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Reforms in Albanian Agriculture

Assessing a Sector in Transition



Severin Kodderitzsch

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ABBREVIATIONS AND ACRONYMS

ADF	- Albanian Development Fund
AFADA	- Albanian Fertilizer and Agri-Input Dealers Association
CPI	- Consumer Price Index
DVS	- Directorate of Veterinary Services
EFTA	- European Free Trade Association
EU	- European Union
FWUA	- Federation of Water Users Associations
GDP	- Gross Domestic Product
GDSR	- General Directorate of State Reserves
GOA	- Government of Albania
IFDC	- International Fertilizer Development Center
IMF	- International Monetary Fund
IPRS	- Immovable Property Registration System
ISTA	- International Seed Testing Authority
MAF	- Ministry of Agriculture and Food
NAREC	- National Agricultural Research and Extension Center
RBA	- River Basin Inter-Ministerial Authorities
RCB	- Rural Commercial Bank
SARA	- Support for Agriculture Restructuring in Albania Project
SSA	- State Seed Authority
UNDP	- United Nations Development Programme
UPOV	- International Union for the Protection of New Plant Varieties
USAID	- United States Agency for International Development
VCF	- Village Credit Fund
WTO	- World Trade Organization
WUA	- Water User Association

CURRENCY EQUIVALENTS

(January 1998)

Currency Unit	=	Lek
1 Lek	=	US \$0.07
US \$1	=	145 Lek (October 1998)

WEIGHTS AND MEASURES

Metric System

EXECUTIVE SUMMARY

i. Albania started its transition to a market economy in 1991. The early transition period was exceptionally disorderly, and resulted in dramatic economic shifts. In 1992, just one year into the transition, economic output had contracted to half of its 1989 level, inflation was in triple digits, and the country was at the verge of famine. Yet from 1993 to 1995 there was near double digit growth and single digit inflation; macro-economic stabilization reflecting the broad dismantling of controls; and early privatization in agriculture, retail trade, and small- and medium-sized enterprises. This progress was uneven across sectors, however. Banking sector reforms, and improvements in institutional and administrative capacities lagged behind. In 1996 indications of impending economic and political crises became more apparent. Financial pyramid schemes were allowed to flourish, and growth, while rapid, was supported by activities associated with the pyramid schemes. Election-driven loose fiscal deficits allowed inflation to increase three-fold. No progress was made in structural reforms. In early 1997, Albania plunged into deep economic crisis. Rioting triggered by the collapse of the pyramid schemes intensified to near civil war, with government losing control over large parts of the country. Economic activities came to a standstill. The lek depreciated by 40% within few months, remittances and donor aid practically ceased, and trade slowed dramatically. Since the election of a new government in mid-1997, however, Albania's economy is once again on a path of recovery and reform.

ii. Albania's agriculture, which provides a livelihood for the majority of the population (around 60% out of a population of around 3.5 million) has likewise experienced dramatic changes since 1991, and further change is likely to mark sectoral development for years to come. Albania is one of the few economies in transition to have experienced positive agriculture growth early in the reform process, as opposed to most Central and Eastern European countries which saw their agriculture sectors contract over several years. By 1993 the sector had recovered from its massive decline, and by 1995 agricultural GDP was 15% above 1989 levels. However, since 1995 output has stagnated and the early high growth rates have not been repeated. Important progress has been made in terms of land reform, the privatization of former collective farms and agro-processing enterprises, and in establishing a largely distortion-free incentive framework. As a result, private sector involvement in production, processing, marketing, and trade has increased considerably and continues to do so. The sector has been the main contributor to GDP over the past years (ranging between 55% and 65%), and has increased both output and total factor productivity. Against the backdrop of recent unrest in Albania the relative importance of agriculture is likely to increase markedly, in terms of its capacity to absorb shocks in the overall economy, and as an income and employment safety net. Preliminary estimates indicate that agriculture production grew by 1% in 1997, whereas overall economic activity contracted by around 7%. In spite of past and future potential output increases, it is unlikely that that Albania will become self-sufficient in major agriculture commodities, such as wheat, oilseeds and sugar.

iii. Farm production is now carried out by approximately 470,000 very small family farms (average 1.1 hectares), fragmented into several plots, as opposed to the 550 state farms and cooperatives before the transition. Major shifts in production patterns have taken place since the radical changes earlier in the decade. All producer and consumer prices have been liberalized, and receive only moderate protection. There has been a massive increase in forage based livestock production which more than compensated for the drop in crop and fruit production. Cereal needs are now met by a combination of domestic production and private sector imports. The private sector now dominates production, agro-processing, marketing, and trade.

iv. Albania has carried out major reforms across a broad range of agricultural production and marketing, which, though in some instances not fully completed, have been remarkable by the standards of most economies in transition in Central and Eastern Europe. A radical land distribution program, coupled with a rapid privatization of previously collective farm assets early in the reform process, fundamentally changed the structure of the sector. Subsequent early privatization of most public marketing and processing enterprises continued the transfer of assets to the private sector which today dominates the agriculture sector. Freeing the trade regime and product prices was done early in the reform process (with the notable exception of wheat, for which prices were liberalized only in mid-1996). Policy reforms have been supported through an overall well-designed agriculture public investment program. The absence of a functioning financial sector and associated rural financial services is perhaps one of the major deficiencies in the reform program at the present time.

v. Impressive as they are, these achievements have yet to significantly alter the reality of Albanian agriculture and rural life. At US \$650 (1997) GDP per capita, Albania is the poorest country in Europe. Production systems remain primitive, yields are low, many farms are too small and fragmented to be viable, physical infrastructure is poor, and private sector activity has yet to fully fill the vacuum left by defunct state processing and marketing agencies. Moreover, there has been little shift in the rural population away from agriculture, and a third of this rural population still lives in deep poverty. Of equal concern is the severe environmental degradation caused by pre-reform economic policies, which have continued to accelerate. Thus, while impressive, the changes wrought to date are only the beginning of the transformation process.

vi. In order to reduce rural poverty, the objective of future public policy and investment in the agriculture and rural sector of Albania would be to support agriculture productivity and growth while ensuring the sustainable use of natural resources. Agriculture growth would contribute to increasing the income of the rural and farming communities and would also improve the country's trade balance, mainly by reducing the need for imports, but also through increased exports of niche products.

vii. In defining public policies and investments in support of agriculture growth and productivity increases, policy makers will need to recognize opportunities as well as constraints facing the sector. Major opportunities are the result of: (a) favorable geographic location relative to the European Union (through Italy and Greece), the Balkans, Turkey and the Middle East; (b) a low wage level; (c) a literate and relatively well educated rural population; and (d) resilient private sector initiative in rural areas. Major long-term constraints which need to be recognized

are: (a) limited and fragmented agriculture resource base; (b) extremely limited access to capital and hence to capital intensive technology; (c) limited entry to export markets; and (d) scarce institutional capacity and resources. Albania is also unlikely to become self-sufficient in major agriculture commodities, in particular wheat, oilseeds, and sugar.

viii. Albanian agriculture must be integrated into the regional and international economies. Integration has two dimensions, one external and one internal. The external dimension implies an open trade regime, and a welcoming attitude to foreign investment in agriculture, agro-processing and rural development (for instance, in tourism). Foreign investors would potentially provide Albania with access to technology and links to export markets, which otherwise would not materialize. Integration also has an internal dimension in opening rural areas to the economy at large, by providing access through rural roads and communications, and improving public education and health services in rural areas.

ix. Opening Albania's agriculture to the world and integrating Albania's many remote rural areas within the Albanian economy, will require public efforts in: (a) the maintenance of a stable incentive framework; (b) support to agriculture productivity; (c) institutional development; (d) rural development; and (e) management of natural resources. The task of supporting rural and agriculture development will require a coordinated effort of public institutions going well beyond the limited responsibilities of the Ministry of Agriculture and Food. Ultimately the future of agriculture and rural areas in Albania will be determined by private sector initiatives and activities. By focusing on the five above mentioned areas, Government would support development by providing a conducive framework within which private initiative could prosper. Suggested key areas for policy actions and public investments are summarized in the **Matrix** attached at the end of this section.

x. Within the framework of an open economy, and a limited but important role for public support to agriculture and rural development, Albania should aim at developing an agricultural sector based on high value commodities, including selected fruits, vegetables, niche produces and grassland-based livestock products. Utilizing the climatic endowment and the cheap labor force available for these more labor-intensive products, Albanian agriculture could be profitable. On this basis and in that direction, the country could become a significant exporter of these products both to the EU but also to Central and Eastern Europe. By increasing high value production Albania may well become a net agricultural exporter, though it will always need to import significant amounts of grains, oilseed and sugar.

xi. In pursuing a strategy in support of high value, labor intensive exportable agricultural products, the development of a competitive agro-processing industry is essential - without this further growth potential for agriculture will remain limited. Upgrading the country's agro-processing capabilities will be dependant – among other things - on a safe, uncorrupt, and stable business environment; access to long term finance; and improved transport and communication infrastructure in rural areas.

xii. Maintenance of an Adequate Incentive Framework. Key public sector responsibilities include: (a) providing a stable macro-economic framework in which agriculture and the rural

sector as a whole can develop; (b) financial sector reform to close the rural credit gap; (c) maintaining the largely liberal trade and price policies established over the past years; (d) accession to the World Trade Organization (WTO) (this will be a key element in consolidating an open trade regime); (e) finishing the privatization agenda for the remaining large-scale agro-processing enterprise (which will allow the government (GOA) to disengage from activities in which it has no comparative advantage); (f) phasing out the General Directorate of State Reserves (GDSR); and (g) revising GOA's approach to food aid in the northeastern districts.

xiii. Support to Agriculture Productivity and Competitiveness. Agriculture productivity (and production), can be increased considerably. Productivity is currently hampered by both structural impediments and short-term constraints. The former includes the need for developing a functioning land market and rebuilding a viable rural finance system. The latter consists of constraints on input supplies (including water and seeds), animal health, and technology transfer. While private sector participation in all these areas will be essential, there is also need for policy and regulatory changes as well as for public investment in addressing these issues. The following areas require particular policy and public investments:

- a) Irrigation and drainage policy: must assist in continued rehabilitation of drainage and irrigation infrastructure where economically justified, with a focus on resolving institutional issues related to Water Enterprises and the establishment of Water User Associations.
- b) Farm inputs: the development of the seed sector through membership in international regulatory bodies, review of the national seed list (as well as seed testing, registration and certification legislation) to allow foreign plant genetic materials to be traded in Albania, and increased private participation in seed multiplication, including the privatization of the public seed enterprise, will be on key element of obtaining productivity increases.
- c) Agriculture support services: should focus on providing essential services which have a considerable public goods element and include: (i) strengthening of veterinary services, in particular with regard to contagious disease control; (ii) supporting agriculture marketing through the establishment of food safety standards and control, establishment of local market infrastructure and commodity associations; and (iii) improving technology transfer.

xiv. Institutional Development will require long-term efforts in land market development; support to marketing and agro-processing; and improvements in rural finance. These include:

- a) Land market development. Addressing legal and implementation problems associated with land registration, land transactions, land fragmentation, and consolidation through continued support in the on-going Land Action Program.
- b) Marketing and Agro-processing. Support the establishment of professional associations to enhance the dialogue between public and private sector agents, the development of local assembly markets through modest public investments, as well as the development of food safety standards.

- c) Rural Finance. Reform should emphasize support for the institutional evolution of the Albanian Development Fund's (ADF) rural micro-credit approach towards formal savings and credit union-based finance institutions. Reform efforts should also address collateral enforcement issues that are impeding the nascent private banking sector from providing working capital and investment credits in rural areas. In the medium-term the possibility of establishing the regulatory framework for warehouse receipt financing should also be explored as could retail banking services pilot projects in rural centers.
- xiii. Support to Rural Development. Successful rural growth is broadly based and widely shared. Especially in Albania, where farm size is small, development of non-farm enterprises is essential to increasing rural incomes, particularly those of the poorest, who typically have the least agricultural land. Continuing interventions are therefore needed to enable non-farm growth and target rural poverty alleviation, as well as to improve rural well-being and promote the active participation of local communities in the rural development process. Simultaneously, rural and regional development in Albania will require considerable investments in developing transport and communication infrastructure.
- xiv. Improved Management of Natural Resources. In order to safeguard the sustainability of agriculture production, GOA must, among other things: (a) develop and implement policies aimed at improved watershed management by facilitating the commune/village level management of mountain pastures and forests; (b) ensure the sustainable long-term use of water resources between competing uses; and (c) develop and implement policies of marine resource monitoring and surveillance.

The Albanian Agriculture Policy and Program Matrix follows on the next page.

Albanian Agriculture Policy and Program Matrix

POLICY AREA	OBJECTIVES	ISSUES	POLICY ACTIONS	PUBLIC INVESTMENTS
A. Maintenance of Appropriate Incentive Framework for Agriculture				
(1) Macroeconomic framework	Maintenance of stable macroeconomic environment (inflation, exchange rate, interest rates)	Macroeconomic stability is key incentive for agriculture production; after collapse of macroeconomic stability in 1997, this framework remains fragile	Continued implementation of restrictive fiscal policies aiming at reducing primary fiscal deficit (including limited agriculture sector budget); and quasi-fiscal deficit (banking sector reform; utilities, including power, water enterprise and state reserves);	
(2) Agriculture price and trade policies	Maintain and improve current largely liberal agriculture price and trade regime	After major agriculture trade (1993 – 1997) and price (1993, 1996) policy reform, indications of increased protectionism during 1998 (MAF: Agriculture Strategy; introduction of seasonal tariffs for selected agriculture products)	<ul style="list-style-type: none"> • Continued maintenance of past agriculture price and trade policy achievements • Removal of all seasonal tariffs on agriculture products (horticultural products) • Increase efforts on WTO accession process • Continued negotiation efforts on preferential access for agriculture products to the EU 	
(3) National and Regional Food Security Policies	Assure cost-efficient access year-round of population to food	(a) National strategic reserves through GDSR ineffective and costly (b) Current Winter Cereal Distribution Program to NE districts ineffective and costly	<ul style="list-style-type: none"> • Reform GDSR: • in line with IMF agreement, reduce and phase out strategic food reserves; introduce GDSR operations as transparent budget item • Introduce reporting system monitoring private sector grain inventories (b) Substitute physical delivery of regional food aid to targeted cash transfers in advance of winter season, through the Social Assistance Program 	

POLICY AREA	OBJECTIVES	ISSUES	POLICY ACTIONS	PUBLIC INVESTMENTS
B. Support to Agriculture Productivity and Competitiveness				
(1) Irrigation	Rehabilitate economically viable irrigation and drainage infrastructure and operate efficiently through decentralized management	<ul style="list-style-type: none"> Deterioration of irrigation and drainage infrastructure during transition with resulting in reduced productivity and increased flooding incidence Management of irrigation schemes requires improvements 	<ul style="list-style-type: none"> Continued promotion and support of Water Users Associations and their newly established Federation Restructuring of 36 public water enterprises 	<ul style="list-style-type: none"> Continued rehabilitation efforts of priority irrigation and drainage systems
(2) Farm Inputs	Seeds and seedlings: ensure farmer access to quality seeds	Seed and seedlings: no or little genetically improved seeds and seedlings available in Albania	<ul style="list-style-type: none"> Seed and seedlings: revise seed legislation with the aim to adopt EU seeds catalogue; seek membership of UPOV and ISTA privatize State Enterprise for Seeds commercialize seed multiplication activities carried out by public research institutions 	<ul style="list-style-type: none"> Seed and seedlings: provide seed regulatory body with means to carry out voluntary testing and seed certification as well as to ensure phytosanitary quality of plant genetic material; pilot approaches of farmer based and commercial seed multiplication
(3) Veterinary Services	Ensure epizootic disease control, quarantine services and drug control; and adequate provision of curative services	Privatization of veterinary services and weak institutional capacity of Dept. of Vet. Services results in limited ability to control epizootic diseases	<ul style="list-style-type: none"> Explore scope for subcontracting of vaccination of meat inspection to private providers Increased linkages between veterinary services and agriculture extension 	<ul style="list-style-type: none"> Strengthen public veterinary monitoring capacity, laboratory and diagnostic facilities Rehabilitate and strengthen border quarantine stations Pilot support to private veterinarians to improve access to basic equipment and drugs on cost recovery basis
(4) Agriculture Extension	Provide relevant and timely technical, management and marketing information to farming community	<ul style="list-style-type: none"> Total of 1,400 public sector staff associated with extension is costly and largely ineffective Extension almost exclusively provided by private sector Large differences in information needs within farming community 	<ul style="list-style-type: none"> Restructure public extension services aiming to reduce fiscal costs 	<ul style="list-style-type: none"> Provide restructured public extension services with adequate means of operation (offices, transport, training etc). Develop increased use of mass media Increase public support of pilot private advisory services (through AFADA, Water Users Associations etc)

POLICY AREA	OBJECTIVES	ISSUES	POLICY ACTIONS	PUBLIC INVESTMENTS
C. Institutional Development				
(1) Land Market Development	Establish a functioning land market that will increase mobility of land and labor	Subsequent to the land distribution of 1992 – 93: (a) finalize first-time land registration process (b) facilitate subsequent land transactions	(a) Approve extension of Land Action Program 1998 – 2001 <ul style="list-style-type: none"> • First-time land registration: • Issue regulations allow for special first registration • Issue regulations allowing for registration of properties without “tapi” (b) Facilitate land transactions: <ul style="list-style-type: none"> • Issue Public Property Law • Issue regulations to allow private/communal lease of state-owned forests and pastures • Merge Cadastre and Registration Offices into “Land Offices” 	Establish and fully equip all District Land Registration Offices (including appointment of all District Registrars) Finalize land surveying and registration process in all cadastral unit by 2001 (including forest and pasture lands).
(2) Agriculture Marketing	Support the establishment of efficient agriculture marketing and competitive agroprocessing	<ul style="list-style-type: none"> • Poor marketing infrastructure (including roads and means of communication) • Small marketed agriculture surplus • Limited access to credit • Public ownership in a limited number of medium sized agroprocessing enterprises 	Develop appropriate food safety regulations and provide advise on export food quality requirements <ul style="list-style-type: none"> • Government to fully privatize all remaining agroprocessing enterprises 	Support establishment and initial activities of commodities associations Establish marketing infrastructure at municipal level (assembly markets, wholesale markets) Promote development of agriculture niche markets through studies, TA and training. Rehabilitate rural roads network
(3) Rural Financial Services	Provide broad scope of private-sector based and sustainable financial services to agriculture sector and rural entrepreneurs	Systemic weakness in overall financial sector has left rural areas without provision of essential financial services. Experience with micro-credit through ADF promising but not in position to fill rural credit gap	Implementation of financial sector reform (also privatize RCB/NCB) will be essential for development of future rural financial services. Institutional transition of ADF's micro-credit activities into formal saving and credit associations.	As formal Saving and Credit Associations develop, support to new institution through line of credit, training and TA essential. Piloting of rural financial retail services in collaboration with participating private banks.

