

MANAGEMENT RESPONSES TO THE CHALLENGE OF SUSTAINABLE DEVELOPMENT IN RUSSIA

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Summary

This chapter discusses management responses to the new challenge of sustainable development (SD) in Russia from government (at the federal and regional levels) and businesses. Their views and behavior are significantly shaped by a third participant in the effort, i.e. the public. The context is set at the beginning and finally some conclusions are drawn. The chapter argues that the natural environment—Russia's greatest asset along with its strong intellectual capacity—is receiving growing attention from the top management of the country and its regions, as well as the private sector, in terms of its health, and cultural and economic values for people. These considerations are preceded by a review of the Russian contextual framework.

1. The Russian Federal Government Response

With all its severe internal political and economic problems awaiting solutions, Russia is making, along with many other countries, genuine efforts to look ahead and steer its future towards sustainable development. These endeavors take place in the wake of the United Nations pioneering efforts aimed at changing the present pattern of largely environmentally unfriendly development, consumption and production, life styles, technological, cultural and demographic change, regulatory and market economic instruments, education and human institutions, social justice and military approaches to

resolving tensions and conflicts.

A breakthrough, hardly noticeable internationally and domestically, was ushered in on April 1, 1996, with President Yeltsin signing a decree (an executive order) by which the concept of Russia's transition to sustainable development (SD)—submitted to him by the Russian government—was adopted following a two-year effort made upon his request over 1994-1995. The Russian president called on legislative and executive authorities to take into account the SD concept in decision-making and preparing new legislation. He also requested the government to elaborate a national SD strategy in 1996. The Russian government issued an ordinance of May 8, 1996, putting the Ministry of Economy, together with the Ministry of Environment Protection and the Ministry of Science and Technology Policy, in charge of preparing a state SD strategy. Appropriate guidelines were worked out and sent to all members of the Russian Federation, i.e. all administrative territorial units (provinces, autonomous republics, *krais*, etc.), to solicit their views so they could be taken into account in the final text of the SD strategy. The unchecked and lengthy systemic crisis in Russia, accompanied by changes of governments, did not allow the country's leadership to elaborate a longer-term vision of Russia. Thus, the draft SD strategy for Russia was put on the back burner and was not adopted until 2001 when the RF Ministry of Economic Development and Trade made 'Major Directions of RF Socio-economic Development for the Long-Term' (up to 2010). This included a section on the environment along with social and economic policy considerations. In 2004, an updated forecast of socio-economic development up to 2007 was unveiled. Meanwhile the Federal government adopted the first National Environmental Action Plan of the Russian Federation for 1999 to 2001. Russian territorial units—the members of the Russian Federation—began to work on regional SD strategies in the mid 1990s, while private companies, especially those which won access to foreign partners, expressed interest in the ISO14000 series of environmental management standards.

Russia radically differs from economically developed countries by structure and ratio of national capital for sustainable development. According to World Bank estimates for 1995 to 2000, the share of natural capital in the national wealth of economically developed countries is not more than 10%, the share of produced capital - about 20%, and of human capital - more than 70%. The basis of the Russian national wealth, however, is natural capital (83-88%). Produced capital amounts to 7-10%, human capital is estimated to be only 5-7%, i.e. indicative of the low cost of labor rather than a generally low educational or professional level.

Low efficiency in using natural resources is one of the reasons for the low effectiveness in the economy, which is traditionally oriented at "unlimited" natural capital. Consumption of natural resources and pollution intensity (per unit of final product) in Russia, are extremely high as compared to economically developed countries. Thus, power consumption in Russia per unit of final product is 2-3 times more; production of 1 ton of paper needs 2-3 times more timber resources. Moreover, from 1992 to 2002, due to deterioration of technological discipline, considerable growth of power and other resources consumption (by 20 to 60%) was observed. Power consumption per unit of gross domestic product increased by 25%, and water consumption by 20%. The intensity of sulfur oxides emissions—the cause of acid rains—led to degradation of large areas of forests and lands

and was 20 times higher than in Japan and Norway, and approximately 6 to 7 times higher than in Germany and France.

