

Contract System Boosts Chinese Fish Production

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Fish production in China reached a record high in 1985 when over $7.05 \text{ t} \times 10^6$ of fish was produced from both capture and culture fisheries. Compared to the production of $6.19 \text{ t} \times 10^6$ in 1984, overall fish production increased by 13.9%. The significant increase in freshwater aquaculture (31.4%) as shown in Table 1 had raised aquaculture production from $1.97 \text{ t} \times 10^6$ in 1983 (see Naga, April 1986, p. 13) to $3.09 \text{ t} \times 10^6$

Table 1. Fish production in China.

	1984 ($\times 10^3 \text{ t}$)	1985 ($\times 10^3 \text{ t}$)	Rate of increase (%)
Marine capture	3,305	3,485	5.4
Freshwater capture	439	475	8.4
Coastal aquaculture	639	712	11.6
Freshwater aquaculture	1,810	2,379	31.4
Total	6,193	7,052	

in 1985 (26.2% over $2.45 \text{ t} \times 10^6$ in 1984). Production from coastal aquaculture had also increased by 11.6% to slightly over 700,000 t. While capture fisheries continue to register positive growth, the increase (5.4% in 1985) remains comparatively minimal.

Government Policy

The aquaculture and fishing industries are greatly activated in recent years by government policy on rational utilization and management of water and land re-

sources for fish production. The government's recent policy on fishing and aquaculture development appears to:

- focus on aquaculture development including effective utilization of all water resources such as lakes, dams, reservoirs for fish production
- emphasize distant water fishing and strengthen management and im-

provement of inshore water fisheries

- emphasize national corporation and cooperative management of the fishing and aquaculture industries
- strengthen fisheries legislation and enforcement and ensure conservation of fishery resources on a sustainable basis
- seek improved quality of fishery products and develop marketing channels
- emphasize the application of science in development.

The recent government policy in promoting fisheries development has yielded positive results especially in the aquaculture industry (Fig. 1). Fish supply has increased in domestic markets and fish price dropped considerably in the last two years. Fish yield per unit area of major water bodies such as ponds, lakes, reservoirs, rivers and canals has increased (Table 2) and resulted in additional harvest of more than 366,500 t in 1985. Culture area of inland waters has also increased by another 342,573 ha producing an additional 175,000 t. Rice-fish cultivation has received favorable government support. The total area of rice fields used for integration with fish-farming in 1985 was 631,533 ha with a yield of 81,000 t.

Table 2. Average yield from main water bodies (1985).

System	Yield (kg/ha)
Pond	1,388
Lake	232
Reservoir	150
River/canal	518

Professionalization

The Chinese fishfarmers have accumulated enormous experience in freshwater fishfarming. With the increased application of science, many fishfarmers have made remarkable improvement in increasing yield. In the Taihu and Pearl River basins, where fishfarming has been

practiced for centuries, average pond yield is the highest in the country. Fish-farming has gradually become a technical profession. In most instances, members of a household become a team commonly known as professional fishfarming household. In 1985, there were 419,400 professional fishfarming households producing 425,900 t as opposed to more than 5.48 million households raising fish on a part-time basis from 300,347 ha and producing only 240,300 t.

The income of fishfarmers and fishermen has also increased considerably from 3,617 Yuen in 1984 to 5,535 Yuen in 1985 (1US\$ about 3 Yuen). This boost in fish production and increase of income are brought about by a recently introduced production contract system which stimulates and provides incentives to fish producers to produce more.

The Production Contract System

The national fish production target is determined through a complicated

process involving a two-way assessment from the central government to the production units at the commune level and vice versa. Before a national target is determined, the production capability of each province is assessed through a series of consultations with production units in each commune. This is done through a review of previous production performance and the potential to increase. When a production target for each province has been agreed upon, it becomes the responsibility of the provincial government to attain the goal. This also applies to county and township administration. A production unit consists of a production brigade and/or production team.

Under the contract system, each production team, brigade, commune, county and province is obliged to attain the production target which is agreed upon through the planning process. Under the present social system in China, all production facilities such as fishponds, vessels, gears and lands belong to the State. At the commune level, members of each production team/brigade are responsible to their commune. The commune helps each production team/brigade to determine its production targets. The amount of fish output by each team/brigade equivalent to the predetermined production target should be sold to the State at a standard price fixed by the State and the excess could be sold in open market. Profits are distributed either equally among production units or on a predetermined proportion with the State.

In promoting production, the government has allowed greater incentives for fish producers for their labor. Hence, over the past years, variations in the contract system are found throughout the country depending on the special circumstances of each commune.

There are two forms of the production contract system operating in China: national corporation and cooperative management systems.

