

FAO Fact Sheets on Aquaculture

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Aquaculture is the fastest developing food producing sector in the world and the exchange of information on all related subjects is becoming a key management issue. In recent years, demands for reliable aquaculture data and information as well as for reporting, accessibility and exchange of such information had increased. These requirements are greatly driven by the need to formulate and monitor sound policies and development plans; by new information and reporting requirements of international agreements and initiatives; and increasing public demand for transparency and accountability.

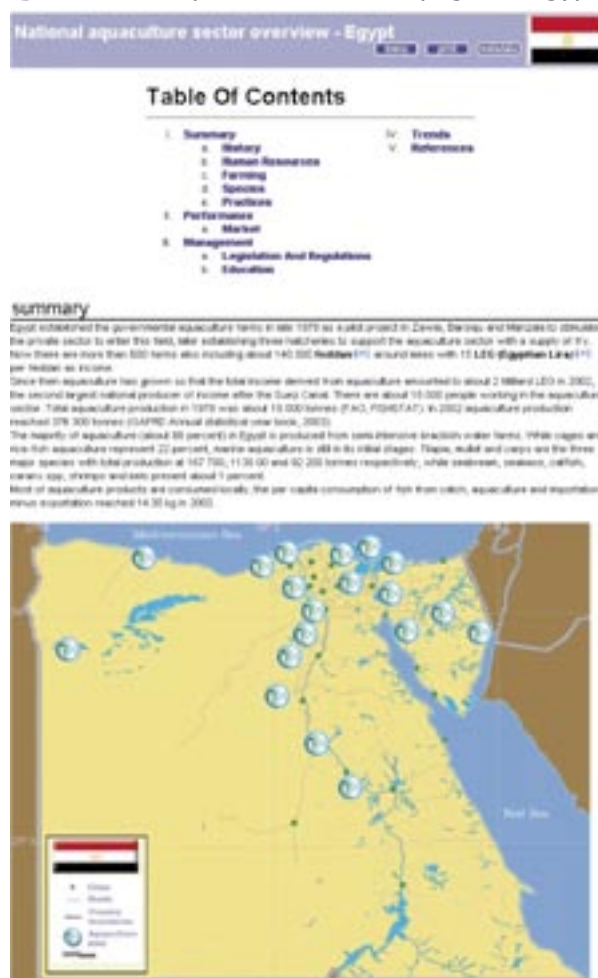
As an information resource centre, FAO compiles and integrates information coming from major centres of excellence, other international organizations, regional bodies and national institutions all over the world. Information is processed and disseminated through internet following high technical standards and using new technologies like Extended Mark-up Language or XML.

In this perspective, the Inland Water Resources and Aquaculture Service (FIRI) is developing a new series of Fact Sheets including specific subject information and profiles supported by graphics (GIS maps, images, line drawings, illustrations, charts, etc.). The Fact Sheets contain a synthesis of information tailored to illustrate the various characteristics of each broad aquaculture subject. Search, navigation and information tools are also accessible. The information domains included in the Fact Sheets are the *National Aquaculture Sector Overviews* (or NASOs), the *Aquaculture Legislation Overviews* and the *Cultured Aquatic Species Information Programme* (CASIP). Some of these fact sheets will be accessible within the month of February 2005 at the following internet address: <http://www.fao.org/figis/servlet/static?dom=root&xml=aquaculture/index.xml>.

The *National Aquaculture Sector Overview* (NASO), a concise and comprehensive cross-domain product, gives a general overview of the aquaculture and culture-based fisheries

aspects at the national level. It is directly linked to the Fishery Country Profiles programme under the leadership of the FAO Fisheries Policy and Planning Division (FIPP). FIRI is currently preparing NASOs for the top 40 main producing countries of the world (see Table 1) as well as for other interested FAO member countries using a standardized structure with a limited number of pages. NASOs contain detailed information on the history of aquaculture; human resources involved in the sector; farming systems distribution and characteristics; cultured species contributing the most to national production; production statistics; description of the main domestic markets; promotion and management of the sector; development trends and issues at the national level (Fig. 1).

