This project flyer is to inform regional and national agencies, institutions, NGOs and researchers about the key findings from the agro-chemical elements of the project *Impact and amelioration of sedimentation and agro-chemicals in Caribbean coastal waters*. This was a 3 year research project funded through DFID’s NRSP LWI programme.

The project commenced in June 2000 and ended in July 2003 and was managed by two organisations in the UK: the University of York, responsible for sedimentation aspects of the project; and MRAG Ltd, responsible for agro-chemical components of the project. Formal project partners included, in Jamaica: Centre for Marine Science, University of the West Indies (UWI) Mona; Caribbean Coastal Area Management Foundation; Caribbean Agricultural Research and Development Institute; Department of Chemistry, UWI Mona; Department of Life Science, UWI Mona; and in St Lucia, Caribbean Environmental Health Institute; Ministry of Agriculture, Forestry and Fisheries; Pesticides Control Board. The project also worked closely with the Pesticides Control Authority in Jamaica, and the regional Coordinating Group of Pesticides Control Boards for the Caribbean (CGPC).

The MRAG Ltd. website (http://www.mragltd.com) contains all the reports as downloadable Adobe

### Summary of key activities:

This following table sets out the activity areas for agro-chemical elements of the project.

<table>
<thead>
<tr>
<th>Project Activity Areas</th>
<th>Reports</th>
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</table>
| 1. Legislation and international obligations | Report 1: Importation, administration and harmonisation of agrochemical management in St Lucia, Jamaica and the wider Caribbean.  
Report 9: Management options for the use of agro-chemicals in the environment. |
| 2. Administration / harmonisation | Report 1: Importation, administration and harmonisation of agrochemical management in St Lucia, Jamaica and the wider Caribbean.  
Report 7: Database review and user requirements analysis prepared for the Coor- |
| 3. Agro-chemical use / Good agricultural practices | Report 2: Review of soil management and farming practices, including the use of agro-chemicals in the Caribbean, with particular reference to St Lucia and Jamaica.  
Report 9: Management options for the use of agro-chemicals in the environment. |
| 4. Environmental Fate - Monitoring and Research | Report 3: Toxicity review for agro-chemicals in St Lucia and Jamaica.  
Report 4: The fate of agro-chemicals in the land-water interface, with reference to St Lucia and the wider Caribbean.  
Report 5: The fate of agro-chemicals in the land-water interface, with reference to Jamaica and the wider Caribbean.  
Report 6: Environmental survey of agro-chemicals in the land water interface of St Lucia. |
Report 6: Environmental survey of agro-chemicals in the land water interface of St Lucia. |
Policy Brief: Management of agro-chemicals for improved public and environmental health  
5 Policy and Management Briefs |
KEY FINDINGS

There has been a long-term increase in the quantities of imports and manufacture of agro-chemicals in St Lucia and Jamaica, and the Wider Caribbean.

Agro-chemicals are known to accumulate in the environment and to have detrimental effects on the environment and human health.

There is a lack of monitoring and research into the fate of agro-chemicals in St Lucia and Jamaica and this is thought to be the situation in the Wider Caribbean.

Improper use of agro-chemicals can harm human health and the environment.

There is an urgent need to:

- Raise public awareness of the potential dangers of agro-chemicals
- Conduct further research into the chronic and acute effects of agro-chemical use on people, including occupational exposure, environmental pollution, and food contamination.
- Conduct further research on the toxic effects of agro-chemicals in the environment.

Limited human and financial resources are the major constraint to the implementation of national and regional obligations and best practice codes of conduct for agro-chemical management.

Adequate legislation is needed to control the use and application of agro-chemicals, and this is best achieved via the implementation of harmonised legislation throughout the Wider Caribbean.

Within national systems, jurisdiction for all user groups needs to be defined and duplication of effort reduced to rationalise the use of limited resources.

Harmonisation of administrative arrangements for agro-chemicals throughout the Wider Caribbean is seen as a means of making better use of limited resources in the region to address this complex task.

Model harmonised legislation, if adopted, will bring considerable benefits (cost-savings, shared resources, etc.):

- To address international obligations that are currently not fully met throughout the Wider Caribbean.
- To establish the framework for best practice management of agro-chemicals.

Good Agricultural Practices (GAP) and Integrated Pest Management (IPM) must be promoted to improve agro-chemical use and promote alternative solutions.

Training, communication, and education of farmers is vital.

Soil conservation and water management practices are essential to reduce run-off and agro-chemical application and pollution.

A regional database for recording registration and management of pesticides is a valuable tool to support the process of harmonisation and enable information sharing.

Harmonised Administrative procedures provide the best option for common monitoring procedures for imports.

There is a need to establish long-term monitoring programmes and targeted research activities including bioaccumulation.

POLICY AND MANAGEMENT STRATEGY AND IMPLEMENTATION

Recommendations and management options were identified in all project reports and summarised in the policy and management briefs. They were synthesised and reviewed by the CGPC.

10 Key recommendations were endorsed by CGPC, and a strategy to implement them was developed. Details are presented in full in the Policy and Management Document.

By working through the CGPC, the project has reached policy makers in the Wider Caribbean who have endorsed the project recommendations and strategy to implement them, and further recommended that:

- The ‘strategy’ and its recommendations are promoted to national governments, by the CGPC, for adoption and future implementation;
- A policy statement, relating to the strategy and its recommendations is presented to the CARICOM for potential support.

Integration of the recommendations into national plans and land management of target countries will take time and has not occurred during the life of the project. The project has, however, worked with CGPC members to develop a strategy for implementing the recommendations, including the development of national plans of action.

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