

Mainstreaming  
The  
Sound Management of Chemicals Priorities  
For the  
Belize SAICM Initiative  
Mainstreaming into Development Plans the Sound  
Management of Chemicals (SMC) Priorities for Key  
Development Sectors in Belize and SMC  
Governance  
Project

An ACTION PLAN

Submitted to the  
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## **1.0 Purpose**

The purpose of the present paper is to develop specific text for the inclusion of the approved Sound Management of Chemicals (SMC) priorities into relevant chapters of Belize's National Development Plan.

## **2.0 Goal**

Provide an Action Plan as a Road Map for the timely consideration of the recommended policies along with their specific actions and estimated costs.

## **3.0 Belize's SMC Priorities**

Belize actively participates in international initiatives for chemicals management as noted in the Situational Analysis Report.

In 2009, Belize received technical and financial support from the QSP to implement the project: "Mainstreaming into Development Plans the Sound Management of Chemicals (SMC) Priorities for Key Development Sectors in Belize and Associated SMC Governance"

The main components of the project are:

The Situational Analysis Report (SAR) which includes:

- Baseline analysis
- Diagnosis and need assessment.
- Identification of national SMC priorities.
- Economic valuation and policy options for selected priorities.
- Mainstreaming priorities into the national development plan.

In September of 2009, Belize launched the SAICM project aimed at identifying priority sectors and prioritizing chemical management issues of concern, with the purpose of having an integrated approach to the sound management of chemicals in the country, and at the same time to identify the chemical issues of highest priority for mainstreaming into the national development plan. The Situational Analysis document identified priority development sectors and important chemicals in these sectors; it described the status of sound management of chemicals in the country, identifying existing legal and institutional strengths and gaps. With full participation of government ministries, industry and the NGO community, a prioritization exercise was conducted in June of 2010 for the purpose of identifying the high priority chemical management issues.

The participants validated what stakeholders had previously identified as important chemical management issues and proceeded to select what was considered to be the four SMC issues of highest priority in Belize:

1. Prevention and Control of Chemical Pollution and Waste with Emphasis on Persistent Organic Pollutants.

2. Enhance Industry Sector Risk Reduction Through the Implementation of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) in Belize.
3. Safe Handling and Use of Chemicals, with an Emphasis on Pesticides, to Address Poisoning, Good Agricultural Practices and Unnecessary Threats to Biodiversity.
4. Chemical Accidents. Expand National Emergency Plans to Include Industrial Accidents Including In Ports and Shipping Channels To Defend Coastal Zone Integrity/Biodiversity and Safeguard Human Health.

#### **4.0 Policy Options Analysis**

For the purpose of moving the process further toward mainstreaming of SMC priorities into the national development process available policy options and the implications in term of cost and required institutional capacity have been assessed for each SMC priority. Since the policy options are numerous and the available resources and time are limited, it is necessary to select those areas of work most likely to have measurable effects on the management of chemicals within the context of national capacities and the timeframe of the national planning cycle.

#### **5.0 *Prevention and control of Chemical Pollution and Waste with Emphasis on Persistent Organic Pollutant (POPs)***

Several work areas are available to begin addressing this high priority SMC issue:

1. Develop the enabling legal framework for the management of waste.
2. Review and update National Implementation Plan for POPs and UPOPs.
3. Identify and dispose of obsolete stocks of pesticides so that they are disposed on in an environmentally sound manner.
4. Develop a national waste management plan to begin phased improvements in how waste is collected, segregated and soundly recycled or disposed of.
5. Waste management awareness raising.

#### **6.0 *Enhance Industry Sector Risk Reduction Through the Implementation of the Global Harmonized System of Classification and Labeling of Chemicals (GHS) in Belize.***

The following steps will be taken to begin addressing this priority issue:

1. Review applicable national legislation and begin aligning with GHS requirements.
2. Establish roles and responsibilities of employees, chemical suppliers and government in the implementation of GHS.
3. Establish an information clearing house for hazard information.

4. Prepare safety data sheets and labels applicable to Belize building on the GHS source material.
5. Develop and implement GHS awareness raising and capacity-building program.

