Chapter 4

Sakhalin Region and Potentially Affected Districts
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The Sakhalin region (Oblast) is the only Russian region made up entirely of islands (59 in total), namely Sakhalin Island and its adjacent islands, Moneron and Tuleniy, and the Kuril Island chain (56 islands). The Sakhalin region covers a total area of 87,100km². The regional capital, Yuzhno-Sakhalinsk, lies 10,417km and seven time zones (+7 hours) east of Moscow.

The Sakhalin region has a population of approximately 590,000 (data from January 1, 2001), and has a low population density (6.8 people/km²). Approximately one-third of the population lives in Yuzhno-Sakhalinsk. The population is comprised of more than 100 nationalities, the majority (80%) being Russian, and the other larger groups being Korean, Ukrainian, Tartar and Belorussian. A number of indigenous groups make up 0.6% of the population, of which Nivkhi, Ulita (Oroki), and Evenki form the majority.

Sakhalin’s Gross Regional Product (GRP) is comparatively small, constituting approximately 0.5% of Russia’s Gross Domestic Product (GDP). Industrial production dominates the Sakhalin economy, with the oil and gas, electrical power, fish, coal and timber industries playing key roles.

This chapter provides a general overview of the socio-economic development of Sakhalin region, focusing in particular on the districts that are likely to experience the greatest impacts from the Sakhalin II Project. This chapter covers the following:

- Historical context,
- Social and political structure and civil society, and
- Current demographic and socio-economic trends.

Socio-economic data are presented for the regional and district levels.

The reference sources for this chapter include:

- Socio-economic monographs about Sakhalin Region,
- Statistics published by the State Statistics Committee,
- Information provided by Sakhalin governmental authorities, and
- The Internet.

The approach to baseline data collection was designed to fulfill the SIA objectives and is described in Chapters 2 and 3.

4.1 HISTORICAL CONTEXT

4.1.1 Sakhalin Region in the Soviet Period Prior to 1991

Between 1905 and 1945, Japan occupied southern Sakhalin under the terms of the 1905 Portsmouth Treaty, and in 1906, Russia abolished the status of the penal colony that had been in existence on Sakhalin since 1869. In 1945, Japan ceded the southern half of Sakhalin island to the USA, and on 2 January 1947, the modern administrative boundaries of the Sakhalin Oblast were defined.

Sakhalin’s infrastructure was developed largely by Japan in the south and the Soviet Union in the north, apart from a short-term occupation of northern Sakhalin by the Japanese between 1920 and 1925. A major exception was coal and oil. Under the 1923 Peking Treaty, eight oil fields in northern Sakhalin were split between Japan (50%) and the Soviet Union (50%), and by 1928 both countries were exporting oil from the region. Coal mining also progressed during this period, although it was largely abandoned by the Japanese in 1938 (Vysokov, 1996).

From 1926-1940 the population of northern Sakhalin grew from about 10,000 to 117,000 as the Soviet Government recruited workers from other parts of the Soviet Union to work in the mines, oil fields, timber enterprises and fishing collectives (Vysokov, 1996). During the Soviet era, these industries continued to dominate the economy, and together with sea transportation accounted for about two-thirds of the GRP.

State farms were the main agricultural enterprises during this period, specialising in vegetable production, dairy farming and livestock rearing (including reindeer herding in the north).

All industrial and agricultural enterprises were owned and run by the State, and Moscow-based ministries...
centrally managed the regional economy.

Throughout the Soviet period, the Government continued to follow a policy of encouraging workers to migrate to Sakhalin and other regions of the Russian North and Far East by paying salaries that were higher than those in European Russia. Sakhalin salaries were generally 1.5-2 times higher than salaries paid for similar work in central Russia. As a result, the population increased quickly, reaching a peak of 719,000 in 1992. Despite this in-migration, many Sakhalin enterprises experienced labour shortages. There was virtually no unemployment.

The socio-economic development of Sakhalin’s districts has been uneven and has been determined by the dominant industries. Northern Sakhalin, especially Okha and Nogliki Districts, has been the focus of oil extraction since the mid-1920s. The economies of the central districts, Tymovsk and Smimykh, were dominated by agriculture, logging and coal mining. In the southern districts of Dolinsk, Tomari, Poroninsk and Makarov, the main industries were pulp and paper production, logging and coal mining.

Kholmsk and Korsakov Districts in the south became the main centres of sea transportation, and Kholmsk and Korsakov are still the largest ports on the island. Fishing and sea transportation dominated these district economies in addition to pulp and paper production in Kholmsk District and coal mining in Korsakov District. Another important southern district was Aniva District, specialising in livestock breeding and vegetable production.

Yuzhno-Sakhalinsk, which was home to one quarter of the island’s inhabitants in the Soviet era, was the main centre of processing industries. Similar to that time, the most important branches of the economy are construction, power, transport, machine building, services and trade.

4.1.2 Social-Economic Change and Development of Sakhalin Region (1991 to Present)

Following the break-up of the USSR in 1991, the State began to experience difficulty in maintaining price controls on most goods and services and as a result the rouble devalued dramatically. In the Sakhalin Oblast, the major socio-economic changes in the first half of the 1990s included:

- The closure of many state enterprises. Most pulp and paper plants, mines, state timber enterprises and many transport enterprises became economically nonviable and either closed down or continued to work unprofitably,
- Mass unemployment as a result of the downsizing or closure of state industries,
- Sharp increases in the prices of major goods and services. State salaries, subsidies and allowances no longer kept up with inflation,
- Privatisation of state enterprise. Large numbers of private trade and services enterprises were created,
- Decline in standards of living for the majority of the population. More than one-third of the population experienced sub-standard incomes,
- Out-migration: the region’s total population declined from 719,000 in 1992 to 591,200 in 2001,
- Increase of intra-regional migration with people moving from rural to urban communities, and
- New market relations developed most quickly in the trade sector, which has grown to account for a greater proportion of the overall economy.

By the end of the 1990s, the general economic decline was reversed and the industrial, agricultural and service sectors began to recover. In addition, foreign investment in oil and gas development stimulated the economy. Today, Sakhalin is one of the three leading regions of Russia for foreign investment.

4.1.3 Indigenous Populations of Northeastern Sakhalin

4.1.3.1 Pre-Soviet Period

During the pre-Soviet period, the aboriginal inhabitants of northern Sakhalin were the Nivkh and Ulro (Onoks, Oron, Orocheny). The Evenki migrated from the mainland to northern Sakhalin at the end of the 19th century.

Most Nivkh lived along Sakhalin’s western shore; on the eastern coastal bays; in the middle reaches of the Tym River and in the mouth of the Poronay River. Their main subsistence activities included fishing, hunting marine and forest mammals, gathering berries, plants and roots, and trading with other ethnic...
groups. They kept dogs for transportation, rites and rituals. During the summer, they lived in small camps on the coastal bays and the estuaries of spawning rivers. In the winter they would migrate to their winter homes about five kilometres from the coast.

Uilta lived near the northeastern bays, in central Sakhalin, and further south along the Poronay River and tributaries of Nevskoye Lake. While their main livelihood activities were similar to those of the Nivkh, they used reindeer for transportation, which enabled them to migrate considerable distances from the coast to the mountains in winter.

In the 1850s, the Russians began to develop Sakhalin, exploring for natural resources, building military outposts, and laying roads.

4.1.3.2 Soviet Period (1925-1991)

In the early 1930s, the Soviet government established state and collective farms for the indigenous people, specialising in fishing (Nivkh) and reindeer herding (Uilta and Evenki). The indigenous people continued to hunt for subsistence and trading purposes. The people were settled into villages and their small traditional camps (stoibisch) were abandoned.

The state subsidised unprofitable Native enterprises and cancelled enterprise debts. It paid rates and provided free medical services. For Native children it provided food and full board in nurseries, kindergartens and boarding schools, in addition to schooling and further education.

Several Nanai families and other ethnic groups came to Sakhalin from the mainland after World War II. In the 1960s, small state farms (sovkhozy) and collective farms (kolkhozy) were amalgamated into larger enterprises and the working populations were moved to even larger centres, such as Nogliki (Nivkh), Val (Uilta) and others. Indigenous populations were largely integrated into mixed ethnic groups in towns and villages.

Territories of traditional natural resource use were reduced in size and most indigenous people ended up working in other sectors of the economy. Fishing quotas were introduced and reindeer breeding and husbandry were restructured. The Native diet changed; traditional social structures weakened and native languages and cultures diminished. Struggling to adapt to the changes the indigenous peoples experienced psychological stress, which often led to alcoholism.

During this time, the oil and gas industry in Okha and Nogliki Districts grew. Government statistics indicate that 29 onshore oil and gas fields have been discovered in Nogliki and Okha Districts since 1925, and are still in production. Almost 2,000 boreholes have been drilled. The oil and gas industry provided gas to villages and towns and supported housing, clinics, hospitals and community cultural centres (known as Houses of Culture).

Prior to the development of oil and gas on the Island, reindeer pastures extended from Okha to Poronaisk. But the pollution of rivers, streams and lakes by industry, together with the restructuring of reindeer husbandry, reduced the domestic deer population from 10,000 to 3,000 animals, and herding enterprises from four to two, with a corresponding loss of jobs.

The last major withdrawal of land for oil development between Nogliki and Val took place in 1970s. Two brigades of oil, the branch of the reindeer-herding state farm Goleniow, were ordered to move their domestic herds from areas in the south to an area north of the Val River. As a result, the total number of domestic reindeer dropped, due to insufficient pasture to accommodate both the existing and translocated herds, and the difficulty of containing the domestic herd in the new location.

Many of the deer returned to traditional pasture areas and eventually became semi-wild. It is believed that some of the small, semi-wild herds that live south of the Val River are descended from the 1970 domestic herds.

Many Nivkh were moved to Nogliki in about 1964, when fishing collectives from the smaller villages were amalgamated into the collective fishing enterprise Vostok. By 1968, Vostok was in debt and its members began to fish in their old fishing grounds. Since then, Vostok has been fishing in most of the bays, particularly Nivvo Bay.
4.1.3.3 Post-Soviet Period

In the period of post-Soviet reform (1991-1995), financial support for the federal indigenous peoples development programme was discontinued. Boarding schools and 24-hour kindergartens were closed, social privileges were drastically reduced, and financing for native enterprises ceased. With the collapse of the centralized economy and the closure of native enterprises at the beginning of the 1990s there was a rise in unemployment among indigenous people.

In the early 1990s, the state reindeer farm Olenévod split into two enterprises: the state farm Olenévod (based in Viakhî, Aleksandrovsk-Sakhalinsky District) and the small state enterprise Val (Nogliki District). In 2001, Olenévod was reorganised into the closed joint stock company Olenévod, and in 2000, Val was relaunched as the cooperative Valetto.

The problem of dividing pastures between these two enterprises remains unresolved. According to documents, the reindeer pastures remain allocated to Olenévod, although the actual users of the pastures in Nogliki and Okha Districts are the Valetto herders.

Despite resettlement to Nogliki, the Nivkh retained strong emotional ties to their former villages and fishing grounds. In the 1990s, some Nivkh, particularly the elderly, began to return on a seasonal basis to their old villages to fish, to rediscover their roots and cultural practices, and to escape the stress of the large settlements. Newer generations of Nivkh have also begun to return seasonally to the old Nivkh fishing grounds, particularly on Nyivo and Nabit Bays. This has led to conflict between the indigenous fishers and the larger fishing enterprise Vostok.

In the early 1990s, Nivkh began to set up their own native or 'clan' fishing enterprises (rodovye khozyaystva) based on traditional fishing grounds. The aim was to practice fishing not only for subsistence, but also for trade.

The firm Aborigen Sakhalina was set up with the help of the regional administration to help clan enterprises and to create jobs for indigenous people. It became an umbrella organisation for Sakhalin’s native enterprises, distributing state money and coordinating their activities. The firm was also involved in fishing. However, in 1999 Aborigen Sakhalina went bankrupt.

Today, 53 clan enterprises are registered in the Sakhalin region. Of these, only 30 are operational, and they employ a total of 409 people. Nogliki District has 15 clan enterprises, most of which are involved in fishing. Clan enterprises are experiencing severe economic difficulties due to low production capacity, low competitiveness, production expense and a lack of business knowledge.

Many native enterprises are registered with the district administrations but have not been allocated land or commercial fishing or hunting grounds. They use traditional fishing grounds to catch marine and river fish. They also hunt marine mammals, gather berries, mushrooms, and wild plants for their own use and sometimes to sell.

The fishing enterprise Vostok (like the enterprise Krasnaya Zarya in Okha District and Druzhba in Poronaisk District) employs indigenous workers, fishes year round and also processes the fish.

