REPUBLIC OF MOLDOVA: AGRICULTURAL POLLUTION CONTROL PROJECT

Project Objectives: The overall objective of the Agricultural Pollution Control Project (APCP) is to reduce nutrient (N&P) pollution from agricultural sources in Moldova to the Danube River and Black Sea. In support of this objective, the project will assist the Government of Moldova to: (i) promote the adoption of environment-friendly practices in crop and livestock production and in rural agro-industries that contribute to nutrient pollution, including wetland and integrated watershed management; (ii) strengthen national policy, regulatory and institutional capacity for agricultural nutrient pollution control and organic farming; and (iii) promote a broad public awareness campaign and replication strategy. The Project would be closely associated with the US\$40 million IDA-funded Rural Investment and Services Project (RISP) (for which negotiations between the Government of Moldova and the World Bank were completed May 3, 2002) and will mainstream environmental concerns into agricultural practices. The proposed project would also assist the Government of Moldova in harmonizing its legislative framework with relevant European Union (EU) directives, and in honoring its international commitments to reduce nutrient loads to the Danube River and Black Sea.

The ultimate goal is to reduce the discharge of nutrients into the Danube River and Black Sea through integrated land and water management. Project activities are directly linked to the "Strategic Action Plan for the Protection and Rehabilitation of the Black Sea" (BSSAP), formulated with the assistance of the Global Environment Facility (GEF). The Project's objective of reducing non-point source pollution is consistent with OP No. 8, Water-body based Operational Program, which focuses mainly on threatened water bodies and the most important trans-boundary threats to their ecosystems.

<u>Project Description</u>: The APCP project will support activities under four components to be implemented over five years as follows:

(i) **Promotion of Environment-friendly Practices**. This component would be implemented at two levels: first, at the national level in conjunction with the Rural Investment Services Project's components for rural support services, business development, and rural finance; second, in a pilot watershed area comprising part of the Lapusna tributary of the Prut river, where an integrated watershed management plan will be implemented

In conjunction with the RISP components for business development and rural finance, the APCP would provide assistance to agro-industry with implementing measures to prevent environmental pollution. Entrepreneurs/enterprises who borrow under RISP (individual farmers, farmers organizations, co-operatives and agricultural processors) and wish to invest in environmentally sustainable agricultural practices, would receive a grant from the GEF fund to offset the incremental cost of nutrient reduction investments. The GEF facilities will provide a matching grant fund of US\$2 million to support the Special Credit Line of the RISP. The credit-grant package would be administered by local commercial credit institutions that participate in the RISP and the mechanism for identification of projects and financial support by banks for RISP credit is well developed. The eligibility criteria for the provision of a GEF grant will be primarily to support those activities that will reduce the nutrient loads in water bodies. The mechanism for APCP support, including screening for eligibility, would be developed during preparation.

With regard to the adoption of environment-friendly agricultural practices on agricultural land at the national level (total agricultural area of 2.3 million hectares), the APCP would provide training for rural advisory service providers in, inter alia, nutrient management, conservation tillage, efficient manure management practices, promotion of organic farming, buffer strips along rivers etc.

This component would also prepare and implement an integrated watershed management plan for the Lapusna tributary of the Prut River in the Lower Prut Basin, with the objective of reducing nutrient loads into the Prut River through nutrient filtration and reduction of the erosion of nutrient

containing soil, as well as biodiversity conservation. The selected Pilot Watershed Area covers eight comunas in the Lapusna Judet located 30 km to the south west of Chisinau, and comprises about 50,000 hectares with a population of more than 43,000, or 14,000 households, in 18 villages. The area has a variety of cropping (vegetables, arable, vineyards, orchards and grassland) and livestock; livestock are kept around the house and close to shallow wells that are a source of drinking water. They are an important source of livelihood in the villages. The handling of livestock waste is a major challenge for the small, resource poor farmers. Soil erosion and loss of forest areas are also affecting the environment and nutrient load. A baseline household survey and a needs assessment have been completed as part of initial project preparation and confirm the priority accorded by the population to tackling waste management at the village level. In addition to investments in waste management, a package of environment-friendly agricultural practices would be demonstrated and a soil and water quality monitoring system set up to quantify the impact of improved practices on reducing nutrient discharge.

