

This is the fifth of six information sheets on improving agro-chemical management in the Caribbean. This sheet considers harmonisation in the context of making better use of limited resources in the region and makes a series of recommendations that address this complex task. The institutional arrangements for the management of agro-chemicals in Jamaica and St. Lucia are examined, specifically administrative and legal systems relating to importation, manufacture, and the distribution chain. The potential for harmonisation of good practice administrative arrangements throughout the Wider Caribbean is also examined.

1. Overview

Harmonisation of agro-chemical management will bring considerable benefits in the areas of cost savings and the sharing of resources. Model pesticides legislation for the region has been developed by the Legal Unit of the Organisation of Eastern Caribbean States (OECS). If this model is adopted nationally, it will bring considerable further benefits including:

- Addressing international obligations that are currently not fully met throughout the Wider Caribbean
- Establishing common administrative procedures and a framework for good practice management and use of agro-chemicals
- Establishing common public health and environmental monitoring standards.

Furthermore, it is recommended that a regional database for recording registration and management of pesticides would be a valuable tool to support the process of harmonisation and to enable information sharing.

International recognition of the need for control of agro-chemical pollution was formalised in the Caribbean by the Cartagena Convention and its Protocol Concerning Pollution from Land-Based Sources and Activities in the Wider Caribbean, and especially Annex IV on Agricultural Non-Point Sources of Pollution. Signatories to this Protocol are obliged to place emphasis on agro-chemical administration procedures.

2. Administrative arrangements

Long-term trends indicate that total pesticide use is increasing in both St. Lucia and Jamaica (see Information Brief 3), and that agricultural pesticides form a large proportion of the pesticides in use. Concurrent with this, there is clear evidence of a long-term increase in the quantities of imports and manufacture of agro-chemicals, not only in St. Lucia and Jamaica but also in the Wider Caribbean. These findings illustrate the urgency and importance of studies to determine the fate and impact of agro-chemicals in the environment (see Information Sheet 2) and also to highlight the need for adequate legislation and administrative procedures to deal with the import and manufacture of agro-chemicals.

Administrative procedures for the import of agro-chemicals are illustrated in Figure 1 (Jamaica) and Figure 2 (St. Lucia). Pesticides are also locally manufactured in Jamaica. The administrative and legal systems for the import and manufacture of agro-chemicals in both St. Lucia and Jamaica are controlled by the Pesticide and Toxic Chemicals Control Board (PCB) and the Pesticide Control Authority (PCA) respectively. These bodies were set up under the relevant Pesticide Acts in each country. Pesticide Control Boards with complementary functions exist in other states in the OECS and the Wider Caribbean.

Administrative arrangements can be complex, and the human and financial resources available to operate the system are often inadequate. In Jamaica, there are 10 full-time staff members, but there are no full-time staff on the PCB in St. Lucia, which is more representative of the situation elsewhere. As a consequence, there is a lack of consistent enforcement in these systems.

