

Fisheries/Aquaculture background document: Summary report of the ABDC-10 parallel session¹

The Parallel Session on Fisheries and Aquaculture considered document ABDC-10/6.1 entitled “Current status and options for biotechnologies in fisheries and aquaculture in developing countries”. The quality of the document was appreciated but more comprehensive treatment of some areas was recommended. These included population genetics for fisheries, molecular markers used for sex identification, species or population identification, the use of cryopreservation for restocking, feed alternatives for carnivorous species, and the need to pay more attention to native species with potential for culture. Biotechnology was considered to be a useful approach to assist the culture of such species through enhanced development of biological information on e.g. physiology and nutrition, and improving performance in culture. Information from model species such as zebrafish would help this process.

The options for developing countries and several identified priorities for the international community as outlined in the document were generally considered adequate with the important addition that fisheries and aquaculture should be recognized and incorporated into national biosecurity plans. The important role of FAO in improving collection, analysis and dissemination of information on aquatic genetic resources as a baseline for developing national strategies was stressed. Although some aquaculture biotechnologies are still too technical and costly for small-scale farmers, principles of traditional animal breeding can be applied and could result in significant production gains without requiring additional farming systems, land or water. Traditional breeding schemes also provide important platforms for the effective application of biotechnology. The use of molecular markers for trade controls and traceability are relatively simple approaches that can markedly improve access to markets and the sale value of products. The need for capacity building to use and implement biotechnologies at different levels was prioritised. A revised version of the document will need to take these points into account.

¹ This is the summary report of the parallel session organized by FAO on the fisheries/aquaculture sector background document (ABDC-10/6,1, synthesized in ABDC-10/6.2) held on the first day of the FAO international technical conference on Agricultural Biotechnologies in Developing Countries (ABDC-10) that took place in Guadalajara, Mexico on 1-4 March 2010 (<http://www.fao.org/biotech/abdc/parallel/en/>).