## AQUACULTURE I

5. WEEK
ORGANISATION OF AQUACULTURE



WEEK	TOPICS
1. WEEK	WHAT IS AQUACULTURE?
2. WEEK	IMPORTANCE OF AQUACULTURE
3. WEEK	AQUACULTURE: ANIMAL PROTEIN
4. WEEK	HISTORY OF AQUACULTURE
5. WEEK	ORGANISATION OF AQUACULTURE
6. WEEK	CHARACTERISTICS OF AQUACULTURE
7. WEEK	POND CULTURE
8. Week	IN STATIC FRESHWATER PONDS
9. WEEK	IN BRACKISH-WATER PONDS
10. WEEK	RUNNING WATER CULTURE
11. WEEK	CULTURE IN RE-CIRCULATORY SYSTEMS (RAS)
12. WEEK	AQUACULTURE IN RACEWAYS, CAGES, AND ENCLOSURES
13. WEEK	MONOCULTURE AND POLYCULTURE
14. WEEK	RECENT ADVANCES IN AQUACULTURE



## Organization and management

As stated earlier, development of fish farming in the country has benefited from the socialist policies of the Government and the collectivization of agriculture and allied industries. There is very close linking of fish culture with agriculture and animal husbandry as will be discussed in a later section.

Aquaculture production in China is largely carried out through state farms or communes and its constituent production brigades and production teams. The organization of communes in China has been fairly well documented and is described in detail in the report of the FAO Study Mission on Agriculture and the People's Communes. The production team is the basic agricultural production (of which aquaculture is a part) unit. In a good many areas, it is also the basic accounting unit, although there is now a tendency to have larger accounting units, such as the production brigades and even communes. The identity of households as social units and to some extent even as economic units, is now maintained, with limited ownership rights.

Even though they may own and cultivate private land on a small scale, the ownership of most of the cultivable land and of implements and machinery rests with the communes or their subsidiary units. The production brigades have major planning and administrative roles and are headed by revolutionary committees with adequate political representation in their management. The commune is both an economic collective and a basic unit of political power in rural China. It administers all activities within the commune area, including agriculture, industry, commerce, education, social welfare and security affairs, merging government administration with commune management. The standard of living and income of commune members are dependent on the success of their operations and the profits made by the commune by collective endeavour and wise management.

Generally the communes undertake activities that neither the production brigades nor the production teams can undertake. In respect of aquaculture, pond fish culture can largely be carried out by production brigades and teams, but farming of lakes and reservoirs or river systems is often done by the commune and sometimes jointly by two or more communes. The commune serves as the link between production brigades and teams on the one hand, and the county and provincial administration on the other.

- Besides the production units, production brigades and communes concerned with agricultural and fisheries production, there may be supply and marketing cooperatives at the commune level. They distribute consumer goods and act as purchasing agents for the state wholesale organization.
- Most counties and provinces have Bureaux of Aquatic Products, which have the major role of providing technical advice to, and maintaining liaison with, production units.

The majority of counties have established state farms, which may specialize in some form of culture, as in the case of the Nanhai County Hatchery and Farm, which produces fry and fingerlings for distribution. Unlike those in the communes, production brigades and production teams, the workers in a state farm are paid employees and their incomes are not affected by the profits made by the farm. The state farms appear to be important as a support to aquaculture activities of communes and production brigades. As in the case of the Paitan Lake Fish Breeding Farm in the Hengyang County of Hubei Province, they may take an active role in extension of techniques, some types of research, supply of fry and finger-lings and short-term training of personnel. They seem to assume a leadership role in the introduction of new technologies and ideas.

Many of the communes have established small-scale industries, some of them producing tools required for fish farming or fishing. With the growing interest in mechanization of fish culture, an increasing number of communes are taking to the manufacture of fish-culture equipment. The group saw at least two that were manufacturing aerators and some others manufacturing different types of water pumps and a type of slush pump for building dikes.

- Planning
- As self-reliance, "planning from below", and peoples' participation in decision-making are believed to be some of the major factors responsible for the success of Chinese aquaculture, the study group paid special attention to these aspects. The fisheries or aquaculture development plan for the country forms a part of the agriculture plan, even though very recently a separate State Bureau of Aquatic Products\* has been established in the Ministry of Agriculture, under the charge of a Vice-Minister.
- \*There is now (June 1979) a separate General Administration of Aquatic Products which is directly responsible to the State Council

- References
- Regional ReviewOn Status And Trends In Aquaculture Development In Europe 2015,
   Fao Fisheries And Aquaculture Circular Nb. 1135/1 Fiaa/C1135/1 (En)
- The State Of World Fisheries And Aquaculture 2016, Fao. 2016
- Advances In Aquaculture Hatchery Technology 2013, Woodhead Publishing Series In Food Science, Technology And Nutrition: Number 242
- Aquaculture: An Introductory Text, 2005, Robert R Stickney
- Aquaculture Farming Aquatic Animals And Plants, 2012, John S. Lucas