Government of Saint Vincent and the Grenadines

National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants

The Ministry of Agriculture, Rural Transformation, Forestry, Fisheries &Industry,

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The Ministry of Health, Wellness and the Environment.

Implementing the Stockholm Convention on Persistent Organic Pollutants in St. Vincent and the Grenadines

National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants

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National Focal Point

Ministry of Health Wellness and the Environment

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Acronyms and Abbreviations

BAT	Best Available Techniques
BEP	Best Available Practices
CARPHA	Caribbean Public Health Agency
COP	Conference of the Parties
FAO	Food and Agricultural Association
GDP	Gross Domestic Product
GEF	Global Environmental Facility
IICA	Inter-American Institute for Cooperation on Agriculture
MOHWE	Ministry of Health Wellness and the Environment
MoL	Ministry of Labour
MoNS	Ministry of National Security
MoFP	Ministry of Finance and Planning
PRDA	Parks Rivers and Beaches Authority
MARTFFI	Ministry of Agriculture, Rural Transformation, Forestry, Fisheries and Industry
NEMO	National Emergency Management Organization
MOHWE	Ministry of Health Wellness and the Environment
MOHIS	Ministry of Housing and Informal Settlements
NESDP	National Economic and Social Development Plan
NEMS	National Environmental Management Strategy
NGO	Non Governmental Organization
NIP	National Implementation Plan
PCB	Pesticide Control Board
PAHO	Pan American Health Organization

PCB	Polychlorinated biphenyls
PCBSVG	Pesticide Control Board of St. Vincent and the Grenadines
POPs	Persistent Organic Pollutants
PIC	Prior Informed Consent
PPE	Personal Protective Equipment
SID	Small Island Developing State
SC	Stockholm Convention
SAICM	Strategic Approach to International Chemical Management
SWMU	Solid Waste Management Unit
SVGBS	St. Vincent and the Grenadines Bureau of Standards
UNEP	United Nations Environment Programme
VINLEC	Saint St. Vincent and the Grenadines Electricity Services

Executive Summary

Persistent Organic Pollutants or POPs are chemical substances that persist in the environment, bioaccumulate through the food chain, and cause adverse effects to human health and the environment. These POPs not only pose threats to the regions in which they are produced and used, but they also threaten other regions where they have never been used or produced as they are transported via air and water, posing an even greater threat to the global population and environment.

The Stockholm Convention (SC) on Persistent Organic Pollutants (POPs) is a direct response by the international community to protect human health and the environment from the negative effects of POPs and chemicals. Currently, 12 POPs pesticides are being controlled by the convention commonly called the dirty dozen, these are: aldrin, chlordane, DDT, dieldrin, dioxins, endrin, furans, hexachlorobenzene, heptachlor, mirex, polychlorinated biphenyls (PCBs) and toxaphene.

It is the goal of the SC to provide the necessary technical and financial resources to assist countries to take action to reduce and eliminate the releases of these chemicals.

Recognizing that:

1. Persistent organic pollutants (POPs) pose major and increasing threats to human health and the environment in Saint Vincent and the Grenadines;

2. Saint Vincent and the Grenadines is a Small Island Developing State (SID) that does not produce any of the group of POPs chemicals under control by the (SC) and may be unintentionally producing POPs;

3. Saint Vincent and the Grenadines may be using POPs and chemicals of this nature and equipment containing POPs;

Saint Vincent and the Grenadines became Party to the SC on POPs in 2005 in an effort to take action to protect human life and the environment in Saint Vincent and the Grenadines. The Environmental Services Unit within the MOHWE is responsible for the coordination of effort to ensure that St Vincent and the Grenadines meet its obligations under the Stockholm Convention on POPs. The development of the National Implementation Plan (NIP) serves as a key instrument to be used by the MOHWE, other agencies and stakeholders to implement the Stockholm Convention on POPs in Saint Vincent and the Grenadines.

Commitment to implementation of NIP

The development and implementation of a NIP is evidence of Saint Vincent and the Grenadines commitment to:

1. remain compliant with the obligations of the SC on POPs

2. reduce and eventually eliminate the unintentional release of POPs

3. protect human health and the environment

Under the SC, Parties seek to:

1. identify and implement measures to reduce or eliminate releases from intentional production and use

2. establish a register of specific exemptions that Parties have requested

3. identify and implement measures to reduce or eliminate releases from unintentional production

4. identify and implement measures to reduce or eliminate releases from stockpiles and wastes

5. develop and implement a plan for the implementation of the obligations under the SC

6. submit proposals for the listing of chemicals in Annexes A, B and/or C

7. facilitate or undertake exchange of information relevant to the reduction or elimination or production, use and release of POPs and exchange information regarding alternatives to POPs.

8. promote and facilitate awareness among policy and decision makers regarding

POPs.

9. undertake appropriate research, development, monitoring and cooperation pertaining to POPs, within each Party's capabilities and resources.

National Priorities and Key Issues

Saint Vincent and the Grenadines acceded to the Stockholm Convention on Persistent Organic Pollutants on 15th September 2005. Although Saint Vincent and the Grenadines no longer uses POPs pesticides, assessments reveal that unintentional by-products of POPs are produced when formed from anthropogenic sources such as waste incinerators, combustion of fossil fuels,

residential combustion sources and vehicular or mobile sources. In addition to exposure to POPs pesticides, Saint Vincent is also exposed to possible releases from PCBs and PCB containing equipment used mainly in the telecommunications and power generating sector. However in recent year there has been a phase out of PCBs containing equipment in the electricity sector. Recent data gathered by the SAICM project further exposed stated that the Vincentian population is exposed to a range of household, agricultural and industrial chemicals and seeks to address management of these chemicals in addition to POPs pesticides.

In implementing the SC on POPs in Saint Vincent and the Grenadines, the following national priorities and key issues has been recognized:

1. Institutional strengthening in the field of chemicals management and POPs in particular;

2. Overall awareness raising on chemicals management issues including hazardous and chemical waste;

3. Assessment of hazardous risks associated with existing stockpiles;

4. Development of specific legislation on sound management of chemicals;

5. Development of specific legislation on sound management of hazardous waste.

The NIP seeks to address these national priorities and key issues and sets targets for implementation within the period for 2015 to 2025 and will be developed in accordance with the procedures set out by the Conference of Parties (COP) to the SC under the following objectives:

1. To strengthen and enhance Saint Vincent and the Grenadine's institutional and regulatory framework

2. To eliminate the importation and use of Annex A POPs Pesticides

3. To eliminate the importation and use of PCBs and equipment containing PCBs and dispose of PCBs and PCB containing equipment

4. To reduce or eliminate releases from unintentional production of POPs

5. To identify and manage contaminated sites

6. To develop, facilitate and promote a system for information exchange that allows

Saint Vincent and the Grenadines to be compliant under the SC on POPs

7. To increase awareness of the public on POPs and chemicals, and their related issues

8. To ensure the regular preparation and submission of reports in accordance with the SC

9. To promote capacity for research and development related to the management of POPs pesticides and chemicals

10. To monitor implementation of the SC in Saint Vincent and the Grenadines.

1.0 Introduction

Sections 1.1, 1.2 and 1.3 present the history of the SC, the purpose and structure of NIP and discusses the POPs issue in Saint Vincent and the Grenadines.

1.1 History of Convention

The SC on POPs was developed out of an international awareness that POPs posed major and increasing threats to human health and the environment, and an international commitment to take measures to protect human health and the environment. An initial list of 12 POPs, phrased the "dirty dozen", are currently being considered under the convention; these are:

- Aidrin
- Chiordane
- DDT
- Dieidrin
- Dioxins
- Endrin
- Furans
- Hexachiorobenzene
- Heptachior
- Mirex
- PCBs
- Toxaphene

In February 1997, the UNEP Governing Council, through decision 19/13C, convened an Intergovernmental Negotiating Committee (INC) with a Criteria Expert Group that would develop criteria and a procedure for identifying additional POPs for future international action.

The SC on POPs was adopted and opened for signature in May 2001 in Stockholm. This convention marked the third multilateral environmental agreement (MEA) to address chemicals management, following the Basel Convention on the Transboundary Movement of Hazardous Chemical Waste and the Rotterdam Prior Informed Consent (PIC) Convention. In developing the NIP, it was necessary to consider the synergies between these groups of MEAs in an effort to develop the way forward regarding the management of chemicals in Saint Vincent and the Grenadines within the framework of the SC.

<u>National Implementation Plans</u>

Article 7 of the Convention states that

1. Each Party Shall:

(a) Develop and endeavour to implement a plan for the implementation of its obligations under this Convention;

(b) Transmit its implementation plan to the Conference of the Parties within two years of the date on which this Convention enters into force for it; and

(c) Review and update, as appropriate, its implementation plan on a periodic basis and in a manner to be specified by a decision of the Conference of the Parties.