Let us now take a retrospective view at events that eventually led to the present situation, and discuss Russia's concept of transition to SD, regional and business efforts. It should be reiterated that the issues of the environment and, even to a greater extent, of sustainable development, were overshadowed in Russia in the 1990s by political strife, and problems of crime and corruption, poverty and societal inequality, and declining health. Nevertheless, they were always kept on the agenda if only to pay lip service as needed.

2. Evolution of sustainable development approaches in Russia

2.1. Early inroads

It may sound paradoxical that, in Russia, SD issues have only recently received notable attention from academia and government, despite Russia's (and, earlier, the USSR's) active involvement in debates about them for decades. As far back as 1970, Aurelio Peccei, President of the Club of Rome, brought to the USSR the team of scientists who wrote "The Limits to Growth". At that time there was little interest shown in that work. The response mainly boiled down to critical remarks, such as those about lack of reference in the book to technological changes that should—and that was the prevailing view in the USSR—solve many development problems. The book was later translated into Russian but both the original and the translated books were kept for confidential use until the mid 1980s. Russian official representatives and experts took part in the UN discussions about such concepts as 'trickle down' development, development without destruction, ecodevelopment, the world ecological order, environmental security, etc.

A new, systemic concept of sustainable development was first introduced internationally in the World Conservation Strategy released as a joint effort by the United Nations Environment Programme (UNEP), the International Union for Conservation of Nature and Natural Resources (IUCN) and the World Wildlife Fund (WWF) in 1980. In 1979, IUCN/UNEP held a conference in the USSR at Ashkhabad, capital of Turkmenistan (a former Central Asia Republic), at which the World Conservation Strategy was discussed and then adopted the following year.

The introduction of the notion of sustainable development went unnoticed in the USSR and, in fact, in many other countries until a few years later. It was made the central theme of the World Commission for Environment and Development (WCED) set up in late 1983. Sustainable development was defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (*Our Common Future*, Oxford University Press, 1987). This definition has been widely accepted, though not without many critical remarks about its vagueness and the lack of operability. Attempts are still underway to make it operational and find an appropriate set(s) of indicators and indices for SD.

In its report, "Our Common Future", the World Commission on Environment and Development (WCED) stated that sustainable development is not "a fixed state of

harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs" (*Our Common Future*, p.9).

Incidentally, the USSR supported the nomination of Mrs. Gro Harlem Brundtland to chair WCED. Prof. V. Sokolov, a well-known biological scientist, was appointed as a member of the Commission. This event again went largely unnoticed in the country. However, public hearings of the Commission's findings, with the participation of more than 500 scientists, experts and NGOs from the USSR and other East European countries, were held in Moscow in December 1986. In his speech at Murmansk on 1 October 1987, M. Gorbachev commended "Our Common Future". The book was fully translated into Russian and published in 1987. Its 20 000 copies were quickly sold out.

The Brundtland Commission report had naturally more publicity in and emotional impact on the world community than "The Limits to Growth". It was the first time that such a report by an international independent commission was discussed at the UN General Assembly, and a relevant commendable resolution was adopted. However, both were similar as regards their inconspicuous, if any, impact on national decision-making. Timid attempts to include the notion of 'sustainable development' in the title of the 1992 (now famous) environment-related Rio conference failed dismally.

It was not until the middle of the UN Conference on Environment and Development (UNCED), "The Earth Summit", held in June 1992 at Rio-de-Janeiro in Brazil, that its participants realized that the sustainable development concept could be the only unifying theme to bring them together and help iron out disagreements on development issues. Thus, UNCED further promoted the concept to make it operational through its Agenda 21, a plan of action for sustainable development at the global, regional, national and local levels, with broad participation of governments as well as business, academic, and other non-governmental communities. Russia's participation in preparations for and in UNCED proper was much smaller than USSR's in the 1972 UN Conference on the Human Environment in Stockholm, which the USSR finally boycotted for political reasons since the West opposed East Germany's participation.