POLICY AREA	OBJECTIVES	ISSUES	POLICY ACTIONS	PUBLIC INVESTMENTS
D. Rural Development				
(1) Decentralization	Achieve efficient provision of rural services in human resources (education, health) and infrastructure (roads, public sanitation)	Over-emphasis on central government responsibility for provision of rural services		Continued support to ADF-type initiatives aiming at local participation in rural development
(2) Rural Infrastructure / Roads	Improve access of rural areas to major regional centers	Reasonably dense, yet poorly maintained rural road network		Rehabilitate tertiary and secondary level rural roads while ensuring mechanism for future maintenance
E. Natural Resource Management				
(1) Forest management	Sustainable use of Albania's forestry resources	<ul style="list-style-type: none"> • Considerable degradation of forest resources due to illegal harvesting and forest fires • Weak regulatory institutions • Increased incidence of flooding in lowland areas due to poor watershed management 		<p>Re-afforestation of forest stands, and introduction of improved forest management practices</p> <p>Strengthening of General Directorate of Forest and Pastures; development and application of sustainable forest management plans</p> <p>Piloting of watershed management approaches upstream of flood affected areas together with drainage rehabilitation in lowland</p>
(2) Pasture management	Sustainable use of Albania's pasture resources	Overgrazing of pastures associated with strong growth in small ruminant population	Issuing of regulations allowing for long term private sector leasing of pastures	Piloting communal pasture management approaches
(3) Marine and aquaculture resource management	Sustainable use of marine and aquaculture resources	Absence of a sustainable fisheries concept defining catch potential and policy Inappropriate catch methods in conjunction with under use of fisheries resources	Development of National Marine Resource Master Plan	Piloting of new, sustainable fishing methods in conjunction with support to development of fishermen associations

1. AGRICULTURE SECTOR FRAMEWORK

1. Albania started its transition to a market economy in 1991. The early transition period was exceptionally disorderly, and resulted in dramatic economic shifts. In 1992, just one year into the transition, economic output had contracted to half of its 1989 level, inflation was in triple digits, and the country was at the verge of famine. Yet from 1993 to 1995 there was near double digit growth and single digit inflation together with macro-economic stabilization reflecting the broad dismantling of controls, and early privatization in agriculture, retail trade, and small- and medium-sized enterprises. This progress was uneven across sectors, however. Banking sector reforms, and implementation of institutional and administrative capacities lagged behind. In 1996 indications of impending economic and political crises became more apparent. Financial pyramid schemes were allowed to flourish, and growth, while rapid, was supported by activities associated with the pyramid schemes. Election-driven loose fiscal deficits allowed inflation to increase three-fold. No progress was made in structural reforms. In early 1997, Albania plunged into deep economic crisis. Rioting triggered by the collapse of the pyramid schemes intensified to near civil war, with government losing control over large parts of the country. Economic activities came to a standstill. The lek depreciated by 40% within few months, remittances and donor aid practically ceased, and trade slowed dramatically. Since the election of a new government in mid-1997 however, Albania's economy is once again on a path of recovery and reform.

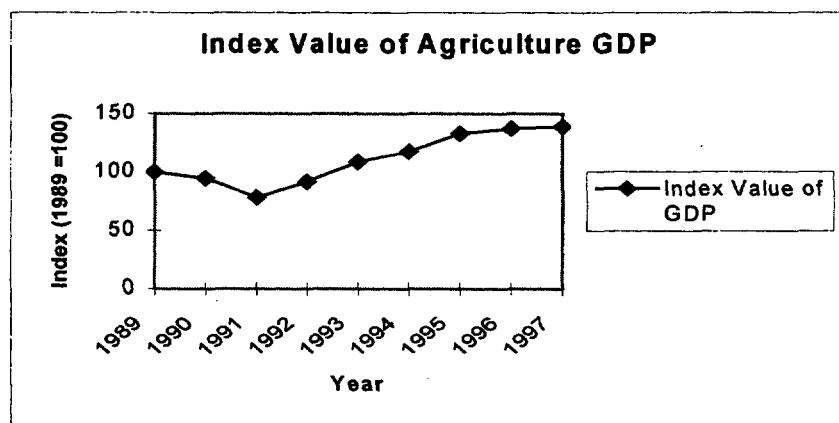
2. Albania's agriculture, which provides a livelihood for the majority of the population (around 60% out of a population of roughly 3.5 million) has likewise experienced dramatic changes since 1991, and further change is likely to mark sectoral development for years to come. Albania is one of the few economies in transition to have experienced positive agriculture growth early in the reform process, as most Central and Eastern European countries saw their agriculture sectors contract for several years. By 1993 the sector had recovered from its massive decline, and by 1995 agricultural GDP was 15% above 1989 levels. However, since 1995 output has stagnated and the early high growth rates have slowed. Important progress has been made in terms of land reform, the privatization of former collective farms and agro-processing enterprises, and in establishing a largely distortion-free incentive framework. As a result, private sector involvement in production, processing, marketing, and trade has increased considerably, and continues to do so. The sector has been the main contributor to GDP over the past years (ranging between 55% and 65%), and has increased both output and total factor productivity (**Table 1** and **Figure 1**). Against the backdrop of recent unrest in Albania the relative importance of agriculture is likely to increase markedly, in terms of its capacity to absorb shocks in the overall economy, and as an income and employment safety net. Preliminary estimates indicate that agriculture production grew by 1% in 1997, whereas overall economic activity contracted by around 7%. In spite of past and future potential output increases, it is unlikely that Albania will become self-sufficient in major agriculture commodities, such as wheat, oilseeds and sugar.

Table 1: Economy and Agricultural Growth Rates

Year	1991	1992	1993	1994	1995	1996	1997
Total Economy	-28.00%	-7.20%	9.60%	9.40%	8.90%	9.10%	-7.00%
Agriculture	-17.40%	18.50%	10.40%	8.30%	13.00%	8.10%	1.00%

Source: Albanian Ministry of Agriculture and Food

3. Productivity also rose as this increase in output was achieved, despite a marked reduction in farm input use which continues to the present. Thus, although partial measures of productivity, such as yield per hectare or yield per animal show little improvement, total factor productivity (aggregate output divided by aggregate inputs) rose by 35% from 1989 to 1995 (15% output increase minus 20% input decrease). This occurred despite a significant depreciation of capital stock due to the abandonment of buildings and facilities and a very low level of new investment.

Figure 1: Index Value of Agriculture GDP

Source: Albanian Ministry of Agriculture and Food

4. Farm production is now the responsibility of approximately 470,000 very small family farms (average 1.1 hectares), fragmented into several plots, as opposed to the 550 state farms and cooperatives before the transition. Major shifts in production patterns have taken place since the radical changes earlier in the decade. All producer and consumer prices have been liberalized, and receive only moderate protection. There has been a massive increase in forage based livestock production which more than compensated for the drop in crop and fruit production. Cereal needs are now met by a combination of domestic production and private sector imports. The private sector now dominates production, agro-processing, marketing, and trade.

Table 2: Share of GDP by Sectors in 1996

Sector	%
Agriculture	55.40%
Industry	11.30%
Construction	9.70%
Transportation	3.20%
Other Sectors	20.30%

Source: Albanian Ministry of Agriculture and Food

5. Impressive as they are, these achievements have yet to significantly alter the reality of Albanian agriculture and rural life. At US \$650 (1997) GDP per capita, Albania is the poorest country in Europe. Production systems remain primitive, yields are low, many farms are too small and fragmented to be viable, physical infrastructure is poor, and private sector activity has yet to fully fill the vacuum left by defunct state processing and marketing agencies. Moreover, there has been little shift in the rural population away from agriculture, and a third of this rural population still lives in deep poverty. Of equal concern is the severe environmental degradation caused by pre-reform economic policies, which has now begun to accelerate. Thus, while impressive, the changes wrought to date are only the beginning of the transformation process.

A. THE CHANGING STRUCTURE OF AGRICULTURAL PRODUCTION

6. Agriculture Resource Base. Albania's agriculture resource base is very limited, with only 0.2 ha of arable land per capita (the lowest in Europe). The country's land area is 27,400 km² (out of a total area of 28,750 km²) or 2.9 million hectares. Of this area only about 25% (some 700,000 hectares) is arable land. An additional 15% or 425,000 hectares is pasture land, while another 1,050,000 hectares is forest land. The country is typically divided into three geographical zones: (a) the coastal plains with about 44% of the arable land; (b) the hilly or foothill areas with 37% of the arable land; and (c) the mountainous areas with 19% of arable land. The coastal plain is the most fertile area and regarded as having the most agricultural potential. Although about 417,000 hectares (about 60% of arable land area) is irrigated - with slightly more than half of the irrigated area (226,000) located in the coastal plains - only about 120,000 hectares or about 17 percent of arable land had operating systems in 1997.

7. Crop and Livestock Production. Albania's farmers adapted quickly to the combination of opportunities and constraints created by economic transition, dramatically transforming the structure of agricultural production. The early privatization and re-distribution of land, livestock and machinery in 1991-92 gave them the resources to operate as private sector enterprises, and the subsequent liberalization of producer prices provided a new incentive structure for allocating these resources. However farmers' choices as to how to use these resources have been severely constrained by the small, fragmented nature of their farms (an average of 1.1 hectares in 4-5 plots), the breakdown of traditional state processing and marketing systems, and a severe shortage of credit. Faced with these conditions most farmers have adopted a subsistence approach to farming, with the aim of producing enough wheat (the staple crop) for their own consumption and relying on livestock and/or vegetables to generate cash income.

8. Crop and fruit output has fallen in response to these changes. Lower wheat production is the major change, particularly in the lower fertility hill and mountain areas where farmers were previously forced to grow wheat despite low yields and profitability. Albania now produces only 40%-50% of its wheat requirements (some 300,000 tons produced out of around 700,000 tons consumed), where once it was largely self-sufficient. The production of industrial crops has virtually ceased due to the collapse of state processing and marketing agencies. Fruit production has also fallen due to both the vandalizing and abandonment of former state-owned orchards, vineyards, and plantations; the slow privatization and redistribution of this land, and the difficulty in re-establishing tree crops when credit is scarce. Production of potatoes and beans -

labor intensive crops that exploit specific agro-climatic zones - has remained constant. The only crops to find an increased role in the new structure of production are maize and alfalfa grown for livestock feed, and vegetable production which has grown quickly in lowland areas close to urban markets. Despite this overall decline, crop and fruit production still accounts for half of total agricultural output and wheat production continues to dominate land use.

9. A massive increase in forage-based livestock production has more than compensated for lower crop production. Moreover, the high proportion of young breeding stock in national cattle, sheep, and goat herds suggests that this increase will continue in the medium-term. Livestock has largely replaced crop production in the lower fertility hill and mountain areas that account for over 55% of agricultural land, where they have a clear comparative advantage. Other factors associated with this increase include the lower capital requirements of livestock production at a time when credit is scarce, the marketing advantages of livestock versus crop products (i.e. low bulk-high value and easy to transport and store on the hoof) when markets are weak, and a strong and growing demand for livestock products. Milk production has been the principal source of growth, increasing by more than 130% due to a combination of increased cow numbers and higher milk yields. Not all components of the livestock sector have grown however, with capital intensive production of pigs and poultry plummeting due to slow privatization and the collapse of the domestic feed milling industry. Nevertheless, the overall value of livestock production has increased by 80%-90% in five years. It now accounts for half of total agricultural output, and dairy production has become the dominant enterprise in Albanian agriculture. Yet this increase has not been without cost, as a 66% increase in the number of small ruminants has inevitably led to overgrazing and degradation of mountain pastures.

10. These changes in the nature and structure of production have also resulted in a huge reduction in the marketed surplus of agricultural products and a greater dependence on imported agricultural products, which now account for about 24% of the total value of imports. For instance, less than 20% of domestically produced wheat is now marketed versus 50% - 55% prior to reform, and flour now accounts for around 8% of the total value of all imports. Urban consumers now rely heavily on imports for most of their flour, sugar, vegetable oils and meat products. Substantial increases in production are needed in the future to raise the marketed surplus and improve Albania's trade balance.

11. Agro-processing collapsed in the early reform period but has begun to increase recently, especially after privatization. Some 90% of all small and medium agro-processing and agriculture marketing enterprises (some 290 enterprises) were fully privatized by the end of 1997, while the remaining 10% are at various stages of the privatization process. The eight remaining large publicly owned enterprises consist of a beer factory, a dairy plant, a bakery, and a flourmill, all in Tirana; a cigarette factory and a bottling plant in Durres; a sugar plant in Maliq; and a cigarette manufacturer in Skodra. GOA plans to privatize these eight large processing and marketing enterprises during 1998. By doing so, GOA will disengage from activities that are truly private sector in nature, and enterprises that will attract strategic investors, are likely to increase product quality considerably.

Table 3: Indicators of the Changing Structures of Agricultural Production

Item	Average for 1985-89	1996	% Change
FARM STRUCTURE			
Number of farms	550 ^a	470,000	NA
Average farm size (ha)	1060 ^a	1.1	NA
LAND USE ('000 ha)			
Wheat	198	125	-37%
Maize	75	65	-13%
Beans	22	24	+9%
Potatoes	13	12	-8%
Vegetables	23	36	+57%
Tobacco	29	7	-76%
Oilseeds	35	1	-97%
Sugar beet	8	1	-88%
Cotton	14	0	-100%
LIVESTOCK NUMBERS ('000)			
Cattle	655	810	+25%
of which Dairy cows	263	480	+83
Sheep	1,443	1,960	+36%
Goats	1,000	1,300	+30%
Pigs	200	95	-53%
Poultry	4,867	3900	-20%
VALUE of PRODUCTION (m lek)			
Constant 1994 prices	1989	1995	
Crops	41,801	41,465	-1%
Fruit	7,511	6,086	-19%
Livestock Products	22,249	42,268	+90%
TOTAL	71,562	89,820	+26%

* as of 1990

Source: Albanian Ministry of Agriculture and Food

12. As most processing plants are small, only a small proportion of production is processed, and the plants' impact on marketing is highly localized. Expansion is constrained by the outdated technology in existing plants, lack of capital for new facilities, lack of technical and managerial expertise, high costs of assembly when farms are small and roads are poor, and poor knowledge of modern sales and distribution systems. While further development of agro-processing will increase the range of marketing outlets for farm products, as well as the possibilities for product transformation and adding value, it should be driven by private rather than public sector investment. The government is already providing indirect support to agro-processing through import protection.

