Russia case study

Developing a farm land redistribution model in Russia

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Land management systems throughout the world reflect these nations historical and cultural development. The transformation process that has started to develop in the countries of Central and Eastern Europe in the late 1980s and early 1990s found Russian land tenure in a situation where all land was held in public property with no opportunity for individuals or legal entities to be private owners of land. Soviet agriculture was stagnant and the discussion that was developing among Soviet economists concentrated around the way of how to improve countries agriculture economic performance through restructuring of collective and state farms.

Being main producers of farm commodities these farms also played an important social role in the lives of rural population. They were not only often providing income for this population group but also most of rural infrastructure such as schools, public transport, utilities and etc. That further complicated the restructuring process although rather soon in these discussions it was realized that transformation of land to private ownership may be the main factor contributing to the growth of farm production.

Soviet tenure was tailored to fit the environment of a centrally planed economy. The then existing land information system was designed to support that decision-making process. Agricultural fields were measured in great detail with respect to area size and soil quality. Rural surveyors educated in agricultural universities throughout the country possessed strong professional knowledge in the production of relevant thematic maps.

The policy towards agricultural land was to treat it as a most valuable resource and the country invested great efforts in the creation and maintenance of agricultural land use farm plans and highly detailed soil maps. Every large farm had a developed land use plan that was updated with regular intervals.

Soil quality was classified on the basis of the boll hectare system[1] which documents the yield capacity for actual agricultural fields and soil maps were updated with 10 – 15 year intervals. The then existing land cadastre system did not have legal information that would describe land use boundaries of large farms as property boundaries but that was not the purpose at the time.

In the beginning of the 1990s that system disappeared. New land policy objectives concentrated around the introduction of private ownership. Agricultural land was the

[1] A boll hectare is the proportional value of one hectare of land compared to the best farmland in Russia. The best farmland is defined as 100 boll-hectare for one geometric hectare. The qualitative registration is detailed for all former collective farms.

first to become subject to privatization as rural reform in Russia was associated with land reform.

By 1998 some 129 million hectares of land or 7,6% of the country's total area had been transferred into what was declared to be ownership of individuals and legal entities. This figure remains stable. In 2003 about 97,2% of privatized land was agricultural. About 87,7% of privatized land in the country is attributed to land shares that belong to some 12 million people. Thus any actions directed at transforming agricultural into a real economic resource may have a significant social and economic impact and they need to be taken delicately.

The Law on Turnover of Agricultural Land has opened up the opportunity for development of agricultural land market in Russia. It comprises regulations that provide general guidelines for the development of an agricultural land market. While the principal legal framework is in place, the full-scale implementation of agricultural turnover practices need to be further developed to facilitate the implementation of that law.

The model of agricultural land redistribution was designed in a bilateral Russian-Danish pilot project in two former collective farms in Pskov Region in the North-West of Russia.

Basic goals of the project concentrated around finding a solution to the problem of redistribution of land shares through a set of procedures that combines active involvement of the holders of land shares, support of local and central authorities, use of advanced GIS technologies and Danish land consolidation experience. Given the size of the land share issue in Russia and limited availability of resources to address it the project targeted towards a development of a cost efficient land redistribution solution.

Under existing legislation all holders of shares need to be involved in the land redistribution process. Thus shareholder consultations are somewhat the same when preparing for one case as compared with preparing for all shareholders at the same time. An individual owner of a land share may initiate an allotment procedure but all surveying and registration costs will need to be covered by the individual in question. This makes the location of individual plots difficult and cost consuming.

Procedures initiated by individuals are more likely to occur in the agriculturally attractive South-Western region of Russia where large processing companies are demonstrating interest in buying agricultural land. In the North-West the situation is different. There is little interest in investments in agricultural sector and the demand for agricultural land is still very small.

Low income levels of the rural population create the problem of financing individual allotments of land shares. The solution to the problem lies with the introduction of a consolidated project approach where the structure of all parcels that can be attributed to the land shares is prepared in a single land redistribution project. A consolidated plan enables other land use interests to be integrated properly. This may include forest, irrigation and environmental protection – but also access road planning can be incorporated.

It was established that the land redistribution process needs to take into consideration that not all shareholders want to single out into individual plots. This can be the case for elderly people that have little interest in starting own farming – or it can be shareholders who have left the farm and live elsewhere or simply the people who do not want to become individual farmers. As a consequence, the strategic approach is to separate the farmland into three segments:

- A territory (called first priority land) designated for locating of individual farms. Typically, you may reserve more land than immediately needed, so that shareholders after the plan has been approved can easily get an individual plot.
- A territory for continued collective farming. If the shareholders do not own or participate in the farming company, a lease agreement has to be established for the territory.
- A territory of unclaimed land is an area proportional to the land belonging to shareholders who have not been reiterated in the first instance or who cannot be identified at present.

The project in Pskov was designed to establish a land redistribution plan for the total area of former collective farms and to involve as many interested parties as possible into the decision making process. The information meeting for shareholders is the first step to initiate the redistribution of land. It has to be prepared with the initiators of the redistribution project having a leading role in presenting ideas to the wider group of shareholders while the officials from the land committee and the municipal administration will explain the formal procedures.

Special efforts were placed on informing shareholders of their rights and opportunities – to ensure that they can identify themselves in the process based on the three options that can be proposed: remain as shareholder to collectively owned farmland, branch out land for individual plot or use the opportunity to sell the share.

The land redistribution process requires involvement of all owners of land shares in the process. Thus a list of holders of land shares is needed to start the process. That process is complicated by a set of uncertainties that need to be addressed by a land redistribution project.

