



a toxics-free future

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International SAICM Implementation Project (ISIP)

In 2010, in an effort to demonstrate SAICM implementation via IPEN Participating Organizations, IPEN launched an International SAICM Implementation Project, also known as ISIP. ISIP aims to mobilize resources for initial enabling activities pertaining to national priorities, in keeping with the work areas set out in the strategic objectives of section IV of the SAICM Overarching Policy Strategy.

In particular, the ISIP supports the Governance objective of SAICM's Overarching Policy Strategy paragraph 26, which calls for enhanced "cooperation on the sound management of chemicals between Governments, the private sector and civil society at the national, regional and global levels."

In addition, ISIP builds on the 2008-2009 Global SAICM Outreach Campaign to raise awareness about SAICM and strengthen collaboration among the public interest, health and labor sectors.

ISIP Objectives

ISIP's four objectives include:

- Promoting the need for sound chemicals management
- Advancing National SAICM Implementation
- Promoting global SAICM implementation by global civil society
- Building capacity among NGOs developing countries and countries with economies in transition

Title of activity: Informing of rural communities and farmers on POPs in Kvemi Kartli region of Georgia.

NGO: ECOVISION –The Union for Sustainable Development

Country: Georgia

Date: June, 2012

Elements of SAICM Covered:

Identify, explain problem, make initial recommendations on how to address the problem, may be linked to public awareness-raising about the issue; Facilitate the identification and disposal of obsolete stocks of pesticides and other chemicals (47, 68)

Provide a physical description of the site

This region is located in the Caucasus region of Eurasia, at the crossroads of Western Asia and Eastern Europe, bounded to the west by the Black Sea, to the north by Russia, to the south by Turkey and Armenia, and to the southeast by Azerbaijan. The capital of Georgia is Tbilisi. Georgia covers a territory of 69,700 km² and its population

is almost 4.7 million. The Kura and the Rioni are the region's main rivers. The Kakhetia region in the southeastern part of Georgia has an area of 5000 km² (0.67% of Georgia).

The region is made up of 7 districts, 5 cities, and 80 villages. The cities are Telavi, Sagarejo, Rustavi, Gardabani, Akhmeta

The region has a continental climate with hot, dry summers and cold winters with little snow. Annual precipitation varies from about 500 mm in the northeast to 250 mm in the southeast. The average January temperature ranges from -8 °C to -12 °C, and the average July temperature is +23 °C. Most of the region is located in the dry steppe and semidesert zones. Soils are divided into five different zones: steppe black earth (chernozem), dry steppe light chestnut, dry steppe chestnut, semidesert light chestnut.

Give a history of the site

As it is known, Georgia is characterized by various climate conditions, agriculture and vegetable cover, which conditions a wide distribution of plant insects, diseases and weeds. Different chemical pesticides have always been used and currently are being used against them. The pesticides are also used in the communal farms and veterinaries against rodents and different parasites.

Based on the existing information, annual usage of pesticides until the 1990's comprises 30-35 thousand tons. The hectare coverage of their usage was also very big. A part of the pesticides have been produced locally and a great deal of it has been imported from abroad.

The regulations and norms of keeping, transporting and using pesticides have never been observed in the country and accordingly the factor of environment pollution was great. From the monitoring data we learn that composition of some pesticides (DDT, HQTSH, Treplan and others) exceeded 4-12 times, and sometimes 30-50 times, the margin of admitted concentration.

Unfortunately, due to the hardest socio-economic conditions created in our country, there has not been any systematic monitoring carried out since 1990, if we don't take into account certain investigations carried out within separate programs.

The hardest socio-economic and political situation was aggregated in 1990-1995, due to which the state management system of pesticides was disorganized at almost every stage of its application (industry, import, export, transit, transportation, maintenance, usage, neutralization). Import of pesticides was significantly decreased during this period and pesticides, including the out-of-date pesticides, collected during the Soviet Union collective farms, were used. Norms and requirements of their usage were violated. There has not been any state registration carried out.

Accumulation of POPs pesticides and especially of DDT began in the beginning of 70's due to their over-supply level in conditions of centralized system of economy. Keeping and storage of POPs was carried out in farms and small sized warehouses. The usage of the most widely spread pesticide –DDT- was limited in 1975 and its use was finally prohibited in 1980. The POPs pesticide resources have been left unused in big and small warehouses belonging to the private company "Sopkimia," or in the state agricultural institutions or farms.

Since 1970, when it was considered that pesticides were old fashioned and out of date, an overall initiation began to be implemented – collection of out-of-date pesticides and their placement in the hazardous waste disposal bunker underground, on the Ialghuja Mountain, Marneuli municipality, East Georgia.