13. The future of an internationally competitive agro-processing industry will be key for agriculture and rural development. Without such an industry, the agricultural growth will be limited to domestic demand, and constrained to the transport of fresh produce. In the absence of such an agro-processing industry, Albania's comparative advantage in labor intensive, high value products will remain untapped. Development of an agro-processing factor will be a function of several factors, among which a safe, uncorrupt, and stable business environment, access to long term funding, and ease of transport and communication infrastructure will be of overriding importance.

B. FARM STRUCTURE AND INCOME¹

14. Albanian farming is predominantly subsistence level, aiming to meet family needs. As a result, only around 18% of crop products, 30% of livestock products and 2% of on-farm processed products reach the market.

15. Average rural household income (including both cash, as well as non-cash income) amounted to roughly US \$2,700 in 1995 (an average rural household consists of 4.9 persons). This income varies between US \$1,850 (Kukes) and US \$4,450 (Vlora). A close correlation between rural household income and areas of high agriculture potential, ease of migration, and vicinity to urban centers seems to hold. Lower income prefectures comprise Kukes, Lezha, Elbasan, Berat, and Korca; while the higher rural incomes can be found in Vlora, Fier, and Gjirokaster.

16. Non-cash income accounts for some 52%, and cash income (some US \$1,300) for some 48% of rural incomes. While rural income is predominantly generated by farming activities (67%), net income from off-farm activities accounts for around 1/3 of rural income and generates by far the most (around 69%) of cash income. Livestock, crop, and sales of on-farm processed products account for only 20%, 10%, and 1% of cash income, respectively. Remittances – estimated at around \$500 per rural household on average -- account for the bulk of off-farm cash income (56%), while self-employment (16%), rents (15%), and transfers from institutions (such as the social welfare program at 12%) are other sources of non-farm cash income. Cash income from off-farm employment, however, remains negligible.

17. On-farm processing, mostly for home consumption, with only a small fraction sold, consists primarily of bread production and milk processing. Some 85% of farmers produce bread on their farm and some 80% process milk.

18. Rural household income is largely consumed (70%); some 19% (US \$510) is invested, and around 11% is saved. Out of the amounts invested, a major share (47%) goes to building new houses, and increasing the livestock herd (40%). Only some 13% of investments, on average some US \$66 per rural household, are made in stables/greenhouses, machinery and orchards/vineyards. The 1995 Farm Survey indicates that credit (from all sources) financed only 7% of total investments in rural areas, implying that the overriding sources of investment financing comes from rural household incomes –in particular remittances-- and savings.

19. This low level of agriculture investments is reflected in the composition of farm assets. Excluding land and orchards, total rural household assets are estimated at some US \$2.8 billion or US \$6,120 per rural household, on average. The bulk of these assets consist of housing (68%), livestock (14%), and household appliances (11%). Only 7% (US \$430 per household) of assets

¹ This section draws on a draft paper "Structure of Agriculture and Sources of Farm Income in Albania After the Transition" by David Kunkel and Egnjell Skreli (June 1998); this paper is based on a country-wide representative farm household survey carried out in 1995 based on a sample of 1,200 farmers carried out under the USAID-funded SARA Project.

are in farm buildings or machinery. Hence, only 3% of farmers have tractors, and only 2% have trucks.

C. POVERTY AND MIGRATION

20. Rural Poverty. Although most of Albania's population is poor in absolute terms, around 30% of rural people (i.e. 600,000 people) live in even deeper relative poverty. This poverty remains pervasive in spite of the significant economic growth achieved since 1992. The main determinants of rural poverty are small farm size, low livestock numbers, and low off-farm income from wages and public and private transfers. One fourth of the rural population is estimated to live on farms too small to provide even a modest level of subsistence from farming alone. Most of these people live in upland areas and the mountains, and have farms of less than half a hectare. The poorest tenth of rural people are unable to meet even their staple food requirements year round and must depend on subsidized wheat or flour in the winter months and public cash transfers.

21. Rural Migration. The number of rural-based Albanians working abroad in 1995 was estimated at around 170,000 and the number of families having at least one member abroad was 115,000, or 24% of all rural Albanian families². In addition, rural-urban migration is already widespread and is viewed as an appropriate change in most cases. (The exceptions are those high potential agriculture areas near Greece which currently lie idle due to the attraction of higher incomes across the border). It offers a means to raise the incomes of both the people who leave, and those who remain. Observation and anecdotal evidence suggest that this is happening to some extent in that out-migration is strongest in the poorest, most isolated mountain areas, and that a large proportion of this out-migration is descending on Tirana where the informal economy is very active.

22. The principal constraint to rural-urban migration is the capacity of the urban economy to create employment and provide housing and social services. Hence the current public investment emphasis on improving urban infrastructure is very much to the advantage of the agriculture sector, and may generate as much or more immediate benefit as direct investment in the agriculture sector itself. However a broader urban investment program which embraces more of the other main cities, would provide the basis for more balanced regional growth.

23. Rural-urban migration will also provide greater incentives for the sale or leasing of rural land, and so the opportunity to consolidate and enlarge farm holdings. This in turn will provide a more suitable resource base for the cost-effective use of modern technology, and the adoption of more profitable and productive farm-management systems. Faster completion of the land reform process will facilitate this process.

24. Gradual reduction of the rural population and the rationalization of land use will allow farmers to respond more effectively to the opportunities created by the liberalization of agricultural markets and prices. Change will take the form of further specialization and

² 1995 Farm Survey, Kunkel et al. (1998)

commercialization of agriculture associated with local agro-climatic conditions, which should, in turn, encourage the growth of complementary agro-processing enterprises. Not all farms will respond in this way, however. Many others farms will remain more subsistence-oriented, seeking to improve their livelihood through non-farm activities. A dual structure of agriculture is thus likely to emerge, with more intensive commercially oriented farms at one pole, and traditional subsistence-oriented farms at the other. While not ideal, this structure constitutes an important safety net for rural people.

D. IMPACT OF 1997 CIVIL CRISIS ON AGRICULTURE

25. The overall impact of the early 1997 crisis on the sector in terms of its effects on food security and constraints to long-term agriculture development is likely to be limited, though the crisis compounds existing difficulties in the sector. Preliminary estimates indicate that agriculture production grew by 1% in 1997, down from 8% in 1996 (while the overall economy contracted by 7%). Privately owned farms and small/medium size enterprises outside of urban centers have suffered little or no damage. Livestock, as well agriculture production on family farms, was not much affected. No severe food shortages occurred, and only some 10,000 tons of humanitarian aid was provided in the course of 1997. Input distribution (mainly fertilizer, but also other agro-chemical and seeds) increased by some 15% in the course of 1997 through the network of Albanian input dealers. Possibly the major impediment to agriculture and rural development caused by the pyramid schemes (which triggered the civil turmoil in 1997), is the lack of overall financial services in general, and for rural areas in particular.

26. MAF estimates total physical damage to the sector as a result of the crisis to be around US \$30 million. Most of the damage occurred at large, mainly Government owned enterprises, agro-processing facilities, and storage warehouses near or in the cities. Although wheat and wheat products stocks as well as other agricultural products, and agro-chemicals were looted, these goods did not leave the country but rather simply changed ownership. Therefore, these goods have been available on the market albeit at a higher price. In particular, some 70,000 tons of wheat were looted from the warehouses of the General Directorate of State Reserves which by end 1997 had some 10,000 tons remained in stock.

27. Damage to the sector can be classified into two broad categories: damage with severe impact, and damage with minor impact *in terms of impact on overall food security, and constraint to further sector development*. Based on damage estimates provided by MAF, damages with severe impact (on food security and further sectoral development) are tentatively estimated at around US \$4.4 million, while damages with minor impact amount to approximately US \$25.6 million. *Damage with potentially severe impact* was observed in the following sub-sectors: (a) Veterinary Services/Food Safety/Public Health; (b) Agriculture Infrastructure (irrigation and drainage systems); (c) Institutions (district land registration offices); (d) Food Sub-sector (bakeries and flourmills); and (e) Forestry Sub-sector (forest administrations, increase in illegal cuttings). *Damage with potentially minor impact* was observed in the following sub-sectors: (a) the Livestock Sub-sector; (b) Food Sub-sector (oil processing enterprises, milk processing, meat processing, and the tobacco industry); (c) Agricultural Institutions (national seed institute, agriculture research institute); and (d) Fisheries Sub-sector (fishing fleet).

28. With some exceptions, the overall damage to projects supported by the donor community has been minor. In most cases project implementation and disbursements continued during the crisis. While the foreign donor community left the Albania at the peak of the crisis, national staff of the Project Implementation Units safeguarded facilities and equipment, and eventually continued operations. Nevertheless some operations have suffered considerable damage. For instance, the dairy plant ("Ajka") in Tirana, the Agriculture University Tirana, and a farmer association project in Vlora all supported by the German Technical Assistance (GTZ) experienced considerable damage. Animal breeding stations supported by the French Government in Korca and the Government of the Netherlands in Valias were destroyed.

E. ACHIEVEMENTS IN AGRICULTURAL REFORM AGENDA

29. Albania has carried out major reforms across a broad range of agricultural practices, which, though in some instances not fully completed, have been remarkable by the standards of most economies in transition in Central and Eastern Europe. A radical land distribution program, coupled with a rapid privatization of previously collective farm assets early in the reform process fundamentally changed the structure of the sector. Subsequent early privatization of most public marketing and processing enterprises continued the transfer of assets to the private sector, which today dominates the agriculture sector. Freeing the trade regime and most product prices (with the notable exception of wheat, for which prices were liberalized only in mid-1996) allowed prices to become fully market determined early in the reform process. Policy reforms have been supported through an overall well-designed agriculture public investment program. The absence of a functioning financial sector and associated rural financial services is perhaps one of the major deficiencies in the reform program to date.

2. STRATEGIC MEDIUM-TERM PRIORITIES

30. In order to reduce rural poverty, the objective of future public policy and investment in the agriculture and rural sector of Albania would be to support agriculture productivity and growth while ensuring the sustainable use of natural resources. Agriculture growth would contribute to increasing the income of the rural and farming communities, and would also improve the country's trade balance, mainly by reducing the need for imports, but also through increased exports of niche products.

31. In defining public policies and investments in support of agriculture growth and productivity increases, policy makers will need to recognize opportunities, as well as the constraints, facing the sector. Major opportunities are in the form of: (a) favorable geographic location relative to the European Union (in the vicinity of Italy and Greece), the Balkans, Turkey, and the Middle East; (b) a low wage levels; (c) a literate and relatively well educated rural population; (d) resilient private sector initiative in rural areas; and (d) some very fertile soils in the lowlands. Major long-term constraints which need to be recognized are: (a) limited and fragmented agriculture resource base; (b) extremely limited access to capital and hence to capital intensive technology; (c) limited entry to export markets; and (d) scarce institutional capacity and resources. Albania is also unlikely to become self-sufficient in major agriculture commodities, particularly terms of wheat, oilseeds, and sugar.

32. The main strategic orientation suggested in this paper is to support the integration of the agriculture sector into the regional and international economies. Integration has two dimensions. First, the external one, which implies an open trade regime, and a welcoming attitude to foreign investment in agriculture, agro-processing and rural development (for instance, in tourism). Foreign investors would potentially provide Albania with access to technology and links to export markets, which otherwise would not materialize. Second, integration also has an internal dimension, aiming at opening rural areas to the economy at large, by providing access through rural roads and communications, and improving public education and health services in rural areas.

33. Opening Albania's agriculture to the world and integrating Albania's many remote rural areas within the Albanian economy, will require public efforts in: (a) the maintenance of a stable incentive framework; (b) support to agriculture productivity; (c) institutional development; (d) rural development; and (e) management of natural resources. The task of supporting rural and agriculture development will require a coordinated effort between public institutions, going well beyond the limited responsibilities of the Ministry of Agriculture and Food. Ultimately, however, the future of agriculture and rural areas in Albania will be determined by private sector initiatives and activities. By focusing on the five above mentioned areas, Government would support development by providing a framework within which private initiative could prosper.

34. Within the framework of an open economy, and a limited but important role for public support to agriculture and rural development, Albania should aim at developing an agricultural

sector based on high value commodities including selected fruits, vegetables, niche produces and grassland-based livestock products. Albania should utilize the climatic endowment and the cheap labor force available for these more labor-intensive products. On this basis, and in that direction, the country could become a significant exporter of these products both to the EU and also to Central and Eastern Europe. By increasing high value production Albania may well become a net agricultural exporter, though it will always need to import significant amounts of grains, oilseed and sugar.

35. In pursuing a strategy in support of high value exportable agricultural products, the development of a competitive agro-processing industry is essential. Without this, further growth potential for agriculture will remain limited. Upgrading the country's agro-processing capabilities will be dependant – among other things - on a safe, uncorrupt and stable business environment; access to long term finance; and improved transport and communication infrastructure in rural areas.

3. THE INCENTIVE FRAMEWORK

A. MACRO-ECONOMIC POLICIES

36. Macro-Economic Conditions. Albania established a sound macro-economic framework early in the reform process, based on strong monetary and fiscal measures to reduce inflation and the budget deficit. It also undertook trade policy liberalization, floating the exchange rate and elimination of exchange rate controls, and the liberalization of domestic prices and markets. These measures arrested an initial 35% drop in GDP from 1991 to 1992 and then facilitated strong real growth in GDP, averaging 9% per year for each of the three years 1993, 1994, and 1995. This period was also characterized by a moderate strengthening of the Albanian currency and a reduction of annual inflation from 31% in 1993 to 6% in 1995. The domestically financed budget deficit was reduced to 7.4% of GDP by 1995, and during the same period the increase in international reserves grew from 2.5 months of imports in 1993 to 4.2 months in 1995.

37. These macro policies (and associated economy wide-growth) have allowed the agriculture sector to respond effectively to land reform, privatization, and the liberalization of domestic prices and markets. Strong economic growth has led to increased demand for agricultural products, as Albanians have a high propensity to spend additional income on food, especially livestock products. Economic stability also allowed farmers to better gauge real (relative) price changes and become more accustomed to decision-making in a market economy. As a consequence, sector growth rates have exceeded GDP growth, by 10% - 11% between 1993 and 1995. Moreover, as agriculture now accounts for 55% of GDP, it provides a valuable social safety net and as means of cushioning high unemployment resulting from economic restructuring.

38. The macro-economic framework deteriorated in 1996, collapsed in 1997 during the civil unrest, and while showing signs of recovery in early 1998, continues to remain fragile. Economic activity came to a standstill in the first half of 1997, resulting in output falling by 7% during that year. During 1997, the lek devaluated by 40% as remittances from abroad and foreign aid declined, and foreign trade slowed. Inflation increased to around 42%. The overall economic downturn is equally reflected in slower agriculture growth rates. The combination of scarce credit and high interest rates will continue to constrain the agriculture sector in the medium-term.

39. Inflation in Albania is currently largely determined by fiscal policies. The need for restrictive fiscal policies overall is well recognized in Albania as being of key importance to the economy. Demands for public resources in support of agriculture development will need to recognize this constraint, and require a strong economic rationale and argumentation for future public policies and investments in agriculture. Overall the size of GOA's agriculture budget over the past recent years has been small relative to the size of the sector, as well as in absolute terms, as has the scope of government interventions in the sector (see **Table 3** below).

Table 4: Ministry of Agriculture and Food Budget 1995-1998 (in US\$ millions)

	1995	1996	1997	1998
Operating Budget	11.4	12.1	11.9	7.7
Investment Budget *	6.7	8.3	7.0	7.9
Total Agricultural Budget	18.1	20.4	18.9	15.6
Share of Fiscal Expenditures	2.2%	2.5%	2.8%	1.5%

* Local counterpart funds to foreign financed projects; and direct financing of GOA financed projects

Source: Albanian Ministry of Agriculture and Food

40. Maintenance of a stable macro-economic framework - including stable prices and a stable real exchange rate, as well as a distortion-free incentive structure - is the single key service governments can provide in support of agriculture and rural development. The overriding importance of the macro-economic and incentive framework has been empirically documented in many countries. While other sector-specific support is important, such support can only be successful within the context of a stable macro-economic environment. Renewed economy-wide real growth is also critical for agriculture sector growth.

B. TRADE AND PRICE POLICIES

41. Agriculture Trade Policy. Albania now has an open economy due to the privatization of trade, the introduction of a simple trade regime with moderate overall levels of protection, and the removal of quantitative trade restrictions. Accession to the WTO is viewed as the means to legitimize and strengthen this policy stance, and progress is being made towards this goal. Albania is also actively seeking to establish bilateral trade agreements throughout the western world and has signed preliminary multilateral agreements with the European Union and EFTA (European Free Trade Association). To date, none of these agreements has obtained preferential access for Albanian products; securing little more than most favored nation status.

