Paradigms Of Evaluation Of The Real Estate In Georgia, Such As Land And Forest

Alexander Sichinava, PhD
Dali Sekhniashvili, PhD
Medea Chikava, PhD
Nazi Chikaidze, PhD
Georgian Technical University, Georgia

Abstract

In the years following the land reform in Georgia and origination of private land property rights in the country, the formation of the land value started to be gradually regulated according to the market value prompted by the 'demand-and-supply' principle. In the authors' opinion, the due management of the agricultural development of Georgia needs significant preparatory works. In the attempt to solve the existing problems, the article gives the situation analysis and certain recommendations. One of the reasons for the degradation of the eco-systems in Georgia and of forests in particular, is the failure to assess the eco-system service of forests, as the forest value is fixed by considering the opportunity to gain the timber and other secondary forest products only, without considering the environmental protection function of the forests. In some cases, the qualitative and quantitative parameters of the forest functions are assessed by using complex mathematical calculations, what in terms of scarce information, yield wrong assumptions. In addition, the methods of economic evaluation of the natural resources are sometimes contradictory. Therefore, the authors think that the concept of the gross economic value is best to use as the methodological approach in the economic evaluation. Value of natural capital or eco-system services in Georgia is not taken into account during the decision-making process either at a state, or a private level, or during the pricing of the forest profitability inter alia. In the article, the authors give their proposals regarding the optimal ways to solve these problems.

Keywords: Ecosystem, natural resources, land, forest resources, economic evaluation

Introduction

Creating the favorable conditions for thorough, rational and efficient use of the land resources and improving land management is one of the urgent problems for any country in the world, and is particularly important for Georgia, as for the land-poor country with rapidly progressing erosive processes. In addition, as the land is necessary for human life, is the durable means of production and is indispensable, by considering the swift population growth and need to boost the production volume of the material values, the use of the land resources in the country must be more thorough, rational and efficient.

Due to the diversified functions of the land in different branches of the national economy, in practice there are a great number of the indicators of the land use efficiency. These indicators much differ from one another. The main thing to consider when solving the question of the thorough use of the land resources is the interests of all branches to ensure the efficient use of land in agriculture, as of the durable means of production and rational organization of the non-agricultural land use.

Following the above-mentioned, thorough, rational and efficient use of land resources, in conjunction with other useful actions, must create all necessary conditions for the successful development and improvement of the social-economic, material-technical, scientific-intellectual and spiritual and moral aspects of the human life.

I.

Georgia is a traditional agricultural country. Nearly half of the population lives in rural areas, where a low-input, subsistence and semi-subsistence farming is a major source of livelihood. An increasing share of agricultural land is left unused.

This land privatization process resulted in subsistence agriculture, with land owners, in excess of half a million, categorized as self-employed farmers. Agriculture became side-lined as a sector. The expected dynamic of the land privatization process was that there would be a gradual consolidation of holdings through a lease process and a functioning land market. This dynamic has not come into effect; rather there is a continuing predominance of small plot cultivation practice.

Of the total agricultural land area, 75% is still State owned, but available for sale. The Government of Georgia accomplishes the sales procedures through the public e-auctions (www. privatization.ge, www.eauction.ge). As for arable land, 55% of them are already privatized.

According to the agriculture census in 2005, there are more than 700,000 agriculture holdings in Georgia, from which more than 99% are classified as family farms. The farm sector is dominated by small private

farms, 93% with less than 2 ha of land, with an average of 2.3 ha per plot. About 82% of agriculture holdings are subsistence and 18% for semi-subsistence or commercial.[1]

The reform of agricultural land in Georgia was launched in 1992 through the mass denationalization of the agricultural land. The land reform then mostly pursued social aims. In order to avoid social unrest due to the mass impoverishment of the population and economic hardships, the government of that time was forced to distribute some land, mainly very small parcels, to almost entire population of the country.