The underground disposal bunker on the Ialghuja Mountain is located in loams, which is on the highest level among aboveground waters. Its geographical location is 41°30'42"N, 44°53'23"E, 700 m.a.s.l. It includes about 4 ha of the territory, 5 km away from the nearest settlement. There are about 10 buried disposal places/chambers in the Ialghuja out-of-date pesticide landfill site. Experts consider that the capacity of concrete chambers comprises nearly 400 tons and nearly 2700-3000 tons of out-of-date pesticides are placed here which demonstrates poor condition of the storage facility.

Placement of the outdated pesticides in the Ialghuja buried bunker was underway from 1976 to 1985, and based on the Decree of the Government acting at that time, the bunkers were officially closed on January 1, 1987.

In 2007 Georgia implemented a project with its own resources and with the assistance of international donors (Holland) that included collection of out-of-date pesticides and their temporal and safe disposal. The collected and outdated pesticides were placed in the excavated holes on the Ialghuja landfill site. Now even more than the 2700-3000 tons of pesticides are stored there.

Description of the chemical characterization

The outdated pesticides collected since the Soviet times and placed in the Ialghuja landfill represent a serious problem for Georgia. They penetrate into soil, ground and surface waters, having an influence on atmospheric precipitations, which seriously endangers human health and the environment.

In order to solve the problem, a program was proposed and approved in Georgia in 2003: "Preparation of the National Action Plan on Fulfillment of the Stockholm Convention on Persistent Organic Pollutants (POPs)". The program was financed by the Global Economical Fund (GEF) and has been implemented by the Ministry of Environment and Natural Resources in cooperation with the United Nations Development Program (UNDP).

Within the project framework, an inventory description of POPs, including pesticides, was carried out in Georgia in 2003-2007.

214 sites containing outdated and harmful pesticides have been estimated and the wastes have been removed from 46 sites. In total, 3057 tons of waste chemicals have been discovered, and 2700-3000 tons of them are located on the Ialghuja polygon for depositing poisonous chemicals. The rest of the 357 tons are located in the former warehouse industrial site of the country.

71 samples of unknown chemicals and 11 soil samples have been taken for the determination of POPs. The laboratory analysis showed that poisonous pollutants have been detected in 47 samples from 71 unknown samples of chemicals and in all 11 soil samples.

The outdated pesticides bunker located on the Ialghuja Mountain has been studied within the project framework. Unfortunately, the bunker itself was not found, and it is still

unclear how dangerous pesticides which had been buried there are. Based on the archived data, the outdated pesticides placed in the bunkers mainly contained DDT and other chemicals representing the iso-measures of different forms of HCH. It is also worth mentioning that during the functionality of the bunkers, chloride organic pesticides were widely used in Georgia, as has been evidenced by the laboratory analysis conducted on two samples, according to which -HCH and the existence of hepta-chloride has been confirmed. Nowadays, the pesticides placed in the bunkers are mixed with each other and have a shape of some unknown paste being mixed with another packing and dressing material.

The situation at the Ialghuja bunker became more aggravated when the outdated pesticides were placed there, collected from all over the Georgia and containing POPs. Placement of pesticides mixed with soil on the bunker surface – on quite a large area along the bunkers - was carried out in violation of environmental norms. According to the investigation carried out by P. Melikishvili Institute of Physics and Organic Chemistry, the analysis of the sample taken from the pesticides mixed with soil shows that the composition of chloride organic pesticides in them comprises 5-7%.

The procedure for verifying the national action plan by the Government has been delayed.

In 2010, the Ministry of Environment began development of a new project in Georgia with the United Nations Development program: Liquidation of POPs pesticides and preserving/conservation of outdated pesticides.

Meanwhile, in April 21, 2011, the following has been confirmed in accordance with Decree #907 of the Government of Georgia: National Action Plan on Persistent Organic Pollutants in Georgia.

Description of the environmental and health consequences

Placement of outdated pesticides in the Ialghuja bunker has been going on from 1976 till 1985 and nearly 2700-3000 tons of outdated pesticides have been put there. Nowadays, the bunkers are in a very devastated condition. The territory is not fenced, it is unprotected and the drainage trenches do not function properly. Livestock moves there freely, with complete access to the stacks of dangerous pesticides.

The pesticides, including POPs, penetrate into the soil, ground and surface waters, and in the air, which causes pollution of the environment and endangers the health of human beings and other living creatures.

There are pesticides and packing material (sacks, barrels) seen on the surface of the bunker and local people have been observed removing pesticides as well as the metal material have been observed. As a result, some people have been poisoned.

The Ialghuja bunker is closely located to the Marneuli Municipality villages: Algeti, Keshalo and Kesalo. The bunker is located directly on the livestock migration road, which is used by the shepherds of Dmanisi, Tetrtskaro and Stepantsminda Municipalities. According to the shepherds, there are incidents of livestock dying.