Figure 1. Example of a NASO webpage for Egypt



The *Aquaculture Legislation Overviews*, a series of comparative national overviews of aquaculture laws and regulations relevant to the top 40 aquaculture producing countries, are being prepared in collaboration with the FAO Development Law Service. The overviews reflect the multi-disciplinary character of aquaculture, the complex issues involved and the various regulations under a wide range of legislation governing the sector. Most of the issues are not unique to aquaculture and are often regulated in a more general legislative regime. Many of the laws and regulations in place today were developed without aquaculture in mind and thus may be applied to the sector in an inconsistent manner. The overviews focus largely on those legislative texts which have been drafted for the purpose of regulating aquaculture; expectedly, occasional problems of interpretation may often arise. Sometimes, it is difficult to relate the nature of the legal regime vs the importance of aquaculture in a particular country. For example, some countries have an advanced aquaculture sector, with virtually no direct legislation on aquaculture; others, on the other hand, may have an elaborate legal regime for aquaculture, but very little aquaculture activity. The preparation of the overviews primarily relied on information available from FAO, supplemented by further materials received from a number of sources. The *Cultured Aquatic Species Information Programme* (CASIP), directed at those wishing to gain an understanding of the steps that should be followed to start to raise aquatic species (fish, mollusc, seaweeds and frogs) and learn about current techniques at the global level, provides a general overview of various cultural aspects (e.g. production systems, diseases and control measures, production statistics, market and trade) for the most important species in aquaculture (Fig. 2). A detailed and comprehensive bibliography as well as related links are also included. The main objectives of the programme are:

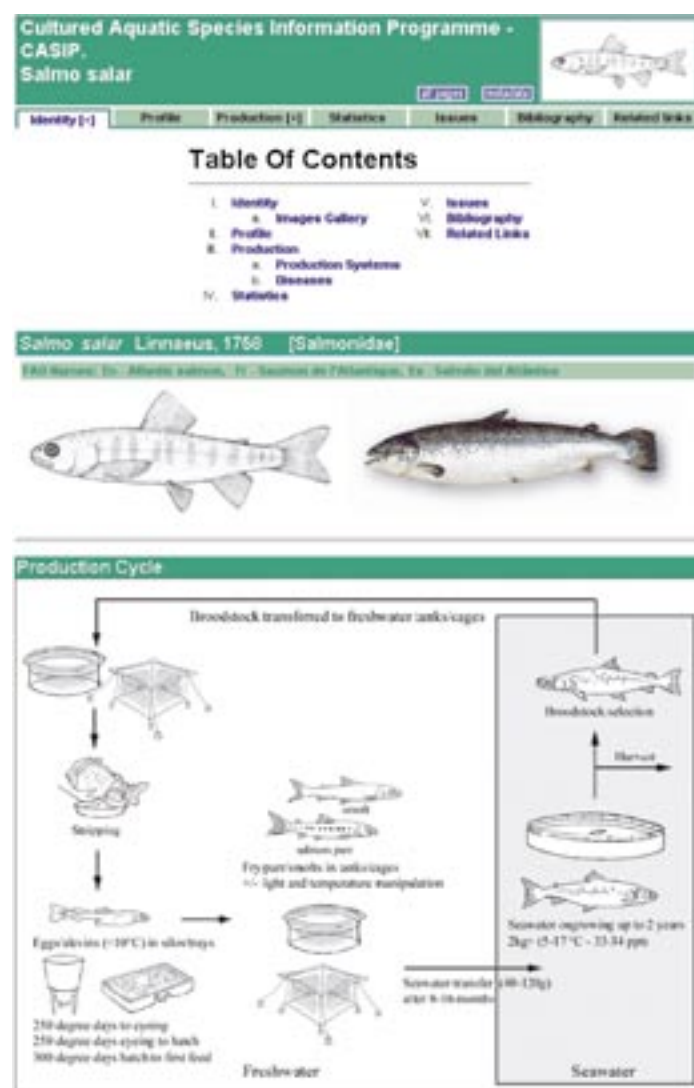
- improve the knowledge of marine and freshwater organisms of current and potential interest to aquaculture;
- provide and disseminate instruments to facilitate the exchange of information on aquaculture practices used to cultivate certain species with the aim to improve aquaculture data quality; and
- provide global information and a standard template for each cultured species.

It is hoped that an international network of experts (individual or institutes), in partnership with FAO, will become owners of the fact sheets and thus be responsible for providing updates. So far, 26 fact sheets have been developed and will be made available soon. The first series consists of the 40 most commercially important species (Table 2).

Experts who wish to contribute their professional knowledge to the compilation of a fact sheet for NASO or Cultured Species are cordially invited to participate in this endeavour.

Further details can be obtained by writing to Mr Valerio Crespi at FAO/HQ - e-mail: valerio.crespi@fao.org.

