



Controlling Pesticide Health and Environmental Hazards at Community Level in Lake Eyasi Basin, Karatu District, Tanzania

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Introduction

- ❖ Tanzania: over 940,000 km²
- ❖ Population: over 39 million
- ❖ Agriculture the main employer, over 70%, > 50% of GDP
- ❖ Pesticides: mainly in agriculture and public health

- ❖ While pesticides seem to have increased agricultural production and improved public health,
 - they could also be detrimental to human health and the environment.
- ❖ The real impacts of pesticides are not easily documented in most circumstances.
 - **Acute** effects are easier to observe, but they could also be confused with common illnesses.
 - Pesticides may also cause **chronic** diseases
 - Pesticide externalities are also not taken into consideration



❖ Chemical pesticide use in horticulture in Tanzania was historically low,

- recent developments in demand for increased **food production** and expansion in **horticulture** have resulted in higher consumption of chemical pesticides

Controlling Pesticide Hazards Project

- Lake Eyasi Basin in Tanzania has a history of intensive pesticide use.
- Vegetables are grown throughout the year and pesticides are widely used
- TAPOHE embarked on a project to train local communities to “self-monitor” the impact of pesticide use in their area
- Supported by PAN UK/DFID



Specific objectives

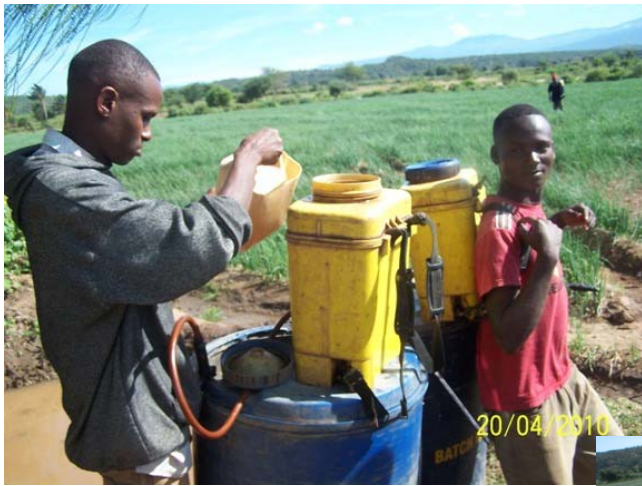
- Increase farmer awareness of the burden of illness created by indiscriminant use of pesticide.
- To document the incidence of mild and moderate pesticide poisoning not necessarily reported by the local health care system
- To undertake initial response measures and make appropriate recommendations for further action on pesticides

Materials and Methods

- Protocol development-
 - data collection tools developed by FAO in Asia were adopted to local situation ([translated](#) and then pre-tested)
- Training –
 - conduct seminars/meeting with the community representatives
- Data collection and analysis–
 - Establishment of Community Pesticides Monitoring Teams and data collection

