and includes surface water, sea, groundwater, wetlands or marine areas within the environment; and includes territorial waters;

“permit” means a permit required under section 5;

“person responsible” in relation to an enterprise, construction or development includes any person at whose order or on whose behalf the enterprise, construction or development will be or, as the case may be, is being undertaken;

“sewage discharge” includes any disposal from sewage disposal or sewerage works;

“territorial waters” means the area of the marine environment which extends no more than three nautical miles from the high water mark;

“waste” means liquid waste and includes domestic sewage;

“waters” means inland or coastal waters.

Part I

Establishment and functions of [insert name of Authority]

Establishment of [Authority]

3. (1) There is hereby established an Authority to be known as (insert suitable name of Authority) which shall be appointed by [the Minister] consisting of the persons appointed in accordance with this section:

(a) a Chairman;

(b) [insert number of members] members drawn from the governmental agencies and departments that discharge functions related to pollution control, pesticide control, agriculture, physical planning, water resources, environmental health, forestry, fisheries and tourism;

(c) one member from the private sector; and

(d) one member representing a non-governmental organisation.

Functions of [Authority]

4. (1) The functions of the [Authority] shall be to:
- (a) control discharges to inland waters and coastal areas;
 - (b) promote public awareness of the marine environment of [insert Country] and their importance to the social and economic life of the country;
 - (c) advise the Minister on matters of general policy relating to the management and development of the marine environment; and
 - (d) perform such other functions pertaining to the control of water pollution as may be assigned to it by the Minister or under this Act or any other enactment.
- (2) In carrying out its functions under this Act the [Authority] shall, in relation to the control, prevention, and/or reduction of marine pollution:
- Provisions below implement Articles IX, XII and XIV of the Protocol (Attendance at meetings, Reporting, and cooperation), Article VIII (Information Systems) and XIV (Scientific and Technical Committee)*
- (a) coordinate the activities of entities that discharge functions to control water pollution;
 - (b) develop and implement plans, programmes, measures and standards including public education programmes;
 - (c) establish and monitor compliance with standards, criteria and programmes;
 - (d) encourage and develop scientific, technical and management-oriented research;
 - (e) establish an adequate framework of laws and policies including policies and legal mechanisms directed towards the management of agricultural activities and the development of a plan to implement such modifications as may be necessary to achieve best management practices;
 - (f) promote the availability of information and the participation of members of the public;
 - (g) co-ordinate the establishment and maintenance of national marine parks and protected areas systems;
 - (h) take the necessary actions for the implementation of the international obligations of the [Country];
 - (i) ensure that any developmental activity which may cause an adverse effect on the marine environment is assessed before such activity is commenced and that such adverse effect be taken into account in deciding whether or not such activity should be authorized;
 - (j) establish linkages with the Secretariat of the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region and other relevant local, regional and international organisations;
 - (k) perform such other functions pertaining to the prevention and control of marine pollution as may be assigned to it by the Minister by or under this Act or any other law.

Permit required

5. (1) Subject to the provisions of this section, no person shall:
 - (a) discharge on or cause or permit the entry into waters, on the ground or into the ground, of any sewage or pollutant or any poisonous, noxious or polluting matter; or
 - (b) construct, reconstruct or alter any works for the discharge of any sewage, any poisonous, noxious or polluting matter, except under and in accordance with a permit for the purpose granted by the [Authority] under this Act.
- (2) Subsection (1) shall not apply to discharges of pollutants specified in the First Schedule.
- (3) Any person who contravenes the provisions of subsection (1) shall be guilty of an offence and shall be liable to a fine of [insert fine] and imprisonment for a term of [insert term]
- (4) The Minister shall make regulations for the granting, suspension and revocation of permits and otherwise in relation thereto.

Revocation etc. of permits

6. (1) Subject to subsection (2), the Authority may by notice addressed to the person to whom a permit was issued revoke or suspend the permit if it is satisfied that there has been a breach of any term or condition subject to which the permit was granted, or if such person fails or neglects to submit to the Authority, in accordance with section 10, any documents, information or assessment required thereunder.
- (2) Except as provided in subsection (3), the Authority shall, before revoking a permit, serve on the person to whom it was granted a notice in writing:
 - (a) specifying the breach or default on which the Authority relies and requiring him to remedy it within such time as may be specified in the notice; and
 - (b) informing him that he may apply to the Authority to be heard on the matter within such time as may be specified in the notice.
- (3) The Authority shall not be obliged to serve a notice pursuant to subsection (2) in relation to any breach if a cessation order or an enforcement notice is issued.