Figure 2. Example of a Cultured Aquatic species Information Programme (CASIP) Fact Sheet for the Atlantic Salmon (*Salmo salar*)



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Table 1. List of the first 40 Cultured Species Fact Sheets

Common name	Scientific name	Common name	Scientific name
1 Japanese kelp	<i>Laminaria japonica</i>	21 Rainbow trout	<i>Oncorhynchus mykiss</i>
2 Pacific cupped oyster	<i>Crassostrea gigas</i>	22 Blood cockle	<i>Anadara granosa</i>
3 Silver carp	<i>Hypophthalmichthys molitrix</i>	23 Wakame	<i>Undaria pinnatifida</i>
4 Grass carp (= White mur)	<i>Ctenopharyngodon idellus</i>	24 Channel catfish	<i>Ictalurus punctatus</i>
5 Common carp	<i>Cyprinus carpio</i>	25 Chinese river crab	<i>Eriocheir sinensis</i>
6 Japanese carpet shell	<i>Ruditapes philippinarum</i>	26 Japanese eel	<i>Anguilla japonica</i>
7 Bighead carp	<i>Hypophthalmichthys nobilis</i>	27 Fleshy prawn	<i>Penaeus chinensis</i>
8 Crucian carp	<i>Carassius carassius</i>	28 Red seaweeds	<i>Rhodophyceae</i>
9 Yesso scallop	<i>Patinopecten yessoensis</i>	29 Mud carp	<i>Cirrhinus molitorella</i>
10 Nile tilapia	<i>Oreochromis niloticus</i>	30 Black carp	<i>Mylopharyngodon piceus</i>
11 Laver (Nori)	<i>Porphyra tenera</i>	31 Whiteleg shrimp	<i>Penaeus vannamei</i>
12 Atlantic salmon	<i>Salmo salar</i>	32 Japanese amberjack	<i>Seriola quinqueradiata</i>
13 Roho labeo	<i>Labeo rohita</i>	33 Giant river prawn	<i>Macrobrachium rosenbergii</i>
14 Catla	<i>Catla catla</i>	34 Mediterranean mussel	<i>Mytilus galloprovincialis</i>
15 Eucheuma cottonii	<i>Eucheuma cottonii</i>	35 Coho (= Silver) salmon	<i>Oncorhynchus kisutch</i>
16 Mrigal carp	<i>Cirrhinus mrigala</i>	36 Mandarin fish	<i>Siniperca chuatsi</i>
17 Giant tiger prawn	<i>Penaeus monodon</i>	37 Soft-shell turtle	<i>Trionyx sinensis</i>
18 White amur bream	<i>Parabramis pekinensis</i>	38 Flathead grey mullet	<i>Mugil cephalus</i>
19 Milkfish	<i>Chanos chanos</i>	39 Green mussel	<i>Perna viridis</i>
20 Blue mussel	<i>Mytilus edulis</i>	40 Gilthead seabream	<i>Sparus aurata</i>

Table 2. List of the top 40 producing countries for which FIRI is preparing the National Aquaculture Sector Overviews and the Aquaculture Legislation Overviews

Rank ¹	Country	2002 (t)	Status
1	China	27,767,251	done
2	India	2,191,704	done
3	Indonesia	914,066	in progress
4	Japan	828,433	 ²
5	Bangladesh	786,604	in progress
6	Thailand	644,890	.....
7	Norway	553,933	done
8	Chile	545,655	done
9	Viet Nam	518,500	in progress
10	USA	497,346	.....
11	Philippines	443,319	in progress
12	Egypt	376,296	done
13	Korea Rep	296,783	.....
14	Spain	263,762	in progress
15	France	249,699	.....
16	Brazil	246,183	done
17	Italy	183,962	in progress
18	UK	179,036	.....
19	Canada	172,336	.....
20	Malaysia	165,119	.....
21	Myanmar	121,266	done
22	Russian Fed	101,340	.....
23	Greece	87,928	in progress
24	New Zealand	86,583	.....
25	Iran	76,817	done
26	Mexico	73,675	done
27	Ecuador	70,181	in progress
28	Colombia	65,000	in progress
29	Korea D. P. Rp.	63,700	.....
30	Ireland	62,568	in progress
31	Turkey	61,165	in progress
32	Laos	59,716	.....
33	Netherlands	54,442	in progress
34	Faeroe Is	50,946	.....
35	Germany	49,852	in progress
36	Australia	38,840	in progress
37	Poland	32,709	.....
38	Denmark	32,026	in progress
39	Ukraine	30,819	

¹ Based on 2002 FAO-Aquaculture statistics² Author not yet identified and/or contracted