General introduction about topics of interest in BFT research: A fishery and aquaculture integrated challenge

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General introduction about topics of interest in BFT research: A fishery and aquaculture integrated challenge

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SUMMARY – A three step procedure is outlined for the development of BFT aquaculture, entailing: (i) identifciation of the major challenges; (ii) translation into scientific questions; and (iii) structured work packages to answer these questions.

Key words: Sustainability, priority planning, support, workshops.

RESUME – *"Introduction générale à des thématiques d'intérêt en recherche sur le thon rouge : Un défi d'intégration halieutique et aquacole". Une démarche en trois stades est présentée pour le développement de l'aquaculture du thon rouge impliquant : (i) l'identification des défis majeurs ; (ii) la traduction en questions scientifiques ; et (iii) des programmes de travail structuré pour répondre à ces questions.*

Mots-clés : *Durabilité, planification des priorités, soutien, ateliers.*

The aim of the research community in the identification of topics of interest in BFT Research is to serve human society for a sustainable development.

In order to fit this aim we propose the following 3-step procedure:

(i) First of all there is a need for a clear identification of the major development challenges for Society. At the regional, national and EU level, at the administrative, political and policy level, from fisherman, aquaculturists, environmentalists and the scientific community. The scientific community can greatly help Society by determining the state of the science of the BFT and develop links, common shared values and recommendation between these different communities, which was one of the major aims during first days of the tuna conference. The position and nature of the major development challenges identified are summarized and shown in Fig. 1.

(ii) The second step: these different challenges need now to be translated into scientific questions by scientists.

(iii) The third step: once translated, these scientific question are structured into research work packages clustered within a scientific programme. These programmes can then be submitted to policy makers for financial support. Together these two new steps constitute the goal of the workshop sessions held in Cartagena.

The research requirement can be dispatched by taking in account three different requirements: (i) support to tuna farmers; (ii) answers to human society queries; and (iii) resolution of bottlenecks for future development.

We can now identify our research field in term of priority planning:

(i) Immediate support to tuna farmers – for biotechnological support: cage and mooring engineering, nutrition, flesh quality, behaviour, pathology, food safety, market accessibility, and economic analysis.

(ii) Immediate answers to society – for a secure and sustainable integrated development: ecological impact at the local scale, ecological impact at the global scale, socio-economic impact at the local scale, socio-economic impact at the global scale, and tuna farming impact at the market.

(iii) Medium term resolutions of main potential bottlenecks to future development – for a responsible and precautionary approach: sustainability of BFT resources for fattening development purpose, sustainability in BFT food supply and market sustainability.

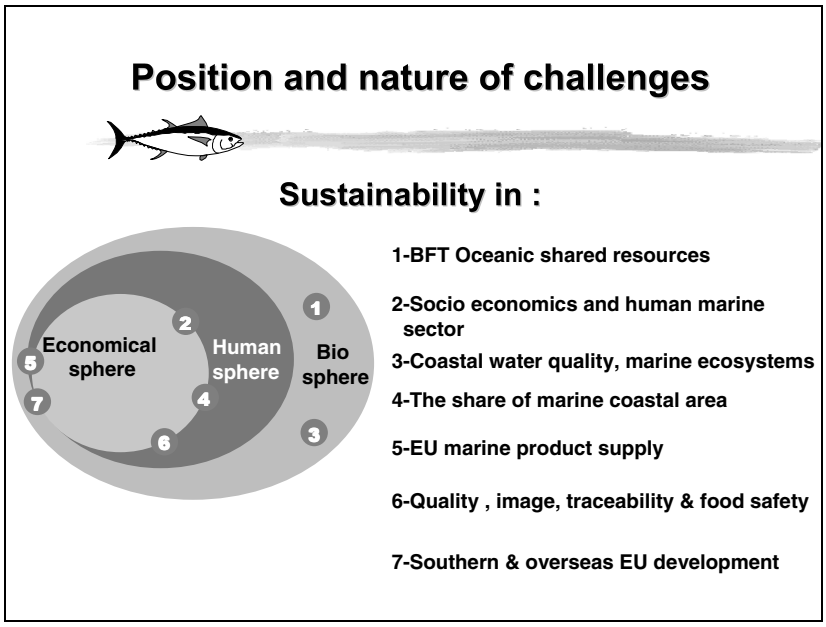

Fig. 1. Position and nature of the major development challenges identified.

To achieve these 3 goals will require specific research actions – there is need of immediate long-term research for the medium term development: (i) BFT reproduction control in captivity (an ambitious and, at least, ten year objective requiring an *immediate* major research programme); (ii) BFT food supply improvements; and (iii) market trend analysis

Taking in account these different identified needs of research we propose the following workshop structure: (i) DOTT-Reproduction; (ii) DOTT-Genetics; (iii) DOTT-Husbandry (biology); (iv) DOTT-Husbandry (engineering); (v) DOTT-Socio-economics and environmental impacts; and (vi) DOTT-Larval and juvenile rearing.