
LEGAL AND INSTITUTIONAL FRAMEWORK FOR LAND PROTECTION IN ALBANIA

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Terra Institute, Ltd., has provided technical assistance in Albania since 1994. Under both the Land Legislation and Policy Project (LLPP) and the Land Markets in Albania Project (LMAP), the Institute has archived almost 50 reports, papers, draft legislation, and commentaries on land legislation, land registration, land tenure, and other land market-related activities in Albania.

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GLOSSARY

FAO	Food and Agriculture Organization of the United Nations
FPRI	Forest and Pastures Research Institute (FPRI)? Forest Research Institute
GIS	Geographic Information System
IFDC	International Fertilizer Development Center
IPRS	Immovable Property Registration System
LIS	Land Information System
LPAP	Land Protection Action Plan
LRI	Land Research Institute (Instituti i Studimi të Tokave, IST)
MOAF	Ministry of Agriculture and Food
MOCT	Ministry of Construction and Tourism
PMU	Project Management Unit
SARA	Support for Agricultural Reorganization in Albania
WWI	Institute for Studies and Designs of Waterworks (Instituti ei Studimeve dhe Projektimeve i Veprave Ujore, ISPVU)

LEGAL AND INSTITUTIONAL FRAMEWORK FOR LAND PROTECTION IN ALBANIA*

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Dean T. Massey†

1. SCOPE OF WORK

This paper describes the growing problems of land degradation in Albania, examining causes and attempts to control soil erosion, soil and water salinization, contamination, deforestation, and landslides. The paper also provides a preliminary evaluation of the legal framework for land protection, including:

- ◆ review of contemporary Albanian laws, administrative decisions, and regulations;
- ◆ discussion of a legal framework that has been developed in the United States and European countries to encourage the sustainable use of agricultural land;
- ◆ suggestion of the formation of a draft legislation working group to prepare new laws that take into account the special environmental and land tenure conditions in Albania; and
- ◆ beginning of an outline for a Land Protection Action Plan (LPAP) in Albania.

2. TYPES OF LAND AND WATER DEGRADATION CONTROL IN ALBANIA

The types and causes of land and water degradation in Albania are no different than those in other countries, some producing more devastation on a per-unit-of-land basis, and others, less. One type of degradation may also bring erosive action to other resources in the environment. For example, excessive soil erosion may affect surface and irrigation water quality as well as drainage of reclaimed land. The overuse of agrochemicals such as fertilizers and pesticides could induce long-lasting pollutants to invade both surface and ground waters. The location and siting of municipal solid-waste disposal facilities could in all probability decrease the amount of available agricultural land; from an environmental point of view, however, such facilities may have to be located on productive agricultural land because of the need to prevent leachate from polluting groundwater. The same sort of situation may exist for rural housing on agricultural land where particular types of soil are needed for individual sewage or septic systems. Even though each type of land and water degradation can be examined individually for solutions, those solutions must be integrated into a plan for the entire environmental or ecological system.

Individual types and causes of land and water degradation in Albania include:

- ◆ excessive soil erosion,
- ◆ deforestation,
- ◆ inadequate drainage of former reclaimed land,
- ◆ landslides,
- ◆ salinization of soils,
- ◆ contamination of surface and ground waters,
- ◆ contamination of soils, and
- ◆ municipal solid-waste disposal.

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Legislation can be adopted and ministerial decisions promulgated specifically for the protection of land and water. In some instances existing laws and decisions in Albania are adequate to protect land and water from some types of degradation, while in other instances new laws must be written and adopted and new decisions issued. However, if laws are adopted they must be reasonable from an enforcement point of view and be reasonably enforced to attain their goals. Some laws can be so stringent in an attempt to attain the goal of a perfect environmental setting that they are not enforceable. All sovereign governments have the authority and responsibility under inherent police powers to protect the general welfare, health, and safety of their citizens; and the protection of the environment clearly protects this welfare. After environmental laws are adopted, administrative agencies must be established to perform the responsibilities set forth and to enforce the regulations of the laws. Funds must be appropriated to employ personnel trained in administration and enforcement. In some instances financial support may have to be provided to farmers and others to initiate the implementation of environmental protection practices, such as structures and management practices to prevent soil erosion. It may be less costly in the long run, or even in the short run, to invest a small amount now to prevent soil erosion than later to clean or dredge sediment from reservoirs and irrigation and drainage canals or to construct new ones.

Funds must be appropriated to determine the types of soil and water degradation, rates and amounts of degradation, methods of alleviation, and targets for attention. Funds are needed to provide extension services to educate farmers and others on how to identify land and water degradation problems, effects of it, and methods of correction. Technical assistance may have to be provided to farmers and others on how to initiate and implement the best management practices for correcting and preventing further land and water degradation.

Responsibility for controlling and preventing land and water degradation in Albania must be assigned to the owners and users of the land and water. Some agricultural land in former cooperative and state farms has been distributed to farmers in ownership or in use, while other portions of agricultural land remain in state ownership. The prevention of land and water degradation on those lands distributed in ownership or in use is the responsibility of the owners or users, while the preservation of all land under state ownership, including undistributed former cooperative and state farmland, forestland, pastureland, and wasteland, is the responsibility of the state. In adopting environmental protection laws the state must ensure that it does not place a higher responsibility upon individual farmers in preventing land and water degradation than it does upon itself.

2.1 EXCESSIVE SOIL EROSION

Causes of accelerated soil erosion include: (1) cultivation of highly erodible agricultural land; (2) inappropriate conversion of forest- and pasturelands to agricultural use; (3) deforestation of fragile forestland; and (4) overgrazing of forest- and pasturelands by cattle, sheep, and goats. Soil erosion causes not only the loss of productive capacity of the soil, but also the sedimentation of streams, rivers, lakes, reservoirs, and irrigation and drainage channels, for the soil particles carry plant nutrients and pesticides that pollute the surface water and at times the groundwater.

Land in Albania was divided into three categories by the Law on the Land, No. 7501, dated 19 July 1991: (1) agricultural land occupied by field crops, fruit plantations, vineyards, and olives trees, wherever they may be, in the countryside, cities, or other residential centers, and irrespective of size; (2) land occupied by forests, pastures, and meadows; and (3) nonagricultural land occupied for, *inter alia*, urban centers, governmental uses, rocky areas, coastal sandy areas, and all water areas. In 1989, there were 706,000 hectares (1,743,820 acres) of agricultural land in the country, including land for both field and tree crops. Much of the expansion of field crop production between 1950 and 1989 took place on marginal and highly erodible land. Most of the nonagricultural land is owned by the state, including approximately 500,000 hectares (1,235,000 acres) of wasteland.

Under the Law on the Land, agricultural land in cooperative farms was privatized and distributed in ownership or in use to co-op members and others. Some of the land, however, was not distributed and some of the privatized land was refused by members because of its low productivity and marginality. Article 5 of the Law on the Land limited its applicability at the time to land in cooperative farms. However, Council of Ministers' Decision No. 452, "For Restructuring State Agricultural Farms," dated 17 October 1992, extended the law's provisions to the privatization of land in state farms and its distribution in ownership or in use to former farmworkers. Workers were given ownership rights in state farmland if the land was formerly part of a cooperative farm. Some farmers have ownership rights to agricultural land, while others have only use rights. In addition, there is more land in former

cooperative farms and state farms that not only has yet to be distributed but also has been rejected because of poor quality.

Even though the Law on the Land was concerned primarily with the privatization of agricultural land, it is among the laws in Albania that have provisions relating to the prevention of land degradation and soil erosion control. These provisions pertain equally to owners and users of agricultural land. Article 11 of the Law on the Land provides that juridical and physical persons who have or will receive agricultural land in ownership or in use are obligated to use it only for agricultural purposes, to preserve and increase its productive capacity, and to systematize and build structures for its protection. Soil erosion controls could be required of both owners and users under this article since erosion decreases the land's productive capacity. In addition, owners and users could be required to construct structures to control soil erosion for the protection of the land. Although Article 11 is incomplete with regard to soil erosion control, it is at least a start and should be used and enforced until a more complete law is adopted.