42. Current trade policy is based largely on a four line schedule of *ad valorem* tariffs: 0%, 7%, 25%, and 40%. There are no additional customs duties or unit tariffs. Wheat and flour are the only commodities eligible for the zero percent tariff line; however, import tariffs of 10% have been recently introduced on both items. In principle, other commodities are allocated to tariff lines according to whether they are unprocessed (i.e. raw materials), semi-processed, or fully processed; with raw materials having the lowest level of protection. In practice, unprocessed crop and livestock imports are subject to the 7% tariff; and processed foods, farm machinery, chemical fertilizer and farm chemicals are subject to 25%. On the export side there are no export subsidies and no export restrictions.

43. Minimum "reference prices" were recently introduced as a means of reducing customs fraud through under-invoicing. While such a system can also be used as a means to increase protection, comparison of these reference prices with relevant world prices suggests that this is not the case. However wide variability in the margin between world prices and reference prices indicates that the methodology used to establish these reference prices should be improved. It is also essential to ensure that any approach to control customs fraud is consistent with the rules of accession to WTO, and there is some doubt that the current reference price system meets these requirements.

Table 5: Total Agriculture Trade 1993-97 (Current US \$ million)

	1993	1994	1995	1996	1997
Total Exports	122.40	141.40	201.60	210.50	167.00
Total Imports	421.00	548.20	650.00	908.60	685.00
Total (Deficit/Surplus)	-298.60	-406.80	-448.40	-698.10	-518.00
Agriculture Exports	23.30	23.30	28.00	35.70	35.40
Agricultural Imports	80.00	153.70	184.40	318.50	163.70
Agriculture (Deficit/Surplus)	-56.70	-130.40	-156.40	-282.80	-128.30

Source: Albanian Ministry of Agriculture and Food

44. The overall protection inherent in current trade policy is moderate, despite a tendency to broaden the spread between tariff lines over time. In 1993 the weighted average tariff level for all imported goods was 12.55%; while that for "food substances derived directly from nature" was 15.8%. There has been some regression in trade policy nevertheless, with an increase in the top tariff line from 30% to 40% during 1995, and an increasing spread between the bottom and top tariff lines. Pressure is also building to raise tariffs on those imports that compete directly with domestic production.

45. The open trade policy has inevitably led to a surge in both imports and exports. This increase in agricultural imports is being driven by increased demand for higher value agricultural commodities such as livestock products and fruit as the result of higher personal disposable incomes as people seek to diversify and improve their diet. Domestic production and sales of these same commodities have also risen substantially in response to this demand, indicating that supply side constraints to further increases in production and improved quality are the real problem for domestic producers, rather than competition from imports.

46. Albania's main food-related imports consist of wheat and flour, sugar, vegetable oils and meat. Around 80% of food-related imports are from EU member countries. Major food and agriculture export items are medicinal plants, tobacco, fish, and niche products such as snails, again with the vast majority (85%) going to the EU.

Table 6: Agricultural Export and Imports 1994-1997 (current US\$ million)

	1994	1995	1996	1997
Agricultural Exports	23.30	28.00	35.70	35.40
Of which				
-medicinal plants	9.80	9.60	11.80	12.20
-tobacco	3.70	3.60	8.80	6.60
-fish and sea products	3.80	5.00	6.40	3.90
-vegetables	0.80	1.40	1.80	1.80
-snails	0.00	0.00	0.00	1.70
-other products	5.20	8.40	6.90	9.20
Agricultural Imports	153.70	184.40	318.50	163.70
Of which				
-flour and wheat	32.20	26.50	123.70	56.90
-sugar and other sugar products	12.20	29.70	35.50	32.30
-oil and fats	19.00	18.60	24.10	20.10
-meat (poultry, pig, cattle, sheep)	33.10	28.50	18.90	15.70
-other products	57.20	81.10	116.30	38.70

Source: Albanian Ministry of Agriculture and Food

47. Indications of increased trade protection. GOA, through MAF, is currently (April 1998) arguing in favor of increased and selective trade protection for agricultural commodities and processed products. Increased trade protection is seen as a means to: (a) reduce the negative trade balance in agriculture products; (b) increase fiscal revenues; and (c) support Albania in the accession process to WTO and the EU.

48. While trade policies are one of the few agriculture market policy instruments realistically available in Albania (at no fiscal cost and little administrative burden), the proposed change in the trade regime should be reconsidered. A negative trade balance for agriculture raw and processed products has been caused by inflated incomes and consumption associated with the pyramid schemes, and with supply constraints which did not allow domestic production to satisfy demand. Artificially increased purchasing power associated with the pyramid schemes has ceased; and as the non-price supply side constraints are gradually overcome, the trade balance for agriculture products is likely to improve. Hence, providing trade protection against agriculture imports is not necessary and is likely to increase real food prices for consumers (and hence reduce the overall competitiveness of the economy as increased food prices are translated into higher wage bills) without increasing domestic supply which continues to be limited by non-price constraints.

49. The selective trade protection as proposed by the MAF-- in terms of: (a) selected agriculture products protected; (b) differential protection of unprocessed vis-à-vis processed agriculture products; but also in terms of (c) increasing protection for the agriculture sector as opposed to other sectors in the economy -- will distort incentives both within the agriculture sector and within the economy at large. These distortions will lead to poor resource and investment allocation, resulting in low productivity and reduced competitiveness in export and also in domestic markets. Returns on private, but also on public, and donor supported, investments will fall. The potential efficiency losses will more than outweigh the benefits of incremental tax revenues associated with higher tariffs.

50. Increased trade protection will not increase the likelihood of Albania accession to the WTO, nor will it support the process of Albania acquiring future EU membership. It will however, have a negative impact on consumers, many of whom are poor. One major achievement made over the past years has been the opening of the economy and the agriculture sector to international trade. This achievement now runs the risk of being undone through the re-introduction of renewed trade barriers.

51. WTO Accession. Immediate priority should be given to completion of WTO membership, with the associated establishment of binding tariffs, and the obligation to retain an open trade policy. In the interim it is essential to resist growing pressure to increase import protection, which would distort the sound existing basis for price formation and make accession to the WTO more difficult. Accession to the WTO will also provide a much needed political legitimization of current trade policy, and so strengthen resistance against pressures to increase protection. Steady progress had been made in this regard up to end 1996, in what is inevitably a slow process. Following receipt of WTO observer status in May 1992, Albania prepared and

submitted the "Memorandum of Foreign Trade" which serves as the starting point for negotiations, in December 1994. Answers to all of the subsequent questions raised by member countries were submitted to WTO in December 1995, and the first meeting with the WTO appointed Working Party was held in April 1996. Bilateral meetings began in October 1996. The response by member countries has thus far been quite positive, as would be expected given Albania's open trade policy stance and its progress with economic reform. The accession process was stalled during 1997 due to events around the civil crisis.

Box 1: Albanian Agriculture and the EU

In a recent draft strategy document (April 1998), the MAF has stated as one of its strategic objectives the need to harmonize Albania's agricultural policies with those of the EU. While this may be a reasonable political objective, it is not sufficiently argued from an economic point of view. Albania is not one of the countries entering into EU membership negotiations within the medium term and hence is under no pressure to harmonize agriculture policies as, for instance, Poland. The EU Common Agriculture Policy itself is a (slowly) evolving body of policies which is gradually moving towards a more liberal price and trade regime in the medium term given EU budget pressures, new EU member applications, and the upcoming new round of multilateral trade negotiations. Albania thus runs the risk of adopting agriculture policies which may well be soon outdated relative to those of the EU, and of being left with future requirements for renewed adjustment and market liberalization. While developing food quality standards as a tool for export promotion to EU member countries may be a viable strategy, copying EU trade and price support policies at this stage is not. Rather than adopt EUCAP-like policies, more effort should be invested into negotiating preferential access arrangements with the EU.

52. Given the extent to which trade and price policy have already been liberalized, membership in the WTO will serve mainly to consolidate previous policy reforms rather than as a basis for further reform. This is a powerful justification nevertheless. Experience in other central and eastern European countries has shown (and indications to that effect also exist in Albania) that there is inevitably strong post-reform pressure to reintroduce high levels of government support and protection for the agriculture sector.

53. Agricultural Price Policy. The removal of bread price controls in July 1996 completed the liberalization of producer and consumer prices for all food and agricultural products. Liberalizing wheat and bread price policies was, however, a difficult and protracted process (see Box 2) Disposal of the remaining food aid wheat stocks in late 1995 has also facilitated private sector imports of wheat, in addition to current private sector imports of flour. As no direct price policy instruments are currently applied, trade policy has become the major direct influence on producer and consumer prices.

54. Trends in producer prices reflect the generally open and liberal environment in which agricultural prices are formed. Subsequent to the freeing of the wheat regime in 1996, cereal prices rose sharply during 1996 in response to trends in world markets. Livestock product prices, on the other hand, have fallen in real terms (relative to the CPI) due to the strong local supply response to domestic demand for meat, milk and cheese. Potato prices increased substantially from 1993 to 1994 but have since fallen in real terms as domestic production has increased. As tomato production increased very early in the reform process, real prices have also fallen since 1994. The higher investment costs and longer maturation period for fruit trees has inevitably

slowed the re-establishment of fruit production, with the result that fruit prices have increased dramatically in response to growing domestic demand.

Box 2: Liberalizing Wheat and Bread Prices

Freeing wheat and bread markets proved to be a difficult and protracted process in Albania where bread is the predominant staple (180 kg annual per capita consumption) and food accounts for a major share of household expenditures (some 70%). From 1992 to mid-1996, a combination of policy instruments were used to maintain low bread prices, high wheat prices, and allow bakers and millers to have profitable margins. These were: (a) a guaranteed minimum floor price for locally produced wheat above border prices; (b) a subsidized selling price of public wheat stocks to millers below border prices and below acquisition cost; (c) a maximum flour ceiling price; (d) a maximum bread ceiling price; (e) subsidies on operating costs for millers and bakeries; (e) import tax exemptions on imported wheat and flour; and (f) auctions for food aid products (including wheat and flour).

During 1992 - 1996, these policies, in aggregate, resulted in: (a) a rural subsistence economy for domestically produced wheat; (b) a separate urban wheat/flour economy supplied by state imports of wheat and private imports of flour; (c) a de facto public sector monopoly/monopsony on wheat imports and domestic wheat trade; (d) the absence of the private sector in wheat imports and limited presence in domestic wheat trade combined with a dominance of private sector flour imports; (e) a technically outdated milling sub-sector not yet fully privatized with important over-capacities often linked to public storage facilities which received public wheat on the basis of quota allocations; and (f) a baking sub-sector with a reasonable degree of competition and efficiency.

By mid-1996 international wheat prices rose to record levels, making public imports of wheat very expensive and fiscally unaffordable. Subsequently, the floor price on domestically produced wheat was reduced to below import parity, prices of public wheat to millers substantially raised and public sales subsequently terminated, and the bread price ceiling as well as the flour price ceiling lifted. Operating subsidies to millers and bakers were abolished in 1997 and import tariff exemptions on wheat and flour ceased in early 1998.

55. Market Stabilization. The MAF also has indicated the need to stabilize markets through targeted market intervention. It is extremely difficult and very expensive (both in terms of fiscal resources and efficiency losses) for small economies to stabilize producer prices or incomes. Albania's recent past experience (1992 to 1996) with guaranteed minimum producer prices for wheat, and with maximum ceiling prices for flour and bread, are an indication of the difficulty and cost associated with attempts to stabilize markets. Re-introducing market interventions do not seem to be viable strategic propositions. The improvement of transport infrastructure underway as well as improvement of inventory practices by the private sector will contribute to increased domestic market integration and the ability to better handle seasonal price fluctuations.

56. General Directorate for State Reserves (GDSR). As the State agency for acquiring, managing, and disposing of strategic reserves, the GDSR is the other mechanism (besides trade policies) which the GOA has, in principle, at its disposal for influencing agricultural prices. Established in 1992 to manage food aid during the difficult initial years of Albania's economic reform program, it retained a powerful influence on agricultural prices through its control of wheat sales and prices until 1996. This role was curtailed following the disposal of all remaining

food aid stocks in late 1995; termination of subsidized wheat sales in 1996; and looting of remaining grain inventories during the civil crisis in early 1997.

Table 7: Trends in Agricultural Prices in Albania (Leks/kg)

Item	July 1993	July 1994	July 1995	July 1996
Nominal Producer Prices				
Wheat	15.87	16.48	14.50	29.96
Maize	20.40	22.08	18.19	39.32
Milk	22.57	28.43	28.52	28.98
Cheese	158.18	178.30	185.88	213.66
Potatoes	18.78	39.48	30.50	38.33
Tomatoes	38.00	22.99	37.65	41.35
Beef	224.50	222.0	229.09	273.98
Lamb	234.75	240.14	234.95	295.02
Apples	31.78	59.62	65.67	93.91
Oranges	37.44	67.75	54.85	91.36
CPI (Dec 1993=100)	92.09	113.75	116.18	133.40

Source: Albanian Ministry of Agriculture and Food

57. While the GDSR has been largely non-functional following the civil crisis of 1997, in fact it has retained the resources and the legislative authority to re-assert its influence on agricultural prices (particularly for wheat, flour and bread), should this be deemed necessary by government. This latent influence is based on continued access to approximately 180,000 tons of storage capacity, a staff of 900 people, and a large transport fleet. The GDSR also reports directly to the Council of Ministers, independently of the MAF, and retains considerable administrative autonomy.

58. The GDSR's current role is ambiguous. The official policy line is that its activities will be restricted to maintenance of a strategic reserve, part of which will be used to ensure an adequate supply of cereal in the poor and mountainous northeastern regions which are often cut off by snow during the winter months. GOA intends to phase out the GDSR over a three year period. Initially, GDSR's activities will be confined to the import, storage, and distribution of wheat to the northeastern districts. By end-1998 wheat reserves will be established at no higher than 20,000 tons. Also, to enhance transparency of operations, GOA will provide GDSR's financial status as well as a financial plan, and include GDSR's revenues and expenditures in the 1999 budget. GOA is committed to phasing out GDSR entirely by 2000.

59. Besides maintaining a liberal trade regime, it is critical that GOA indeed implements the above phase-out of the GDSR in order to safeguard an adequate incentive framework for the agriculture sector. With regard to national food security, two instruments are available, that, in combination with private sector, would allow Albania to address a food emergency: (a) IMF's Contingent Import Facility; and (b) donor-supplied food aid. These instruments could be complemented by a reporting system that would monitor private sector grain inventory levels. At the level of national food security, and after the dismal performance of the GDSR during the civil unrest in 1997, there is little rationale in maintaining this large institution. As grain and flour

imports and trading is now carried out by private sector dealers and importers, phasing out GDSR would remove a costly institution whose mandate has largely become redundant.

C. FOOD SECURITY

60. Food Insecurity. There is no significant food insecurity at the aggregate level, despite the emergence of a large structural food deficit in the aftermath of economic reform. Key imported foods are readily available on world markets. Albania has adequate foreign exchange reserves, and a private sector capable of handling imports. Household food insecurity is a significant problem however. It is caused by the deep-seated absolute poverty in some regions and is manifested in the inadequate access of many Albanian households to available food. It is especially pronounced in the upland and mountain regions where population pressure is high, arable land is scarce, and infrastructure is very poor. Most of Albania's rural food insecure live in these areas, with the north/north-eastern districts being the most vulnerable, particularly when snow renders the mountain roads impassable during four or five months of the year.

61. Three broad sets of policy measures have been established in response to Albania's poverty and household food insecurity: income transfer programs, winter food distribution programs in the north-eastern mountain districts, and regional development programs in low income rural areas. All use targeting as a means to make more effective use of available resources; food insecure socio-economic groups being the focus of income transfer programs, and food insecure regions being the focus of the regional programs. Together they provide a strong base for addressing the short- and medium-term consequences of poverty and food insecurity. It remains to improve their effectiveness, particularly given the scarce and declining public resources on which they rely. Of the other potential policy responses, self-targeting measures such as public works programs have yet to be widely used, and the government has terminated food subsidies (the least effective approach).

62. Food Security and Agricultural Policy. In the long-term, significant improvement in rural household food security will derive from growth and structural change in the agricultural sector. More direct policy initiatives such as the GDSR distribution of food during the winter, and the holding of strategic reserves have a limited role to play. Any expansion of these activities, such as the current acquisition of wheat stocks, will reduce the incentives to increase production and farm income at significant public cost; which contributes little to improved food security. As GOA is committed to phasing out the holding of national strategic reserves, the following outlines a possible approach to reforming food assistance to the northeastern districts.