Meanwhile, the additional outdated pesticides penetrate into soil, ground and surface waters with the influence of atmospheric precipitations, which seriously endangers human health and the environment.

Description of who is responsible for the site

The Ialghuja bunker is located on the territory of Marneuli Municipality and belongs to the Municipality's property. The Ministry of Environment is responsible for the placement of dangerous wastes.

Description of the plans for cleanup

As we have mentioned above, the National Action Plan of POPs -pesticides was confirmed in 2011 based on the Decree of the Government of Georgia according to which neutralization of nearly 200 tons of pesticides was planned, though it is not clear how they will be separated from the mixed chemicals. Implementation of the plan is in the primary stage and the completion of the implementation group and consultations with public organizations are underway. Our organization plays an active role in the negotiation process, and we shall be represented with the rotation principle in the surveillance committee with other partner non-governmental organizations.

Proceeding from the above mentioned, and due to the fact that the project is in the initial phase and that the completion process is underway, our project is a precedent and represents a first stage to provide the population with the information concerning POPs and about the harmful impact of their spreading, especially for the shepherds who have to take out and draw the livestock near the bunker for grazing purposes.

Project Outcomes:

Description of the activity conducted

- o The project stakeholders were identified;
- o Questioning of farmers and suppliers (200 persons) on the types of pesticide types used in Georgia, amount per hectare, certification, supply, etc. was carried out;
- o Materials for the workshop were developed;
- o Stakeholder workshop on pesticides was organized in Marneuli;
- o Information leaflet on pesticides was published; and
- o Special issue of environmental newspaper "LITTORAL" fully dedicated to pesticide topic was published.

A workshop on the elimination of obsolete pesticide stockpiles in Jagluja was held in Marneuli with participation of local authorities, NGOs, and farmers.

The participants were provided information about IPEN and the project. Results of questioning were presented to the audience. According to rapid assessment, the absolute majority of rural population does not have any information about POPs.

Presentations about the history of pesticide origins, their hazardous character, safe use and storage were made by ECOVISION experts.

Information on related international conventions (Stockholm, Basel, Rotterdam) was provided.

Duties and obligation of national and local governments with regards to the above-mentioned conventions were introduced. Instructions in case of discovering hazardous chemicals were provided (how to act, whom to address).

Recommendations on how the local population could be involved in decision-making processes were introduced. Information materials (flyers and newspapers) were distributed among participants.

The meeting was covered with different means of mass media.

Impact on target groups:

A number of questions about identification and safe use of pesticides were asked during the workshop.

The participants asked for information about new technologies in replacement of pesticides in agriculture.

The local population requires fencing of areas where outdated pesticides are stored. They also requested to improve management of Ialghuja hazardous waste polygon. The meeting generated great interest among participants and supported strengthening of communication and public involvement at the local level.

The following conclusions were adopted:

The participants will distribute information materials among their communities.

ECOVISION will organise an additional meeting for local government representatives in case they plan any particular activity in related field.

ECOVISION will provide additional information and consultation for local government representatives.

Special recommendations will be elaborated to integrate topics on pesticides in educational and eco clubs programs.

Impact on target policies:

A project on utilization of pesticides from Ialghuja polygon has been implemented with financial support of UNDP/GEF - Project Disposal of POPs Pesticides and Initial Steps for Containment of Dumped POPs Pesticides in Georgia.

The local population is actively involved in the process. A stakeholder meeting with all stakeholders dealing with hazardous waste management issues was organized by UNDP Georgia.

Outreach to stakeholders:

The workshop was attended by environmental bodies, sanitary and epidemiological services, heads of agricultural and industrial facilities, and NGOs. ECOVISION has a history of cooperation and partnership with these stakeholders. It continues working with all of them on issues of obsolete pesticide stockpiles and other environmental issues of mutual concern.

Deliverables, outputs and/or products:

- Recommendation on economic development plans for the local municipality;
- Press-release for local media;
- Radio program on local and regional radio;
- Internet publication; and
- Dissemination of project outcomes via CENN Information Service.

Communication Efforts:

The following information materials were prepared to communicate the results of the workshop to the public:

- Press-release for local media;

- Leaflet for local population;
- Radio program on local and regional radio;
- Internet publication;
- Information about the project and its deliverables were disseminated via REC Caucasus; and
- Newspaper "ZGVISPIRETI."

SAICM National Focal Point:

SAICM National Focal point in Georgia Nino Tkhilava

NGO Recommendations for next steps:

- o Creation of national hot-line, in order to provide adequate information on pesticides and POPs;
- o Coordination of all projects dealing with chemical security in the country and creation of joint strategy;
- o Introduction of information on POPs in education and eco club programs;
- o To elaborate information materials on identification of hazardous substances in food and cosmetic goods.