

Russian Federation

Legal Protection of Soils

by Irina Krasnova*

The state of soil

Being the largest country in the world as to its territory, Russia has not managed to escape the problem of land loss in the face of challenges connected with modern social development. One such problem relates to the loss of the fertile layer of the land surface known as soil. The causes of these negative processes seem to be widely known and similar in many countries. However, in the case of Russia, some of them are directly related to the modern economic reforms now taking place. One of the most serious soil degradation problems results from urbanisation, the uncontrolled sprawl of settlements and competition for already developed land areas, many of which have the best productive and economically viable soils situated in geographically favourable regions, and which are biodiversity rich and best suited for agricultural production, forests or plantlife rather than for construction purposes. In Russia, over 60 per cent of the total population is concentrated in the central European and south-western part, which only makes up one fifth of the whole territory of the country with the best productive soils. Some 90 per cent are urban residents. The same area is responsible for over 50 per cent of industrial production (official data from *Rossiyskaya Gazeta*, 10.06.2000). In addition to the physical loss of soils due to urbanisation and industrial development, the general degradation of soils is connected with pollution from industrial enterprises, waste disposal, open space deficit and other negative consequences of urban lifestyles. One can hardly talk about biodiversity or landscape diversity in these areas.

Agricultural regions¹ face another type of serious environmentally-related soil problem, including erosion, salinisation, desertification and pollution by pesticides and agrochemicals, and to a large extent are conditioned by the application of inappropriate methods and technologies of agricultural production. These processes have been aggravated in recent times in Russia due to the loss of governmental control over land use, a dramatic cut in governmental subsidies for land improvement measures, and unbalanced market and pricing policies when expenses for maintaining environmentally sound land use practices cannot be covered by profits obtained from trading in agricultural products. However, there is another side to the coin. Due to a fall in agricultural production, large areas of agricultural land have been abandoned or remain unused, where the slow processes of natural reforestation have begun. In soil protection terms, this seems to be beneficial; however, it puts additional responsibility on farm-

ers, state and other land users to ensure the productive, efficient use of agricultural land to meet the demands of the population combined with sufficient environmental protection of land involved in agricultural production.

The state of soil covered by forests can be estimated as quite good.² Most forested areas are situated in remote regions of the North, Siberia and the far East of Russia, not very susceptible to pollution, erosion or other forms of degradation. However, this is not the case with areas of intensive commercial logging. Violation of the logging companies' obligation to reforest the sites after work has been done causes soil exhaustion and erosion.

Economic reforms in the Russian Federation are also associated with another problem connected with soil degradation. A fall in production, aged industrial equipment and low labour discipline has been the cause for a growing number of industrial accidents, which have had serious environmental consequences. The most frequent are accidents at industrial installations and accidents with leakages in pipelines. As a rule, soil pollution caused by oil leakages renders soil unfit for further use and requires expensive and long-term measures for its rehabilitation.

Legal measures for soil protection

Soil degradation arouses concern in Russia and various legal, institutional, technical and economic measures have been taken to maintain soil in an appropriate state. Soil protection is regulated within environmental and land use laws and covers several areas.

However, there is no legal definition of soil in the Russian legislation. Soil is routinely understood as being a fertile layer indivisible from the land surface. In most instances, the terms "soil" and "land" are used as synonyms in law.

Soil is protected against various negative impacts connected with economic activities. Measures for soil protection differentiate depending on the designation of land. According to the Land Code of the Russian Federation, land is classified into seven categories depending on the official principal use of the land. Categories include agricultural land, urban land areas, land used in industry, for road construction, mineral extraction and other purposes, specially protected land areas, forested land, land containing bodies of water and reserved land. Within each land category, soil has different social values and plays different roles. It is also subjected to different negative impacts, and susceptible to different forms of degradation.

