Land reform is the cornerstone of the transition of the post-Soviet states and East European countries to a market economy. There are many aspects of this reform – privatization of state-owned land and real property, implementation of a land registration system, establishment of a new legal framework and of new institutions, and introduction of land taxation systems. All of these aspects are almost equally important for a successful transition to a land market. At the same time they are tightly linked with each other, forming together a general system of land management.

In order to establish an advanced land management system in any transitional economy it is very important to ensure the following:

- to set/define the right sequence of reform areas and aspects to develop;
- to avoid a piecemeal approach to the reform and to provide for a balanced development of all elements essential for a land management system;
- to elaborate concepts and design particular systems which could be relatively easily and quickly implemented and at the same time assure sustainable development.

International experience shows that there could be different approaches in different countries. Usually these approaches are derived from the existing goals and local peculiarities of particular states. Quite often the concepts of development are also highly determined by the international agencies offering cooperation and advice.

After a relatively late start due to the situation of political unrest, Georgia has been developing increasingly in the field of land reform since 1995. Taking advantage of close cooperation and financial and technical aid from the governments of Germany and the USA, as well as international agencies (World Bank, IFAD, UNDP), Georgia is carrying out reform projects in several major areas of land management, as is shown in Table 1.

**Legislative Reform**

Setting a new legal framework is one of the basic tasks of the reform. The admission of private property after more than 70 years of solely state possession of land and real estate is an attempt at establishing a new social and economic environment in land related affairs. It pushes forward the process of formation of a free land market.


The adoption of these laws has facilitated the conveyance of about 1 million hectares of agricultural land to private ownership free of charge. Privatization embraced most of the dwelling parcels too, and also some of the industrial and commercial land in both rural and urban areas.

At the same time the political decision on the privatization of land and legal support for this process did not assure the immediate emergence of private property which could be marketable. Actually a new stratum of landowners was created which lacks complete access to its property because well-defined procedures of land distribution, parcel delimitation and property registration are non-existent. Therefore, for the most part, owners could use property for their own needs, having approximate limits to property, or even deciding and setting parcel boundaries themselves, unless claims existed in cases of particular land parcels, but they could not officially transfer the title to another person.
Thus just a declaration of privatization of land did not result in the fast growth of a formal land market. Such a situation necessitated the parallel development of support mechanisms of land privatization and land market creation. In this regard the institutional enhancement and implementation of land registration systems came to be of primary importance. Adoption of the “Land Registration Law” in 1996 defined general conditions and procedural frames of the registration of land and landowners in Georgia.

Institutional reform

A significant change in the concept of land as a valuable resource resulted in the emergence of new institutions for its management. In the Soviet period land resources were almost free of charge and were considered merely as a physical basis for construction in the cities, and also for cultivation, plant-growing or similar agricultural activities in rural places. Land was rarely considered to be a scarce commodity, and therefore the most valuable and expensive resource in any market economy was practically free in the Soviet Union. Accordingly, land use largely depended on bureaucratic decisions; sometime (and very often) corruption was “playing the role” of a market mechanism.

In the above-described situation there was no special administrative unit in the former local government structure responsible for the coordination of numerous land-related activities: allocation and measuring of land lots, registration of tenants and land-users, valuation of land and calculation of land rent, control of land use, etc. Only a small part of these functions were distributed between architectural-planning departments, technical inventory bureaus, housing departments in the cities, and so-called “land arranging” (zemleustroistvo) units in rural areas. Thus information support in decision making was not perfect, and land management as a whole never had been performed with a necessary accuracy, often leading to vagueness in land use, violations and conflicts as a result.

In the new situation the functions of conducting land privatization and some other processes in land reform were passed to the newly established State Department of Land Management (SDLM) in association with its regional affiliates in administrative districts and municipalities. It doesn’t exclude participation of the Soviet period “land managers”- architectural and building departments, technical inventory bureaus and a few others- in this process. Another “conductor” of privatization - Ministry of Management of State Property- is responsible for the privatization of state-owned industrial and commercial enterprises and deals only with buildings and constructions without land.