Many indigenous people work in other sectors of the economy. A total of 959 indigenous people (30.5%) are employed. As of October 1, 1998, 175 indigenous people were registered as unemployed and looking for a job, and 80% of these were receiving unemployment benefit. However, the actual rate of unemployment among indigenous people is higher, as most unemployed people do not register and make their living instead by various private activities and informal trade.

In 1990, the NGO Sakhalin Association of Indigenous People was set up. Today the president is Alexei Limanzo and the Association is based in Nogliki. The Association develops and supports social and cultural programmes. Other districts also have their own district associations.

The Sakhalin regional assembly has a native representative, Antonina Nacherkina. There is also a Department of Native Policy in the regional administration, headed by Nadezhda Laigun. The regional administration has a programme for the socio-economic development of indigenous peoples (2001-2004), including social support to native communities and financial aid to clan enterprises.
4.2 SOCIO-POLITICAL STRUCTURE AND CIVIL SOCIETY

4.2.1 Administrative Structure

Implementation of the Sakhalin II Project and its mitigation measures will frequently require the involvement of several authorities, ranging from the community to the regional level. An understanding of the administrative structure also provides insights into the following:

- The balance of power within a community or district and the way this power is allocated and administered,
- The decision-making structures related to allocation and availability of resources (e.g., land, infrastructure and services), and
- The role of local residents in decision-making.

4.2.1.1 Sakhalin Region as a Constituent of the Russian Federation

The Sakhalin Oblast was formed on January 2, 1947 as one of 89 constituents of the USSR. In 2002, Sakhalin became part of the Russian Far Eastern Federal District (RFEFD), which also includes the Republic of Sakha, Primorye Region, Khabarovsk Region, Amur Region, Kamchatka Region, Magadan Region, the Jewish Autonomous Area, the Koryak Autonomous Area, and the Chukotka Autonomous Area. Khabarovsk is the Federal District capital.

The total area of the RFEFD is 6,517,300 km² with a population of 7,538,000. The Federal District is governed by the Authorised Representative of the Russian President, who is appointed by the President. The current Authorised Representative is Konstantin B. Pulikovsky.

4.2.1.2 Administrative Structure of Sakhalin Region

Executive power on Sakhalin is exercised by the Regional Administration. The structure of the Regional Administration is presented in Appendix C, Figure C-01. The head of the Regional Administration is the Governor, who is elected by the people of the region every four years. In addition to governing the region, he represents the interests of Sakhalin within the Russian Federation and internationally. The current Governor, Igor P. Farkhudinov, was elected for a second four-year term in October 2000.

Legislative (representative) power: The Sakhalin Regional Duma has 27 deputies, elected by the people every four years. The Regional Duma has the right to introduce legislation into the State Duma of the Russian Federation. The Sakhalin Regional Duma has the following committees:

- Budget and Finance,
- State Structures, Regulations and Self-government,
- Ethics, Information Policy, Culture and NGOs,
- Rule-of-Law, Law Making and External Affairs,
- Education, Science, Sport and Youth Affairs,
- Natural Resources and the Environment,
- Social Policy, and
- Economic Policy and Industry.

Judicial power in Sakhalin Region consists of the Regional Court, District Courts, Arbitration Court, Regulatory Court, and Justices of the Peace. All are part of the judicial system of the Russian Federation.

4.2.1.3 Public Administration in Sakhalin Region

Sakhalin Oblast is divided into 19 municipal formations. These include 17 districts: Okha, Nogliki, Aleksandrovsk, Tyumsk, Smirnykh, Poronansky, Tomari, Uglegorsk, Nevelsky, Kholmsk, Makarov, Dolinsk, Aniva, Korsakov, Severo-Kurilsk, Kurilsk, and Yuzhno-Kurilsk. The village of Sakhalinsk and the city of Yuzhno-Sakhalinsk also have the status of municipal formations (Appendix C, Table C-01).

A municipal formation can be an urban or rural community; several communities sharing a common territory; or part of a community or other populated territory that has municipal property, budget and elected public officials.
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According to Article 3 (2) of the Constitution of the Russian Federation: ‘... the people of Russia can participate in the governing of the country either directly or via the institutions of Federal government and Public Administration (mestnoesamoupravlenie).’ Public Administration (PA) is independent of the Government and is active in municipal formations. Executive power is administered by municipal administrations at the level of district (or municipal formation) and at the community level by village and town administrations. District council deputies and heads of municipal formations (mayors) are elected representatives of the Public Administration. Public Administration is subject to federal, regional and municipal legislation.

The general population can directly influence local community issues in the following ways:
- Referendums,
- Local elections (deputies and other elected officials) at least every five years,
- Community meetings,
- Individual right to submit draft laws on local issues to municipal councils,
- Requests to representatives of Public Administration, and
- Territorial self-government organisations of individuals that do not represent a separate municipal formation, e.g., the Mitsulevka village committee.

4.2.2 Civil Society in Sakhalin Region

4.2.2.1 Non-Governmental Organisations

As of February 2002 there were over 821 NGOs registered in Sakhalin Region, many are inactive. There is no breakdown of these NGOs. However, in December 2000, according to the report of the Head of the EA Department of Sakhalin Regional Administration T.P. Frolika at the Conference ‘Power and Society; Administrative Authorities and Non-Governmental Organisations of Sakhalin Oblast. Practice of Co-operation’ that took place in Yuzhno-Sakhalinsk on December 16, 2002, there was the following number of NGOs in the Sakhalin Region.

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Unions</td>
<td>234</td>
</tr>
<tr>
<td>Political parties and unions</td>
<td>65</td>
</tr>
<tr>
<td>Public Movements</td>
<td>39</td>
</tr>
<tr>
<td>Public Foundations</td>
<td>60/16 Charitable Foundations</td>
</tr>
<tr>
<td>Public Institutions</td>
<td>6</td>
</tr>
</tbody>
</table>

The same report identified the following active groups among the non-trade union and non-political organisations:

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports</td>
<td>64</td>
</tr>
<tr>
<td>Youth</td>
<td>18</td>
</tr>
<tr>
<td>Environmental</td>
<td>13</td>
</tr>
<tr>
<td>Charitable</td>
<td>20</td>
</tr>
<tr>
<td>Disabled and Veterans</td>
<td>17</td>
</tr>
</tbody>
</table>

Russian regulations do not require NGOs to register officially, provided that they do not plan to carry out any commercial activity or open a bank account. Therefore, some publicly active groups are not registered. A number of NGOs are set up with a specific objective in mind and cease to exist shortly after reaching it. Furthermore, experts estimate that only 25-30% of registered NGOs are active.
The number and professionalism of NGOs on Sakhalin is steadily increasing. Environmental organisations are more active than other types of NGO on Sakhalin, following Russia-wide NGO trends. However, in the last 5-7 years other types of organisation have become increasingly active: civil rights groups, social support groups, public ‘watchdog’ organisations, NGO resource centres, philanthropic organisations, business/professional associations, analytical and consulting centres.

TABLE 4-03: MAIN FORMS OF NGO ACTIVITY ON SAKHALIN

<table>
<thead>
<tr>
<th>Form</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Grants and scholarships</td>
</tr>
<tr>
<td>2.</td>
<td>Social Technologies (hospices, foster families, environmental expertise/expert reviews, rehabilitation centres, crisis centres, etc.)</td>
</tr>
<tr>
<td>3.</td>
<td>Resource Centres</td>
</tr>
<tr>
<td>4.</td>
<td>Public Forums (Public Chambers, Committees, Round Tables, etc.)</td>
</tr>
<tr>
<td>5.</td>
<td>Combined mechanisms</td>
</tr>
</tbody>
</table>

Source for classification: Results of Round Table Meeting ‘Russia’s Non-Commercial Sector: condition, prospects, specialist training’, Moscow State University, headed by Yakimets, V.N. NAN.

Sakhalin NGOs are more active in big urban centres in the south, but in the last two-three years, public involvement in social life has increased in other districts. This includes Small and Medium Enterprises (SME) Associations in Uglegorsk and Tomari, the indigenous youth organisation Chamgun in Nogliki, and a business incubator in Aniva.

4.2.2.2 Foreign Assistance

With the offshore oil and gas projects, Sakhalin has become one of the most important regions in Russia for U.S. Technical Assistance and NGO activity (Appendix C, Table C-02). For many years, the Japanese Centre in Yuzhno-Sakhalinsk has been running training and exchange programmes for local entrepreneurs. Several South Korean organisations cooperate with Sakhalin Koreans’ Associations.

There are hardly any European non-profit or technical assistance organisations active on Sakhalin. In 1999, the British Council opened a Russian-British Centre in Yuzhno-Sakhalinsk with the help of British Petroleum.

In October, 2002 European Bank for Reconstruction and Development announced its intention to set up a SME training programme on Sakhalin.

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4.2.2.3 Political Parties and Movements

As of January 2002 there were 36 political parties, movements and election blocks registered in Yuzhno-Sakhalinsk. Only a few of them can be considered influential, based on the results of several elections to the State Duma: see Appendix C, Table C-03 for the election results.

- Unity (Edinstvo),
- Communist Party of the Russian Federation (KPRF),
- Liberal Democratic Party of Russia (LDPR),
- Yabloko,
- Homeland - All Russia,
- Union of Right-Wing Forces (Soyuz Pravykh Sil (SPS)),
- Women of Russia (Noscheshny Rossiya), and
- Russian National Unity (Russkoye Natsionalnoye Edinstvo).

Results of the elections were further confirmed by the public opinion polls carried out by the Laboratory of Sociology at Sakhalin State University. These were conducted in 1995, 1999 and 2000 in 14 towns and villages: Nepgli, Aleksandrovsk-Sakhalinsky, Tymovsk, Smiryh, Pionersk, Uglegorsk, Malikov, Dolinsk, Novo-Aleksandrovsk, Troitskoye, Aviva, Nevskoye, Kononkov and Yuzhno-Sakhalinsk, with a total of 1,500 respondents. The polls showed the following popularity ratings (%):

<table>
<thead>
<tr>
<th>Year</th>
<th>KPRF</th>
<th>Unity</th>
<th>LDPR</th>
<th>Homeland - All Russia</th>
<th>Yabloko</th>
<th>Women of Russia</th>
<th>Russian National Unity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>25.4</td>
<td>-</td>
<td>11.3</td>
<td>9.4</td>
<td>-</td>
<td>5.7</td>
<td>-</td>
</tr>
<tr>
<td>1999</td>
<td>21.1</td>
<td>18.4</td>
<td>13.1</td>
<td>7.8</td>
<td>5.3</td>
<td>3.8</td>
<td>0.9</td>
</tr>
<tr>
<td>2000</td>
<td>24.9</td>
<td>19.4</td>
<td>10.8</td>
<td>8.5</td>
<td>7.5</td>
<td>9.2</td>
<td>1.3</td>
</tr>
</tbody>
</table>

* Parties did not exist at the time.
Source: Sakhalin State University Laboratory of Sociology.

Other parties and political movements do not play a significant role in the Sakhalin political arena.

4.2.2.4 Religions and Religious Sects

The October 1917 Revolution changed relations between the State and the Church in Russia. A Decree of the Council of People’s Commissars (January 20, 1918) separated the Orthodox Church from the State and the education system, and the Church was no longer a legal entity (V.V. Klochkov, Law and Religion: From State Religion to Liberty of Conscience in the USSR. Moscow, Politizdat, 1982).

Baptists arrived on Sakhalin in the 1920s. In 1929, there were nine communities of Evangelists in Rybnovsk District (now Oka District) and three Orthodox churches in Aleksandrovsk-Sakhalinsky and Rykovskoye. In 1929, changes to the constitution began a period of anti-religious Soviet policy. By 1930 the churches in the regions were closed (O.V. Potapova, Execution of Repression Policy by the Soviet Authorities Against Believers on Sakhalin Island in the 1920s-1930s, Materials from the 7th Far Eastern conference of young historians, Vladivostok, 2002).

It was not until 1946 that the Evangelical Christian Baptists obtained permission to conduct prayer meetings and were registered in Aleksandrovsk as a religious group. In southern Sakhalin, which was then part of Japan, over 250 churches, temples and shrines were registered prior to 1945.
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### TABLE 4-05: NUMBER OF CHURCHES, TEMPLES OR SHRINES REGISTERED IN SOUTHERN SAKHALIN PRIOR TO THE WORLD WAR II

<table>
<thead>
<tr>
<th>Religion/Sect</th>
<th>Number of Churches/Temples/Shrines</th>
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<tbody>
<tr>
<td>Buddhist</td>
<td>150</td>
</tr>
<tr>
<td>Shinto</td>
<td>50</td>
</tr>
<tr>
<td>Tenrike Sect</td>
<td>50</td>
</tr>
<tr>
<td>Catholic</td>
<td>4</td>
</tr>
<tr>
<td>Protestant</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>259</td>
</tr>
</tbody>
</table>

Source: N.V. Potapova, Christianity on Sakhalin, Christianity in the Russian Far East: Materials from the International Conference held on April 19-20, 2002, Vladivostok.