Other provisions in the Law on the Land relate indirectly to soil erosion control. Any juridical or physical person who does not use the land received in ownership or use for agricultural or livestock-raising purposes within one year is deprived of those rights in the land under Article 15. Such land would revert to the state for redistribution to new owners or users. Requiring that the land be used for agricultural purposes within one year should ensure that the land is not left idle or neglected for long periods of time. As a result, presumably the best management practices are being used on the land to protect the environment, as is required under Article 11, and to preserve and increase its productive capacity.

Owners and users of agricultural land are obligated under Article 12 to protect irrigation projects, installations, and equipment and are denied the right to prohibit other owners and users from using such equipment. Article 17 provides that industrial and mineral refuse and water with chemical content harmful to agriculture must be channeled and gathered in appropriate places to protect the land and plants and to prevent water pollution, thus not endangering the life of people, animals, and birds. The specific siting of such a project and the area where it is to be built need approval before beginning its construction or functioning.

Articles 21 and 22 of the Law on the Land contain provisions for enforcing environmental protection of the land. Agencies of local government can forbid the occupation or ill usage of land within their respective jurisdictions in contradiction to the law and its prohibitions. Article 23 provides that owners who do not take protective measures may be penalized by the head of the Land Survey Office in the respective district for an administrative offense, with a fine of 2,000–5,000 Lek. An appeal can be made to the head of the district people's council, whose decision is final. Persons who damage or misuse land may be prosecuted under the Penal Law.

2.1.1 Decisions regarding conservation law

To control soil erosion and protect surface water from pollution, Albania should adopt a comprehensive Soil and Water Conservation Law. Some of the decisions regarding such a law include the following.

Land and activities applicable to the law. Should the law apply only to privately owned or privately used agricultural land? Should the law also apply to state-owned forestland and pastureland as well as undistributed state-owned agricultural land? Should the law apply to land in cities and villages? Should the law apply soil erosion control only to agricultural, forest-, and pastureland or should it also include land disturbances by industrial and housing construction?

Administrative structure for national support. What national agency should administer the law and what are its functions, powers, duties, and responsibilities? What is the national administrative agency's relationship to local governmental units? Should a national level soil and water conservation board, commission, or committee be created and attached to the administrative agency? If so, what are its functions, powers, duties, and responsibilities and its relationship to local governmental units? Generally the functions of such a board, commission, or committee are to provide informational, planning, and financial assistance to local government units. Additional powers may be given if the national government establishes soil-loss limits or land-disturbance restrictions. How many members should comprise the board, commission, or committee, and who appoints them and for how long?

Establishment of national standards. Does the national administrative agency want to establish national standards or goals in the law and, if so, what are they? How are they to be enforced and by whom?

Administrative structure at the local governmental level. What local governmental units are going to administer the law or plan, and what are their functions, powers, duties, and responsibilities? Should an advisory committee be established at the local level and, if so, what are its functions, powers, duties, and responsibilities?

Regulatory powers of local governmental units. Are local governmental units required to adopt regulations or may they adopt them voluntarily? If regulations are mandatory, must they be approved by the national administrative agency? Do mandatory regulations enforce only national standards or goals?

Administrative procedures at the local level. What administrative procedures are to be used by the local governmental unit to administer the law and regulations and how? Are permits required?

Enforcement of regulations and appeals. What are the enforcement mechanisms? Are there penalties? What are the appeal procedures?

Soil erosion control and water pollution program or plan. Who prepares the soil erosion control and water pollution program or plan at the national and local levels? What is included in the program or plan? Who approves the local plan or program?

National funding for soil erosion control. Is the national government going to provide cost-sharing funds to landholders or land occupiers to initiate and implement soil and water conservation practices? If so, how much or what percentage of the cost will be shared and for what practices? If cost-sharing* is to be provided, are the areas in need going to be prioritized and is the funding limited to critical areas?

2.1.2 Subjects within proposed conservation law

Some of the article headings that should be included in a Soil and Water Conservation Law enacted by the People's Assembly are the following.

- I. Title of the law.
- II. Purpose of the law or declaration of policy.
(A few general statements on why the country is adopting the law.)
- III. Definition of terms used in the law.
(Make sure that a definition of "land occupiers" is given; that is, who are they?)
- IV. National soil erosion control goals.
(Give tolerable erosion levels if that is what you want and time schedules for meeting those goals.)
- V. Land over which law applies.
(Does the law apply only to privately owned or privately used land? Does the law apply only to agricultural land or does it include state-owned land such as forestland and pastureland?)
- VI. Duties of Ministry of Agriculture and Food or other national administrative agency.
(List all powers, duties, and responsibilities.)
- VII. Creation of soil and water conservation board or commission.
(If one is to be created, list its membership, who appoints it, its terms of office, and its powers and duties.)
- VIII. National regulations.
(List the regulations or standards relating to soil erosion control.)
- IX. National soil and water conservation plan.
(Creation, purpose, preparation, identification of priority areas, review, implementation, and noncompliance.)
- X. Local governmental units.
(Who are they and what are their powers, duties, and responsibilities?)
- XI. Creation of local committees.
(If they are to be created, list their membership, who appoints them, their terms of office, and their powers and duties.)
- XII. Local regulations on soil and water resource-management practices.
(Adoption, mandatory or voluntary, approval, and enforcement.)
- XIII. Entering land for inspection.

* Practices that could be cost-shared include the establishment or improvement of permanent vegetative cover, terracing, water diversions, grazing protection, windbreaks, reservoirs, stream protection, sod waterways, and tree planting.

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- (Give authority to do so.)
- XIV. Complaints for noncompliance.
(Who may make complaints and how are they handled?)
 - XV. Land disturbing activities.
(Are land-disturbing activities for construction of industrial buildings and housing developments to be included in the law and local regulations, and if so, what are they?)
 - XVI. Public cost-sharing funding.
(Availability, restrictions, loans, application for funds, practices eligible for funding, and priority areas.)
 - XVII. Cooperation with other agencies.
 - XVIII. Agreements with local governments.
 - XIX. Penalties.
 - XX. Appeal procedures.
 - XXI. Separability clause.

The country should be divided into regions or zones and land capability maps should be prepared for each. Such maps can indicate the suitable uses of the land for various types of production. Ministry of Agriculture and Food (MOAF) personnel must be trained in soil erosion, how to detect it, and methods of control. After an Agricultural Extension Service has been established, personnel from that service must be trained in soil erosion problems and solutions so that extension agents can provide information and educational programs to farmers and others on soil erosion, methods of control, damages caused to the land and environment, and relationship to water pollution. Education is needed before a law can be enforced, and education will create a public awareness of soil erosion and other forms of land degradation. Technicians must be trained in management practices and physical prevention and control of soil erosion so they can provide technical assistance to farmers and others.

2.2 DEFORESTATION

According to Article 2 of the Law on Forestry and Forest Police Service, Law No. 7623, dated 13 October 1992, forest resources are composed of land committed to forests and land with forest flora. Article 3 defines forests as dense woodland, with a surface larger than 1,000 square meters and a density not less than 30 percent, which produces wood material and influences the surrounding environment; and defines land with forest flora as forest woodland areas, with a density ranging from 5 to 30 percent, which are not registered in the cadastre as any other land resource. Forest resources are made up of state, public, and private forests. Public forests are under state ownership and in common use of one or several villages or communes. There are no private forests in Albania; all forest resources are state-owned.

The total state-owned forest area in Albania comprises 1,044,680 hectares (2,611,700 acres). During the past 40 years, the forest area has decreased by 280,000 hectares (700,000 acres); during the 1980s, however, it increased by about 35,000 hectares (75,000 acres) due to afforestation of marginal land, usually pastureland, and slower rates of conversion to agricultural use.

Deforestation, which is a major contributor to soil erosion and has significant effect on water quality, has been caused both by converting forestland to agricultural use and by thinning. About 150,000 hectares (370,500 acres) of existing forestland has a low density of trees because of overharvesting. Only about one-third of the forestland is fully stocked at present and is found mostly in the hilly areas near cities. There has been no investment in afforestation since 1990. Soil erosion has resulted from harvesting on the high slopes of forests and overgrazing of cattle and livestock in forestland.

State and public forest resources are administered, developed, and protected by the MOAF's Directorate of Forestry and Pastures, which operates through the Directorate of Forest Service at the district level. Articles 2 and 7 of Law No. 7623 provide procedures for approval of transferring agricultural land to forest resources and for transferring land out of forests. Any deforestation or change of purpose is permitted only after approval for reducing the forest resource inventory by the appropriate authorities and after payment of the value of the converted resource. Income received is used for afforestation of another area of land of similar size.