The Russian government delegation, headed by then deputy president of Russia A. Ruzkoy, signed all the major final UNCED documents. Russian NGOs succeeded in translating an abridged Agenda -21 into Russian and disseminated it in Russia. However, the difficult political and economic situation in Russia pushed to the fore such issues as economic hardships, crime, corruption, the Chechen war, and heavy inflation, leaving environmental concerns way behind.

3. Sustainable Development in the wake of UNCED

It was not until February 1994 that the notion of sustainable development became 'legitimized' in Russia, first appearing in a top official document, namely, a decree (an executive order) by President Yeltsin who requested the government to elaborate, recalling UNCED recommendations, a concept of Russia's transition towards sustainable development. That was a cautious and phased approach to the new

paradigm. Russia's Ministry of Economy was placed in charge of the effort, with the environment ministry closely joining it. An inter-agency committee was set up for the purpose. The committee was chaired by a Vice-Minister of Economy and his deputy was a Vice-Minister of the Environment. The Ministry of Economy also set up a select expert working group to prepare a text of the SD concept. The first draft was completed in late 1994 and sent to all federal ministries and agencies, and administrations of Russian provinces (the members, or subjects, of the Russian Federation) and was published in the Russian environmental weekly 'The Green World' ('Zeleny mir' in Russian) in February 1995. Comments and critical remarks were received and taken into account in the second draft that was later discussed at the first Russian Congress on Environmental Protection held in early June 1995. The Congress recommended that the work on the SD concept continue. A new, more expanded, drafting group was set up for the purpose. The final draft was ready in November 1996 and was submitted by the Ministry of economy to the Russian Government that considered it at its cabinet meeting in late January. That session was chaired by the then Prime Minister V. Chernomyrdin. The text was approved, with some recommended changes. The Government secretariat took over and finished the work.

On April 1, 1996, President B.Yeltsin issued a decree # 440 "On the Concept of Russia's Transition to Sustainable Development" by which the text of the Concept was adopted (it was attached) and two major directions of further activities were charted: the major provisions of the Concept should be taken into account in all new legislative acts as well as economic and social development decisions, and a strategy for Russia's transition to sustainable development be prepared in 1996. The Concept was based on a triad of ecology, economy and society. The goals of ecological integrity, in particular, respecting ecosystems' carrying capacity, eco-efficiency and eco-equity were spelled out. Broad criteria for achieving major objectives were indicated. Special chapters were devoted to regional SD issues and their international dimension.

Russia charted a two-stage approach in response to UNCED. First, to work out a concept of transition to SD and, second, to design a national SD strategy. A two-tier organizational arrangement was set up, similar to that used for the preparation of the SD concept, namely, an inter-ministerial committee with the participation of scientists and NGOs and a select drafting group of experts. For the preparation of the SD concept, the Ministry of Economy was put in charge (its vice-minister was chairman of the inter-ministerial committee), with the Environment Ministry (a deputy chairman) and other ministries involved. For the design of a draft SD strategy, the Ministry of Economy was placed as the first responsible ministry to be assisted by two others—the Environment Ministry and the Ministry of Science and Technology Policy.

4. Approaches to sustainable development

This drive towards exploring sustainable development prospects for Russia began against the background of similar activity in other countries (OECD, 1993) and efforts to design a national environmental protection action plan.

The **four "E" challenges**—ecological integrity, economic prosperity, equity and human health, and environmental security—have come to the foreground of people-centered

development, to make it sustainable.