63. Targeted income transfer programs include pensions, unemployment benefits, and a social assistance program (Ndihma Ekonomika) which makes cash payments to families whose income is insufficient to meet minimal subsistence requirements. Of these programs, the Ndihma Ekonomika is perhaps the most important for rural areas, reaching up to 35% of rural families in the poorer, north-eastern districts. The most pressing problem for this program is the declining level of assistance to beneficiaries, due to budget cuts and the erosion of benefit value by inflation. While there is general agreement that improved targeting is the best way to respond to this dilemma, this has proven difficult to effect, despite a major reduction in the number of

beneficiaries. Rather than making higher payments to a smaller, more effectively targeted beneficiary population, average benefit levels have instead declined significantly.

64. Reform of Winter Cereal Distribution Program to Northeastern Districts. Secure access to food in the NE Districts is compounded by low subsistence production of wheat, above average transport costs due to remoteness from major wheat supply centers, inaccessibility during winter months, and a high poverty incidence. Inaccessibility during winter months imposes three to four months of storage cost on a poor population with inadequate subsistence production; while the Ndherme Ekonomike provides limited cash transfers, it does not cover increased storage costs during the winter months in this region. Families would have to pay for three to four months worth of wheat in the autumn: but their income does not provide them with such a cash flow, nor does the Ndherme Ekonomike. In the absence of sufficient income these districts continue to suffer from lack of food security and will require continued support - either in kind or in cash - on social grounds in the medium-term future.

65. To ensure that rural people in the north and north-east of Albania have sufficient cereal to last them through the winter, a public Winter Cereal Distribution Program was implemented through the GDSR. This program supplies between 10,000 to 30,000 tons of wheat and flour to communes that are likely to be cut off from major centers. Within the framework of this Winter Cereal Distribution Program, MAF estimates the total cereal requirement for people likely to be isolated during the winter, based on District level estimates of the number of people affected and the duration of their winter isolation. These estimates are presented to the GDSR, which arranges the acquisition and transport of this cereal to the relevant District centers, where it is stored in GDSR granaries. Once delivered to the District centers, local District Councils contract with a private trader in each commune to deliver and sell the grain. In principle, the sale price at the District level should cover the costs incurred by the GDSR. In practice, the GDSR has been obliged to subsidize these sales in order for the wheat to be competitive with wheat and flour sold on local private markets. Consumers at village and commune level are expected to pay a price equivalent to the cost ex District-level granary, plus the transport cost and operating margin of the trader.

66. A recent review (June 1998) has highlighted the following issues associated with the Winter Cereal Distribution Program: (a) an overestimate of the winter cereal requirement due to an underestimate of the local cereal production available for human consumption; (b) an underestimate of the importance of private trade (in particular for imports from Monte Negro and Kosovo); (c) an overestimate of the length of time which people are completely snowed in during the winter; (d) an overestimate of the number of people affected; (e) distributed cereal is more expensive than cereal sold by private traders, resulting in a need to subsidize wheat in order to sell it; and (f) no direct link between the Winter Cereal Distribution Program and the Ndihma Ekonomika, though both aim to improve food security.

67. The following policy options have been identified in the recent review: (a) immediate termination of the Winter Cereal Distribution Program and re-allocation of resources to the Ndihma Ekonomika Program; (b) advance payments of Ndihma Ekonomika before the winter (thus improving the household's ability to acquire sufficient food stocks for the winter); (c)

modifications of the Winter Wheat Distribution Program based on the following options: (i) develop a simpler rule-based procedure for the program, which targets cereal more tightly to low-income rural households (for instance by restricting supply to the needs for 60 days (two months) in all Districts and by restricting cereal distribution to those households which qualify for Ndihma Ekonomika. On this basis, the total requirement for the north and north-east region would be approximately 5000 mt.; (ii) contract the supply and distribution of cereals to the private sector; and (iii) distribute maize grain rather than wheat and flour, which is cheaper on a calorie-equivalent basis, and would be self-targeting as maize is typically consumed by lower-income households.

68. Targeted regional development, the other agriculture sector response to food insecurity, is also proving to be a valuable initiative. Most of these programs are coordinated through the Albanian Development Fund (ADF) which provides credit and guidance for small-scale business and infrastructure projects. Provided they are focused on high potential areas, these programs will enhance crop and livestock production, access to employment and access to markets; all of which improve food security. District authorities have taken a very important role in this respect, by giving preference to initiatives from high potential areas. Support for more isolated, low potential areas is neither cost-effective nor rational in that it does not address the underlying problem of overpopulation and reduces the incentives for out migration, which is ultimately an important component of the solution.

4. SUPPORT TO AGRICULTURAL PRODUCTIVITY AND COMPETITIVENESS

69. The increase in agricultural production since 1991 is largely attributable to a change in the composition of production towards higher value products in which farmers have a comparative advantage. Crop and livestock yields have changed little and remain very low relative to the potential that can be achieved under Albanian conditions (**Table 8**), and to yields obtained elsewhere in eastern and central Europe. This yield gap is due to a range of constraints which, if resolved, could increase agricultural output and total factor productivity by 10% - 20% over the next 3-5 years. Such an increase would be of benefit not only to farmers. The associated increase in marketed surplus would also reduce the need for imports and so the trade deficit.

70. A shortage of seeds is the most pressing of these constraints but inadequate use of fertilizer, agro-chemicals, animal feed, and animal health remedies are of equal significance. In addition, better use of the more fertile lowland areas is constrained by the breakdown of drainage and irrigation systems, although a rehabilitation program has been initiated. These constraints are considered further below, together with current and prospective private and public sector measures to address them.

A. IRRIGATION

71. Irrigation and Drainage. Irrigation is of critical importance to agricultural production and productivity. While Albania has substantial annual rainfalls (800-2,000 mm in coastal areas, 1,600-2,000 mm in the hilly region, and up to 3,000 mm in the mountains) compared to other Mediterranean countries, less than 20% of annual rainfalls occurs in the six month period April-September. Crop water deficits between June and August range between 400 to 500 mm, which cannot be supplied from soil moisture, making irrigation necessary for summer crops, such as vegetables, potatoes and water melons (see **Table 9** for the yield comparison). Drainage is also important in order to prevent flooding from winter storms, particularly in the coastal plain.

72. Construction of irrigation and drainage schemes had been given high priority under the socialist regime. By the mid-1980s, irrigation and drainage schemes respectively covering about 420,000 and 430,000 hectares have been constructed. About two thirds of the irrigation area was coastal marshlands, which have been drained and reclaimed between 1930s and late 1970s.

73. During the socialist era, all responsibilities in the irrigation and drainage sector, including: planning, construction, operation, and maintenance, and management, had been solely under the state-owned district-based water enterprises. Under the gradual decline of the economy toward the end of the socialist regime, many irrigation schemes have entered into the vicious cycle of: (a) inadequate budget allocations; (b) deferred maintenance; (c) system deterioration; and (d) unreliable water delivery. Many irrigation and drainage facilities ceased operations with the massive destruction in 1991 at the demise of the socialist regime. Only 80,000 hectares were actually irrigated in 1993.

Table 8: Yield Potential

Commodities	Yield per ha in tons/ha			
	1989/90	1992	1995/6	Potential Albania ^a
Wheat	3.0	1.5	2.9	4.0
Maize	4.0	2.2	3.5	5-6
White beans	12	8	10	20
Potatoes	10	7.7	11	40
Watermelon	N/A	14	19	30
Tomatoes (field)	25	20	30	34-40
Tomatoes (glass)	75	N/A	80	90-100
Cow's Milk (liters)	1400	1300	1700	3000

^a Based on actual data obtained under ideal growing conditions in Albania.

Source: Albanian Ministry of Agriculture and Food

Table 9: Yields for Selected Irrigated and Non-Irrigated Crops (ton/ha)

	Irrigated	Non-Irrigated
Alfalfa	39.0	24.2
Maize (foliage)	43.0	11.3
Beans	1.5	1.0
Potatoes	16.5	3.0
Vegetables	5.5	3.0

Source: Monitoring and Evaluation Report, PMU, August 96

74. The first major irrigation rehabilitation project started in December 1993 with the intention of: (a) rehabilitating high priority irrigation and drainage canals; and (b) ensuring sustainability of irrigation and drainage sector through the introduction of participatory irrigation management. This project has so far rehabilitated approximately 75,000 hectares (irrigation) and 80,000 hectares (drainage), respectively (or 18% and 19% of the total irrigation and drainage area) in seven districts in the higher potential areas of the coastal plains; and established more than 180 WUAs covering 75,000 hectares and comprising 63,000 member families. These WUAs have been in charge of rehabilitated secondary canals, and the staff and state subsidies to the state-owned water enterprises has been reduced from 1,500 to 700, and from US \$1.63 million to US \$0.5 million respectively during 1994 and 1997. The uniform water charge 2.0 lek/m³ has been replaced by 0.5 lek/m³ to be paid by WUAs to water enterprises for bulk water delivery, and WUAs are now responsible for setting and collecting tariffs according to the actual cost of operation and maintenance of secondary and tertiary irrigation facilities

75. Despite remarkable progress made under the project, there are risks that may jeopardize the sustainability of the irrigation and drainage sector:

- Poor Performance of the state-owned water enterprises (WEs). Under diminishing financial support from the state budget, and serious damage incurred during the civil turmoil in 1997, state-owned water enterprises seem to fail to increase their efficiency and fulfill their

obligation to maintain and operate primary irrigation and drainage facilities. In the absence of the supervision of the Ministry of Agriculture and Food, many WEs are reported to finance their recurrent cost (mainly personnel cost) by reallocating investment funds to operation, carrying out side businesses (e.g. private construction contracts, renting excavators, collecting river sand/gravel), and /or deferring maintenance of primary canals. This resulted in the poor operation of the main irrigation canals in 1997, and more seriously, recent frequent floods in the north³. These water enterprises failed to collect O&M cost from WUAs (beneficiaries) in 1997, as WUAs have lost confidence and trust in WEs' services. There is an urgent need to undertake a major reform of these water enterprises.

- Capacity to water user associations (WUAs). A survey in April 1998 indicated that about 20% of WUAs have fully sufficient technical, financial, and administrative capacity, followed by the second group of WUAs with moderate problems accounting for about 60%. The remaining 20% of WUAs have serious problems, particularly in increasing membership and collecting water tariffs. While this is still remarkable progress considering their very limited history (most of them started operating in 1996) and a civil turmoil in 1997, it clearly indicates that continuous technical assistance is critical to ensure the long-term sustainability for irrigation facilities, as WUAs will be primarily responsible for irrigation facilities in the future.

76. Continued Rehabilitation of Drainage and Irrigation Infrastructure. Future development of the irrigation sub-sector should focus on the establishment of sustainable irrigation and drainage irrigation sectors. Specific steps should include: (a) development of sustainable water user associations; (b) restructuring state-owned water enterprises; and (c) rehabilitating priority irrigation and drainage irrigation systems.

77. Development of WUAs. Water users associations would be developed into federations of water user associations (FW), which would eventually be entrusted with the sole responsibility of primary irrigation facilities and secondary drainage schemes within their command area. These FW, as financially autonomous institutions, would carry out all irrigation tasks regarding planning, maintaining, and operating irrigation facilities and drainage facilities within the command area, determining the level of tariffs and collecting them from members. The legal frameworks for these FW would also be developed to define them as public institutions under supervision of a regulatory agency within the MAF. The Government envisages that most of irrigation facilities will be transferred to FW by 2004.

78. Restructuring of water enterprises. Correspondingly, the 36 state-owned district-based water enterprises would be restructured and consolidated into new public institutions. These new institutions would be under the close supervision of management board, including beneficiary representatives from municipalities and FWUAs/WUAs, as well as the Government officials. Later, these new public institutions will also be supervised by river-basin inter-ministerial authorities (RBAs) to be established with newly defined tasks, including: (a) regulation and

³ For example in 1996, the area of Lezha was flooded three times until September while previously experiencing floods only once every two to three years.

supervision of water use; and (b) monitoring of hydro-meteorological information and water quality. The regulatory role of the Irrigation Department at Ministry of Agriculture and Food (MAF) would also be strengthened.

79. Rehabilitation of the priority irrigation and drainage schemes. The physical development of the irrigation and drainage sector should emphasize simple and inexpensive rehabilitation. The basic design of most irrigation and drainage schemes in Albania is technically sound and adequate, considering the current intensity of irrigation and technical capacity. Most of the irrigation schemes would also be economically viable, as they are gravity-based canal distribution systems, and unlike other eastern European countries, very few schemes have high pumping heads in excess of 50 meters. However, the selection of the project area should be examined carefully to confirm farmers' commitment to irrigation agriculture, and in this context, an up-front financial contribution from beneficiary farmers prior to the rehabilitation should be explored.

B. FARM INPUTS

80. Seeds and Plant Genetic Material. Albania has good natural conditions for seed production and multiplication. But while most components of the former state system for acquiring and distributing agricultural inputs have been privatized; control of the production, multiplication, and distribution of seed has been largely retained within the public sector. Foundation seed is still produced by state research institutes, who then contract seed multiplication to private sector farmers before transferring it to the State Enterprise for Seeds and Saplings for distribution. The State Seed Authority is the central authority for seeds, with responsibility for control of imports, testing, and certification of new varieties (most of which are developed in Albania); and the setting of seed prices. A lack of resources and direction has led to the breakdown of this plant breeding system, resulting in a severe shortage of foundation seed for multiplication. And as the government has only just begun to expand the list of acceptable foreign varieties for import, private sector agents have had limited scope to respond to this need, either by increasing imports or by seed multiplication. As a consequence, for the last six years farmers have had no choice but to retain their own seed in order to continue production. Yields have stagnated or declined as a result, particularly for wheat and maize -- the principal cereal crops.

81. This situation reached crisis proportions for wheat and maize during 1996 and 1997, forcing the government to expand the list of eligible foreign varieties for import on a temporary basis, and to import some basic seed for multiplication. Donor agencies have also supplied wheat and maize seed for multiplication and distribution. But while these actions address the immediate problem of inadequate seed, they do not resolve the underlying institutional problems associated with the research institutes and the SESS, and their role vis-à-vis the private sector. The institutional capacity for identifying and registering new varieties, seed testing, certification, and monitoring the quality of seed imports remains weak and poorly focused; and the private sector still lacks adequate incentives to become more active in seed import, multiplication, and distribution. Furthermore, although there is no direct control of seed prices, they remain distorted relative to world prices in that domestically grown seed is sold at prices sufficient to cover the

costs of multiplication and distribution, rather than at prices determined by supply and demand on domestic markets.

82. Some progress has been made in the establishment of appropriate roles for public and private sector agents. The SSA has applied for membership in the International Seed Testing Authority (ISTA) and is seeking guidance on becoming a member of the International Union for the Protection of New Plant Varieties (UPOV). Its technical capacity has also been increased by a new seed laboratory and some overseas training for SSA technical staff. These are essential first steps in focusing the public sector role on seed certification and testing according to international norms; which will facilitate adequate control of product quality in a private sector seed market. This process needs to be accelerated by meeting the technical and legislative requirements for membership of ISTA and UPOV; and through further review of the national seed list to expand the number of suitable foreign varieties for import, multiplication and distribution.

83. Albania has the potential to become a seed exporter, provided that adequate regulations are established. However, there is a need to rationalize the seed industry based on the following measures: (a) privatization of the seed production and multiplication activities currently performed by the Seed Research Institutes; (b) revision of existing seed legislation to comply with UPOV standards; (c) further review and expansion of approved varieties for import; and (d) further strengthening of the institutional capacity for variety testing, registration and certification; and (e) review of donor policies associated with the importation and distribution of seeds to ensure that these activities do not constitute a disincentive to private sector involvement in agricultural input markets. It is recommended that a Seed Sub-sector study be carried out as soon as possible to review this potential and advise the Government on how to expand private sector seed multiplication and distribution. Seed multiplication and production is a typical private sector activity, the only role for the MAF should be regulatory, seed certification, and plant breeding to come up with new and improved varieties.

84. Fertilizer and Agri-chemicals. Annual fertilizer use has fallen from 340,000-350,000 tons in 1987-1989, to 75,000 - 90,000 tons currently. Less than one third of the main crops receive minimum nitrogen and phosphate needs and no potassium is applied. This has resulted in widespread "soil-mining" and a consequent degradation of Albania's already scarce agricultural resource base.

85. Domestic production of single-super phosphate, urea, and ammonium-nitrate accounted for most of the pre-reform fertilizer supply. A phosphate complex at Lac produces some 10,000 tons of single-super phosphate each year from imported rock phosphates; but would be non-viable as a private sector entity and relies on government subsidies to continue operating. Consequently production is minimal. Most fertilizer is imported and distributed by the Albanian Fertilizer and Agri-Input Dealers Association (AFADA), an association of private sector agents who have also negotiated distribution agreements with the two fertilizer complexes (see **Box 3**). The government has also recently introduced legislation to establish minimum quality standards for fertilizer, in order to increase the transparency of marketing.