Thus despite SDLM domination in the land management process, there is significant fragmentation and complex distribution of different tasks, duties and responsibilities between different units. Fig. 1 shows task distribution between institutions in Tbilisi, Capital City of Georgia.

It is remarkable that private sector (survey, GIS firms, etc.) starts to play an important role in land management and in the market, as well.
Cadstral reform

Emergence of the real estate market and new forms of administration resulted in an increasing demand in systems for recording and processing various land-related information. This information should mostly include data about (a) landowners, (b) the nature of their interest in land (e.g. owner’s title, type and duration of rights, restrictions, and responsibilities), and (c) land parcels (e.g. location, boundaries, size, and improvements). It could also contain some other characteristics such as land value, land use, etc. For these purposes systems of public register and land cadastre are being implemented.

Generally in most countries registration systems are designed to secure landowners rights on their property and to assure legitimacy of their rights. Thus records in the public register have mostly legal character, and their necessity dramatically increase together with the emergence of private property on land and more rapid conveyance of a property on the real estate market. On the other hand, cadastral systems provide rather detailed information about land-parcels, including its geometry, the coordinates of boundary points, precise size, and the unique identification/number of a parcel. The names of landowners are also attached to cadastral information.

It is well known that traditionally in countries with a long history of land management land registration and cadastre were developed separately for different purposes: registration as a legal approval for ownership, and cadastre for taxation needs. Nevertheless, during last few decades there is an obvious demand for the aggregation of data from these two systems into one, creating a unified multipurpose cadastre. Usually cadastral systems, especially if they are designed for multiple users (i.e. are multipurpose) serve as a basis for so called land information systems (LIS) of different levels- communal, regional, national, etc. (see Larsson 1991).

In Georgia like many other post-communist states, a significant demand emerged in security of titles, investment in and on land, during last few years. On the other hand detailed survey of all parcels, land and property owners, tenants and all other users became very important for taxation purposes. Moreover an acute need in land-related information has been expressed by architectural and planning, building, agricultural, environmental and some other institutions too.

The implementation of registration and cadastral systems are legally based on “Land Registration Law” and the forthcoming “Law on Cadastre and Land Information Systems.” The particular work to design appropriate systems and to introduce them were started in the mid-1990s. The biggest efforts are done in the capital city of Tbilisi, which is far ahead in this field, developing modern multipurpose cadastral/land information system (LIS) since 1996 together with the German Society of Technical Cooperation (GTZ). According to the concept of the project, the creation of a universal cadastral basis for the building of a modern LIS is foreseen. The system combines the elements of a “legal cadastre,” i.e. records on landowners, their rights and encroachments for title registration, and a “fiscal cadastre,” i.e. records about parcels, owners/tenants, and tax rates for taxation purposes. It also contains some other data concerned with topography, buildings and constructions, land use, etc.

The production of parcel-based cadastral information is based on an up-to-date aerial survey and photogrammetric processing of images. Large-scale cadastral maps (1:500) of high accuracy are being used in title registration, taxation, physical planning, etc. By October 1999 digital basic maps will already cover the built-up area of Tbilisi (~15,000 hectares) and about 40% of cadastral maps for systematic registration of landowners would be developed. Parallel to this process since January 1998, sporadic title registration has been in progress. Over 4,000 cases of land conveyance and property transactions have been already recorded in public register.