Power of Authority to request environmental impact assessments

Article VII requires Parties to develop Environmental Impact Assessments as a mechanism for preventing and controlling discharges to the marine environment

7. (1) Subject to the provisions of this section, the Authority may by notice in writing require an applicant for a permit or the person responsible for undertaking in a prescribed area, any enterprise, construction or development:
 - (a) to furnish to the Authority such documents or information as the Authority thinks fit; or
 - (b) where it is of the opinion that the activities of such enterprise, construction or development are discharging or are likely to discharge a pollutant, to submit to the Authority in respect of the enterprise, construction or development, an environmental impact assessment containing such information as may be prescribed, and the applicant or, as the case may be, the person responsible shall comply with the requirement.
- (2) A notice issued pursuant to subsection (1) shall state the period within which the documents, information or assessment, as the case may be, shall be submitted to the Authority.
- (3) Where the Authority issues a notice under subsection(1), it shall inform any agency or department of Government having responsibility for the issue of any licence, permit, approval or consent in connection with any matter affecting the environment that a notice has been issued, and such agency or department shall not grant such licence, permit, approval or consent as aforesaid unless it has been notified by the Authority that the notice has been complied with and that the Authority has issued or intends to issue a permit.
- (4) Any person who, not being an applicant for a permit, refuses or fails to submit an environmental impact assessment as required by the Authority shall be guilty of an offence and shall be liable on summary conviction to a fine of [insert fine].

Operations of Authority regarding water pollution

Related to Article III (3) — (Enforcement) measures to prevent, reduce and control pollution from landbased sources and activities.

8. (1) Where it appears to the Authority that any poisonous, noxious or polluting matter is likely to enter, or is or was present in any waters, the Authority may,
 - (a) after consultation with any agency or department of Government having functions in relation to water or water resources, carry out such operations as it considers appropriate for the purpose of preventing it from doing so; and
 - (b) where such matter appears to be or to have been present in such waters, for the purpose of removing or disposing of the matter, or of remedying or mitigating any pollution caused by its presence in the waters, or of restoring the waters, so far as it is reasonably practicable to do so, to the state in which they were immediately before the matter became present in the waters.
- (2) Any amounts reasonably incurred by the Authority carrying out operations in pursuance of subsection (1) are, subject to subsection (3), recoverable by the Authority as a debt incurred by the person or persons who caused or permitted the poisonous, noxious or polluting matter, as the case may be, to be present at the place from which it was likely in the opinion of the Authority to enter waters or, as the case may be, to be present in such waters; and accordingly, without prejudice to any penalty imposable on such person or persons, such sums may be recovered without limit of amount, as a civil debt.
- (3) A person shall not be liable to pay any sums expended by the Authority pursuant to this section if he satisfies the court that such sums were incurred unreasonably.
- (4) Any person who wilfully obstructs the Authority or any person authorized in that behalf in the exercise of its powers under this section shall be guilty of an offence under this Act and shall be liable on summary conviction to a fine of [insert fine] or to imprisonment for a term of [insert term].

Notice to abstain from agricultural activity

Implements ANNEX IV — Agricultural Non-Point Sources of Pollution (could also include fertilizer on lawns/golf courses)

9. (1) Where it appears to the Authority that any internal or coastal waters have been or are likely to be polluted in consequence of an act or omission which is related to an agricultural activity the Authority may, in consultation with the Minister responsible for agriculture, serve on the occupier of the land where the act or omission took place, a notice requesting him to stop or prevent acts or omissions of that kind.
- (2) Any person who refuses or fails to comply with a notice served under this section shall be guilty of an offence and shall be liable a fine [insert fine; usually a severe one due to the extent of damage that may be caused] or to imprisonment for a term not exceeding [insert term] or to both such fine and imprisonment, and
 - (a) where a person defaults in the payment of a fine imposed under this subsection, he shall be liable to imprisonment for a term of [insert higher term]; and
 - (b) where the offence is a continuing offence, he shall be liable to a further fine of [insert fine] for each day on which the offence continues after conviction.