Provisions in the Law on Forestry and Forest Police Service, Law No. 7623, prevent further degradation by deforestation, soil erosion, and overgrazing by requiring afforestation and implementation of erosion control measures and grazing restrictions. Several articles in the law prohibit activities deemed harmful to forest resources. The following activities are forbidden under Article 9: (1) occupation and use of forests or lands with forest flora which are part of the forest resources without approval of competent authorities; (2) occupation and use of areas

greater than those for which approval has been granted; (3) placement of any object whatsoever in another place which is not approved; (4) failure to reconstitute lands in forest resources which were given in temporary use; and (5) destruction and degradation of forests by massive measures. It is forbidden under Article 19 to cut or uproot trees and shrubs in highly sloping areas; on a belt of 100 meters in the upper limit of vegetation for woods, brushwood, and rare species; and trees and shrubs along national roads for a width of 20 meters on either side where the slope is more than 30 percent. Article 21 forbids any activity likely to cause a decrease in forest resource productivity and to obstruct the renovation or weaken the protective and social functions of forest resources, except under special cases permitted by a Council of Ministers' decision. All articles in Chapter IV, "The Protection of Forest Resources," are devoted specifically to the protection of the forest resources, including grazing and pasturing.

Article 15 of Law No. 7623 provides for the preparation of production and inventory plans for state and public forest resources. Project study authorities prepare production plans for each district with the objective of maintaining a suitable forest structure and protecting and recreating the productivity of the forest ecosystem. The studies for production and inventory plans are approved by the Directorate of Forestry and Pastures. Articles in Chapter III, "The Exploitation of Forests and New Forest Production," relate to the management of forest resources, including cutting and harvesting of trees by contractors and gathering of wood by local persons for fuelwood and other purposes.

Article 17 of Law No. 7623 obliges the Directorate of Forestry and Pastures and local authorities acting through the Directorate of Forest Service at the district level to undertake afforestation in desert areas, in zones of severe erosion, on sandbanks, in marginal areas with a low level of fertility, on grit lands with a low level of fertility for forest resources, and in other problem areas in order to augment overall forest resources and their productivity. This obligation is met by planting tree species with rapid growth, high economic value, and adaptability to prevailing conditions. Article 18 provides that afforestation of desert areas, protection of forests in higher elevation in the upper belts, and interruption of tree cutting and cattle grazing be done to restrict erosion in riverbeds and ravines following snow accumulation.

Article 38 and Article 35 permit the state to charge for pasturing cattle in forested areas. Article 41 forbids pasturing or moving cattle in newly afforested areas, in exploited or rehabilitated forests, in protective forests, in national forest parks, around scientific centers or national monuments, in natural protected nurseries, in hunting areas, or near seed nurseries. Although studies have been carried out to determine grazing capacities in forestlands, farmers do not adhere to the grazing restrictions issued by the Directorate of Forestry and Pastures.

The Law on Forestry and Forest Police Service contains adequate legal provisions to protect against deforestation, soil erosion, and overgrazing and to require afforestation and implementation of soil erosion control measures and practices and restrictions on grazing. State-owned forestlands should also be subject to the provisions of a new Soil and Water Conservation Law.

2.3 INADEQUATE DRAINAGE OF FORMER RECLAIMED LAND

During the late 1940s the state initiated a series of irrigation and drainage projects in the lowland regions. These projects were intensified during the 1960s and 1970s. Arable land increased from 391,000 hectares (977,500 acres) in 1950 to 457,000 hectares (1,142,500 acres) in 1960; to 599,000 hectares (1,497,000 acres) in 1970; and to 702,000 hectares (1,765,000 acres) in 1989, almost twice that available in 1950. Most of this newly arable land was obtained by extending irrigation systems and draining wetlands and swamps in the coastal plain region. Land was reclaimed by establishing a complex network of drainage channels, dikes, and pumps, which direct excess water to the sea. In most instances the same channels are used for both irrigation and drainage systems.

The coastal plain region contains the country's prime arable land; it has been largely reclaimed from swamps and marshes and developed for arable agriculture over the past 40 years. The majority of the state farms, which were the country's most productive, were located in this region. These state farms, which occupied 24 percent of the arable land in 1995, were situated primarily on reclaimed or drained swamplands. Drainage took place on 76,133 hectares (190,333 acres) of land in 1991, with 25,017 hectares (62,543 acres) on state farms and 52,113 hectares (127,790 acres) on former cooperative farms.

Drainage channels have not been maintained since 1990-91, and pumps, irrigation canals, and equipment routinely malfunction. Reclaimed lands now remain flooded for longer periods of time, and the groundwater table is rising from lack of drainage. Much of the problem stems from soil sediment entering the drainage canals and channels while responsibility for maintaining these canals and channels remains unknown. To remedy this problem,

the World Bank and other donor agencies have provided funds for a pilot Rehabilitation Irrigation and Drainage Project, which is carried out by private contractors in the districts of Kava, Lushnje, and Fier. The cleaning of the canals and channels is guided by designs and drawings made in 1995. The work is overseen by the district Directorates of Water (also known as water enterprises), which are under the Water Division of the Directorate of Natural Resources within the MOAF. These Directorates of Water remain independent of the MOAF Agriculture Section in each district.

Many of the problems concerning irrigation and drainage could be solved by applying the Law on the Administration, Maintenance, and Operation of Drainage Works, Law No. 7846, dated 21 July 1994, and the MOAF Regulation No. 12, On Water Users' Associations, dated 8 August 1994. The law contains several articles pertaining to the protection of irrigation and drainage systems and assigns responsibilities for environmental preservation. Article 9 of Law No. 7846, for instance, provides that the district Directorate of Water rehabilitate the damaged parts of all irrigation systems by means of subsidies from the national government.

Articles 7, 9, 15, and 19 of Law No. 7846 provide that district Directorates of Water, Water Users' Associations, and juridical and physical persons operate and maintain the irrigation and drainage systems as well as the flood protection works at their own expense. Under Article 9, the district Directorates of Water are responsible for administering, operating, and maintaining the major (primary and secondary) irrigation and drainage systems, including all canals, pumping stations for irrigation, and drainage structures, at their own expense; under the same article, Water Users' Associations are responsible for administering, operating, and maintaining the majority of the interior (tertiary) irrigation and drainage systems, including canals, drains, gates, and appurtenant structures, at their own expense. Article 11 indicates that small, independent irrigation and drainage systems, including small reservoirs, streams, and pumping stations that are within the territory of only one Water Users' Association, be administered by those associations at their own expense. Articles 9 and 16 specify that the cost of operation and maintenance of irrigation and drainage systems administered by the district directorates be covered by income received through water charges paid by water users during the irrigation season and, if necessary, by special funding from the national government.

In 1994, charges for irrigation water were set at 2 Lek per cubic meter in the flat areas and 1.4 Lek per cubic meter in hilly and mountainous areas. No charges were made for draining the land. During 1995, the national government charged the Water Users' Associations 1.9 Lek per cubic meter while the associations charged the water users 2.0 Lek per cubic meter. The national government wanted the district Directorates of Water to contract with Water Users' Associations to pay for the water, and the associations to charge the farmers in accordance with Articles 26 and 27 of Law No. 7846 (Article 26 provides that water users pay 30 percent of the annual cost of providing water).

Under Article 17 of Law No. 7846, Water Users' Associations and other juridical and physical persons are obligated to keep the interior irrigation and drainage systems in good order and to avoid misuse of irrigation water, overcropping of canal banks, soil erosion, and pollution of water resources in their territories. Offenses and violations are specified in Article 29 and penalties are listed in Articles 30 and 31.

Under authority of Articles 13 and 14 of Law No. 7846, Water Users' Associations are established as voluntary associations on the basis of village boundaries, irrigation units, or small irrigation systems; associations may also be established by communes, municipalities, and district Directorates of Water. Those established by communes and district directorates are compulsory associations. MOAF Regulation No. 12, On Water Users' Associations, enumerates establishment procedures, regulatory powers, and responsibilities and duties of associations. In 1995, there were 120 Water Users' Associations in Albania.