2. The parties shall, where appropriate, cooperate directly or through global, regional and sub-regional organizations, and consult their national stakeholders, including women's groups and groups involved in the health of children, in order to facilitate the development, implementation and updating of their implementation plans.

3. The Parties shall endeavour to utilize and, where necessary, establish the means to integrate national implementation plans for persistence organic pollutants in their sustainable development strategies where appropriate.

This article presents the basis for development and implementation of national plans to implement the SC through international and regional cooperation. This article is of particular significance to SIDs such as Saint Vincent and the Grenadines where technical expertise pertinent to the development, implementation and updating of implementation plans, may be limited. The article further encourages Parties to incorporate the management of POPs into national sustainable development strategies and action plans as far as possible.

Mechanisms used to develop the NIP

The NIP was developed out of a process of stakeholder consultation, national and international research and data gathering and guidance from the Environmental Management Department of the Ministry of Ministry of Health Wellness and the Environment, Ministry of Agriculture etc. and the Steering Committee on Chemicals Management.

The following also guided the development of the NIP:

- National Profile for POPs and Chemicals Management
- National POPs and Chemicals Inventory
- Assessment of the Legislative and Institutional Framework for the Management of

POPs and Chemicals in Saint Vincent and the Grenadines

- Establishment of a POPs Information System

1.2 Purpose and Structure of the NIP

Purpose of the NIP

Article 7 of the SC states that "Each Party shall develop and endeavour to implement a plan for the implementation of its obligations under this Convention". The NIP seeks to present the way forward regarding the management of POPs pesticides and chemicals in Saint Vincent and the Grenadines in an effort to protect human life and the environment. The NIP will also allow Saint Vincent and the Grenadines to be compliant with its obligations under the Convention through institutional, policy and legislative action plans that will guide Saint Vincent and the Grenadines through the period 2015 to 2025. The NIP offers flexibility in that it provides for regular 5-year reviews in an effort to ensure that the action plans and strategies meet the future challenges as the convention evolves.

Structure of the NIP

The development of the NIP was guided by the draft document, "Guidance for Developing a National Implementation Plan for the Stockholm Convention" (UNEP).

Section 1 presents the history of the SC, discusses the purpose of national implementation plans and summarizes the POPs issues in Saint Vincent and the Grenadines. Section 2 presents Saint Vincent and the Grenadines baseline and profile, highlights the current institutional, policy and regulatory framework for POPs and chemicals in Saint Vincent and the Grenadines and presents an assessment of POPs and chemicals in Saint Vincent and the Grenadines. While Section 3 intends to outline the strategies and action plan components of the NIP.

1.3 Summary of POPs Issues

POPs Pesticides

The last known uses of POPs pesticides in St. Vincent and the Grenadines are summarized in Table 1.

Table 1: Last Known Uses of POPs Pesticides in SVG

POP Pesticide	**Last Know Uses**
Aldrin	Treatment for termites and other soil pests, termites infesting building materials, in grain storage, and for vector control
Chiordane	Not known to have been used
DDT	Control of medical and veterinary vectors such as malaria-transmitting mosquitoes, plague-transmitting fleas and trypanosomiasis-transmitting tsetse flies
Dieldrin	Treatment for locusts, termites, human disease vectors
Endrin	Formally used against insects and rodents. No current or recent uses are known
Heptachlor	Treatment for termites and other soil pests, termites infesting building materials
Hexachlorobenzene (HCB)	Formally used for seed treatment against fungal diseases, as well as for industrial purposes.
Mirex	Treatment against leaf-cutting ants, termites in buildings and outdoor; fire retardant and for other industrial purposes
PCBs	Last used by VINLEC in transformers for electricity generation

Source: MARTFFI 2013

Although the use of POPs pesticides in Saint and the Grenadines was banned , other chemicals used primarily in the manufacturing and agricultural sectors may contain POPs. The groups of chemical products or formulations imported into SVG are listed below (Chemical Profile, 2013):

Adhesives	Cleaners	Oils Pigments
Agro- chemical products	Cosmetics	Paints, synthetic fibers
Acids	Detergents	Perfumes
Alkali	Drugs	Petroleum
Arts and craft products	Fiberglass and resin plastics	Petroleum products
Automotive products	Fillers Inks	
Batteries	Metal Coating	

Saint Vincent and the Grenadines is also exposed to unintentional by-products of POPs (dioxins and furans) when formed from anthropogenic sources such as combustion of fossil fuels, residential combustion sources and vehicular or mobile sources. The open burning of derelict tyres is seen as a source of UPOPs. Section 2.3.4 presents an assessment of releases from unintentional production of dioxins and furans, HCB and PCBs.

Pesticides and Fertilizers

Table 2 shows the quantities of pesticides and fertilizers that were imported into Saint Vincent and the Grenadines between 2010 and 2014.

Table 2 Volume of Pesticides and Fertilizers imported from 2010 to 2014

Year	Pesticides (Kg)	Fertilizers (Kg)
2010	**452,198**	**2,373,153**
2011	550,104	1,025,768
2012	1,458,792	1,632,061
2013	439,990	1,685,108
2014	368,139	1,847,550
Total	**326,922,299**	**856,364,107**

Source: Statistical Office, St. Vincent and the Grenadines

The National Profile for POPs and Chemicals Management in Saint Vincent and the Grenadines notes the continuing importation of PCBs and PCB containing equipment such as transformers and large capacitors. It also highlights many cases where mercury based products such as light bulbs, healthcare instruments, pesticides, body soaps and bleaching creams are still being sold and used in Saint Vincent and the Grenadines. It will be imperative for the Government of Saint Vincent and the Grenadines (GOSVG) to monitor this situation and in this regard, the action plans and strategies of the NIP include a monitoring programme in an effort to improve the situation.

Obsolete and Unwanted Pesticides

A survey of obsolete and unwanted or banned pesticides was conducted in 2013 by the MARTFFI, which identified the existence of a small quantity of 3.2 tons of obsolete and unused chemicals on the Island.

The major problem which these obsolete and unused chemicals present is the eventual release of POPs and chemicals into the ground and atmosphere, owing to inadequate and unsuitable storage conditions. In addition, the nature of containers used to store these chemicals do not ensure their integrity and containment. The NIP identifies actions that must be taken to address management and disposal of these chemicals as this will determine its ability to meet the obligations of the SC and protect human health and the environment.

2.0 Country Baseline

The SC is being implemented in Saint Vincent and the Grenadines by the Ministry of Health Wellness and the Environment in collaboration with the Ministry of Agriculture, Customs and Excise Department, Saint Vincent and the Grenadines Port Authority, Ministry of Foreign Affairs and Trade, Chamber of Industry and Commerce ,NEMO and other NGOs. The overall objective is to protect human health and the environment from POPs and chemicals by:

a. Preparing the foundation for the implementation of the convention in Saint Vincent and the Grenadines

b. Assisting Saint Vincent and the Grenadines to meet its reporting and other obligations under the Convention

c. Strengthening Saint Vincent and the Grenadine's national capacity to manage POPs and chemicals

The activities include the following:

a. Determination of coordinating mechanisms and organizations

b. Assessment of national infrastructure and capacity, and establishment of an inventory of chemicals, including POPs

c. Establishing priorities and determining objectives

d. Formulation of a National Implementation Plan (NIP) and specific Action Plans

e. Endorsement of the NIP by Stakeholders

2.1 Country Profile

St.Vincent and the Grenadines, a chain of islands is but a mere speck on the world map (Figure 1). A country of indigenous Garifuna people, African, Indian and European descendants, St.Vincent prides itself in being very diverse. The country seeks to approach development in a manner that meets the needs and aspirations of all its citizens. It seeks a development that is sound, sustainable, impartial, harmonious, sensitive of culture and individuality and compatible with the lawful claims and needs of other nations and societies. Sound development cannot exist unless it is equitable and sustainable, and development cannot be sustainable unless every effort is made to ensure effective natural resource conservation and environmental management.

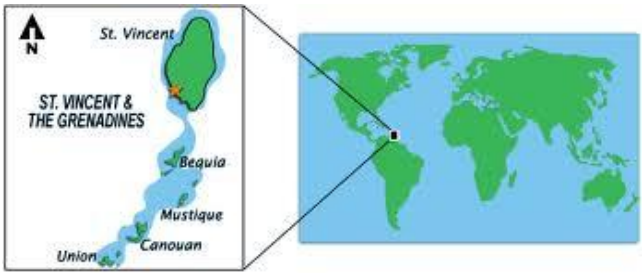

Figure 1: Location of St. Vincent and the Grenadines in the World Context

2.1.1 Geography

Within the Caribbean St. Vincent and the Grenadines is located in the Windward Islands at the lower end of the Caribbean chain at latitude 13° 15N, 61° 12 W. They are situated between Grenada to the south, St. Lucia to the north and Barbados to the east (Figure 2). The islands are in the Atlantic Standard Time Zone, one hour ahead of Eastern Standard Time and four hours behind GMT.