Notes: Other enforcement measures and procedures may be relied upon such as compounding of offences, cessation notices, and enforcement notices.

Part II**Financial Provisions, Accounts and Reports**

10. This part will contain the usual powers with regard to finance, expenditure, borrowing and investment powers, staffing etc. of Authority. These provisions are crucial to the Authority's capability in discharging its functions and are one of the limiting factors regarding this option for marine pollution control.

Part III**General**

Power to make regulations.

11. The Minister may make regulations for the purpose of giving effect to the provisions of this Act, and in particular but without prejudice to the generality of the foregoing, such regulations may contain provisions in relation to:
- (a) discharge standards and codes of practice with respect to the control of marine pollution;
 - (b) the quantity, condition or concentration of pollutant substances that may be released into internal and coastal waters;
 - (c) the design, construction, operation, maintenance and monitoring of facilities for the control of water pollution and the disposal of waste;
 - (d) the conservation of marine resources;
 - (e) the form and manner of, and the fees payable in connection with, an application for any permit that may be granted by the Authority under this Act;
 - (f) the grant, refusal, revocation or suspension of any permit that may be issued by the Authority and the terms, conditions or restrictions subject to which a permit may be granted;
 - (g) the fees or charges payable to the Authority for services rendered by the Authority, its servants or agents in carrying out the provisions of any enactment under which the Authority exercises functions;
 - (h) any other matter required by this Act to be prescribed.

First Schedule (regulation 5)

LIST OF DISCHARGES TO WHICH THESE REGULATIONS DO NOT APPLY

- (a) Discharges from non-commercial motor vehicles;
- (b) Discharges from households except where such households contain industrial or commercial facilities;
- (c) Any housing or commercial development or both of less than 30 units, without affecting the generality of 2(3);
- (d) Processing, manufacturing, washing or servicing of any other products or goods:
 - (1) that produces pollutant or less than 60 cubic metres per day;
 - (2) that the pollutant does not contain those contaminants listed as parameters (vi) to (xvi) in the first column of the Second Schedule;
 - (3) where the total load of biochemical oxygen demand of the pollutant fixed at 20 degrees centigrade for 5 days or suspended solids or both, shall not exceed 6 kilogrammes per day (concentration of 100 milligrammes per litre);
- (e) Licensed water abstraction;
- (f) Emergency activities to avoid a greater danger to the public;
- (g) Domestic animal husbandry and crop cultivation;
- (h) Domestic waste effected by means of absorption or soak-away pits or other prescribed waste disposal system.

Model 3: Provision to establish an Intersectoral Committee (by amendment to appropriate main Act)

Note: Article XIII of the LBS Protocol requires each contracting party to establish a focal point to serve as liaison to the Secretariat and to discharge certain specified functions. Article X requires parties to promote public access to information and public participation. In light of the multisectoral nature of those duties and the need for an integrated approach it is recommended that an Intersectoral Committee be established as the focal point taking into account the following illustration:

Establishment of Committee

- (1) There is hereby established a Committee to be known as the (insert suitable name of Intersectoral Committee) which shall be appointed by the Minister consisting of the persons appointed in accordance with this section:
 - (a) a Chairman;
 - (b) [number of members] members drawn from the governmental agencies and departments that discharge functions related to pollution control, pesticides management, agriculture, physical planning, water resources, environmental health, forestry, fisheries and tourism;
 - (c) one member from the private sector; and
 - (d) one member representing a non-governmental organisation.