Law No. 7846 and MOAF Regulation No. 12 adequately provide for protection of irrigation and drainage systems and for proper drainage of reclaimed land. Responsibility for administration, operation, and maintenance of both irrigation and drainage systems is assigned to district Directorates of Water, Water Users' Associations, and individual persons or juridical entities.

2.4 LANDSLIDES

Landslides are a form of mass movement of soil due to the loss of stability of underlying earth or rock. Soil becomes saturated with water after heavy, prolonged rainfall. With the lack of trees and other vegetative cover to hold soils in place, landslides can start on sloping land; they are most common in mountainous regions and on the banks of rivers. In Albania, most of the problems with landslides occur on slopes in forestland and on state-owned wasteland.

Only the Law on Forestry and Forest Police Service, Law No. 7623, dated 13 October 1992, has any provisions addressing the problem of landslide. Under Article 17, the Directorate of Forestry and Pastures and local authorities through their Directorates of Forest Service are obligated to undertake afforestation in desert areas, in zones of severe erosion, in marginal areas of low fertility, and in other problem areas. Article 18 calls for the protection of forests in higher elevation areas and the interruption of tree cutting and cattle grazing to restrict soil erosion in riverbeds and ravines. Law No. 7623 applies only to forest-resource land and not to state-owned wasteland.

In addition to stabilizing the soil by providing forest and other vegetative cover, owners of land susceptible to landslides must set up engineering operations, such as retaining structures, walls, terraces, terrace outlets, dams, dikes, ponds, ditches, and the like, to retain the soil on the slopes and to prevent it from entering waterways. Various engineering operations can be used to prevent landslides on riverbanks.

The Soil and Water Conservation Law could have provisions prohibiting land disturbance in certain critical areas and on land with slopes above a particular percentage unless adequate protection and control measures are taken to prevent erosion and landslides. Amendments could be added to the Law for Protecting the Environment, Law No. 7664, dated 21 January 1993, to require environmental impact assessments and licenses for activities on land susceptible to landslides. Article 8 of Law No. 7664, which requires assessments for programs and activities affecting the environment, might be so interpreted if liberally construed.

2.5 SALINIZATION OF SOILS

In 1995, some 15,000 hectares (37,000 acres) of land in Albania were reported to be seriously salinated; they were located primarily in the coastal region where soils are heavy and areas lie as little as 1 meter above sea level. If the soil moisture around plant roots contains too much salt, most cultivated crops cannot absorb the water and nutrients needed to germinate and grow.

Both poor management of irrigation water and irrigation with saline water can cause salinization if the land is insufficiently drained. Pumping wells along the Adriatic Coast produces filtration of saltwater into the aquifers; when water from these aquifers is pumped onto the soil, salinity problems arise. Salinity problems can also come from irrigating with saline surface water.

Salt accumulation is a problem especially in arid and semiarid regions. While rainfall flushes much of the soluble salts from the soil in humid areas, limited rainfall fails to leach away the salts in drier areas. When land in these limited rainfall areas is irrigated, leaching becomes intensive. Well-drained soils on higher levels of the landscape gradually become less saline when irrigated with good-quality water, because the water dissolves the salts and transports them into the groundwater, which then may return to feed into surface water supplies. This process adds salts to the waters downstream. When these salinated downstream waters are used for irrigation, the salts just accumulate in low-lying, poorly drained areas. In addition, the return flows from irrigating saline land may cause excessive amounts of salts in downstream waters. Efforts to deal with the problem of salt accumulation must be carefully planned, therefore, to ensure that the salinity is reduced, not just moved to another area.

2.6 CONTAMINATION OF SURFACE AND GROUND WATER

Sediment from erosion, along with the fertilizers and pesticides carried with the soil particles, contaminates surface and ground water and reduces its quality for irrigation, industrial, livestock, human, fishing, recreational, and livestock purposes. Soil erosion causes not only the loss of productive capacity of the soil, but also the sedimentation of streams, rivers, lakes, reservoirs, and irrigation and drainage channels. As of 1995, Albanian rivers were depositing over 64 million tons of sediment annually in the Adriatic Sea.

Nonpoint source water pollution abatement provisions should be as much of a part of the Soil and Water Conservation Law as stipulations relating to soil erosion control. Management practices and structures, such as sod waterways and check dams, dikes, and ponds that retard or prevent runoff from reaching waterways, should be

required by the law and by any future regulations. Technical assistance on methods of building retentive structures can be provided to Albanian farmers along with government-funded financial support. The use, amount, and application methods for fertilizers and pesticides should be regulated. An Agricultural Extension Service would be useful in providing farmers with information on fertilizer and pesticide use.

Provisions in a few Albanian laws already have some relationship with preventing contamination of surface and ground water. Article 17 of the Law on the Land, Law No. 7501, dated 19 July 1991, provides that industrial and material refuse and waters with chemical content harmful to agriculture must be gathered in special places to protect the land and plant life and to prevent the pollution of water. Under Article 17 of the Law on the Construction, Administration, Maintenance, and Operation of Irrigation and Drainage Works, Law No. 7846, dated 21 July 1991, district Directorates of Water have the right to order Water Users' Associations and other juridical and physical persons to take specific steps to avoid misuse of irrigation water, flooding, overtopping of canal banks, soil erosion, and pollution of the resources in their territories. Articles 17 and 18 of the Law on Forestry and Forest Police Service, Law No. 7623, dated 13 October 1992, requires the Directorates of Forest Service to undertake afforestation, to prevent soil erosion, and to protect riverbeds with restrictions on grazing.

2.7 CONTAMINATION OF SOILS

Contamination of soils can come from industrial and mining wastes flowing onto surrounding land and from salts emerging from improper irrigation and drainage.* Some provisions of the Law for Protecting the Environment, Law No. 7664, dated 21 January 1993, can be used to prevent soil contamination from industrial and mining wastes. If Albania does not already have such regulation, the People's Assembly should adopt a Law on Mining containing provisions that guide the disposal of mine wastes, prevent land and water pollution, establish operating permits, call for environmental impact statements, and reclaim mine sites.

A greater problem is chemical pollution of soil by pesticides resulting from the spraying of orchard trees. Excessive pesticide drips from the trees onto the vegetation and soil below and thereby enters into the food and milk chain of cattle, sheep, and goats grazing on the grasses. Tests are not being performed on meat or milk to determine possible pesticide contamination. The People's Assembly needs to adopt a Law on Pesticide Application and Storage.

2.8 MUNICIPAL SOLID WASTE DISPOSAL

Providing the means for the proper disposal of municipal solid waste and refuse is a governmental function and responsibility congruent with protecting the health and safety of the citizens. That function and responsibility should lie with the incorporated cities and towns in urban areas and villages and communes in the rural areas. Industrial and hazardous solid waste should be disposed of separately from domestic waste, and more caution must be taken to prevent groundwater contamination. At the present time, however, Albania has no laws specifically related to the location or site of solid waste disposal facilities or landfills, proper management of these facilities, separating out the hazardous or toxic wastes, record keeping, closure of facilities, or penalties for violations. All of these stipulations should be included in a solid waste management law.

The proper location of solid waste disposal facilities or landfills may conflict with the conservation of productive agricultural land, for soil types that are the most productive for crops may also be those that are best for preventing leakage from landfills and consequent pollution of groundwater. Most solid waste facilities or landfills will have to be located in agricultural or other rural areas. Priority, however, should be given to landfill protection over agricultural use because groundwater pollution can last for a hundred years or more and is costly to eliminate, while people depend upon groundwater for drinking and other domestic uses on a daily basis. Land use planning and zoning laws can be helpful in locating solid waste disposal facilities or landfills; they should be included as an element in any local, comprehensive land-use master plan. Research should begin regarding the use of recycling to save landfill space or incineration.†

* Salinity problems were discussed in section 2.5 of this report.

† Regulations would also have to be issued to provide standards for preventing excessive air pollution from incinerators.