After 1945, the number of churches, temples and shrines decreased, mainly due to the repatriation of the Japanese, migration of the Poles back to Poland, and Soviet anti-religious propaganda.

Perestroika introduced changes in the legal status of religion, as reflected in the 1990 Law of the USSR On the Liberty of Conscience and Religious Organisations. Religious organisations became legal entities with the right to own real estate, legally defend their interests, participate in public events, and use the mass media.

The first Russian Orthodox church opened in Okha on April 2, 1991. Churches then opened in Korsakov, Khomutsk and Dolinsk Districts and in Yuzhno-Sakhalinsk (N.V. Potapova, Christianity on Sakhalin, Christianity in the Russian Far East: Materials from the International Conference held on April 19-20, 2002, Vladivostok). As of February 2002, 13 types of religions/sects are registered on Sakhalin, with a total of 128 parishes (Appendix C, Table C-04). The churches with the largest number of parishes are:
- Russian Orthodox Church - 47 parishes,
- Christian Evangelistic Church - 37 parishes, and
- Christian Presbyterian Church - 18 parishes.

The number of people practicing religion has increased since the Soviet times, especially in large urban communities.

A series of opinion polls conducted by the SSU sociological laboratory gave the following responses to the question: “Do you consider yourself a religious person?” Women gave 68% of the positive responses to this question.

### TABLE 4-06: RESULTS OF THE SERIES OF OPINION POLLS (%)

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</tbody>
</table>

Source: Sakhalin State University Laboratory of Sociology.

Based on their attitude to religion, the polls identified the following five groups.

### TABLE 4-07: ATTITUDE TO RELIGION

<table>
<thead>
<tr>
<th>People’s Attitude</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active believers</td>
<td>19%</td>
</tr>
<tr>
<td>Those who believe in God but do not associate God with any particular religion</td>
<td>24%</td>
</tr>
<tr>
<td>Those who do not believe but are sure that devotion helps people to cope with life</td>
<td>25%</td>
</tr>
<tr>
<td>Those who do not believe and are indifferent to religion</td>
<td>21%</td>
</tr>
<tr>
<td>Those who actively deny religion</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: Sakhalin State University Laboratory of Sociology.
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4.3 DEMOGRAPHIC AND SOCIO-ECONOMIC PROFILE OF SAKHALIN REGION

This section presents a brief description of the socio-economic status of Sakhalin Region, including:
- Demographic profile and displacement of population,
- Employment and unemployment,
- Sakhalin region economic profile,
- Infrastructure, and
- Standards of living and quality of life.

4.3.1 Demographic Profile and Displacement of Population

As of January 1, 2001 there are a total of 591,200 permanent residents in Sakhalin Region, which is approximately 0.3% of the total population of the Russian Federation (Annals of Russian Statistics. Moscow: Federal Committee of State Statistics, 2001).

4.3.1.1 Population Density

The majority of the population (86.9%) lives in urban areas, which continue to expand due to better living conditions. While the average population density for the island as a whole is 6.8 people/km², the south, including Yuzhno-Sakhalinsk, is more densely populated. This is due to a better climate and socio-economic conditions (Figure 4-01 and Appendix C, Tables C-06 and C-23).

FIG. 4-01: DISTRICTS POPULATION AND AREA AS OF JANUARY 1, 2001
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4.3.1.2 Population Dynamics

As in most of Russia, Sakhalin’s population is steadily declining, as illustrated in Figure 4-02.

FIG. 4-02: POPULATION CHANGES IN SAKHALIN REGION IN 1996-2002

More data on population changes is available in Appendix C, Tables C-05 and C-06.

Over 125,000 people left Sakhalin in the 1990s, primarily due to deteriorating living conditions. Some other regions of Russia have a more favourable climate and a better standard of living. In recent years, however, population outflow has decreased. Fifty percent of those who changed their place of residence in 2000 moved to mainland Russia while others moved either abroad or to another part of Sakhalin.

There is considerable intra-regional migration with a significant in-migration into Yuzhno-Sakhalinsk.

A high death rate that exceeds the birth rate results in a natural population decline. From 1995 to 2000, however, this rate of decline slowed, except for 1999, which had an increase of 48.1% over the previous year. Figure 4-03 illustrates the changes in migration, birth and death rates in Sakhalin Region.

FIG. 4-03: MIGRATION, BIRTH RATE AND DEATH RATE IN SAKHALIN IN 1995-2001

4.3.1.3 Population Composition

In Sakhalin Oblast as a whole, 65.8% of the population are people of employable age (50 or under for women and 55 or under for men). Women make up slightly more than half of the whole population (50.6%). However, males make up 53.2% of people of working age and children. Due to the low birth rate, there has been an ongoing decline in the percentage of children and juveniles in the Sakhalin population (Displacement of Population in Sakhalin Region: Statistical Bulletin. Yuzhno-Sakhalinsk: Sakhalin Regional Committee of State Statistics, 1995, 1996, 1997, 1998, 1999, and 2000).

The ethnic composition of Sakhalin is quite diverse (Figure 4-04 and Appendix C, Table C-08). According to the 1989 census, the majority (82%) consider themselves to be Russians, followed by Ukrainians, Koreans, Belorussians and Tatars. Ethnic composition varies insignificantly from one district to another although there are more Koreans in the south and more indigenous people in the north. More detailed information on Sakhalin’s indigenous people can be found in Section 4.1.3, Chapter 6 and Appendix C, Tables C-28 and C-29.

FIG. 4-04: SAKHALIN POPULATION - ETHNIC BREAKDOWN (1989 CENSUS)

4.3.2 Employment and Unemployment

Recent years have seen a significant deterioration in the employment situation and the work environment in Russia as a whole and on Sakhalin. The percentage of the Sakhalin population that is of working age has been consistently declining in recent years. In January 2000 it decreased to 394,100 people (67% of the total regional population) (Appendix C, Table C-09). Almost a third of the employable population lives in Yuzhno-Sakhalinsk. The economically active population is also declining as a proportion of the total population, totalling 314,600 on August 1, 2002, although there was a small increase in 1997 and 1999 (Figure 4-05).
As of August 1, 2002, the composition of the economically active population was as follows:

- Employed - 89.1%, and
- Unemployed - 10.9%, including 1.8% registered at the Federal Employment Service.

Between 1991 and 1999 employment decreased by 30%. This was due to an overall production decline and the restructuring of the regional economy. Economic improvement since 1999 has increased employment by 6.9%. As of August 1, 2002 the number employed in industry is 280,200 (Sakhalin Regional Committee of State Statistics, 2002).

In August 2002 unemployment stood at 34,400, according to data from selected employment studies. This is 26.3% less than in 2001 (Sakhalin Regional Committee of State Statistics, 2002). More than 50% of the unemployed are male. The majority of those unemployed put in applications to the Federal Employment Service rather than other employment institutions, which received applications from 31,920 unemployed people in 2001 (Guberniyskie Vedomosty, April 17, 2002). The majority of those who applied were female. About 20% of those who applied to the Federal Employment Service were registered there (Labor Supplies in Sakhalin Region and Their Distribution by Industries in 2000 Statistical Bulletin. Yuzhno-Sakhalinsk: Sakhalin Regional Committee of State Statistics, 2001).

Structural changes in the economy (Sections 4.1.2, 4.3.3.1) changed the distribution of labour among the different branches of the local economy. The number of people employed in the private sector on Sakhalin, as for Russia in general has consistently increased. In 1990, 1995 and 2000, the share of the workforce employed by the private sector was 6.3%, 24.2%, and 48.8% respectively (Labor Supplies in Sakhalin Region and Their Distribution by Industries in 2000 Statistical Bulletin. Yuzhno-Sakhalinsk: Sakhalin Regional Committee of State Statistics, 2001).

Employment grew in power production, the oil industry, trading, catering and federal administrative institutions, but decreased in the coal, timber, forestry and paper-and-pulp industries (Figure 4-06 and Appendix C, Table C-15).
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FIG. 4-06: DISTRIBUTION OF EMPLOYED POPULATION (%) BY THE BRANCHES OF ECONOMY IN 1990, 1995, 2000

The primary employers on Sakhalin are currently the extractive industries (e.g., fuel, timber, pulp and paper, fishing) and trading and catering (Figure 4-07 and Appendix C, Table C-16).

FIG. 4-07: DISTRIBUTION OF THE EMPLOYED POPULATION (%) IN SAKHALIN REGION BY THE BRANCHES OF INDUSTRY IN 1990, 1995, 2000

More information on the subject is available in Appendix C, Tables C-10, C-12 and C-13.
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4.3.3 Sakhalin Region Economic Profile

4.3.3.1 Summary

In 2001, the GRP in Sakhalin Region, the most important indicator of economic development, amounted to 49,311 million Roubles, a 22.2% increase over the previous year in current prices (Preliminary Data of the Sakhalin Region Administration and the Sakhalin Agency for Attracting Investment). At the same time, according to preliminary data from the Sakhalin Regional Committee on State Statistics published in the newspaper Gubernskie Vedomosti (April 29, 2002), the consumer price index increased by 20.6% from 2000 to 2001.

Therefore, economic growth on Sakhalin in 2001 was not significant (approx. 1%). In previous years the changes were more noticeable and the economy grew by 4.9% in 2000 in comparison with 1999, and by 19.1% in 1999 compared to 1998 (Table 4-08).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GRP</td>
<td>-23.4</td>
<td>-4.2</td>
<td>-0.9</td>
<td>-4.3</td>
<td>+18.1</td>
<td>+4.8</td>
</tr>
<tr>
<td>Volume of industrial production</td>
<td>+8.8</td>
<td>+13.8</td>
<td>-4.2</td>
<td>+2.9</td>
<td>+9.6</td>
<td>+13.0</td>
</tr>
<tr>
<td>Production of consumer goods</td>
<td>+6.0</td>
<td>-20.9</td>
<td>-4.0</td>
<td>+17.9</td>
<td>+5.0</td>
<td>-0.6</td>
</tr>
<tr>
<td>Investment outlay</td>
<td>+6.7</td>
<td>+30.7</td>
<td>+22.3</td>
<td>+50.3</td>
<td>+110.0</td>
<td>+63.3</td>
</tr>
<tr>
<td>Retail sales</td>
<td>+2.8</td>
<td>+16.9</td>
<td>+14.0</td>
<td>+14.2</td>
<td>+16.2</td>
<td>+16.3</td>
</tr>
<tr>
<td>Real services to the population</td>
<td>+11.5</td>
<td>+13.1</td>
<td>+3.5</td>
<td>+18.7</td>
<td>-7.6</td>
<td>+7.8</td>
</tr>
<tr>
<td>Money income of the population</td>
<td>+12.5</td>
<td>+31.3</td>
<td>+0.0</td>
<td>-0.4</td>
<td>+0.0</td>
<td>+0.8</td>
</tr>
<tr>
<td>Real disposable income</td>
<td>+2.2</td>
<td>+1.6</td>
<td>+3.5</td>
<td>-0.2</td>
<td>-16.2</td>
<td>+13.9</td>
</tr>
<tr>
<td>Real salary</td>
<td>+2.2</td>
<td>+1.6</td>
<td>+3.5</td>
<td>-0.2</td>
<td>-16.2</td>
<td>+13.9</td>
</tr>
<tr>
<td>Consumer price index, December compared to December of the previous year</td>
<td>+25.0</td>
<td>+13.1</td>
<td>+0.0</td>
<td>+26.0</td>
<td>+34.9</td>
<td>+13.4</td>
</tr>
</tbody>
</table>


The regional economy started to improve in 1999. This growth is primarily due to the development of the oil and gas industry. Investment in the oil industry makes up more than 50% of total investments in the regional economy and 83% of foreign investments. At present the production of mostly industrial commodities represents more than 60% of Sakhalin’s GRP. The GRP components are shown in Figure 4-08.

FIG. 4-08: STRUCTURE OF GRP AS OF 2000

Note: Terms explained in Glossary.
4.3.3.2 Industry

Industry plays a leading role in Sakhalin Region, owing to the availability of significant resources and the peculiarities of its historical development. In recent years extractive branches have grown to over 70% of GRP.

The main branches of industry are oil and gas, electric, fishing, coal, and timber and wood processing. The description of the current status of the major branches of industry is represented in Table 4-09.