The design of an SD concept raised several issues. The **first** is **appropriateness of SD for Russia while in deep economic crisis**. It is sometimes argued that people can afford to deal with the quality of the environment as their living standards and wages are raised, and as food, clothing, and housing needs are met, i.e. when an accumulation of capital is achieved with some savings to be directed to the environmental field. If the present life looks relatively secure, people can think about the future. To support this view, the debatable environmental Kuznets Curve, alleging an inverted U-shape dependence between pollution emissions and GDP per capita, was suggested in the 1990s (Stern, 2003). GDP per capita in Russia was US \$2540 in 2004, with government projections to raise it to \$3900 in 2007, while the UN human development index is expected to increase from 81 in 2003 to 85.5 in 2007. It is expected that the economic growth will result in more air and water pollution emissions and toxic waste up to 2005.

This is why ecological problems are not usually priority issues for the poor. The conclusion is made that the correlation between rising incomes and concern over the environment is valid not only for social groups but also for different countries. Japan is viewed as an example of a country that turned into a world economic power between 1973 and 1984 and, at that time, took measures to address its environmental issues. A different situation is cited in developing countries struggling with poverty and famine and, therefore, less time and effort to devote to combating environmental problems.

On the other hand, the use of energy and materials and, therefore, pollution intensity are higher in developing countries and countries in transition, such as Russia. They are precursors of an environmental crisis. It is often pointed out that the International Monetary Fund rushed south with programs to stabilize the monetary situation, but nobody spoke of stabilizing the natural resource base there. Yet, throughout the 1980s, the depreciation of natural resource assets, as an annual percentage of GDP, dwarfed the balance-of-payment deficit. The difference was that the balance-of-payment deficit was duly recorded, transparent, and scrutinized. The documentation of domestic natural resource assets went unrecorded, unnoticed, and uncorrected .

In the early 1990s, Russia seemed to qualify for both these factors, with environmental concerns rated after economic hardship, crime, and corruption in government (then came the Chechen war to further aggravate the situation). On the one hand, there was a heavy pressure from the IMF and other financial donors to check inflation and reduce the federal government budget deficit. The recent trend towards growing openness, internationalization and globalization of national economies, in which environmental concerns play a conspicuous role, as well as burgeoning international environmental conventions with liability clauses, have become exogenous factors that spur integration of environmental, economic, and social policies.

By 1998, Russia's GDP had fallen by about 60% from the level of 1989. Industrial output decreased by about 70% over the same period, while air pollution came down by about 40% (with pollution from mobile sources diminishing at a slower rate). The fall in water pollution was much slower—less than 20%. A similar situation is true in regard to waste generation. The same trend was generally observed in other CIS countries—a

dramatic growth in pollution intensity per unit of GDP in the 1990s. This means that any economic revival without technological change would immediately lead to a sharp increase in pollution unless the economy is drastically restructured with a sizable inflow of investments. In 1995, the Russian Ministry of Environment was responsible for more than 20 federal level programs dealing, in particular, with radioactive waste management for 1996 to 2000, support for nature protected areas, dioxin control, waste management, Lake Baikal and some other regional problems, etc. Many programs were heavily under-financed from the federal state budget.

The **second** issue deals with **inefficient societal** (control-and-command/closed vs. market/open/ democratic) **management** to address industry-related environmental problems. It may seem paradoxical that both market and centrally planned economies, during the era of industrial development gave rise to massive environmental degradation. One can attribute this phenomenon to the fact that they both pursued development and competition with each other based on a similar economic (industrial) growth and military security paradigm. That was an extensive, nature-ravaging kind of development. Natural assimilating capacity and resources (environmental services and goods) were considered mainly free and practically inexhaustible, with the capability of technological "progress" to solve any emerging problems being unlimited.

Market economies generated environmental losses due to "market failures" that appeared in the form of widespread pollution externalities, widespread abuse of commons and negative intergenerational transfers. Technological change has largely been driven by profit motives of private companies, with environmental effects seen as externalities and their burden being shouldered by the human community at large, including what was recently called 'ecological footprints'. Government stepped in to address externalities and other problems with regulatory and, more recently, market-based mechanisms. The international community became involved to deal with international and global environmental issues outside the capacity of individual governments, and to co-ordinate as well as harmonize their efforts.