- (ii) National Level Strengthening of Policy and Regulatory Capacity. The project will support strengthening of the national legislative, regulatory and institutional capacity of the government of Moldova in agricultural pollution control. It would include assistance for harmonising local and national legislation with EU's directives on environmental pollution control, including the Nitrates Directive (91/676/EEC). Opportunities for promoting environmentally sound and sustainable agriculture, particularly the promotion of organic farming, would be developed including certification procedures for export. Activities under this component would increase capacity of the government for addressing agricultural pollution control measures and honouring its international commitments to reduce pollution to the Danube River and Black Sea. Monitoring and evaluation mechanisms will be developed during project preparation to gauge the effectiveness of project measures in reducing the nutrient loads that flow into the Danube tributaries.
- Public Awareness and Replication Strategy. A broad local and nationwide public information (iii) campaign will be undertaken to disseminate the benefits of proposed project activities and achieve replicability of the same. Local level activities will relate both to the experience of adoption of environment-friendly practices in conjunction with RISP across the country, as well as in the pilot watershed. At the local level, the main audience will be the direct stakeholders of the project (local and county officials, farmers, community groups and NGOs). The objective of the activity will be to familiarize the population and help induce the behavioural changes necessary to the success of the project. The efforts at the national level would concentrate on institutions and groups (Government agencies, national environmental or professional associations, academia, NGOs, etc.) and the population at large that may develop and build a general good-will for the project and its benefits, and raise the interest of potential future clients. Leveraging RISP project funds would improve the replicability of these practices among agricultural enterprises nation-wide. The project will provide for the organization of national and regional workshops, field trips, visits, training, publication in international agriculture and environmental journals and other activities to promote replication of project activities in other similar areas of Moldova as well as Black Sea riparian countries. Watershed modelling based on developing management strategies from experience in the pilot watershed area, would be a component of the replication strategy. The project will work closely with ongoing similar efforts in Georgia, Bulgaria, Poland, Romania and Turkey, and the exchange of experiences will help in contributing significant reductions in the nutrient loads entering the Danube River and Black Sea.
- (iv) **Project Management Unit**. A Project Management Unit will be established with CAPMU. The GEF funds would provide support for hiring relevant staff to implement APCP activities in conjunction with RISP.

<u>Stage of the project:</u> Project preparation (PDF – B) officially started on October 30, 2001. A Project Preparation Unit has been established in November, including project manager, manager assistant, secretary/translator and a driver. The local experts were selected and hired in March 2002.

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APCP is indeed considered a unique project for Moldova due to the specific long term objectives to achieve. It is expected to have direct and measurable effect both in terms of ecological impact on water and soil quality in the pilot area and socio-economic as well. In this sense, development of a scientifically and technically well grounded manure management system or promotion of environment-friendly agricultural practices require the implication of large range of different central and local agencies. One of the main challenges for PPU was the identification of potential partners among public organizations, scientific institutions as well as non-governmental organizations. During the inception phase different meetings with officials from the Government, Ministry of Ecology, Ministry of Agriculture and other public agencies were conducted. It was important to avoid any misunderstanding which could negatively influence project preparation process. Ecological requirements are compatible with economic development provided there are appropriate socio-economic and public behavior conditions. In the Republic of Moldova deeply affected by economic difficulties sustainable development which means, among others, the rational use of natural heritage is rather a declarative than an applied strategic policy. Often de reforms are slowed down by the lack of coordination between different ministries/agencies and even by group interests as well. That is why, it was vitally important to get the official engagement of high level policymakers.

In the watershed project pilot area PPU has developed a large awareness campaign practically involving all local stakeholders. Two seminars were conducted in different comunas both of them having been leaded by the Prefect of Lapusna Judet. At the seminars were invited the mayors, individual farmers and leaders of farmer associations, teachers and other representatives of social groups which have had a day-to-day influence on local people. The major scope of these meetings was to raise public awareness on the project objective and to identify the community understanding and needs in a feedback manner. The World Bank's mission leaded by Mr. Jitendra Srivastava had the opportunity to assess the willingness as well as readiness of local communities to participate in project preparation and respectively in project implementation process. The seminars were broadly reflected in local and central mass-media.

A local coordination committee represented by the Judet Prefecture, agricultural and health departments, local environmental agency as well as mayors of comunas was established. It has only a recommending competence but his role in project preparation and implementation as well is expected to be of a tremendous importance taking into the large spectrum of specific project objectives and stakeholders involved.

As APCP has had a pronounced local character, the experts engaged were required to work in close relationship with local stakeholders. Practically, each of basic document is addressed to some concrete objectives. During the last five months the following Working Papers were prepared:

- 1. Basic Data on Pilot Watershed Area.
- 2. Community Needs Assessment.
- 3. Baseline Household Survey.
- 4. Testing/demonstration program for environment-friendly agricultural practices.
- 5. Manure Management System.
- 6. Shrub & Tree Planting Program.
- 7. Wetlands Management program.
- 8. Water and Soil Quality Monitoring Program.
- 9. National Level Strengthening of Policy & Regulatory Capacity.
- 10. Public Awareness Program

Cost evaluation of designed actions is one of the most important and intricate issue as well. In this sense, the experts had carefully to prioritize the activities proposed otherwise there have been the risk to planned some measures which later would proved to be financially and technically

unsupported. This also refers to local contribution. One the one side it is vitally necessary to get as much as possible local means (financial and/or in-kind contribution) which might be treated as tool to raise the responsibility of stakeholders but on the other side that contribution must be realistic in terms of its availability. The Ministries and local authorities, first of all the Ministry of Agriculture and Ministry of Ecology and local Mayoralties should be the guaranty of project preparation and implementation at the national level (replicability) and local level in pilot watershed area.

Summarizing the above it is worth mentioning the following:

- despite APCP has a concrete objective it is a complex project which requires a well grounded approach of a large range of ecological, socio-economic, cultural and other factors:
- a wide awareness campaigned both at governmental and local level should be developed in order to ensure the right understanding of project objectives among decision-makers and common local people;
- it's important to get indeed involvement of all responsible agencies, including the Parliament, Government, Ministries, local authorities and other stakeholders;
- PPU should foresee and keep under control any possible internal and out of the project risks in order to avoid or at least to mitigate their negative impact on project development process.

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