**Table 4-09: Status and Development Prospects for Key Industries in Sakhalin Region**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Role in the Regional Economy</th>
<th>Production</th>
<th>Labour Resources</th>
<th>Development Programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oil and Gas Industry</strong></td>
<td>- 2,946,000,000 Roubles in federal, regional and municipal taxes</td>
<td>- Oil and gas.</td>
<td>- Average number of workers: 7,000.</td>
<td>- Federal Target Programme Economic and Social Development of the Russian Far East and Baikal Area in 1996-2005.</td>
</tr>
<tr>
<td></td>
<td>- 83% of total foreign investment.</td>
<td>- Petroleum products: petrol, black oil fuel, diesel, kerosene.</td>
<td>- Average salary: 12,078 Roubles/month.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
<th>Oil, gas, condensate.</th>
<th>- 2% of total employment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 72 discovered deposits (51 onshore and 21 offshore)</td>
<td>- Average number of workers: 5,600.</td>
<td></td>
</tr>
</tbody>
</table>

|-------------|---------------------------|------------------------------------------|

**Fishing Industry**

<table>
<thead>
<tr>
<th>Role in the Regional Economy</th>
<th>- 25.3% of industrial production volume.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- 20.4% of export volume.</td>
</tr>
<tr>
<td></td>
<td>- 2.6% of total capital investments.</td>
</tr>
<tr>
<td></td>
<td>- 7.6% of total employment.</td>
</tr>
<tr>
<td></td>
<td>- 8.1% of taxes to the regional budget.</td>
</tr>
<tr>
<td></td>
<td>- Fishing is also a recreation activity and additional</td>
</tr>
<tr>
<td></td>
<td>source of food and/or income for many.</td>
</tr>
<tr>
<td></td>
<td>- Main source of food and/or income for some Native</td>
</tr>
<tr>
<td></td>
<td>people and others (especially the unemployed).</td>
</tr>
<tr>
<td></td>
<td>- Several settlements built around fishing enterprises.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
<th>- Main commercial marine species are: herring, sole, humpback</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>and salmon, pollock, Pacific saury, macrurus, coal, Pacific cod,</td>
</tr>
<tr>
<td></td>
<td>rock trout, halibut, crab, scallop, for seal, sea-lions, sea-lion,</td>
</tr>
<tr>
<td></td>
<td>seal, other seaweed.</td>
</tr>
<tr>
<td></td>
<td>- Sea of Japan, Sea of Okhotsk, Pacific Ocean.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enterprises</th>
<th>- 652 enterprises, 40.6% unprofitable.</th>
<th>- Key enterprises: Pilenga, Confidor, Sisafico, Tunaicha, Alfa, Persey, Komsomol Ocean Fishing Service, Galatrom.</th>
</tr>
</thead>
</table>

**Production**

- Fresh and frozen products.
- Processed fish products.

**Labour**

- Average number of workers: 21,214, up to 40,000 during fishing season.
- Average salary: 8,091 Roubles/month.

**Investment Projects**

- Construction of a biological resources reproduction plant for offshore species.

**Main Markets**

- Domestic and Foreign Markets.
  - Export to APR countries (Japan, China, South Korea).
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#### Coal Industry

**Role in the Regional Economy**
- 4.2% of industrial production volume.
- 2% total employment.
- Main fuel for Sakhalin power stations.
- Several settlements built around mining enterprises.

**Resources**
- Bituminous and Brown coals.
- Coal concentrate.
- Coal in most deposits are of intermediate type between bituminous and brown.
- As of Jan. 1, 1990 there were 22 registered coal deposits and 2 coal bearing areas.

**Production**
- Bituminous and Brown coals.
- Coal concentrates.

**Labour**
- Average number of workers: 5,611.
- Average salary: 3,948 Roubles/month.

**Development Programmes**

**Investment Projects**
- Poronaiskugol - open cast mining, increasing production up to 500,000 tonnes/year.
- Kuznetskoye - purchase of new equipment to increase production.

**Enterprises**
- Sakhalin Coal Corporation, Tomarugol, Sakhalin Coal Resources.

#### Timber, Timber Processing (Including Pulp and Paper Industry)

**Role in the Regional Economy**
- 3.1% of industrial production volume.
- 2% employment.
- 1.2% total regional taxes.

**Resources**
- Sakhalin forests contain the following conifer species:
  - Spruce: 36.4%
  - Silver fir: 28.8%
  - Larch: 25.4%
- Total volume of forest resources: 597,800,000 m³.
- Mature forest: 320,000,000 m³.
- Total harvest area: 3,600,000 m³/year.

**Production**
- Industrial timber, lumber.
- Paper, cardboard, carton ware.
- Cellulose.

**Labour**
- Average number of workers: 5,132.
- Average salary: 12,904 Roubles/month.

**Investment Projects**
- Sakhalin Forest Company - logging operation.
- Dary Morya (Gifts of the Sea) - Laminate Wood production.

**Enterprises**
- Sakhalin Forest Company, Sakhinterlesprom, Sakhalin Forestry Company.
- 127 enterprises, 56% are unprofitable.

**Main Markets**
- Domestic markets: Sakhalin, Kamchatka, Chukotka.
- Export to Japan, South Korea.
**Electric Power Industry**

- **Role in the Regional Economy**
  - 6.0% of industrial production volume.
  - 3% employment.
- **Resources**
  - Basic resources: coal and gas (see Raw Materials Base of Oil and Gas and Coal Industries).
- **Enterprise**
  - 95 enterprises.
  - Key enterprise: Joint Stock Company Sakhalinenenergo.
  - It produces 80% of electric power of the Sakhalin Region.
- **Investment Projects**
  - Expansion of Nogliki gas power station when its second line is constructed.

**Labour Resources**
- Average number of workers: 7,139.

**Development Programmes**
- Key enterprise: Joint Stock Company Sakhalinenergo. It produces 90% of electric power of the Sakhalin Region.

**Main Markets**
- Domestic markets.

**Investment Projects**
- Expansion of Nogliki gas power station when its second line is constructed.

**Sources:** Sakhalin Investment Attraction Agency.


### History and Prospects of Oil and Gas Industry

The oil and gas industry plays an important role in the Sakhalin economy (Figure G-06). Oil was discovered in the north of Sakhalin (Okha and Nogliki Districts) in the 19th century. The first Russian oil derrick was built in 1910. On August 10, 1928, the first Soviet oil company, Sakhalinmef, was founded. It later changed its name to Sakhalinmorneftegaz and today is known as the Limited Liability Company Rosneft-Sakhalinmorneftegaz. The first Soviet oil was produced on October 14, 1928. In 1929, eleven more wells started industrial production, with an annual yield of 26,000 tonnes. New oil deposits, Katangi, Pilitun, Nutovo and Ekhabi, were discovered in the north of Sakhalin and a new oil pipeline was built between Ekhabi and Okha.

The Okha-Komsomolsk-na-Amure oil pipeline was built during WW II. The years 1946 and 1958 were marked by the rapid growth of oil and gas production (1.6 and 6 times respectively). New oil deposits were discovered in Tungor and Kolendo.

In the 1950s, Sakhalin oil companies started to apply so-called secondary methods of oil extraction. Air and gas were pumped into oil pools to cause hydraulic fracturing. Introduction of these new extraction methods and development of new deposits enabled further growth of oil production (three times) and gas production (12.2 times) between 1947 and 1964. All the produced oil was transported to the mainland via pipeline.

In 1967 new methods were introduced to inject high pressure hot water and overheated \((350-400)\) gas into the oil pool, which enabled renewed development of old deposits in Okha, Katangi and eastern Ekhabi.

By the end of the 1970s, the majority of Sakhalin's onshore oil deposits had reached their final development stage. As a result, oil production started to decline significantly in 1974 and by 1978 it had dropped by 12%. Only the development of a new deposit, Menge, halted the decline and stabilised output at 2.5-2.65 million tonnes a year. In 1985, production started to decline once more, dropping by 28.7% between 1985 and 1993. Most onshore deposits were exhausted and development plans became focused on the Sakhalin offshore oil deposits.

The history of offshore oil and gas exploitation began in the 1970s. The USSR government and the Japanese company SODECO signed an agreement on co-operation on exploration, construction of field facilities and extraction of oil and gas from the Sakhalin shelf. Under this agreement an oil and gas...
condensate field, Odoptu, was discovered in 1977 and the Chaivo field was discovered in 1979. Between 1984 and 1990 the Russians discovered three major deposits: Lun-A, Pititn-Astokh and Arktun-Dagi.

For many years the Joint Stock Company Sakhalinmorneftegaz (SMNG) was the only oil and gas extracting company in the RFE. In 1991, with the coming of foreign investment companies, its first competitor, Petrosakh, appeared on Sakhalin. Petrosakh is the first oil processing enterprise in Sakhalin.

Sakhalin was the first place in Russia to start oil and development on the basis of PSA. Sakhalin I and Sakhalin II became the first Sakhalin offshore projects with PSAs.

The Ministry of Natural Resources together with the Ministry of Energy developed the short- medium- and long-term offshore development concept that includes participation of existing Russian extraction enterprises and attraction of foreign inventors. The authorities plan to hold no less than two tenders a year for 8-10 proposed blocks. The Ministry of Natural Resources is currently working on the licensing programme, which should be adopted by the end of 2002. The Sakhalin and Magadan Shelf regions are the most ready to be included in the programme.

The Russian federal government and the Sakhalin Regional Administration are preparing further competitions for other Sakhalin Projects following the Sakhalin offshore development plan. Russian oil companies, like Rosneft, Rosneft-Sakhalinmorneftegaz, Petrosakh, Alfa-Eco, Sakhalin Oil Company, as well as major international companies like BP-Amoco have shown an interest in these Projects and formed alliances.

4.3.3.3 Agriculture

Of Sakhalin's main industries, agriculture has become the smallest contributor to GRP in recent years (approx. 4.8-5.0%). Sakhalin specialises in crop production. The agricultural sector comprises arable farming (approx. 66%) and livestock farming (approx. 33%). The total cultivated area in Sakhalin in 2001 was 14,062 ha. 36% of this is located in Aniva District and Yuzhno-Sakhalinsk (Appendix C, Table C-19). Most cultivated land belongs to agricultural enterprises (Appendix C, Table C-20).

Sakhalin is classified as a high-risk farming area. Even the most favourable areas (Tymovsk and Poronaisk Districts and the south and west) are excessively wet, making crop cultivation difficult and limiting the range of crops that can be produced. These are mainly potatoes, other vegetables (mostly cabbage, carrots and beets) and animal fodder (Appendix C, Table C-19). Tomatoes, cucumbers, peppers and green vegetables are grown in greenhouses year round. Sakhalin's livestock sector is mainly made up of cattle, pig and poultry farming.

Agricultural production does not satisfy regional demand for key foodstuffs (except potatoes). Local production supplies about 50% of the region's demand for vegetables, 9% of meat, 15% of dairy products and 75% of eggs (Sakhalin Investment Attraction Agency). Most farm products consumed in Sakhalin Region are imported from other Russian regions and from abroad.

Sakhalin agriculture is characterised by low profitability. In 2000, 71% of agricultural enterprises were unprofitable, compared to 67.8% in 1999 (Sakhalin Region at the Turn of the 21st Century. Jubilee Collection. Yuzhno-Sakhalinsk: Sakhalin Regional Statistics Committee, 2001). The biggest agricultural producers are concentrated in Aniva, Tymovsk and Uglegorsk Districts and Yuzhno-Sakhalinsk. Individual farm holdings (cooperatives) produce more than agricultural enterprises, with 54% of the total combined production in the region in 2000. Agricultural enterprises produce 39% and individual farms - 7% (Sakhalin Region at the Turn of the 21st Century. Jubilee Collection. Yuzhno-Sakhalinsk: Sakhalin Regional Statistics Committee, 2001).

4.3.3.4 Construction

Currently, Sakhalin's construction industry accounts for 20% of total industrial production (Sakhalin Region at the Turn of the 21st Century. Jubilee Collection. Yuzhno-Sakhalinsk: Sakhalin Regional Committee of State Statistics, 2001). Following a slump in construction activities in 1995-1996, there was a marked revival in 1997: increase in output/the physical volume indicator was growing at that time. In 2000, however, the construction industry stopped expanding.

In 2000, according to contracts, the volume of construction work generated exceeded three billion Roubles, 3% below the 1999 figure. Almost 13% of construction companies reported losses (compared to 28% in
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4.3.4 Infrastructure

4.3.4.1 Summary

The service industries that contribute most to the economy are trading, catering, transportation and telecommunications. The region is not developed enough to meet the demands of a modern economy. Most economic activity is in the south where there are ice-free ports, railway hubs and large population centres. Telecommunications include telephone, cable and wireless networks, radio and TV.

Table 4-10 shows the composition of paid services per capita in 2000.