Agro-chemicals import - Jamaica

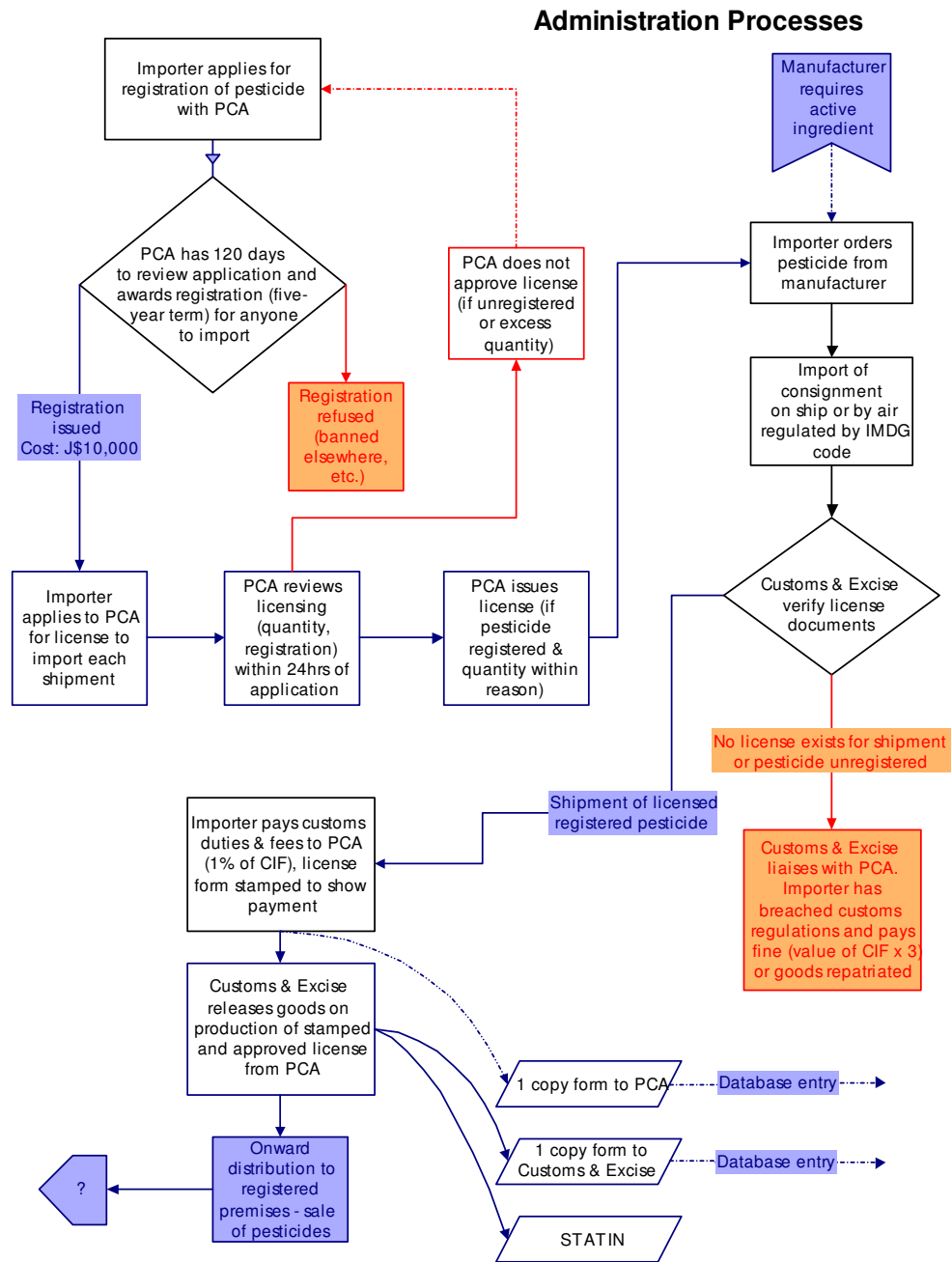


Figure 1 Agro-chemicals import—Jamaica

Note: STATIN is the Statistical Institute for Jamaica. CIF is the Cost of Insurance and Freight.

