

## Communication strategy

### DFID NRSP project R7668 ‘Impact and amelioration of sediment and agro-chemicals in Caribbean coastal waters’

We would appreciate if you could complete with your comments and country experience ASAP and preferably by 12<sup>th</sup> July. Please return to Nicole Esteban (n.Esteban@ic.ac.uk).

**Table 1. What are the issues?**

The issues in this table form the basis for the following 3 tables and so are very important. If you add any issues, then please follow through the issue in the next tables by adding in an additional row for that issue.

Note that the right hand column (issues associated with sediment and soil loss are being researched by our project partners, University of York). Please add any issues that you have particular to your country.

In particular:

- a) Add any additional pesticide use issues
- b) Correct / delete any pesticide use issues that do not exist in your country

Pesticide Use	Sediment/soil loss
Lack of soil conservation allows pesticide contamination to be carried downstream	
Use of illegal pesticides	Soil erosion from steep slopes
Wrong use/application: Over-use of pesticides Wrong application rate/timing Wrong pesticide for disease	Flood waters remove protection systems
Use of cocktail of pesticides	
Poisoning of user/family Chronic Acute	Wrong type of soil protection
Pollution: River Coastal Environmental Non-target species	Removal of trash
Improper storage and disposal induces contamination	Farming of unsuitable soil/slopes
Repackaging by vendor removes labelling	
Improper or no protective clothing	
Inefficient or dirty application equipment	

**Table 2. Who are the stakeholders involved with the pesticide control issues?**

This table includes stakeholders directly and indirectly (e.g. giving advice) involved with different pesticide use issues, in the same order as listed in Table 1.

- a) Add any issues that you added on Table 1 in right hand columns.
- b) Add (with appropriate checks any other stakeholders that we have missed off)?
- c) Are any issues incorrectly matched with stakeholders?

Stakeholder	Issues										
	Illegal import	Wrong use	Cock-tail	Health	Poll-ution	Storage/ Disposal	Re-pack-age	Protect-ive wear	Equip-ment	?	?
<b>Import</b>											
Port Authority	✓				✓	✓		✓			
Customs& Excise	✓				✓						
PCB	✓			✓	✓	✓		✓			
Import agent	✓					✓	✓				
<b>Manufacture</b>											
Chemical co					✓	✓	✓		✓		
PCB				✓	✓		✓	✓			
<b>Distribution</b>											
Agric board		✓	✓	✓	✓	✓	✓	✓	✓		
Farm shop			✓			✓	✓	✓	✓		
Chemical depot			✓			✓	✓				
<b>Application</b>											
Pest operator		✓	✓	✓	✓	✓		✓	✓		
Farmer	✓	✓	✓	✓	✓	✓		✓	✓		
<b>Agencies/ Institutions</b>											
Health Authority	✓	✓		✓				✓			
Extension Service (agriculture, fish, forestry)	✓	✓	✓	✓	✓	✓	✓				
National NGO's	✓	✓		✓	✓	✓					
International PAHO, FAO	✓	✓	✓	✓	✓						

**Table 3. What are the management options for each issue?**

- a) This table looks at solutions, management options, target audiences and implementers for each issue listed in Table 1.
- b) List the additional issues (from Table 1) on the bottom rows
- c) Verify that solutions are correct and add any others used in your country
- d) Check that management options, target audiences and implementers are correct. Add any others.

<b>Issue</b>	<b>Solution?</b>	<b>How? Mgt option</b>	<b>Target audience</b>	<b>Implementer</b>
Illegal import	Control import	Increased awareness of C&E officers	C&E	C&E
Over use; incorrect application rate/timing; inappropriate pesticide	Knowledge of proper use of pesticides	Training for farmers, raise awareness of proper use (labelling etc), Certification of pest control operator	Farmers	Extension services, Vendor, Agricultural board, Farm shop, Chemical company
Use of cocktail mixes of pesticides	Use single or complimentary pesticides	Training for farmers, inform shops	Farmers, Shops	PCB, Chemical company
Poison cases	Ban pesticide	Change legislation	Farmers	MAFF Extension services
	Use protective gear	Make available in shops Public awareness	Farmers, Shops	Extension services
	Education	Public awareness	Farmers/ families	PCB, Schools, Ministry of Health
Pollution: river, coastal, environment, non-target species	Prevent pollutant use	Promote organic farming, biological controls, integrated pest management	Farmers/ families	PCB Extension services, NGO's, International organisations
Spillage due to incorrect storage	Store in secure place	Public awareness, training for farmers, licensing of premises	Farmers, shops, agricultural board, chemical depot, Port Authority	PCB, Extension services
Re-packaging	Import pesticides in suitable sizes, produce labels for repackaged pesticides	Consultation of chemical companies, promote suitable package sizes, discourage re-packaging at shop	Chemical companies, shops	PCB
Inappropriate protective wear	Appropriate for tropics	Research and use of least toxic materials	Governments , agencies, chemical companies	Governments
Wrong equipment	Proper equipment	Training and certification of operators	Governments , agencies, chemical companies	Governments

**Table 4. What and how can our project communicate with implementers of proposed management options?**

- a) Add any management options and “how” that you know about.
- b) We are interested in any of the types of management options that is already dealt with in your country (through posters, guidelines, communication etc as listed in column 3). Please write what exists in column 4.
- c) Let us know what else could be done to existing activities (by adding value) in column 4 and mark your comments separately from what exists already (answers to (a)).
- d) Asterisk top priority management options and methods of communication that our project can achieve (either columns 2, 3 or 4)

<b>Implementer</b>	<b>Management Option</b>	<b>How</b>	<b>What exists? Add value?</b>
C&E	Increased awareness of C&E officers	Policy brief, Pesticides Manual and Guidelines, Communication between PCB and C&E	
Extension services; Vendor; Agricultural board; Farm shop Chemical company	Training for farmers, raise awareness of proper use (labelling etc)	Guidelines for use of pesticides and control of diseases, Communication with chemical companies about improved labelling	
MAFF	Change legislation to ban pesticides	Communication between PCBs via CGPC	
Extension services	Make protective gear available in shops, Public awareness for handling of pesticides	Promote sale by vendors, Promote tax incentive for decreasing cost of protective gear, Posters or leaflets for distribution by extension services Training & certification of operators	
PCB, Schools, Ministry of Health	Public awareness about proper handling of pesticides	Posters or leaflets for distribution by PCB and schools, Public awareness by MoH	
PCB Extension services	Promote organic farming, Biological controls, IPM	Posters to promote organic food purchase, Radio programme about impact of pesticides on rivers/coast	
PCB Chemical company	Training for farmers to stop using cocktail mixes, Inform shops	Pesticides Guidelines for farmers, Simple posters for shops	
PCB Extension services	Public awareness about correct storage, Promote guidelines for storage at farms, Licensing of premises	Public awareness campaign by PCB/MAFF Produce storage poster Licensing of premises programme	
PCB	Consultation of chemical companies about packaging, Promote suitable package sizes, Discourage re-packaging at shop	Guidelines for chemical companies with opinions of farmers, Posters for shops to prevent re-packaging	