The above-described activities do not cover the complete range of project aims, which embrace several fields other then registration or cadastre, e.g. physical planning, zoning, valuation. Figure 2 shows the data management concept of the Tbilisi project. This concept could be noteworthy for the following reasons:

(a) It provides a universal, geodetic-adjusted basis for different users for development their own databases, on the one hand, and for sharing common information on the other. Thus it avoids duplication and big additional efforts in data management (e.g. land/title registration, taxation and planning units are using the same basic database);
(b) It allows to combine long-term and current tasks and fulfill them parallel keeping a step-by-step development approach (e.g. parallel running of sporadic and systematic registrations);
(c) It uses a modern but cost-effective technology and technical tools for data processing at present and assures its future maintenance (e.g. aerial survey and remote sensing, which provides up-to-date
data for lower costs then traditional field survey does).

It is planned to spread the experience of the capital city all over the country. The complete title registration of all landowners and a systematic cadastral will begin by the end of 1999 in the framework of a six-year nation-wide land management project.

**Tax reform**

The introduction of a new land taxation system is one of the cornerstones of land reform. Land value taxation is recognized and exercised worldwide as the restrictive power of government over private property. Moreover, it is an attractive revenue-raising tool for state and local governments. For example, in the United States, on average, property taxes account for about 75% of state and local government tax revenues (Floyd and Allen 1997: 98).

The primary goal of land taxation in Georgia, naturally, is to raise a significant amount of revenue to fill up still inadequate budgets of most local governments. But, simultaneously, the pursuit of this goal has had secondary effects. It requires the rapid collection and processing of information on parcels and landowners on the one hand and the valuation of land and property on the other. Therefore it is tightly linked with the implementation of cadastral and registration systems, and in spite of the financial burden it puts on the population, taxation could be considered as one of the major elements in the transition to market relations and to modern land management patterns.

The adoption of the “Tax Code,” in which a separate part (Tax Code of Georgia, Part VI: Land Tax) is dedicated to land taxation issues, established general conditions for determining and levying land taxes. It contains several peculiarities that differentiate it from most taxation systems exercised in other countries.

The issue of the tax base should be especially emphasized. The elements of a tax base include identification of the property that is to be taxed, and the basis on which the tax is imposed. According to the Georgian Land Tax Law, only land is the object of direct taxation, while buildings are subject to a transfer tax. As a recent international survey has shown (Youngman and Malme 1994), this is an unusual situation throughout the world, as except for a few exceptions (e.g. Australia), taxes are levied from real property, including both land and buildings.

As for the tax basis, rather rarely is it other than a property’s value, either its capital market value or its annual rental value. And this is natural, since by its character the property tax is an ad valorem tax; that is, it is levied as a percentage of value. It is a tax on the value of property as opposed to a tax on the income earned from property. Tax rates usually are determined by budgetary needs, particularly by dividing the planned amount of tax income by the tax digest, i.e. the total assessed values of all taxable properties in a jurisdiction.

In Georgia’s case the land tax base is different again from the most widespread international patterns. It is not directly derived from property value. It could be better ascribed to area-based patterns, with rates determined according to selected factors. At the same time separate and different approaches are established for determining land taxes for two main categories of land: agricultural and non-agricultural.

It should be noticed that the main reason for not using the value-based approach to land taxation is a lack of appraisal information and market data on land transactions. Therefore a sort of geographical/area-based approach is generally introduced instead.

In the case of agriculturally used land, the Land Tax Law directly defines the tax rates for all the administrative districts and major cities of Georgia (Tax Code, Division VI, Chapter 23, Paragraph 150). Two main categories of agricultural land are singled out: (1) arable land and perennials, and (2) hayfields and pastures. For both of these categories the law roughly differentiates the tax rate according to two groups of quality of land – good or poor for the first category (giving average rate for the districts too), and regular (natural) or cultivated for the second. Actually, by this the law establishes tax rate minimum and maximum limits for each above-mentioned territorial unit. At the same time district administrations are given the right to further differentiate their land according to its quality/productivity, i.e. to set several subcategories (between good and poor) of land and introduce appropriate intermediate tax rates. Application of this right is optional.