<table>
<thead>
<tr>
<th>Name of Service</th>
<th>Volume of Paid Services per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Roubles</td>
</tr>
<tr>
<td>All Services</td>
<td>4,603</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
</tr>
<tr>
<td>- Household Services</td>
<td>431</td>
</tr>
<tr>
<td>- Passenger Transportation</td>
<td>1,245</td>
</tr>
<tr>
<td>- Telecommunications</td>
<td>771</td>
</tr>
<tr>
<td>- Housing and Utility Services</td>
<td>1,175</td>
</tr>
<tr>
<td>- Cultural Services</td>
<td>41</td>
</tr>
<tr>
<td>- Tourism and Excursions</td>
<td>38</td>
</tr>
<tr>
<td>- Medical Care</td>
<td>196</td>
</tr>
<tr>
<td>- Sanitary and Rehabilitation</td>
<td>95</td>
</tr>
<tr>
<td>- Legal Services</td>
<td>167</td>
</tr>
<tr>
<td>- Educational Services</td>
<td>233</td>
</tr>
<tr>
<td>- Other Services</td>
<td>226</td>
</tr>
</tbody>
</table>


Since the mid- to late 1990s the volume of paid services available to the population has dropped although in 2000 it increased slightly compared to 1999. The cost of paid services grows with inflation. The total cost of paid services in 2000 was 12,031,000 Roubles of which more than 66% were market services.

4.3.4.2 Transport

The key elements of Sakhalin’s transport infrastructure include a network of asphalted and unasphalted roads, the railway, pipelines, ports and airports.

From the 1970s, road transport became the major form of transportation for goods and passengers on Sakhalin. In 2000, 46% of goods and 95.6% of passengers were transported by road. The federal roads linking Nogliki and Yuzhno-Sakhalinsk and Yuzhno-Sakhalinsk and Korsakov are the main traffic route down the island. An unasphalted local road between Nogliki and Okha links settlements in the north. Local roads connect other settlements in central Sakhalin and on the western coast. Road construction and upgrading has been necessary due to the increasing number of vehicles.

As of January 1, 2001, there were 4,115 km of roads (public, private and enterprise-owned). Of these, 2,754 km were asphalted. On January 1, 2001, over 113,000 privately owned vehicles were registered, over one-third of them in Yuzhno-Sakhalinsk. Sakhalin Region at the Turn of the 21st Century. Jubilee Collection. Yuzhno-Sakhalinsk. Sakhalin Regional Committee of State Statistics, 2001. Since the early 1990s, the number of car parks has increased over 1.5 times.
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The second most important means of transportation is the railway, which in 2000 transported 28.6% of cargo and over 3% of passengers. The Sakhalin railway uses the narrow gauge lines introduced by the Japanese. There are two branches: the eastern branch from Korsakov in the south to Nogliki in the northeast, and the western branch between Gornoavoisk and Ilyinsky. There is no regular railway north of Nogliki. Two railways connect the western and eastern lines: Yuzhno-Sakhalinsk-Kholmsk and Arsentyevka-Ilyinsky.

Sea transportation is especially important for Sakhalin. Sakhalin has 11 ports, the largest of which are Korsakov and Kholmsk. Cargo going to Sakhalin or to the Kuril Islands is delivered by sea: either on cargo ships, or Sakhalin ferries, which transport box cars between the ports of Vanino and Kholmsk. Sea transportation makes up a much greater percentage of Sakhalin’s total than the Russian average.

Sakhalin has seven air terminals with passenger, mail and cargo traffic. The biggest, Yuzhno-Sakhalinsk, handles large volumes of passenger traffic, mail and cargo and can accommodate the planes of such large companies as Aeroflot, Domodedovo, Vnukovskie Avialinii, VladivostokAvia and Transaero as well as a number of foreign carriers. Since the late 1990s, there has been an ever-increasing volume of regular international air traffic.

Regular commercial flights are increasing, signifying a strengthening of permanent commercial ties between Sakhalin and other countries. Besides transportation of people and cargo, air carriers provide services for the oil and gas industry, geology, healthcare, forest protection services, the Ministry of Emergencies and others. Air transport connects Yuzhno-Sakhalinsk with some Sakhalin communities.


- Pipelines - 31.8%
- Railway - 29.9%
- Sea transport - 25.3%
- Motor vehicle - 11.8%, and
- Air transport - 1.2%

4.3.4.3 Communications

In 2001, in addition to the main 25 telecommunications enterprises, there were 945 active telecommunications facilities within enterprises that serve either the enterprise alone, or part of the local population as well (Sakhalin Investment Attraction Agency). In addition to telecommunication, the region also has a postal/telegraph service.

99.9% of the population receive at least two TV channels (ORT and RTR) whilst 35.2% receive five stations and 19.8% more than five (Sakhalin Region at the Turn of the 21st Century. Jubilee Collection. Yuzhno-Sakhalinsk: Sakhalin Regional Committee of State Statistics, 2001). Almost everyone within the region can receive radio broadcasts. Not every settlement has a post office. DHL and UPS courier services are available in Yuzhno-Sakhalinsk.

Special effort is being made to introduce and develop new communication services. A post-office email service enables electronic messages to be sent and received using post office computers. An EmeGarantpost email system is being developed across the region. The use of fax and data transmission networks and remote services has increased. Despite being expensive, the Internet has become increasingly more popular. The market for high quality telecommunication services is growing, together with the demand for new and improved services. New operators are creating competition for existing enterprises. Telecommunications is one of the most promising sectors, with great opportunity for growth and development.
4.3.4.4 Housing

As of January 1, 2001, the total area of housing in the region covered 11.6 million m², of which 48.7% is municipal housing and 43.9% is private housing. (Sakhalin Region at the Turn of the 21st Century. Jubilee Collection. Yuzhno-Sakhalinsk: Sakhalin Regional Committee of State Statistics, 2001). The average living space per person is high and increasing, currently at around 20 m²/person (19.9 m² in urban areas and 17.4 m² in rural areas) (Appendix C, Table C-25).

From the early 1990s there had been significant growth in new housing, mostly in Yuzhno-Sakhalinsk. In 1999, 47,000 m² of new living space was constructed: 64,400 m² in 2000 and 32,300 m² in 2001. Except for Yuzhno-Sakhalinsk, the amount of new housing coming onto the market decreased in 2001.

Privatisation of housing has increased (3,800 apartments were privatised in 2000). Since the start of the privatisation programme, over 98,000 apartments (4.3 million m²) have been privatised. The condition of housing continues to deteriorate. Insufficient funds are available for major repairs and for replacement or upgrading of utilities.

The Sakhalin construction industry has a considerable unused production potential, in housing construction as well as in the production of a wide range of modern construction materials.

In July 2002, contractors were building 719 blocks of housing. This involved 135 companies and the overall number of workers in the construction industry was close to 11,000. Starting in 1990, enterprises and organisations constructed about 1.5 million m² of living space of which a little more than 100,000 m² was private construction.

At the moment, housing construction in Sakhalin is going through a slow period. The main reasons for this are:

- Insufficient resources,
- Limited investment, and
- Non availability of mortgage.

In the region there are many cases of incomplete housing construction. In January 2001, the number of incomplete houses (not counting private construction) was 137. This figure, however, is decreasing. The total area of incomplete housing construction is 114,200m².

4.3.4.5 Utilities

Municipal services supply water, heat and hot water primarily in larger populated centres, while rural residents rely mostly on individual, domestic sources for water and heat. The main suppliers of electrical power are the Yuzhno-Sakhalinsk state electric power station, the Sakhalin hydroelectric power station in Vakhreush and the Tigilsk gas-fired power station.

The utilities of the region are currently in an unsatisfactory state - the supply of electricity, heating and water is unreliable. Electrical power cuts are the most common problem. It is estimated that 25% of heat supply networks, 30% of sewage systems, and approximately 45% of water supply facilities were in need of replacement in 2000 (Report on Socio-Economic Status of the Municipal Formations of the Sakhalin Region in January-December 2000. Yuzhno-Sakhalinsk: Sakhalin Regional Committee of State Statistics, 2001). The percentage of wastewater passing through treatment facilities increased from 57% in 1996 to over 65% in 1999.

Provision of utilities by municipalities for urban and rural areas in 2002 is as detailed in Table 4-12.
### TABLE 4-12: MUNICIPAL PROVISION OF DOMESTIC UTILITIES IN SAKHALIN REGION IN 2000 (%)

<table>
<thead>
<tr>
<th>Type of Supply System</th>
<th>In Urban Areas</th>
<th>In Rural Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>90.2</td>
<td>52.6</td>
</tr>
<tr>
<td>Sewage</td>
<td>84.9</td>
<td>44.5</td>
</tr>
<tr>
<td>Centralised heating</td>
<td>85.4</td>
<td>36.1</td>
</tr>
<tr>
<td>Hot water</td>
<td>25.8</td>
<td>4.4</td>
</tr>
</tbody>
</table>


### 4.3.5 Standards of Living and Quality of Life

#### 4.3.5.1 Summary

The standard of living in Sakhalin has been assessed using the following data:

### TABLE 4-13: MAIN STANDARD OF LIVING DATA FOR SAKHALIN REGION IN 1995-2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average income per person/month*</td>
<td>672.3</td>
<td>989.3</td>
<td>1,126.8</td>
<td>1,145.5</td>
<td>1,902.0</td>
<td>2,526.5</td>
</tr>
<tr>
<td>Average monthly salary*</td>
<td>872.8</td>
<td>1,455.2</td>
<td>1,665.2</td>
<td>1,924.0</td>
<td>2,832.3</td>
<td>3,680.8</td>
</tr>
<tr>
<td>Subsistence level per person/month**</td>
<td>490.2</td>
<td>659.8</td>
<td>744.2</td>
<td>820.1</td>
<td>1,324.0</td>
<td>1,525.5</td>
</tr>
<tr>
<td>Percentage of regional population with substandard income</td>
<td>24.6</td>
<td>35.2</td>
<td>32.8</td>
<td>36.6</td>
<td>36.5</td>
<td>36.0</td>
</tr>
<tr>
<td>Ratio (%) compared to subsistence level**</td>
<td>- Average income</td>
<td>137.1</td>
<td>149.9</td>
<td>151.4</td>
<td>139.7</td>
<td>143.6</td>
</tr>
<tr>
<td>- Average monthly salary</td>
<td>178.0</td>
<td>220.4</td>
<td>223.7</td>
<td>234.6</td>
<td>213.9</td>
<td>218.1</td>
</tr>
<tr>
<td>- Average pension</td>
<td>93.4</td>
<td>102.0</td>
<td>98.2</td>
<td>99.0</td>
<td>68.7</td>
<td>98.3</td>
</tr>
</tbody>
</table>

** Minimum subsistence level for the corresponding age group.


For the first time in many years, the standard of living on Sakhalin improved in 2000. Compared to 1999 (Table 4-08 in Section 4.3.3.1) average income rose by 11%, average salary increased by 6.9%, and the average pension grew by 27.4%. In 2001, average income was 3,988 Roubles, an increase of 32.7% over the 2000 figure. Average salary rose by 38.5% and pensions by 19.1% (Gubernskie Vedomosti, April 17, 2002). Average income in Sakhalin is 18-20% higher than elsewhere in Russia. The cost of living (services, food, medicine, etc.), however, is 50% higher (Main Indicators of the Standard of Living of the Population of the Sakhalin Region and Far-East Region in 1995-2000. Statistical Report. Yuzhno-Sakhalinsk: Sakhalin Regional Statistics Committee, 2001).

With the introduction of the market economy, the structure of income of the population has changed considerably. Social transfers have decreased because of a decrease in state benefits. Income generated by entrepreneurial business has been increasing. The percentage of the total income represented by salaries is reducing.

On Sakhalin, the range of average income is narrower than elsewhere in the Russian Federation. In 2000, the income of the most affluent 10% of the population was 7.6 times that of the poorest 10%, while for Russia as a whole 13.7 times. (Social Indicators of the Income and Standard of Living of the Population, Moscow, 2002, Ministry of Labour and Social Development of the Russian Federation). However, the percentage of the population living below the subsistence level (36% in 2000) is higher than the Russian average.
4.3.5.2 Education

At the beginning of the 2000-2001 academic year Sakhalin’s education system had the following facilities:

**TABLE 4-14: EDUCATIONAL FACILITIES IN SAKHALIN REGION AT THE BEGINNING OF THE 2000-2001 ACADEMIC YEAR**

<table>
<thead>
<tr>
<th>Educational Facilities</th>
<th>Number of Facilities</th>
<th>Total Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evening</td>
<td>16</td>
<td>2,521</td>
</tr>
<tr>
<td>Day-time, Including:</td>
<td>211</td>
<td>81,099</td>
</tr>
<tr>
<td>- Elementary general education.</td>
<td>42</td>
<td>5,998</td>
</tr>
<tr>
<td>- Basic general education</td>
<td>22</td>
<td>1,953</td>
</tr>
<tr>
<td>- Secondary general education</td>
<td>147</td>
<td>73,148</td>
</tr>
<tr>
<td>Special secondary education</td>
<td>18</td>
<td>8,065</td>
</tr>
<tr>
<td>Higher education</td>
<td>8</td>
<td>10,516</td>
</tr>
</tbody>
</table>


Most of the daytime general education facilities (65.9%) are located in urban areas (Education and Culture in Sakhalin Region. Collection of Statistics. Yuzhno-Sakhalinsk: Sakhalin Regional Committee of State Statistics, 2001). During the 2000-2001 academic year, eight educational facilities implemented higher education programmes. Four of these are state educational facilities of higher education.

