INTERNATIONAL WATERS RESULTS NOTES

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Turkey: Anatolia Watershed Rehabilitation Project

GEFID#: 1074, GEF Agency Project ID#: P075995; Project Status: Active

1. **Reduction in nutrient loads to local soil and water bodies in target micro-catchment areas:** Installation of manure management systems, including construction of manure platforms, adequate manure storage facilities and training in optimum application of manure as fertilizers as well as implementation of environmentally friendly agricultural practices such as shrub and tree planting is leading to decreases in nutrient loads entering soil and water bodies from agricultural sources.

2. **Increased awareness and adoption of environmental friendly agricultural practices** : A broad public awareness program of project benefits is resulting in a significant increase in the percentage of farmers recognizing the importance of mainstreaming environmental considerations in agriculture and implementing environmentally friendly agricultural practices.

3. **Increased organic farming, leading to increased marketing of organic products and improved household incomes.**

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PROJECT OBJECTIVE

The project's overall development objective is to support sustainable natural resource management practices in 28 micro-catchments in Anatolia and Turkey's Black Sea Region and thereby raise incomes of communities affected by resource degradation.

The key global environment objective is to introduce farming practices which will reduce the discharge of agricultural nutrients into surface and ground water in watersheds draining into the Black Sea in four provinces.

RESULTS: PROCESS

INDICATOR #1: **Development of a legal framework consistent with the EU Nitrates Directive for good agricultural practices.** Turkish legislation with respect to nitrates pollution has been harmonized with the EU Nitrates Directive. Institutional and regulatory mechanisms are in place supporting water quality monitoring program which has been mainstreamed into Ministry operations.

INDICATOR #2: **Increased public awareness of causes, effects and mitigating measures of natural resource degradation in participating MC communities**. A public awareness program has been developed; implementation of the program has been undertaken in all 28 pilot micro-catchments targeted under the project.

RESULTS: STRESS REDUCTION

INDICATOR#1: **Increased number of farmers in project area adopting environmentally friendly agricultural practices towards nutrient discharge reduction**. During project preparation, surveys indicated that virtually no farmers in project micro-catchments were processing or using manure or efficiently; insignificant measures were in place for reducing nutrient discharge. To date, the project has trained 90% (3,500) people in nutrient management practices. A significant number of farmers are now implementing environmentally friendly agricultural practices. There is a large increase in vegetative cover; crop productivity, as a proxy for soil fertility, has also increased (ranging between 30% and 145% depending on variety); training in organic farming has resulted in sustainable use of manure as fertilizer and increased marketing of organic products, resulting in improved incomes.

INDICATOR#2: **Agricultural pollution into the Black Sea is reduced in pilot micro-catchments and efforts are underway to scale up these investments.** Project activities, including, *inter alia*, the development and adoption of packages of investments and practices for nutrient discharge reduction, development and implementation of a water quality monitoring program, development and enforcement of legal institutional and regulatory mechanisms which has been mainstreamed into ministry operations and an effective public awareness program are contributing to reductions in nutrient loads entering soil and water bodies in the project area. A replication strategy is under preparation as part of the National Watershed Management Strategy.

RESULTS: WATER RESOURCE AND ENVIRONMENTAL STATUS

With a significant increase in the adoption of environmentally friendly agricultural practices through project support, it is expected that the intended objective of the project, i.e. reduction in nutrient loads to local soil and water bodies in the targeted micro-catchment areas, would be met. The project closes in June 2012; the impact evaluation will be undertaken at that time to assess the level of N and P reductions through project interventions and improvements in the quality of water entering the Black Sea.

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