Thus the value of land is not a market value but a sort of “relative value” according to its productivity in comparison with other land. In the situation of an absence of market data, the application of “relative values” seems to be an acceptable solution. On the other hand, as relative values do not provide direct access to tax rates, it became necessary to establish the latter by politically approved subjective decisions. Taking into account the payment capacity of the population along with a few other social and economic characteristics, the Parliament directly defined rather low tax rates for agricultural land. The highest rates are established in the Tbilisi and Mameuli district, which is rich for fertile black soils. The average tax rate for arable land there is 47 Lari (by June 1999 1 US$=2 Lari) per hectare per year, and a maximum rate of 57. Meanwhile in several
mountainous districts, like Mestia, the rates are only 8-9 Lari.

It is noteworthy that district administrations and local authorities extensively participated in the decision making process.

Unlike agricultural land, non-agricultural land doesn’t receive fixed tax rates from the Land Tax Law. Instead, it sets “the basic tax rate” for all of Georgia - 0.24 Lari per square meter per year (Chapter 24, Paragraph 154). Besides, it defines that “non-agricultural land tax must be calculated by multiplication of the basic tax-rate by territorial coefficient and by parcel size… Differentiation of the territorial coefficient must be carried out according to location and zoning. Delimitation of zone boundaries and differentiation of a territorial coefficient of land rent must be done on the basis of expert social and economical valuation of territory, by reference to a physical plan or other town-planning documents of a settlement. It should be presented by an appropriate unit of the State Department of Land Management, and approved by local government authorities”(Chapter 24, Paragraph 155).

It is beyond the scope of this paper to define in details a method of calculation of land tax rates for non-agricultural land in Georgia. This issue is reflected in a separate article (see Salukvadze 1999). It should be mentioned only that the method allows the following:

(a) to arrange all urban settlements of Georgia in hierarchical order, reflecting relative worth of settlements’ land resources;

(b) to establish rules and criteria for internal division or zoning, common for all urban settlements, and determine relative position of a parcel in an intrasettlement hierarchy;

(c) to measure a parcel’s location value by (a) and (b) factors and combine them into one integrated territorial coefficient.

The application of this method made it possible to “cover” every particular site throughout the country for tax ratings. The highest tax rates were fixed in Tbilisi. In the central districts of the city the tax rates make up 0.36 Lari per square meter. Meantime in some (mostly mountainous) villages a minimal rate of 0.03 Lari per square meter is defined.

The new land taxation system can be criticized in many ways, but still the system has several merits that are essential for the initial phase of its implementation. In particular, this system is quite simple, easy for tax inspectors to calculate and to explain to taxpayers. It is very schematic and does not reflect many differences in land value, but at the same time makes a good basis for starting tax levying quickly, which is so necessary to the state. The efficacy of the system will be examined in the process of levying and collecting tax. In this respect along with the taxation system, the existence of appropriate data about taxable property and taxpayers has primary importance. For example, the estimated tax amount for Tbilisi- 14 million Lari- could be doubled in the case of having perfect data. From this point of view, the importance of rapid development of a cadastral and a land registration system should be emphasized again.

It cannot be stated for sure, but most likely the introduced land taxation system will gradually be transformed into a value-based one and will significantly increase the degree of diversity as well as land tax rates throughout the country.

Conclusions

The progress of land reform during last five years has substantially changed the general economic and social environment in Georgia. The gradual transition from a command system of land management towards a market-oriented one has resulted in the relatively fast privatization of state land/real property and the emergence of a free land market. These changes are based on new legislation and institutional arrangements and are strongly supported by the implementation of modern multipurpose information systems.

The tight cooperation and assistance of numerous foreign agencies and international organizations has played a positive role in the first stage of transition. At the same time it becomes more necessary to coordinate their efforts for creation of an appropriate model of land management for Georgia. This shouldn’t be mechanically copied from any developed country, but completely based on local conditions, traditions, peculiarities and needs. From this point of view the establishment of a Coordination Counsel with the participation of all donor organizations has great importance.

