

Planning and policy development in aquaculture

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While aquaculture output is growing worldwide, the need for planning for its continued development is increasingly acknowledged by governments, be it in countries where the sector has reached maturity, or where it is still in its infancy. This need becomes even more acute with growing expectations over the sector's contribution to food security, poverty alleviation, economic growth and overall sustainable development.

Planning reduces risks, informs decision-making, establishes trust and conveys information. In aquaculture development, planning will stimulate and guide the

evolution of the sector by leading to policies, strategies and plans which provide incentives and safeguards, attract investments and boost development, whilst ensuring long-term sustainability (economically, environmentally and socially) and ultimately contributing to economic growth and poverty alleviation. However, planning is not always as straightforward a process as one may think; it is often compounded by numerous factors.

IMPEDIMENTS TO PLANNING

Inadequate human capacities.

These often occur in higher government spheres responsible for aquaculture development. The

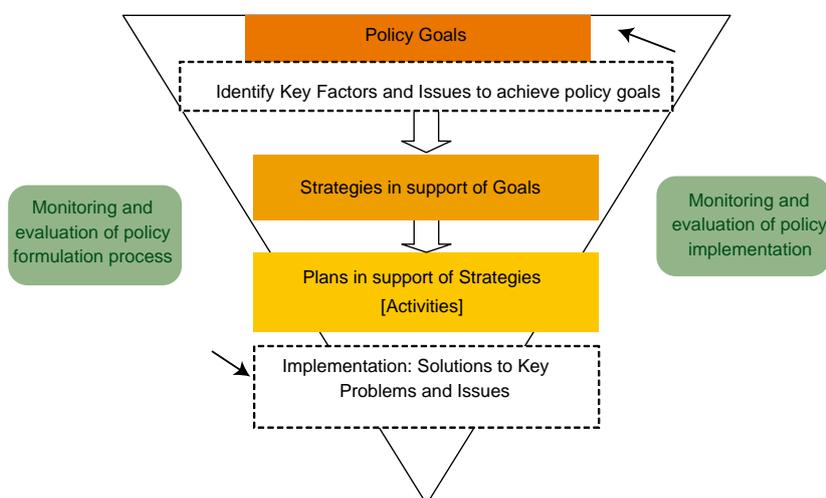
issue is that, often, institutions are inadequately resourced to address economic and social issues which are associated with aquaculture development. In the planning process, they also often fail to link aquaculture to other sectors of the economy.

Confusion about planning terminology.

There is often confusion between 'policy' and 'strategy' formulation and what their implementation entails. Planning is the rational process undertaken to elaborate a coherent framework supporting the development of a sector. This framework is hierarchical and logically structured along a policy, a strategy and an implementation plan. Figure 1 illustrates this hierarchy. A policy can be defined as a vision setting the direction of development, with broad goals such as sustainable resource exploitation or contribution to economic growth. A strategy is defined within a known policy and includes a sub-set of concrete objectives indicating how each policy goal would be met. A plan contains a list of programs and activities (under each program) to implement to achieve each strategy objective.

Weak planning processes. There are many instances where planning is undertaken based on inadequate participation and consultation, where the necessary stakeholder endorsement is lacking.

Figure 1: Hierarchy of policy and implementation



Source: Brugère, C. and Ridler, N. 2004. Global aquaculture outlook in the next decades: an analysis of national aquaculture production forecasts to 2030. *FAO Fisheries Circular*. No. 1001. Rome, FAO.

Institutional shortcomings. The mandates and responsibilities of authorities dealing with various aspects of aquaculture development often overlap. This usually leads to conflicts and to inadequate and poorly-enforced legislation, which not only complicates planning processes, but often results in inadequate implementation of their outcomes.

Lack of information. Insufficient/lack of information or biased information constitute a further hurdle to planning and can result in sub-optimal decisions over policy choices and their implementation measures.

NEGATIVE CONSEQUENCES OF INADEQUATE PLANNING

Inadequate planning can lead to wrong economic choices and inappropriate policies.

Pooreconomicchoices may consist of the inadequate use of economic instruments (subsidies, incentives, taxation) or macro-economic policies (exchange rate, fiscal and monetary policies) to support aquaculture development and link the sector to the wider economy, decreasing its competitiveness both domestically and internationally.

Slow, unbalanced and uncoordinated aquaculture development results from the combined effects of both poor planning and wrong economic choices. Some of the manifestations of this unfit development are: (i) failure of the sector to meet expected increases in production; (ii) weak and ineffective producer and trader organizations; (iii) appropriation of resources and benefits by elite groups; (iv) ignorance of environmental and social aspects and (v) extension services and human capacity development that do not match the requirements of the sector. When these hindering

factors are not tackled as part of a coherent framework, their combined effects will be failure of the sector to significantly contribute towards the achievement of objectives and goals set at the national level.

Inter- and intra-sector conflicts such as competing economic interests within the sector, along with conflicts between objectives (i.e. when planning agencies have diverging objectives such as environmental protection, economic development and social equity¹, can easily generate confrontations. Although satisfying everyone's aspirations may not be feasible, minimizing conflicts is possible with appropriate consultation and stakeholder involvement throughout the planning process.

CHALLENGES TO PLANNING AND POLICY FORMULATION

Improving planning and policy formulation is possible but requires tackling the following challenges:

Integrating and managing multiple stakeholder interests. This can be done through a participatory process whereby multiple stakeholders are brought together and a flexible approach to discussion and consensus building is taken.