St. Vincent, Chief Island of the chain, is 18 miles (29 km) long and 11 miles (18 km) wide and is located 100 miles (161 km) west of Barbados and 21 miles (34 km) south west of St. Lucia. The island is mountainous and well forested with many valleys and waterfalls. St. Vincent is dominated by the volcano La Soufrière, which rises to 4,048 ft (1,234 m).

The Grenadines, a chain of nearly 600 islets with a total area of only 17 sq miles (27 sq km), extend for 60 miles (96 km) between St. Vincent and Grenada. The main islands in the Grenadines are Bequia, Balliceau, Canouan, Mayreau, Mustique, Isle D'Quatre, Petit Saint Vincent, and Union Island.

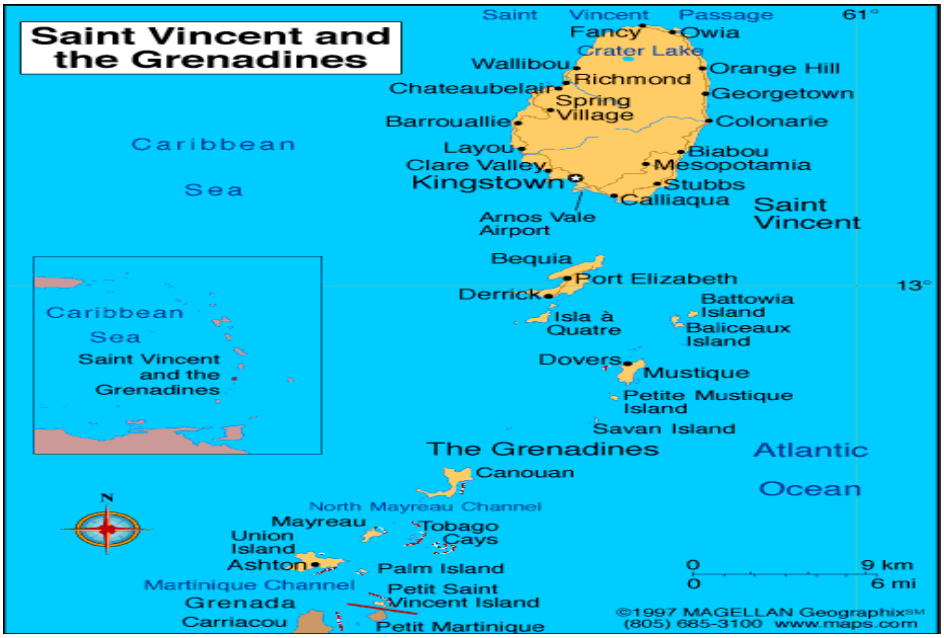

Figure 2: Location of St. Vincent and the Grenadines in the Caribbean

2.1.2 History

The Garifuna Indians inhabited St. Vincent before the Europeans arrived, and the island still sports a sizable number of Garifuna artifacts. Explored by Columbus in 1498, and alternately claimed by Britain and France, St. Vincent became a British colony by the Treaty of Paris in 1763. In 1773, the island was divided between the Garifunas and the British, but conflicts between the groups persisted. In 1776, the Garifunas revolted and were subdued. Thereafter, the British deported most of them to islands in the Gulf of Honduras. Sugarcane cultivation brought thousands of African slaves and, later, Portuguese and East Indian labourers.

The islands belonged to the West Indies Federation from 1958 until its dissolution in 1962, won home rule in 1969 as part of the West Indies Associated States, and achieved full independence Oct. 27, 1979. Prime Minister Milton Cato's government quelled a brief rebellion on Dec. 8, 1979, attributed to economic problems following the eruption of Mount Soufrière in April 1979 (which had caused the evacuation of the northern two-thirds of the island). The eruption, followed by Hurricane Allen in 1980, seriously damaged the nation's economy, particularly the important banana crop, in the 1980s. By the 1990s the economy had begun to rebound. With the 1999 decision by the European Union to end its preferential treatment of bananas imported from former colonies, St. Vincent sought to diversify its economy, primarily through expanding tourism.

2.1.3 Political Structure and Government

Saint Vincent and the Grenadines is an independent state within the British Commonwealth. It claims as its head of state Queen Elizabeth II, who is represented on the island by a governor general. The office of Governor General has mostly ceremonial functions including the opening of the islands' House of Assembly and the appointment of various government officials. The nation's form of government is a parliamentary democracy. The governor general selects the prime minister, usually the leader of the majority party in the unicameral (one-house) House of Assembly. Parliamentary opposition is made of the largest minority stakeholder in general elections, headed by the leader of the opposition. The House of Assembly consists of 21 seats (15 representatives chosen by popular election and 6 appointed senators).

In terms of the judiciary, the Eastern Caribbean Supreme Court, based in Saint Vincent and the Grenadines, carries out judicial functions. One judge from the court is based in Saint Vincent. The country has no formal armed forces, although the Royal Saint Vincent and the Grenadines Police Force includes a Special Service Unit as well as a militia that has a supporting role on the island.

2.1.4 Population

Demographic Features

The 2012 Population and Housing Census Preliminary Report for St. Vincent and the Grenadines returned a total population of 109,991 reflecting a 0.89 percent growth since the 2001 Population and Housing Census. Life expectancy at birth was 72.4 years for both sexes combined. Table 3 shows the population distribution by age group and sex.

Table 3. Population Distribution by Group and Sex, 2012

Age Group	Total Household Population			% of Total
	Male	Female	Total	
0-14	13,664	13,261	26,925	24.6
15-49	28,994	27,879	56,873	52.1
49-64	8,048	7,352	15,400	14.1
65+	4,845	5,146	9,991	9.2
Total	**56,419**	**53,572**	**109,991**	**100.0**

Source: 2012 Population and Housing Census Preliminary Report

Between 2001 and 2012, the number of households in St Vincent and the Grenadines increased by 20.5 percent. At the same time, the average household size declined from 3.5 to 3.0 persons per household. Table 4 provides a comparison of the total number of households and average household size, 1970-2012.

Table 4: Households and Average Household Size, 1970-2012

Census Year	Total Number of Households	Percentage Increase	Average Size
1980	20,290	19.8	4.8
1991	27,002	33.1	3.9
2001	30,558	13.2	3.5
2012	36,829	20.5	3.0

Source: 2012 Population and Housing Census Preliminary Report

Table 5: Human Development Index, St. Vincent and the Grenadines, 2010-2013

Year	Life Expectancy at Birth	Expected Years of Schooling	Mean Years of Schooling	GNI per capita (2011 PPP$)*	HDI
2010	72.2	13.3	8.6	10,253	0.717
2011	72.3	13.3	8.6	9,786	0.715
2012	72.4	13.3	8.6	10,132	0.717
2013	72.5	13.3	8.6	10,339	0.719

* Gross National Income (GNI) per capita using purchasing power parity (PPP) rates.

Source: UNDP Human Development Report, 2014

Economic Status

The UNDP Human Development Report, 2014 places St. Vincent and the Grenadines in the high human development category with an index value of 0.719. Indeed, between 2010 and 2013, the human development index for St. Vincent and the Grenadines increased from 0.717 to 0.719 representing an average annual increase of 0.09 percent. This rating is based on assessment of the three basic dimensions of human development - a long and healthy life, access to knowledge, and a decent standard of living. Table 2.3 provides data on these three dimensions of human development.

Despite the upward trajectory of the human development index, St. Vincent and the Grenadines has experienced negative or low economic growth rates since the advent of the global economic downturn in September 2008. Economic forecasts indicate that the current fiscal challenges will persist for another 2-3 years, at least.

The 2007/2008 St. Vincent and the Grenadines Country Poverty Report revealed that 30.2 percent of the population was poor and could not meet the minimum annual expenditure required to satisfy their basic food and non-food needs. Although this index represented a significant improvement over the 37.5 percent reported in 1996, it remains a major risk factor for human and social development.