Hazardous practices





Farmer's training

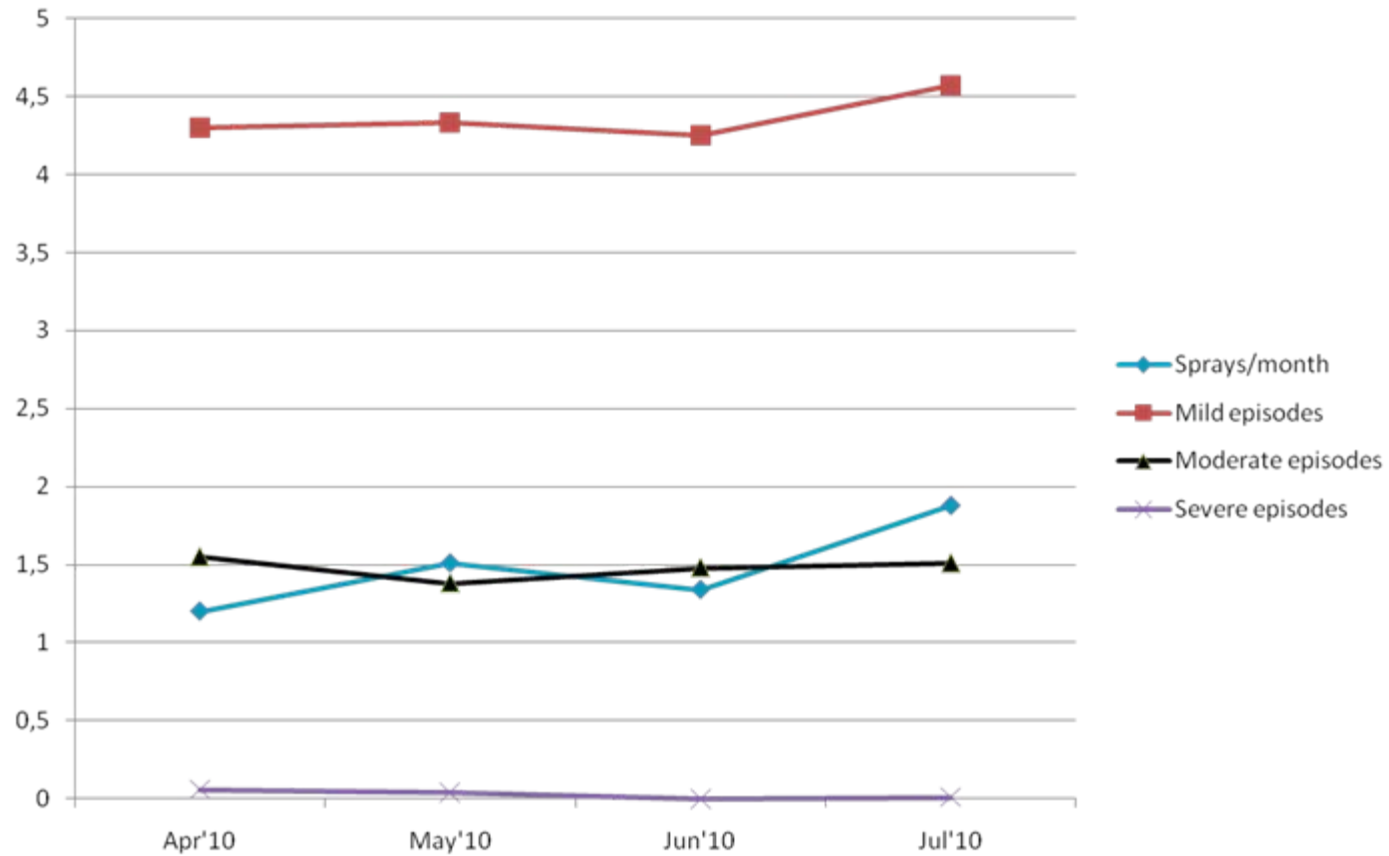




Results

Sprays/person/month	1.48
Mild episodes/spray	7.19
Moderate episodes/sp	2.33
Severe episodes/spr	0.03