- (2) In carrying out its functions under this Act the Committee shall, in relation to the control of marine pollution:
- (a) coordinate the activities of entities that discharge functions for the control of water pollution;
 - (b) develop and implement plans, programmes, measures and standards including public education programmes;
 - (c) monitor compliance with standards, criteria and programmes;
 - (d) encourage and develop scientific, technical and management-oriented research;
 - (e) establish an adequate framework of laws and policies including policies and legal mechanisms directed toward the management of agricultural non-point sources and the development of a plan to implement such modifications as may be necessary to achieve best management practices;
 - (f) promote the availability of information and the participation of members of the public;
 - (g) co-ordinate the establishment and maintenance of national marine parks and protected areas systems;
 - (h) take the necessary actions for the implementation of the relevant international obligations of the [Country];
 - (i) ensure that any developmental activity which may cause an adverse effect on the marine environment is assessed before such activity is commenced and that such adverse effect be taken into account in deciding whether or not such activity should be authorized;
 - (j) establish linkages with the Secretariat of the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region and other relevant local, regional and international organisations;
 - (k) perform such other functions pertaining to the control of marine pollution as may be assigned to it by the Minister by or under this Act or any other law.



PART VI

6.0 Benchmarks to Assess Progress

Summary: Marine pollution is high on the list of environmental issues that face GEF-IWCAM countries. Integrating watershed and coastal areas management is a strategy that can bring successful results to the control, prevent, and/or reduction of marine pollution from land-based activities. To do this each country should consider the wide range of activities to meet IWCAM objectives and establish its own priorities suited to its own particular circumstances.

The numerous and complex links between watershed and coastal areas management and how to encourage an integrated governance to protect these areas from pollution are key issues for GEF-IWCAM project countries. Clearly, there are no universal blueprints or prescriptions to follow and the legal and institutional measures will be incomplete without activity in other areas. Resources and expertise are limited. As an effective measure therefore countries should compare needs and prioritize actions among the participating countries and avoid duplication of efforts.

This Part exemplifies in a Table (below) the recommended actions towards establishing legal and institutional frameworks for IWCAM. These actions are to be implemented by the country itself but in most cases they will require external support for their effective implementation.

Table 8: Benchmark Summary of Practical Actions for IWCAM

COUNTRIES BY GROUP	LEGISLATIVE ACTIONS	INSTITUTIONAL & OTHER ACTIONS
Antigua & Barbuda, Dominica, Grenada, St. Vincent, St. Vincent & the Grenadines	ANB: Introduce regulatory framework for IWCAM under either Draft EP&M or EH Acts. Integrate IWCAM objectives into existing or draft legislation.	ANB: Explore institutional options to determine which is preferred including under which existing Intersectoral Committee IWCAM should be established. Launch awareness programme to promote LBS ratification.
	DOM: Improve weak pollution control regime.	DOM: Sensitise technicians to view IWCAM as a mechanism to address all environmental and water resources management issues. Strengthen Intersectoral Committee on IWCAM.
	GND: Promote the ratification of the LBS Protocol . Assess legislative options.	GND: Keep momentum for IWCAM. Arrange meeting between IWCAM and Secretary to Cabinet.
	SLU: New Water and Sewerage Act is adequate for IWCAM tasks. Promote regulations for the adoption of regional standards for discharges.	SLU: Develop pilot watershed model. Conduct needs Assessment for enforcement programmes.
	SVG: Review of LBS Protocol to consider ratification. Conduct audit of existing legislation to determine way to proceed to implement LBS Protocol .	SVG: Improve capacity for IWCAM at individual technical levels. Coordinate IWCAM activities with Water Resources project funded by European Union to avoid overlap and increase the scope of benefits to SVG.