2.1.5 Socio-Economic Factors

Brief Overview of economic background of SVG

Economic growth appears to have been driven primarily by the service sectors led by Transport, Storage and Communications, which grew from $152.65 million in 2002 to $215.45 in 2012; Wholesale & Retail Trade, which grew from $167.14 million in 2002 to $229.13 million in 2012; and Construction, which grew from $96.15 million in 2002 to $117.55 million in 2012. Real Estate, Renting and Business Activities also made a significant contribution to GDP growing from $205.89 million in 2002 to $233.34 million in 2012. The traditional Agriculture, Livestock and Forestry sector contracted slightly over that decade declining from $84.94 million to $82.69 million, while the Fishing sector also declined from $4.92million to $4.67 million over the same period.

Agriculture and other Sectors

Agriculture is identified as among the lead productive sectors in the Vincentian economy, both in terms of primary production and agro-processing/value-adding. Its development will be based on a combination of private, cooperative and state as the hub of economic activity within a policy framework based on the World Bank's definition of "good investment climate" that is, "the set of location – specific factors shaping the opportunities and incentives for firms to invest productively, create jobs and expand". The areas for programmed investment in agriculture are predetermined by the policy strategy outlined in the Medium Term Economic Strategy where the government is committed to diversifying the economy, including the agriculture industry around bananas, through strategic intervention and institutional cooperation. This approach is intended to actively create an enabling environment to drive entrepreneurship among farmers, fisher-folk and other stakeholder groups to significantly increase agri-food production, processing, and marketing. The outcome is to generate formal employment, rural income, and improve food security and foreign exchange earnings.

In 2009, agriculture contributed 10% of the Gross Domestic Product and 26% of the labour force. Banana is still the main crop although its importance has declined significantly, and there has been an increase in the cultivation of root crops such as cassava, eddoe, dasheen yam and sweet potato. The Government has been implementing a series of structural reforms to promote greater investment in the agricultural sector through restructuring of the banana industry and agricultural diversification, with a series of fiscal incentives and farm support services. Other key agricultural products are: coconuts, arrowroot starch, spices, as well as small numbers of cattle, sheep, pigs and goats. Fish, plantains, pineapples, and peppers are also growing in importance. For the medium term it is expected that overall, the agricultural sector will show an increased contribution to GDP and foreign exchange earnings; however, the sector remains vulnerable to adverse weather conditions and suffered some losses as a result of Hurricane Tomas in 2010.

Agriculture is also important to the continued development of rural areas, where approximately 42% of the population resides, with roughly 10% or 12,000 persons active in some form of agricultural activity.

Agricultural production is also significant in ensuring a reasonable level of the food security in St. Vincent and the Grenadines. A wide range of vegetables and fruits are emerging as important export commodities, albeit with seasonal, climate-related variability. Since 2004, the sub-sector, along with root crops (dasheen, eddoes, and sweet potatoes) experienced greater share in the regional market. However, the difficulties experienced in agriculture, mainly the erosion of preferences and the consequent declines in banana exports, has resulted in St. Vincent and the Grenadines being classified as a net importer of food, valued at US$37.8 million in 2003.

The Ministry of Agriculture, Forestry and Fisheries Strategic Plan for Agricultural Diversification and Development 1997-2006 is currently being revised to chart the development of agriculture and agri-business over the long term. The revised document will focus on reducing risk in new investment activities. The new agriculture will be developed on a policy platform of agriculture diversification around bananas. The policy points towards the modernization and enhanced competitiveness of the agricultural sector to achieve the following policy objectives:

- Export development based on selected commodities including fisheries and other bio-products to generate foreign exchange earnings.
- Food and Nutrition security through the production of selected commodities including fish and livestock production.
- Import substitution which involves the production of special commodities and products for import replacement, saving foreign exchange, increasing linkages with the tourism sector, creating employment and the development of export base agro-industries.

The development challenges to the food, agriculture and natural resources system in St. Vincent and the Grenadines are no different from other CARICOM states. There are clear synergies and a dovetailing of the agricultural diversification and poverty reduction strategies with the broad objectives, priorities and strategies for agricultural modernization and transformation, food and nutrition security and reversing the trend in food imports of regional, hemispheric and international initiatives. Indeed, opportunities exist for St. Vincent and the Grenadines to benefit from the OECS Agricultural Policy Framework and Strategic Plan, and consequently, the sub-regions commitment under CARICOM's Interventions to Alleviate the Key Binding Constraints to the Agricultural Sector (Jagdeo Initiative), the Caribbean Fisheries Regional Mechanism (CRFM), the UN FAO-led National Medium Term Investment Profiles (NMTIP), the Summit of the Americas Agriculture Agenda 2015 and the UN Millennium Development Goals (MDGs), especially Goals 1, 3, 7 and Goals 8.

There is also a growing service sector which includes tourism, telemarketing and offshore financial services. Infrastructure projects, including the construction of a new airport to be ready in 2011, also contributed to the economy.

Other Industrial Sectors

Other than agriculture, other industrial activities revolve around manufacturing (food processing, cement, furniture, clothing, starch), construction, mining and quarrying, transportation and utilities. While there is not a chemical manufacturing industry in SVG, those industries identified along with other economic sectors use imported chemicals.

2.1.6 Education

St. Vincent and the Grenadines pursues a vigorous policy of universal access to education for all children of school age. In this context, the Government continues to make significant investment in the areas of early childhood, primary, secondary, and post-secondary education within the framework of its "Education Revolution". Major emphasis is also being placed on tertiary, technical, nursing, teacher, and adult and continuing education.

Adult literacy in St. Vincent and the Grenadines is estimated at 84 percent, with younger generations having higher literacy rates than their parents. Household heads are also becoming more educated with 8.6 percent having received training at secondary and university levels in 2007, compared to 3.2 percent of heads in 1995.

2.1.7 Environmental Overview

As a SID, Saint Vincent and the Grenadines has recognized the need to manage its environment in a sustainable manner. Many of the country's income earning activities depend on natural resources and as such, it is imperative for Saint Vincent and the Grenadines to take steps to address and mitigate negative impacts on the environment.

Saint Vincent and the Grenadines is faced with numerous environmental issues summarized as follows:

- soil degradation and coastal erosion
- Loss of biodiversity
- Inadequacy in waste management relative to certain category of waste (pneumatic tires, WEEE)
- improper chemical management practice
- Adverse impacts of climate change

Several strategies for environmental sustainability were outline in the St. Vincent and the Grenadines National Economic and Social Development Plan 2013-2025:

- minimise where possible, the discharge of pollutants in soils, water, air and the natural environment.

- Adopt and implement appropriate measures to adequately manage solid and liquid waste, including hazardous waste, and atmospheric pollutants.

- Develop a sustainable waste management system.

- Manage terrestrial, marine and atmospheric, resources, organisms and eco-systems in a sustainable manner.

- Encourage the adherence to St. Vincent and the Grenadines' commitment under Multilateral, Environmental Agreements (MEAs).

- Develop fiscal and other policy incentives to encourage environmentally sustainable imports and the use of local products with degradable contents

2.2 Institutional, Policy and regulatory Framework

Section 2.2 describes the current institutional, policy and regulatory framework for environmental management in Saint Vincent and the Grenadines and highlights barriers to an effective framework as analyzed by the assessment of infrastructure for chemicals management in Saint Vincent and the Grenadines.

2.2.1 General Legislative Framework

The MOHWE has the overall mandate for environmental management in SVG. However there are no specific laws to address chemicals management. The relevant legislative requirements are dispersed under numerous sectoral laws which can aide in the implementation of the NIP in St. Vincent and the Grenadines. Table 6 presents the agencies with responsibility for key environmental issues.

Table 6: Agencies Responsible for Key Environmental Issues.

Environmental Issue	Agencies Responsible
Water	CWSA, MARFFI, PRBA,
Air Pollution	MoL, MOHWE, MoNS
Climate	MOHWE, MARFFI
Land	MARTFFI, MOHIS
Waste management	SWMU, MOHWE
Coastal and Marine	MOHWE, MoNS, MoFP, MARFFI.PRBA
Energy	MoFP, MOHWE, VINLEC

However this fragmentation can create difficulties for regulating parties to understand, and comply with the various legal requirements and can lead to duplication of efforts and inefficient use of resources on the part of government. Lack of clear definition of terminology and/or different interpretation of legal terminology can also be a problem, leading to inconsistencies in how the various ministries interpret, implement, and enforce the laws.

There are also substantial gaps in the legal framework, where certain categories of chemicals are not adequately addressed. For example, the protection of workers in the agricultural sector through occupational health and safety legislation is one area which is not adequately addressed within the legislative framework of Saint Vincent and the Grenadines. In particular, there is a serious need for legislation relating to the reduction of risks resulting from handling and use of hazardous chemicals, both by professional users (in industry and/or agriculture) and consumers. Additionally, Saint Vincent and the Grenadines does not have legal provisions concerning treatment and disposal of obsolete chemicals and pesticides, and chemical wastes.

