<table>
<thead>
<tr>
<th>DFID Project Number</th>
<th>R8364</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Authors</td>
<td>Caribbean Environmental Health Institute</td>
</tr>
<tr>
<td>Date</td>
<td>2004</td>
</tr>
<tr>
<td>NRSP Production System</td>
<td>Land Water Interface</td>
</tr>
</tbody>
</table>

---

1. This document is an output from projects funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID.
Policy Brief

AGRO-CHEMICAL MANAGEMENT FOR AGRICULTURAL AND RURAL DEVELOPMENT

CGPC
AGRO-CHEMICAL MANAGEMENT FOR AGRICULTURAL AND RURAL DEVELOPMENT

The experiences of newly industrialised countries indicate that the transformation of economies from agriculture to a service or industrial base has been stimulated by rapid growth in the agricultural sector. Hence, the region should seek to improve its agricultural sector as a way of promoting economic development.

Furthermore, the policy objectives of the Regional Transformation Programme (RTP) for Agriculture that CARICOM Heads of Government have endorsed, calls for increased competitiveness of fresh traditional and non-traditional agricultural exports; enhanced food security; reduced poverty; strengthened intersectoral linkages, increased value-added products and services, while improving nutritional status of the population. Agro-chemicals have been accepted as an integral part of agriculture production, in an effort to increase productivity and improve the appearance of produce.

In a recent study conducted through the Department of International Development (DFID) funded project and in collaboration with several regional institutions, it has been indicated that all farmers depend on agrochemicals for pest and disease control in the two case study islands of St Lucia and Jamaica.

Furthermore, farmers indicated that they would use more agro-chemicals if they had the resources, but that they were not aware of the environmental impacts of agro-chemicals on the farms or health of their neighbors.

Users of pesticides should be made aware of the effect of pesticide residue on foods consumed locally and exported. This should also be the case for residents of the communities close to farms and those affected further downstream of such cultivation.

This could be achieved by establishing consistent long term monitoring of levels of pesticide residue in the environment and on human health.

It is generally the poor, little educated, socio-economically disadvantaged who are at greatest risk. Available statistics indicate that developing countries use between 10% and 25% of the world's pesticides, they suffer up to 50% of the reported cases of acute poisoning and between 73% and 99% of the reported fatalities among pesticide applicators.

Lack of access to information on the dangers of certain pesticides contributes to their prolonged use long after they have been prohibited in developed countries. Caribbean countries must seek to participate in international conventions such as the Rotterdam Prior Informed Consent procedures where such information is shared.

Other activities contributing to the more serious impacts of agrochemicals include:
- Repackaging of chemicals by vendors with improper labeling;
- Incorrect application;
- Inadequate application equipment;
Failure to wear protective clothing; and
Improper storage

Fortunately, Caribbean communities especially those with active non-governmental organisations (NGOs) with well-traveled members are becoming increasingly aware of the importance of developing regulatory framework for agro-chemical management.

Importing countries are requiring that regulatory systems be established as a condition for future trade. Failure to adopt to these requirements will mean loss of markets and ultimately increased levels of poverty in rural communities.

It is imperative that management of agro-chemicals is brought to the attention of the farming community, consumers and policy makers.

Given the number of agencies currently involved in management of agro-chemicals, it is evident that a cohesive region-wide agro-chemical management strategy needs to be adopted to protect the environment, human health, agriculture markets and employment in rural communities. Such a strategy calls for National Plans to be developed involving Agriculture, Trade, Health, Legal Affairs, Tourism and the Environment and Consumers.

The Coordinating Group of Pesticide Control Boards of the Caribbean (CGPC), in collaboration with regional inter-governmental agencies such as the Caribbean Agriculture and Research Development Institute (CARDI) and Caribbean Environmental Health Institute (CEHI) and its international collaborators, is proposing an approach to the current situation.

The CGPC Strategy for Improved Agro-Chemical Management in the Wider Caribbean outlines the 10 key prioritised management recommendations that have been developed.

1. Harmonised procedures for agro-chemical management should be adopted throughout the Wider Caribbean:
   - Regionally acceptable (or local) standards for Maximum Residue Limits should be established
   - Locally owned and managed database should be developed for harmonised administration and information sharing including regional registration
   - Model legislation on Pesticides and Toxic Chemicals ratified and adopted.
   - Regional environmental reference sites need to be established.

2. Sustainable financing and cost recovery mechanisms must be investigated

3. Communications experts should be engaged for communication, education, and training purposes; change-management concepts should be applied.

4. Institutional analysis and evaluation of the capacity and resource needs of Pesticide Control Boards (PCBs) and other relevant executing agencies (e.g. extension services, monitoring and research agencies, medical laboratories) should be undertaken to avoid duplication of effort.
5. PCBs must be adequately staffed. 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 agrochemicals in the environment.

6. Good Agricultural Practices (GAPs) and other good practice codes of conduct for agro-chemical use need to be implemented for locally consumed and exported produce.

7. Promote the implementation and further research on Integrated Pest Management (IPM).

8. Socio-economic analyses, including cost-benefit analyses, should be conducted for different farming practices.

9. Carefully designed public health and environmental monitoring plans must be developed. Ensure adequate analytical capacity to enable monitoring for compliance.

THE WAY FORWARD

It is critically important that users of pesticides be trained in application methods to reduce the levels of pesticide residue on foods if they are to maintain markets for their produce.

Governments should support the development of such strategy to maintain present levels of survival in rural communities.

Monitoring programmes that will provide data on health effects in local populations and possible effects on tourism as a result of beach and river pollution should be developed.

Active public education systems to seek private sector and international donor support.