National Corporation Management System

Before 1978, government exercised central control on administration and management of all public fishery corporations. Under this system all production

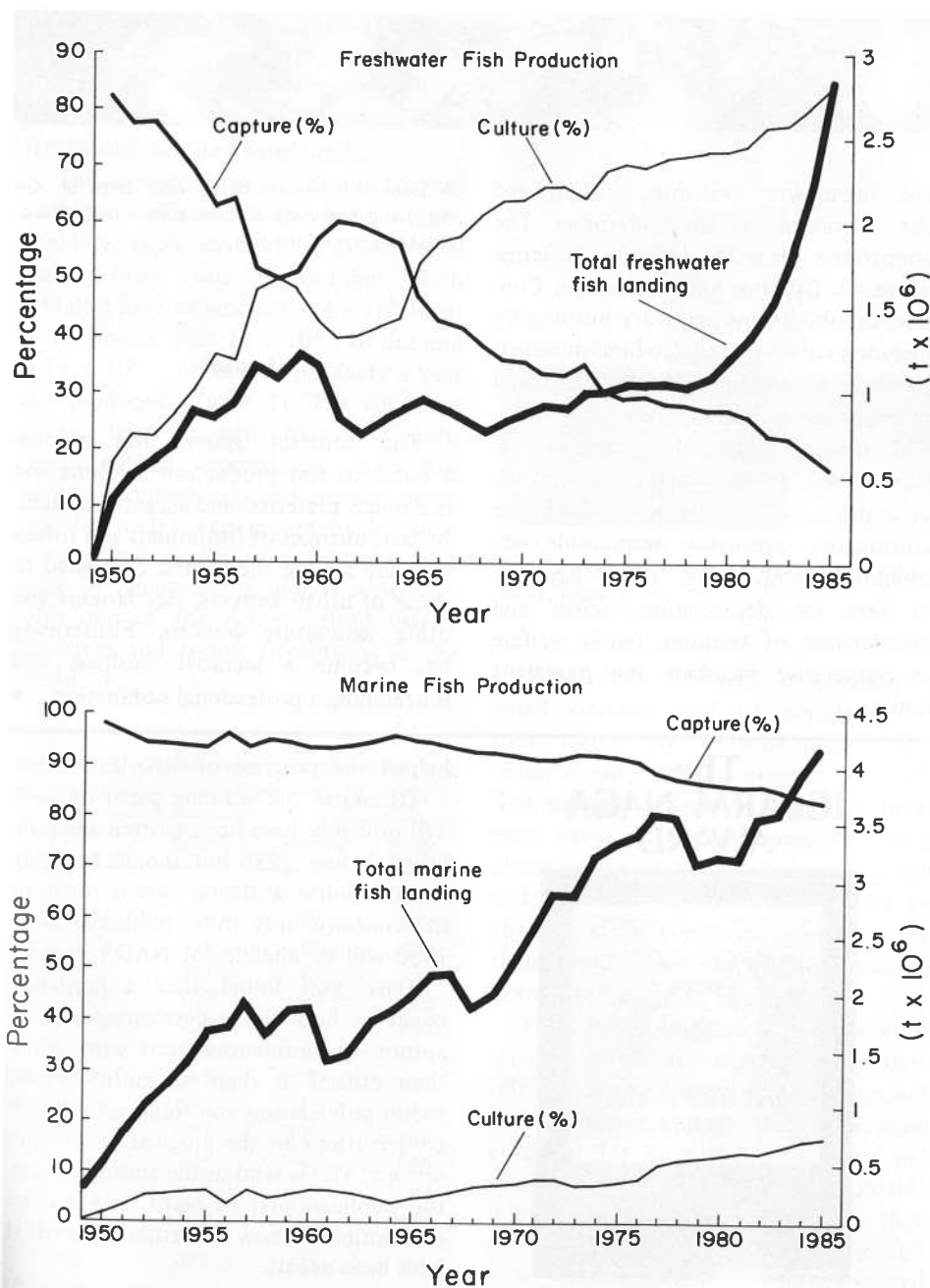


Fig. 1. Freshwater and marine fish production in China and percentage contributions from culture and capture fisheries, 1950-1985. [From Fishery economics of China (1949-1983) by Yen-Wu et al. 1984 and Shuichan Zhoukhan, 15 April 1986, p. 2 (both in Chinese)].

targets, production values, profits and salaries were predetermined by the governing body. The employee shared no responsibility for inability to meet production targets nor shared in profits gained. The apparent lack of effective administrative control over the employee and economic responsibility has caused serious financial losses in many public corporations.

The system was reviewed in 1978 wherein incentives were being injected in public corporations to stimulate production. It was again modified in 1982 when public corporations were given full authority in management control. The common practices include: (a) provision of extra compensation to fixed-wage operators for meeting contractual obligations and (b) sharing of production values or profits for non-fixed wage workers. Various methods are being used in profit sharing ranging from equal share to point system.

Cooperative Management System

The contract system implemented by cooperatives is essentially the same as that practiced by public fishery corporations. Contracts are given to production teams or brigades who are also members of the cooperatives. Contract agreements may vary and so does profit sharing. A more common practice widely applied in China in the fishing and aquaculture sector is that the contractor is given full control of the equipment, facilities and



the manpower available to him and the operation of the enterprise. The cooperative provides facilities in terms of vessel, fishfarm and equipment. Contractual obligations may vary but usually include predetermined production target, production capital, production cost and in some cases product quality.

Under this system the agreed production should be sold to the cooperatives at a pre-agreed price (State price). The contractors are also responsible for shouldering operating cost, payment of fees for depreciation, repair and maintenance of facilities, public welfare of cooperative members and provident funds.

A bountiful harvest of Chinese carps at Xin An Jiang Reservoir, Zhejiang Province, China. Note the size of the fish.

Impact

The contract system has become a boost to fish production in China and is a much preferred and accepted system. In fact, incomes of fishfarmers and fishermen are among the highest compared to those of urban workers, rice farmers and other agriculture workers. Fishfarming has become a lucrative business and is becoming a professional occupation. ●

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