Agro-chemicals import - St. Lucia

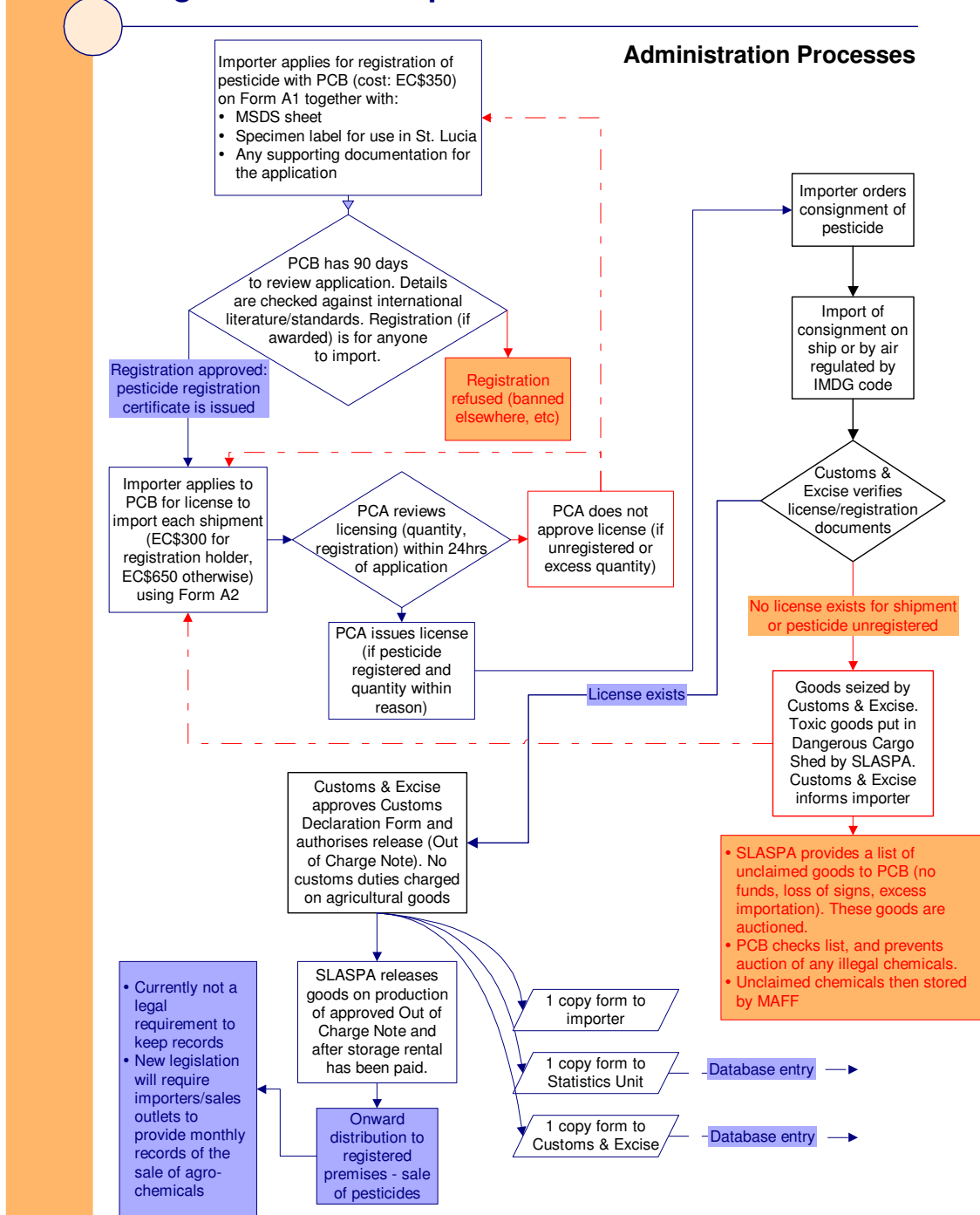


Figure 2 Agro-chemicals import—St. Lucia

Note: MSDS is the Material Safety Data Sheet. SLASPA is the St. Lucia Air and Sea Port Authority. Figure 2 is correct at the time of printing, although fees are not collected at the present time. Furthermore, St. Lucia is currently restructuring its administrative procedures according to its new Pesticides and Toxic Chemicals Control Act.

In St. Lucia, the system does not include provision for the regulation of public end-users of pesticides, but the public do come under the requirements of other legislation. This situation is thought to be common throughout the Wider Caribbean. In Jamaica, however, pesticide users are covered under the Certificate of Pest Control Operators. The PCA has a mandate to regulate the use of pesticides, and certifies pesticide applicators including both commercial and private users (farmers).

3. Harmonised legislation and administration

Given the complexity and number of tasks involved in administering pesticide control, and the lack of national resources to address all the tasks, harmonisation of administrative arrangements is seen as a means of making better use of limited resources in the region. It will bring benefits to the PCBs administering the system, to other authorities involved in agro-chemical management, and to external applicants wishing to register or import products.

