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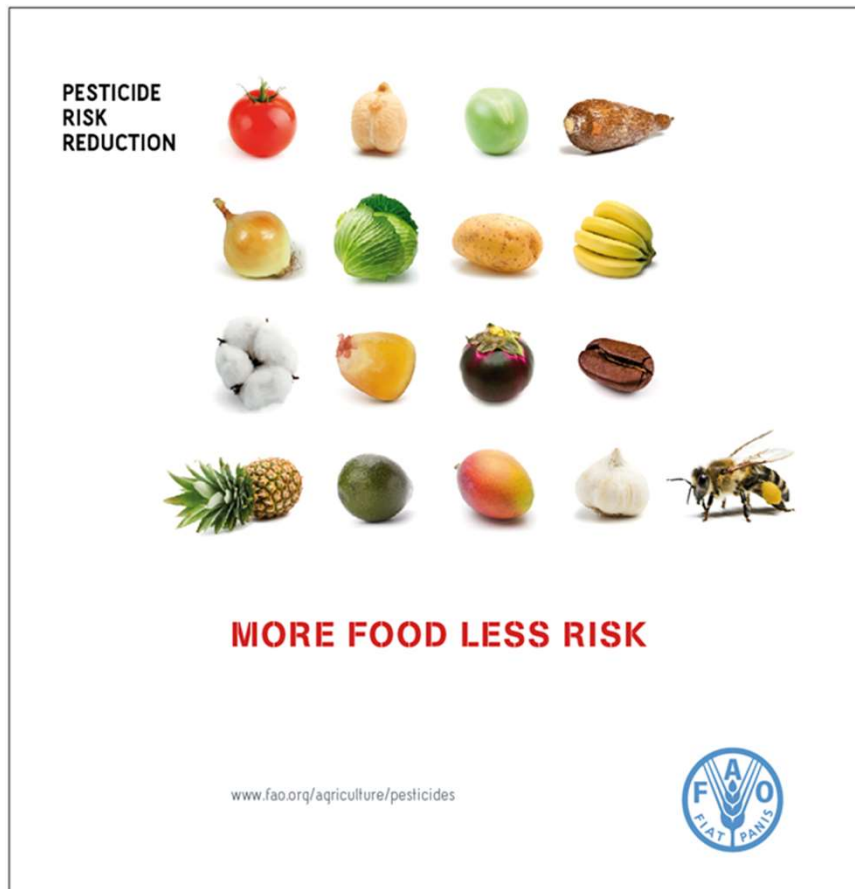
Phasing out highly hazardous pesticides from agriculture in Mozambique: lessons learned and challenges



