



Health and Ecological Programmes around the Chernobyl Exclusion Zone

Context

The Chernobyl accident of 1986 has affected a large area surrounding the Nuclear Power Plant. In the most affected zone, the Chernobyl Exclusion Zone, no commercial activities are allowed today, and this zone is still not suitable for people to live. The radioactive contamination of the areas adjacent to the Exclusion Zone has resulted in health and ecological problems, affecting people living and working in these areas. According to a WHO report on the medical damages and consequences of the accident to the population of Ivankiv district, the morbidity in the region is twice higher than other surrounding districts. In this context, several healthcare projects in Ukraine were implemented by the European Union and other Donors in the past.

In 2011, at the proposal of the EU Parliament, the European Commission committed to further assist the Government of Ukraine in addressing the social impacts of the Chernobyl accident. A budget of 4.9 M€ was allocated to address health and ecological problems related to Chernobyl accident consequences.

Objectives

In order to tackle both the human health and the environmental issues, the programme was divided into 4 components:

- Training and coordination of health-related projects
- Supply of medical equipment and consumables
- Supply and installation of a greenhouse
- Supply and installation of a wood incinerator

The Greenhouse and Incinerator are intended to operate as pilot facilities. If they are successful, they should be replicated in other districts affected by the Chernobyl accident.

Results

Working in partnership with the Government of Ukraine and the local authorities in the city of Ivankiv, the European Union has supported the establishment of an infrastructure, aimed at facilitating the implementation of a long-term health study of children living within the Ivankiv region.

Training, coordination of health-related projects and supply of medical equipment

The Ivankiv Hospital has been equipped with state of the art equipment that will support the detailed health study of around 3000 children living in the region, whose ages range from pre-natal to 18 years. In order to properly monitor their health, with respect to the potential effects of everyday exposure to radiological hazards remaining from the 1986 Chernobyl accident, the children have been receiving regular medical examinations at the Hospital, by highly trained medical Ukrainian experts, utilising the equipment provided by the EU. In the longer term, it is hoped that the results of these examinations will provide doctors and health experts in the region, with crucial information and data to help mitigate the effects of radiation exposure on future generations.

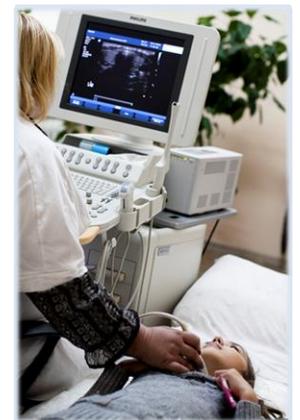


It is anticipated that through self-sustainability of the programme, as well as future support from the international Donors community, the Health Study will deliver the required results over a period of around twenty years.

In parallel with delivering state of the art medical and monitoring equipment, the Programme established:

- A laboratory for the control of the chemical composition of foodstuff,
- A laboratory for medical analysis,
- A well-equipped maternal and child sanitary service centre, together with maternal and child sanitary protection programmes,
- A 'New and Information Centre' and a 'Counselling Service on Hygiene and Nutrition' for people living within the Ivankiv Region,
- Up-to-date radiological mapping of the area.

In order to assure the integrity of the equipment and to provide a clean and sterile environment for doctors, medical workers and patients involved in the health study, rooms and areas of the hospital were also refurbished.





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Greenhouse

One of the key concerns regarding the children's health, is the consumption of home-grown and/or locally grown produce.



In order to show how the production and consumption of clean vegetables can improve the situation, a 7,500 M2 state of the art greenhouse was delivered as part of the programme.

This Greenhouse, which will be run as a commercial operation, will deliver around 15% of its annual produce free of charge, for consumption by those involved in the study. It is hoped that successful and profitable operation of this pilot project will attract further investment for the growth of clean produce in the area.



The greenhouse during the pilot operation period

Wood incinerator

Another major concern is the threat of further airborne radiological hazards resulting from fires in forest and contaminated grass lands, inside the Chernobyl Exclusion Zone.

This threat can be considerably reduced through extensive cleaning of the forest floor and application of modern practices in the maintenance of contaminated land areas. To this end, the programme delivered a wood incinerator, which is located within the city of Chernobyl, and is utilised for the burning of waste debris gathered during the maintenance and clean-up of forest and land areas within the Exclusion Zone.

The Incinerator is equipped with state of the art filters to prevent any potential dispersion of radionuclides. The ash, which is collected in special drums, its radiological content and levels are monitored and recorded by the Central Radwaste Management Enterprise. The Incinerator will also provide heating to the offices and work places of Organisations subordinate to the State Agency for the Management of the Exclusion Zone, located in the city of Chernobyl.

Assuming positive results in the monitoring and analysis

of waste ash and gasses from the operation of the incinerator, it is hoped that additional incinerators will be constructed within the Exclusion Zone.



Incineration Facility supplied

The colloquium for presentation of the results of the Health and ecological programmes around the Chernobyl Exclusion Zone was held on 10th July 2018. Presentations and materials of the colloquium are available on: www.iso.kiev.ua

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