THE REPUBLIC OF LITHUANIA

GENERAL ECONOMIC DATA

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>65 303 km²</td>
</tr>
<tr>
<td>Water area</td>
<td>7 000 km²</td>
</tr>
<tr>
<td>Length of continental coastline</td>
<td>90 km</td>
</tr>
<tr>
<td>Population (2003)</td>
<td>3.46 million</td>
</tr>
<tr>
<td>GDP at purchaser’s value (2003)</td>
<td>US$18 423 million</td>
</tr>
<tr>
<td>GDP per head (2003)</td>
<td>US$5 334</td>
</tr>
<tr>
<td>Agricultural GDP (2003)</td>
<td>US$1 343.2 million</td>
</tr>
</tbody>
</table>

FISHERIES DATA

Commodity balance 2001:

<table>
<thead>
<tr>
<th></th>
<th>Production</th>
<th>Import</th>
<th>Export</th>
<th>Total supply</th>
<th>Per capita supply</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>tons live weight</td>
<td>kg/year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish for direct human consumption</td>
<td>153 932</td>
<td>112 426</td>
<td>75 077</td>
<td>189 963</td>
<td>54.5</td>
</tr>
<tr>
<td>Fish for animal feed and other purposes</td>
<td>1 401</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Estimated employment (2003):

(i) Primary sector (including aquaculture): 2 500
(ii) Secondary sector: 5 000


Trade (2003):
Value of fisheries imports: US$112.9 million
Value of fisheries exports: US$115.2 million

MAIN RESOURCES AND FISHERIES REGIONS

The territorial waters and maritime exclusive economic zone comprise 7000 km², which is about two percent of the Baltic Sea.

Other water bodies with economic fisheries significance consist of the Lithuanian part of the Curonian lagoon (41 300 ha out of the total area of 161 000 ha), 2 827 lakes (87 359 ha) and 1 589 (>0.5 ha) (total of 24 434 ha), and 733 rivers over 10 km in length (32 601 ha). Internal waters occupy four percent of the national territory.

According to the agreement on fishing relations with European Union (EU), Lithuanian fishermen can fish in the Baltic Sea, in the waters belonging to EU countries. Other international agreements allow Lithuanian fishermen to use resources of more distant waters. These are the areas regulated by the North Atlantic Fisheries Organization (NAFO) and the North East Atlantic Fisheries Commission (NEAFC), the Svalbard zone in the waters of Norway in the Barents Sea, the EEZ of Mauritania, and other less significant waters.

Fisheries companies, fishermen and fishermen's organizations

More than 2 500 fishermen operate at sea, and it is calculated that each worker on a vessel at sea creates four to five jobs directly related to fisheries business.

Internal fisheries employ about 1 500 people, and the 62 operational fish processing companies employ more than 3 500 people.

There are 147 companies fishing in the Baltic Sea, 42 of which operate in deep waters, with more than 100 smaller companies operating in coastal areas. More than 75 companies fish the Curonian lagoon, and another 67 companies operate in other waters.

FISHERIES INFRASTRUCTURE

Nine Lithuanian fishing vessels are certified for product export to the EU. There are 67 vessels operating in the Baltic Sea – fishing trawlers, medium-sized Black sea seiners, fishing boats and trawler boats. Vessel lengths are 20 to 30 m, with a capacity of 100 to 200 GRT. More than 200 small fishing vessels operating in the coastal areas. In distant water, there are 24 vessels under the Lithuanian flag, totalling 28 000 GRT.

Fishing activity in coastal area, the Curonian lagoon and internal waters is operated from smaller boats and row boats. The main port for Baltic sea operations is Klaipeda. Other ports that are important for coastal and Curonian lagoon fisheries are Dventoji, Juodkranté, Uostadvaris and Kintai, although considerable renovation or rebuilding is needed.

Lithuanian vessels operating in the Baltic Sea land their catch Klaipeda in Lithuania, or in EU ports, particularly Denmark and Sweden, where up to a third of the Lithuanian cod catch has been landed. Catches by Lithuanian vessels and landed outside Lithuania are reported on a monthly basis. Some foreign vessels, mostly Russian, land their catches in Klaipeda. Regulations limit landing in Klaipeda to vessels with the appropriate permit, and landings by foreign vessels are reported as required under Rule 2.3 of IBSFC Fishery Rules.