Chemical legislation can in many ways be considered an essential tool for government action in order to safeguard the population and the environment from risks posed by chemicals. Legislation enables a government body to take, within the legislative limits, certain actions, e.g. to prevent and/or control risks posed by dangerous chemicals and enforce its chemical regime. Legislation also provides a predictable normative framework within which government, producers, traders, and users of chemicals can operate. This is evidenced by the fact that industry is often favourable to appropriate, scientifically sound regulation, particularly when it serves to level the playing field and when it increases the predictability of the context in which companies operate.

Saint Vincent and the Grenadines has legal and institutional frameworks which have implications for sustainable chemicals management. However it does not have an integrated approach to sustainable chemical management. This is exacerbated by shortages of resource allocation for enforcement, monitoring, and training. Effective legislation for sustainable chemical management will require the monitoring as well as the establishment of proper management and disposal systems. Public knowledge and information about chemicals and their impacts, underlies the choices of consumers and, should be promoted. Consumer and shareholder values, interests and concerns can be an important shaper of chemicals management. The NIP will serve as a catalyst to propel improvements in the legal and regulatory framework for chemical management that will allow Saint Vincent and the Grenadines to achieve its goals and obligations under the SC.

Additionally, St Vincent and the Grenadines in response to meeting its obligation under the St George's Declaration (SGD) on Principles of Environmental Sustainability has adopted the National Environmental Management Strategy (NEMS) and the National Economic and Social Development Plan 2013-2025 which create a platform policy framework for meeting its obligations under the MEAs.

Environmental Data

The availability of Environmental data is critical to analyzing and taking appropriate measures to address environmental issues such as chemicals management. Saint and the Grenadines have reduced capabilities to generate relevant environmental data which is important for advance planning and mitigation on a number of environmental and chemical issues.

In an effort to address this, Saint Vincent and the Grenadines hosted a number of stakeholders consultations between 2011-2013, as part of the SAICM project that brought together key agencies with the aim of finding an amicable way of capturing, collating and disseminating data. The SVGHIS was seen as a medium to achieve this aim.

2.2.2 Roles and Responsibilities of Agencies involved in POPs Life Cycle

The MOHWE has collaborated with a number of key agencies and stakeholders to implement POPs and Chemicals management in SVG.

The formation of the National Steering Committee which represented the concerns of public sector, private sector, NGOs, academia and regional agencies that was establish to guide the SAICM project process and the development of the NIP. This committee was established to serve as a mechanism for a multi-sectoral approach to tackle chemicals management in SVG.

The Representatives of the National Steering Committee includes:

- Ministry of Health Wellness and the Environment(MOHWE)
- Ministry of Agriculture Rural Transformation Forestry Fisheries and Industry(MARTFFI)
- Customs and Excise Department
- Pesticides Control Board(PCB)
- Saint Vincent and the Grenadines Solid Waste Management Authority (SWMA)
- Ministry of Labour (MoL)
- Saint Vincent and the Grenadines Port Authority (SVGPA)
- National Emergency Management Organisation (NEMO)
- Saint Vincent and the Grenadines Bureau of Standards (SVGBS)

- Ministry of Education
- Maritime Office
- Ministry of National Security
- Private Sector/ NGO representatives

The role and responsibilities of agencies involved in POPs and Chemical Life cycle are listed in Table 7.

Table 7: Roles and Responsibilities of Agencies in POPs and Chemical Life cycle

POPs Life Aspects	**Responsible Agencies**	**Responsibilities**
Importation	PCB	Registration of pesticides and publising of approved list of products
	MARTFFI	Provide guidance on intended use of pesticides to be imported
	Ministry of Trade	Issuance of import Licence
	Customs	Monitor imports and prevent illegal trade (GHS, UN codes, import data)
	Port Authority	Analysis of manifest
Storage	Port Authority	Secure imported chemicals until delivery, also stores detained chemicals
	Distributors	Stores chemicals until sold
	Users	Store chemicals until used and empty containers until disposal
Transportation	Importers, distributors, users	Transportation of chemicals to points of storage, sale and usage
Distribution and Marketing	Importers and distributors	Import chemicals for self use or for sale

Use/Handling	Users MARTFFI	Handle, mix and apply chemicals Provide training and guidance on chemical use and safety
Disposal	Users/Distributors SWMU Private sector	Dispose chemical containers Collection and disposal of waste at landfill Export waste such as lead acid batteries

There are other regional and international Institutions and agencies that contribute to the management of chemicals in St. Vincent and the Grenadines. These include but not limited to the following:

- **Organization of Eastern Caribbbean States (OECS), Environment and Sustainable Development Unit (ESDU)**

The OECS ESDU is involved in the provision of support services based on policy directions set by the OECS Ministers of the Environment Policy Committee (EPC).

- **Pan-American Health Organization (PAHO)**

PAHO seeks to improve health and living standards of the people of the Americas. The Caribbean Program Coordination Centre (CPCC) is located in Barbados and serves a number of countries including St.Vincent and the Grenadines. PAHO's mandate includes chemical safety.

- **Caribbean Public Health Agency (CARPHA)**

CARPHA is a regional agency of CARICOM that provides technical and advisory services to its member states in all areas related to public and environmental health.

- **The Inter-American Institute for Cooperation on Agriculture (IICA)**

IICA seeks to encourage and support efforts of member states to foster agricultural development and rural well-being in their territories. Areas of focus include Trade and Agribusiness Development, Technology and Innovation, Agricultural Health and Food Safety, Sustainable Rural Development, Information and Communication, Education and Training.

- **National Emergency Management Organization (NEMO)**

Their mandate includes the efficient functioning of preparedness, prevention, mitigation and response actions. NEMO acts as the coordinating arm of government in disaster management through the activation of the Emergency Operating Centre (EOC).

- **Basel Convention Regional Centre (BCRC-Caribbean)**

The BCRC-Caribbean is based in Trinidad and Tobago. It provides training and technology transfers for the Caribbean Region. St. Vincent and the Grenadines have benefited from a number of workshops hosted by the centre on various chemical issues related to the Basel, Stockholm and Rotterdam conventions. The centre is currently reviewing the chemical profile for St. Vincent and the Grenadines.

2.2.3 Relevant International Commitments and Obligations

Owing to Saint Vincent and the Grenadines' commitment to preserving life on Earth as we know it, Saint Vincent and the Grenadines is Party to a number of multilateral environmental agreements (MEAs) and regional agreements. Much of the progress that Saint Vincent and the Grenadines has made in managing its environment has been the result of technical and financial assistance received as a Party to these agreements. Table 8 presents these agreements relevant in the context of POPs and chemicals.

Table 8. Relevant Regional and International Agreements

Agreement	Notes
Organization of Eastern Caribbean States	Supports environmental management from a regional (OECS) level through the EPC
St. George's Declaration on Principles of Environmental Sustainability	Sets out principles for environmental sustainability for the OECS countries
Basel Convention	Address the Transboundary movement of toxic and hazardous waste
Rotterdam PIC Convention	Prior informed consent regarding shipment of toxic and hazardous waste
Montreal Protocol	Seeks to phase out the consumption of ozone depleting substances
Cartagena Convention	Protects Caribbean waters from pollution

2.2.4 Principles of Existing Legislation and Regulations Addressing Chemicals and POPs

This section highlights the legislations and regulations that address POPs directly or indirectly as shown in Table 9.

Table 9: Legislation that Address POPs and Chemicals in Saint Vincent and the Grenadines

Legislation	**Relationship to POPs**
Pesticides Control Act No.23 of. 1973.	Provide a comprehensive framework for the regulation of pesticides for the purpose of more adequately protecting human and animal health and safety, plant and the environment.
Solid Waste Management Act No 31 of 2000.	Provides for coordinated and integrated systems for the collection, treatment, recycling and disposal of solid waste, including hazardous waste which may contain POPs.
Occupational Safety and Health (Draft)Act of 2001	Sets new standards for occupational safety and health. It addresses handling, storage, use, disposal and transportation of dangerous substances.
Public Health Act No. 9 of 1977	Promotion and protection of human and environmental health.
Fishers Act No. of 1986	Protects and preserves marine reserves from chemicals.
Convention on Oil Pollution Damage Act No.6 of 2002	Makes provision with respect to civil liability for oil pollution by merchant ships and for connected purposes.
Litter Act No.15 of 1991	Protects against the indiscriminate disposal of chemical waste.
Forestry Act of 1945(rev.1992)	Protect water catchment areas.
Water Act of	Provides for declaration of a water emergency in cases of chemical spills into water ways
Standards Act No.28 of 2001	Labeling of all chemicals and POPs, and promotes public and industrial welfare and health and safety
Disaster Preparedness Act 2006	Speaks to locations of chemicals and POPs containing equipment and managing the potential disasters associated with POPs
Customs and Excise Act	Administration and border control responsibilities relating to chemicals management in international trade

Environmental Health Service Act No.14 of2001	Regulate and monitor the discharge of pollutants into the environment
Physical Planning Act No	Requires an environmental impact assessment for developments that pose threats to the environment
Petroleum Act No. 3 of1998	Controls the importation of petroleum products
Air and Seaports Authority Act No.	Establishes regulations for port safety and empowers the Authority to destroy or dispose of dangerous, offensive or leaking cargo at the expense of the owner

2.2.5 Procedures and Initiatives for the Management of POPs and other Chemicals

Importation

The PCB sets the overall procedures for importing pesticides and chemicals into St. Vincent and the Grenadines. Products are included in a list of chemicals that require a license to import. This list is compiled by the PCB and is reviewed periodically. Presently, these procedures do not extend to POPs chemicals, as they are not on the list of chemicals that require a license for importation. The process for the registration and importing of pesticides into Saint Vincent and the Grenadines is described below.