Land lots are relegated to this or that category upon the results of state registration and are divided from each other by frontier signs. As a general rule, land within each

* Doctor of juridical science, professor of environmental and land use law of the Russian Academy of State Administration, Moscow.

category may be used only for the purposes established by law. Land lots may be transferred from one category to another only by a special decision, in some instances, made by the Government of the Russian Federation, and in others a decision made by the governments of the member countries of the RF. It is forbidden for landowners or land-users to change the designation of land. The designation of land lots, permitted uses, landowners or land-users are registered in the state land registry. The recently established agency the Federal Service of the Land Registry is responsible for keeping the register of assessment.³ Procedures connected with the registration of land lots and keeping the land register of assessment are determined in the Law on Land Registry of the Russian Federation (2000).

Most intricate protection is accorded to the soil of agricultural land. Soil in agricultural production is viewed predominantly as an economic resource, and soil protection measures are aimed at preventing the loss of agricultural land and at raising its fertility and productivity. Although these are also provided to protect soils against pollution and other forms of degradation caused by agricultural production, such measures are aimed at preserving the quality of soil fit for growing agricultural plants rather than at protecting other soil designations.

The above objectives are attained through establishing various legal mechanisms. For the purpose of preventing the loss of agricultural land, it is forbidden to use agricultural land for purposes other than agricultural production. Agricultural land may be taken from agricultural land-users only in exceptional cases and may be granted to other users for purposes connected with: a) the implementation of the Russian Federation's international obligations; b) development of deposits of valuable minerals; and c) construction of cultural and historic objects, roads, pipelines and electric lines – should there be no other alternative for the placing of such objects. The Land Code of the Russian Federation establishes a land-taking procedure that includes conducting of an environmental impact assessment (EIA), an ecological survey of the projected activities, reaching agreements with local administrations, interested land-users, etc. It is not allowed to take primary arable lands and use them for purposes other than the growing of agricultural plants.

Agricultural land-users are obliged to raise the fertility and productivity of soils and to prevent their pollution, as well as the pollution of other natural objects while engaged in agricultural works. For this purpose, land-users may apply necessary chemicals only in conformity with legal requirements. Under the Law on Safe Handling of Pesticides and Fertilisers (1997), provision is made for the state registration and certification of pesticides and fertilisers, their appropriate marking, for the producers of such fertilisers to be obliged to adhere to established technical standards, and for traders to be obliged to provide customers with recommendations on their use. Only those pesticides and fertilisers that are proved to be safe for human health and the environment will be registered and thus permitted for use. The Law does not mention possible impacts on soil, meaning that any negative impact on all components of the environment shall be taken into

consideration. There are no criteria for determining the safety of pesticides or fertilisers for the environment, which gives a high level of discretion to respective state decision-makers.

The Law on Land Improvement (1996) establishes legal requirements for irrigation and drainage of agricultural lands, forest-planting against erosion and other forms of degradation, cleaning of agricultural lands from bushes and trees, and improvement of soil through the application of chemicals. The Law envisages that land improvement should be a function of respective state agencies, which shall be obliged to develop plans and projects of land improvement, and construct and operate land improvement systems. So-called improved lands assume a special status. They cannot be taken from agricultural users and designated for other economic purposes, and they may be granted to interested persons in ownership or use on the condition that they assume an obligation to operate and maintain the land improvement systems in accordance with technical rules.

The Law On State Regulation of Ensuring the Fertility of Agricultural Lands (1998) provides for an obligation of



Problems with the Sustainable Use of Soils also effect other areas of the globe.

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land-users to grow agricultural plants in ways that may not cause loss of soil fertility, to observe requirements for land improvement measures, and for notification of the respective state agencies about the use of pesticides and fertilisers. The State is mandated to support and regulate activities aimed at raising the fertility of soils through the licensing of agrochemical activities, encouragement of scientific research, financing of activities aimed at raising the fertility of soils of agricultural land, monitoring fertility of soils, standard-setting and state supervision.

Several federal state programmes supplement the laws and governmental regulations designed to ensure the im-

plementation of legislative requirements. For instance, the State programme "On Raising the Fertility of Soils in Russia" determines concrete activities, funds and responsible organisations.