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Presentation Outline



1. Context

2 : HHP Risk Reduction Methodology

3 : HHP List and mitigation measures

4 : International Regulatory Actions - RC

5 : Lessons learnt and challenges

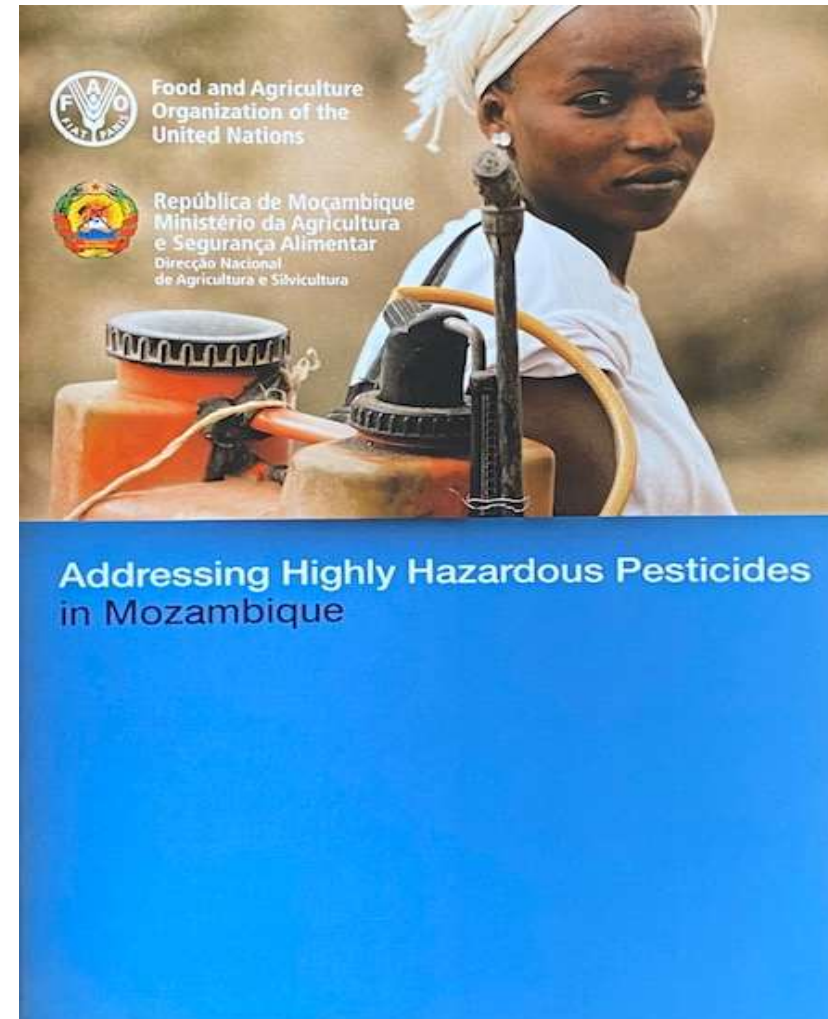


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1. Context

- Importance of agriculture to Mozambique.
- Pesticide registration in Mozambique
- Past Pesticide Life cycle management projects in Mozambique – focus on the Project EP/MOZ/101/UEP funded by SAICM-QSP “Reduction of HHP risks in Mozambique”
- Project implemented 2013/14; served as a pilot and informed development of the FAO/WHO Guidelines on HHPs (2016)
- Brochure published in 2016 - ‘Addressing HHPs in Mozambique’ - <http://www.fao.org/3/i5360e/i5360e.pdf>



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2. Methodology for HHP Risk Reduction in Mozambique

From 641 products was registered (190 a.i.)

79 products meeting the JMPPM HHP criteria (34 a.i.)

39 products (12 active ingredients) for field survey

Aluminium phosphide, Benomyl, Dichlorvos, Endosulfan, Fluazifop-butyl, Metamidophos, Oxamyl, 2,4-D dimethylamine, Paraquat, Bendiocarb, Chlorfenvinphos

JMPPM HHP criteria, as follows:

- WHO classes Ia & Ib; GHS carcinogenicity, mutagenicity, reproduction toxicity categories 1A & 1B; Stockholm Convention: Annex A & B, and pesticides meeting criteria of Annex D; Rotterdam Convention: Annex III; Montreal Protocol; [... high incidence of severe or irreversible adverse effects on human health or the environment.]

1. Alachlor
2. Aldicarb
3. Carbendazim
4. Carbofuran
5. Diafenthiuron
6. Diazinon (> 300 g/L)
7. Diclofop-methyl
8. Difenacoum
9. Ethion
10. Fenamiphos
11. Iprodione
12. Furfural
13. Methidathion
14. Methiocarb
15. Monocrotophos
16. Terbufos
17. Thiodicarb
18. Zinc phosphide

Evaluation of the importation (last 3 years) concluded that 18 a.i are not being used in the country. They were only registered but not imported.