Step1

The importer applies to the PCB with;

- MSDS sheet
- Specimen label for use on product
- Other supporting documentation

Step2

Application review process

- Verification of the information provided
- Registration approved or denied

Step 3

Notification process

- Product is placed on the approved list
- Updated list forwarded to relevant stakeholders

Step 4

Importation and inspection

Use

The MARTFFI set out procedures for the safe use of chemicals and pesticides. This is ensure through ongoing training and certification programmmes with farmers, industry and other stake holders .

Enforcement and Monitoring

In Saint Vincent and the Grenadines the required technical and financial resources are not readily available to allow for efficient and effective enforcement and monitoring necessary for POPs chemical management, however limited enforcement of the established codes and guidelines are undertaken by the PCB.

2.3 Assessment of the POPs Issue in Saint Vincent and the Grenadines

2.3.1 Assessment of POPs Pesticides(Annex A ,Part I Chemicals)

History

The chemicals categorized under Annex A Part I of the SC are aldrin, chlordane, dieldrin, endrin, heptachlor, hexachlorobenzene (HCB), mirex, toxaphene and polychlorinated biphenyls (PCBs). Saint Vincent and the Grenadines is not a producer or exporter of POPs pesticides but has been importing pesticides and chemicals for use primarily in the agricultural and manufacturing sector and in industrial processes.

The categories of pesticides used in Saint Vincent and the Grenadines are insecticides, fungicides, herbicides molluscicides and nematicides .Table 10 lists the most commonly used pesticides in the agricultural sector in Saint Vincent and the Grenadines.

Table 10: Most Commonly Used Pesticides in the Agricultural and in Saint Vincent and the Grenadines.

Pesticide	**Active Ingredient**	**Class**
Gramoxone	Paraquat	Herbicide
Roundup	Glyphosphate	Herbicide
Touchdown	Glyphosphate trimesium	Herbicide
Vydate	Oxamyl	Insecticide/Nematicde
Bandit	Azoxystrobin	Fungicides
Volley	Fenpropimorph	Fungicides
Tilt	Propiconazole	Fungicides
Fungalor	Imazilil	Fungicide
Siganex	Pyrimethanil	Fungicide
Impulse	Spiroxamine	Fungicide

Source ,MARTFFI

The health and environmental effects associated with the various groups of pesticides are well documented.

Chemicals

A survey on obsolete pesticide conducted by MARTFFI showed that there is no known stock of POPs pesticides in Saint Vincent and the Grenadines.

In addition to pesticides, Saint Vincent and the Grenadines also imports and uses a wide range of chemicals such as fertilizers, petroleum and related products, lubricating oils, greases and waxes and industrial chemicals.

Control

St. Vincent and the Grenadines is partnering with the Food and Agriculture Organisation (FAO), in a proposed Global Environment Facility (GEF) funded project, "Disposal of Obsolete Pesticides including POPs, Promotion of Alternatives and Strengthening of Pesticide Management in the Caribbean" to eliminate obsolete pesticides which were identified.

Regulatory and Policy Framework

The regulatory and policy framework for the management of POPs pesticides discussed in Section 2.2 does not contain the legal and administrative mechanisms to completely eliminate the use and importation of POPs pesticides, as required by the SC for Annex A, Part I chemicals. Notwithstanding this limitation a number of pesticides and toxic chemicals have been prohibited from importation into Saint Vincent and the Grenadines (Table 11). The action plan and strategies in the NIP identifies actions required to strengthen this framework in order to allow Saint Vincent and the Grenadines to achieve its obligations under the SC.

Table 11: Prohibited Pesticides and Toxic Chemicals in Saint Vincent and the Grenadines (2001)

Aldicarb (Temik)	Azinphos-ethyl (Gusathion A) Azinphos-methyl
(Gusathion M. Guthion)	Demeton (Systox)
Dicrotophos (Bidrin)	Dimefox (Pestox XIV)
DNPC	EPNB
Fensulfothion (Dasanit, Terracur P)	(Dyfonate)
Gophacide	HCH Lindane
Parathion	Parathion-methyl
Pentachloraphenal	ACP Phorate (Thimet)
Zectran DDT	Sulfotep
Thionazin (Nemofos, Zinophos)	TEPP

Source:MARTFFI

2.3.2 Assessment for PCBs (Annex A, Part II Chemicals)

History

Annex A Part II Chemicals under the SC speaks to the use of polychlorinated biphenyls or PCBs in equipment such as transformers, capacitors and other receptacles containing liquid stocks. Saint Vincent and the Grenadines is not a producer or an exporter of such PCBs containing equipment but is an importer of PCBs and equipment containing PCBs. In 2011 8.8 metric tons of PCB containing equipment was imported into St Vincent and the Grenadines. (SAICM 2013). The industries in Saint Vincent and the Grenadines that currently depend on PCB containing equipment are the telecommunications and power generation industry.

Control

Although there are innovative treatment technologies that can be used for the disposal of PCBs. Saint Vincent and the Grenadines lack the capabilities and capacities to implement these Best Environmental Practices (BEP) and Best Available Techniques (BAT). The primary control strategy for PCBs and PCB containing equipment would be to eliminate the imports through a face out programme, while adopting alternative technologies suitable to Saint Vincent and the Grenadines.

Existing Policy and Regulatory Framework

There is no policy or regulatory framework to address the elimination of PCBs in equipment. The NIP identifies actions necessary to ensure legislative support to eliminate the use of PCBs and PCB containing equipment in Saint Vincent and the Grenadines.

2.3.3 Assessment with respect to DDT (Annex B, Part II Chemicals)

History

The importation and use of DDT into Saint Vincent and the Grenadines has been banned since the 1980's. Although there is no planned future use or importation of DDT into Saint Vincent and the Grenadines, the Government of St Vincent and the Grenadines reserves the right to seek exemptions(for vector control purposes), within the deadline date as stipulated by the convention .

Existing Policy and Regulatory Framework

The ban on DDT is controlled by the Pesticides Control Act No. 23 of 1973.

2.3.4 Assessment of Releases from Unintentional Production of Annex C Chemical (Dioxins/Furans, HCB and PCBs)

History

The chemicals categorized by Annex C Chemicals of the SC are:

. polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF) — Dioxins and Furans

. hexachlorobenzene (HCB). and polychlorinated biphenyls (PCB)

Dioxins and furans are products of combustion. Saint Vincent and the Grenadines has a long history of burning for agricultural, energy, and solid waste management purposes. In the agricultural sector, burning is practiced for land clearing. Charcoal production still remains a source of energy and combustion still occurs on a small scale as a means of waste disposal.

The main sources of dioxins and furans in Saint Vincent and the Grenadines are from stationary sources including activities from industry and manufacturing (thermal wire reclamation, asphalt production) and energy production (power plants, wood and biomass combustion). Other sources include automobiles, commercial and household heating and cooking, uncontrolled combustion, production and use of

chemical and consumer goods. Table 12. present the likely sources of PCBs in St Vincent and the Grenadines.

Table 12: Articles, Material and Equipment Containing PCBs

Adhesives	Asphalt Roofing Material
Carbonless Copy Paper	Compressor Oil
Wax Extenders	Dielectric Fluid (Primary Source)
Dyes	Electromagnets
Fluorescent Light Ballasts	Heat Transfer Fluid
Inks	Insulating Coatings
Lubricants	Gas Pipelines
Paints	Pesticides
Plasticizers	Rubberizes
Space heaters	Tar paper

Source: Saint Vincent and the Grenadines, National Inventory, 2013.

Control

The strategy to reduce unintentional releases of PCDD/PCDF, HCB and PCBs is by introducing legislative measures to control emissions from vehicles, machineries and open burning practices.

