

Problems of the Land Erosion and Land Reform in Georgia

Georgian nature presents a great variety of widely contrasting landscapes due to geological, geomorphologic, hydrological, climate and soil conditions and frequently alternating and ranging from subtropical forests to dry desert-steppes from the Black Sea to the east. Georgia is a country with an ancient tradition of land cultivation. In the 20th century it became an agro-industrial country. Traditionally Georgia has been a net exporter of food products and a major supplier of vegetables, fruit, tea, essential oils, citrus, wine, mineral waters, cognac, canned fruits, and vegetables to the rest of the Soviet Union. In the late 1980's, the country contributed more than 10 percent of all the inter-republic trade in food and agricultural products, and the value of the Georgian food exports to the rest of the Former Soviet Union exceeded by factor of 1.7 the value of food imports from the Soviet Republics. During recent years the supply of agricultural products from Georgia to the FSU republics and international markets has been substantially reduced. The country has lost its position on the export markets and as a result Georgia became a net importer of food products. There total land are is 7628.5 ha of all categories and in private sector 943.4 ha and in private sector 6685.0 ha. From them Agricultural lands of all categories are 3022.7 and in private and state ownership 763.0 and 2259.7 ha's. Arable lands of all coquetries 795.3 and in private and state ownership 436.6 and 358.7 ha's. Land under of fruit orchards and perennial plants (period 2001-2003) of all categories 267.9 and in private and state ownership's are approximately 1181.1 and 86.8 ha's. Growing fruit in the various regions is of significance to the country employment level. Domestic consumption of fresh fruits is approximately 48.000 tons or 36% of whole production. Besides, large quantities of table grapes, all types of fruits, even citruses and produces fruit (juice, dried fruits, jam, concentrates, sour cherry, marmalade etc) are being consumed well and are very high quality and tasty. More than 82 percent of GDP was produced by the private sector in 2002, compared to 74 percent in 2001. Official statistics indicate that 55 to 60 percent of the labor force is employed by the private sector, but the large shadow economy (40 to 70 percent of GDP by different estimates) makes this figure unreliable. 73 percent of the average household income comes from private sector activities. The 1997 Law on State Property Privatization regulates the privatization process except for land and housing privatization. Housing was largely privatized at the beginning of the decade under the appropriate Soviet law, which allowed citizens to privatize the housing that they occupied at a nominal price and with a minimum of bureaucratic procedures. After the collapse of the Soviet Union the process of rehabilitation of the Georgian agro-sector took almost 10 years. In 1999 the total volume of production in this sector increased by 8% (in comparison to 1998) and it constituted GEL 2650 million. The total are of Georgia comprises 69.7 thousand km², among which 13.0 % comes under plain areas, 33.4 % - under slopes and 53.6 % - mountains. Georgia is divided into so called "vertical zones". There are different physical, geographic and climatic conditions on this relatively small territory. We can come across almost all kinds of soil and climate existing in the world. With a long growing season and some areas of subtropical climate, citrus and a variety of deciduous fruits, vegetables and vine crops grow well along with tea, cereals, sunflower and a variety of field crops. Much of the milk from cattle and sheep is used to make cheese. With the variety of climates, almost any crop can be raised, giving Georgia one of the most diverse agricultural bases in the former Soviet Union. Due to its strategic geographical position between Europe and Central Asia, Georgia remains the

