

## **Long-Term Consequences of Chernobyl Catastrophe and Remediation Programs in Russia**

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Dear Ladies and Gentlemen!

Let me express our thanks to IAEA and UN organizations for making arrangements for and supporting fruitful activity of the Chernobyl Forum.

Unprecedented scale of radiological emergency at the Chernobyl Nuclear Power Plant (NPP) has set us a package of the most difficult tasks aimed to eliminate negative consequences and remediate a normal life in contaminated areas.

Due to the accident, above 56,000 square meters of the Russian Federation's territory, including about two million hectares of agricultural lands and about one million hectares of forest resources, were radioactively contaminated. The four regions, namely the Bryansk/Kaluga/Orel/Tula regions, were contaminated to the most extent. About three million people lived in those areas. More than 52,000 citizens were relocated in an organized way or resettled independently. Above 200,000 citizens of Russia were involved in elimination of emergency effects.

The Russian Federation (RF) Government has charged EMERCOM of Russia to coordinate activities on mitigation of consequences of the Chernobyl accident. The Ministry has undertaken the functions of a state customer of federal target programs for elimination of effects of radiological emergencies and catastrophes. Federal ministries and agencies, as well as executive authorities of the RF subjects are involved in implementation of the programs. Since 1998, joint Russian-Byelorussian projects to mitigate effects of the Chernobyl catastrophe have been under way.

Large-scale work on radiological/medical/social protection for the citizens and remediation of the lands has been performed within the scope of federal target programs. Since 1991, more than 5 billion USD has been spent on the activities to eliminate consequences of the accident, as well as to pay out benefits and compensations.

The key element of EMERCOM's policy is to comprehend the role of a radiation factor in the entire package of vital objectives. The result of it is that protective actions are directed towards the most contaminated areas and priority attention is focused on the development of a social sphere and health care.

The main program trends are as follows:

- Social and economic remediation of the areas;
- Public health protection;
- Radiation monitoring;
- Public exposure dose reduction;
- Remediation of agricultural/forest lands;
- Information activity and social-and-psychological rehabilitation of the public.

Let me summarize the results of our work. Almost a twenty-year experience in scale research and practical activities makes it possible to conclude that the severest consequences of the Chernobyl accident have affected the social sphere and not have developed as radiological events. Proper protective actions, mainly in agriculture and forestry, have been implemented only in the areas of the four most contaminated regions. The running foodstuff monitoring shows that it is only in the Bryansk and Kaluga regions that samples taken recently have not met radiological and hygienic requirements. As for the other areas, practically all foodstuffs did meet hygienic standards.

A considerable number of socially valuable objects, such as housing, schools, preschool institutions, gas and water supply networks, hospitals, polyclinics, gymnastic and sanitary complexes, etc., have been commissioned on contaminated lands.

A large scope of research has been performed in the area of radiation epidemiology, health care, radiation hygiene and agricultural radiology. The Russian state medical-and-dosimeter register covers the data of more than 600,000 people. The research results have contributed a lot into the work of the Chernobyl Forum.

Activities on information work and social-and-psychological rehabilitation are under way. The three Centers created jointly with UNESCO and designed for work with the public from the most affected areas, such as the Bryansk/Orel/Tula regions, have been in operation for more than 10 years. The Centers have won public confidence and gained considerable experience in social and

psychological assistance to different categories of people. The analysis of the Centers' activity in Russia has shown that they efficiently contribute to social tense reduction. To improve the public information work, a network of regional information-and- analytical centers is in process of creation. Their task is information and consulting assistance to the public in the items of radiation safety and a current status of the areas affected. The Russian-Byelorussian information center for Chernobyl issues has been established on the IBRAE RAS base. It will become part of the International Chernobyl Research and Information Network (ICRIN).

Of special significance are the activities served to draw attention of international public to the issues of affected regions, implementation of joint international projects on elimination of radiological emergency effects, rehabilitation of people and remediation of the areas.

For the two decades, international assistance and cooperation were of many-sided nature. They covered scientific cooperation and practical actions in the areas of health care, agriculture, information activity and other fields, as well as children's rehabilitation and many other humanitarian projects.

The Russian Federation highly appreciates the International Community's assistance rendered in the area of elimination of long-term effects of the Chernobyl catastrophe.

The most vital thing for successful mitigation of the catastrophe consequences is scientific justification for the strategy aimed to recover normal life activity in contaminated areas. Today, it is possible to state that basic forecasts elaborated by the international scientific community have proved to be correct. The conclusions and recommendations of the 1986 Viena conference; those of the 1991 International Chernobyl project; the Viena conference "10 years after Chernobyl"; joint projects of the Euro Commission; IPHEC project; as well as the results of activities under the Franco-German initiative, reports made by UN UNSCEAR and the UNDP Evaluation Commission work towards a common goal.

The Chernobyl Forum has set the task to systemize the entire volume of accumulated data and achieve an efficient scientific consensus on effects of the accident. The solution will allow us to move forward with more confidence. In the forthcoming days, we will have to consider basic results of the Forum's activity and outline future objectives.

As for the Forum's recommendations, they will, undoubtedly, be quite useful. Still, I would like to point out that it is not necessarily the case for scientific recommendations to be implemented immediately and fully. A scientific vision of the situation is only part of the problem. The state policy represents public compromise, and we ought to take into account all the liabilities taken by the state in part of social protection for the citizens affected by the accident. Overall, all the activities run in the Russian Federation to mitigate the Chernobyl catastrophe consequences adhere to the Chernobyl Forum's recommendations which represent an integral system of measures for eliminating medical, ecological and social-and-economic consequences of the Chernobyl accident.

For the period of almost twenty years that have passed since the Chernobyl catastrophe, a huge and scale work has been performed to rehabilitate the public and remediate the areas affected by radiation. Nevertheless, due to the long-term nature of consequences dealt with long-lasting radioactive contamination and distant medical effects for public health, the issue of checking and agreeing results of the research will remain on the agenda in future.

Popularization of the Chernobyl Forum's results should be mentioned as one of the urgent objectives for the nearest future. Our experience shows that the task to harmonize radiation risk perception is extremely difficult.

I would like to point out another significant trend in international cooperation, which is an increase in preparedness to radiological emergency response. This task is beyond the Forum's framework; however, it is of vital importance under conditions of new threats and challenges of the civilization. EMERCOM of Russia's experience in the area and readiness for international cooperation are well known.

To conclude, on behalf of EMERCOM of Russia's Minister S.K. Shoigu, I wish all participants of the Forum a successful and fruitful work for the sake of well-being and health of those people who have suffered in the Chernobyl catastrophe. We hope that cooperation within the Chernobyl Forum's framework will provide an effective solution for the issues we are facing with respect to elimination of consequences of the Chernobyl accident.

Thank you for attention.