The reform was not built upon any conceptual basis; nor did it have any long-term vision of what it could bring to the country in economic and social terms. Moreover, a low degree of legitimacy of the then-time government, a clear lack of competence, a shortage of time as well as adequate monetary and organizational resources adversely affected the consistency and quality of the reform soon after its commencement. Right from the outset, the government failed to establish precise mechanisms guaranteeing ownership rights. This, in fact, still needs improvement as of today.

At this point, it should be noted that the reform, to some extent, met requirements of all groups of population. Land was given both, to rural and urban population regardless of whether or not they had been engaged in agriculture earlier. In this sense and by considering that it was probably impossible for the land reform to be implemented consistently in the setting of objective, extremely grave problems in the 1990s, we should assume that regardless of a number of serious shortcomings, some weak prerequisites for the establishment of a class of owners were still created.

At the initial stage of the reform the state maintained its control on perennial meadows and pastures. Meanwhile, the process of leasing out land resources that remained under the state ownership was launched. Large plots of land were leased out to probably relatively affluent rural and urban residents who thus became actual holders of those lands.

Eventually, the state initially transferred some 760, 000 ha of land to the population within the framework of the reform and leased out a large part of that 460,000 ha land which remained at its ownership. Up to 1.25 ha of land was allocated to people engaged in agriculture and permanently living in rural areas, whilst up to 5 ha was given to people of the same category, but living in the high-mountainous areas. Those who were not engaged in agriculture, but lived in rural areas permanently were allocated 0.75 ha of

[1] Assessment of the Agriculture and Rural Development Sectors in the Eastern Partnership Countries. Georgia. The European Union's Neighbourhood Programme. Accomplished by the Food and Agriculture Organization (FAO) with the financing of the European Commission, 2012

land, whilst the people of the same category, but living in the high-mountainous areas were given up to 5 ha of land each. Urban residents who had or wanted to buy parcels in villages could receive up to 0.15 ha in zones adjacent to urban areas, up to 0.25 ha in the lowlands and up to 1 ha in the mountainous regions. Residents of regional centers and towns engaged in agriculture were given 0.75 ha of land each, whilst the same category of residents employed in the non-agricultural sector received up to 0.5 ha of land. [1]

In a wide sense, "land" means all natural resources and riches, being the "naturally granted riches" and used by the man. This wide category includes such resources, as arable land, forests, ore deposits and water objects. The land itself is an important natural resource.

In addition to land, the property relations relate to the soil cover, vegetation cover, non-migrated wild fauna, melioration facilities erected off land and field protective forest zones. They have no value without the land. The land, with its natural value, is charged with the fixed land tax. In view of the diversified natural properties and economic uses of land, the land farming relations can also be diversified. While some kind of relation is formed in agriculture, another is formed in industry, and still other kinds of relationship are formed in forestry, in building of settled areas, etc.

Therefore, we must consider the land assessment in two directions: on the one hand, land is a natural resource with its characteristic area, relief, fertility, waters, forests and bushes and flora and fauna. The land is assessed following its multi-purpose function constantly associated with the gaining of profit. On the other hand, land is thought in terms of the major constituent of the real property. It is assessed from the position of usability and profitability. The land is assessed on the example of a concrete land plot.

It is worth mentioning that the absence of land market, which is a direct result of the problems of the property rights protection, also of the fact that for the market to operate, transparent information is needed, has a negative impact on the prices of the land sold by the state.

Table 1: Average size of land sold by the Ministry of Economics of Georgia and average price paid per hectare of land (GEL)

Size in hectare	Sales price
Less than 1 ha	Less than 360 GEL
From 1 to 2 ha	360-720 GEL
From 2 to 3 ha	720-1080 GEL
From 3 to 4 ha	1080-1334 GEL
From 4 to 5 ha	1334-1440 GEL
More than 5 ha	More than 1440 GEL

Source: privatization.ge

The table above shows that the sales price of land plots disposed by the Ministry of Economics is not very high. An average sales price is only three times higher than the price the private owners will have to pay for the proper registration of their ownership rights. In such a case, lands are purchased by more or less informed investors having relevant financial resources. It is easy to assume that in case of small-size private owners, the cost of proper registration may even exceed the nominal (market) price of land.