The Law for Protection of the Environment, Law No. 7664, dated 21 January 1993, contains provisions that relate to the placement of solid waste disposal facilities or landfills, particularly for hazardous and toxic substances. Dangerous substances and wastes are defined in Article 2 of the law, and environmental protection from pollution by such substances and wastes is required of all state institutions, legal entities, and individuals in Article 3. An environmental impact assessment is required before locating a solid waste disposal facility or landfill under Article 8, which also provides that such an assessment is required for programs and activities that affect the environment or are particularly dangerous to human health. The contents of environmental impact assessments are set forth in Article 14. Licenses are required for the disposal or processing of toxic substances or wastes under Article 18, but not for operating a solid waste disposal facility or landfill; Article 18 should be amended to require a license to operate a solid waste disposal facility or landfill. One of the articles in Chapter IV, "Inspection and Information for the Environmental Situation," should be amended to specifically require inspections of solid waste disposal facilities or landfills. Chapter V, "Duties and Rights of Central and Local Institutions for Environment," and Chapter VI, "Responsibilities and Sanctions," could also be amended to include solid waste disposal facilities or landfills. Even though solid waste disposal facilities are not specifically mentioned in the Law for the Protection of the Environment, they can be construed as applicable to the law because of the effect they have on the natural and human elements and factors of the environment.

2.8.1 Subjects within waste management law

Albania needs a Solid Waste Management Law that includes some of the following article headings.

- I. Title of law;
- II. Purpose of law;
- III. Definition of terms;
- IV. Regulation powers to establish management standards;
- V. Powers and duties of national agency;
- VI. Powers and duties of local governmental units;
- VII. Location and siting requirements;
- VIII. Operating licenses;
- IX. Inspections;
- X. Hazardous and toxic wastes;
- XI. Incineration;
- XII. Recycling requirements;
- XIII. Record keeping;
- XIV. Closures;
- XV. Abandonment;
- XVI. Liability for damages;
- XVII. Fees;
- XVIII. Enforcement; and
- XIX. Penalties for violations

3. PREPARATION OF LAND PROTECTION ACTION PLAN FOR ALBANIA

3.1 OBJECTIVE OF LAND PROTECTION ACTION PLAN

The objective of this Land Protection Action Plan (LPAP) is to reduce the rate of land degradation in Albania and even to reverse the process.

3.1.1 Types of land degradation

The Land Protection Action Plan will attempt to solve several types of land degradation problems:

Excessive soil erosion. This type of land degradation is caused by: (a) the cultivation of highly erodible agricultural land; (b) the inappropriate conversion of forest- and pasturelands to agricultural use; (c) the deforestation of fragile forested lands; and (d) the overgrazing of forest- and pasturelands by cattle, sheep, and goats. The problem arises when the rate of soil loss far exceeds a tolerable level for maintaining the productive capacity of land.

Inadequate drainage of former reclaimed land. Failure to maintain drainage channels and to reduce the sedimentation caused from erosion has caused former reclaimed land either to remain flooded for extended periods of time or to increase in salinity, thus reducing its overall productive capacity.

Uncontrolled and excessive municipal solid waste disposal. The location of municipal solid waste facilities in rural areas will reduce the amount of agricultural land available for crop production; if not properly located, leakages from unsuitable soils will pollute groundwater.

Contamination of surface and ground water. Sediment from soil erosion, along with fertilizers and pesticides carried with the soil particles, contaminates surface and ground water and reduces its quality for irrigation, industrial, livestock, human, fishing, recreational, and livestock purposes.

Contamination of the soil. Factory and mining wastes often flow onto the surrounding land and produce contamination of the soil. The pumping of wells along the Adriatic Coast can produce the filtration of saltwater into the aquifers; the water is then pumped onto the soil, producing problems of salinity.

Urbanization on high-quality agricultural land is also a threat to high productivity. The construction of homes outside the “yellow line” of cities (where over one-third of prime agricultural land is located) and the external boundaries of villages without permission is increasing, thus reducing the availability of highly productive land and affecting the ability of Albania to provide sufficient food for its population. In order to formulate a general strategy for dealing with land degradation, this factor will be included in the Action Plan.

3.2 FORMATION OF WORKING GROUP TO DEVELOP LAND PROTECTION ACTION PLAN

A Working Group should be formed under the coordination of the Land Policy Department of the PMU-IPRS to develop a Land Protection Action Plan (LPAP).^{*} Other members of the Working Group should include specialists from the following agencies:

- ◆ Land Research Institute (LRI) [Instituti i Studimi të Tokave, IST];
- ◆ Institute for Studies and Designs of Waterworks (WWI) [Instituti ei Studimeve dhe Projektmeve i Veprave Ujore, ISPVU]; and
- ◆ Forest Research Institute [? Forest and Pastures Research Institute, FPRI ?]

Each member of the Working Group should be assigned responsibilities relating to the particular type of land degradation in which its institution has expertise. For example, the Land Research Institute (LRI) would be responsible for soil analyses, with documentation of high-risk areas and contamination of the soil, while the Institute for Studies and Designs of Waterworks (WWI) would be responsible for water-quality analyses, with documentation of sediment in channels, streams, rivers, and lakes. The Forest Research Institute (FRI) would be responsible for documenting problems relating to deforestation and overgrazing. Personnel of the various MOAF directorates and enterprises in each district can provide the staff to do the work and the MOAF district laboratories can undertake the analyses.

Representatives and advisory personnel will be invited to participate in the activities of the Working Group as needed from the following agencies:

- (1) Land Division of the MOAF;
- (2) Fisheries Division, Directorate of Natural Resources, MOAF;
- (3) Directorate of Forestry and Pastures, MOAF;
- (4) Directorate of Livestock, MOAF;
- (5) Legal Office, MOAF;
- (6) Ministry of Construction and Tourism;
- (7) Ministry of Health;

^{*} See also “Proposal to Study the Economic and Environmental Benefits of Reducing Soil Erosion in Albania,” by James G. Bockheim (Mt. Horeb, WI: Terra Institute, Ltd., December 2001).

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- (8) Ministry of Interior (Local Government);
 - (9) Committee on Environmental Protection and Preservation;
 - (10) Agricultural University of Tiranë;
 - (11) University of Tiranë;
 - (12) Agricultural University of Korçë;
 - (13) Environmental nongovernmental organizations;
 - (14) Municipal, District, and Commune local-governmental organizations;
 - (15) Farmer organizations; and
 - (16) International organizations and projects (IFDC, FAO, Extension, SARA, etc.).

The Working Group should form advisory committees to become involved with specific types of degradation and organizational, legal, and institutional issues. Such committees can be composed of a few members of the Working Group in addition to representatives of the collaborating agencies, such as municipalities, prefectures, districts, communes, villages, and farmers. In addition, an Advisory Committee to the Working Group (that is independent of the Working Group) would consist primarily of persons with professional expertise but additionally of local government and farmer representatives. All committees must seek active participation and input of local government representatives and farmers.

3.3 STEPS TO BE TAKEN UNDER LAND PROTECTION ACTION PLAN

3.3.1 Detailed documentation of problems

The first step in the development of the LPAP is to determine the various types of land degradation and to document the nature, extent, and geographical location of these land degradation problems. For example, it would be of priority to document the rate of sedimentation in irrigation and drainage canals and reservoirs, amount of soil erosion, rate of erosion, salinization hazards, effects of sediment as well as plant nutrients and pesticides on surface- and ground-water quality, rate of deforestation, erosion rates from deforested land, potential loss of agricultural land from locating solid waste disposal facilities in rural areas, and rate of housing construction in rural areas with its accompanying potential loss of prime agricultural land.

3.3.2 Identification of high-risk areas

A second step in the development of the LPAP is to identify the geographic areas of highest risk for the various types of land degradation. For example, it would be important to identify areas with high risk of erosion and areas where surface water quality is dramatically reduced from sedimentation, plant nutrients, and pesticides. Areas of high risk from flooding due to sedimentation of the drainage canals should also be identified. The rate of erosion and sedimentation in these high-risk areas should be documented as well.

3.3.3 Educational programs

The third step in the development of the LPAP should be to establish an educational program to teach farmers and the general public, including residents in both urban and rural areas, of the types of land degradation; their causes; the extent of the problems; their effects on the welfare, health, and safety of all people; and methods for prevention and protection of the environment. The general public should be educated on the prevention of land degradation because public support is necessary for an effective land protection program.

3.3.4 Development of legislation

Examine existing legislation for adequacy in land protection program. Existing laws in Albania relating to land and the environment should be examined to determine their adequacy to protect the land and other elements of the environment from degradation. For example, the Law on the Construction, Administration, Maintenance, and Operation of Irrigation and Drainage Works, Law No. 7846, apparently has adequate provisions on the protection and maintenance of both irrigation and drainage systems. Under this law drainage channels are to be cleaned and

maintained to prevent land flooding; however, the law does not provide adequate protection of those channels from sedimentation.

