Caribbean Pesticide Management News

Project Update – September 2019

PROJECT OBJECTIVES / COMPONENTS

1. Safe Disposal of POPs and other obsolete pesticides and PCBs
2. Technology Transfer of methodologies for identification and remediation of contaminated sites
3. Development of systems to manage empty pesticides containers
4. Strengthening the regulatory framework and institutional capacity for sound management of pesticides
5. Promotion of alternatives to chemical pesticides

Our first edition of Caribbean Pesticide Management News primarily targets Caribbean pesticides regulatory authorities. Our aim is to keep project stakeholders informed about the FAO-GEF Pesticides Management Project currently being implemented in the Caribbean region, on a quarterly basis.

The project "*Disposal of Obsolete Pesticides including POPs, Promotion of Alternatives and Strengthening Pesticides Management in the Caribbean*" is presently being implemented by the Food and Agriculture Organization (FAO) and the Coordinating Group of Pesticides Control Boards of the Caribbean (CGPC) in 11 countries of the Caribbean – Antigua and Barbuda, Barbados, Dominica, Dominican Republic, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago.

Technicians Trained in Sampling Techniques for potentially Pesticides-Contaminated sites in Suriname

On Wednesday 12th June, 2019, 34 persons, including 11 female from eleven countries (pesticides inspectors, laboratory technicians, pesticides authority Registrars and industry partners) participated in a field training exercise on the sampling of pesticides-contaminated sites at the Marienburg obsolete storage site in Commewijne, Suriname. The exercise was led by Dr Gaius Eudoxie, Soil Scientist, Faculty of Agriculture, UWI, St Augustine, Trinidad and Tobago as part of project Component 2. During the session, participants were instructed on how to mark out grids, collect soil samples and record the relevant data, including Global Positioning System (GPS) information. They were also informed on how to prepare and store the samples before shipping for pesticide residue analysis. Participants reported that the session was very "hands on" and interactive.

The region has reported contaminated sites in the past. Quantities reported cannot be exported for destruction. The existence of such sites makes a compelling case for developing national and regional capacity to deal with them in the future. However, the region also faces challenges in developing and

deploying appropriate identification, characterization and remediation strategies due to the small size of the states and the particular risks of climate change on soil erosion and landslides, potentially releasing contamination to the surrounding freshwater and marine ecosystems. This exercise seeks to adapt methods that have been piloted and developed in other regions to the Caribbean context through practical experience and training of regional technicians.

Dr Eudoxie introducing the training session © B Wirjo

Participants measuring the grid and sampling © B Wirjo

Ms Oxley taking a sample © B. Wirjo

Samples bagged and labelled for storage © B. Wirjo

Dr Lopez recording soil sample data © B. Wirjo

Regional Project Coordinator (RPC) Meets with Empty Pesticide Container Management (ECM) Stakeholders in 4 countries

