1. Introduction

Aquaculture, probably the fastest growing food-producing sector, now accounts for almost 50 percent of the world's food fish and is perceived as having the greatest potential to meet the growing demand for aquatic food. Given the projected population growth over the next two decades, it is estimated that at least an additional 40 million tonnes of aquatic food will be required by 2030 to maintain the current per capita consumption.

FAO regularly collects information on global aquaculture production, value and development through official reports from its member countries. These data are analysed, and the status and trends of the sector's development are regularly reported through two main publications of the FAO Fisheries Department: *The state of world fisheries and aquaculture* (SOFIA) and *Review of the state of world aquaculture*, as well as via occasional special publications such as *Aquaculture in the third millennium* (NACA/FAO, 2001).

In 1999, FAO conducted a series of regional aquaculture development trends reviews and made a comprehensive analysis of the status of the global aquaculture sector as part of the global Conference on Aquaculture in the Third Millennium that was jointly organized by the Network of Aquaculture Centres in Asia-Pacific (NACA), the Department of Fisheries Thailand and FAO, and held in Bangkok, Thailand, in February 2000.

In 2005, the FAO Fisheries Department, as one of its regular programme activities, again conducted a series of regional aquaculture development trends reviews, with the view to make a global appraisal of the status of aquaculture and the trends in its development. These regional reviews and the resulting global review or synthesis were conducted in parallel with and complementary to two other activities: (a) the development of National Aquaculture Sector Overviews (NASO)[1] and (b) the preparation of a Prospective Analysis of Future Aquaculture Development (PAFAD). Both were initiated in response to the recommendations of the Committee on Fisheries Sub-Committee on Aquaculture. During the process, over 100 NASOs were prepared and seven regional aquaculture development trends reviews were made.

This document is primarily a synthesis of seven regional reviews that have been previously published as FAO Fisheries Circulars[2]. Further information can be obtained by consulting the respective regional reviews as companion documents.

Initially, the intention was to cover all aquaculture-producing countries in the world, but this proved impossible due to some logistical and financial constraints. However, coverage in this review includes all the countries with a significant aquaculture sector and production, except the Central Asian Republics (although Georgia joined the review workshop of Asia and the Pacific region). For regional reviews, the following country groupings were used:

1. Asia and the Pacific region

East Asia – People's Republic of China (including Hong Kong Special Administrative Region, Macao Special Administrative Region and Taiwan Province of China), Japan, Democratic People's Republic of Korea and the Republic of Korea.

[1] www.fao.org/figis/servlet/static?dom=root&xml=aquaculture/naso_search.xml

[2] FAO/Network of Aquaculture Centres in Central and Eastern Europe, 2006; Hecht, 2006; Morales & Morales, 2006; Network of Aquaculture Centers in Asia-Pacific, 2006; Olin, 2006; Poynton, 2006; Rana, 2006

South Asia – Bangladesh, India, Nepal, Pakistan and Sri Lanka.
Southeast Asia – Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, Thailand and Viet Nam.
West Asia – The Islamic Republic of Iran.
Oceania **–** Australia and the Pacific Island Nations.

2. Central and Eastern Europe
Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, The former Yugoslav Republic of Macedonia , Moldova, Poland, Romania, Russian Federation, Serbia (Republic of), Slovakia, Slovenia and Ukraine.

3. Latin America and the Caribbean
Argentina, Belize, Bolivia, Brazil, Colombia, Chile, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.

4. The Near East and North Africa
Algeria, Bahrain, Egypt, the Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Morocco, the Sultanate of Oman, Qatar, the Kingdom of Saudi Arabia, Syrian Arab Republic, Tunisia, the United Arab Emirates and Yemen.

5. North America
Canada and the United States of America.

6. Sub-Saharan Africa
Angola, Burkina Faso, Cameroon, Central African Republic, Congo (Republic of the), Congo (Dem. Rep. of the), Côte d'Ivoire, Ghana, Guinea, Kenya, Liberia, Madagascar, Malawi, Mozambique, Nigeria, Sierra Leone, South Africa, United Republic of Tanzania, Uganda and Zambia.

7. Western Europe
Austria, Belgium, the Channel Islands, Cyprus, Denmark, Faeroe Islands, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey and United Kingdom of Great Britain and Northern Ireland.

All chapters in this document, except Chapter 2, refer to the above regional country groupings. For aquaculture production in Chapter 2, FAO's latest official statistical data (2004) were utilized and the regional analyses were performed using available data from all countries in the regions. Most of the production analyses presented in other chapters are based on the FAO official statistical data up to 2003.

One of the major constraints encountered during the compilation of this review was the paucity of information on the behaviour of the aquaculture sector on a global basis. For example, reliable quantitative information on trends in intensification and aquaculture expansion; the contribution of aquaculture to employment, poverty reduction, health, nutrition and social development; and the impact of aquaculture on the environment are scarce. Therefore, when addressing these issues, it was necessary to discuss them in a qualitative manner. Information from a number of published studies was used to illustrate issues with specific cases or to complement materials in the regional reviews.

As the greatest proportion of global aquaculture production comes from Asia (currently over 90 percent, with about 74 percent originating from China alone), and as aquaculture is highly dynamic in the region, it is impossible to avoid bias towards Asia when discussing aquaculture globally. However, every endeavour has been made to cover all regions adequately.

Occasionally, issues do not draw on examples from all regions. This is due mainly to the unavailability of relevant information in the regional reviews. Also, in some cases, specific regional examples have been used to discuss specific issues.

As expected, the countries in any given region were not homogeneous in their state of aquaculture development. As a result, it was difficult to interpret information on a regional basis; however, this issue was addressed by demonstrating the differences among countries in the various regions.

In preparing this document, in addition to the use of United States dollar figures (US$), Euro figures have also been used, especially in the European review. It was not possible to collect unified information from all countries through the NASO process; for example, it was difficult to find information specific to the aquaculture sector on employment, social benefits, consumption, trade, etc., as most country data used were aggregated fisheries/aquaculture. In Chapter 4, which addresses food security and access to food, lack of consumption data for aquaculture alone compelled the use of aggregated fisheries data for analysis. The contribution of inland fisheries (culture-based fisheries) to world fish production has not been extensively reviewed in this document.

The national/regional review process and the resulting global synthesis involved many people, including fish farmers, service providers, policy-makers, scientists, researchers and non-governmental organization (NGO) workers.

A rigorous and iterative review process has shaped this report. If some key information, as mentioned above, are lacking or inadequate, it has not been the result of a shortcoming in the process, they are simply unavailable; their absence is in fact pointed out in the regional reviews as opportunities for future assessments and information development.

Another significant point is that, while FAO had the ultimate responsibility for this review and indeed directed its development, the process has been widely owned and participated in by organizations, institutions, agencies and groups with a major stake in national, regional and global aquaculture development. This broad collaborative effort is a reflection of another positive trend that recently has characterized aquaculture development: global cooperation. This trend will probably have as much impact on the direction and speed of aquaculture development as the other trends revealed by the review, and along with the other desirable ones, it should be fanned and sustained.

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