



IAEA

Atoms for Peace: The First Half Century

1957-2007

Rehabilitating agricultural products from the territories affected by the 1986 accident at Chernobyl

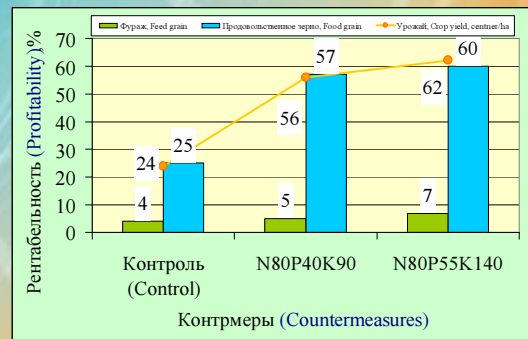
The challenge...

Some 190 000 hectares of agricultural lands in the larger area of Gomel, Belarus, were contaminated with radioactive material as a result of the accident at the Chernobyl power plant. Most of these lands are concentrated in the Khoinitsky, Bragin and Narovla districts, where grain harvests can rise to between 20 000 and 30 000 tonnes every year. Measurements have shown levels of radioactivity in the grain that exceed the safety limit, owing to the presence of strontium-90.



The project...

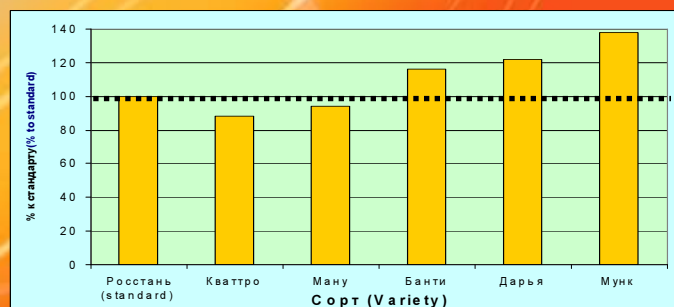
Grain production has traditionally been an important focus of agriculture in Belarus. Cultivation of winter wheat is particularly important to the farming economy. The IAEA and its counterparts, the local authorities and the Research Institute for Soil Science and Agrochemistry of Belarus, applied agrochemical countermeasures to reduce the strontium content in grain to safe levels. In addition, to solve the problem of contaminated grain, a demonstration flour production unit was established, which used local grain, with strict monitoring for ^{90}Sr and ^{137}Cs . IAEA support has laid the groundwork for a flour production unit and a laboratory for radiological quality control and analysis of both raw materials and end products, in line with international standards.



Profitability of winter wheat cultivation

The impact...

The technologies introduced through this project have enabled the establishment of a grain mill that delivers high quality and radiologically clean flour, safe for human consumption. By providing jobs and working with locally produced agricultural materials, this project contributes significantly to socioeconomic development in the region.



^{90}Sr uptake by grain of wheat varieties