Another example is the Law for Forestry and Forest Police Service, Law No. 7623, which apparently provides adequate protection of forestlands from further deforestation, soil erosion, and livestock overgrazing. However, the means for involving local communities in the protection of forestlands are not clearly identified.

Provisions are present in the Law on the Land, Law No. 7501, on the protection of land from soil erosion and housing developments in rural areas; however, these provisions are insufficient for adequate protection.

Prepare needed legislation. A subsequent step to be taken by the Working Group in the development of the LPAP is to develop legislation that protects land from degradation. For example, it is likely that the Working Group will identify a need for developing a Soil and Water Conservation Law that includes provisions for controlling soil erosion and preventing surface and ground water pollution resulting from sedimentation, plant nutrients, and pesticides. Such a law should involve both national and local governments in soil erosion and water pollution control programs, with responsibilities assigned to both levels. In the law the national government should establish tolerable soil loss limit goals as well as a time schedule for attaining those goals, provide nationwide administration of soil erosion and water pollution control, create a soil erosion control and water resource management plan, and assign responsibilities to local governments along with permission to adopt regulations. Local governments should be required to create a soil erosion control and water resource management program in which they indicate how they are to meet the national goals for their territories and be permitted to adopt local soil erosion control regulations. The adoption of local regulations may be mandatory or voluntary with voter approval depending upon the desires of the People's Assembly when approving the law. Such a law and local regulations would also protect against sedimentation in surface water.

Another likely piece of legislation is a regionally oriented Land Use Planning and Zoning Control Law to prevent land degradation from housing developments in rural areas and to assist in locating solid waste disposal facilities.

Air pollution resulting from chemical emissions from thermal power stations, oil refineries, pulp and paper mills, fertilizer plants, and metallurgical complexes, including steel mills and smelting operations, can have a harmful effect on forests, surface and irrigation water quality, and the soil. Albania needs to adopt an Air Pollution Control Law that establishes chemical emission standards and permissible rates for various pollutants and industries; permits and criteria for issuing them; technology for meeting the standards and permissible rates; and inspections, testing methods, enforcement methods, and penalties for violations. Air pollution will increase in Albania as more of the industrial plants become operational.

3.3.5 Investment program for land protection

Investment of public resources will be needed to resolve the different types of land degradation by sharing the costs with owners of land or enterprises. It will also be necessary for the owners of the land or enterprises where degradation is most severe to share in the costs of correcting the deficiencies. The Land Protection Action Plan should develop a procedure for identifying the needed investments for land protection and for mobilizing the necessary public and private resources.

3.3.6 LIS for monitoring evolution of different types of land degradation

Presently available knowledge among specialists and landholders in the districts should be used to identify the types and locations of land degradation that are most serious. Such information can be summarized on existing maps. A second effort should be to develop a computerized Land Information System (LIS) for land protection based on the work already begun by the MOAF, the International Fertilizer Development Center (IFDC), and the various institutes.

4. IMPLEMENTATION OF LAND PROTECTION ACTION PLAN

The Land Protection Action Plan should lay out a timetable of activities and financial requirements. The following ideas might be further developed for the soil erosion control and water protection component of the LPAP.

(1) Immediate

Identify areas of the country with the highest rates of soil erosion. Start erosion control measures in districts where the problems are likely to be the greatest. Focus on these areas to determine alternative methods to deal with erosion problems. Because of the limited resources in Albania, high-risk areas should be targeted first.

(2) Intermediate

A series of seminars should be developed on land degradation problems and solutions to those problems. Radio and television programs could be used in this effort.

(3) Long term

A Geographic Information System (GIS) should be prepared to identify high-risk soil erosion control areas and to constantly monitor and evaluate the effectiveness of the national and local soil erosion control and water resource management programs. Depending upon the evaluations, changes can be made in the programs and public financial resource investments as needed to further reduce the rate of land degradation.

ANNEX 1. URBANIZATION ON HIGH-QUALITY AGRICULTURAL LAND

While in Albania the most often heard cause of agricultural land degradation was the construction of homes on prime land or the conversion of agricultural land around cities to housing developments. Nearly 34 percent of the Class I and II (prime) land in the country is located in the districts containing the six largest cities. There is increasing construction of homes and other buildings, without permission, on prime agricultural land outside the yellow line of cities and village boundaries, thus reducing the availability of highly productive land, which will affect the future ability to provide sufficient food.

One of the research areas assigned to the Soils Research Institute by the Immovable Property Registration System's Project Management Unit (PMU) was identifying land uses around cities to discover exactly what has happened to the agricultural land formerly in the possession of cooperative and state farms. Three different situations of land use became apparent, all involving the construction of housing on agricultural land. First, the land distributed to former state farm workers for use is not being farmed for various reasons. Former owners of ex-state farmland are illegally building homes or illegally selling that land to other persons, who are building homes. Second, some of the agricultural land near cities, particularly around Tiranë, has not been distributed to farmers and remains state-owned property. Families from different parts of the country are migrating into the areas and illegally building houses on this state land. Third, agricultural land that is distant from the owners' present homes is not being used for farming. The recipient farmers are building new homes on that agricultural land to protect their ownership rights.

Housing development and business construction activities in Albania will continue to increase as land is being privatized. Urban and rural land use planning and regulations, such as zoning, must be initiated to minimize loss of valuable agricultural land close to urban areas and to avoid haphazard urban growth and land speculation. Changes in present land use rules and regulations may be necessary to meet the need for more housing, new businesses, and accompanying infrastructure such as roads, streets, and water and sewage facilities; to avoid degradation and contamination of land, water, and air; and to minimize loss of prime agricultural land. An assessment must be made to determine land use planning activities, planning authority, and rules and regulations to implement the plans with regard to urban, agricultural, housing, construction, business, industrial, and public uses. There is an Urban Land Use Planning Law, but not one relating to such land.

Planning is necessary for the orderly development and use of land. While economic and social effects are taken into consideration in land use planning, the planning itself is primarily concerned with the physical environment. It deals with the location of land uses, activities, and structures, such as agriculture, industry, manufacturing, commerce, business, residential, public facilities, and buildings, in reference to other uses, activities, and structures. Policies and regulations relating to planning seek to balance urban, industrial, agricultural, and public use of land and other land resources; to allow for local community needs and interests and to improve the quality of life in urban and rural areas. Zoning is the principal regulatory tool employed in planning.

Planning in some instances can create conflicts between local governments and political subdivisions that exercise overlapping jurisdictions as well as between neighboring municipalities that make up a suburban or metropolitan area. To resolve these conflicts in land areas comprising portions of two or more local governments or political subdivisions, laws should be designed to promote regional land use planning. Regional land use planning may be necessary where planning within a metropolitan area must account for the circumstances of all the communities comprising that area. To plan only for the central city, without thinking about the situation of suburban or satellite communities, makes no sense. Regional land use planning must be considered for the Tiranë area because of its size and for the Durrës area because the city is Albania's major seaport.

The process of land use planning by a planning commission or other administrative body produces a "master plan" (also called "comprehensive plan" or "general land use plan") or long-range guide for the development or use of the land area being analyzed. The master plan is the end result of studying population trends, existing land use patterns, traffic conditions and problems, locations of major business districts and commercial areas, drainage or sewage problems, locations of public buildings, areas of single-family residence, and so forth. First, it records the locations and types of activities taking place on the land in question as well as the types of physical structures and facilities serving those activities; then, it considers longer-range projections of population and employment trends in the area. The result of compiling such information is a prediction of the needs for physical facilities in the area, for allocation of land to desired activities, and for overall preservation of open spaces. The planning process thus enables a governmental entity to plan for the construction of schools, streets, and water and sewage facilities and

provide other public services such as fire and police protection. In compliance with the master plan the government also enacts controls over the private use of land. Its determination of zoning, subdivision, and other local regulations enhance the protection of health, morals, safety, and general welfare in the community.