According to the information provided by the Regional Department of Education there are eight Universities in the Sakhalin Region. Four of them are State Universities and four are private Universities. All the Universities are located in Yuzhno-Sakhalinsk. The largest University is Sakhalin State University. Sakhalin University students major in the following subjects:

- Economics,
- Computer Science,
- Management,
- Psychology,
- Law,
- Engineering (this has been most intensively developed since 1999 with the students majoring in fuel and energy engineering),
- Natural Sciences, and
- Pedagogics.

In the 1990s number of students in the Sakhalin Universities increased. There are a number of reasons for this. These are demographic changes, market demand, some social factors (some students’ parents chose to send their children to Russian universities on the mainland since tuition fees in the Sakhalin universities are lower than at some universities on the mainland, etc.). In 1999 there were 9,131 students at the Sakhalin universities. Out of these 5,299 students were full-time. In 2000 there were 9,505 students at Sakhalin Universities, and out of them 5,936 students were full-time.

In the former Soviet Union, university education was free. With the market economy the number of fee-paying students is increasing. Now Russian state universities provide free education only for those who pass university entrance exams with high grades. About 25% of Sakhalin State University students pay tuition fees. In the remaining three state universities about 75% of students pay. All the educational services provided by Sakhalin private universities charge tuition fees. Approximately 1,000 students graduate annually from Sakhalin universities. About 700 graduates are former full-time students (Education and Culture in Sakhalin Region. Collection of Statistics. Yuzhno-Sakhalinsk: Sakhalin Regional Committee of State Statistics, 2001).
4.3.5.3 Healthcare


Due to financial problems, some medical facilities have closed down in places with lower demand for medical services or a decreasing population. Between 1990 and 2000 the number of hospitals decreased by 40.3% and the amount of outpatient care and clinic services fell by 27.7%. In larger cities, such as Yuzhno-Sakhalinsk, Korsakov and Kholmsk, several new medical treatment centres have been built.

In 2000 there were: 130.3 hospital beds per 10,000 residents; over 2,000 physicians; about 7,000 nurses; 147 obstetricians and gynaecologists; and 211 paediatricians.

Between 1995 and 2000, the per capita number of physicians did not change significantly, ranging from 36.2 to 38.9 per 10,000 residents (Appendix C, Table C-21). For the region as a whole, the average number of physicians in 2000 was 37.3 per 10,000 residents. For Yuzhno-Sakhalinsk this figure was 69 per 10,000 residents.

The economic downturn in the early 1990s lowered standards of living for most Russian citizens. As a result, quality medical care is beyond the reach of not only those who live below the ‘poverty line’ but also people with average incomes.

4.3.5.4 Crime

In 2001, 15,114 crimes were reported - a 2.9% increase over the previous year. Crimes against private property account for 49.2% of total crime and 82.2% of these were thefts. Economic crime included property-related offences (20.5%), business-related offences (7.9%), embezzlement (9.3%), and state authority offences (5.0%).

In the same period crimes involving a weapon decreased by 52.5% and firearms offences by 48.7%. Murders dropped by 50%, grievous bodily harm by 48% and disorderly conduct by 48.5%. No crimes were reported involving explosives.

Efforts to reduce road accidents have been unsuccessful. In 2001, there were 867 road accidents, an increase of 5.3%. There were 118 fatalities (a drop of 4.1%) and 1,107 people were reported injured (an increase of 2.4%). Traffic accidents involving children increased by 3.5% to 147, with seven children killed and 153 children injured, an increase of 16.7% and 4.8% respectively.

According to the Sakhalin Regional State Committee on Traffic Safety, road accidents peaked in 1998. Over 2000 traffic accidents in the region as a whole rose by 5.3% in 2001, this increase was especially high in Smirnykh (63.6%), Nogliki (47%), Aniva (50%), Tomari (27.8%) and Dolinsk Districts (17.1%) and Yuzhno-Sakhalinsk (12.9%). The current rate of road accidents is considered high. Through August of 2002 accidents increased by 31.5% against the same period in 2001.
TABLE 4-15: TYPES OF ROAD ACCIDENTS

<table>
<thead>
<tr>
<th>Description</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total traffic accidents</td>
<td>909</td>
<td>823</td>
<td>867</td>
<td>454</td>
</tr>
<tr>
<td>Due to driver's fault</td>
<td>788</td>
<td>705</td>
<td>713</td>
<td>370</td>
</tr>
<tr>
<td>Due to fault of drivers of vehicles belonging to legal entities, including:</td>
<td>79</td>
<td>73</td>
<td>72</td>
<td>49</td>
</tr>
<tr>
<td>Driving while intoxicated with alcohol</td>
<td>17</td>
<td>13</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Due to fault of drivers of personal vehicles, including:</td>
<td>587</td>
<td>513</td>
<td>599</td>
<td>370</td>
</tr>
<tr>
<td>Driving while intoxicated with alcohol</td>
<td>193</td>
<td>149</td>
<td>164</td>
<td>78</td>
</tr>
<tr>
<td>Caused by driving while intoxicated</td>
<td>210</td>
<td>181</td>
<td>178</td>
<td>96</td>
</tr>
<tr>
<td>Caused by speeding</td>
<td>279</td>
<td>236</td>
<td>286</td>
<td>185</td>
</tr>
<tr>
<td>Caused by mechanical failure</td>
<td>20</td>
<td>13</td>
<td>25</td>
<td>11</td>
</tr>
<tr>
<td>Caused by non-compliance of traffic regulations by pedestrians</td>
<td>165</td>
<td>173</td>
<td>200</td>
<td>116</td>
</tr>
<tr>
<td>Caused by unsatisfactory road quality</td>
<td>53</td>
<td>60</td>
<td>115</td>
<td>68</td>
</tr>
<tr>
<td>Due to fault of motorists, including:</td>
<td>55</td>
<td>28</td>
<td>42</td>
<td>24</td>
</tr>
<tr>
<td>Caused by road conditions</td>
<td>19</td>
<td>7</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Children injured</td>
<td>172</td>
<td>142</td>
<td>147</td>
<td>79</td>
</tr>
<tr>
<td>By unknown vehicles</td>
<td>127</td>
<td>121</td>
<td>126</td>
<td>51</td>
</tr>
</tbody>
</table>

Source: Sakhalin Regional Federal Committee of Traffic Safety, Department of Internal Affairs.

The number of cars is increasing, and, on average, there is one car per family (three people). Most vehicles are second-hand, imported from Japan.

The main causes of increased traffic accidents are:
- Increase in total number of cars on the road,
- Poor road quality,
- Narrow roads,
- Pedestrians non-adherence to traffic rules,
- Drivers do not obey the rules on the road,
- Insufficient enforcement of the legislation related to drunk-driving, and
- Insufficient emphasis on traffic regulations around schools.

More information on traffic accidents is available in Appendix C, Table C-22.

4.4 POTENTIALLY AFFECTED DISTRICTS

The implementation of the Sakhalin II Project will have a social impact on the entire island; some positive and some negative. Some impacts have already been felt. While the Sakhalin II Project will affect the whole Sakhalin Region and to a degree the Russian Far East, this report is focused on direct Project impacts, such as pipelines, temporary construction camps, laydown yards, the LNG plant, booster stations and the upgrading of Project-related infrastructure. This limits the scope to the following districts: Okha, Nogliki, Tyomovsk, Smirnykh, Poronaisk, Makarov, Dolinsk, Yuzhno-Sakhalinsk, Aniva, and Korsakov.

This section provides a brief description of the socio-economic status of the above districts, in particular:

<table>
<thead>
<tr>
<th>Section</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics and population distribution</td>
<td>4.4.1</td>
</tr>
<tr>
<td>The economic situation</td>
<td>4.4.2</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>4.4.3</td>
</tr>
<tr>
<td>Standards of living and quality of life</td>
<td>4.4.4</td>
</tr>
<tr>
<td>Socio-Economic Profile of the Affected Districts</td>
<td>4.4.5</td>
</tr>
</tbody>
</table>
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4.4.1 Demographics and Population Distribution

4.4.1.1 Population Distribution

The population of Sakhalin Region is very unevenly distributed and concentrated largely in the south, with one-third of the population living in Yuzhno-Sakhalinsk (Figure 4-01).

In five of the districts under consideration, the share of the total regional population did not change or changed very slightly between 1995 and 2000. There were significant population decreases in Okha and Makarov Districts, while the populations increased in Ariva and Nogliki Districts and Yuzhno-Sakhalinsk.

The population density of Sakhalin Region is 6.8 people/km². This index varies greatly (Figure 4-09 and Appendix C, Table C-23) with the greatest density in:
- Yuzhno-Sakhalinsk - 201.8 people/km² (29.7 times greater than regional average),
- Korsakov District - 18.2 people/km² (2.7 times greater), and
- Dolinsk District - 13.4 people/km² (2 times greater).

In the other surveyed districts the population density was lower than the regional average, with the lowest in:
- Nogliki District - 1.1 people/km² (6.2 times lower than regional average),
- Smirnykh District - 2.1 people/km² (3.2 times lower),
- Okha District - 2.5 people/km² (2.7 times lower), and
- Tymovsk District - 3.3 people/km² (2.1 times lower).

The majority of Sakhalin residents (86.9%) live in urban communities (Appendix C, Table C-22). In most of the surveyed districts 75% or more of the population is urban, with the exception of Ariva District (15%), Tymovsk District (<50%) and Smirnykh District (<50%). More information on population and population density is available in Appendix C, Table C-23.
4.4.1.2 Population Dynamics

Sakhalin Region has experienced quite complex demographic changes since the early 1990s. Rates of migration differ greatly from district to district (Figure 4-10 and Appendix C, Table C-07).

FIG. 4-10: NATURAL MOVEMENT AND MIGRATION IN 2000

The main cause of population decline is migration from Sakhalin to other regions of Russia and abroad. In most of the districts surveyed, migration rates were decreasing, but out-migration was still greater than in-migration. However, in Nogliki District and Yuzhno-Sakhalinsk, in-migration is higher than out-migration. Since 1995 in most districts out-migration has been decreasing and in Yuzhno-Sakhalinsk the rate of in-migration has been consistently rising.

Other factors influencing population dynamics are a low birth rate and high death rate. Between 1995 and 2000 a natural population decline (surplus of deaths over births) was observed in the districts concerned. In this period an insignificant natural population increase (surplus of births over deaths) was observed in Nogliki District (the birth and death rates were the same in 1995 and there was no increase between 1997 and 2000) (Figure 4-11). In 1998 there was a natural population increase in Aniva District (Municipal formations of Sakhalin Region in figures. Jubilee collection. Yuzhno-Sakhalinsk: Sakhalin Regional Statistics Committee, 2001). In 2000 the natural population decline was higher than the regional rate in most of the districts concerned. But lower in Nogliki, Aniva and Korsakov Districts and Yuzhno-Sakhalinsk.

Between 1995 and 2000 overall populations declined in most districts concerned. The most significant reductions were in Olka District (16.8%) and Makarov District (16.2%). The smallest reductions were in Yuzhno-Sakhalinsk (1.0%), Aniva District (3.1%) and Nogliki District (3.3%).

4.4.2 Economy of the Affected Districts

Economic development in Sakhalin’s districts was and still is uneven. This is due to geographical and climatic differences and the availability of natural resources. A brief historical background on the economic specialisation of each district is given in Section 4.3.1. The main economic sector in districts, with the exception of Aniva, is industry (Appendix C, Appendix C-17). The extractive industries dominate these districts and the region as a whole.
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4.4.2.1 Industry

In 2000 Nogliki District had the biggest share in the total volume of industrial production (45.7%), Makarov District had the least share (0.2%) (Figure 4-11 and Appendix C, Table C-17). The region's industrial centre is Yuzhno-Sakhalinsk.

The following districts are the leaders in industrial production:
- Oil and gas extraction - Nogliki District,
- Coal - Poronaisk District,
- Timber and timber processing - Tymovsk District,
- Electric power production - Yuzhno-Sakhalinsk,
- Meat including by-products - Yuzhno-Sakhalinsk, and
- Fishery and seafood yield - Yuzhno-Sakhalinsk.

This may not necessarily be the leading industry in that municipality (e.g., Yuzhno-Sakhalinsk) (Appendix C, Table C-18, Figure C-02, C-03, C-04, C-05, C-06, C-07 and C-08).