In addition to the economic growth paradigm, which was similar to that of western societies, USSR and its allies had an additional ideological goal, namely "to catch up with and overtake the West" as well as to become self-reliant. Much hope was placed on the achievement of military superiority. All that was done "at whatever cost", social and environmental, using central-planning control-and-command management. Many economic and environmental setbacks were kept hidden (such as Chelyabinsk, Siberia, in 1957 and Chernobyl, Ukraine, in 1986) and are even now often shrouded in puzzled official statistics. Although many advanced environmentally sound solutions were even encouraged at the top, they were often bogged down in ministerial "red tape" since they distracted from or delayed the attainment of economic targets. This was why international decisions and resolutions in the environment areas adopted with USSR's participation did not practically contribute to the improvement of the environmental situation in the country. Russia's share of world high tech trade was 0.3 to 0.5% in 2003 (compared with 36% for the USA, 30% for Japan, 17% for Germany, and 6% for China) Many environmental principles became useless under the overwhelming domination of state property, e.g. both a factory and a neighboring state farm polluted by that factory were government-owned in the USSR and other Eastern European countries. There

were practically no externalities. Government had no economic instruments with which to act and change technology. By imposing a fine on the factory it, in fact, took its own money from one pocket (or a budget line) and put it into another within the same total amount. However, even this action was not popular. In the absence of competitive factories, the fine could affect the factory's production targets set by the same government and thus disrupt links in the whole industrial branch. The latest democratic and market-oriented changes in the former USSR and Eastern Europe have led to a search for new economic tools to complement regulatory measures and design new approaches to integrated economic and environmental development in Russia. However, this process has brought little results as yet. According to the government's figures, 21% of the Russian population lived below the poverty line in 2004, while the ratio of the rich and the poor was about 18 to 20 times at the 10% level. About one third of the government-employed sector were paid at a level below the living wage, which about US \$1000 per employed person in 2004.

The official net capital outflow from Russia was assessed at US \$9.1 bln.

The **third** issue is the state of current, obviously **unsustainable, economic development** in Russia that is heavily dependent on exports of its natural resources. The share of processing industries in Russian exports, including military products, was about 10% in 2004. About 35% of GDP is due to mining industries operating for export. Falling industrial output and under-utilized production capacities from 1989 to the early 2000s led to decreasing overall environmental pollution and concern. However, pollution intensity, i.e. pollution per unit of industrial output has risen; the industrial and technological crisis has resulted in a sharp upsurge of industrial accidents with acute environmental and human health problems; the legacy of past severe pollution has spread over a huge territory affecting millions of people. A drive for hard currency, often coupled with lax government control, has brought hazardous, toxic and even radioactive waste to Russia from abroad for disposal or processing. Russia's copious non-renewable natural resources are being depleted for exports, to earn hard currency. Nature reserves stripped of government budget subsidies are also in deep crisis. All this has affected pharmaceutical and agricultural seed stock industries, while oil and gas mining, forest logging activities, and pipeline laying and operation in Siberia have seriously affected biodiversity.

These and other factors urge an integration of environmental, economic and social (IS) policies. Among those "other" factors there are, in particular, Russia's international commitments, such as those relating to the Rio Conference's final documents and calling for a transition to sustainable development. The Russian government's major objective is to lessen dependence on exports of natural resources and to boost domestic markets in the years to come.

The **fourth** issue deals with **economy-environment-society integration**. In the circumstances, it is considered that urgent measures should be taken to alleviate the pressure, both overall and per unit of consumption, of the economy on the environment. Energy efficiency is being handled through raising fuel and electricity prices. Dematerialization issues are addressed, in particular, through waste control, and product eco-certification. All this calls for structural economy-wide changes to establish new

resource-efficient industries, close down resource-intensive and resource-dependent enterprises, implement the environmentally sound retooling of obsolete enterprises, add environmental controls, and make environmentally safe products.

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Biographical Sketch

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