

<b>FISHERY COUNTRY PROFILE</b>	<b>Food and Agriculture Organization of the United Nations</b>	<b>FID/CP/UKR</b>
<b>PROFIL DE LA PÊCHE PAR PAYS</b>	<b>Organisation des Nations Unies pour l'alimentation et l'agriculture</b>	 <b>January 2004</b>
<b>RESUMEN INFORMATIVO SOBRE LA PESCA POR PAISES</b>	<b>Organización de las Naciones Unidas para la Agricultura y la Alimentación</b>	

**UKRAINE****GENERAL ECONOMIC DATA**

Area:	603 700 km <sup>2</sup>
Territorial waters (Black Sea):	24 850 km <sup>2</sup>
Shelf area (to 200 m) (Black Sea):	77 514 km <sup>2</sup>
Exclusive Economic Zone (Black Sea):	ca 131 000 km <sup>2</sup>
Length of coastline:	1 278 km
Population (2001):	49 112 000
Population (2003):	48 523 000
GDP (2001):	US\$ 43 000 million
PCE per caput (2001):	US\$ 888.4
Agricultural GDP (2001):	ca US\$ 1 000 million

**FISHERIES DATA****Commodity balance (2001):**

	<b>Production</b>	<b>Imports</b>	<b>Exports</b>	<b>Total</b>	<b>Per</b>

			(estimated)	supply	caput supply
	'000 tons live weight				kg/year
Fish for direct human consumption	382	266	36	612	12.5
Meal	50	9.6	-	9.6	

<b>Estimated employment (2001):</b>	
Fish production sector, including:	31 000
distant-water fisheries	9 000
Azov and Black Seas inland waters	16 000
	6 000
Aquaculture sector:	12 000
Processing sector:	2 000
Gross value of fisheries output (estimated) (2001):	US\$ 240 million
Trade (2001):	
Value of imports (estimated):	US\$ 93.4 million
Value of exports (estimated):	US\$ 33.1 million

### Commodity balance for 2003:

2003	Production	Imports	Exports	Stocks variation	Total Supply	Per Caput Supply
	tonnes liveweight					kg/year
Fish for direct	247 965	394 254	42 331	0	599 888	12.4

human consumption						
Fish for animal feed and other purposes	0	-	-	-	-	-

Trade <b>(2003):</b>	
Imports:	US\$ 112 538 000
Exports:	US\$ 17 636 000

## STRUCTURE AND CHARACTERISTICS OF THE FISHING INDUSTRY IN 2002

Ukraine has fisheries operations on international high seas, in the Black and Azov Seas, and in national inland waters (reservoirs, lakes and rivers, as well as freshwater aquaculture). In 2001, total landings from capture fisheries and aquaculture production was 381 000 t. This was lower than 1995–2000 catches, which were in the range of 400 000 to 450 000 t/year. Distant-water fisheries account for about 70 percent of the Ukraine catch. Fisheries and freshwater aquaculture are traditional occupations, especially for the population living in the coastal zone and near rivers, lakes and water reservoirs. Fish products play an important role in the nutrition of the Ukraine population and are considered strategically important food. However, in the present economic situation, it is most profitable for Ukrainian companies involved in distant-water fisheries to sell most of the high-seas catch (up to 80 percent) in the countries situated close to the fishing areas.

In the 1980s, when Ukraine was part of the USSR, its total production of fish products from all sources peaked at 1.1–1.2 million tonnes, and fish consumption in the country was about 18–19 kg per person per year. Fishermen's associations did not pay taxes and had State subsidies. In the 1990s, following Ukraine's independence, subsidies were cancelled due to the economic crisis, and capture catch and aquaculture production declined sharply, falling to a low of 313 000 t in 1994, when imports were at a low level and annual fish consumption fell to 5–6 kg per capita.

In 2001, of Ukraine's total fish production of 381 000 t, about 325 000 t was processed for human consumption, with 50 000 t processed into fish meal and 159 000 t of fish for human consumption exported. Imports of fish products increased markedly in the late 1990s, and in 2001 imports of fish products were 328 000 t. In total in 2001, Ukraine's population consumed 494 000 t of fish products, or 10.2 kg per capita. The percentage of fish protein in the total animal protein consumption in 2001 increased to 12 percent, while in 1993–1995 it was only 3–4 percent. The

share of fish products in the population's nutrition is greatest among inhabitants of coastal zones and near rivers, lakes and reservoirs.