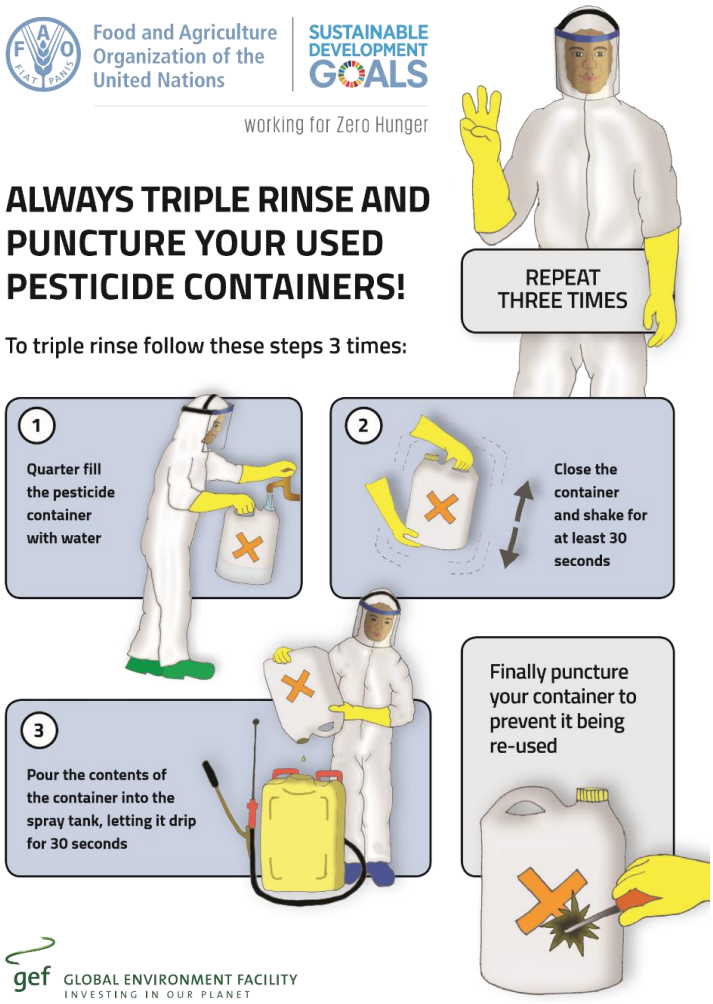
During the period June – July 2019, the RPC, along accompanied by representatives of national Pesticide Regulatory Authorities met with ECM stakeholders in Barbados, Antigua and Barbuda, Guyana and Trinidad and Tobago. The stakeholders included pesticides importers and distributors, farmers, representatives from Ministries of Agriculture, Health, Environment, and other agencies including Customs, Solid Waste Management, the media and NGOs. The RPC outlined the requirements for ECM networks to be established first as pilots and then, expanded nation-wide. There were a total of seventy-five attendees including twenty-four females. The stakeholders in all four countries recognized the importance of establishing ECM schemes and formed steering groups to move the process forward. Farmers expressed the desire for continuous engagement in the form of follow up and hoped that these meetings were not just "talk shops".

Mr Amichand addressing ECM stakeholders in Guyana © G. Mathurin

Mr Amichand addressing farmer group executive in Guyana © G. Mathurin

ECM stakeholders in Trinidad and Tobago © G. Mathurin

The project in collaboration with PAN-UK has also produced an ECM Toolkit, which has been shared with project countries. It promotes the triple-rinsing and puncture of empty pesticides containers to reduce pesticides residues and render them unusable.



Example of poster developed to promote the triple rinse of empty pesticide containers

Info Bit…..

Rinsing statistics – did you know that triple-rinsing empty pesticide containers significantly reduced the pesticide residues levels in containers, reducing risk to human and environmental health?

Rinsing statistics for: Active ingredient in 1 oz. (28g) of liquid remaining in a 5 gallon (22.5L) container

Rinsing Stage	Pesticide Residue	Percentage Remaining
After draining	14.2 g	100%
After 1st rinse	0.2 g	1.4%
After 2nd rinse	0.003 g	0.021%
After 3rd rinse	0.00005 g	0.00035%

Levels of pesticides residues remaining in plastic containers after each rinse.

In a pilot empty pesticide container management scheme established in Suriname in the agricultural district of Nickerie, Seventy (70) big bags (approximately 4.5 tonnes) were collected in 2 rice growing seasons over a 1 year period! Just imagine, they could have possibly not been triple-rinsed and recklessly left in the field, the rivers or burnt, endangering human and environmental health!! Good work Ms Carmen van Dijk, Pesticide Registrar in Suriname!!

Ms C. van Dijk with collected and stored empties in Suriname © E. Amatmoekrim

Triple-rinsed empty pesticides containers in Suriname © E. Amatmoekrim

Example of a collection bin in Suriname © C. van Dijk

Another type of collection bin for flexible "big bags" © C van Dijk

One previous method of container disposal in Suriname© G. Mathurin

Empty containers baled for export and recycling in Suriname © E Amatmoekrim

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Forty-one Caribbean Pesticides Registrars and Technicians trained in the use of the FAO Pesticide Registration Toolkit

In February 2017 and February 2019, a total of 41 Registrars and Technicians including 19 females were trained in the use of the FAO Pesticide Registration Toolkit, which is a desktop support system to help pesticides authorities from developing countries better evaluate pesticides submitted for registration under their own particular conditions. Countries benefiting from that training: Antigua and Barbuda, The Bahamas, Barbados, Belize, Cuba, Dominica, Dominican Republic, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago.