Land designated for the location of cities or other human settlements or for industrial entities, for road construction or mineral extraction, have different values, as they are predominantly used as a territorial basis. Protection of soil fertility has no significance and is not required. Here, protection against pollution by solid wastes, chemicals and radioactive substances takes priority. In conformity with the Law on Environmental Protection solid wastes may be disposed of in places specifically selected for that purpose. It is prohibited to place toxic wastes on lands close to cities and other human settlements, and in specially protected areas. Storage of radioactive wastes should be effected in accordance with technical standards ensuring their safety for human health and the environment. The Law on Industrial and Communal Wastes (1998) gives details of procedures for handling solid wastes. In particular, it provides that waste sites may be located only upon a state permit. The appropriate land areas are selected on the basis of scientific studies and after a positive assessment of the ecological situation. Owners or operators of waste sites are obliged to monitor the state of natural objects, including soil, in order to prevent their pollution. The Law also takes protecting soil against pollution into consideration on Air Protection. To avoid pollution of the environment, including soil, all sources of pollution are allowed to emit pollutants only within established limits and upon the granting of a state permit.

In mineral extraction, land-users are obliged to remove and keep all soil, and to rehabilitate land by relaying the soil after the work has been completed.

The ecological value of soil prevails for land designated to be specially protected areas, forested lands or land containing water objects. The main objective of the legal regulation of soil protection is to ensure the preservation of soil in its natural state. This is achieved through restrictions on its uses. The most stringent regime of environmental protection and use is established for specially protected areas. According to the Law on Specially Protected Areas (1995), activities that may cause the degradation of protected natural objects or ecosystems are prohibited. Activities such as agriculture, farming, mineral extraction, waste storage and industrial production are prohibited in certain types of specially protected areas.

The forest legislation is based on a comprehensive approach to forests as ecosystems and is aimed at ensuring the sustainable use of forests in accordance with the principles of raising the resource potential of forests, the protection of biological diversity of forest ecosystems and meeting the demands of society in forest resources. According to the Forest Code of the Russian Federation (1997), forest users are entitled to use forests freely unless it causes degradation of forests and forested land. The responsible state agencies may suspend or restrict forest uses if this is necessary for the protection of forests or forested land, as well as for biodiversity protection and environmental protection. State permits determine the al-

lowed methods of logging depending on the category of forests and their principal designation. There are three categories of forests, with the first category having the highest ecological value and thus the most stringent logging restrictions. Provision is made that when logging, the ecological functions of forests should not be impaired.

The state of land adjacent to water bodies is viewed as an important factor for water protection against pollution. In accordance with the Water Code of the Russian Federation, land uses that may cause the degradation of water bodies are prohibited. In particular, provision is made that water drainage areas shall be subject to protection against pollution and littering. Chemical substances may be applied only in cases where they do not have a negative impact on the state of water bodies. Provision is also made for the establishment of water protection zones with a restricted regime of land use along the water bodies. Within such zones it is not permitted to plough lands, to cut timber or to site cattle farms. Land use may be carried out in the established procedure, but only upon agreement of the water protection agency.

In response to soil pollution problems, the recently adopted legislation provides for the conservation of degraded land.⁴ It means that if the land is recognised as degraded in the established procedure, it is subject to soil rehabilitation measures. These measures can be taken either by the landowner or by the State, who should be compensated by those who caused the damage. During the rehabilitation period, such land will not be used.

The land use, civil and financial legislation provides for necessary funding mechanisms. In particular, the Law on Land Use Tax establishes that all land users are obliged to pay regular land taxes and such payments shall be concentrated on a budget to be spent only on land protection and land improvement measures. The recently established Agency of Land Registration and Assessment and the Ministry of Property Relations share responsibilities for implementation of land use and land protection legislation.