Harmonised administrative procedures could include:

- Common legislation
- Common definition of the structure and function of the PCBs
- Regionally developed and accepted lists of registered and prohibited substances
- Common registration procedures, though this may vary given ecological and other variations from island to island.
- Common licensing procedures for the import and manufacture of pesticides, and the definition of the responsibilities of the importer or manufacturer for stewardship of the chemicals
- Common licensing procedures for the handling and use of agro-chemicals by pest control operators and for traders of agro-chemicals
- Common definition of standards (i.e. permissible residue limits in the environment) and a common approach to promoting alternatives to pesticides
- Shared analytical capacity through CEHI and other institutions.

There have been a number of initiatives in the Caribbean towards harmonisation. The Coordinating Group of PCBs in the Caribbean

(CGPC) (originally formed in 1987 for the OECS states but now covering the Wider Caribbean) has a wide mandate, but one of its main objectives is to harmonise registration of pesticides. The CGPC provides a valuable mechanism for information exchange and keeps interest in sound pesticide management at the forefront of the mandates of national PCBs. It has driven a number of initiatives:

- An OECS led initiative through the CGPC for draft model legislation for the OECS on pesticides and toxic chemicals (1998) was developed, and there have subsequently been requests through the OECS Secretariat's Legal Affairs Unit to include regulations dealing with the prohibition of the use of toxic substances such as chemical weapons. The draft model legislation produced by the OECS has been ratified and accepted by St. Lucia and St. Kitts & Nevis and is pending elsewhere. St. Lucia has based its new Pesticides and Toxic Chemicals Control Act (2001) on the model legislation and this can be considered as a framework for regional legislation.
- Prior Informed Consent (PIC) procedures developed through the Rotterdam Convention require exporters trading in a list of hazardous substances to obtain consent from importers before proceeding with trade. The CGPC has promoted this approach, though it has not been regionally adopted except in the case of Jamaica.
- Harmonised guidelines for pesticide registration and control in the OECS and Barbados were developed through the FAO in 1995–6, but are yet to be fully implemented.
- Guidelines for certification of commercial pesticide operators in the OECS have been developed but not yet implemented. Commercial pesticide operators have been certified in Jamaica.
- OECS countries, together with the FAO, have developed a regional pesticide database for registration, licensing, and quantification, but it is currently in use in only one member state. A complementary database (GEREFI) is in use in Jamaica and has been used effectively.
- A regional website for pesticide registration was launched in 2000 by the PCA of Jamaica, based on the GEREFI database. At the time of this report, only Jamaica has entered information.

4. Database review

A review of the two current databases used throughout the member states of the CGPC found that they were both based on dated software and have not been updated to work on current operating systems. Most PCBs still maintain handwritten records or use spreadsheets. There was also a lack of trained IT staff familiar with database use or development.

The OECS/FAO database contained most of the applications needed but was poorly designed. The GEREFI database was better designed but had fewer functions. Neither is recommended for wider promotion.

There was, however, an acknowledged need for a database in the region and it would act as a driver for harmonisation. Comparing a web-based or locally hosted system, the latter would be simpler and cheaper, but must also be able to import and export data between OECS and CARICOM countries whilst maintaining security. However, the participants at the 7th CGPC meeting favoured a web-based approach with a suitable regional host, and proposed submitting a project to FAO. Before formalising such a recommendation, national consultations were held followed by a formal recommendation at the 8th CGPC meeting to produce a project proposal to submit to FAO and other donor agencies.

5. Recommendations

- Conduct an institutional analysis and evaluation of the capacity and resource needs of PCBs and other relevant executing agencies (e.g. extension services, monitoring and research agencies, medical laboratories) throughout the Wider Caribbean. Duplication of effort should be rationalised.
- Establish dedicated full-time staff within PCBs to administer and implement national legislation relating to agro-chemicals. The composition of the Board of Directors should include representation from the private sector and persons with experience in ecological issues and the fate of agro-chemicals in the environment.
- Investigate what must be covered at a national level and what can be achieved regionally to avoid duplication of effort and cost (e.g. training; communications and promotional material; promotion of harmonised legislation).