In 2000, the fisheries industry comprised about 2 300 vessels, including 1 450 motor vessels and 850 unpowered vessels. There were 47 large trawlers with overall length (LOA) of 82–128 m and 2 600–6 300 GRT and 39 medium trawlers (55–62 m LOA and 600–700 GRT), and 14 fish carriers (124–172 m LOA and 5 500–13 000 GRT) for transporting products from ocean fishing areas. Fishing vessels in the Azov and Black Seas basin were 95 small vessels, purse seiners and trawlers of 16–36 m LOA and 30–350 GRT, the majority being vessels of 25–26 m LOA and 96–104 GRT, and 165 motor boats of less than 16 m LOA designed for netting and trap setting and long-lining. More than 30 small transport vessels (27–55 m LOA and 80–700 GRT) transport fish products.

In 2001, only 20–25 large fishing vessels operated in international waters, supported by several fish carriers. In the Azov and Black Seas, fisheries involved about 20 seiners and trawlers, 30–40 motor boats and several transport vessels. The other vessels in the national fleet were inactive port.

An important problem for Ukrainian fisheries is the ageing of the fleet, where vessels are generally between 20 and 27 years old. That may result in scrapping of more than 90 percent of the fleet by 2010–2015. At present, only 7 Ukrainian large-tonnage vessels are between 2 and 8 years old.

The catch per fisherman in 2001 in high seas fisheries was 28.3 t; 4.3 t in the Azov and Black Seas, inland reservoirs and natural waterbodies; and 2.6 t in aquaculture production. The number of professional workers directly working in the fishery industry in Ukraine was about 45 000 people, but some 500 000–1 000 000 people are connected to some extent with fisheries, processing, transportation and sale of fish products, ship building and ship repairs. This equates to less than 5 percent of the economically active population. For these people, fisheries and fishery-related activities are the main source of earnings. Fisheries have greatest economic importance in the coastal areas. In the Autonomous Republic of the Crimea, Odessa Region, Kherson Region, Nikolaev Region, Zaporozhje Region and Dnepropetrovsk Region, fisheries and ship building are important sources of employment.

In 1995, Ukraine established its Exclusive Economic Zone (EEZ) in the Black Sea, on the basis of the UN Convention on the Law of the Sea. Biological resources in the Azov Sea form a common resource for the two countries on the basis of the Agreement with the Russian Federation (1993). In 1999, Ukraine ratified the United Nations Convention on the Law of the Sea of 10 December 1982. In 2002, Ukraine ratified the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFA).

Current problems in Ukrainian fisheries are connected with the general crisis in the economy of the country, following the transition from a centrally-planned to a market economy. The development of fisheries in

Ukraine is impeded by high costs for supplies of materials and machinery, an absence of circulating assets in enterprises, high credit costs, extremely strict taxation, imperfect privatization legislation, absence of laws concerning fisheries and aquaculture, criminalization of fisheries business, and shadow turnover of the greater part of the capital. Formation of a competitive environment is still at an early stage. Government support for fisheries as it exists in many countries has not yet been established in Ukraine. Ukraine has no wholesale markets for fish products, so expenses for sale of fish products in the domestic market approaches half of total commercial costs.

## **MARINE FISHERIES**

Marine fisheries of Ukraine are historically divided into two independent parts: fisheries in the Black and Azov Seas within the EEZ of Ukraine and neighbouring countries; and distant-water fisheries beyond the Azov and Black Seas area. Total catch in the Azov and Black Seas in 2001 was 87 000 t, and 255 000 t in the waters beyond.

### **Fisheries in the Azov and Black Seas**

Under Ukrainian law, biological resources and the sea bed within the territorial waters are the property of the State; the biological resources in the EEZ and the sea bed are under the jurisdiction of the State; and marine areas and the sea bed cannot be assigned as private property.