Box 3: The Albanian Fertilizer and Agri-Input Dealers Association (AFADA)

Most agricultural inputs are now marketed by private sector agents. AFADA (The Albanian Fertilizer and Agri-Input Dealers Association) accounts for most of this trade, notably for fertilizer and agricultural chemicals, and to a lesser extent for seeds, building materials and livestock feed. AFADA evolved from a series of important early initiatives by the International Fertilizer Development Center (IFDC) to ensure continuity of agricultural input supply in the aftermath of early reform measures, and to establish input supply as a private sector activity. The project began in May 1992 with the importation and public auction of urea and Diammonium Phosphate, most of which was purchased by some 115 private entrepreneurs for resale to farmers. Continued IFDC training and support for these and subsequent private sector agents has allowed them to become active in all aspects of agricultural input marketing (sourcing and arranging of imports and credit, domestic sales and distribution) in an increasing array of input commodities.

Approximately 400 dealers now operate under the AFADA umbrella, of whom some 175-180 are full-time (primary) dealers while the rest operate on a smaller, part-time basis. Of the 175-180 primary dealers, 5-6 now import up to half of the total fertilizer used. AFADA itself is well organized and dynamic, with responsibility for informing members and clients of current events and activities through their monthly newsletter, organizing training programs, developing advertising and media presentations, organizing field days to demonstrate new commodities, and acting as a lobby to present dealer and farmer views to government.

The major constraint to further strengthening of AFADA is the availability of credit, particularly for transactions which involve large import consignments. Despite an excellent record of loan repayment, dealers still face extreme difficulty in obtaining working capital, and experience long delays and high interest rates (25%-26%) when they do obtain it. Albania's inadequate, poorly maintained road network also raises distribution costs and limits the incentives to operate in isolated areas; as does the small and highly fragmented nature of existing farms.

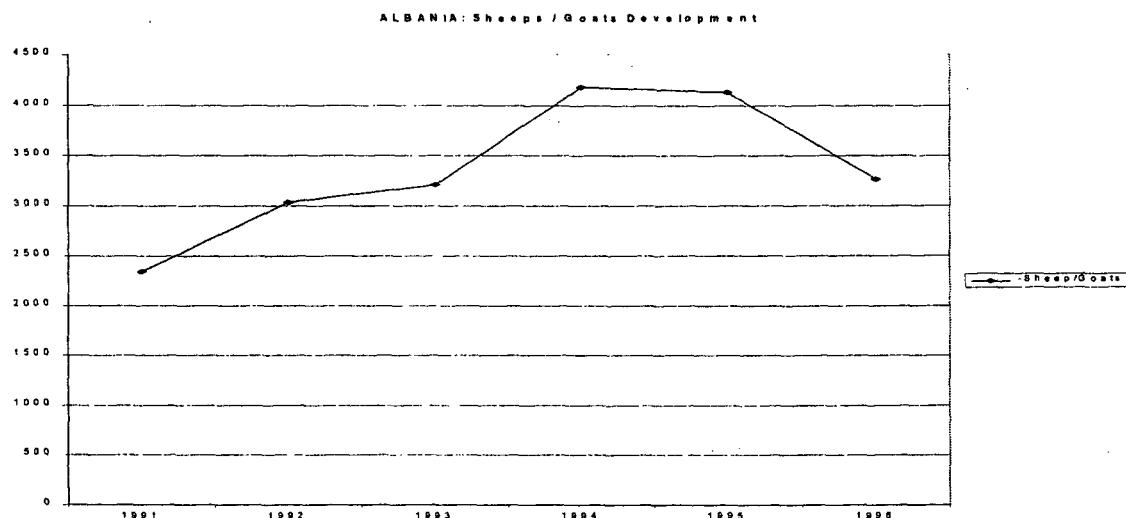
86. The use of agricultural chemicals also remains very low, despite recent extension efforts to promote chemical weed control, and a more active role by AFADA in importing the chemicals, acquiring the training and licenses needed to distribute them, and demonstrating their effectiveness through field trials. New legislation in 1994 has also defined an appropriate role for the State based on the identification of acceptable chemicals for import and use, the licensing of sales outlets, and the training required by licensed marketing agents.

87. Reliance on private sector imports has not, in itself, constrained the aggregate supply of fertilizer or chemicals. The principal constraint is the scarcity and high cost of credit which limits both the capacity of private sector input dealers to import, and the ability of farmers to raise seasonal finance. The distribution of these inputs is very uneven however, with low levels of input use in the more isolated, marginal areas. Lower production potential limits demand in these areas, and private sector agents have less incentive to operate where roads are poor and farmers are highly dispersed.

88. Animal Feed. Most livestock production occurs on family farms with three to six head of cattle and 10-20 sheep and goats. In recent years considerable emphasis was placed (with donor support) on animal breeding as the means to raise production. As a result, mixed dual purpose cattle breeds predominate (37% Holstein crossbreeds and 41% jersey crossbreeds). The same is true for small ruminants, with imported merinos and cigaja type crossbreeds predominating among sheep, and local breeds among goats. The expansion of small ruminants (as one of the few strategies available to the emerging small private farmers) is one of the most visible

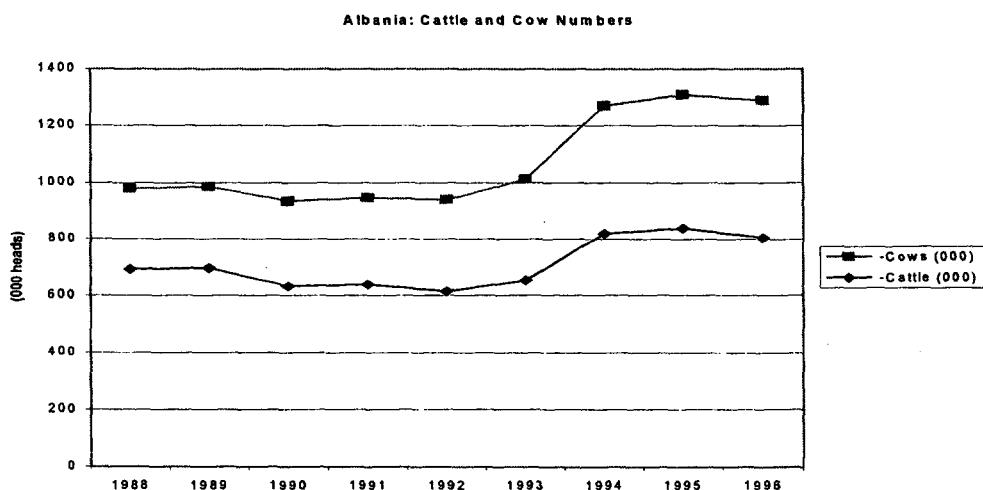
developments in agriculture in Albania in recent years. In fact, poor feed and inadequate use of animal health remedies are the main constraints to production, resulting in low milk yields, low carcass weights and extended breeding intervals. Outdated management techniques and sub-standard animal housing are further constraints.

Figure 2: Sheep and Goat Development



Source: Albanian Ministry of Agriculture and Food

Figure 3: Cattle and Cow Numbers



Source: Albanian Ministry of Agriculture and Food

89. Poor access to high quality forage is especially critical. Alfalfa and maize are the dominant feeds, followed by vegetable by-products, but they are all of generally low quality and not always available when needed. Shortages of protein and mineral supplements further reduce the quality of animal feed available for ruminants, as most manufactured feeds are imported.

Future emphasis should be placed on measures to improve forage quality, management and feeding practices; rather than the current preoccupation with animal breeding.

C. AGRICULTURAL SERVICES

90. Veterinary Services. Poor animal health is one main reason for low productivity in animal production, affecting a major sub-sector in agriculture. Both public and private veterinary services are in dire need of support. The division of tasks between public and private veterinary services basically seems sound. Public services focus on diseases and functions such as drug registration, quarantine and food quality control that have the aspect of a public good, while private veterinarians attempt to provide curative services and control of infections for which there are only minor externalities.

91. The veterinary service has been privatized, with over 1,000 veterinarians now in private service. However livestock illnesses often go untreated as farmers lack the means to pay for drugs and services. The public sector role is now restricted to national disease control programs and diagnostic services, sanitary control of milk and meat processing plants, quarantine, and the supply and distribution of licensed drugs, vaccines and other supplies. It is implemented by the Directorate of Veterinary Services (DVS), a component of the MAF with a small staff in the capital, and 500 vets and vet inspectors throughout the country. This reorganization, combined with the opening up of national borders, has placed considerable pressure on the DVS. This was accentuated by an outbreak of foot and mouth disease during 1996. This outbreak has now been brought under control. Yet DVS' ability to control contagious diseases is limited by inadequate monitoring capacity, laboratory and diagnostic facilities, and the vaccines as well as logistics. Quarantine services, compounded by the long borders with adjacent countries which make movement of animals difficult to control at the best of times, need to be increased. Private veterinarians require support (on a credit or cost recovery basis) to improve their equipment, means of transport and drug inventory.

92. While the basic physical infrastructure needs to be strengthened, the institutional arrangements need to be rethought. Scope for efficiency improvements exist through the introduction of subcontracting schemes for public sector tasks (such as compulsory vaccination or meat inspection) to private agents. The extension services should be increasingly involved (and supported through adequate training, and possibly simple field kits) to provide simple animal health services including basic diagnostic and vaccination services, but also practical advice on better animal management and feeding practices (including mineral supplements), which are the basis for efficient disease prevention and control. Compared to the need for improved health services and extension on improved animal husbandry and feeding practices, efforts on animal breeding are of secondary priority.

93. Agricultural Extension. Prior to reform, extension services were provided free of charge by some 3,000 specialists employed on the State farms and Cooperatives. They provided advice on agronomy, animal production, agricultural engineering, agricultural planning and financial economics, always with the aim of maximizing yields and production under large-scale farm management systems. The post-reform collapse and eventual redistribution of large-scale farms

and cooperatives left most of these extension agents unemployed. Some used their expertise to become farmers, and others set up private sector enterprises for the marketing of agricultural inputs and outputs.

94. The first step towards establishing a public sector extension service was taken in January 1992 with enactment of the Law on Extension, which mandated the formation of an extension agency under MAF with responsibility for providing technical, marketing, and business advisory services. Ex-cooperative and state farm extension agents were employed to form advisory groups of 3-4 villages. Currently, more than 1,400 people under MAF, divided over three departments (extension, crop production, veterinary services), an Agricultural Information Centre and District Directorates, are directly or indirectly engaged in agriculture extension activities. In addition, research institutes employ officers for research-extension related activities.

95. While progress has been made, both the quality of service provided and the approaches to service provision vary widely among districts according to the (mostly donor-funded) resources at their disposal. Farmers' Associations have also found little farmer support as a vehicle for input and output marketing, despite active promotion by extension agents. The completion of training programs for all extension agents is perhaps the most valuable achievement to date; but further institutional change and support is needed to reorient them towards the problems of small-scale commercial and/or subsistence farms, and to inform them of relevant technology and management systems.

96. The 1,400 staff directly (650 extension agents) and indirectly (800 staff providing plant protection and animal health advice) associated with public extension services account for around 70% of the MAF staff, and represent a considerable public expense. At the same time public extension is finding it difficult to provide a comprehensive service to some 470,000 farmers (a ratio of 1 extension agent/720 farmers), especially when roads are poor and they have no transport and few other resources. Effective mass media techniques have yet to be developed in response to this problem. Existing resources are stretched even further in that extension agents often have to fulfill other responsibilities such as data collection, and the monitoring and enforcement of current legislation.

97. Despite its limited resources, the national extension program makes no provision for a private sector role in extension, other than that of Farmers' Associations. This is a serious deficiency, especially given that an active, private extension service has already evolved in association with the private sector marketing of agricultural inputs. Under the AFADA umbrella (Albanian Fertilizer and Agro-Input Dealers Association) some 180 primary and 250 secondary farm input dealers are engaged in extension activities, such as demonstration plots and field days, plus the use of mass media techniques such as newsletters, videos and television programs. Joint preparation and distribution of this mass media material would be advantageous to both public and private sector agents. Note also that these private sector agents have the same technical background as their public sector counterparts -- all being previously employed as specialists by the former State farms, Cooperatives and Research Institutes. Explicit recognition of the private sector role in extension also provides a precedent for eventual privatization of public extension services.

98. Finally, current activities are weakened by the lack of interaction between extension and research activities. The lack of information on new, appropriate technologies for private farmers is currently one of the most apparent weaknesses of public extension. Adaptive, practical on-farm research, other than through the private sector and sporadic projects, is virtually non-existent, thus giving the private sector a monopoly on the introduction of new technologies and products. A strategy has yet to be defined on how to institutionalize the identification, generation, and testing of new technologies through on-farm research and how to strengthen the links between research institutes, public and private extension, the agro-business sector and farmers.

99. Agriculture Research. As government and donor initiatives to reform the research system have been slow to materialize, the pre-reform structure of 14 commodity-specific research institutes⁴ and four regional livestock research stations remains largely in place. This state of limbo has inevitably led to the system's deterioration, and budget cuts have accelerated this deterioration. The result is a shortage of supplies, outdated equipment, technology, and facilities, and limited contact with researchers in other countries. Many of the staff have left. Research output has suffered accordingly in terms of its relevance and the level and quality of output.

100. The institutional structure is clearly in need of reform, beginning with the research mandate ill-suited to a farming environment now characterized by thousands of small-scale commercial farmers. Future research must focus on technologies and farm management systems which enhance profitability and comparative advantage rather than maximizing yield and production. The organizational structure is also inappropriate and expensive with too many small, individual institutes working independently. It also retains numerous potentially commercial activities such as seed production and multiplication, and agricultural mechanization which should be separated and privatized. The research staff who remain are aware of the need to change but need guidance on how to reorganize and refocus their activities.

101. Recognizing these problems, USAID conducted a major review of the research system in 1994 and produced a "Master Plan" as the basis for developing a more appropriate system. To improve cohesion and cost-effectiveness, the Master Plan recommends amalgamation of the existing research institutions and stations into a National Agricultural Research and Extension Center (NAREC). This center would respond to 10 of the previous research mandates (excluding tobacco, agricultural mechanization, sugar beet and veterinary research), and also have a strong extension component. It would be located on the site of an existing Research Institute at Fushe-Kruje, with supporting regional research stations in the five main agro-ecological zones (Lushnja, Shkodra, Vlore, Cerriku and Korce). The total cost of restructuring, including new building construction, relocation, the replacement of facilities and equipment, development of an appropriate documentation center, and the re-training of staff is estimated at US \$10 million. The Plan also made broad recommendations on the definition of a more appropriate research agenda, and the administrative procedures for allocating research funding. Despite general acceptance of the Master Plan subsequent action has been slow.

⁴ Cereal and Oilseeds, Vegetables and Potatoes, Fruit and Grapes, Olives and Citrus, Sugarbeet, Tobacco, Plant Protection, Livestock Production, Animal Breeding, Veterinary Research, Fisheries, Forestry, Fodder and Pasture Management, Agricultural Mechanization.

5. INSTITUTIONAL DEVELOPMENT

A. LAND MARKET DEVELOPMENT

102. Albania has undertaken major agriculture land reform that would be remarkable by any standard in Eastern Europe, and which has fundamentally changed the agriculture sector. With an explicit emphasis on equity, nearly all previously state-owned agriculture land was distributed to the employees of former agriculture cooperatives and state-farms on the basis of the Law on Land (Law 7501, of 1991). While this law was applied in the majority of cases, a significant share (some 15 - 20%) of agriculture land was reportedly appropriated on an ad hoc basis by previous owners. Agriculture land consisting of some 2.3 million properties (parcels), is now owned by around 470,000 families. Farm size is small (1.1 hectares on average) and subdivided into several plots (4 to 5 plots on average). While the overriding emphasis has been on land distribution, some questions related to restitution and compensation of pre-collectivization land owners still persist and need to be resolved.

103. In order to protect newly found property rights and to establish the legal and institutional framework within which a land market can develop, an Action Plan for an Immovable Property Registration System (IPRS) was designed and implemented by GOA with donor support. The two objectives of the Action Plan are to: (a) establish property records within a new, unified system for registration of rural and urban real estate; and (b) develop the legal framework for an efficient real estate land market. The Action Program, initiated in 1993, originally aimed at establishing first-time registration of all real estate properties (excluding forest and pasture land) by December 1998. This target will not be met for reasons discussed below, which were compounded by the civil conflict during 1997. An extension of the Action Program is being prepared which would aim at achieving first registration of all real estate properties by 2001, including the pasture and forest land which is currently not included, as these are mostly still in state property. Currently only 20% – 25% of land ownership has been formally registered.