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3. HHP List and mitigation measures

Field survey on 325 farmers in 7 provinces with the objective of:

- Know how those products are being used?
- Quantities used;
- Methods of application;
- Risk reduction measures used by the farmers (PPE);
- Risk assessment (Exposure)



Main output:

- Farmers hardly use PPE when applying pesticides
- The majority of farmers report symptoms and signs attributed to pesticide exposure



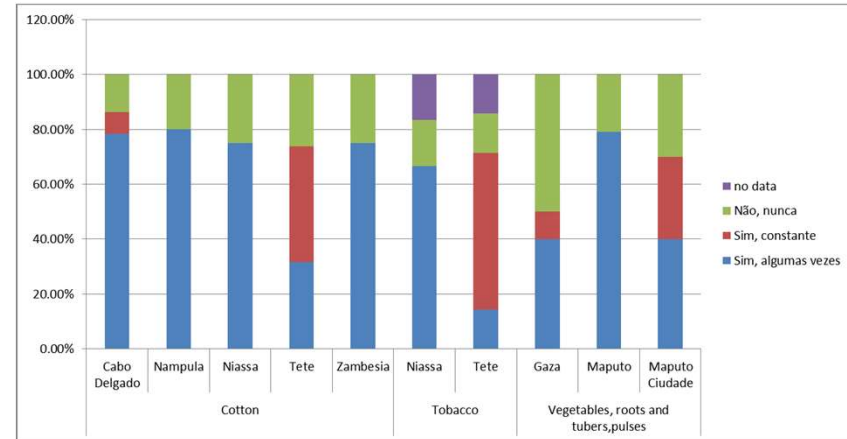
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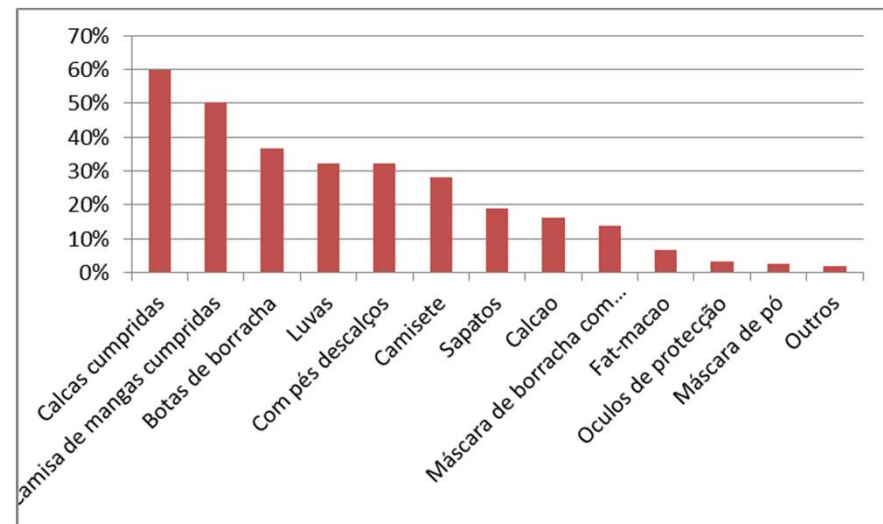
3. HHP List and mitigation measures

■ Stakeholder meetings Objective -

- Discuss findings of HHP survey
- Assess the need for the identified HHPs
- Review possible alternatives
- Propose measures to reduce the risk posed by HHPs



People becoming sick during and/or after applying pesticides



Use of PPE by farmers



3. HHP List and mitigation measures

Meeting output/Decision

- **Immediate action** – Ban of 30 a.i.

- **Medium time actions**
 - 4 a.i. conduct risk assessment using locally appropriate models
 - Notify the Final Decision to Rotterdam Convention

- **Long time action**
 - Intensify **information and awareness building** on good agricultural practices and risk reduction
 - Strengthen **inspection and control** of pesticide-related activities
 - **Harmonize registration** cancellations of highly hazardous pesticides with neighbouring countries (ref. through SAPReF)

1. Alachlor
2. Aldicarb
3. Carbendazim
4. Carbofuran
5. Diafenthiuron
6. Diazinon (> 300 g/L)
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8. Difenacoum
9. Ethion
10. Fenamiphos
11. Iprodione
12. Furfural
13. Methidathion
14. Methiocarb
15. Monocrotophos
16. Terbufos
17. Thiodicarb
18. Zinc phosphide
19. Brodifacoum (Liquid formulation)
20. Difethialone
21. Methamidophos
22. Benomyl
23. Methomyl 900 g/kg
24. Chlorfenvinphos
25. Carbaryl
26. Oxyfluorfen
27. 2,4-D Dimethylamine
28. Paraquat
29. Endosulfan
30. Diuron