Several articles in the Law on the Land, Law No. 7501, dated 19 July 1991, relate in some way to land use planning and regulations on certain land, particularly agricultural land, in urban and rural areas of Albania. The Law on the Land proposes to divest certain land of state ownership by means of privatization. Article 1 divides the land into three categories: (1) agricultural land, irrespective of size and regardless location (countryside, villages, cities, or other inhabited areas); (2) forest, pasture, and meadowland; and (3) nonagricultural use land. Article 2 grants rights to state-owned land in ownership to physical (individuals) or juridical (legal entities) persons; however, those rights do not include sale or purchase of the land. Article 3 provides that state-owned agricultural land is given in ownership or in usufruct (use) to local (Albanian) physical or juridical persons. However, Article 5 restricts the divestiture and privatization of state-owned agricultural land to that in cooperative farms, where such land is given to families that are members of the cooperatives. Agricultural land in cooperative farms can, as previously stated, include land used for agricultural purposes in villages, cities, and other inhabited areas. Portions of land in former state farms now come under the Law on the Land by virtue of Council of Ministers' Decision No. 452, "For Restructuring State Agricultural Farms," dated 17 October 1992.

Article 11 of the Law on the Land requires agricultural land received in ownership or in use to be kept in agricultural production; those physical and juridical persons receiving the land are obligated to preserve and increase its productive capacity and to develop plans for its protection. Article 14 restricts the construction of buildings and other projects on agricultural land to those used for agricultural and livestock purposes and then only in accordance with regulations specified by the Council of Ministers. The Council of Ministers thus obtains opportunity for establishing land use controls over the construction of buildings and other projects on agricultural land.

Article 4 of the Law on the Land allows foreign physical or juridical persons to lease land for buildings maintained for purposes and under terms defined by special contract. Although this article prohibits foreign investors from owning the land, it does permit their leasing it. The future use of that leased land must be defined in a special contract, which would be the lease instrument. Such a lease instrument can contain some land use regulation or control provisions.

Article 13 of the Law on the Land restricts the location of new buildings not used for agricultural and livestock purposes: "Dwellings, houses, economic, socio-cultural and any other type of building are built within a border line (the 'yellow line')." Thus all new buildings must be constructed within the established boundaries of cities, towns, or villages or other areas established for such purposes. Article 13 states, "Land for construction is given with or without remuneration (payment) according to the criteria set by the Council of Ministers." The Council of Ministers is given the option not only to set criteria for remuneration or payment, but also to establish land-use standards, such as location, type of use, type of buildings or construction, size of buildings, and number of residents. Article 13 further states, "It is prohibited to build any type of project outside the settlement border (the yellow line) without special decision of the respective competent organ."

Article 18 of the Law on the Land requires that any building and construction plans be approved: "With the proposed approval of the draft proposal and area of construction by the respective organ (agency), the land is given in ownership or for use to those who carry out the construction, but not before three months after work has begun. The change in the land registry is made when construction work begins." The government agency can establish standards, such as building regulations or codes, upon which to base approval of the draft proposal; however, those standards must be published and be uniform.

Article 17 of the Law on the Land contains land use planning and controls for environmental purposes: "Industrial waste, mining refuse and waters containing chemicals harmful to agriculture must be channeled and gathered in special places in order to protect the land and plants, prevent water pollution and not endanger the life of people, animals and poultry." Locations of such places for waste disposal need approval. If approval is not given, the projects cannot begin.

The Law on the Land also contains articles that provide methods for enforcing its land use planning and control regulations. Article 16 states, "When juridical or physical persons getting land as ownership or in usufruct (use) for construction or other economic activities do not respect terms for completing the project according to the prior agreement, they are obliged to pay an amount equal to the average annual rent of the land." Article 21 states, "The

organs of local state power in the relevant jurisdiction shall prohibit every trespass and misuses of the land within their jurisdiction that is contrary to this Law and other relevant regulations.” If a trespass or injury to the land is observed, the members of the people’s councils of the relevant jurisdiction, owners or users of the land, officials in the land survey office, jurisdictional urban planning staff, or police in charge of public order are obliged to make out a complaint and the offender is asked to return the land to its former state within three days. Article 21 also provides that if the offender fails to comply, the government may eliminate the trespass and return the land to its former state at the offender’s expense.

The present provisions in the Law on the Land are too fragmented for adequate land use planning and regulation on a national scale. The People’s Assembly of the Republic of Albania should therefore enact legislation enabling the people’s councils of districts, communes, municipalities, towns, and villages to plan and regulate or control the future use of land in their jurisdictions. Legislation enacted by the People’s Assembly would enable local governments to perform the functions of land use planning and regulation. Districts could have jurisdiction over rural or nonurban areas outside city, town, and village boundaries (outside the yellow line), while cities, towns, and villages would have jurisdiction within those areas.

Some of the article headings that should be include in a law enacted by the People’s Assembly authorizing local governments, such as districts, communes, cities, towns, or villages, to create commissions to perform land use planning, prepare master plans, and adopt those master plans are the following.

- I. Purpose of the law.
- II. Definitions of terms used in law.
- III. Designation of planning area subject to particular local government’s authority.
- IV. Grant of power to local governments to create a planning commission and perform land use planning.
- V. Creation of planning commission.
 - A. Number and qualification of members.
 - B. Appointment of members.
- VI. Relationship of regional planning commission, if any, with local planning commissions.
- VII. Relationship of district planning commission, if any, with local planning commission.
- VIII. Organization, meetings, and rules of planning commission.
- IX. Staff of planning commission.
- X. Finances of planning commission.
- XI. General powers and duties of planning commission.
- XII. Miscellaneous powers of planning commission.
- XIII. Operating procedures for transaction of business of planning commission.
- XIV. Matters to be referred to planning commission.
- XV. Preparation of master plan.
 - A. Geographic area of master plan.
 - B. Items to be included in master plan.
- XVI. Procedure for adoption of master plan.
 - A. Notice.
 - B. Public hearings.
 - C. Planning commission approval.
- XVII. Adoption of master plan by governing body.
- XVIII. Legal status of master plan.

Valid zoning regulations or ordinances must be authorized by an enabling authority and the validity of the provisions of a regulation may be tested on the basis of conformity to the enabling authority. Article headings that should be included in a law enacted by the People’s Assembly enabling local governments, such as districts, communes, cities, villages, or towns, to create zoning commissions and boards of adjustment, prepare zoning control regulations, and adopt zoning control regulations are the following.

- I. Purpose of law.
- II. Definition of terms used in law.
- III. Purpose of zoning control regulations or ordinances.
- IV. Grant of power to local governments to adopt zoning control regulations.
- V. Authority of local governments to adopt zoning control regulations.
- VI. Criteria for creation of land use districts or zones.
 - A. Types of districts or zones that may be created.
 - B. Authority for special development districts.

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- VII. Regulation of uses within districts or zones.
 - VIII. Regulation of size and use of buildings.
 - IX. Building setback requirements.
 - X. Compliance of zoning control regulations with master plan.
 - XI. Procedure for adoption of zoning control regulations.
 - A. Public nature.
 - B. Public hearings.
 - C. Zoning commission approval
 - XII. Governing body adoption of zoning control regulations.
 - XIII. Procedure for amending zoning control regulations.
 - XIV. Creation of zoning commission.
 - A. Number and qualification of members.
 - B. Appointment of members.
 - XV. Organization, meetings, and rules of zoning commission.
 - XVI. Staff of zoning commission.
 - XVII. Finances of zoning commission.
 - XVIII. General powers and duties of zoning commission.
 - XIX. Operating procedures for transaction of business of zoning commission.
 - XX. Nonconforming uses.
 - A. Definition.
 - B. Types permitted.
 - C. Distinction between repair and expansion.
 - D. Discontinuance or elimination.
 - XXI. Variances.
 - A. Conditions required for granting.
 - B. Procedures for granting.
 - XXII. Special exceptions and special use or conditional use permits.
 - A. Definitions.
 - B. Conditions required for granting.
 - C. Procedures for granting.
 - XXIII. Authority for extraterritorial zoning.
 - XXIV. Board of adjustment or board of appeals.
 - A. Number and qualification of members.
 - B. Appointment of members.
 - C. Powers and duties of board.
 - D. Operating procedures of board.
 - E. Adoption of rules for operation of board.
 - F. Meetings and record keeping requirements of board.
 - G. Types and procedures for appeals to board.
 - H. Procedures for hearing appeals.
 - I. Voting on appeals.
 - XXV. Appeal of board of adjustment or board of appeals decisions to courts.
 - XXVI. Inspections.
 - XXVII. Enforcement and remedies.
 - A. Types.
 - B. Procedures.
 - XXVIII. Penalties for violation.
 - A. Types.
 - B. Procedures.