It is also obvious that in the first stages of reform the biggest efforts were made in legislative and technical fields. Meanwhile promotion of a free land market should include development of essential market services, easy and equal access to land and cheap capital, etc. Underdevelopment or a complete lack of real estate brokerage, building maintenance, land and property valuation, credit and mortgage banking, and
real estate insurance still remain as a bottleneck in the reform process. Nevertheless, the aforementioned progress makes a hopeful starting point for further development towards an efficient land and real estate market.

REFERENCES


Table 1. The Structure and General Characteristics of Land Reform in Georgia

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<tr>
<th>ECONOMIC REFORM</th>
<th>LAND REFORM</th>
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**LEGISLATIVE REFORM**
- The Law on Privatization of the Agricultural Land (1993)
- Land Registration Law (1996)
- Civil Code (1997)
- Tax Code (1997)
- The Law on Privatization of the Non-Agricultural Land (1998)
- The Law on Management of the State Land (1998)
- Building Code (in progress)

**INSTITUTIONAL REFORM**
- Ministry of Management of the State Property (Ministry of Privatization)
- State Department of Land Management

**CADAstral REFORM**
- Urban multipurpose cadastre (pilot-project in Tbilisi, since 1996): (a) systematic land registration; (b) sporadic land registration; (c) tax cadastre; (d) building and planning cadastre
- Rural cadastre (pilot-project in two districts since 1997)
  (a) systematic land registration; (b) tax cadastre

**TAX REFORM**
- The new taxation system (since 1997): taxed property-only land (no buildings); tax basis-geographic location (no property value); land categories: (a) agricultural, (b) non-agricultural; tax rates: (a) fixed for agricultural land, (b) according to zoning for non-agricultural land;
FIG. 1 THE MODEL OF TASK DISTRIBUTION AND INTERACTION OF THE INSTITUTIONS INVOLVED IN LAND MANAGEMENT
(According To The Concept Of The GtZ “Land Management” Project)
Abbreviations:

**Age** – Aerogeodetical Enterprise

**Apd** – Architectural And Planning Department

**Bti** – Bureau Of Technical Inventarization

**S D L M**
- Land Cadastre
- Registration
- Privatization
- Land Valuation
- Taxation

**Private Architect**
- Physical Planning
- Building Projects

**Private Survey**
- GIS...

**TAX Inspection**
- Collection of Land Taxes

**Ministry of Privatization**
- Privatization of Industrial and Commercial Land

**Notary Public**
- Building Inventory
- Building Valuation

**B T I**
- Building Inventarization
- Building Valuation
FIG. 2 DATA MANAGEMENT CONCEPT OF THE GTZ “LAND MANAGEMENT” PROJECT

AERIAL PHOTOGRAPHY/SURVEY → PHOTOGRAM-METRIC → FIELD CONTROL/CORRECTIONS → DEVELOPMENT OF THE DIGITAL BASE MAP (DXF FILES)

GEODESY & MAPPING (AEROGEODETERICAL ENTERPRISE)

SCANNING → PARCEL MAPS FOR TITLE

PARCEL MAPS FOR TITLE → LAND/TITLE REGISTRATION

LAND/TITLE REGISTRATION → CADASTRAL MAPPING

CADASTRAL MAPPING → PLANNING AND

PLANNING AND → COMMUNICATIONS/NETWORKS INVENTOR

COMMUNICATIONS/NETWORKS INVENTOR → BUILDING INVENTOR

BUILDING INVENTOR → CADASTRAL DATABASE

CADASTRAL DATABASE → EDB

EDB → CADASTRAL MAPPING

CADASTRAL MAPPING → CADASTRAL MAPPING

TAXATION (SDLMI & TAX INSPECTION)

REGISTRATION (SDLMI)

CADASTRE (SDLMI)

TOWN PLANNING (ARCHITECT. & PLAN. DEPT.)

PERMANENT FLOWS → TEMPORARY FLOWS