



SAD STATE OF THE DNIPRO RIVER

The Dnipro River is the third largest river in Europe. It has its source in the Smolensk region of the Russian Federation and flows through the states of Belarus and Ukraine. With an area of some 300,000 square kilometres, the river basin covers 11 counties in Russia and Belarus and 19 oblasts in Ukraine.

Ukraine is a densely populated country (pop. 53 million) with some of the world's richest farmlands and a high level of industrialization. The Dnipro is the country's main watercourse for supplying water to irrigation and industry as well as being a transportation artery, with large river ports, linking the Black Sea through Ukraine to Belarus and Russia. Beginning in the 1920's, and culminating in the 1950-60's, six major reservoirs, together termed a "cascade," were built on the Dnipro river to provide hydropower and irrigation water to the farm belt and by means of canals, to the drier lands of southern Ukraine and Crimea. The current flow of the Dnipro has been reduced by nearly one-half of its original flow at its mouth because of these water demands.

The Dnipro river is extremely polluted with nearly 20 billion cubic meters of untreated effluent being dumped into the river each year. This represents over a third of the annual flowthrough of some 52 billion cubic meters. Nearly 3 billion cubic meters of this effluent is toxic. The Dnipro carries nuclear runoff from the Chernobyl region down into the Black Sea.

The costs of this environmental degradation are enormous. In 1989, the Supreme Soviet Environmental Committee reported that 80 percent of the diseases in the USSR relate, directly or indirectly, to environmental problems. Unchecked pollution will continue to retard agricultural and industrial production and labour activity. The physical infrastructure will continue to run down.

The Ukrainian government has given a high priority to the rehabilitation of the Dnipro and requested assistance for this activity. The International Development Research Centre and the Bureau of Assistance for Central and Eastern Europe have cooperated in developing this program.

**WATER POLLUTION CONTROL
CRITICAL TO UKRAINE**

IDRC LAUNCHES MAJOR PROGRAM TO REHABILITATE DNIPRO RIVER BASIN

Ukraine is the most environmentally degraded republic of the former Soviet Union, with 70 percent of its population living in environmentally dangerous areas. Environmental degradation in Ukraine includes contamination by radiation from the Chernobyl nuclear disaster, excessive use of toxic pesticides and herbicides in agriculture, soil salinization from irrigation, and high level of air pollution.

The contamination of the water supply is especially serious because Ukraine has limited sources of fresh water. The average amount of fresh water per capita is well below the average levels available in the former Soviet Union. The most important source of water is the Dnipro river, which drains some 60 percent of the surface area of Ukraine and provides

drinking water to some 70 percent of the population.

Current pollution levels of the Dnipro River, both surface and groundwater, impose major economic and health risk constraints upon water use, thereby limiting options for future development. Of principal concern are wastewater from:

Large Urban areas: especially the cities of Zaporizhzhia, Dnipropetrovsk, Zhitomir, and Dniprodzerzhinsk. Large urban areas often have malfunctioning wastewater treatment plants, and smaller municipalities have none at all. The current economic climate in Ukraine places major constraints on upgrading of existing treatment facilities, or the construction of new works.



Majestic but polluted Dnipro River flowing through Kyiv.