# Ecohealth and pesticides: Lessons for research and action





- HESO 449, January 20, 2011
- Ben Brisbois

#### Ecohealth at the IDRC (I)

- IDRC: a Canadian Crown Corporation whose mandate is "research for development"
- 1983: Gilles Forget hired to head a new Occupational Health Program at IDRC
- 1990 IDRC conference on pesticides in developing countries (Forget, 1991)
- 1992, UNCED, restructuring in IDRC's health programming --> Ecosystem approaches to human health program

#### Ecohealth at the IDRC (II)

- Ecosystem management for better community health through:
  - Participation
  - Transdisciplinarity
  - Equity (especially gender)
- A synthesis of 'fashionable' ideas in health, environment and development
- Two decades of research, conference and 'communities of practice' (but after 2011?)

#### Pesticides and potatoes in Ecuador



Multiple projects with Ecuadorian, international researchers

- Demonstrating exposure with fluorescent dyes
- Epidemiology on health effects
- Farmer field schools, integrated pest management
- Economic evaluation of health impacts
- Policy influence

#### Cole et al., 2006

A further challenge is the pressure of market capitalism, which pervades even remote agricultural communities, often with the face of multinational pesticide companies. Despite the state's traditional role in regulating for public health,57 its powers in a globalizing world have been eroded. Although reduction of toxic pesticide use made sense at a field level for Ecuadorian farmers and at a regional level for communities and health authorities, movement globally is slow.58 Despite sound proposals for international monitors of pesticide sales and use,59 headway has been limited and only on prior notification

of toxicity. Crucial issues of differential power and knowledge between different stakeholders have to be confronted,60 including in EcoHealth discourse. Is the current EcoHealth framework capable of guiding analyses that tie local conditions to the global level, where geo-politics drive environmental change and market penetration?61 EcoHealth's ability to effectively grapple with complex policy environments may depend on its linkages with other research programs that IDRC sponsors on equity, globalization, and international markets.

#### 'Scaling up' Ecohealth

Insights from the political ecology of pesticide exposure in Ecuador's banana industry



- Ben Brisbois
- Ecohealth 2010, London School of Hygiene and Tropical Medicine
  - 19 August, 2010

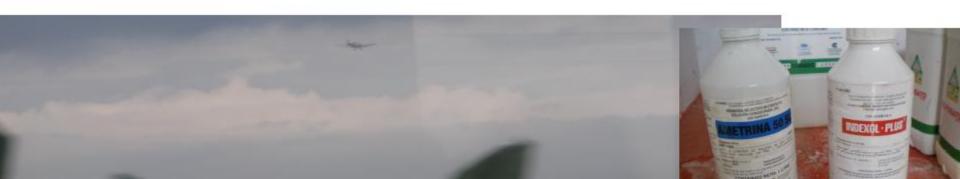
# Bananas & pesticides in Ecuador (I)

- World's leading exporter of bananas, a pesticide-intensive monoculture that has transformed the physical and human geographies of Latin America for over a century
- Exemplary case study on the environmental health effects of the global food system with special relevance to 'scaling up' Ecohealth



# Pesticides, agriculture and IDRC Ecohealth projects

- Ecosystem Approaches to Human Health: participatory, transcisciplinary, equity-conscious (with pesticides an early and ongoing focus)
- Ecohealth pesticide work with Ecuadorian potato farmers suggests need to engage with forces of globalization (i.e. not just local scale)



# Why 'political ecology'?

- Sees environmental change (and related health outcomes) as product of political economy
- Explicit recognition of geographic scale, political power, global and national structures vs. local/individual agency;
- Methodologically innovative, complex, challenging...



#### Bananas and pesticides in Ecuador (II)

Global South (e.g. Ecuador)

Global North (e.g. Canada)

Fruit multinationals shift risk; agrochemical producers push products; international organizations promote export-based agro-industrial model

Minimal regulation; labour markets create vulnerabilities; exportbased agriculture is incentivized Supermarkets demand perfect fruit; governments support international organizations, fund research

Workers + pests + soil + bananas + pesticides = occupational, environmental exposure



Citizens support government; consumers purchase bananas; researchers

### Research & policy implications

- Can research that addresses the communityscale problems of traditional Ecohealth projects ever reach beyond symptoms of the international economic system?
- How to engage with the global-scale forces that structure possibilities at the community level?
- Is this possible when much research is funded by people implicated in the problem?