- Investigate sustainable financing and cost recovery mechanisms and, where necessary, novel and creative means found to develop capacity and to fulfil all the functions of the various institutions involved in all aspects of agro-chemical management, including administration and funding of PCBs (e.g. via a registration and licensing system; penalty schemes). External sources of funding must be explored and fully utilised.
- Explore greater regulation of the sale of pesticides to end-users and their responsibilities for them.
- Place more emphasis on enforcement and make adequate provision for inspectors to undertake this.
- Introduce training and awareness raising for Port Authority and Customs and Excise officers regarding the register of permitted and banned substances.

Legislation

- Annex IV on Agricultural Non-Point Sources of Pollution of the LBS Protocol to the Cartagena Convention should be widely ratified and adopted throughout the Caribbean.
- Requirements under the LBS Protocol for a national plan of action (NPA) should be developed by each state throughout the Wider Caribbean, using lessons from model plans currently being developed for Jamaica and St. Lucia.
- Model plans for Jamaica and St. Lucia should incorporate requirements specified under Annex IV for pesticides and fertilisers, IPM/IMPP (as appropriate), and the recommendations of this project. All relevant stakeholders, including the PCA/PCB, should be consulted in drafting the plan.
- Legal advice is needed in the further development of legislation, its incorporation into national laws, implementation, and enforcement.
- Training and awareness raising in the requirements of the legislation is needed for the public and the staff of implementing agencies.

Harmonisation of legislation and administration

Harmonisation of administrative procedures must be vigorously pursued and promoted through the CGPC and at a national level. The CGPC should continue to take a lead in prioritising necessary future actions, based on work already initiated:

- Harmonised legislation on pesticides and toxic chemicals should be ratified and adopted throughout the Wider Caribbean.
- Systems for appropriate selection of chemicals based on their benefits, human and environmental health threats, and international agreements should be regionally established and applied. When in doubt, a precautionary principle should be applied.
- It is recommended that all countries of the CGPC adopt a Prior Informed Consent (PIC) procedure to give importing countries the tools and information needed to identify potential hazards and prevent importation of chemicals they cannot manage safely.
- Harmonised guidelines for pesticide registration should be promoted.
- Harmonised guidelines for certification of pesticide control operators should be promoted, including legislation covering their responsibilities.
- The need for common licensing arrangements, definition of standards, promotion of alternatives to pesticides, and other matters should be explored at a regional level and prioritised. Terms and conditions of licensing should be used as a mechanism to ensure compliance with requirements for packaging, labelling, storage, and distribution.

Through the CGPC, a regional pesticide database for registration, licensing, and quantification has been suggested as a good overall means of harmonising pesticide registration amongst Caribbean states, and this study endorses that view. It is recommended that the CGPC endorse a recommendation to develop a project for a locally owned and managed database, which includes:

- A detailed, inclusive user requirements analysis

- An assessment of the institutional constraints and capacity and resource needs to ensure success of the database
- An evaluation of alternative funding mechanisms
- Database development
- Capacity building to support the database nationally and, if necessary, at the regional level, and training in the use of the database.

Further information

Available as downloadable files under the Land-Water Interface option in the left-hand panel at <http://www.mragltd.com>:

- Esteban, N., P. Espeut, B. Hay, C. Mees, and S. Seddon-Brown, 2003. Importation, administration and harmonisation of agro-chemical management in St. Lucia, Jamaica and the Wider Caribbean. DFID NRSP Project R7668. C-CAM and MRAG Ltd.
- Pearce, J., and N. Esteban, 2002. Database Review and User Requirements Analysis prepared for the Coordinating Group of Pesticide Control Boards of the Caribbean. DFID NRSP Project R7668. MRAG Ltd.

Other information sheets in the series are:

1. Management of agro-chemicals for improved public and environmental health
2. The fate of agro-chemicals in the land-water interface in St. Lucia and Jamaica: Environmental monitoring
3. The quantification and toxicity of agro-chemical imports into St. Lucia and Jamaica
4. The on farm use of agro-chemicals and associated soil management and farming practices in St. Lucia and Jamaica
6. Management options for the use of agro-chemicals.

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