

Associação Brasileira de Agroecologia (ABA) : Sustainable Territory Project

Introduction

Brazil has been the country with the highest consumption of pesticides since 2008. In 2017, the Brazilian pesticide market moved more than USD 5.940 billions (R\$33 billion). As a consequence, every day, almost 26 people are intoxicated by pesticides. Between 2007 and 2015, 84,200 intoxicated patients were reported. Almost 1,900 people died from acute illnesses (which refers to the number actually reported, but there is still a lot of underreporting). The damage to the public coffers of the Unified Health System due to the cost of treating pesticide poisonings was USD 11.3 billion/year in Brazil. For every dollar spent on pesticides, up to USD 1.28 is needed for health care costs and work permits. Paraná, the state where awareness-raising and educational booklets were developed and distributed through this project, is the state with the largest number of reported cases. The cost to Paraná's public health resources amounted to USD 26.9 millions (R\$150 million) between 1998 and 1999.

To deal with this scenario of increased prevalence of poisonings and escalating damages to the public health in Brazil, this project focused on training health professionals in Primary Health Care through educational booklets and instructional manuals with relevant content and instructions on how to deal with this problem. The purpose of these materials is to introduce basic knowledge about pesticides and their health impacts, and to develop awareness among these professionals, so that they can be alert to possible cases of human or environmental pesticide contamination in their districts. In addition to increased knowledge about this situation, the materials offer help to professionals in training their colleagues, developing actions to prevent contamination, and promote healthy food and practices for growing pesticide-free foods to the population of their communities, with agroecology as their ultimate goal. Consequently, these materials could help decrease the underreporting and increase specific treatments for those who are intoxicated, once professionals become increasingly aware of this issue.

This project aimed to work on food systems themes, pesticides, and agroecology, together with health professionals of Primary Care Units of the

Unified Health System (SUS) in Brazil. To achieve this objective, 4 booklets were prepared, each one with an accompanying instruction manual to deepen the information on the contents of the booklets. Therefore, a total of 8 materials were prepared (4 booklets and 4 instruction manuals). Although inclusion of instruction manuals was not originally planned, the coordinators decided to prepare them so that the health professionals would obtain more information about pesticides and agroecology, and be able to apply it in their Health Units and districts.

Executive summary of the booklets

1st booklet: “The unsustainability of the use of pesticides”

This booklet has the main objective of problematizing information on pesticides and the environment to inspire reflections on the way food production is being handled in food systems that use pesticides and on the pesticides' impacts on the environment; demystifying the association between this mode of food production and food security.

The booklet contains 7 pages and was structured according to the following topics: How does the agribusiness production process impact the environment?; Where will the pesticide content in the packaging go?; Irreversible environmental impacts caused by the indiscriminate use of pesticides; and Bibliographic References.

2nd booklet: “Exposure to pesticides and information on care for intoxicated people”

This booklet has as main objectives: to inform, sensitize and mobilize health professionals about the main characteristics of pesticides, the types of contamination, signs and symptoms, systematic reporting to the Notifiable Diseases Information System (SINAN), the therapeutic approach to be used by the health professionals; to enable the association between the use of pesticides and the impacts of pesticides on human health; and to mobilize these health professionals to recognize the risks of human intoxication from pesticides in their communities.

The booklet has 10 pages and was structured according to the following topics: Inclusion criteria; Types of intoxication; Vulnerable populations; Attention Flowchart: Organization, attention and organized patient demands; Clinical evaluation, exams, diagnostics, and investigation; Instrument of identification and

community surveillance of health risks through exposure to pesticides; and Bibliographic References.

3rd booklet: "How to work on the topic of pesticides and agroecology with the community?"

This booklet has as main objectives: to encourage health promotion related to the impacts of pesticides by health professionals; encourage the dispersion of information acquired during the training process among other health professionals and between them and the population; develop health education dynamics so that these professionals can mobilize the local population on the risks of contamination by pesticides and develop dynamics of self-care; encourage social participation in councils, community debates and through the formation of community pesticide surveillance committees, bringing together social actors involved in the educational, social assistance and environmental systems, in addition to, of course, the community itself, to identify risks and discussion of agroecological alternatives for both food consumption and planting.

This booklet contains 8 pages and has the following topics: Why work on these themes? (agroecology and pesticides); Main difficulties; The importance of interprofessionality; Individual and family approach; Active methodologies; Encouraging community social participation; and Community pesticide use surveillance committees.

4th booklet: "Promoting agroecology in the community"

This booklet has as main objectives: to discuss agroecology; to promote strategies to achieve a healthy diet in the communities (free of agrochemicals and transgenics); to introduce the discussion on Food Sovereignty; to mobilize health professionals and community members around possibilities of cultivation and consumption of agroecological foods in the urban environment as a guarantee of Food and Nutritional Security (SAN), through actions at the local level; and to enable the generation of demands for public policies on Food and Nutritional Security that strengthen the Food Sovereignty of communities.

The booklet has the following topics: How to mobilize community participation in agroecological activities; Weaving the solidary web of sustainable development; Identifying Potentialities; Articulating Partnerships; Developing Agroecological Food and Nutritional Security actions.

The four project coordinators who participated in this last stage were: Vanessa Daufenback, Francco Antônio, Lusinério Prezotti and Sophia Sol.

Next steps

The materials will be released by the Municipal Council for Health and Food and Nutritional Security of Piraquara and Curitiba, as of February 2021, for implementation in the Health Units of these two cities. The materials will be widely disseminated on ABA's social networks and will be available on its website. There will be a live launch of the materials on social networks, with all the coordinators of the project and ABA. They will also be widely disseminated to multi-professional family health programs so that they can be applied by health professionals residing in their district.