104. Land rights remain unclear and inhibit land rental. This failure to complete the land reform process is still a major constraint to sectoral development. In the absence of full ownership rights and land titles, a land market has been slow to develop, which in turn impedes any market-based consolidation of Albania's small, fragmented farms. In addition, the user /usufruct rights of a significant part of State-owned forests (about 200,000 hectares out of 1 million hectares) and pastures (about 250,000 hectares of lowland pasture out of 400,000 hectares) is intended to be gradually transferred to Communal management on a pilot basis.

105. Land Market Development. Finalizing land reform and establishing a functioning land market increases land and labor mobility. It will contribute to productivity by improved allocation to those who can make the best productive use of land; and this will, in the long run, allow for farm sizes to increase and decrease fragmentation of individual farms. Two areas need to be addressed to allow for a functioning land market: (a) finalizing the first-time registration process; and (b) the legal framework for land transactions. In addition, piloting approaches to

voluntary land consolidation will be important in finding ways to reduce land fragmentation. Implementing the Land Action Program will be a key element to addressing all of the mentioned problems.

106. Finalizing First-time Land Registration. While considerable obstacles persist, the overall progress on land registration has been impressive. The process of *land registration* is hampered by three main outstanding issues: (a) establishment of District Registration Offices; (b) special first registration; and (c) First Registration of properties without documents.

Box 4: First-Time land Registration

First-time registration is a complex procedure. On the basis of an allotment certificate (so-called *tapi*) issued by District Land Commissions during the distribution process which indicates all properties belonging to a family individual properties are surveyed and mapped (index maps). This provides the means for establishing ownership sheets for individual parcels (so-called *kartellas*). These *kartellas* are subsequently entered into a computerized databank. Once all *kartellas* for a cadastral zone (the smallest administrative unit in which registration is carried out - normally the size of a village with its agriculture land) have been established - a list of *kartellas* (on a parcel index map) for the cadastral zone is put on public display for 90 days in order to allow for the resolution of possible ownership conflicts. Subsequent to public display and possible changes, *kartellas* are registered with the District Registry Office which then issues an ownership certificate. With the registration process completed the state takes on the guarantee of the integrity of ownership rights.

Out of 3,002 cadastral zones (covering rural and urban real estate), the process of first registration has been initiated in 1,800 cadastral zones (60%); and first time registration at the District Registry offices has been completed in around 600 cadastral zones (21%). The registration process is on-going in all 36 districts of Albania. Areas with high economic potential have received priority in the implementation of the registration process. Real estate transaction have started in areas where registration has been completed.

107. Establishment of Registration Offices. As of late November 1997, 14 out of 36 District Registration Offices remain to be fully established and/or the District Registrar appointed. Out of these 14 Offices, five have been established, but have insufficient office space to be operational (Fier, Vlore, Lac, Korca and Berat). The previous government has delayed the establishment of this key institutional infrastructure, namely the Chief Registrar, who in turn appoints the District Registrars, was himself appointed as late as February 1996. Since early 1998 considerable improvements have been made and the establishment of this infrastructure should now be finalized, in particular with regard to the two Registration Offices in Tirana.

108. As these Registration Offices become operational, the future role of the Cadastre Offices (which held land related information during socialist times) needs to be clarified; one proposal is to redefine the functions and to merge these Cadastre Offices and the Registration Offices into "Land Offices."

109. Special First Registration. Currently, the land registration process is carried out on the basis of individual cadastral zones, i.e. land can be registered and formally transacted only if and when the entire cadastral zone has gone through the process outlined above. For cadastral zones that have not yet been included in the first registration process, formal transaction of properties by interested parties who wish to have full faith in their ownership right is not possible. In order to overcome this constraint, registration of individual properties needs to be made possible outside of the cadastral zone-based process, at the initiative and expense of the current owner.

Such a process can be accommodated through procedural regulations within the existing framework of the Law for Registration of Immovable Property (Law 7843, July 1994) and is within the mandate of the Chief Registrar. Such regulations should be adopted as soon as possible. While the first cases of special first registration with the approval of the Chief Registrar have been reported in 1998, the regulatory framework nevertheless still needs to be clarified.

110. Registration of Properties without Documents. The registration process is based on the *tapi* issued by the District Land Commission during the distribution process. In many instances spontaneous privatization outside the framework of the Land Law took place by ex-owners or their heirs taking possession of their former land. Currently no process has been established to formalize and register this *de facto* ownership. These issues were not addressed in the early years of the economic transition, as authorities feared that the legal recognition of repossession would undermine the outcome of the land distribution process. The issue applies to some 15% of all cadastral zones and in particular in some 200 villages in the north of Albania.

111. Recognizing and registering formal land ownership would require either an amendment to the Law for Registration or a regulation under that law recognizing ownership and allowing authorities to issue *tapi* and undertake the registration process. This would, however, requires the re-establishment of the District Land Commissions in the relevant districts which have been discontinued after the land distribution process. An alternative being considered is the formation of Special Validation Commissions by each commune to validate the *de facto* possession identified by the field teams carrying out the first registration process. Relevant regulations should be adopted addressing this issue and allowing the completion of the registration process for all agriculture land. A number of proposals have been advanced and now require action on the part of GOA.

112. Land Transactions. The number of registered real estate transactions (both land and buildings) have increased markedly over the past six months (see Table 10), albeit from a very low base (and with some ambiguity as to whether registered transactions are associated with sales or registration of inheritance). Land sales continue to be hampered by the pending compensation issue. Until this issue is laid to rest, there will be pressures at the local level against sales by those who had owned land prior to collectivization in the mid-1940s.

113. Considerable progress has been made in recent months in terms of improving legislation associated with land transactions. Land transactions (buying and selling, mortgaging, and leasing) of land was, in principle, possible under the Law of Buying and Selling of Land (July, 1995). This was limited by: (a) the right of first refusal which required that a seller must first offer his land to members of his family, then a neighbor, then to the ex-owner, then to village members, before being able to offer it to a third party buyer; and (b) by joint family ownership without providing an operational definition of what constitutes a family. These two issues (and others) have been addressed in the recently adopted (April 1998) land transaction law ("Law for transferring the ownership of agriculture land, meadows, pastures, and forestry") and should improve the security of land transactions.

114. Currently most forest and pasture land is under state-ownership, and in principle, under state management. The inability of the state to safeguard and manage these lands, and the short-term approach of villagers in exploiting these assets in the absence of secured user rights, has lead to natural resource degradation on a large scale. Recently adopted legislation ("on Leasing State-Owned Agricultural Land, Meadows, Pastures and Forests") will, in principle, provide the possibility of long-term leases by communes and villages, which would encourage a more sustainable use of these resources and provide a broader, legal base of income generation. This law will however, require numerous regulations to become operational, in particular, a Public Property Law (currently in draft) will need to be adopted which defines and registers public land and allocates responsibilities for publicly owned real estate between central and local government institutions.

Table 10: Progress in Establishing a Functioning Agricultural Land Market

	1994	1995	1996	Jun-97	Dec-97	Jan-98	Feb-98	Mar-98	Apr-98	May-98
Districts in which office space is provided for land registries	2	13	24	25	25	25	26	27	27	38
Districts in which land registry offices officially opened	0	0	15	22	22	25	334	34	34	334
Districts in which land registry offices functioning	0	0	15	19	20	23	23	23	26	24
Cadastral Zones in which registration process begun (as percentage of land area)	410	995	1,487	1,650	1,724	1,733	1,755	1,774	1,779	1,800
Cadastral Zones in which registration process completed (as percentage of number of cadastral zones)	12	35	53	58	60	61	61	62	63	63
Properties registered as part of general registration	...	80	203	345	483	500	540	575	586	632
Properties registered by special registration	...	...	...	...	...	...	30	30	50	65
Ownership certificates issued by registration offices	...	...	...	2,011	3,734	4,300	4,868	5,587	7,000	9,000
Transactions in agricultural land completed	...	...	...	150	395	420	510	629	800	950

Source: Ministry of Agriculture and Food

115. Land Fragmentation. Agriculture holdings in Albania are small (average farm size 1.1 hectares) and fragmented (4 to 5 plots per farm on average). Consolidation of agricultural land will depend on a functioning land market (which already is showing increasing number of transactions) and migration out of agriculture. Publicly administrated consolidation on a voluntary basis (as experienced in France or Germany) is technically possible, but costly and time-consuming; it is hence not a real option for Albania. Various forms of voluntary consolidation without administrative involvement are being observed in isolated instances; these forms of consolidation should be reviewed and possibly piloted, in particular in irrigated areas.

116. Extension of the Action Plan. An extension of the Land Action Program is being prepared which would aim at achieving first registration of all real estate properties by 2001, including

pasture and forest land. This extension needs to be finalized and approved quickly in order to ensure donor-supported funding by end 1998.

B. AGRICULTURE MARKETING

117. Agricultural Markets. Initial conditions for establishing marketing systems based on competitive private sector activity were very difficult. Former State marketing agencies either collapsed completely, leaving a huge vacuum that the private sector was ill-equipped to fill; or the State clung to its former role, and restricted private sector activity. A small, but active, private sector has evolved nevertheless, and now dominates the marketing of most agricultural output and inputs. However, it is severely constrained by the inadequate, poorly maintained road system, the small marketed surplus available for trade, weakly developed market infrastructure, and the limited access of marketing agents to credit. Markets are poorly integrated as a result (See Box 5), despite a well-developed market information system⁵, and many producers lack adequate access to market outlets for inputs and outputs.

118. Albania's mountainous terrain renders road construction and maintenance difficult and expensive. A poor existing road system deteriorated further during the 1980's and 1990's due to inadequate maintenance and a huge increase in traffic. The major north-south and east-west axes are now in very poor repair, other secondary roads are even worse, and many roads cannot be used during winter. A major program of road reconstruction has now been initiated, with rehabilitation and improvement of the main north-south and east-west axes as the main priority, plus further work on secondary roads linking main regional centers. But even with these improvements, many mountain villages still have no vehicle access at all, and mountain regions are cut off by snow during winter.

119. Where subsistence production systems predominate, marketed surplus is inherently small. In Albania it is less than one-third of production for all commodities except potatoes. As a residual, it is also a highly unstable source of supply. Where there is limited capacity to import, reliance on this small marketed surplus results in a market which is very thin and highly volatile, a situation which serves neither the interests of producers nor consumers. The more isolated mountain regions are certainly in this position. Measures to increase agricultural production are an essential precursor to raising the marketed surplus, along with measures to improve market structures and the incentives for sale of surplus production.

120. Local Markets. Daily agricultural markets now operate in all urban centers. Vendors are a mix of producers selling their own produce, assemblers, and small-scale importers. Competition is strongest where a steady supply of produce is assured by a combination of local production, production brought in from other regions, and imports. Otherwise, markets are thin and prices are volatile.

⁵Weekly price information has been collected since August 1994, for 59 commodities and inputs in 12 regions, and is disseminated throughout Albania by newspaper and radio. The information is collected at local "farmers markets" and so captures both producer and consumer prices, for domestic production and imports.

121. Much could be done to improve the physical facilities of daily markets, and thus the incentives for both producers and consumers to use them. Many are no more than a vacant lot, with no protection from the weather, no market stalls, and poor access for both buyers and sellers. Even the better organized facilities such as those in Tirana are too small to handle the current flow of produce, and trade has spilled over into surrounding streets. Local government authorities (possibly supported through a matching grant from donors or central government) could enhance both producer and consumer welfare by providing covered stalls, better access for vehicles and pedestrians, and effective means of cleaning and maintaining these facilities. Fees levied on stall use could cover the costs of operation and maintenance.

122. There also is an active private sector assembly process, although it is fairly thin. Most assemblers are either vendors who sell in the market on a permanent basis, or larger producers who buy small quantities from neighboring producers to resell with their own produce. There is also a wholesale trade operation, with vendors buying from markets in Korce, Shkodra and other high production zones; for transport and sale in Tirana. A further group of market vendors close to the southern and eastern borders find it more profitable to acquire their produce in Greece or Macedonia rather than operate an assembly operation among local farmers.

123. Weekly or monthly livestock markets operate in many areas but need to be established more widely. In addition to providing an essential market outlet, these markets link livestock production in upland and lowland areas by supplying young animals from the mountains for finishing in lowland areas. As livestock markets need efficient low-cost transport in order to serve a reasonably wide area, the inadequate, poorly maintained road system is probably the major constraint to increased market activity.

124. Producers associations have yet to prove an effective structure for organizing marketing activities, despite considerable public support. Albanian farmers have shown little interest in group marketing activities, even where members have strong family ties. (This constraint applies equally to cooperatives). Although this approach has had demonstrable success in other countries, there is little point in continuing to promote it in an environment where it is unwelcome. There are many other ways to support the development of agricultural marketing systems and promote private sector marketing activity, which benefit both individual and group marketing agents, such as the establishment of rural assembly markets.

125. All of these private sector agents face high assembly costs due to the combination of poor roads, the need to collect produce from a large number of small-scale producers, and the very small surplus for sale. Assemblers and processors thus appear to operate on a fairly localized basis, typically in areas which are close to markets and/or where more market-oriented producers are located in close proximity. The large majority of producers who fall outside these locations, must arrange their own transport to local markets.

126. Public Role in Agriculture Marketing. Public support to agriculture marketing should consist of: (a) establishing food safety standards and controls; (b) development of local market infrastructure; (c) support to the establishment of commodity associations; and (d) promotion of niche product marketing.

127. Food safety and quality. Food safety is clearly an important aspect of public health management and consumer welfare. Improving food safety standards, however, goes beyond the simple adoption of regulations. It also requires investments at the producer and processor levels, and investment which would translate into higher product costs. Increased food costs have to be borne by consumers, many of whom already now are under severe household budget pressure. Lastly, increased food safety regulations require public enforcement. Developing new food safety regulations will also need to include the design of a transition strategy to higher levels of food safety standards.

128. Albanian agricultural products continue to be of lower quality than imported alternatives in terms of presentation, grading, and packaging. This places them at a disadvantage at a time when disposable incomes are rising and Albanian consumers are becoming more discerning. Lower product quality and the inability to comply with export standards also limits access to export markets. Food quality improvement is a function of both domestic and export consumer demand supported by appropriate and enforceable regulations avoiding potential for rent seeking and corruption. Typically it is the private sector that improves food quality based on perceived demand. Publicly mandating food quality standards, in particular for animal products is key for exported agriculture goods in the context of a target export promotion effort.

129. Establishing Commodities Associations. Most market institutions exist in some form in Albania although they are weakly represented for many commodities and in many regions. These institutions must now be strengthened in order to increase the range of marketing options for the buyers and sellers of agricultural outputs and inputs; expand the opportunities for adding value to agricultural products; and increase the efficiency of transactions at each stage of the marketing chain. Private sector commodities associations are an important instrument to enhance the discussion between private and public interest. With limited public support (through training, technical assistance), such associations could be formed.

130. Promotion of Agriculture Niche Markets. Several agriculture niche products, including but not limited to medicinal plants and herbs, snails, olive products, honey and bee products, have considerable export potential, in particular in the EU. In exploring measures to support this export potential, GOA in close collaboration with the private sector should carry out marketing studies aiming at increasing sales on export and domestic markets. Recommendations would cover the following areas: (a) public policies (including, but not limited to, legislation and regulations for instance on product safety and quality; or areas for bilateral negotiations on preferential access); (b) key public investments (for instance, in infrastructure); and (c) private sector investments.

Box 5: Price Formation and Transmission

Where markets work well, prices are formed in response to supply and demand and vary across space and time in a consistent manner. A simple analysis of weekly price data provided by MAF and the USAID SARA project provides some insight into the extent to which this is occurring for wheat, wheat flour, potatoes, tomatoes, cows' milk and mutton in Tirana, Shkodra, Kukes, Peshkopi, Korce, Gjirokaster and Fier, for the period August 1995 - July 1996. Wide variation in the way these prices are formed and transmitted suggests that agricultural markets are not well integrated and so not working as well as they should.

Although only a partial analysis, these results suggest that markets are poorly developed. The limitations imposed by poor roads, lack of processing and the small marketed surplus also mean that production is oriented towards local markets, with limited movement of products between markets. Moreover, seasonal price movements are still either non-existent or too small to provide an adequate incentive for off-season production. Transport and processing constraints limit the potential for spatial arbitrage of perishable products.

Wheat. Wheat is only traded year-round in the high potential regions where there is a large marketed surplus (Korce, Shkoder and Fier). In Tirana and in the mountain regions, trade only occurs for 5-6 months of the year, with flour being traded during the other months. The national market for wheat is thus very thin. In the three markets where wheat was traded all year, prices were formed largely in response to government controls until 1996 and were thus fairly constant. They were then gradually liberalized during the first half of 1996, and so increased in line with world prices. This sequence resulted in a distorted seasonal price pattern with minimal consequent incentives for commercial private sector storage. Correlation coefficients were calculated for these three markets as a means to examine spatial integration. Although high (> 0.88), these coefficients reflect the influence of government controls and then world prices, rather than strong spatial integration. In fact closer examination reveals a distorted spatial relationship in that wheat prices are highest in Fier (which is closest to Durres), relative to Korce and Shkodra. The opposite pattern would be observed if farm gate prices were consistent with import parity prices (ex farm-gate).

