Project Evaluation Series

Terminal evaluation of the project "Disposal of persistent organic pollutants and obsolete pesticides and implementation of sound pesticides management in Benin"

GCP/BEN/056/GFF GEF ID: 4756

Annex 1. Risks from pesticides and persistent organic pollutants and sustainable management challenges

- 1. According to an inventory of obsolete stocks and related waste carried out in Benin in 2012, there were more than 504 tonnes of obsolete pesticides (including 380 tonnes of endosulfan, 15 tonnes of dieldrin, and 12 tonnes of lindane) and 150 tonnes of other pesticide contaminated waste in the country. Pesticide stocks are located at 115 sites distributed over the twelve departments of Benin. These stocks are stored in poor conditions, in damaged or leaking packaging, and pose a considerable risk to public health and the environment. Some stocks are located in densely populated urban areas, such as the dieldrin stockpile in Porto Novo.
- 2. The accumulation of obsolete persistent organic pollutants (POPs) and the contamination of sites near human facilities and water bodies have had negative effects on human health with documented cases of human poisoning. In 2000, research identified at least 37 deaths caused by endosulfan after the reintroduction of the chemical into cotton-growing areas of the country.
- 3. In addition, the use of poor-quality pesticides, combined with poor use practices, has contributed to the development of resistance in pests, leading to increased dosages and frequencies of use and ultimately to negative effects on agricultural productivity, product quality, and the health of users and local residents.
- 4. The accumulation of obsolete stocks of pesticides and POPs and the environment contamination or degradation are linked to gaps and deficiencies in the legal and institutional framework, as well as to a weak technical capacity for the rational management of pesticides throughout their life cycle, including inspections, packaging management and the use of alternatives.
- 5. The National Committee for the Approval and Control of Plant Protection Products is not involved in post-registration activities such as inspections, awareness raising, monitoring and assessment of health and environmental effects. The National Pesticide Management Committee model proposed by the Economic Community of West African States would address these gaps.
- 6. Pesticide inspection and control is primarily the responsibility of the Plant Protection Service, established in 1991 and placed under the Department of Agriculture. However, its activities have generally been limited to the control of pesticides imported from official points of entry into the national territory. Similarly, pesticide quality analyses are carried out in foreign laboratories and, given the costs involved, the number of samples is often small. Inadequate quality control and inspections encourage illegal trafficking and the movement of banned or poor-quality pesticides in Benin. Thanks to a recent reform, some responsibilities were delegated to the Beninese Food Safety Agency (ABSSA). Under the terms of Decree No. 2017-433 of 10 August 2017 (Republic of Benin, 2017a), ABSSA must, among other duties: perform a mission of advice and regulation in the external control bodies of the Ministry of Agriculture, Livestock and Fisheries; carry out studies relating to the evaluation of all sanitary, zoosanitary, phytosanitary and ichthyo-health risks; carry out sanitary and quality controls in accordance with the areas of empowerment defined by the texts in force.
- 7. In Benin, there is no functional system for the adequate management of empty pesticide containers (EPCs). There are more than 12 tonnes of EPCs, consisting of 30 000 bottles of 170 ml to 500 ml and one-litre cans that need to be disposed of. This volume is expected to increase over time, as Benin imports an average of 2.5 million litres of pesticides per year. These containers are often reused to store liquid foods such as milk, oil, honey or drinking water. Another practice is to burn them in the field or simply abandon them in nature.
- 8. The proposal and adoption of alternatives to conventional chemical pesticides, on which Benin relies heavily for its agriculture, remain very limited. Alternatives to endosulfan are not yet

available or widely adopted by cotton farmers since 2009, when the ban on importing endosulfan came into effect. As a result, illegal endosulfan trade is widespread. It is imperative to identify and promote viable Endosulfan alternatives and other extremely hazardous pesticides. The National Agricultural Research System has suggested some actions that have already been implemented, such as the registration and marketing of alternatives and the development of resistant varieties. Several research and development projects have focused on building farmers' capacity to better manage their crops with minimal pesticide use. Despite the good outcomes yielded by some projects and initiatives, the lack of dissemination of information on alternatives to pesticides, the absence of clear indications on responsibilities and how to improve outcomes, remain constraints to innovation. Many alternatives developed by different institutions remain unknown to users. There is a need to develop a national, coherent and evidence-based approach to promote integrated management.

- 9. The Government has developed response strategies that remain limited and unsustainable. Pesticide importation and distribution have been handed over to parastatals SONAPRA and the Fertilizer Purchasing Centre, after the withdrawal of pesticide importation and distribution licenses from the private sector. Other national initiatives include the adoption of a multisectoral action plan to combat pesticide food poisoning, under the leadership of the United Nations Food Security & Nutrition Working Group. In 2013, Benin became a member of the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) and entered the process of adopting the common regulation for the registration of pesticides in CILSS countries.
- 10. Thus, the project "Safeguarding and disposal of obsolete pesticides in Benin (GCP/BEN/055/JPN)" carried out between 2012 and 2015 by FAO and the Government, resulted in the disposal of 452 tonnes of endosulfan and contaminated materials (FAO, 2016), bringing the stock inventoried in 2012, to about 200 tonnes of known obsolete pesticides and POPs to be safeguarded and disposed of, which also justified the drafting of Project GCP/BEN/056/GFF.

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