Finance and resource allocations. Availability of adequate funding is fundamental to the implementation of planning outcomes (policies, strategies and action plans). Timing is also important to match planned activities with national budgeting and fund releases. Furthermore, special care should be given during the planning process to assess both "additionality" and "leverage"². "Additionality" is the extent to which any investment and/or activity might proceed in the absence of any government sector support. It is important at all times to make sure

that governments are not spending money on activities that the private sector would otherwise have invested in anyway. "Leverage" is the extent to which spending government sector money can help to encourage private sector investments of benefit to the sector.

Human capacity development.

A key aspect to consider in the planning process is the level of human capacity that is available to carry out the activities specified in the planning documents. Human capacity development needs specific attention because of changes in the international development context such as: (i) a move in public management towards decentralization, strengthening relationships between government and civil society privatization and deregulation; (ii) increasing emphasis on good governance and (iii) the information and communications revolution. It also needs attention because new approaches to fisheries and aquaculture management, such as the ecosystems approach, are more inclusive and require levels of capacity which were not previously necessary.

Conflict prevention and mitigation.

Considering potential conflicts at the outset of planning and integrating prevention and mitigation measures in the planning and policy implementation processes can help deal with these conflicts more effectively. Some countries have detailed procedures for conflict mitigation, so that when conflicts arise, there is a transparent and accountable process for their resolution. However, because of the range of aquaculture and non-aquaculture stakeholders operating in the same area, it can be difficult to satisfy everyone.

Supportive legislation. Legislation embraces all instruments having the force of law, such as Acts, Regulations, Decrees, Orders and local by-laws. The importance of legislation is underlined in the FAO Code of Conduct for Responsible Fisheries (CCRF), which contains many articles referring to the need for appropriate legal and administrative frameworks for fisheries and aquaculture development at national and international levels. There is often a debate about whether policy informs and determines legislation, or vice-versa; it is often a little of both. Legislation provides the legal framework to support policy through the details specified in such instruments and through powers relating to enforcement and sanctions. Changes to established policy may require associated legislative change and the implementation of a new policy direction is likely to require an assessment of the extent to which current legislation needs to be modified to support successful implementation. Key components generally found in legislative frameworks for aquaculture development relate to property rights, access to clean water sources, avoidance of unnecessary costs and a permit or licence system for aquaculture operations. However, it is noteworthy that legislation applicable to related sectors (e.g. finance, environment) may not adequately cater for, or protect, the needs of aquaculture producers and may require amendments. Legislation is also often not neutral in its impact on different socio-economic groups.

PLANNING AND POLICY DEVELOPMENT SUPPORT FROM FAO

The increasing number of requests for support in aquaculture planning and policy formulation are indicative of the importance given to the subject

by Member Countries. Responses to such requests have been provided in Angola, Brazil, Cameroon, the Democratic Republic of Congo, Indonesia, Georgia, Latvia, Mozambique, Pakistan, Senegal, Viet Nam and Zambia. Furthermore, at the Third Session of the COFI Sub-committee on Aquaculture (New Delhi, India, 4-8 September 2006), Member Countries stressed the importance of the issue of adequate planning in aquaculture to respond to the fluctuations and pressures that confront the sector. They also recommended that the FAO Department of Fisheries and Aquaculture pursued its work related to the provision of guidelines on planning, policy formulation, implementation and monitoring for the aquaculture sector as well as continued to support the development of policies and strategies at national levels. A step in this direction is the organization of an Expert Consultation on improving planning and policy development in aquaculture in February 2008 in Rome. In addition to responding directly to Member Countries' needs, this Consultation is one of the ways to enable the implementation of Article 9 (Aquaculture) of the FAO CCRF and of provisions under Article 10, 11 and 12.

Further information on the Expert Consultation may be obtained directly from the authors of this article.

¹Béné, C., Macfadyen, G. and Allison, E. 2004. Increasing the contribution of small-scale fisheries to poverty alleviation and food security. FAO Technical Guidelines for Responsible Fisheries No. 10. Rome, FAO.

²Macfadyen, G., Haylor, G. and Brugere, C. 2006. Guidelines for policy development and implementation through consensus and participation: Examples from the fisheries/aquaculture sector. FAO and Government of Pakistan, Islamabad.

Socio-economic Impacts of Aquaculture

On Member Countries' request at the Second and Third Sessions of the COFI sub-Committee on Aquaculture, FAO's Department of Fisheries and Aquaculture Department initiated a number of efforts aimed at understanding and assessing the contribution of aquaculture to food security, economic growth and poverty alleviation, the social and economic impacts of aquaculture. Each study has provided a conceptual framework for the identification of the measurable parameters and a methodology for their measurement at the individual, household and national levels. The Department is convening an Expert Consultation on the "Assessment of Socio-economic Impacts of Aquaculture" in February 2008 in Ankara, Turkey on this subject. A group of renowned economists, social scientists and other experts from Member Countries will meet to agree on a common, robust and widely applicable method for assessing socio-economic impacts of aquaculture. They will also discuss and advise the Department on the way forward on this topic. In particular, they will agree on what they believe still needs to be done in the field of socio-economic analyses and assessments in aquaculture or whether there are other indicators to be developed in this area. Further information may be obtained by writing to Cecile Brugere at Cecile.Brugere@fao.org and/or Nathanael Hishamunda at Nathanael.Hishamunda@fao.org