CATCHES, FISH IMPORT/EXPORT AND FISH MARKETS

In Lithuanian waters in the Baltic Sea during the past few years the average yearly yield has been 10–15 000 t of various species, two–three percent of which is caught in the coastal areas. The main species are cod, herring, sprat, plaice, turbot, salmon and smelt.

In other waters in 2003, Lithuanian vessels caught 150 000 t of fish and 5–6 000 t of shrimp. Redfish, mackerel, cod, red plaice, black halibut and squid form the bulk of these catches.

The world ocean resources, including the Baltic Sea resources, are overused, and some fish species are threatened with extinction. The EU therefore intends to apply a stricter policy regarding fishing in the Atlantic Ocean and to decrease quotas. In the past decade the Lithuanian quota in the Baltic Sea has almost halved, and will continue to decrease, especially for cod, which is a popular product in the market. Therefore, to adapt to the situation, the Lithuanian fishing fleet will have to modernize and downsize. However, due to falling demand, the fishing quotas are not used for Baltic sprat, sprat and salmon. The Lithuanian processing industry is slowly beginning to process these species, especially because in other Baltic countries the fish processing industry is well developed and there is even a shortage of these species.

INLAND WATER FISHERY

Internal waters include the Curonian Lagoon, reservoirs, lakes, rivers and ponds. In general, the area of such water bodies is 262 500 ha, or four percent of the country's area. Most Lithuanian hydrologic basins have ecological conditions suitable for fishery development. In Lithuanian internal waters there are more than 50 species of fish. Internal water fisheries provides employment for about 1 500 people.

The biggest and most efficient Lithuanian landlocked basin is the Curonian Lagoon, of which Lithuania has the use of one-quarter. Commercial fish production approaches 1 300 t/yr (a productivity of over 30 kg/ha). The annual harvest is about 450–500 t of roach, 350–400 t of bream, 70–90 t of pikeperch, 8–10 t of eel, and some smelts and perch. The Curonian Lagoon accounts for about 80 percent of all fish caught in Lithuanian internal waters. In 2003, the total inland water catches reached 1 959 t.
Free trade agreements and supportive customs policies create favourable conditions for the development of
fish landing pier, but the fish auction has not yet been established. Thermo-containers for transport of fish. It is planned to build an auction hall in connection with the new production capacity, a sorting machine for small fish, a cold store facility (100 t capacity) and 100

Lithuania has 29 900 big and or small rivers and other watercourses (>0.5 km) with a cumulative length of 63 700 km and an average net density of 0.99 km/km. The rivers are important for their role as spawning and juvenile grounds for species caught elsewhere. Because of trade seasonality and comparatively little fishing effort, Lithuanian river fisheries have little direct impact on the economy, but the river net is very important for stock maintenance, and as a source of recreational fishery. Annual yields from the rivers are estimated at 150–170 t.

Although catches from internal waters comprise less than one percent of all fish caught by Lithuanian fishermen, the inland water fishery resource is of great importance at a local economic level, as well as having social and recreational significance. It provides some employment and is a national income source, and an important impetus for the development of rural tourism, which is increasingly popular.

POND FISHERIES AND FISH FARMING
There are 18 big joint-venture companies and 50 private farmers engaged in pond fish farming, with over 10 500 ha of ponds, with a yield of about 2 000–2500 t of carp, trout, pike, eel and other fish. Crayfish are also being produced.

The capacity of farming ponds is not fully exploited. Carp, which is in greatest demand, meets market demands, but opportunities for growing trout, pikeperch, pike, peled and crayfish for internal markets and export are not fully exploited. The last year was especially successful for aquaculture, with production increasing to 2 348 t, a 38.5 percent increase over the previous year with 1 103 t of aquaculture production exported to the new EU countries.

Pond fisheries are not a traditional, limited-input rural business but rather are gaining momentum as an additional element in rural tourism and recreation, and helping to maintain employment opportunities and provide additional income to rural economies.

A very important role in maintaining and increasing fish resources of the country is played by the Lithuanian State Fisheries Research Centre (LSFRC). The Centre engages in breeding and growing juveniles of salmon, pike, carp, crucian carp, burbot, pikeperch, tench, salmon-trout, whitefish, peled and less common species. The juveniles are used to stock lakes, rivers and ponds. Carp selection is also being carried out, and carp growing farms and individual farmers are provided with stocking material. Crayfish are also being bred.

International commitments require that Lithuania contribute toward preserving the salmon population in the Baltic Sea. The quotas that the country receives depend on the contribution it has made. A start has been made on salmon breeding facilities in the Peimena division of LSFRC, and following completion of the salmon breeding unit, it will be possible to apply for an increase in the salmon quota for Lithuanian fishermen.

