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CENTRAL ASIAN AND CAUCASUS REGIONAL FISHERIES AND AQUACULTURE COMMISSION						
INAUGURAL MEETING						
Istanbul, Turkey, 19-21 December 2011						
INTERIM SCIENTIFIC AND TECHNICAL ADVICE TO THE COMMISSION						

INTRODUCTION

1. This document provides the background information on the scientific and technical advice prepared by regional experts for the Central Asian and Caucasus Regional Fisheries and Aquaculture Commission. The advice was prepared after the official establishment of the Commission in December 2010 and was produced with technical and financial support from the Central Asia Regional Programme for Fisheries and Aquaculture Development (FishDev–Central Asia), FAO Technical Cooperation Programme project “Capacity building for the recovery and management of the sturgeon fisheries of the Caspian Sea (TCP/INT/3101) and the FAO Regular Programme.

2. The document needs to be read in conjunction with other related documents, namely the Establishment of the Technical Advisory Committee (TAC) (CACFish:I/2011/3) and the 5-year Regional Work Programme (2011-2015) of the Commission (CACFish:I/2011/5).

3. The interim scientific and technical advice was presented to the Fourth Intergovernmental Meeting on the Establishment of the Central Asian and Caucasus Regional Fisheries and Aquaculture Commission, which was held in Cholpon Ata, on the shores of Lake Issyk Kul, Kyrgyzstan, 22-24 June 2011. Delegations from eight countries (Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkey and Ukraine) and an observer from the Caspian Environment Programme (CaspEco) attended this meeting. The Meeting adopted the interim scientific and technical advice and called upon the experts in the region to send their comments and suggestions to the Secretariat for including in the final versions of the documents. The Meeting recommended the FAO Secretariat to submit document to the Inaugural Meeting of the Commission for official endorsement by the Central Asian and Caucasus Regional Fisheries and Aquaculture Commission and in support of region-wide implementation. In the next sections the abstracts of the documents are presented. The full versions are made available as well.

Technical Guidelines on Sturgeon Hatchery Practices and Hatchery Management for Release

4. Sturgeon hatcheries play an important role in the rehabilitation of the sturgeon stocks in the Caspian Sea and elsewhere. Since the demise of the Soviet Union in 1991, a large part of the experience, knowhow, and specific knowledge on sturgeon hatchery practices and management in the

Caspian Sea basin has disappeared, while research and knowledge on sturgeon and hatchery practices in other regions has advanced rapidly in the last decades.

5. Sturgeon restocking practices that resulted in limited success have caused a critical re-assessment of the entire culture process, the strategies applied for conservation culture, the design of rehabilitation programmes, the design of hatcheries and the mode of their operation. These Technical guidelines aim to increase global awareness, technically guide and build capacity about the best-practices currently available in sturgeon hatchery management, by providing senior and mid-level sturgeon hatchery staff a practical tool for modern sturgeon hatchery practices and management. These technical guidelines focus on hatchery practices that are aimed at reproduction and growth of fry and fingerlings for restocking objectives.

6. The guidelines address a wide range of issues, including: hatchery design and location, collection and transportation of wild breeders, selection and maintenance of broodstock, tagging of sturgeon, water quality and supply, feeding and feed quality, selection of breeders for controlled reproduction, spawning and gamete processing, rearing of larvae and juveniles in tanks, rearing of juveniles in the ponds, release of fingerlings, sanitary and hygiene measures, hatchery documentation, hatchery maintenance and repair, staff and labour issues, monitoring and research, social and environmental responsibility, international regulations and conventions on sturgeons, and implementation and updating of these guidelines.

7. They provide specific guidelines, justifications for these guidelines and make suggestions to support their implementation. The guidance provided is based on the FAO Code of Conduct for Responsible Fisheries (1995) and contributes to the implementation of the Ramsar Declaration on Global Sturgeon Conservation (2006). As such, these Technical Guidelines are part of the capacity building and awareness raising efforts of the partners involved in their preparation, including FAO, WSCS, IUCN, CaspEco, UNDP, ISS6, World Bank, IHE and CACFish, to increase the success of sturgeon hatchery practices for release purposes.

8. The Technical Guidelines will be published in early 2012 as FAO Fisheries and Aquaculture Technical Paper. The main authors of these Technical Guidelines are: Chebanov, M.; Rosenthal, H.; Gessner, J.; Van Anrooy, R.; Doukakis, P.; Pourkazemi, and M.; Williot, P.

Feasibility of Restocking and Culture-based Fisheries in Central Asia

9. Culture-based fisheries have been successfully developed across the world in order to increase productivity of capture fisheries, with five to tenfold increases in productivity per hectare not uncommon. Fish farming too has shown to be an important contributor to national food security, rural employment and income generation.

