Speaking about Russia in general terms, the intensification of social tension, the rising crime rate, and the growth of xenophobia are not the direct results of the present migration process. Besides, they are not identical in different districts and bear a strong regional stamp. The situation in the European part of Russia is very different from that in the south. In the south there are few legal control mechanisms governing the arrival and admission of migrants and refugees, and this has dangerous social consequences.

Part V Labour Emigration and the Brain Drain from Russia

In 1990 total emigration from Russia to the West and Israel reached 103,600 people. It fell to 88,300 in 1991 and rose again to 102,900 in 1992. In 1992 the ethnic composition of emigration to the West and Israel changed significantly, with the proportion of Germans and Russians rising and the proportion of Jews falling. The major receiving countries throughout the early 1990s were Israel, Germany and the USA. It may be expected that in the next few years emigration rates will continue at about 100,000 people per year. 19

According to K. Frolov, Vice-President of the Russian Academy of Science, during the years of perestroika more than 150,000 members of the intelligentsia, mainly people with technical and scientific backgrounds, left Russia. The reduction in the number of scientific studies taking place in the various branches of science which are considered the most essential today is keenly felt. For example, in ecology Russia is very far behind the USA in the study of how engineering and technical problems influence nature and humankind.²⁰

More than 30,000 Russian scientists are now working in the USA and in Israel. There are more than 4,000 in Germany, 600 in France,²¹ and 95 in Korea. Some 150 scientists are soon

expected to leave for other countries in the former Soviet Union and another 50 for Chile. 22 It is very likely that Russian specialists will be leaving for other Latin American countries too. The Venezuela Oil Company plans to spend five million dollars for a highly qualified work force from the countries of Eastern Europe and the former Soviet Union. The European Community estimates that 50,000 people will be recruited in this way. The former Brazilian Minister of Education said that Brazil is ready to employ 10,000 scientists from the former Soviet Union in the universities and scientific centres of his country. Other possible destinations for Russian specialists include Malaysia, Singapore and the countries of the Persian Gulf, where the need for highly qualified specialists in banking and the computer business is urgent.

The Russian government passed a regulation on the conclusion of an agreement between Russia, Germany and Finland which allows the citizens of Russia to work legally in Germany and Finland on a contract basis. Every year 2,000 Russian specialists leave Russia to do such contract work. In the draft of the agreement it is mentioned that the number of people working in Germany on the basis of contracts will reach 8,000. The salary of Russian specialists must be in accordance with German rates.²³ Other such agreements are completed, while others are at the discussion stage, with more than 30 countries in Europe, America, Australia and Asia.

One survey suggests that the factors which motivate people to look for work abroad include the decline in the standard of living (77.7 percent), economic instability (69.9 percent), uncertainty about the future (54.4 percent), political instability (50.5 percent), poor furnishing of material-technical information in Russian science (4.9 percent), and low wages.²⁴ As of April 1, 1993 there were 7,390 unemployed scientists in Russia.²⁵

Russia and the West are especially concerned about the emigration of scientists employed in the nuclear indus-

try. Among physicists the potential rate of emigration is very high according to a survey carried out among leading scientists. Thirteen percent of physicists are ready to leave the country for abroad immediately and 40 percent of the respondents do not exclude such a possibility.²⁶

The specialists are leaving scientific institutes and construction offices in large numbers. In 1992, defence plants lost 600,000 people, scientific-research institutes and construction offices, 200,000 people.²⁷

According to the Director of the CIA, one million former Soviet citizens are engaged in the production of nuclear weapons. Out of this number, 1,000-2,000 are able to construct such weapons, 3,000-5,000 have experience in the production of plutonium, and tens of thousands have knowledge which could be very useful for countries which want to build and design missiles and produce chemical weapons ²⁸

According to western secret service sources, 60 of the 4,000 Soviet scientists who are connected with the nuclear bomb have been recruited by five foreign states. According to the same source, for each scientist, recruiters from Iran, Pakistan, India, Iraq and Brazil receive US \$1,000 and the Soviet scientists are promised an annual income of US \$36,000-75,000 and the right to settle in the host country.²⁹

Our sources quote another point of view. The Russian Atomic Ministry says that cases are known in which scientists connected with secret technology emigrate. But even if several hundred such scientists emigrate, they would not be able to build a nuclear bomb in a developing country because doing so requires a great deal of experience and access to very scarce technology and a unique industrial culture. The intelligence service of Russia stresses that access to detailed information in the sphere of nuclear weaponry is available only to several dozen scientists who have not left the country.30

The real danger of losing such highly trained professionals exists