AVERAGE MONTHLY SPRAY EVENT & ILLNESS EPISODES PER FARMER - QANG'DEND

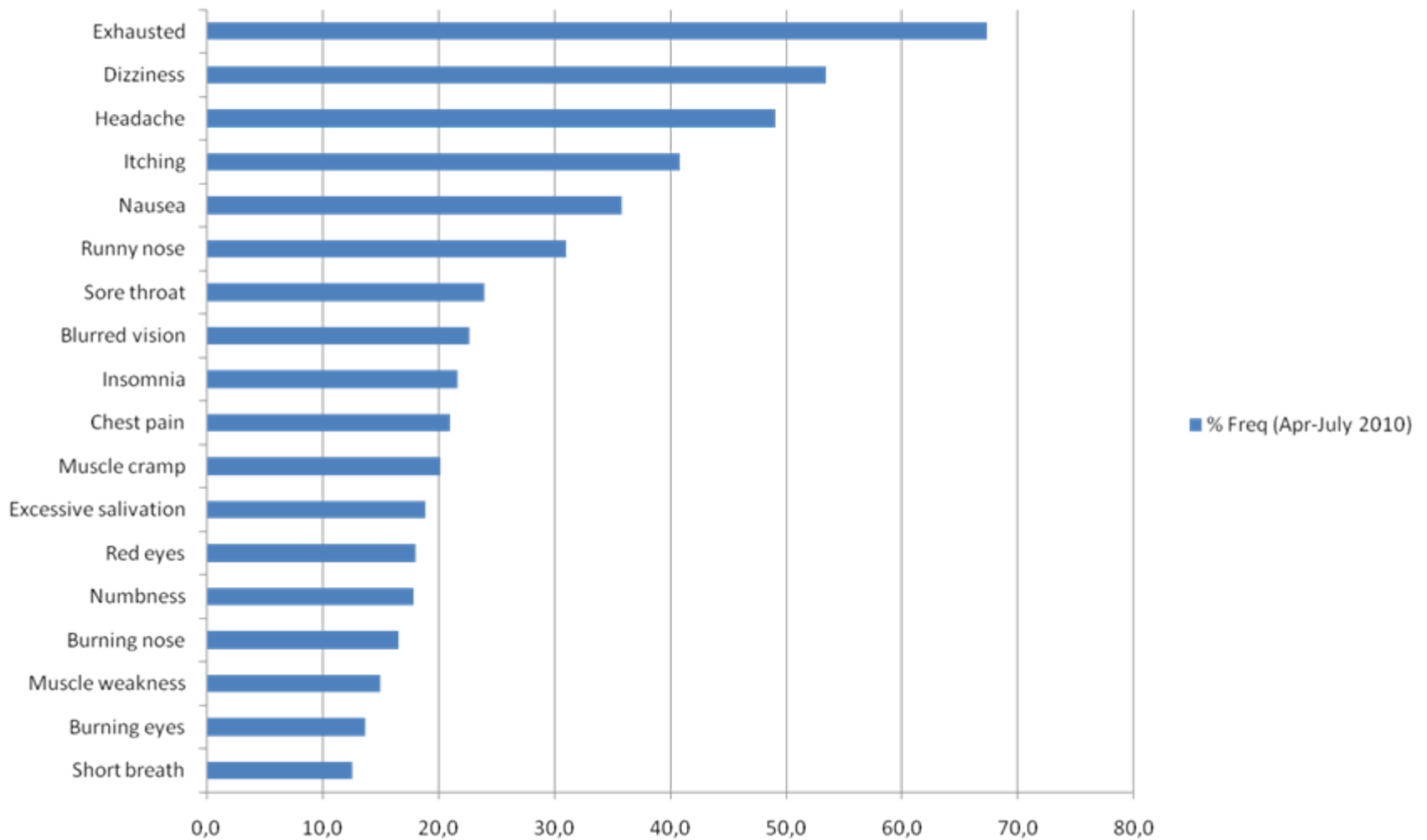




Pesticide mixtures in L. Eyasi

TRADE NAME	COMMON NAME	TYPE
Dursban + Selecron + Profectron + Fenom C	Chlorpyrifos + profenofos + profenofos + profenofos + cypermethrin	Insecticide
Thionex + Polytrin + Selecron	Endosulfan + profenofos + cypermethrin + profenofos	Insecticide
Fenom Plus + Profecron + Dursban	profenofos + lamda cyhalothrin + profenofos + chloropyrifos	Insecticide

FARMERS' SELF-REPORTED SIGNS AND SYMPTOMS OF PESTICIDE POISONING, QANG'DEND – APR-JULY 2010



Summary

- ❖ Mixtures of pesticides in spray session - uneconomical and a health and environmental hazard
- ❖ Empty containers disposed haphazardly in streams and farms - reused
- ❖ Pesticides suppliers - not sensitive/conscious of health and environmental hazards.

Conclusion

- Application of pesticides in the study areas is high and poses health risks to the farmers that use them, consumers of products and to the environment
- Communities lack vital training -about pesticides and their impact, reading labels to make choices, disposal of containers etc