



Phasing out HHPs; Replacing them with Agroecology

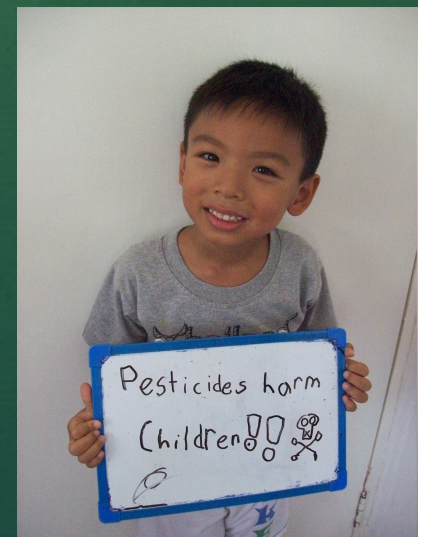
Meriel Watts - Pesticide Action Network

HHPs in SAICM: 2006-2014

- Dubai Declaration: concern about dependency of agriculture on pesticides
- Global Plan of Action: critical that stakeholders promote alternatives in order to phase out highly toxic pesticides
- 2006, FAO Council: “progressive ban on HHPs and their substitution with safer alternatives”
- 2012, ICCM3: 65 countries and organisations supported a resolution for a “progressive ban on HHPs and their substitution with safer alternatives”
- 2013-14, Regional SAICM meetings: 140 countries
- 2014, OEWG: African Region called for a Global Alliance to Phase out Highly Hazardous Pesticides

HHPs in SAICM: 2015

- IOMC (INF7): “HHPs are still in widespread use, posing significant/severe threats to human health and the environment;” and “In most developing country situations HHPs cannot be used without risk due to local conditions of use.”
 - Bangladesh (2014) – 85% of sprayers had adverse health effects
 - Pakistan (2012) – 100% of women picking cotton 3-15 days after it had been sprayed suffered health effects
- FAO/WHO/UNEP (INF 8) - link between exposure to HHPs and rising incidence of cancer and developmental disorders.



Sustainable Development Goals



Lady bird larva eating
aphids

Goal 2: “..achieve food security ... promote sustainable agriculture”

- **Target 2.4:** “ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change .. and that progressively improve land and soil quality”

ICCM4 (INF 7): UN-proposed indicator for tracking future progress of SAICM:

- “Number of countries actively promoting ecological and biological control options”



Replacing Chemicals with Biology: Phasing out HHPs with Agroecology

by Meriel Watts with Stephanie Williamson



What is agroecology



Healthy soil is the fundamental basis of sustainable agriculture

- The science and practice of applying ecological concepts, principles and knowledge to the design and management of agroecosystems
- Long considered the foundation of sustainable agriculture
- The basis of IPM, organics, Sustainable Crop Intensification, and other ecosystem-based approaches
- Pesticides used as last resort

High Level Support

- 2014 – FAO held its First International Conference on Agroecology
- 2010-2014 - UN Special Rapporteur for the right to food, Olivier de Schutter
- UNCTAD, IAASTD

All say agroecology is the future of agriculture in order to meet food security and climate change needs

Why replace chemicals with biology

- **Malathion**

- not an HHP in 2014
- Sri Lanka: acute poisoning
 - responsible for 25.8% of the pesticide poisoning admissions to hospital
 - mortality rate = 20%

Agroecology makes sense: economically, socially, environmentally

Increased yields

- ✓ Cambodia: organic rice growers yields average 3.4 t/ha compared with the nation-wide average yield of 2.4 t/ha

Increased profit

- ✓ Senegal: replacing synthetic pesticides with biopesticides and neem seed extract saved US \$60/ha in costs and increased net crop value by 61%

- improved climate change
resilience



- improved food security



Organic vegetables in a
market in Senegal

Philippines - study of 840 farmers:

- ✓ Twice as many organic farmers as conventional farmers had increased their food security since 2000
- ✓ Since changing to organic growing the farmers ate 68% more vegetables, 56% more fruit, 55% more protein-rich staples and 40% more meat

**FAO Director-
General, February
2015:**

“The model of agricultural production that predominates today is not suitable for the new food security challenges of the 21st century. ... Since food production is not a sufficient condition for food security, it means that the way we are producing is no longer acceptable.”



Replacing endosulfan with agroecology

Home-made coffee berry borer trap, Nicaragua



- Stockholm Conference of Parties, 2012:

When replacing endosulfan give priority to ecosystem approaches to pest management

- Coffee berry borer, Central America and Columbia:
 - ✓ good crop hygiene, careful monitoring of pest levels, attractant traps, strategic use of a biological control spray, *Beauveria*
 - ✓ cheaper

BUT: Farmers & countries need help



**Farmer-to-farmer
transmission of knowledge -
rice breeding in the
Philippines**

- Extension, Farmer Field Schools, Farmer-to-Farmer transmission of knowledge
- Research
- Supportive policies

Ecuador: Constitution + General Law of Food Sovereignty specifically support and encourage agroecology

France (2014): Law for the Future of Agriculture, Food and the Forest promotes agroecological approaches, with target of implementing these on 200,000 French farms by 2025

Brazil: National Plan for Agroecology and Organic Production to promote agroecology

Global Alliance to Phase out HHPs (GAPH)

- Farmers need help
- Governments need help
- The International community can help
- GAPH can facilitate that help