Existing Policy and Regulatory Framework

There is no policy or regulatory framework to address the unintentional production of

Annex C Chemicals.

2.3.5 Assessment of Stockpiles, Contaminated Sites and Wastes

State of Stockpiles, Contaminated Sites and Wastes

There has been no formal assessment of stockpiles or contaminated sites and waste in Saint Vincent and the Grenadines. Prior to 2003 all waste was disposed at the Arnos Vale dump site.

Control

The Arnos Vale dumpsite was subsequently closed, sealed with clay and fenced to prevent human contact with contaminated soil and wastes.

Existing Policy and Regulatory Framework

There is no policy or regulatory framework to address the management of stockpiles, contaminated sites and waste. The NIP identifies actions that must be taken to adequately manage stockpiles, contaminated sites and waste.

2.3.6 Summary of Future Use and Releases of POPs – Requirements for Exemptions

Saint Vincent and the Grenadines has no planned future use or production of POPs, with the exception of DDT, for which Saint Vincent and the Grenadines reserves the right to seek exemptions for vector control purposes.

2.3.7 Monitoring Releases, Environmental and Human Health Impacts

Saint Vincent and the Grenadines has no existing programmes or capacity for monitoring releases and environmental and human health impacts.

2.3.8 Current Level of Information, Awareness and Education amongst Target Groups

General Public, Farmers and Industry

The current public awareness and educational programmes focus mainly on issues related to the use and application of pesticides .Limited information have been disseminated to the general public, farmers and industry on POPs related issues.

2.3.9 Relevant Activities of Non-Governmental Stakeholders

NGOs in Saint Vincent and the Grenadines have not traditionally participated in the management of POPs and chemicals. However they have been pioneers in adopting best practices and industry standards which ultimately impact POPs and chemicals management positively. The NIP seeks to solicit greater involvement of NGOs in POPs and chemicals management.

2.3.10 Technical Infrastructure for POPs Assessment, Measurement, Analysis, Management, Research and Development

The overall technical infrastructure in Saint Vincent and the Grenadines, for POPs assessment, measurement, analysis, management, research and development need to be strengthening. Several initiatives have been undertaken to build technical infrastructure. These include; short term training in contaminated site management, expansion of physical infrastructure for laboratory and inventory for chemical profiling. The NIP will propose steps that can be taken to improve the infrastructure for POPs assessment and analysis, and research and development.

2.3.11 Impacted Populations or Environments

The negative impact of POPs and other chemical on human health and environment has been well researched internationally. However in Saint Vincent and the Grenadines the capacity for conducting such assessment is lacking, hence there is no documented evidence to show adverse impact of POPs and other chemicals on human health and the environment. While no official studies have been conducted, farmers, pesticides operators and industry workers remain the most vulnerable.

2.3.12 Assessment and Listing of New Chemicals

The registration of pesticides and chemicals into Saint Vincent and the Grenadines is regulated by the Pesticides Control Act No. 23 of 1973. The PCB assesses chemicals proposed for importation and is guided by decisions of the relevant conventions.

In addition to the twelve (12) POPs listed above, at the fourth meeting in 2009, the Conference of Parties decided to amend Annexes A, B, and C of the Convention by adding the following nine (9) new POPs as listed in Table 13.

Table 13.The new POPs under the Stockholm Convention

Chemical	Annex	Specific exemptions / Acceptable purposes
Alpha hexachlorocyclohexane	A	Production: None Use: None
Beta hexachlorocyclohexane	A	Production: None Use: None
Chlordecone	A	Production: None Use: None
Hexabromobiphenyl	A	Production: None Use: None
Hexabromodiphenyl ether and heptabromodiphenyl ether (commercial octabromodiphenyl ether)	A	Production: None Use: Articles in accordance with the provisions of Part IV of Annex A
Lindane	A	Production: None Use: Human health pharmaceutical for control of head lice and scabies as second line treatment
Pentachlorobenzene	A and C	Production: None Use: None
Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride	B	Production: For the use below Use: Acceptable purposes and specific exemptions in accordance with Part III of Annex B
Technical endosulfan and its related isomers	A	Production: As allowed for the parties listed in the Register of specific exemptions Use: Crop-pest complexes as listed in accordance with the provisions of part VI of Annex A
Tetrabromodiphenyl ether and pentabromodiphenyl ether (commercial pentabromodiphenyl ether)	A	Production: None Use: Articles in accordance with the provisions of Part IV of Annex A
Key: Pesticide	**Industrial chemical**	**Unintentionally produced**

Source: ***Available at-http://chm.pops.int/"The new POPs under the Stockholm Convention"***

3.0 STRATEGY AND ACTION PLAN ELEMENTS OF THE NIP

3.1 Policy Statement

St Vincent and the Grenadines by becoming Party to the SC on POPs is evidence of the country's commitment to eliminate the use of POPs and hazardous chemicals in its territory. The objective of the NIP is to implement institutional, policy and legislative activities that will ensure the protection of human health and environment from negative effects of POPs and chemicals through the development and implementation of a POPs and chemicals management plan that meets the needs of Saint Vincent and the Grenadines as the SC evolves.

The NIP is integrated into the work programme of the MOHWE, and as such is integrated into government's National Economic and Social Development Plan. The guiding principles of this plan have been discussed in subsection 2.1.7.

In effort to ensure that national priority issues are effectively addressed in the implementation of the NIP, stakeholders involve will be paramount.

3.2 Implementation Strategy

The NIP will be implemented in the context of the NESDP and NEMS and will be coordinated by the MOHWE. To achieve the objective of the NIP governance and operations issues must be at the forefront. In terms of governance, the ability and capacity to generate and store information is important. Also, operational corrective and preventative measures must be incorporated into everyday procedures. Some basic strategies have been identified to encourage and facilitate national participation of all sectors in the implementation of the NIP. These include:

i. Raising awareness regarding POPs and other chemicals issues among decision-makers and the public

ii. Placing POPs and chemicals-related issues high on the country's development priority list

iii. Ensuring that funds are allocated to the relevant regulatory agencies for POPs and chemical management.

iv. Ensure that the relevant regulatory agencies for POPs and chemical management are knowledgeable on sourcing available external funding.

Existing legislation will be strengthened and proposed regulations will allow for integration into existing legislative frameworks. Existing infrastructure such as laboratories will be strengthened and capacity

and capabilities will be enhanced. The NIP will allow for responses to the evolving requirements of the SC and needs of Saint Vincent and the Grenadines.

The NIP must be reviewed every five years, as guided by the Parties to the Convention, in addition to allowing for amendments that may be required to strengthen the NIP. This review will ensure compliance with the terms of the NIP activities and must be reviewed under the following conditions:

a. new measures identified by the SC

b. addition of new chemicals to the annex of the Convention

c. changes in national conditions that may affect the NIP activities

d other changes that directly affect the NIP

All amendments and reviews must be developed by the MOHWE in consultation with stakeholders. Amendments to the NIP must be reported to the SC Secretariat and any other relevant implementing agency.

3.3 Activities Strategies and Action Plan

This section outline several strategies and action plans to ensure the effective maintenance of the NIP

3.3.1 Institutional and Regulatory Strengthening Measure

Programme	Activities	Responsible Agencies	Indicators	Time frame
Develop a mechanism for an integrated approach for POPs and chemicals management	1.Revise and update the Draft National Policy on Chemicals to include POPs	MOHWE MARTFFI Legal Affairs	Integrated Planning for POPs and Chemicals Management.	Ongoing
	2.Update /develop contingency plan for disaster management	MOHWE NEMO MoNS	Plans approved and capacity built to implement	1 year 6months
	3.Update existing NEMS to include key targets of the NIP	MOHWE Central Planning Unit	The NESDP/NEMS implemented	On going
	4.Develop guidelines for coordination and collaboration among stakeholders	MOHWE MARTFFI NGOs	Guidelines developed and adopted.	1 year
Institutional Strengthening for assessment, analysis and monitoring of POPs and other chemicals	1.Strengthen national capacity for the implementation of POPs	MOHWE	Allocation of resources	9 months
	2.Review/update of laboratories to determine existing and potential capabilities and resources required	MARTFFI	Priority areas identified, capacities improved and resources allocated	1 year
	3.Create technical infrastructure for POPs assessment, measurement ,analysis within laboratories	Ministry of Finance	Laboratories equipped technical and resources and equipment for data collection, analysis and monitoring of POPs and chemical releases	2years