Efficiency of the legislative soil protection measures

The state of legislative regulation of soil protection seems to be satisfactory in Russia. One can hardly find an area, at least among Russian experts, which is not covered by legal regulations. Generally, the approaches and legal mechanisms of soil protection seem to be advanced. At the same time, the gap between the level of legislative regulation and the actual state of soil remains wide. According to the data, all the soil degradation processes in Russia are growing. Poor implementation and enforcement of laws may be stated to be one of the principal causes of this phenomenon. In its turn, poor implementation of law is conditioned to a great extent by underfunding and general mismanagement of soil protection activities. For instance, only 5 per cent of the funds required under the federal programme "On Raising the Fertility of the Soil in Russia" were financed from the budget. The land use taxes are so low that they barely cover the primary needs connected with land management, and are mostly channeled to bureaucratic expenses. The rules on economic incentives,

which provide a release from land use taxes for farmers and other land-users who invest in land improvement, do not work because of high inflation and other economic barriers that make soil improvements unprofitable.

There are also doubts about the feasibility of some legal approaches. For example, the strict rule about the removal and storage of the soil's fertile layer in cases of mineral extractions seems to be economically and environmentally questionable in many instances. If it is favourable for highly productive soils, it appears to be unfavourable for others. In cases of mineral extractions in regions where the land is not appropriate for agricultural uses, soil rehabilitation, which is relatively expensive, is not necessary and of little practical use. It has been proved that land rehabilitation makes the industrial process and the end product more expensive, while rehabilitated land is never quite the same again.

The civil mechanism of compensation for losses in cases of land takings in most cases does not encourage soil protection, despite the legal declaration. When agricultural or forested land is taken for industrial purposes with compensation, the money the land-users receive is rarely spent on development and improvement of new land areas. If land is taken from such land-users, they often abandon the land and move to cities, switching to other businesses. The land taken is used as a territorial basis for the location of roads, settlements and industries, and consequently the value of soil is lessened or even lost. However, there is no clear answer as to whether one should preserve all available soil as it is, in all cases.

Governmental regulations that are vital for the implementation of legislative requirements are often lacking, thus leaving many legal provisions inefficient and unworkable.

In addition, since the beginning of privatisation, some 60 per cent of agricultural land has been privatised, and the State has released itself from the responsibility of taking care of such land. All the above legal land improvement measures are expensive and cannot be carried out by farmers alone.

In environmental terms, laws frequently demonstrate economic rather than environmental concerns about the state of soil, especially those used for agriculture. It is

interesting to note that the non-use of agricultural land that leads to the spread of bushes and trees is recognised as land degradation, qualifying as misconduct and being subject to punishment. However environmentally speaking in terms of, for example, wildlife and habitat protection, such processes seem to be favourable.

Prospects for the development of soil protection legislation

The legislation regulating soil protection is tending towards consolidation. A draft law on soil protection is now under consideration in the State Duma of the Russian Federation. However, it is currently being criticised by the government for repeating many of the rules already established in current legislation and for lacking well-grounded financial accounting of the implementation of certain soil protection measures, such as the creation of a soil database, monitoring the state of soil, development and dissemination of knowledge in the field of soil protection.

The State Duma of the Russian Federation is also going to consider another draft of the Land Code, which is supposed to provide for soil protection. In this way, the legislators face a serious challenge – to establish a well-balanced set of legal mechanisms that can overcome the current legal problems and ensure the efficient protection of soil. To what extent the legislators are ready to solve this task is not clear. Improvement in the current situation will also depend much on the political will of the government, the economic conditions, and the availability of the financial resources necessary for the implementation of legislative requirements.



Notes

¹ Land designated for agricultural purposes totals some 39 per cent with arable land making up 12 per cent of this (*State of the Environment in the Russian Federation, 1998*).

² Forested areas make up some 49 per cent of the Russian Federation (*State of the Environment in the Russian Federation, 1998*).

³ The Federal Service of the Land Register was established on 13 May 2000 according to the Presidential Decree "On the Federal System of the Executive Power".

⁴ Regulations on the Procedures for the Conservation of Degraded Agricultural Lands and Lands Polluted by Toxic Industrial Wastes and Radioactive Substances. Approved by Governmental Decree on 5 August 1992.