10. Unfortunately, political upheaval, the disruption of historic fish supply chains and limited state budgets have combined to halt many of the restocking and culture-based fisheries programmes in the Central Asian and Caucasus region during the 1990s. This is unfortunate, as a number of important waterbodies in the region offer great potential for such activities. As a consequence, this study was tasked with providing an overview of regional waterbodies and historic and contemporary culture-based fisheries and restocking experiences—using case studies from Kazakhstan, Kyrgyzstan and Uzbekistan—with a view to suggesting potential ways in which national governments and the Central Asian and Caucasus Regional Fisheries and Aquaculture Commission (CACFish) might support the rehabilitation of culture (and, by extension, capture) fisheries in the region.

11. Seven overarching principles are identified (i.e. ecosystem compatibility, compatibility with other uses, best available science and information, social and economic benefits, collaboration with the culture production sector, the regulatory process, public information) and accompanying recommendations are made to guide culture-based activity and restocking in the region.

Better Management Practices for Carp Production in Central and Eastern Europe, Caucasus and Central Asia

12. Common carp is the most widely cultured Cyprinid. It is indigenous to Eurasia, but has been introduced practically everywhere outside its native geographical and climatic range. For centuries, common carp was the main species of the fish ponds of Europe and Central Asia. Today, it remains the best choice for utilizing fish pond resources under the temperate climate of Central and Eastern Europe, the Caucasus and Central Asia. In the countries of these regions, carp is produced in polyculture where the application of BMPs could significantly contribute to the physical and financial development of its producers and the health of the environment.

13. This guide describes and explains the key biological, technical, economic, social and environmental aspects BMPs of carp production. The topics have been chosen because there are many benefits to the aquaculture sector and to its stakeholders in adopting BMPs. Reduced public cost of managing the sector, higher production efficiency, better access to markets, increased profitability and improved image and reputation of the fish farms and their representation are among them. The establishment and maintenance of efficient fish farm facilities and infrastructure and the optimum utilization of feeds and other production inputs require skilled and knowledgeable farm managers and workers. These create the preconditions for a successful and sustainable carp aquaculture.

14. This document deals with the related BMPs of advanced fry and grow-out production of carp in general and of common carp in particular. These are presented together with the related activities in a systematic, concise and easy to read format. Natural culture of carp and the biological control of water weeds with carps are special polyculture production systems. Their BMPs are also discussed. Although at present the production of common carp is feasible only in pond polyculture, this document also presents useful and practical information about monoculture and intensive culture of carp in tanks and cages.

15. The BMP will be published in 2011 or early 2012 as FAO Fisheries and Aquaculture Technical Paper. The main authors of the BMPs are Woynarovich, A.; Bueno, P.B.; Altan, Ö.; Jeney, Zs.; Reantaso, M.; Xinhua, Y.; and Van Anrooy, R.

Regional Workshop on Fishery and Aquaculture Statistics, Information, and Trends: Improving Data Collection, Analyses and Dissemination

16. The workshop was held in Antalya-Turkey, from 12th to 14th April 2011 under the FishDev–Central Asia aimed at facilitate the effective generation and the use of fishery information and statistics as a foundation of sound policy development and responsible fisheries management in Central Asian and Caucasus Region. The findings of the workshop indicate that the region lacks fisheries data and information particularly for fisheries resource management and socio economics. Besides, the workshop underlined that mechanisms for data collection and reporting requires substantial improvement at national and regional level. The workshop made recommendations to FAO, Governments in the region and to the Commission.

17. The following are the recommendations produced by the workshop for consideration of the Commission:

- a. Technically assist the member countries to develop and adopt effective and pragmatic standards and procedures for data collection, which should be compatible with FAO procedures. Activities could encompass:
 - Capacity building fisheries data collection and fisheries statistics, including the use of appropriate approaches to improve the sampling frame.
 - Establish and agree upon the major regional indicators for the fisheries and aquaculture.
 - Support the development of appropriate national data bases/fisheries information

systems.

- b. Promote collaboration between national fisheries and statistical authorities of the CACFAC members, through the development of protocols of exchange of information and the development of a Central Asian and Caucasus Fisheries and Aquaculture Information System (CACFIS).
 - CACFISH should facilitate networking and sharing of fisheries and aquaculture information, should be coherent and compatible with national systems and should respond to the specific information needs for sustainable development of fisheries and aquaculture in the Central Asian and Caucasus region.
 - CACFIS should address the increasing needs for fisheries and aquaculture information in the region, facilitate the exchange of information, enable both public and private sectors to access essential information for their decision making, and contribute to increasing the visibility of the sector among the public.

SUGGESTED ACTIONS FOR THE COMMISSION

18. The Commission is invited to endorse, as appropriate, the scientific and technical advice referred to it.