The empirical studies of results of the programmed registration projects launched in the 1980s show that the registration produced significant positive results in the absolute majority of Asian, Latin American and other transitional countries. As a result of proper completion of the land registration, there will be established mechanisms for consolidating the land based on the market principles; for example, groups of specialized "consolidators" will emerge, which will work to increase the land market price by means of buying out parcels from individuals and improving them. [2]

Evaluation of the land as that of the real estate is based on the consideration that every land plot is unique with its location and content, and its supply is limited.

In the years following the land reform in Georgia and origination of private land property rights in the country, the formation of the land value started to be gradually regulated according to the market value prompted by the 'demand-and-supply' principle.

An agricultural land is assessed by considering the following parameters:

- Soil;
- Water rights;
- Climate;
- Harvesting opportunities;
- Environment control;
- Rights to use mineral resourses;
- Other important details.

A non-agricultural land is assessed by considering the following parameters:

- Prestige;
- Location;
- Size and shape;
- Opportunity to unite the plot;
- Topography;
- Rate of harvest;
- Accessibility;

- Environment;
- Utility services.

One of the major conclusions of the United National Conference "RIO+20" held in Brazil (on June 20-22, 2012) was that the modern climatic, biodiversity, fuel crises as well as recent crises, such as food and water deficit, and financial system and economy as a whole are the result of the failure to assess the natural resources and environment [3].

The ecological-economic evaluation of natural resources and forest ecosystem in particular is recognized as one of the tools to solve the social-economic and natural systems management problems and modern ecological problems.

The economic evaluation of the eco-service is of a decisive importance for improving the environmental protection and is the basis to make the right managerial decisions. It is the economic evaluations allowing fixing the damage caused by irrational use of eco-services, prove the economic efficiency of the investments in the environmental protection complex, compare the loss and profit of the rendered eco-service and calculate the values of compensation fees.

The importance of the ecological-economic evaluation of the natural resources and of forest ecosystems in particular, is evidenced by the materials of the FAO Committee on Forestry. The 20th Committee session noted that the ecological value of forests, plantations and forestry is given more importance... and it is necessary to activate the process of development of such innovative economic mechanisms and methods, such as rendering the ecological service, giving its quantitative representation and evaluating the full spectrum of commodity and services what will promote a deeper understanding of the role of forests in solving the important social-economic problems and achieving the goals and target values.

The need for the economic evaluation of natural resources was discussed in the document, such as "Biodiversity Strategy and Action Plan of Georgia". This document underlines that no economic evaluation of biodiversity has been ever accomplished in Georgia and it is necessary to develop modern monetary methods of evaluation, ensure the protection of the ecological, economic, social and cultural values of forest eco-systems and use them based on the principles of sustainability. The data of Report TEEB – 10 No. 1 underline the need for the development and improvement of the methodological approaches to the ecological-economic evaluation of the eco-systems and forest eco-systems first of all, as the reduction of the forest areas and deterioration of their quantitative indicators were considered as one of the major ecological problems of modern times. [4,5,6]

In our view, one of the reasons for the degradation of the eco-systems in Georgia and of forests in particular, is the failure to assess the eco-system

service of forests, when the forest value is fixed by considering the opportunity to gain the timber and other secondary forest products only, without considering the environmental protection function of the forests.

The following must be considered as the natural parameters of the direct forest benefit and environmental formation functions:

- Timber supply per tree (as the source of timber) to gain direct benefit;
- CO2 absorption;
- CO2 depositing ability of the forests;
- CO2 emission;
- Function of purifying atmospheric air;
- Dust-retaining ability of the forests;
- Soil-protecting function;
- Soil-retaining function over the mountain slopes;
- Water-protecting and water-regulating functions;
- Maintaining the underground river flow and mineral water output;
- Forests as fauna habitats;
- Maintaining the species and numbers of wild animals;
- Recreational function;
- Forest attractiveness for holiday-making and tourism.

The ecological-economic assessment of the natural resources and forests in particular, is one of the most complex problems of the directions of the economic science, the ecological economics. This direction, as an independent science and study discipline, was established in the 1970s under name “Nature use and environmental protection”.