**7.0** *Safe Handling and use of Chemicals with Emphasis on Pesticides to Address Poisoning, Good Agricultural Practices and unnecessary threats to Biodiversity.*

Required initiatives are:

1. Develop and promote the implementation of GAP including Integrated Pest Management.
2. Promote access to lower risk or safer pesticides.
3. Promote the use of pest and disease-resistant crop varieties.
4. Provide training in alternative and ecological agricultural practices, including non-chemical alternatives.

**8.0** *Chemical Accidents. Expand National Emergency plans to Include Industrial Accidents including in Port and Shipping Channels to Defend Coastal Zone Integrity/Biodiversity and Safeguard Human Health.*

Improvements in this area will require the following:

1. Review legislation dealing with accidents prevention, preparedness and control.
2. Industry hazard identification and risk assessment.
3. Incorporate into national disaster preparedness plan, a chapter on industrial and chemical accident prevention and response, utilizing OECD, WHO and IPCS guidance documents.
4. Support industry to develop on site accident prevention and response plans.

**9.0 Action Plan and Road Map**

*Goal*

To put in place the required legislative and institutional infrastructure to support the implementation of policies and actions addressing the identified high priority SMC issues.

*Strategies*

Capitalize on existing in-country chemical management capacities.

Use a multi-sectoral, multi-stakeholder approach to chemical management.

Draw on existing international technical guidance documents.

## National Action Plan for the Implementation of SAICM in Belize. 2011-2015

SMC Issue	Selected Policy Options	Actions	Timeframe	Cost USD\$
1. Prevention and control of chemical pollution and waste with emphasis on persistent organic pollutants (POP's).	Identify and dispose of obsolete stocks of pesticide so that they are disposed of in an environmentally sound manner. Promote the prevention of UPOPs	Update legislation on waste management including new POPs	2011	\$45,000.00
		Situational analysis of New POPs.	2012	\$250,000.00
		Proper disposal of POP's including medical waste on a recurrent basis.	2013-2015	\$1,200,000.00
		Information generation and communication on green harvesting and land preparation practices.	2011	\$120,000.00
	Establish the enabling legal framework for the management of waste.	Attitude, Knowledge and Practice study on waste management.  Develop waste management policy document and update legislation	2011  2012	\$30,000.00  \$45,000.00
Waste management awareness raising program.	Develop and implement waste management awareness plan including green harvesting and land preparation practices.	2012-2013	\$50,000.00	
Develop a national waste management plan to begin phased improvements in how waste is collected, segregated and soundly recycled or disposed of.	Establish and begin implementing a national action plan with respect to waste prevention, waste minimization, waste separation and disposal through the application of best practices.	2012-2015	\$120,000.00	
2. Enhance Industry Sector Risk Reduction Through the Implementation of the Global Harmonized System of Classification and Labeling of Chemicals (GHS) in Belize.	Review applicable legislation and begin aligning with GHS requirements.	Review and align legislation with GHS requirements.	2011	\$45,000.00
	Develop GHS situational analysis and national GHS action plan, including the establishment of hazardous information clearing house.	Conduct GHS situational analysis.	2011	\$30,000.00
	Establish roles and responsibilities of employees, chemical suppliers and government in the implementation of GHS.	Incorporate in legislation the role of main stakeholders in the implementation o GHS	2011	\$30,000.00
	Prepare safety data sheets and labels.	Develop Belize safety data sheet and labels.	2012	\$30,000.00
	Develop and implement GHS awareness raising and capacity-building program.	Develop and implement GHS action plan including awareness raising actions.	2012-2015	\$90,000.00
3. Safe Handling and use of Chemicals with Emphasis on Pesticides to Address Poisoning, Good Agricultural Practices and unnecessary threat to Biodiversity.	Develop and promote the implementation of GAP including Integrated Pest Management.	Determine scope and strategies for national GAP program.	2011	\$30,000.00
		Develop crop specific IPM manuals.	2012	\$60,000.00
		Conduct inventory of farmers applying pesticides and pesticide use.	2011	\$100,000.00
		Develop national GAP and IPM awareness program.	2012	\$120,000.00
		Integrate GAP and IPM into the school of agriculture curricula.	2013	\$90,000.00
	Promote access to lower risk or safer pesticide.	Train farmers on the use of alternative safer pesticides	2013-2015	\$60,000.00

