



Food and Agriculture Organization
of the United Nations

LIFECYCLE MANAGEMENT OF PESTICIDES AND DISPOSAL OF POPS PESTICIDES IN CENTRAL ASIAN COUNTRIES AND TÜRKİYE

GCP/SEC/011/GFF

MANAGING PESTICIDE WASTES,
SUPPORTING GREEN CROP PRODUCTION
IN CENTRAL ASIA AND TÜRKİYE



GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

BACKGROUND AND RATIONALE

LATE 1930s

Introduction of modern, synthetic pesticides based on chemical groups like organochlorides, organophosphates, and later on phenoxyacetic acids, captan, carbamates, neonicotinoids, and glyso-phates, but also on heavy metals.



1970s

Concerns are expressed over possible environmental and health hazards associated with the use of pesticides.



Search for alternative approaches in agriculture relying on less or no use of chemicals



1985 THE INTERNATIONAL CODE OF CONDUCT ON THE DISTRIBUTION AND USE OF PESTICIDES launched by FAO.



1992 BASEL CONVENTION Control of transboundary movements of hazardous wastes and their disposal.



2004 ROTTERDAM CONVENTION

Promotion of shared responsibility in the international trade of certain hazardous chemicals in order to protect human health and the environment from potential harm; and contribution to the environmentally sound use of those hazardous chemicals.



2004 STOCKHOLM CONVENTION

Ban of a whole class of pesticides based on so-called POPs-chemicals (Persistent Organic Pollutants).



Obsolete pesticides represent a significant global environmental and health hazard. It is estimated that a substantial portion of the global stocks of obsolete pesticides can today be found throughout the former Soviet Union area – including Central Asia – due to the highly chemicalised agriculture in the region, related mandatory pesticide applications and over-supply as part of the planning economy. These hazardous chemicals are often stored in deteriorated containers or buried in landfills, where leakages contaminate the soil and water and pose a high risk for the environment, biodiversity and human health. Safe removal and disposal of obsolete pesticides is a technically complex and costly activity.

FAO promotes sustainable crop production systems in which countries should rely on less inputs like agro-chemicals. This implies for the countries introducing sustainable practices like Integrated Pest Management (IPM), low-input agriculture, composting, and better pest monitoring and prediction. In order to achieve that, there is a need to improve legislation on pesticide lifecycle management as well. Further accumulation of obsolete pesticides will be only prevented by enhancing sustainability and resilience in agro-systems, reducing reliance on pesticide and ensuring better management.

PROJECT OBJECTIVES

The GEF-funded and FAO-managed project supports countries through two key dimensions under four components:

1. the safe disposal of obsolete pesticides, and
2. introducing agricultural practices relying on the use of less and less dangerous pesticides.

The project aims to safely destroy up to 900 metric tonnes of POPs and obsolete pesticides, demonstrate the FAO management cycle for pesticide-contaminated sites through various pilot demonstration projects, strengthen the institutional and regulatory framework for managing pesticides throughout their lifecycle, and increase the successful uptake of alternatives to chemical pesticides on key crops for better production, better nutrition, a better environment and a better life.

PROJECT COMPONENTS



Reduce threats from POPs and other obsolete pesticides posing high risks to public health and the environment

1

2

Strengthen the legal as well as the institutional framework for proper pesticide management across its full lifecycle



Reduce the use of pesticides through introduction of improved agricultural practices

3

4

Share project achievements and lessons learnt



PROJECT AT A GLANCE



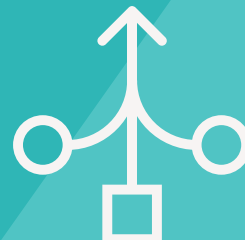
DONOR

The GEF



GEF PROJECT GRANT

USD 8 136 986



CO-FINANCING TOTAL

USD 38 300 000



FOCAL AREAS

Chemicals (Persistent Organic Pollutants)



CONTRIBUTION TO THE SDGS

SDG 2, SDG 3, SDG 6, SDG 12



DURATION

48 months



PARTNERS

National governments, NGOs, communities, academia, industrial partners and other service providers



OBJECTIVE

To reduce the release of POPs from obsolete pesticide stockpiles and strengthen the capacity for sound pesticide management throughout their lifecycle in four Central Asian countries and Türkiye



BENEFICIARY COUNTRIES

Kyrgyz Republic
Republic of Azerbaijan
Republic of Kazakhstan
Republic of Tajikistan
Republic of Türkiye

COUNTRY SPECIFIC TARGETED AREAS

AZERBAIJAN

National inventory of obsolete pesticides and related materials • Development of national disposal capacity • Safeguarding and disposal of POPs pesticides • Container management system • Management of contaminated sites • Completing legal framework on pesticide life-cycle management • Improving pesticide registration system • Promoting alternatives to Highly Hazardous Pesticides (HHPs) • Improving better spraying practices and ground applications • Pest surveillance and adaptation to climate change • IPM field trials on selected crops and organic school garden



KAZAKHSTAN

National inventory of obsolete pesticides and related materials • Development of national disposal capacity and disposal of POPs pesticides • Container management system • Management of contaminated soils • Completing legal framework on pesticide life-cycle management • Improving pesticide registration system • Promoting alternatives to HHPs • Improving better spraying practices and ground applications • Pest surveillance and adaptation to climate change • IPM field trials on selected crops



KYRGYZSTAN

National inventory of obsolete pesticides and related materials • Safeguarding and centralization of POPs pesticides • Container management system • Introduction of management of contaminated soils • Completing legal framework on pesticide life-cycle management • Improving pesticide registration system • Improving better spraying practices and ground applications • Promoting alternatives to HHPs • Pest surveillance and adaptation to climate change • IPM field trials on selected crops and organic school garden



TAJKISTAN

National inventory of obsolete pesticides and related materials • Upgrade central obsolete pesticides landfill • Container management system • Management of contaminated soils • Completing legal framework on pesticide life-cycle management • Improving pesticide registration system • Improving better spraying practices and ground applications • Promoting alternatives to HHPs • Pest surveillance and adaptation to climate change • IPM field trials on selected crops



TÜRKIYE

Disposal of confiscated pesticides • Container management system • Improving better spraying practices and ground applications, inspection system • Promoting alternatives to HHPs • IPM field trials on selected crops • Experience sharing



CONTACT

Food and Agriculture Organization of the United Nations (FAO)

Viorel Gutu

Subregional Coordinator for Central Asia
and FAO Representative in Türkiye
Ankara, Türkiye

Tania Santivanez

Agriculture Officer
Lead Technical Office

Website:

<https://www.fao.org/in-action/pesticides-central-asia>



This project is funded by the Global Environment Facility (GEF).



Some rights reserved. This work is available under
a CC BY-NC-SA 3.0 IGO licence