4.4.2.2 Agriculture

In most of the districts, agriculture does not have much impact on economic development. The largest share of agricultural production is in Yuzhno-Sakhalinsk (29.2% of total regional production in 2000). Agriculture is a leading industry in Aniva District (Figure 4-12 and Appendix C, Table C-17).
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In 2001, forage crops were grown on half or more than half of cultivated land (58.8% of cultivated land in the region) in the majority of districts, with the exception of Nogliki, Okha, Smirnykh and Poronaisk (Appendix C, Table C-19). The second largest area was planted with potatoes (32.6%). Most cultivated land belongs to agricultural enterprises, except in Okha, Nogliki, Smirnykh and Poronaisk Districts, where most belong to individual agricultural households (Appendix C, Table C-20).

The main branch of livestock farming is cattle rearing. As of January 1, 2001 there were 27,623 head of cattle in the region. Cattle rearing is most developed in the following districts (Report on Social and Economic Status of Municipal Formations in January-December 2000 in Sakhalin Region. Yuzhno-Sakhalinsk: Sakhalin Regional Committee of State Statistics, 2001):
- Aniva District - 13.2% of total cattle in region,
- Dolinsk District - 12.8%, and
- Yuzhno-Sakhalinsk - 12.2%.

Most districts have cattle except Nogliki, Tymovsk, Smirnykh and Poronaisk.

#### 4.4.2.3 Construction

The volume of construction work in the districts concerned has been minimal over recent years (Figure 4-13), with the most in Yuzhno-Sakhalinsk (more than 61.9% in 2000) and the least in Makarov District (0.1%) (Appendix C, Table C-17).

#### 4.4.3 Infrastructure

##### 4.4.3.1 Transport

The transport infrastructure differs greatly from district to district on Sakhalin. This is due to a number of geographical, historical and economic conditions. As a result, the more economically developed parts of the island (south and west) have better developed transport infrastructure, where roads and railways access to the main ports the year round. These areas handle 90% of inter-regional and 75% of Sakhalin internal cargo traffic.

##### 4.4.3.2 Communications

All regular communications services are available in the surveyed districts, including postal service, telephone, telegraph, radio and TV. However, in most of the surveyed districts inter-city dialling often fails. Modern communication services are also being developed (internet, mobile phones, etc.), but mostly in the south. Sakhalinskiyaz is the main provider of telephone services.
4.4.3.3 Housing

Living space per person differs between the districts - in Poronaisk, Okha and Makarov Districts it is higher, and in Smirnykh and Aniva Districts and Yuzhno-Sakhalinsk it is lower. The difference between social groups is also growing, as a result of changes in income patterns and the subsequent layering of society. This is particularly noticeable in Yuzhno-Sakhalinsk (Appendix C, Table C-25).

While municipal housing reform is currently underway on Sakhalin, the condition of housing is declining in each district and there are insufficient funds to carry out reconstruction work or build new housing. Most housing construction is taking place in urban areas, in particular in Yuzhno-Sakhalinsk. In urban areas, housing construction tends not to be funded by the local population, while in rural areas, the opposite is the case - most living premises construction is funded by the local residents themselves. There has been an increase in individual housing construction.

In settlements there are people who need housing or housing improvements, which points to a housing deficit. In Poronaisk District, there is an average of 26.9 m² of living space/person, but 1,948 people are waiting to receive housing. In several settlements in this district, accommodation lies empty and the owners live outside the district. This situation is typical of districts in the region.

4.4.3.4 Utilities

The regional and district utilities network is currently facing problems with financing and logistical support, the main problems being:

- Old infrastructure,
- Equipment depreciation,
- Inability of current infrastructure to meet growing demand,
- Non-payment for utilities by community residents.

The surveyed districts differ according to the availability of utility services (Appendix C, Table C-24). Districts provide municipal water supply, sewage system, municipal heating supply, baths and showers. In Nogliki and Okha Districts, more than 90% of homes have gas. In Yuzhno-Sakhalinsk, hot running water is provided to 67.2% of homes. In most districts hot water is supplied to fewer than 20% of homes. Hot water is not provided to homes in Smirnykh and Makarov Districts. In some areas, hot water is not supplied in summer.

Municipal reform of utilities is being carried out, but the state of utilities remains very poor. Yuzhno-Sakhalinsk, Okha and Poronaisk Districts have the best provision of utilities in the region, while Tymovsk and Smirnykh Districts have the worst (Appendix C, Table C-24).

4.4.4 The Standards of Living and Quality of Life

4.4.4.1 Summary

Standards of living differ from district to district. Wage primarily determine standard of living standard, since it is the basic element of income for the majority of the population. The standard of living standard is higher in Nogliki District and in Yuzhno-Sakhalinsk.

Tables C-14, C-21, C-26 and C-27 of Appendix C demonstrate difference between affected districts in standards of living and quality of life.
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4.4.4.2 Wages

Wage levels also differ from districts to district (Appendix C, Table C-14). The determining factor is the main economic sector operating within the district. For example, wages in Nogliki and Okha Districts are higher than the average regional level because a significant proportion of the population is engaged in the oil and gas industry.

According to the Regional Economics Committee, the average monthly wage in the Sakhalin Oblast over a period of seven months in 2002 was 6,312 Roubles, 138.1% of the monthly wage for the same period in 2001 (TIA Ostrova).

Among the districts studied in the above 2002 report, the highest monthly wages occurred in:

- Nogliki District - 12,456 Roubles,
- Okha District - 9,252 Roubles, and
- Yuzhno-Sakhalinsk - 6,883 Roubles.

The lowest average monthly wage was registered in Makarov District - 4,034 Roubles.

In 2002 there still were back payments on salaries due. Back payment on salaries in the region was 528,465,000 Roubles by August 1, 2002. The largest wage arrears are in Yuzhno-Sakhalinsk (74,423,000 Roubles), Poronenk District (58,524,000 Roubles) and Dolinsk District (48,271,000 Roubles). The smallest wage arrears were in Tymovsk District (434,000 Roubles).

4.4.4.3 Healthcare

The districts analysis for 1995-2000 showed that medical personnel supply varies throughout the island (Appendix C, Table C-21). The level of medical personnel in those districts studied is lower than the average regional level, which is 37.3 doctors/10,000 people, but this average is skewed by the greater number of doctors within Yuzhno-Sakhalinsk, which has 69.0 doctors/10,000 (more detail can be found in the Health Impact Assessment).

The following districts had the least numbers of doctors per 10,000 people in 2000:

<table>
<thead>
<tr>
<th>District</th>
<th>Doctors per/10,000</th>
<th>% Below Regional Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smirnykh</td>
<td>15.2</td>
<td>58.4%</td>
</tr>
<tr>
<td>Poronenk</td>
<td>14.5</td>
<td>67.3%</td>
</tr>
<tr>
<td>Makarov</td>
<td>12.2</td>
<td>67.3%</td>
</tr>
<tr>
<td>Aniva</td>
<td>17.3</td>
<td>67.3%</td>
</tr>
</tbody>
</table>

The biggest reduction of medical personnel (doctors) for 1995-2000 was in:

- Dolinsk District - by 31.0%,
- Makarov District - by 25.6%, and
- Smirnykh District - by 20.8%.

At the same time there was a small increase in numbers of medical personnel in Nogliki District. The largest growth took place in Yuzhno-Sakhalinsk. The level in 1995, which was 56.1 people/10,000, increased to 69.0 people/10,000 in 2000.

The situation regarding medical personnel supply in the majority of the districts studied has been stable over the last three years.

The number of medical institutions in the districts concerned (except big territories) has been reduced over the past 10 years, particularly in rural areas. Information about the number of different types of medical institutions is given in Chapter 4.5.3. Polyclinics and hospitals are usually situated in district centres, and paramedic stations are located in rural areas and villages.

Detailed information about healthcare is given in the Health Impact Assessment report.
4.4.5 Socio-Economic Profiles of the Affected Districts

The summaries below describe the socio-economic status of the surveyed districts in 2001.

**Okha District**

*Administrative Centre:* Okha (pop. 29,000); 1,062 km from Yuzhno-Sakhalinsk; nearest railway station is Nogliki

*Administrative division of the district:* 1 town (Okha); 4 small towns (Vostochny, Kolendo, Tunger, Elkhabe); 6 village administrations (Moskalvo, Nekrasovka, Novye Langry, Rybnovsk, Sabo, Piltun)

*Area:* 1,481,590 ha (17% of region)

*Population:* 36,700 (6.2% of regional population); 2.5 people/km²; indigenous population - 1,232

*Working-age population:* 24,400

*Payroll staff:* 14,500

*Job-seekers (as of the end of the year):* 730

*Average monthly wage:* 6,056 Roubles (164.5% of regional average)

*Leading economic sectors:* Industry (oil and gas, electric, food)

*Share of regional industrial production:* 10.5%

*Leading industries:* Oil (21% of regional production) and gas (46%), electric (9.1%), timber (5.1%), meat and by-products (8.5%) and dairy products (8.7%)

*Share of regional agricultural production:* 3.2%

*Social infrastructure:* 13 schools, 4 hospitals/out-patient clinics, 8 paramedic/ambulance stations, 1 museum, 10 libraries, 10 community centres

*Crime:* 3,096 registered crimes/100,000 residents
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Nogliki District

<table>
<thead>
<tr>
<th>1900</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail turnover</td>
<td>Industrial produce</td>
</tr>
<tr>
<td>Agricultural produce</td>
<td>Investments in fixed capital stock</td>
</tr>
</tbody>
</table>

Administrative Centre: Nogliki (pop. 11,300); 659km from Yuzhno-Sakhalinsk

Administrative division of the district: 2 small towns (Nogliki, Katangli), 2 village administrations (Val, Nysh)

Area: 1,379,500ha (15.8% of region)

Population: 14,600 (2.5% of regional population); 1.1 people/km²; indigenous population 1,038

Working-age population: 9,500

Payroll staff: 6,000

Job seekers as of the end of the year: 330

Average monthly wage: 6,709 Roubles (182.3% of regional average)

Leading economic sectors: industry (oil and gas, electric)

Share of regional industrial production: 41.7%

Leading industries: oil (72.6% of regional production) and gas (about 50%), electric (11.4%), timber (4.8%), timber processing (9.3%)

Share of regional agricultural production: 1.7%

Social infrastructure: 7 schools, 3 hospitals/out-patient clinics, 2 paramedic/ambulance stations, one museum, 9 libraries, 3 community centres

Crime: 3,555 registered crimes/100,000 residents
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Tymovsk District

Administrative Centre: Tymovskoye (pop. 9,200); 501km from Yuzhno-Sakhalinsk.
Administrative division of the district: one small town (Tymovskoye), 9 village administrations (Ado-Tymovo, Argi-Pagi, Voskresenovka, Voskhod, Kirovsk, Krasnaya Tym, Molodezhnoye, Chir-Unvd, Yasnoye)
Area: 631,270ha (7.2% of regional Area)
Population: 20,800 (3.5% of regional population); 3.3 people/km²; indigenous population - 236
Working-age Population: 13,900
Payroll staff: 6,200
Job-seekers (as of the end of the year): 129
Average monthly wage: 2,230 Roubles (60.6% of regional average)
Leading economic sectors: agriculture and industry (timber)
Share in regional industrial production: 0.9%
Leading industries: commercial timber (29.5% of regional production), timber (9.1%), timber haulage (31.7%)
Share of regional agricultural production: 4.7%
Social infrastructure: 14 schools, one hospital, 18 paramedic/ambulance stations, one museum, 16 libraries, 14 community centres
Crime: 2,307 registered crimes/100,000 residents
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Sminykh District

Administrative Centre: Sminykh (pop. 7,300); 363km from Yuzhno-Sakhalinsk
Administrative division of the district: one small town (Sminykh), 6 village administrations (Buyukly, Onor, Pervomaisk, Roschino, Pivinsk, Pobedino)
Area: 795,900ha (9.1% of the regional Area)
Population: 16,700 (2.8% of the regional population); 2.1 people/km², indigenous population - 26
Working-age Population: 10,800
Payroll staff: 3,900
Job seekers: 456
Average monthly wage: 3,162 Roubles (85.9% of regional average)
Leading economic sectors: agriculture and industry (timber)
Share of regional industrial production: 3.4%
Leading industries: timber processing (17.7% of regional production), timber (13.6%), timber haulage (16.8%), residual oil, petrol and diesel fuel (100%), oil (6.5%)
Share in regional agricultural production: 3.3%
Social infrastructure: 9 schools, 2 hospitals/out-patient clinics, 6 paramedic/ambulance stations, 10 libraries, 9 community centres
Crime: 2,429 registered crimes/100,000 residents
Poronaisk District