The bulk of Ukrainian catch in the Black Sea originates from territorial waters and the EEZ. In the Azov Sea, Ukrainian fishermen have the right to fish over all the sea area in accordance with the Agreement with the Russian Federation, but, in 2002, Ukraine unilaterally limited the area permitted for Ukrainian fishing activities to the country's own waters following establishment of a presumed marine border with the Russian Federation. Ukrainian fishermen seasonally fish anchovy (*Engraulis encrasicolus*) in the waters of Georgia on the basis of a bilateral agreement.

In 2000–2001, the catch quota for fisheries in the Black and Azov Seas was allocated to some 200 fisheries companies, cooperatives, fish canneries and private persons. About 20 000 people were involved in fisheries on a temporary or permanent basis. Starting from 2002, a fisheries licence system was introduced. The legislative basis for fishing is the Fisheries Regulation ("Rules of Fisheries"). Control and surveillance for Fisheries Regulations compliance are carried out by the Regional State Inspectorates of Fish Protection, integrated into the Chief Administration for the Protection and Reproduction of Water Living Resources "Holovrybvod".

Ukraine's catch in the Black Sea in 2001 was 58 000 t, worth about US\$ 21 million, and in the Sea of Azov it was 29 000 t, worth about US\$ 14 million. The principal species in the Azov and Black Seas catch are European sprat, *Sprattus sprattus* (local name: *shprot*) – 49 000 t; Azov tyulka, *Clupeonella cultriventris* – 18 000 t; European anchovy (local name: *khamsa*) – 17 000 t; pike-perch (zander) (*Stizostedion lucioperca*) – ~1 000 t; mullets (*Mugilidae*) – 2 500 t; turbot (*Psetta maxima*) – ~1 000 t; cumulative catch of mussels (*Mytilus galloprovincialis*) and rapa whelks (*Rapana venosa*) is about 1 000 t. Whiting (*Merlangus merlangus*)

and dogfish (*Squalus acanthias*) are taken as bycatch in the sprat fishery.

More than 90 percent of Ukrainian catches in the Azov and Black Seas are caught by small-tonnage motorized seiners and trawlers of 16–36 m LOA and 30–350 GRT. About 10 percent of the catch is taken by coastal fishing gears – set nets, set gillnets, traps and other stationary nets and hooked fishing gears (generally longlines) – using open boats.

Mechanized fisheries in the Azov and Black Seas began to be developed in the 1960s. The most intensive purse seine and trawl fisheries for anchovy are in autumn and winter for the aggregations of this species in the Kerch Strait, along the Ukrainian and Russian coasts of the Azov and Black Seas, and in the waters of Georgia. Sprat is fished by trawl fisheries, mainly in summer, on the northwestern shelf of the Black Sea and near the Crimean coast. Tyulka purse seining is conducted in the Azov Sea in winter, while turbot fisheries are distributed along the southern coast of Crimea. Pike-perch and Pacific mullet (*Mugil soiuy*) (haarder; local name *pilengas*; acclimatized in the 1980s) are fished by purse seines and traps (stationary uncovered pound nets) in the Azov Sea, in winter generally. Harvesting of mussels and Rapa whelks is carried out over the northern shelf of the Black Sea using bottom dredges. In the low-saline waters of the northwestern Azov Sea, Ukrainian fishermen fish for freshwater species such as pike-perch, freshwater bream (*Abramis brama*), roach (*Rutilus rutilus*) and others.

Till the early 1990s, Ukraine's catch in the Azov and Black Seas was some 180 000–200 000 t, reaching in some years 230 000–260 000 t. Anchovy was the principal species caught, forming approximately 80 percent of the catch. In 1989–1991, Ukraine and other countries of the region faced a sharp, crisis decrease in biomass of anchovy and other small pelagic fishes, which resulted in decline of the Black and Azov Seas catches. The crisis resulted from an intense impact on the food chain by an Atlantic intruder – the ctenophore *Mnemiopsis leidyi* – as a food competitor of anchovy and other small pelagic fishes. The ctenophore had probably been introduced into the Black Sea with tanker ballast water; it was recorded for the first time in the Black Sea in 1982, and reached a peak in 1989–90. Moreover, the collapse in Ukrainian catches, as well as catches in other Black Sea countries (except Turkey), was aggravated by a sharp reduction in fishing effort due to the economic crisis. In 1993, Ukraine's catch in the Azov-Black Sea basins reached its lowest value for 50 years – 26 000 t, and then the catch began to grow again.

