FISHERY COUNTRY PROFILE	Food and Agriculture Organization of the United Nations	FID/CP/TUK August 1998
PROFIL DE LA PÊCHE PAR PAYS	Organisation des Nations Unies pour l'alimentation et l'agriculture	
RESUMEN INFORMATIVO SOBRE LA PESCA POR PAISES	Organización de las Naciones Unidas para la Agricultura y la Alimentación	

TURKMENISTAN

GENERAL ECONOMIC DATA

Area:	488 100 km^2
Shelf area [1]:	n/a
Length of coastline(estimates) [1]:	610 km
Population (1996):	4 600 000
GDP (1996):	US$ 2 121 million
GDP *per caput* (1996):	US$ 461
Agricultural GDP (1994 estimate):	US$ 403 million

FISHERIES DATA

Commodity balance (1995):

	Production	Imports	Exports	Total supply	*Per caput* supply
	'000 tons liveweight				kg/year

Fish for direct human consumption	6 173	200 (estimate)	600 (estimated)	5 773	1.3
Fish for animal feed and other purposes	3 690	-	-	3 690	0.8

Estimated employment (1996):	2 200
Gross value of fisheries output (1996):	US$ n/a
Trade (1996, estimated):	
Value of imports:	US$ 0.2 million
Value of exports:	US$ 0.3 million

STRUCTURE AND CHARACTERISTICS OF THE INDUSTRY

Introduction

Turkmenistan became an independent State in October 1991. The constitution established the principle of private ownership of land, natural resources, and other material and intellectual assets. However, the Government has adopted a cautious approach toward the transition to market economy, taking into consideration the need for stability and the maintenance of economic output. The Government's policy is to become self-sufficient in food production and processing.

Caspian Sea fishery

There are 77 commercially used fish species in the Caspian Sea, including 90% of the world's stock of sturgeons. The total annual catch of fish by ex-USSR republics during the 1980s and the beginning of 1990s was between 335 000 and 387 000 tonnes, while the highest catch, in 1970, was over 530 000 tonnes.

In 1991, the total catch of fish, from the Caspian Sea and the inland waters of Turkmenistan, reached about 41 000 tonnes; it declined to less than 10 000 tonnes in 1995. The decrease continued in 1996 (9 012 tonnes) and 1997 (8 486 tonnes). The supply of fish for human consumption and fishmeal declined proportionately.

The Turkmenistan sea fishery resources consist mainly of kilka (*clupeonella delicatula)* and are exploited by Balkanbalyk, a State-owned company. Its fleet numbers 11 large vessels and 12 medium-sized units. There are also ten transport vessels supporting the

fishing fleet, four tug-boats and three vessels which supply the fishing fleet with bunker. Only four of these vessels are less than ten years old. Due to inadequate maintenance and limited repair facilities most of the remaining are laid up. The only modern, fully operational vessel is RDOMS-type freezer (2 294 GRT, 1 160 hp), built in 1991.

Annual quotas are also allocated for the limited catch of sturgeon. In the Caspian Sea fishing of sturgeon is prohibited. It is allowed only in rivers and Turkmenistan does not have rivers flowing into the Caspian Sea. Therefore, its quota is caught in the Russian waters. The fish is processed in Russia against a fee for service, and the products are then shipped to Turkmenistan.

Inland fisheries

Several small lakes and rivers (Amu Darya, Murgad, Tedjen etc.) are fished. The biggest river in Turkmenistan is Amu Darya, the flow of which was diverted to the Kara Kum Canal. There are four State fishing companies active in inland fisheries. They catch fish, buy catch of cooperatives and also trade in fish. The quantities traded in 1995 were as follows:

Marybalyk 109 mt
Dashkhovuzbalyk 203 mt
Lepapbalyk 264 mt
Akhalbalyk 249 mt

Aquaculture

Between 1991 and 1995, the aquaculture production declined by 50% (from 2 100 to 1 050 tonnes). The 1997 aquaculture production decreased to 342 tonnes. This drop is largely attributed to the lack of domestically produced fishmeal and other feed components. Over the last six years, the production of fishmeal dropped by 80% (from 6 600 to 1 375 tonnes).