Fish and crayfish resources are currently limited in inland waters. At present capacities, it would be possible to incubate 400 million fish eggs per year, but lack of funds has limited possibilities of exploiting these opportunities.

FISH PROCESSING INDUSTRY
Lithuania is a country which imports raw material, processes and exports finished products, with imports to Lithuania growing yearly. Most come from Norway, USA and Iceland – over 37 percent of all imports. Exports are growing yearly too, and in 2004 the fish and fish products export/import balance became positive.

At present there are 62 fish processing companies, with more than 3 500 employees, while in 1999 there were more than one hundred processors. In spite of the decrease in number, production quantities continue to increase. Following the introduction of enhanced fishing control and increased quality requirements, competition has eliminated some companies, with only the most modern companies surviving, notably those companies meeting EU sanitary and hygienic requirements, employing wide-reaching marketing activities and increasing exports were able to stand the pace. In 2003, 50 600 t of fish were produced; in 2001 it was 67 000 t; in 2000 it was 47 000 t; compared with only 21 100 t in 1988. Currently, 25 fish processing companies have veterinary numbers, enabling them to export fish products to EU countries.

Beside the traditional frozen, salted, marinated and canned fish products, there is a growing selection of culinary fish products with sauces, garnitures and additives of preserves. There is a growing popularity of crab sticks and other products of surimi material, and other delicacies from various species of fish.

A major part of fish processing industry production is surimi products (crab sticks, fish fingers, etc.; ca 34 percent), frozen fish and frozen fish fillet (ca 23 percent) and canned fish (12 percent). Those products are mostly for export. Other product types – salted, smoked, dried fish and culinary fish products – are mostly supplied to the Lithuanian market. Most of these products are produced by modern companies in accordance with EU sanitary and hygiene standards.

The construction of a specialized landing place for Baltic Sea fishing vessels in Klaipėda Seaport was completed in 2004, with new quays and service facilities. There is an ice generator with 20 t/24 hr production capacity, a sorting machine for small fish, a cold store facility (100 t capacity) and 100 thermo-containers for transport of fish. It is planned to build an auction hall in connection with the new fish landing pier, but the fish auction has not yet been established.

Trade
Free trade agreements and supportive customs policies create favourable conditions for the development of
fish import/export and the processing industry of the country. In 2003 imports were 92 000 t. The local market in Lithuania is small, almost filled, and usually the most important criterion for competition in the market is low price. Therefore prospective companies aim at greater exports, and to comply with EU requirements. In 1999 and 2000, exports were similar, at 31 000 t, but in 2003 exports tripled and reached 94 000.

<table>
<thead>
<tr>
<th></th>
<th>Exp tonnes</th>
<th>Exp US$1 000</th>
<th>Imp tonnes</th>
<th>Imp US$1 000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithuania</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>65 105</td>
<td>71 503</td>
<td>93 912</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60 722</td>
<td>77 601</td>
<td>115 151</td>
<td></td>
</tr>
<tr>
<td></td>
<td>102 285</td>
<td>82 318</td>
<td>92 081</td>
<td></td>
</tr>
<tr>
<td></td>
<td>91 629</td>
<td>88 006</td>
<td>112 911</td>
<td></td>
</tr>
</tbody>
</table>

Fish and fisheries products make up to seven percent by value of foodstuffs exported by Lithuania. In 2003, the total value of fish and fish product exports reached US$115 million. At present there are only three fish conserve production companies in Lithuania. Their production is mostly exported to CIS and countries of Eastern Europe. In view of contracting fishing quotas and potential increases in catches of conservable fish, this branch of the processing industry should expand, especially as the demand for fish conserves is not satisfied.

The relationship between Lithuanian fishermen and fish processors is not stable. Due to the unstable economic situation, fishermen are reluctant to make long-term fish supply agreements with processing companies and fish processors offer low prices. There is therefore a need for a primary fish auction, to develop port infrastructure and organize the market of fish products, which should provide a more stable income to fishermen and satisfy the demands of processors and consumers.

There are two recognized Producer Organizations (PO) in Lithuania: one brings together companies fishing in the Baltic Sea; the other is for fish farming companies. These POs were created under the Denmark project. The main purpose of these POs is regulation of first-sale prices in order to stabilize markets. POs intervene in the market when fish prices are too low, in order to guarantee stable incomes for fishermen.

