UTF/URU/025/URU Gestión Pesquera en Uruguay

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The Government of Uruguay and FAO signed a Unilateral Trust Fund (UTF) Agreement in July 2007 for a three-year Fisheries Management Project that aims to improve sustainable Fisheries and Aquaculture Development in Uruguay through the following:

1. restructuring and modernizing the institutional framework of DINARA (Dirección Nacional de Recursos Acuáticos);

2. providing capacity building to the production sector to secure high quality and hygienic standards of all fishery products, including modern labor safety provisions;

3. implementing a robust management system based on development policies and application of scientific findings on fisheries, e.g. effective exploitation schemes, minimizing capture losses and diversifying catches;

4. reorganizing the artisanal fisheries sector including implementation of a new institutional management structure; and

5. developing aquaculture as an alternative production.

This US$5.81 million project is entirely funded by the Government of Uruguay and not supported by the World Bank as erroneously reported in FAN 36, Dec. 2006.

Pre-project situation is briefly described below:

Industrial fisheries:
The industrial fleet has some 120 boats employing 1 800 persons and catching 97 percent of the total, out of which 80 percent is exported. From Uruguay's 11.930 km² EEZ, the country catches some 120 000 tonnes/year and exports fishery products valued at US$170 million (2006 data). Five most important fish species are: common hake *Merluccius hubbsi*, whitemouth croaker *Micropogonias furnieri,* stripped weakfish *Cynoscion guatucupa*, Argentine croaker *Umbrina canosai* and long-tailed hake *Macruronus magellanicus*. Global overfishing trend also affects Uruguay and above-mentioned species are fully exploited or overfished. Same situation exist for non-traditional catches, like red deep-sea *crab Chaceon (Geryon) quinquedens.* Demersal catches have gone down; the mean trophic level of landings decreased and fishing in balance index (FIB) decreased since 1997.

Artisanal fisheries:
Thus far, fisheries development policy have largely ignored artisanal sector catching only 3 percent of the total, i.e. some 3 000-4 000 tonnes/year. The artisanal sector employs almost equal number of fishers as the industrial sector and catch is an important source of fish for local consumers, although local fish consumption is very low (below 8 kg/capita). Unfortunately, previous efforts to improve artisanal fisheries for instance by supporting cooperatives has not worked as well as expected. Relatively easy free access and low capital investment requiring artisanal operations attracted too many unemployed people into fishing and it became difficult to manage and/or to regulate. Participatory fisheries management may serve as a potential solution to the current situation, using lessons learned in Asia and Africa.

Commercialization:
Two thirds of production is exported frozen and 20 percent as fresh/chilled. The rest is made as fish meal/fish oil, canned or smoked. Eighty percent of fish is frozen without filleting. The project's concern will be the quality of products. DINARA is not an internationally accredited reference laboratory. The Uruguay Technical Laboratory (LATU, Laboratorio Tecnologico del Uruguay) is the only

internationally accredited laboratory in the country.

Institutional framework:
DINARA is responsible for evaluating fisheries resources and aquaculture. First and foremost, the project has to establish new law and long-term fisheries and aquaculture development policies based on relevant scientific and economic observations. Today, many management decisions are based on research data which are more than 20 years old. In addition, an economic programme is needed, but DINARA lacks sufficient capacity in statistical analysis and in processing socio-economic data. DINARA has very few postgraduates, so the capacity of scientific staff needs to be improved. While the sanitary inspection has enough personnel, they are not fully familiar with Hazard Analysis and Critical Control Point definitions. New focus will be needed for inspection, particularly on board operations. Fishing data collection quality must be improved and must be computerized. A lot of data from the last 30 years exists, but is not programmed for automatic use. DINARA needs to increase its visibility through new audiovisual information campaigns and these materials have to be produced with the help of the project.

Aquaculture:
The first National Plan for Aquaculture Development was developed in 1975; a new plan has now been drafted under the FAO project: TCP/URU/3101 – Plan Nacional de Desarrollo de Acuicultura (See FAN 36, Dec. 2006). This UTF project will facilitate follow-up TCP activities to finalize scientific policy and long-term development plan for aquaculture in Uruguay. Very limited aquaculture activities have been developed in the country and production has been less than 100 tonnes/year in the

past years. Currently cultured species include black catfish *Rhamdia quelen*, pejerrey *Odontesthes bonariensis*, bullfrog *Rana catesbeiana*, Australian red claw or tropical blue crayfish *Cherax quadricarinatus*, common carp *Cyprinus carpio* and grass carp *Ctenopharyngodon idella*, Tilapia (*Oreochromis* sp.), etc. and various ornamental freshwater fish species. There is, however, one commercial size farm, which cultivates Siberian sturgeon *Acipenser baerii* in 4 000 m² raceways. In 2004, this farm exported 1.3 tonnes of caviar and 10 tonnes of sturgeon meat. In the very near future, the Black River Sturgeons (Esturiones del Rio Negro S.A.) expects to produce 20 tonnes of Black River Caviar and some 150 tonnes of sturgeon meat. The first management committee meeting of the project took place on 15th of August 2007; FAO was represented in this committee by Jordi Lleonart, FIRM and Heimo Mikkola, FAOR.

Further information about the project can be obtained by writing to the authors.

Recently held and upcoming meetings on aquaculture organized and co-organized by The Fisheries and Aquaculture Department

- FAO Expert Consultation on Assessment of socio-economic impacts of aquaculture, 4-8 February 2008, Ankara, Turkey
- FAO Expert Meeting: Climate-related Transboundary Pests and Diseases including Relevant Aquatic Species, 25-27 February 2008, Rome, Italy
- FAO Expert Consultation on Improving Planning and Policy Development in Aquaculture, 26-29 February 2008, Rome, Italy
- FAO/NACA/SCA/DFID Expert Workshop on Guidelines for Aquaculture Certification, 28-29 February 2008, London, UK
- SBBSTA 13 Side Event on Aquaculture and Biodiversity, 21 February 2008, Rome, Italy
- TCP/BiH/3101 Training/Workshop 5: Surveillance and Diagnostics, 24-28 March 2008, Sarajevo, Bosnia and Herzegovina