It is often the case that no maintenance or updating of these lists were ever done after land share certificates were issued in the mid 1990s. There are also problems of unclaimed shares or unissued land share certificates. Eventually, uncertainties in forming and verifying shareholder lists can be resolved by civil court verdicts. Such a verdict is a cumbersome process. Therefore, more practical approaches were designed by the project involving active interaction of local authorities and the participants of the project.

The redistribution process will often trigger a process of transactions with shares. The Law on Turnover of Agricultural Land stipulates that all other shareholders are to be consulted and thereafter the local authorities before selling can take place. As the process of notification and hearing takes some months, the exchange of shares is initiated at the very early stage of the project. The transactions should preferably be

closed before the redistribution plan is finalised so that the optimal location of the shares owned by one shareholder can be taken into account.

The list of shareholders who wish to branch out also need to be established and taken into account. One or several territories for location of individual parcels need to be identified. Preferably, more land needs to be allocated than immediately required.

The Law on Turnover of Agricultural Land stipulates that compensation needs to be paid out by owners of land shares that have larger market value to owners of land shares with smaller market values. Under existing legislation that involves the services of private property assessors.

For the rural population these are usually hard to afford. The project suggested a more practical approach. It was proposed that when shareholders approve the redistribution plan they also need to agree not to claim compensation. This can be achieved when the value of a plot is proportionate to the value stated in the shareholder certificate.

The land redistribution procedure may need more than two meetings. A conclusive meeting is however a critical step. At least 20% of shareholders make up the quorum and the target is to get a two thirds majority approve the land redistribution plan that is prepared by a surveying company in consultation with the working group and the local land committee office.

The project in Pskov Region was not the first attempt in Russia to distribute agricultural land locked in land shares. That project however was probably the first to make use of available GIS technologies to assist in development of a land redistribution plan.

An applied GIS parcel management tool has been developed as part of the toolbox for preparing redistribution projects. The aim of the software is to provide a digital solution that enables the surveyors in an easy manner to simulate the location of plots while at the same time being able to automatically to generate the deeds, parcel maps, and other legal documents.

The tool helps to establish new property boundaries restricting the field work to the minimum. Natural boundaries such as roads, shrubbery, and watercourses were accepted without further demarcation or measurements. Development of the software in combination with these new surveying procedures have also contributed to the reduction of the project costs.

The basic principle of the tool is to design plots with an area equal to the boll hectares indicated in the shareholder certificate. Boll hectares give a rather precise indication of the weighted value of land by taking the quality of agricultural land into account. Thus, in the absence of any market price of land, the boll hectares are considered the best indication of the actual value of land.

The original design of the project envisioned new aerial surveys being performed to accommodate the project needs. Being constrained by the availability of resources and realizing that this is a more likely situation that may occur in the future in similar projects it was decided to make the best use of available mapping materials. A land

surveying company was assigned by the land committee to retrieve the available cadastral, topographic, and technical maps of the two farms in question and digitise them.

Aerial surveying or satellite images are a better option but in this case they were not available. The baseline materials were the thematic situation maps of the farm at 1:10,000 scales that provided information on the general layout of the farm area, types of land use and soil quality. These hard copy maps were produced in the USSR for all collective farms and were used as a soil quality and field-planning instrument. They are usually held in the archives of local land committees or former agricultural surveying institutes.

Although the available mapping materials were not updated since the beginning of the 1990s or even earlier they proved to be still accurate enough to provide the base for the land redistribution plan. Some visual inspections were done to update situation maps.

A scanned updated situation map is used as reference for preparation of the digital map. Zones with equal boll hectare indications are recorded in digital form. Other key features are also indicated. These are natural boundaries, non-farming land such as forest and lakes – as well as access roads and passages. Designed software tool also helps to avoid common border traces as well as eliminate white and duplicating areas.

Digital situation maps with boll hectare and key features shape the cartographic basis for preparation of the draft redistribution plan. The shareholder list, with shareholders' and the "wish list" represent the other part of the input.

The draft redistribution plan is made as the best guess by the land surveying company in cooperation with the local working group. A number of practical issues are impacting the layout:

- Locate the parcels for immediate apportionment at the first priority territory.
- Use natural boundaries as property demarcations.
- The boll hectare value of the parcel should be equal to the indications on the shareholder certificate.
- Locate parcels next to each other if farmers wish to form an association.
- Ensure access roads to all parcels or parcels in associations.
- Take into account restriction zones around water courses and other environmental and technical protection zones.

Parcels are designed for all shareholders except unclaimed shares. The first draft plan will not give an indication as to who will receive what parcels. The allotment was undertaken at the decisive shareholder meeting. However, the land surveyor may prepare the allocation of parcels in consultation with the local working group.

The final redistribution plan indicates the location of all parcels corresponding to shareholder certificates. Parcels for immediate and planned apportionment are allocated in the first priority territory. Names are assigned to the parcels for

immediate apportionment. This is executed by linking the parcels of the draft redistribution plan with the shareholder list.

As a special feature the proposed owner for particular parcels can be indicated on the map. Thus it is possible at the decisive meeting or prior to this to use the software as a simulation tool where different options for the location and apportionment of share are indicated in an interactive process with shareholders and authorities.

A land redistribution project is also subject to the approval of local authorities that under law have to agree on the proposed changes.

In the result of the implementation of the project it was proved that reallocation of agricultural land can be performed with relatively low cost in a relatively short time. The procedures designed in the result of the project are propagated throughout Russia in a number of similar seed projects supported by the Federal Government.

The project has identified a series of bottlenecks in existing legislation that need to be addressed to make land redistribution process easier and provided proposals for their solutions.