Ukrainian fishermen in the coastal fisheries use small vessels, mainly near the coastal cities and villages. Fishing gear is set no farther than 2–3 hours' motor boat travel from landing sites. The coastal fisheries are the oldest sources of employment and income for the coastal communities, the most important source of food, and successfully keep their ancient traditions. Most of these fisheries target species with higher market price. Till recently, coastal fisheries targeted sturgeons, but after the ban on sturgeon fisheries from 2000, they instead targeted mullets. In catches of set (fixed) nets and traps, about 40 fish species are recorded, but the bulk comprises European anchovy, European sprat, tyulka, silversides, haarder and flatfishes. Dogfish, skates and rays and turbot are harvested

with gillnets and longlines. Cases of violation of the Fisheries Regulations are rather frequent in the coastal zone, so the State Fish Protection agencies are very active there. Nevertheless, poaching for sturgeon occurs and is resulting in a continuing decline in its biomass in the Azov Sea.

### **Distant water fishery**

In 2001, 20–25 large Ukrainian fishing vessels were operating on high seas outside the EEZs of Ukraine and other countries. Their total catch was 255 000 t of fish, cephalopods and crustaceans (about 70 percent of total Ukrainian marine production, worth about US\$ 180 million. In total, some 3 000 persons were directly involved in the distant water fishery.

In 2001, in the Central and Eastern Atlantic (FAO Statistical Area 34), 12–14 vessels operated in the EEZs of Guinea [Conakry], Mauritania, Morocco and Senegal. The target species included horse mackerel (*Trachurus* spp.), European pilchard (*Sardina pilchardus*), chub mackerel (*Scomber japonicus*), and sardinellas (generally round sardinella, *Sardinella aurita*). Ukraine took the greater part of its oceanic catch in the Eastern Central Atlantic – 187 000 t in 2001. In the EEZ of New Zealand, five vessels operated and caught 59 000 t, targeting hoki (*Macruronus novaezelandiae*), snoek (*Thyrsites atun*), horse mackerel (*Trachurus* spp.) and squid (*Nototodarus* spp.). At the seamounts of the Western Indian Ocean, one vessel caught 800 t of demersal fishes, mainly alfonsino (*Beryx splendens*) and bluenose warehou (*Hyperoglyphe antarctica*). In the Antarctic part of the Atlantic Ocean, two Ukrainian vessels fished Antarctic krill (*Euphausia superba*), catching 4 000 t. About 80 percent of the distant-water catch was sold in the countries located close to the fishing area, and the remaining 20 percent was landed in home ports.

### **INLAND FISHERIES**

Ukraine has about 71 000 rivers, with a total length of 248 000 km. Among them, 3 212 rivers have a length of more than 10 km and total 73 700 km in length. The largest rivers are the Danube, the Dnieper and the Southern Bug. The country has more than 8 000 lakes and estuaries, 953 of the lakes have an area of more than 1 km<sup>2</sup>, and their total area is 3 790 km<sup>2</sup>. In the basins of the largest rivers in Ukraine, generally near hydropower stations, there are 1 157 artificial waterbodies (reservoirs) with a total area of 9 680 km<sup>2</sup>. The largest such dams are in the Dnieper Cascade, with a total area of 6 920 km<sup>2</sup>, and about 20 percent of the area has a depth of more than 2 m, allowing aquaculture.

The total area of all inland freshwater waterbodies in Ukraine is about 24 000 km<sup>2</sup> (4 percent of the territory), but only 32 percent is used for fisheries and controlled by Holovrybvod. This government agency controls 2 028 rivers with a total length of 68 000 km; 1 767 lakes with a total area of 1 574 km<sup>2</sup>; 557 water reservoirs, with an area of 6 085 km<sup>2</sup>; and biological resources of the Azov and Black Seas within the jurisdiction of Ukraine and important for reproduction of living water resources.

Fisheries in inland waterbodies are operated by 40 cooperatives and by several hundred private persons, licensed for fisheries and assigned a