

AQUACULTURE UPDATES BY REGION



©FAO/M. HALWART

AQUACULTURE UPDATES BY REGION • AQUACULTURE UPDATES BY REGION • AQUACULTURE UPDATES BY REGION

FAO support within Aquaculture Development in Pakistan

In the 1980s, the Pakistan Government placed high importance on aquaculture development. In consequence, the country experienced strong development of inland aquaculture, particularly carp culture; however, since the 1990s, aquaculture has become marginalized. In 2017, for instance, total aquaculture production was only around 160 000 tonnes, a share representing only 0.14 percent of world aquaculture production, falling far short of its 2.6 percent of world population. Low

aquaculture production is among the reasons that the per capita fish consumption in Pakistan is about 10 percent of the world average. Compared to the world average of over 20 kg per year in 2019, fish consumption in the country remains the lowest in the world with only 1.9 kg per capita per year.

Pakistan has extensive resources of fresh and brackish water, and favourable agro-climatic conditions. However, multiple inefficiencies and constraints in the fish value chain are seen as blocking issues for aquaculture development. Three main constraints are:

(i) unsatisfactory sanitary conditions

in post-harvest handling and distribution; (ii) low and seasonal domestic fish consumption; and (iii) high production costs and a lack of economies of scale for existing fish farms.

Encouraged by more successful aquaculture development in neighbouring countries (e.g. Bangladesh, India and Iran, Islamic Republic of), existing and potential farmers in Pakistan are eager to venture into aquaculture. However, these farmers are deterred by a lack of success stories, especially in subsectors (e.g. shrimp farming) that have yet to take off despite various efforts in the past. The Government of Pakistan has recently reaffirmed the importance of developing aquaculture in the country, evidenced by explicitly including aquaculture development



Written by:

Mina Dowlatchahi

E-mail: Mina.Dowlatchahi@fao.org

Mariam Zia Khan

E-mail: Mariam.ZiaKhan@fao.org

FAO Country Office for Pakistan,
Islamabad, Pakistan

Weimin Miao

E-mail: Weimin.Miao@fao.org

Junning Cai

E-mail: Junning.Cai@fao.org

FAO Fisheries and Aquaculture
Department, Rome, Italy



Carp and tilapia farm hatchery in Punjab, Pakistan

©FAO/J. CAI

in the newly approved national food security emergency programme.

FAO has been actively supporting Pakistan to unleash its growth potential in aquaculture. Efforts include three missions under the FAO/World Bank Cooperative Programme to backstop the formulation of a multimillion World Bank project on aquaculture development in Pakistan, including: (i) a scoping mission in March 2019 focusing on assessment of the status of aquaculture and fisheries in Sindh Province; (ii) a field mission in August 2019 to conduct the “assessment of market opportunities for an expanded Pakistani aquaculture sector”, which includes an international market assessment of key aquaculture commodities (shrimp, tilapia and trout) to identify export market opportunities, and a value chain diagnosis of Pakistani aquaculture to identify potential public and private interventions and aquaculture growth potential in the country; and (iii) a field mission in Pakistan in October 2019 to develop economic and financial models to facilitate the formulation of the World Bank project.

Built on three aquaculture development projects initially developed by the National Fisheries Development Board and approved by the national government, the World Bank project will be focusing on three areas: (i) shrimp farming (including hatchery operations) in Punjab, Sindh and Balochistan, with a focus on export earnings; (ii) cage aquaculture nationwide, with a focus on optimal utilization of natural water resources (reservoirs, lakes and rivers) and increased domestic fish consumption; and (iii) trout farming in northern regions for domestic niche markets (e.g. tourist consumption) and local economic development. A work in progress, the project is expected to be operational in early 2020.

In parallel, and in order to start immediate support to the

development of an aquaculture sector in Pakistan, FAO assisted the Fisheries Development Board in the formulation of two Technical Cooperation Programme (TCP) projects, which focus, respectively, on the development of a National Policy and Implementation Plan for the Fisheries and Aquaculture sector (TCP/PAK/3709-C6), and a feasibility study and piloting of the farming of shrimp, prawn and fish species in Punjab and Sindh Provinces (TCP/PAK/3710). The two projects have recently been approved.

The National Symposium on Fisheries and Aquaculture for Food and Livelihood in Pakistan was held on 8 October 2019 with the purposes of raising awareness of the potential sustainable contribution of aquaculture and fisheries to inclusive economic development in the country, and commencing a discussion on how to tackle the challenges to this goal. The National Symposium was jointly opened by the Federal Minister for National Food Security and Research and the FAO Representative in Pakistan. Officers from the FAO Regional Office for Asia and the Pacific and the Fisheries and Aquaculture Department provided the National Symposium with key technical inputs and facilitated all three technical sessions centred around: (i) global fisheries and marine capture fisheries; (ii) development of aquaculture in Pakistan; and (iii) FAO-Pakistan initiatives for fisheries development. The three sessions were followed by a robust discussion whereby participants, including provincial government counterparts and relevant stakeholders, put forward their suggestions and input. Key discussion points centred around the complex pathways between fisheries and aquaculture and food and nutrition security, including the environmental, economic, social and legal/governance dimensions.