As the analysis of the literary sources evidence, forest eco-systems have a number of functions, and there are a number of methodological approaches to the economic evaluation of the given natural resources. It should be noted that in some cases, the qualitative and quantitative parameters of the forest functions are assessed by using complex mathematical calculations, what in terms of scarce information, yield wrong assumptions. In addition, the methods of economic evaluation of the natural resources are sometimes contradictory.

In our opinion, the concept of the gross economic value is best to use as the methodological approach in economic evaluation. Gross economic value of the forest resources can be identified by summing up to aggregated indicators: use value and non-use value. So, the Gross Economic Value = Use Value + Non-use Value (1). Use value on its turn, is the sum of several summands: direct use value, indirect use value and delayed alternative value, i.e. Use Value = Direct Use Value + Indirect Use Value + Delayed Alternative Value (2). The economic value of these parameters is associated with a number of peculiarities.

The parameter most convenient to evaluate economically is the direct use value. The direct use value is measured based on the established prices. The existing market prices of goods and services (eco-tourist trips, hunting tours) must be considered as one of the types of value parameters.

So, the direct use value given by the forests is made up of:

- Sustainable (inexhaustible) timber production;
- Medicinal herbs;
- Non-essential products (mushroom, berries, nuts, etc.);
- Tourism;
- Sustainable hunting and fishing.

Indirect use value is more difficult to determine. This indicator is often used in a global scale or in a wide regional aspect, i.e. it tries to identify the benefit by covering as large area as possible. This includes the ecology regulation functions, including waste assimilation and pollution, global effects, etc. At present, there are studies of economic evaluation of the given functions. For example, indirect use value is made up of the following parameters:

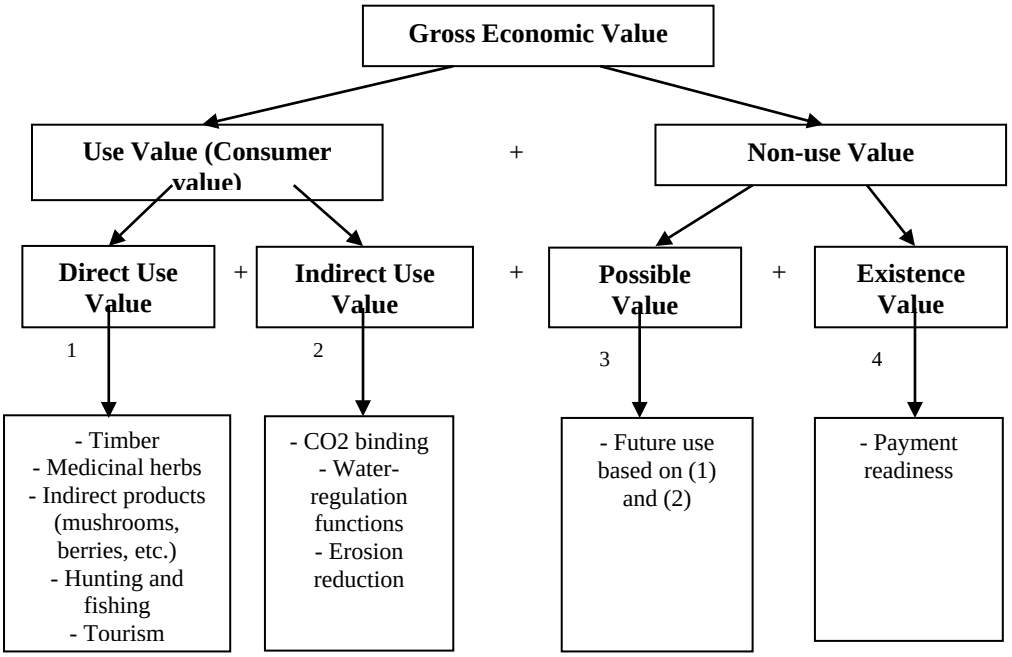
- Carbon gas binding (mitigation of the greenhouse effect);
- Water-regulation functions (anti-flood measures);
- Erosion reduction (improvement of soil productivity, reduction of water resource pollution).