The other factor hindering the aquaculture production is a rapidly progressing deterioration of ponds, mainly due to siltation. Water comes primarily from the Kara-Kum Canal which carries a considerable amount of silt, making thus the ponds shallower every year. The required depth of the ponds is 140 cm while, at present, most of them are 20-100 cm deep. Yet, there is a potential for increased fish production, provided the ponds are properly maintained and other inputs are made available.

Utilization of the catch

Most of the fish landed in Turkmenistan by large vessels is sold frozen. Salted, pickled, smoked and canned products are also common. Before 1991, there was a large-scale production of pickled fish both on board of the RDOS-type fishing vessels and on shore. At present, the only canning factory still operating is in Turkmenbashi (ex-Krasnovodsk); it produces also pickled, smoked and dried fish. The plant, as well as the technology employed, are very old. The other problem limiting production is the lack of tin for cans. Since the metal sheets are imported, the shortage of hard currency impedes regular supplies.

Fish landed by small vessels is consumed fresh, salted or used for production of fishmeal.

Most aquaculture production is sold fresh on local markets.

Economic role of the industry

Before 1991, the fishing industry of Turkmenistan served the economic area of the former USSR; while fish protein contributed about 40% to the total *per caput* consumption of

animal protein in the former USSR, the diet of Turkmen people does not include a large portion of fish and fish products**.** As a result, most of the catch of kilka (canned or processed into fishmeal) was sent to Russia and only frozen and canned fish, caught mainly by long-distance vessels, remained for distribution in Turkmenistan.

Today, the bulk of kilka catch is frozen or canned and sold on the local market, while limited quantities are smoked, salted or pickled. Fish plays an important role exclusively in the diet of the people living in the coastal area.

Over the five-year period ending in 1995, the *per caput* fish consumption declined from about 8 kg in 1991 to 1.3 kg in 1995.

The total employment in the whole sector in 1996 was about 2 200 persons.

DEVELOPMENT PROSPECTS

The Turkmenistan fishing industry has good prospects, as the fish resources of the Caspian Sea are underutilized. The TAC for kilka in the Caspian Sea is in the range of 250 000 tonnes and Turkmenistan's share is 70 000 tonnes. Skilled labour and low-cost fuel are available. There is a demand for frozen fish in Russia, and for canned fish in Turkmenistan and the neighbouring countries.

Creating favourable investment conditions for the replacement of old fishing fleet and the renewal of the shore infrastructure would be essential for the development of the industry. The introduction of a new legislation would facilitate the reform of the industry and help attract foreign investment. Restructuring and privatization are likely to take place, although it would be unrealistic to expect such changes to occur in a short period of time. Export of frozen and canned fish might become a significant currency-earning activity.

RESEARCH

Before 1991, research of the resources of the Caspian Sea was done by a Research Institute (CASPNIIRH) with the headquarters in Astrakhan (Russian Federation) and branches in all ex-USSR republics. The Turkmenistan branch was in Turkmenbashi (Krasnovodsk). The institute monitored and surveyed hydrographic state of the sea and Volga River, the bioproductivity, the dynamics of fish populations and fish behaviour.

After the collapse of the USSR, all branch offices of CASPNIIRH were closed and the existing archives were moved to Astrakhan.

AID

In the period 1996-97, EU funded a project for technical assistance in the Turkmenistan fisheries sector. Taking into account the fishery potential and the critical state of the economy, Turkmenistan needs further assistance for: (1) renovation of the large- and small-size fleet; (2) renovation of the shore infrastructure; (3) modernization and development of transportation and trade system for fish products; (4) introduction of modern technologies in processing and packaging of fish products; (5) creation of a modern system for collecting fishery statistics; (6) promotion of small-scale private fisheries and trade; (7) promotion of aquaculture and maintenance of fresh water ponds.

1	The level of the Caspian Sea changes substantially from year to year (up to 0.5 m/ year) which means that also the length of the coastline and the shelf fluctuate.