	Promote the use of pest and disease-resistant crop varieties	Conduct demonstration projects on alternative farming methods	2013-2015	\$50,000.00
	Provide training in alternative and ecological agricultural practices, including non-chemical alternatives	Develop and implement capacity building for agriculture extension officers.	2012-2013	\$100,000.00
		Develop farmer's IPM training manuals and capacity building program.	2012	\$60,000.00
4. Chemical Accidents. Expand National Emergency plans to Include Industrial Accidents including in Port and Shipping Channels to Defend Coastal Zone Integrity/Biodiversity and Safeguard Human Health.	To develop and integrated national system to prevent major industrial accidents and for emergency preparedness and response to accidents and disasters involving chemicals.	Review legislation dealing with accident prevention, preparedness and control.	2011	\$45,000.00
		Hazard identification and risk assessment.	2011	\$45,000.00
		Incorporate into national disaster preparedness plan, a chapter on industrial and chemical prevention and response, using OECD, WHO and IPCS guidance documents.	2012	\$25,000.00
		Develop guidelines for industrial accidents involving hazardous chemicals.	2012	\$25,000.00
		Support to industry in the development of onsite accident preparedness plan.	2012-2015	\$125,000.00
<b>TOTAL COST</b>				<b>USD\$3,020,000.00</b>

**BUDGET AND TIMELINE IN US\$ by YEAR**

Activities	2011	2012	2013	2014	2015	Total
<b>PRIORITY 1.</b>						
Update legislation on waste management including new POP's	\$45,000.00					\$45,000.00
Situational analysis on New POPs		\$250,000.00				\$250,000.00
Proper disposal of POP's including medical waste on a recurrent basis.			\$100,000.00	\$1,000,000.00	\$100,000.00	\$1,200,000.00
Information generation and communication on green harvesting and traditional land preparation practices	\$120,000.00					\$120,000.00
Attitude, Knowledge and Practice study on waste management.	\$30,000.00					\$30,000.00
Develop waste management policy document and update legislation.		\$45,000.00				\$45,000.00
Develop and implement waste management awareness plan including green harvesting and land preparation practices.		\$25,000.00	\$25,000.00			\$50,000.00

Establish and implement national action plan with respect to waste prevention, waste minimization, waste separation and disposal through the application of best practices.		\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$120,000.00
<b>PRIORITY 2</b>						
Review and align legislation with GHS requirements.	\$45,000.00					\$45,000.00
Conduct GHS situational analysis.	\$30,000.00					\$30,000.00
Incorporate in legislation the role of main stakeholders in the implementation of GHS	\$30,000.00					\$30,000.00
Develop Belize safety data sheet and labels.		\$30,000.00				\$30,000.00
Develop and implement GHS action plan including awareness raising actions.		\$30,000.00	\$30,000.00	\$15,000.00	\$15,000.00	\$90,000.00
<b>PRIORITY 3</b>						
Determine scope and strategies for national GAP program.	\$30,000.00					\$30,000.00
Develop crop specific IPM manuals.		\$60,000.00				\$60,000.00
Conduct inventory of farmers applying pesticides and pesticide use.	\$100,000.00					\$100,000.00
Develop and begin implementing national GAP and IPM awareness program.		\$120,000.00				\$120,000.00
Integrate GAP and IPM into the school of agriculture curricula.			\$90,000.00			\$90,000.00
Train farmers on the use of alternative safer pesticides			\$40,000.00	\$10,000.00	\$10,000.00	\$60,000.00
Conduct demonstration projects on alternative farming methods			\$30,000.00	\$10,000.00	\$10,000.00	\$50,000.00
Develop and implement capacity building for agriculture extension officers.		\$50,000.00	\$50,000.00			\$100,000.00
Develop farmer's IPM training manuals and capacity building program.		\$60,000.00				\$60,000.00
<b>PRIORITY 4</b>						
Review legislation dealing with accident prevention, preparedness and control.	\$45,000.00					\$45,000.00
	\$45,000.00					\$45,000.00