Administrative Centre: Poronaisk (pop. 20,600); 288km from Yuzhno-Sakhalinsk

Administrative division of the district: one town (Poronaisk), 5 small towns (Vakhrushev, Vostok, Castillo, Leonidovo, Tikhmenevo), 3 village administrations (Zabaykalets, Malinovka, Trudovoye)

Area: 728,490ha (8.4% of region)

Population: 35,300 (6.0% of regional population); 4.7 people/km²; indigenous population - 463

Working-age population: 22,600

Payroll staff: 9,500

Job-seekers (as of the end of the year): 784

Average monthly wage: 3,153 Roubles (85.7% of regional average)

Leading economic sectors: industry (timber, coal, food, fishing)

Share in regional industrial production: 2%

Leading industries: coal (22.7% of regional production), fish and marine products (4.1%), electric (12.7%), timber processing (5.8%), fresh fish products (3.9%) and canned marine products (6.1%)

Share of agricultural production: 5.6%

Social infrastructure: 14 schools, 7 hospitals/out-patient clinics, 6 paramedic/ambulance stations, one museum, 8 libraries, 6 community centres

Crime: 2,084 registered crimes/100,000 residents
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Makarov District

Administrative Centre: Makarov (pop. 8,700); 235km from Yuzhno-Sakhalinsk
Administrative division of the district: one town (Makarov), 4 village administrations (Vostochny, Gorny, Novoye, Porechye)
Area: 214,800ha (2.5% of region)
Population: 11,400 people (1.9% of total regional population), 5.3 people/km²; no indigenous residents
Working-age population: 7,400
Payroll staff: 2,700
Job seekers (as of the end of the year): 877
Average monthly wage: 1,987 Roubles (54% of regional average)
Leading economic sectors: industry (timber, coal, fishing)
Share of regional industrial production: 0.2%
Leading industries: coal, timber, fishing, timber processing (insignificant percentages of regional production)
Share in regional agricultural production: 1.6%
Social infrastructure: 7 schools, one hospital, 5 paramedic/ambulance stations, one museum, 7 libraries, 4 community centres
Crime: 2,681 registered crimes/100,000 residents
Dolinsk District

Administrative Centre: Dolinsk (13,800); 43km from Yuzhno-Sakhalinsk

Administrative division of the district: one town (Dolinsk), 4 small towns (Bykov, Vzmorye, Sokol, Uglezavodsk), 3 village administrations (Pokrovka, Sovetskoje, Starodubskoye)

Area: 244,160ha; (2.8% of regional Area)

Population: 32,200 (5.5% of regional population); 13.4 people/km²; no indigenous residents

Working-age population: 21,400

Payroll staff: 7,400

Unemployed people of employable age in search of job as of the end of the year: 327 people

Average monthly wage: 2,592 Roubles (70.4% of regional average)

Leading economic sectors: industry (coal, food, fishing) and agriculture

Share of regional industrial production: 1.0%

Leading industries: coal production (6.5% of regional production), construction materials production (wall materials - 58.3%, reinforced concrete - 44.6%, non-metal materials - 7.8%), meat and by-products (10.1%), fishing and sea-food harvesting (1.8%)

Share of regional agricultural production: 8.3%

Social infrastructure: 10 schools, 3 hospitals/out-patient clinics, 5 paramedic/ambulance stations, 12 libraries, 6 community centres

Crime: 1,798 registered crimes/100,000 residents
Yuzhno-Sakhalinsk

Regional Centre - Yuzhno-Sakhalinsk is a municipality

Area: 91,250ha (1% of region)
Population: 186,900 (31.6% of regional population), 201.8 people/km²
Working-age population: 121,300
Payroll staff: 75,400
Job seekers (as of the end of the year): 513
Average monthly wage: 4,194 Roubles (113.9% of regional average)

Leading economic sectors: electric, machine construction, metalworking, timber processing, food, transport, construction, trade
Share of regional industrial production: 13.6%

Leading industries: electric (41%), timber and timber processing (21.9%), meat and by-products (59.9%), dairy products (66.2%), vodka and alcohol (74.5%), animal fodder (100%), bread (35.4%), confectionery and pasta (90.0%), fish (16.9%), construction materials (walling materials - 35.4%, reinforced concrete - 40.9%, non-metallic construction materials - 35.7%), fishing and sea-food harvesting (19.7%)

Share in regional agricultural production: 29.2%

Social infrastructure: 37 schools, 12 hospitals/out-patient clinics, 7 paramedic/ambulance stations, 3 museums, 23 libraries, 8 community centres, 2 theatres
Crime: 2,295 registered crimes/100,000 residents
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Aniva District

**Administrative Centre:** Aniva (8,700); 17km from Yuzhno-Sakhalinsk

**Administrative division of the district:** one town (Aniva), 4 village administrations (Voskresensk, Ogonki, Taratuy, Troitskoye)

**Area:** 269,000ha (3.1% of region)

**Population:** 15,600 (2.6% of regional population); 5.8 people/km²

**Working-age population:** 10,300 people

**Payroll staff:** 3,700

**Job-seekers (as of the end of the year):** 203

**Average monthly wage:** 2,143 Roubles (58.2% of regional average)

**Leading economic sectors:** agriculture, industry (food)

**Share in regional industrial production:** 0.8%

**Leading industries:** fish products (19.6% of regional production), meat and by-products (4.7%)

**Share in regional agricultural production:** 12.9%

**Social infrastructure:** 10 schools, one hospital, 9 paramedic/ambulance stations, 11 libraries, 9 community centres

**Crime:** 3,981 registered crimes/100,000 residents
Korsakov District

Administrative Centre: Korsakov (37,900 people); 42km from Yuzhno-Sakhalinsk

Administrative division of the district: one town (Korsakov), 2 small towns (Novikovo, Ozersky), 3 village administrations (Okhotskoye, Solovyovka, Chapaevo)

Area: 260,450ha (3% of regional Area)
Population: 45,900 (7.8% of the regional population); 18.2 people/km²
Working-age population: 31,900
Payroll staff: 14,900
Job seekers as of the end of the year: 183
Average monthly wage: 2,598 Roubles (70.6% of regional average)
Leading economic sectors: industry (fishing, food), sea transport
Share of regional industrial production: 3.8%
Leading industries: fishing and sea-food harvesting (11.0%), non-metal construction materials (25.8%), fish products (11.7%), canned fish and marine products (28.1%), cardboard (100.0%) and timber (5.1%)
Share of regional agricultural production: 6.3%
Social infrastructure: 16 schools, 3 hospitals/out-patient clinics, 9 paramedic/ambulance stations, one museum, 15 libraries, 11 community centres
Crime: 2,973 registered crimes/100,000 residents
4.5 SUSTAINABILITY OF SAKHALIN’S RURAL COMMUNITIES

4.5.1 Economic Policy in Soviet Times

The Sakhalin Oblast is rich in natural resources, including fish, lumber, oil and gas. It has a relatively small population. It is distant from Russia’s primary markets in the West and has a severe climate that limits the growing and harvesting seasons to four - five months per year. It also significantly increases construction costs (up to 70%). The region’s infrastructure is crumbling and very little maintenance or upgrading has been undertaken in the past decade.

The region’s economy has not been sustainable as it was based largely on resource extraction but its location made it a strategic priority for the Soviet State. Sakhalin agricultural farms and industrial enterprises received large subsidies to cover their high costs of production due to the climate and remote location. Incentives were paid by the central government to ensure an adequate workforce to support the region’s economic activity. Subsidies to the economy included:

- Artificially low prices of raw materials for enterprises and utility companies,
- Centralised shipment and delivery of food and fuel to Sakhalin Region. In the 1980s there were ten ferryboats running daily between Kholmsk on Sakhalin and Vanino on the mainland, and
- Enhanced worker compensation packages financed by the federal budget.

Heat and housing maintenance costs were high, but again were subsidised by the government for the General Public. These policies resulted in an artificial economic structure and inflated population base that would not have developed under normal market conditions.

4.5.2 Changes During Transition to Market Economy

In the 1990s, the government significantly reduced federal subsidies to enterprises and industries, and price controls on raw materials and outputs were mostly removed. The inflow of goods and fuel decreased. There are only two ferryboats running between Sakhalin and mainland Russia now. As a result, the majority of Sakhalin enterprises that existed in the Soviet times have become economically non-viable. It was especially true for the big enterprises, like Korsakov Ocean Fishing Service, that had a well-developed social infrastructure that included company housing, transportation, kindergartens, etc. Those additional expenses hindered their ability to compete effectively in the market economy.

Municipalities with their own deficit budgets were also not able to assume the social obligations enterprises could no longer meet. Many enterprises went bankrupt, or were closed or significantly downsized. For example, the pulp and paper plants in Poroninsk, Kholmsk, Makarov and Olesnisk closed resulting in a major impact on their respective communities and the region as a whole.

Only a few agricultural enterprises have survived and even those have significantly reduced their livestock and farming areas. A growing percentage of the region’s food comes from abroad or from the Russian mainland.

Sakhalin agricultural and industrial enterprises did not have and in many instances still do not have the management know-how and technologies needed to compete in the global economy even for their own local market. The human resources have not been developed, education and training is deteriorating and there is no visible government programme has addressed this problem. This situation reflects the loss of good teachers to out-migration and to higher paying jobs, such as those in the oil and gas industry.

The oil and gas industry is also having difficulty finding qualified workers locally. The problem is aggravated further by the lack of infrastructure - housing, communication, transportation - needed for workers who might be brought from the mainland. Consequently, the region is an importer of most products and an exporter of natural resources only. Trading in finished goods with countries such as China, Korea, and the USA is one-way. Export of unprocessed natural resources helps the federal budget but does little for the regional and local economies.

Enterprises in Sakhalin Region are significantly handicapped by the involvement of criminals in business and by the growing incidence of crime in general in the area. The taxation system is also a barrier to business growth.
Another factor contributing to the non-sustainability of Sakhalin communities is the reform of the Russian Army. The transition to a smaller, professional Army reduced the number of garrisons located on the island. In many small rural communities such as Leonidovo and Gastello services provided to military units located in or nearby the community was an important source of employment.

4.5.3 Current Responses
The federal, regional and local government is implementing some policy changes necessary to create a viable economic base in Sakhalin and the northern areas in general. To improve the efficiency of industrial enterprises to enable them to function with limited or no state support the government is:

- Accelerating economic restructuring of enterprises by encouraging them to shed social assets (infrastructure, support, etc.) and through other measures that permit industrial rationalisation,
- Allowing market driven contractual labour practices,
- Developing programmes to reduce and/or close non-viable communities. In many instances reduction was actually happening due to natural factors, following the economic decline. More information on the current migration trends can be found in Sections 4.3.1.2 and 4.4.1.2,
- Improving efficiency in the provision of municipal and social services. A good example of the following is the restructuring of the Nogliki Administration that enabled elimination of departments with overlapping responsibilities, enabling the reduced staff to fulfil the same amount of work effectively. For example, the Departments of Economy, Trade, Prices and Tariffs, and Consumer Rights merged into the single Department of Economic Policy, which now serves both public welfare and economic development in Nogliki. The Nogliki example was followed by the Korsakov Administration, and
- Opening possibilities for restructuring through the support of outmigration that would reduce the existing social support base and create opportunities for more effective use of the freed resources for improvement of social support and effectiveness of local enterprises.

Sakhalin Region has several programmes running including:

- A Coal Mining Restructuring programme, which facilitated the closure of old mines and the introduction of more cost-effective open-cut mining on new coal deposits. Several settlements were closed, with residents relocated to other Sakhalin settlements or other regions of the Russian Federation, and
- Relocation options and/or retraining programmes were provided for the reduced staff. This programme mostly affected Uglegorsk and Novelsk Districts, but some villages in the surveyed districts: Makarov (Gornoye) and Yuzhno-Sakhalinsk also participated in the programme.

A similar approach was used for the relocation of residents from the settlements in the North, formed around oil and gas deposits. With the onshore production steadily decreasing, key enterprises moved and some striving settlements such as Vol declined. The village of Katangli is another example of such a relocation programme. The shortage of funds, however, caused many such programmes to fail to achieve their objectives. In many instances relocation schemes in communities such as Katangli and Gornoye were not completed.

4.5.4 Introduction of Principles of Sustainable Development
There are some things that SEIC can do to within the communities it operates into assist in ensuring development is sustainable, such as:

- Provision of training for its employees; adding new skills,
- Safeguarding the environment and participating in programmes that take advantage of the Sakhalin environment whilst considering the needs of future generations, and
- Supporting the use of gas by local companies, government authorities, and households.

The success of such SEIC undertakings will depend on the appropriate selection of Project beneficiaries; and positive and effective relationships with the communities. Working together with government agencies will be an important element of achieving more sustainable approaches to development.