Participants – February 2017, Trinidad and Tobago © Unknown

Participants – February 2019, Trinidad and Tobago © V. Benn

Link to Toolkit: **http://www.fao.org/pesticide-registration-toolkit**

74.1 Tonnes of PCBs Waste to be removed from four countries for Environmentally Sound Disposal

The bids submitted by waste contractors in response to a call for tenders are currently being evaluated. The selected contractor will be responsible for safely removing or decontaminating 74.1 tonnes of PCBs waste from Antigua and Barbuda, Barbados, Suriname and Trinidad and Tobago. The operation is expected to begin in October 2019 and end by February 2020. This is being done in collaboration with a project currently being implemented by the Basel Convention Regional Center (BCRC) based in Trinidad and Tobago and the United Nations Industrial Development Organization (UNIDO).

Polychlorinated biphenyls (PCBs) are a group of man-made chemicals. They are oily liquids or solids, clear to yellow in color, with no smell or taste. PCBs are very stable mixtures that are resistant to extreme temperature and pressure. PCBs were used widely in electrical equipment like capacitors and transformers. PCBs have been released into the environment through spills, leaks from electrical and other equipment, and improper disposal and storage. It is estimated that more than half of the PCBs produced have been released into the environment. Once in the environment, PCBs can be transported long distances and they bind strongly to soil and sediment so they tend to be persistent in the environment. They have been found in air, water, soil, and sediments throughout the world. PCBs have not been made since 1977. As a result, the levels in the environment and in the food chain have been declining.

Different types of PBCs oil-containing equipment *© Creative Commons*

Farmer Field Day in Trinidad to promote Alternatives to Hazardous Toxic Chemical Pesticides

On Wednesday 17th July, 2019, 72 persons including 23 females participated at a one-day farmer field day to promote integrated pest management (IPM) and the use of non-toxic alternatives to chemical pesticides to manage diseases in vegetable crops. The field day which was led by Dr Saravanakumar, Faculty of Agriculture, UWI, St Augustine, Trinidad and Tobago and supported by the FAO-GEF project, demonstrated results of field and greenhouse trials in which alternatives were used to manage diseases in tomatoes and peppers in Trinidad. A practical component of the field day included looking at the disease organisms under the microscope and observing trials being conducted in the greenhouse.

The Farmer Field Day Banner © G. Mathurin

Section of the participants at the training workshop © G. Mathurin

Ms Branch, sweet pepper farmer, presenting a testimonial © G. Mathurin

Mr Ali, Pesticides Registrar, addressing the participants © G. Mathurin

Mr Azir, tomato farmer presenting a testimonial © G. Mathurin

Group of farmers touring a tomato trial greenhouse © G. Mathurin

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Suicide Prevention Day Observed

On September 10th 2019, some CGPC countries' pesticides regulatory authorities led by Guyana, observed "Suicide Prevention Day". One of the most common methods used for suicide in developing countries is the consumption of toxic pesticides. A new publication (PREVENTING SUICIDE: A resource for pesticide registrars and regulators) launched by WHO and FAO on September 10th 2019, guides pesticide regulators on the problem and the action that they can take to help save lives. Please find the link to a resource for pesticide Registrars and national regulatory authorities to help prevent suicides using pesticides:

https://lnkd.in/gQyTPhE

Pesticides Inspectors in three countries benefit from training in Regulatory Procedures

The pesticides inspectors in Antigua and Barbuda, Guyana and Trinidad and Tobago benefitted from a half-day training exercise. Presentations were made on the role of the pesticides inspector; pesticides import/export control; illicit pesticides and their impact; reporting on public health and environmental health incidents; highly hazardous pesticides (HHPs) and the current status of glyphosate in select countries. Sixteen inspectors, including eight female, participated in the training, which was conducted by the RPC.

REFERENCES:

Illinois Department of Public Health, Springfield, Illinois, 62761, USA, February 2009. Fact Sheet – Polychlorinated Biphenyls (PCBs).

Food and Agriculture Organization, May 2008. International Code of Conduct on the Distribution and Use of Pesticides – *Guidelines on Management Options for Empty Pesticide Containers*

Food and Agriculture Organization of the United Nations

Coordinating Group of Pesticides Control Boards of the Caribbean

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