Starting with an overview on fisheries and aquaculture for food

security and livelihoods in Asian countries, relevant issues were covered, including the need to include fish as a key element in food security, in nutrition and livelihood strategies at the national level, and in wider development discussions and interventions. A key point raised was the presence of inequitable roles and contributions of various actors (fishing communities, smallholders and fishing companies, etc.) in a diverse and heterogeneous sector, and the need to close these inequitable gaps. Additionally, institutional capacities need to be strengthened to meet international standards for conservation of water and natural resources use for aquaculture development. Statistics on Pakistan’s fish stocks show a declining trend, which may be a cause for concern.

Technical experts delivered presentations on global fisheries production and trade, covering Pakistan’s contribution, status, challenges and the way forward for marine capture fisheries and international fisheries instruments. Particular focus was placed on the impact of the country’s non-ratification of the Port State Measures Agreement. Overfishing of marine fisheries requires urgent attention, and the high costs undermining the sector’s profitability need to be addressed. Furthermore, development of aquaculture must not come at the cost of undermining livelihoods in vulnerable, small-scale fishing communities. Developing aquaculture requires diversifying variety, addressing post-harvest losses, and improving quality controls and processing technologies to ensure both the safety of the products and human health.

Other topics included status and development trends of aquaculture in Asia, challenges in aquaculture development in Pakistan and corresponding government initiatives to boost the development of Pakistan’s aquaculture sector.

The Government of Pakistan has launched a comprehensive 309 billion rupee “Agriculture Emergency Programme”, under which three of its thirteen development projects would be executed in fisheries, namely, projects on incubating shrimp farming, cage culture for fish species, and trout culture in Khyber Pakhtunkhwa. The financial allocation for the three development projects on fisheries is 13 billion rupees.

A presentation on aquatic animal health management was delivered, focusing on preventive health care of aquatic animals, and the importance of maintaining a healthy environment to reduce the risk of disease outbreaks or production losses and promoting healthy production systems. A suggestion was made that utilizing the FAO Code of Conduct for Responsible Aquaculture and the Ecosystem Approach to Fisheries, would ensure protection of natural biodiversity and the environment.

A project inception workshop was conducted jointly by FAO-Pakistan and the Fisheries Development Board of Pakistan to launch the two TCP projects the next day. The inception workshop was attended by representatives from relevant national and provincial fisheries authorities and institutions participating in project implementation. The workshop introduced the objectives and result framework and planned activities of the two TCP projects to the key players in project implementation, also discussing project outputs and the scope and implementation arrangements of project activities. Not only did the participants show high interest, but also Punjab Province proposed to serve as a pilot moving forward. All participating provinces expressed their willingness to develop provincial fisheries and aquaculture policy and update the respective legislations in line with the federal policy on fisheries and aquaculture. Accordingly, a formal request has



Aijaz Ahmed Mahesar, Secretary, Livestock & Fisheries, Government of Sindh, addressing the symposium

been received by the Government of Punjab for technical support to develop the provincial fisheries and aquaculture policy to meet its Sustainable Development Goals targets.

While continuing support of the development of the World Bank project for aquaculture development in Pakistan, FAO will explore the possibility of providing more direct support to the future implementation of the project through a technical assistance component with the World Bank project. FAO will provide full technical support to the implementation of the two TCP projects in Pakistan. The immediate follow-up action will be to support the Fisheries Development Board in finalizing the implementation details for the two TCP projects in consultation with the provincial fisheries development authorities and stakeholders, particularly the scope of project activities and coordinating mechanism.

Major findings from these activities include wide buy-in and agreement on the importance of enabling the further development of aquaculture within the sustainable food systems approach, including the following:

- The need for improved legislation and development of fisheries and aquaculture policy at the federal and provincial levels.
- The need for the establishment of a statistical data collection system on fisheries to support informed policy-making.
- The need to strengthen fish handling and safety protocols and procedures.
- The need to inform and promote rural communities on the potential for aquaculture for livelihood development through export earnings.
- The need for awareness-raising on the role of fish in healthy diets, with an objective of raising the current low levels of fish consumption.



SEE ALSO

WAPI factsheet on aquaculture growth potential in Pakistan:
www.fao.org/3/ca5585en/ca5585en.pdf

Top 10 species groups in global, regional and national aquaculture 2017 – supplementary materials to the WAPI factsheet on “Top 10 species groups in global, regional and national aquaculture 2017”:
www.fao.org/3/ca5187en/ca5187en.pdf

WAPI factsheet on international market potential for shrimp export from Pakistan: www.fao.org/3/ca7625en/ca7625en.pdf

WAPI factsheet on international market potential for tilapia export from Pakistan: www.fao.org/3/ca7626en/ca7626en.pdf

WAPI factsheet on international market potential for trout export from Pakistan: www.fao.org/3/ca7627en/ca7627en.pdf

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.