gateway for land transportation across the Caucasus, using its ports as bridges; its location on the Black Sea is one of the country's foremost natural assets. Some overland routes are problematic, but Georgia is publicly committed to building a functional trans-Georgia transportation infrastructure to its Caucasus and Central Asian neighbors. Farming in mountainous areas is mostly developed in Georgia, farming in plain areas is well developed as well. In order to get good yields of agricultural crops there is a necessity to conduct activities connected with irrigation (Eastern Georgia), draining (western Georgia) and soil protection (against erosion). Many farmers in developing countries recognize the need to use safe and sustainable farming methods, but much of the information and advice available to them, influenced by chemical companies, promotes high levels of external inputs. The inputs recommended are not only environmentally unsound but are often too costly for small-scale farmers. In this respect, farmers' movements are becoming each day more and more active, and the achievements of the agrarian sphere of the country are much depended on the level of their development. Nowadays the rural economy is the only field where there is noticed the process of the production increase and the greatest partial share in its development is belonging just to small and middle farmers and farmers' economies. Despite many laws existing today, there is still some vacuum, which must be filled at the expense of the introduction of new laws, the promotion of which must be ensured by the farmers' unions themselves by means of forming the initiative groups among farmers. The impact of processes of globalization on the national economy, WTO membership obligations, liberal trade policy from one side, and excess of subsistent small farms oriented mostly on self-sufficiency, technological gap and under-developed market infrastructure from the other side, are significant determinants not only of decrease export production but also of disappearance of local consumption from domestic market due to its non-competitiveness. Georgia has distinct zones depending on altitude, in which one may observe nearly all the world's soils and climates. Economic geographers divide the country's territory by agricultural specialization into eleven zones and two sub-zones. As a result of land reform, as of April 1, 2002, 25.2 percent of the country's total agricultural land had been privatized. Of the total area of privatized agricultural land, 54.9 percent is arable, 67.6 percent is covered by perennial crops, 29.4 percent is meadows, and 4.7 percent is pastures. The state has leased out 29.9 percent of total agricultural arable land to private farms, households and associations of farmers. Households own most livestock, poultry and beehives. The private sector's share in total agricultural production is approximately 98 percent. Regardless of this fact, the privatized plots were smashed to 4 million separate pieces, what doesn't support the global development of the field. The agricultural land is owned by 577 thousand families out of 683 thousand ones, I. e., 855 own a piece of land sized from 0.25 to 1 hectare only. The questions concerned with the registration of the land were long-drawn, too, as a result of which the land market wasn't formed and the land hadn't become the main liquid basis of the farmers' activities. Soil erosion continues to be a serious threat to our continued ability to produce adequate food. Numerous practices have been developed to keep soil in place, which include reducing or eliminating tillage, managing irrigation to reduce runoff, and keeping the soil covered with plants or mulch. Enhancement of soil quality is discussed in the next section. It is well known that Environmental physiology and organic farming is it very nature base on biodiversity and sustainable conditions of fields. Many farmers in Georgia as in developing countries recognize the need to use safe and sustainable farming methods, but much of the information and advice

available to them, influenced by Farmers companies, promotes high levels of information, consultations and advises for them. The recommendations are given by our organization and are not only environmentally, about biodiversity, ecology, field techniques and business consultations and this information are often too free of charge for small-scale farmers. It is a common misconception among the ‘uninformed’ public that organic farming is synonymous with ‘traditional’ or in other words, old-fashioned farming. This perception does the organic movement no good as it implies a farming system that is not prepared to learn. The reality could not be further from the truth. To believe that organic farmers are stuck in the past is like thinking conventional farming to go the answer to environmental pollution. Organic agriculture is defined as an environmentally and socially sensitive food supply system. It co-operate closely with practitioners in participative research and demonstration projects. As organic and environmentally agriculture is best served by research methods that take the context of the individual farm into account, the AFRD prefers ‘bottom-up’ learning. This it takes this approach knowledge through experience and for insights in resolving cases of conscience. Participative methods are integrated into the traditional research set –up of testing and controlled experimentation. The learning route of experienced researches is integrated with the solution seeking process and the choices of the pioneering farmers. Our research areas are soils and fertilization, grassland and clover management, animal health and welfare, plant cultivation and breeding, fruit cultivation. It also looks at the natural environment on farms. As the soil beneath our feet is something most of us take for granted. It is however a precisions recourse that largely governs agricultural sustainability and environmental quality, both locally and globally. From a holistic perspective, soils are fundamental for human and animal health as they control the input of nutrition’s into the food chain. Unfortunately, not all modern agricultural systems and management practices focus on the maintenance and improvement of this fundamental resource. It has been estimated that during the 1990s there was an annual degradation of 34% ha of land of Georgia. Organic farming, however, provides the opportunity to buck the trend. Several studies have shown that organic systems improve soils by increasing both the organic matter content and the biological activity for developing of fields on base of sustainable environmental physiology.