	4.Develop and implement an information exchange system.	MOHWE, MARTFFI,	Information system developed	1 year
	5.Create technical infrastructure for POPs assessment measure ,analysis within Laboratories.	MOHWE .Bureau of Standards. MARTFFI	Laboratories equipped technical and financial resources and equipment for data collection, analysis and monitoring of POPs and chemicals releases.	2 years
Development of a National Policy on POPs and Chemicals Management	1.Establish mechanisms for the development implementation of national policy		Implementation of the NIP	1 year
	2. Develop and implement monitoring and evaluation programmes for implementation of the policy.	MOHWE .Bureau of Standards. MARTFFI	Financial and technical resources mobilized	1 year 6months
	3. Review ,revise and update protocols for transportation,storage,handling/use and disposal of chemicals		Monitoring and evaluation programme implemented .Report generation	2 years
Development of Protocols for priority areas of chemicals management	1.Review, revise and update protocols for the importation of chemicals	Ministry of Trade MOHWE,MARTFFI	Stakeholder consultations guide development of protocols Protocols adopted	On going
	2.Review,revise and update protocols for transportation, storage, handling/use and disposal of chemicals including storage	Ministry of National Security, MOHWE,MARTFFI	Stakeholder consultation guide development of protocols Protocols for transportation, handling and containment of chemical spills developed .Adoption of approved protocols	Ongoing
	3.Develop a programme for promoting updated protocols among stakeholders.		Application of protocols by stakeholders. Programme implementation. Use of protocols to improve transportation,storage,handling and disposal(in an environmentally sound manner)of	2years

Enhance of legislative and Regulatory Framework for POPs and other chemicals management	Development and implement a monitoring programme for evaluating the use of the protocols 1.A legislative and policy review conducted	Legal Affairs Dept. MOHWE Chamber of Industry	chemicals Regulations developed to control and eliminate releases from unintentional POPs Legislation guided by national consultative process Amendments to existing Pesticide Control Act. to be named The Pesticide and Toxic chemicals Act which will cover the management of POPs.	On going
Improve stakeholder involvement in the management of POPs and Chemicals	1.Identify stakeholders with an vested interest in POPs 2.Conduct an analysis of current financing mechanisms employed in chemicals management	MOHWE Ministry of Financing Foreign Affairs.	Financial mechanism identified	Ongoing
Cost: 524,000EC$ *				

3.3.2 Production, import and export, use, stockpiles, and wastes of Annex A POPs pesticides (Annex A, Part I chemicals)

Programme	Activities	Responsible Agencies	Indicators	Time Frame
Eliminate the importation of Annex A POPs Pesticides, Part I, chemicals	1. Develop and implement strict guidelines for Annex A POPs	MARTFFI, PCB	Regulations updated to better regulate the importation of pesticides. A register of specific exemptions is maintain and submitted to the SC Secretariat.	1 year
	2. Promote GAPs within the Agricultural Sector and establish demonstration farms within communities	MARTFFI	The amount of pesticides used on farms is reduced by at least 50 %.	3 years
Suitable management of stockpiles and waste of Annex A, Part I, chemicals	1. Develop and implement national management plan for stockpile and waste of Annex A, Part I chemicals	MARTFFI PCB MOHWE	Management plan approved and operational BAT and BEP implemented for management of stockpiles and waste.	2 years
Cost:355,000EC$ *				

3.3.3 Production, import and export, use, identification, labelling, removal, storage, and disposal of PCBs and equipment containing PCBs (Annex A, Part II chemicals)

Programme	Activities	Responsible Agencies	Indicators	Time Frame
Sustainable Management of PCBs and PCB containing equipment	1. Develop an inventory of PCBs and PCB containing equipment and obsolete equipment	MOHWE SWMU	Inventory developed and published	1 year
	2. Develop a time table for phasing out PCBs and PCB containing equipment	MOHWE	Phase out plan approved and implemented	1year
	Identify and promote the use of economically feasible and environmentally sound alternatives to, and disposal options for PCBs and PCB containing equipment	MOHWE SWMU	Alternatives identified and promoted	1 year
Cost:400,000 EC$*				

3.3.4 Measures to reduce releases from unintentional production (Article 5)

Programme	Activities	Responsible Agencies	Indicators	Time Frame
Assessment of releases from unintentional production of POPs	Identify sources of unintentional releases and production of PCCD/PCDF, HCB and PCBs.	MOHWE	Sectors contributing to unintentional production are identified	1year
	Assessment of current levels of Dioxins and Furans in women.	MOHWE	Assessment published	3years
Reduction of release from unintentional production of POPs.	Eliminate releases from unintentional production of POPs	MOHWE MARTFFI	Limits of acceptable burning enforced Eliminate burning household, commercial and green waste.	1year
Cost:260,000EC$ *				

3.3.5 Identification of contaminated sites (Annex A, B, and C Chemicals)

Programme	Activities	Responsible Agencies	Indicators	Time Frame
Sustainable management of POPs and chemicals	1. Develop sustainable management plan and remediation programme for contamination	MOHWE	Data base of contaminated sites maintained Remediation of contaminated sites	2 years
	2. Establishment of a poison control centre	MOHWE NEMO	Capacity developed to adequately respond to cases of chemical exposure. The Milton Cato Memorial Hospital (MCMH) is equipped to manage human exposure to POPs and chemicals.	2 years
Cost:298,000EC$ *				

3.3.6 Facilitating or undertaking information exchange and stakeholder involvement

Programme	Activities	Responsible Agencies	Indicators	Time frame
Enhance coordinated efforts on information exchange and sharing	Development and delivery of a public awareness campaign on pesticides safety	MOHWE MARFFI	Designated quarterly slots on the Ministries communication units programming	September 2015
	Catalogue existing information on POPs and chemical in SVG	MOHWE MARTFFI	Document and disseminate information every 2-3yrs	1year 6months
	Ensure information exchange related to reduction and elimination and identify alternatives Expand information activities as part of NIP implementation	MOHWE	Publish bulletins, include information I quarterly newsletters. Compilation of list of alternatives	2 years
	Laise with the SC	MOHWE	Provide periodic reports	on going
	Establish link on the MOHWE webpage	MOHWE	Current information will be available by designating personnel to continually update relevant information	on going
Cost: 98,000EC$*				

3.3.7 Public Information, Awareness and Education (Article 10*)*

Programme	Activities	Responsible Agencies	Indicators	Time frame
Development and execute educational and public awareness programmes on POPs pesticides	Provide the public with information on banned, severely restricted, highly hazardous pesticides and POPs pesticides.	MOHWE MARFFI	booklets and brochures distributed to stakeholders	on-going
Training in chemical management and appropriate use and safety	Train fire fighters Train importers and pesticides applicators and farmers	MOHWE MARTFFI NEMO	At least one annual activity undertaken	On-going
Development implementation of awareness and training programmes regulatory agencies	Training regulatory personnel in the implementation of the Globally Harmonised System for the Classification and Labeling of Chemicals	MOHWE MOHWE	Participate in the annual training course for the Customs and Excise Department.	On-going
Cost: 315,000 EC$*				

3.3.8 Reporting (Article 15)

Programme	Activities	Responsible Agencies	Indicators	Time frame
Regular reporting on activities and measures taken to achieve compliance with the Stockholm Convention	Incorporation of POPs reporting into the MOHWE's annual reporting schedule	MOHWE	Reports completed for submission to the SC	on-going
	Submission of first report to the Conference of the Parties by December 31. 2016	MOHWE MARTFFI	First report prepared submitted	1year 6months
	Improving the MOHWE's Health Information System for the storage and retrieval of data on POPs and other chemicals.	MOHWE MOHWE Information Technology Unit	Improvement of the Health Information System	5years
Cost: 200,000EC$*				

3.4 Development and capacity-building proposals and priorities

The MOHWE is responsible for the implementation of programmes under the SC. In order for St Vincent and the Grenadines to achieve its objectives outlined in the NIP, there is need for the strengthening of the capacity within the MOHWE and other agencies to effectively implement the NIP.

The ongoing public awareness programmes on safe pesticide handling conducted by the MARTFFI and the MOHWE must now be reviewed to include POPs and other chemicals. The MOHWE must continue to work closely with the other government agencies and stakeholders in an effort to create ownership of the NIP

3.5 National Implementation Plans (Article 7)

Programme	**Activities**	**Responsible Agency**	**Indicators**	**Time frame**
To prepare the first National Implementation Plan under the SC	Actions and activities to be identified based on guidance prepared by the Stockholm Convention Secretariat	MOHWE MARTFFI National steering committee	First NIP submitted	2015
To review and update the NIP in response to amendments to the Convention or its Annexes	Actions and activities to be identified based on guidance prepared by the Stockholm Convention Secretariat	MOHWE MARTFFI National steering committee		
Cost: 38,000EC$*				

***Funding:** Government of Saint Vincent and the Grenadines (in-kind contributions) and the United Nations Environment Programme.

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