RESEARCH

Laboratory of Marine Ecology, Institute of Ecology of Vilnius University

The Institute of Ecology of Vilnius University is a state-funded research institute. It focuses on fundamental and applied scientific research, as well as the development of such research, in the fields of ecology, environmental sciences, ethology and parasitology covering: regularities and mechanisms of the functioning of terrestrial and aquatic ecosystems under the impact of global climate change and anthropogenic load; sensitivity, vulnerability, adaptations and micro-volution of ecosystems and their constituent parts; physiological and ethological mechanisms of animal population management; and functions of parasites in ecosystems.

The main research thrusts of the Laboratory of Marine Ecology are the structure and productivity of zoocenoses of the Baltic Sea coastal zone, Curonian Lagoon and Kaunas Water Reservoir; and the regulation of biological diversity and fish stocks under the impact of natural and anthropogenic factors. There are regular resource investigations and monitoring of zoobenthos and fish in waterbodies. The Laboratory participates in programmes of investigation and rehabilitation of endangered fish species, and in environmental projects associated with the development of Klaipėda Port, Būtingė Oil Terminal,
Kruonis Hydroaccumulation Power Plant and other industrial activities. A lot of research is carried out at the behest of various national bodies. The Ministries of Environment and of Agriculture are provided with recommendations for applying fishery regulation measures, and for setting catch limits in individual water bodies. For research in the Baltic littoral zone and the Curonian Lagoon, the laboratory works in close cooperation with the Coastal Research Institute in Sweden and with Kaliningrad AtlantNIRO Research Institute in the Russian Federation.

**FISHERY SECTOR STRUCTURE AND FISHERY INSTITUTIONS**

The Fisheries Department under the Ministry of Agriculture is engaged in formulating and carrying out fisheries policy in Lithuania. The main tasks of the department are: to create a legal and economic framework for expedient functioning of the fish and fish products market and to create favourable conditions for Lithuanian EU integration; to set priorities for the development of the fisheries sector, to preserve traditional fishing areas and to extend fishermen's activities to Atlantic and other oceans; to integrate into the global fish market; and to establish a policy of utilizing the results of scientific research and modern production technology in the fisheries sector.

Fisheries covers activities related to fish resource management, protection and regeneration, fishing, aquaculture, pond fisheries, fish processing and primary fish sales. Fisheries production account for 15 percent of all agricultural production.

The main principles of fishing management in both Lithuanian and international waters for Lithuanian fishing vessels were established by the Law on Fisheries, adopted on 27 June 2000. The management and conservation of fish resources are mostly regulated by Orders adopted by the Ministers of Agriculture and of the Environment. Fish catch limits in the Baltic Sea are established annually according to IBSFC recommendations (for cod, sprat, herring and salmon). Based on scientific advice, catch limits are set for sea trout. The Fisheries Department allocates quotas to fishing companies.

With Lithuania's accession to the EU, administration of Lithuanian fisheries agreements and commitments pass to EU authorities and is regulated by EU legislation. In the course of negotiations it was guaranteed that Lithuania would receive fishing quotas according to the principle of relative stability, that is, in such a way that it will not have negative social economic consequences for Lithuanian fishermen and the fishing fleet.

**INTERNET LINKS TO FISHERIES INSTITUTIONS**

1. Fisheries Department of the Ministry of Agriculture
   [http://terra.zum.lt/min/OS/dsp_struktura.cfm?StambesnisID=81&langparam=EN](http://terra.zum.lt/min/OS/dsp_struktura.cfm?StambesnisID=81&langparam=EN)
2. Laboratory of Marine Ecology, Institute of Ecology of Vilnius University

**ANNEX: ADMINISTRATION STRUCTURE**

[Diagram of Fisheries Department of the Ministry of Agriculture and related institutions]
<table>
<thead>
<tr>
<th>stocks</th>
<th>organisational issues</th>
<th>Marketing and tariff duties</th>
<th>Coordination of EU affairs</th>
<th>Ethics and codes of practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical fishery trade training</td>
<td>Fishing and fish processing</td>
<td>Producers’ organisations</td>
<td>Fishing vessel register</td>
<td>Draft projects, integrated plans of institution's policy</td>
</tr>
<tr>
<td>Fish landings</td>
<td>First sale and fish auction</td>
<td>First sale and fish auction</td>
<td>Scientific research</td>
<td></td>
</tr>
<tr>
<td>Post infrastructure</td>
<td>Statistical database and information</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>