It is also difficult to calculate the delayed alternative value (potential value). The delayed alternative value is associated with the conservation of biological resources and its possible future use, i.e. the medications of the future, genes in plant-growing, biotechnology, substitutes of exhaustible resources, etc. are considered. In such cases, the potential value may be the corrected sum of the direct and indirect use values. As for the unused value, it is based on so called existence value, which is the trial to economically assess quite delicate ethic and esthetic aspects: nature self-value for a human. Esthetic value of nature, the obligation to maintain the nature for the future generations, heritage value, etc., are the benefit of an individual or the society gained only through knowing that such goods and services exist.

Existence value may be an important reason for protecting the wild nature. This kind of value is assessed by means of simplified economic approaches, first of all, the associated theory of “payment readiness”.

So, the gross economic value of the forests may be defined with the following formula: Gross Economic Value = Direct Use Value + Indirect Use Value + Delayed Alternative Value + Existence Value (3). The structure of the aggregated indicators of the economic values of forests is given in Fig. 2. a program must be developed with the time schedule and budget and the

principal rights and obligations of the main actors engaged in the program realization are to be identified, (4) relevant funds and technologies allowing



the cheapest realization of the program are to be obtained, (5) the land ownership legislation is to be improved to maximally facilitate the registration procedures. The state must consider and reduce the costs of the procedures as much as possible to avoid constraints during the program implementation.

The degree of the state interference may be from minimal through proactive. For instance, where the state wishes to realize the development projects and there are high expectations of investments, the options of the land parcel buyout and consolidation may be considered for the further realization or accomplishment of different infrastructural or investment projects.

The value of natural capital or eco-system services in Georgia is not taken into account during the decision-making process either at a state, or a private level, or during the pricing of the forest profitability *inter alia*. The tax to use the timber of the major forest-forming tree species is minimal, not exceeding 5% of their market value. The tax for different uses of the forest fund lands is also very low. Similarly, the auction prices of leasing are much lower than the prices gained through evaluation of the functions of forest eco-systems. Our proposal is to at least double the tax and auction prices for using the timber and to use the gained extra funds to form the special fund to develop the forest complex.

Unfortunately, a large portion of the agricultural lands in Georgia remain unused. The present statistics, reports and field visits clearly show that a great part of the arable lands (130.000 ha) is not sown/used. Besides, it is clear that many land owners no longer live in these areas and thus, do not use the land and not allow others to use it, either. To solve this problem, we think it is necessary to target larger farmers with better opportunities to improve the productivity and harvest export, and to better substitute the harvest import.

Conclusion

Today, the tax and regulatory system provides no incentives to change the current pattern of land use and small-scale production. Property tax is payable only on land holdings (Property tax: by region, land type and quality: pasture land from 2 to 5 GEL; agriculture land from 8 to 57 GEL) greater than five hectares, whether the land is used or not. In addition, the individual land owners, classified as self-employed in agriculture, pay no income tax, nor need to account for turnovers not exceeding 100,000 GEL (around € 42,000) and value added tax on turnovers not exceeding 200,000 GEL (around € 84,000). If an individual's or group's income exceeds these limits, they need fiscal identity and are required to report to the fiscal authorities, pay taxes and undergo official control and surveillance. This situation much constrains the formation of producers' groups of one sort or another. [6]

In our opinion, in order to boost the efficiency of the state support of agriculture, it is necessary to shift from the short-term investments to the long-term ones in such fields, as irrigation and drainage systems and service infrastructure. It is also necessary to identify all land resources to help increase the areas of the economically active agricultural land. There are a number of opportunities in this respect: taking into account not fully used pastures and areas included in the forest fund; actively continuing the land privatization process owned by the state and rehabilitating the degraded land areas.

So, the qualitative transformation of agriculture in Georgia will play a decisive role in securing the economic success of the country. Objectively, the optimal solution of the land privatization and land relation issues will be a strong impulse to maintain the positive trend of the economic reforms and to secure the economic development and independence of the country.

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