ANNEX 2. LIST OF CONTACTS

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ANNEX 3. SEMINAR ON LEGAL AND INSTITUTIONAL METHODS TO CONTROL SOIL EROSION IN ALBANIA

Prepared for Ministry of Agriculture and Food, Tirana, Albania, 27 January 1995, by Dean T. Massey, Legal Consultant, Terra Institute, Ltd., Mt. Horeb, Wisconsin, USA

I. SOIL EROSION

- A. Soil losses affect productive capacity of land.
- B. Conservation practices designed to conserve soil resources and prevent and control runoff.
 - 1. Structural devices.
 - 2. Cultivation practices.
 - 3. Retirement of highly erodible areas.

II. NONPOINT SOURCE WATER POLLUTION

- A. Definition.
- B. Sediment from erosion is the main source.
- C. Most sediment comes from agricultural activities, primarily cropland.
- D. Carried with sediment are pesticides, dissolved solids, fertilizers, organic material, and bacteria.

III. GOVERNMENTAL SYSTEM IN THE UNITED STATES

- A. Three levels of government.
 - 1. Federal.
 - 2. State.
 - 3. County or local.
- B. Each level has legislative and administrative powers.
- C. Each level involved in soil erosion control and nonpoint source water pollution abatement.
- D. Most of the responsibility in the United States for controlling nonpoint source pollution lies at the local level, with the federal and state governments establishing water quality standards, guidelines, and soil loss limits and providing technical and financial assistance.
- E. Primary responsibility to control soil erosion and reduce sediment and other nonpoint source pollutants resulting from soil erosion is with the local government.
- F. Soil and water conservation programs have been accomplished primarily through farmers' voluntary initiatives using federal cost-sharing incentives and educational activities of the Agricultural Extension Service.
- G. Although a substantial nationwide program for the prevention of soil erosion has existed for over 40 years, very little has been done to adopt land use regulations to control erosion.
- H. Regulations can be adopted by counties only under an enabling law of the state.

IV. FEDERAL PROGRAMS

- A. Agricultural Extension Service.
 - 1. Structure of Extension Service.
 - 2. Provides education to farmers at local level.
- B. Soil Conservation Service.

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1. Organized as federal agency in 1935.
 2. Structure of Soil Conservation Service.
 3. Provides technical assistance for planning and applying land treatment practices within counties and for individual landowners.
- C. Agricultural Stabilization and Conservation Service.
1. Organized as federal agency in 1935.
 2. Structure of Agricultural Stabilization and Conservation Service.
 3. Provides various cost-sharing programs.
- D. Agricultural Conservation Program.
1. Cost-sharing between 50% and 75% for installing conservation practices.
 2. Annual limit \$3,500 for landowner or operator.
 3. May participate with annual agreement or long-term agreement that runs from 3 to 10 years.
 4. A list of approved practices for cost-sharing.
- E. Rural Clean Water Program.
1. Established under Clean Water Act of 1972 to provide financial assistance to landowners and operators for controlling agricultural nonpoint source pollution to improve water quality.
 2. Administered by Agricultural Stabilization and Conservation Service.
 3. In selected project areas throughout the country with long-term cost-sharing contracts up to 75% of the cost-management practices.
 4. Only in selected areas where U.S. Environmental Protection Agency has approved an area-wide waste treatment management plan identifying water quality problems from agricultural nonpoint source pollution.
 5. Contracts between 3 and 10 years in duration; maximum payment to a participant of \$50,000.
 6. Practices must be approved by the county.
 7. Forfeit further payments if not performed.
- F. Forestry Incentives Program.
1. Annual or long-term agreements between 3 and 10 years with owners of private forestlands to provide them with cost-sharing assistance for planting trees or improving existing timberlands to encourage afforestation of suitable open lands and the afforestation of cutover lands.
 2. Cost-sharing may not exceed 65% and the ???
 3. Eligible areas selected by state forester.
- G. Special Areas Conservation Program.
1. Established by Agriculture and Food Act of 1981.
 2. Program to conserve soil, water, and other natural resources in “designated special areas” by providing additional technical and financial assistance to agricultural landowners and operators or groups of them.
 3. Areas with severe and chronic erosion or water management problems.
 4. Landowners and occupiers must have a conservation plan approved by the county before they are eligible to enter into cost-sharing agreement.
- H. Food Security Act of 1985 Financial Incentive Programs.
1. Conservation Acreage Reserve Program.
 - a. Take highly erodible or fragile cropland out of production for 10-year period.
 - b. Farmers’ rent paid.
 2. Conservation Servitude Program.
 - a. Must be highly erodible wetlands or marginal cropland.
 - b. Grant 50-year servitude for conservation, recreational, and wildlife purpose for canceling outstanding debts owed to Farmers Home Administration for loans.
 3. Multiyear Set-Aside Acreage Contracts.
 - a. Part of farm commodity program.
 - b. Vegetative cover to mountain conservation.
- I. Food Security Act of 1995 Compliance Programs.
1. Highly Erodible Land Conservation Program (Sodbuster).
 2. Wetland Conservation Program (Swampbuster).

V. EFFECTIVENESS OF FEDERAL PROGRAMS

- A. Despite financial incentives, cropland losses from erosion have been increasing since 1970s.
- B. Criticized programs for:
 - 1. Enhanced production rather than erosion control.
 - 2. Failure to direct assistance to areas having most critical erosion problems.
 - 3. Distribution of assistance despite concentration of erosion problems.
- C. Installing and maintaining soil and water conservation practices is costly despite receiving federal cost-sharing incentives.

VI. STATE PROGRAMS

- A. Some states have cost-sharing programs.
- B. Some states have income tax and property tax incentive programs.
- C. All states have laws to perform soil conservation activities.
- D. Some states have laws granting counties permission if they desire to adopt soil erosion control regulations.
- E. Some states establish soil erosion control standards or criteria and require counties to adopt regulations or enforce the state's standards or criteria.
- F. Regulations may be enacted under the general police powers of any sovereign government to promote the general welfare, health, and safety of its citizens.

VII. COUNTY OR LOCAL PROGRAMS

- A. Soil erosion control measures that counties are empowered to perform under state law.
 - 1. Conduct investigations and research relating to character of soil erosion, propose preventive and control measures needed, and publish and disseminate the results.
 - 2. Conduct demonstration projects.
 - 3. Carry out prevention and control measures on any government controllable land.
 - 4. Furnish or provide financial aid to landowners or occupiers.
 - 5. Make equipment, fertilizer, and seed available to landowners.
 - 6. Construct, improve, and maintain structures.
 - 7. Develop comprehensive plans for conservation of soil resources.
- B. Permissive regulatory power.
 - 1. Voluntary approach to soil erosion control.
 - 2. Regulations may be adopted only with the approval of the required number of voters.
 - 3. Practices covered in regulations:
 - a. Carry out necessary engineering operations.
 - b. Observance of particular methods of cultivation.
 - c. Specification of cropping program and tillage practices.
 - d. Requirement to retire highly erodible land.
 - 4. Enforcement powers.
 - a. Require the landowner or occupier to perform the work.
 - b. If not, county performs the work and charges the landowner or occupier.
- C. Mandatory regulatory power.
 - 1. Controls are in three categories:
 - a. Counties are required to adopt regulations and have them approved by state.
 - b. State is required to prepare statewide erosion and sediment control programs and guidelines and counties are required to adopt standards and regulations based on them.

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- c. State adopts land use regulations that are enforced by state agencies and local agencies.

VIII. PREVENTION OF LAND DEGRADATION LAWS IN ALBANIA

- A. Law on the Land, No. 7501, dated 19 July 1991.
 - 1. Article 11. Owners and users to preserve and increase productive capacity of land and build structures for its protection.
 - 2. Article 12. Protect irrigation projects and equipment.
 - 3. Article 15. Used for agricultural purpose within one year or loss of possession.
 - 4. Article 17. Refuse and waters with chemical content must be channeled and gathered in special place.
 - 5. Article 21. Local governments may prohibit occupation or ill use of land in violation of this law.
- B. Other laws.