4. International regulatory action – RC

- Regional Training on how to prepare the final decision and Notifications under RC
- Close collaboration with Rotterdam Convention Secretariat on notification process of Final Regulatory Actions (FRAs)
- Recently Mozambique submitted notifications of FRAs for 11 pesticides

1. 2,4-D-dimethylamine
2. Paraquat
3. Diuron
4. Oxifluorfen
5. Carbaryl
6. Chlorfenvinphos
7. Furfural
8. Iprodione
9. Methidathion
10. Terbufos
11. Thiodicarb



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5. Lesson Learned

- When the government, decision makers and pesticide users understand the risk of HHPs, it is possible and easier to take action reduce those risks.
- Industry and civil society are key stakeholders interested in protecting the environment and health of the people.
- Key to have economically viable alternatives to HHPs;
- Farmers should be involved and have confidence in the alternatives

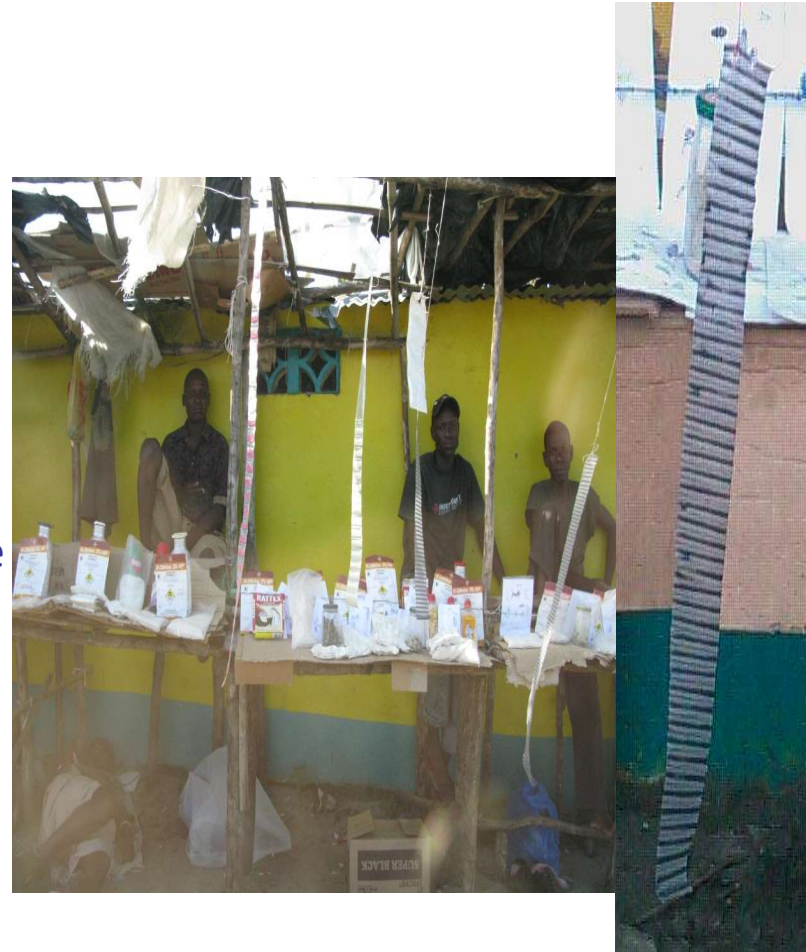


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6. Challenges

- Lack of human, financial and technical resources to sustain risk assessments and develop alternatives.
- Same known alternatives are more expensive and are not much promoted/known.
- Lack of harmonization and fragmented approaches to HHP risk reduction in the region
- Porous borders and weak enforcement capacities -illegal importation and use of banned HHPs.



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Thank you

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