Hazard identification and risk assessment.						
Incorporate into national disaster preparedness plan, a chapter on industrial and chemical accident prevention and response, using OECD, WHO and IPCS guidance documents.		\$25,000.00				\$25,000.00
Develop guidelines for industrial accidents involving hazardous chemicals. See UNEP DTIE Paris new guidance		\$25,000.00				\$25,000.00
Support to industry in the development of onsite accident preparedness plan.		\$65,000.00	\$35,000.00	\$15,000.00	\$10,000.00	\$125,000.00
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>TOTAL</b>
<b>TOTALS</b>	<b>\$520,000.00</b>	<b>\$815,000.00</b>	<b>\$430,000.00</b>	<b>\$1,080,000.00</b>	<b>\$175,000.00</b>	<b>USD\$3,020,000.00</b>

## 10.0 Next Steps to Be Taken For Mainstreaming

### *Goal*

To recommend the next steps to be taken towards getting the policies and actions presented in the Action Plan and Road Map into the National Development Plan and Budget Cycle.

### *Strategies*

Capitalize on the ICM and recommend that this body take on a wider coordinating role regarding the Sound Management of Chemicals (SMC) and its relationship with the environmental, health and economic development aspects of SMC in Belize.

Present the Situation Analysis Report (SAR), the Concept Papers, Cost Benefit Analysis, Policy Options and Action Plan to the Ministry of Economic Development as the Ministry responsible for National Development and Planning; and to the Ministry of Finance as the Ministry responsible for Budgeting for consideration in their development plans and budgeting.

Present the same reports to the Ministries responsible for Natural Resources and the Environment, Health, Agriculture, and Human Development for consideration in their own Ministry and sector plans.

Funding Agencies resident in Belize need to be made aware of the broader goals of SMC in meeting the development needs of Belize.

### *Action*

The Belize Medium Term Development Strategy (MTDS) 2010 – 2013 *Building Resilience against Social, Economic and Physical Vulnerabilities* has already been developed for what is now the short to medium term. In the interest of furthering the objectives of the Sound Management of Chemicals in the human, environmental and economic development of Belize it is necessary for these SMC reports and recommendations be presented at the earliest so that a possible additional chapter is added that encompasses the Action Plan and Road Map.

The Belize MTDS is prepared as a broad and inclusive document, which allows for a second and alternative route to implementation of the SMC recommendations and action plan. The support of the Ministry of Economic Development and of the Government of Belize is required to get the Action Plan and Road Map included into the sector plans of the line Ministries including those mentioned before.

### *Timing*

In order to have the first year reflected in the national budget prepared by the Ministry of Finance the results need to be presented during December 2010 and followed up in January and February 2011. The national budget is an exercise whose estimates for revenue and expenditure are presented by the Prime Minister and Minister of Finance in early March each year.

Given the tight schedule available for the upcoming budget exercise an alternative would be to concentrate on getting the SMC results into the overarching goals and objectives of the Ministry of Economic Development and into the sector plans of the implementing / line Ministries.

The budget implications of the policies and actions can then be subject to a more detailed review including their full implications for actions and budgetary implications.

This alternative is the recommended route for mainstreaming the SMC priorities into the national development plan and eventually into the national budget as it takes into account the late stage of the medium term plans and the annual budget cycle of Belize. The ICM needs to be mindful of the state of the medium term plans and budget cycle in order for them to follow up on the mainstreaming exercise.

Whichever route is considered the Department of the Environment would customarily be required to first prepare a Cabinet Paper for the approval of the Minister of Natural Resources and the Environment for the consideration of the full Cabinet of the Government of Belize. That national body would then make the decision as to which mode of entry into the development plans of Belize should be adopted or whether it should be considered at the sector level. The

support of the Ministries mentioned before as well as of their Ministers and Chief Executive Officers will also need to be mobilized in order to ensure a high degree of awareness and acceptance of the cross cutting role of SMC and its positive role in meeting the National Development goals and objectives of a young and forward looking nation.