Table 8: Benchmark Summary of Practical Actions for IWCAM

COUNTRIES BY GROUP	LEGISLATIVE ACTIONS	INSTITUTIONAL & OTHER ACTIONS
<p>Bahamas, Jamaica, St. Kitts and Nevis, Trinidad and Tobago</p>	<p>Bahamas: Strengthen legislation on control of marine pollution.</p>	<p>Bahamas: Establish programme for prevention of marine pollution. Sensitise policymakers on IWCAM objectives.</p>
	<p>Jamaica: Examine the LBS protocol to determine which aspects may be integrated into the Draft NEPA Act.</p>	<p>Jamaica: Coordinate IWCAM activities among agencies (NEPA, WRA, Parish Councils, Agriculture, NSW Authority, Maritime Administration, EH Unit). Conduct Workshop to promote IWCAM awareness, importance of watersheds and marine environments to the economy, role of agencies in preventing pollution, updating of offences under various Acts. Circulate Toolkit among agencies and ministries.</p>
	<p>St. Kitts & Nevis: Enhance existing NCEPA umbrella legislation to consider IWCAM and subsequently determine whether LBS ratification is appropriate. Revise Watercourses Act to consider IWCAM issues.</p>	<p>St. Kitts & Nevis: Identify high-level champion at political and technical levels to promote LBS ratification. Conduct Workshops pitched at various levels to sensitise public, technocrats, policymakers. Establish Demonstration Project.</p>
	<p>Trinidad & Tobago: Review existing Water Pollution Rules for consistency with discharge standards in LBS Protocol.</p>	<p>Trinidad & Tobago: Make IWCAM a national project. Make EMA coordinating entity for IWCAM. Coordinate IWCAM activities with IMA.</p>

Table 8: Benchmark Summary of Practical Actions for IWCAM

COUNTRIES BY GROUP	LEGISLATIVE ACTIONS	INSTITUTIONAL & OTHER ACTIONS
<p>Cuba, Dominican Republic</p>	<p>Cuba: Include coastal zone and watershed management provisions in Law No 81 to fill gaps in IWCAM framework.</p>	<p>Cuba: Conduct public awareness programme on IWCAM and LBS Protocol.</p>
	<p>Dominican Republic: Finalise Draft Law on Water.</p>	<p>Dominican Republic: Translate the Toolkit into the Spanish language. Promote IWCAM through Workshops and exchanges with GEF-IWCAM countries.</p>
	<p>Haiti: Follow-up on recommendation to Prime Minister for the ratification of the LBS Protocol. Draft enabling legislation and regulations to implement LBS Protocol.</p>	<p>Haiti: Translate Toolkit into the French language. Conduct stakeholder workshop on IWCAM and Toolkit. Participants should include judicial and enforcement officers. Establish pilot project to develop comprehensive IWRM strategy and action plan for water. Conduct comprehensive study on the enforcement system taking local and municipal stakeholders into account.</p>
<p>Barbados</p>	<p>Conduct policy review and share findings to consider options for adopting IWCAM as a strategy and whether a legislative approach is the preferred one. Prepare Cabinet paper on benefits of LBS Protocol ratification.</p>	<p>Enquire into the underlying factors as to why Barbados has not yet ratified the LBS Protocol.</p>



PART VII

7.0 Conclusion

A subtle weakness of preparing a Toolkit to promote IWCAM is that for the purposes of ratifying and implementing the LBS Protocol, the Toolkit promotes legislative changes as the primary method to control pollution. The reality is far from that conclusion. Implementation will demand a mix of approaches — from political and public awareness, to technology and capacity-building to undertaking institutional changes to instituting legal measures. The most challenging task to implementing any pollution control programme therefore is to determine which approach is the more critical, effective and simple to put in place. In fact countries can start with implementing the “lower hanging fruit” in order to maintain a momentum or even where resources permit, engage activities simultaneously as a means to establishing a programme for IWCAM and ultimately enacting national legislation to implement the leading global instrument to control, prevent, and/or reduce marine pollution — the LBS Protocol and thereby control activities in watersheds and coastal areas that contribute to that pollution.

The mechanisms identified in this Toolkit are not exhaustive, but are indicative of recent trends towards the establishment of appropriate laws and institutions to control and manage marine pollution. Since the determination is still to be made as to the suitability of any of the templates to a country’s particular circumstances, the Toolkit does not establish a legislative version that harmonises the principles of relevant MEAs set out in Part II with any of the templates set out in Part V to produce a single template. A legislator can however accomplish this by combining the drafting examples for including key principles in Part II of the Toolkit with a template provided in Part V of the Toolkit.

In any event, the mechanisms that have been proposed for implementing IWCAM depend on a high level of political will and the availability of resources — financial, human and technological — to realise the goal of an improved water quality in marine and coastal areas. This Toolkit is not beyond refinement but nevertheless can serve as a guide to legislators and water managers in adopting measures for IWCAM. It provides materials legislators can use to revise the legislative and policy framework that governs water pollution in their respective countries.

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