Wheat Flour. Although largely sourced from imports, the wheat flour transacted on domestic markets is probably the most actively traded agricultural commodity in Albania and transactions are observed in all markets during most of the year. The influence of government control (as for wheat) is evident however, particularly in the low prices observed in Kukes and Peshkopi which are furthest from Durres; and in the failure of regional price differences to reflect transport costs. (Tirana has the highest prices, followed by Fier/Gjirokaster, Shkodra, Korce and then Kukes/Peshkopi). High observed correlation coefficients are thus once again misleading as indicators of market integration.

Potatoes. Potato prices give a better indication of the extent to which markets are working, as there is no government intervention and the marketed surplus is some 60% of total production (mostly from Korce and the Coastal Plains). Markets do not appear to be well integrated spatially (with the exception of Fier and Tirana) indicating that most production is for local markets. There is some seasonal price variation in June-July 1996, although it is not clear what causes this as potatoes are planted in April and harvested in September-October.

Tomatoes. Tomatoes are the most important horticultural crop. They are grown in greenhouses and open fields and are produced for both fresh (wholesale) markets and processors. Prices show a strong seasonal pattern and move very closely between regions, as indicated by high correlation coefficients. However the very small price differential between regions indicates that most production is for local markets, with limited product movement between regional markets.

Cows Milk. The high perishability of milk, lack of processing, and poor roads mean that liquid milk production is necessarily for local markets only. With the possible exception of Fier and Tirana, the spatial integration of milk markets is thus negligible. Some seasonality of prices is evident, with prices rising during winter months when feed is scarce.

Mutton. Meat markets show a higher level of market integration than milk, with higher observed correlation coefficients. This is not unexpected in that production is typically in upland regions, consumption is concentrated in towns, and meat is readily processed and transported. Some seasonal price variation is observed during the summer months when grazing is scarce.

C. RURAL FINANCIAL SERVICES

131. Financial sector reform is an equally critical element in maintaining macro-economic balances in the short-term and closing the rural credit gap in the medium-term. While an

important credit gap in rural areas is likely to continue for some time, GOA would refrain from providing subsidized credit to the sector.

132. The development of an agricultural and rural credit system through the former Rural Commercial Bank (RCB) has clearly been a disappointing experience. In 1993, the insolvent Bank for Agriculture and Development was liquidated and the RCB was created to provide loans under market conditions to private farmers, agro-processors, traders, and rural entrepreneurs. Despite donor support, efforts to reform and strengthen RCB were unsuccessful - RCB's organizational structure, including the lack of an appropriate incentive framework for staff and management, remained unchanged. Moreover, systemic weaknesses common to rural financial markets (such as lack of traditional forms of collateral required by commercial banks and information barriers) are especially pronounced in Albania, where land is largely unregistered, movable property registries do not yet exist, collateral is effectively unenforceable due to a dysfunctional judicial system, rural borrowers lack credit history, and lenders lack experience in commercial lending. As RCB's lending portfolio continually deteriorated, new lending stopped, and RCB branches have provided practically no loans since mid-1996. After the liquidation of the Rural Commercial Bank and merger with the National Commercial Bank in late 1997, the rural sector has been left short of essential financial services (i.e. agriculture credit, rural savings and a functioning payment system in rural areas).

133. Demand for agricultural credit by the new private farming sector continues to be strong and is rising. Individual farmers require access to credit in order to purchase farm inputs and mechanization equipment. With rising demand for inputs and equipment by the farm sector, agricultural support services such as traders and transport enterprises also seek financial resources in order to respond to these new business opportunities. Loan demand by the new private agro-industrial sector is also increasing quickly.

134. From 1993 to 1996, an important share of agricultural credit has been made available by international donors, much of which has been channeled through the RCB, and other, smaller intermediaries. One such intermediary is the Albanian Development Fund (ADF) which has successfully managed to provide remote and poor villages with small-scale rural credit and infrastructure. While the approach taken by ADF for the provision of small-scale credit in the past has proven very successful in terms of recovery rates (100%) and of reaching poor rural communities, its coverage (some 5% of all villages), and scope in filling the growing credit gap is nevertheless limited. As a result of the dismal performance and subsequent bankruptcy of the RCB, the village credit funds (VCFs) implemented by the Albanian Development Fund are currently the only source of rural credit (see Box 6). This system has been rather successful. The information barrier is resolved by taking loan decision making to the level of the village, where there is absolute transparency and the work ethic of each borrower is known to all. "Peer pressure" substitutes for traditional collateral. Moral hazard is adverted because the reputation of each borrower (which is highly valued within the village community) is at stake. The VCF model offers enormous potential to establish a simple savings and credit association system that corresponds to the needs of the rural population and that functions within current Albanian reality.

135. Development of ADF's rural micro-credit. The VCF model offers enormous potential to establish a bottom-up financial network with the full participation of small farmers, evolving to a progressively sustainable savings and credit association system. The 1995 Law on Savings and Credit Associations, although it will require future strengthening, provides a first legal framework for the experimental transformation of VCFs to savings and credit associations. However, the current institutional environment of the rural credit program (which is implemented by a rural credit department of ADF, a Government foundation with soft budget constraints) is not consistent with the establishment of a sustainable rural credit system, which necessitates a private environment with transparent cost/loss accounting and performance-based salary remuneration. In order to build on the achievements to date and ensure future sustainability of rural microcredit, ADF's rural credit program would be transformed to a system of private, autonomous savings and credit associations.

136. Addressing Collateral Issues in Rural Areas. One key impediment to the provision of more formal forms of rural credit through the nascent private banking sector is the uncertainty associated with enforcing collateral in the event of foreclosure. While currently not fully understood, efforts should be made to review the current legal framework in consultation with private banks and potential larger scale rural borrowers (such as agro-processing enterprises) and seek to develop and adopt regulation to this effect. Forms of inventory financing, for example through the development of regulations and institutions associated with warehouse receipts, should also be reviewed.

Box 6: The Albanian Development Fund

Following the rapid privatization of agricultural land in 1992, the Government, with the financial assistance of the World Bank, launched a rural poverty alleviation program with two main components: a community-based infrastructure works program to generate employment and improve small local infrastructure, and an innovative "village credit fund" program. Project activities were designed and tested using a participatory approach during the Rural Poverty Alleviation Pilot Project. The Rural Development Fund - a foundation with legal and fiscal autonomy yet overseen by a Board of Trustees comprised of Government officials - was established to implement the project. The pilot project proved highly successful, and the Government expanded the project's components under the follow-up *Rural Development Project*, which became effective in May 1995. In addition, given the success of the Rural Development Fund in rural areas, the Government transformed it into the Albanian Development Fund (ADF), and expanded its microcredit and infrastructure works to selected urban areas under the *Urban Works and Microenterprise Pilot Project*, which became effective in December 1995.

ADF's **infrastructure program** now covers 28 of Albania's 36 districts, and will be expanded country-wide under the upcoming *Community Works Project*. ADF has proven an efficient agency for promoting and financing small-scale infrastructure, especially in remote rural areas, obtaining very low subproject unit costs and incurring reasonable operating costs. Over 380 rehabilitation subprojects, including rural roads, water supplies, small irrigation schemes, schools, and health centers, amounting to over 1 billion leks (over US \$10 million) have been financed by ADF. During the civil crisis that engulfed Albania in early 1997, infrastructure subprojects were protected by local governments and communities, which in some cases hired guards paid with their own funds.

Under the **village credit fund (VCF) program**, there are now over 200 VCFs in 11 districts of Albania, and over 9,000 active borrowers with loans averaging about US \$500 each. Despite the civil unrest of 1997, the loan repayment rate is nearly 100% (less than .5% portfolio at risk), due to a system based on village solidarity and local decision making - villagers elect a three-member village credit committee that makes the loan decisions and assures the repayment. Under the proposed *Microcredit Project*, the VCF system will be expanded and transformed into a progressively sustainable savings and credit association system.

137. The supply of agriculture and rural credit will be extremely limited in the medium-term. The agenda for financial sector reform and the difficulties for providing viable rural credit will result in only a very limited amount of the agriculture and rural credit demand being met in particular at the level of small-scale producers and processors. Following the disappointing experience with formal rural credit through the banking sector in Albania and the impact of the "pyramids," donor funding for agriculture and rural credit is likely to remain very limited in the medium-term. Subsidized credit (through interest rate subsidies) has little economic rationale in a country where labor is abundant and capital scarce and may contribute to unemployment without increasing overall productivity. Emphasis in the future should be on: (a) supporting the institutional evolution of ADF's rural micro-credit approach towards a formal savings and credit union based finance institution; and address collateral enforcement issues that are impeding the nascent private banking sector from providing working capital and investment credits in rural areas; (b) in the medium term the possibility of establishing the regulatory framework for warehouse receipt financing should also be explored; and (c) providing a regulatory framework, including a registry system for moveable assets, conducive to the nascent private banking industry to take the risks associated with agriculture and rural-based lending.

138. Piloting Rural Financial Services. As a complementary activity to overall financial sector reform carried out by Government, the development and testing of appropriate technologies of financial intermediation in rural areas should be explored. Piloting rural financial services through private banks with some limited public support could consist of: (a) development of suitable technologies to provide retail financial services to small and micro-entrepreneurs in small rural localities; (b) establishment and operation of a network of pilot experimental banking offices; (c) incremental administration expenses incurred by Government while managing and monitoring the pilot experiment; and (d) dissemination of the results of the pilot experiment.

139. A small credit line may be made available to participating banks as initial working capital endowment for the experimental branches in key rural centers such as Korca and Girokastra. This initial working capital is required for the units to provide a number of sub-loans to entrepreneurs and thereby test the services and technologies to be developed by the project. Nonetheless, it is expected that the majority of the experimental branches would be able to mobilize enough deposits to cover their cash flow needs.

140. The central idea of the pilot project is to establish a series of small branches of private banks in localities of various sizes to demonstrate that the provision of financial services to individuals and SMEs may be profitable if appropriate technologies are used to do so. Such a pilot activity could be justified as an appropriate government intervention because the development of sustainable technologies for delivering financial services to SMEs requires extensive local experimentation on how to implement such new technologies. The problem is that the investment in experimentation may be inadequate unless the government provides limited support.

6. RURAL DEVELOPMENT

141. Successful rural growth is broad based and widely shared. Especially in Albania, where farm size is small, development of non-farm enterprises is essential to increasing rural incomes, particularly the incomes of the poorest, who typically have the least agricultural land. Continuing interventions, like those under the ADF, are therefore needed to enable non-farm growth and target rural poverty alleviation, as well as to improve rural well-being and promote the active participation of local communities in the rural development process. Since 1992, GOA has supported decentralized rural development through ADF's credit and infrastructure rehabilitation programs. Currently targeted to hilly and mountainous areas, ADF's programs should be expanded for broader impact, while evolving to respond to the changing needs and conditions of Albania's rural economy. Simultaneously, rural and regional development in Albania will require considerable investments in developing transport and communication infrastructure.

142. Decentralization. The emergence of greater interest in decentralization of government in Albania is driven in part by the current desire for the empowerment by local representatives as a reaction against over-centralization in the past, and in part by efficiency considerations for the provision of services. Decentralization can be initiated through a sector specific approach while maintaining central quality control in key areas. Investments in human resources (health, education), and the provision of infrastructure (roads, and public sanitation) could be areas where a decentralized approach will lead to more efficient provision of public services.

143. Investment in Rural Infrastructure. GOA has supported decentralized small-scale infrastructure rehabilitation through ADF's rural works program, which has evolved from an initial focus on employment creation, with works carried out directly by local governments (communes) hiring village labor, to greater emphasis on quality and use of small-scale contractors. In future evolution, provision of small-scale rural infrastructure would be guided by financial and economic analysis assisting local governments to maximize the benefit of limited resources - and with greater emphasis on cost recovery.

144. Beyond small-scale infrastructure works at the local level, the needs for investments in primary rural road rehabilitation and secondary road construction is clearly important, as is the need to improve communication infrastructure. Economic returns to rural transport infrastructure has been shown to be very high in other countries (for instance Morocco or Pakistan). A systematic approach to the provision of large rural infrastructure in conjunction with donor support is called for.

145. Road Network. The road network in Albania is composed of approximately 18,300km of public roads which can be broadly classified into three categories: Approximately 2,400km of primary roads link major production and population centers within Albania and provide access to national ports and border posts. Most of the primary road network falls within two major transport corridors - forming an East-West, and North-South axis across Albania. A secondary road network, estimated to comprise 5,000km of roads connect Albania's cities and regions, and in some cases provide access to the primary road corridors. The majority of the estimated

10,900km of tertiary roads serve a local function, providing access to, and between local communities.

146. The condition of the network varies. About 90% of the primary and 15% of the secondary roads are paved. The primary roads are generally in a poor but stable condition. They are in the process of being upgraded under recent funding/donor programs. The majority of secondary roads, as well as all tertiary roads are either of stone-pitched or earth construction. Approximately 14,000 km of these roads are 'rural roads.' These roads have been almost totally neglected until recent years, and many have been passable only by four wheel drive vehicles during the dry season. With the assistance of donor organizations, GOA, is upgrading over 1000km of rural roads. However, the remaining 90% of these roads are in poor condition, and consequently a large number of communities and villages remain isolated for a least part of the year. The basic structure of these roads are modest but usable. Drainage varies widely; in some place it requires only the addition of a few culverts, while in others it needs to be fully reconstructed.

147. Road Administration and Management. The Ministry of Public Works and Transport, through the GRD (and its field organization of District Road Directorates) currently holds responsibility for all primary roads as well as those secondary roads which are important for strategic reasons or for tourism purposes (a total length of about 3200-3500 km roads). There are some additional 1000km of urban roads under the responsibility of Local Governments, Municipalities and City Councils. The remaining 14,000 km of 'rural roads' fall under the jurisdiction of various Local Governments, Prefectures (District Councils) Communes and other Ministries (eg Ministry of Agriculture, Ministry of Defense). Precise responsibilities for rural roads are not defined. In response to this situation, GRD are investigating the re-organization of the roads sector with the assistance of technical assistance. There currently appears to be no Masterplan for the development of Albania's public road network.

148. Current Activities. GOA recognizes the urgent need for rehabilitation works and new investments in roads to provide an adequate transport infrastructure necessary for the development of the economy. This point is clearly emphasized in recent Transport Sector Roundtable discussions. As of the first quarter of 1998, cumulative financial commitments to the road sector amount to approximately US \$280 million. The GOA is focussing it's own financial resources on maintenance, as well as road improvement of secondary roads in the northeast and southeast regions. Main donors in the sector include the EU PHARE program, IDA, Italy, EBRD and the Kuwait Fund.

149. Roads targeted by GOA's rural roads project are those in highly productive agricultural areas. A total of 85 road sub-projects have been selected in 14 districts from two agricultural regions, the Adriatic coastal plane - and the southeastern regions around the city of Korca. Five additional economically justified roads have been included in six very poor districts (Topoje, Hasi, Gramshi, Berati, Skrapar and Saranda) at the request of GOA. Despite its relatively extensive coverage, the rural roads projects will only rehabilitate a little over 5% of the countries rural roads.

7. MANAGEMENT OF NATURAL RESOURCES

150. Accelerating degradation of natural resources is perhaps the most deep-seated long-term constraint to sector development. The many facets of this issue – which are only briefly sketched in this section - include natural resource degradation to: (a) forest lands through uncontrolled deforestation and forest fires; (b) pasture land through the significant increase in livestock numbers and consequent overgrazing in mountains areas; (c) through agriculture production on marginal lands; (d) scarce and productive arable land through rapid urbanization; (e) marine fishing resources; and (f) water resources and watersheds. A much more thorough review – such as would be carried out under a planned National Environmental Action Plan – is required to formulate a systematic approach to addressing these issues.

151. Soils have been exploited continually since 1991, receiving little fertilizer other than some animal manure. The result is a fall in organic matter content, nitrogen, and potassium compared to 20 years ago. Inadequate use of fertility conserving cropping patterns, wasteful cultivation practices, and poor and inadequate soil conservation practices are further causes of this soil degradation. In addition to declining soil fertility, the result is a decline in water retention capacity, an increasing incidence of weeds and plant diseases, an increased incidence of wind and soil erosion, particularly in the less fertile soils and hilly areas, and frequent flooding. Approximately 200,000 hectares has been affected in this way, most of it in the higher potential coastal zones.

152. Considerable forest degradation is occurring at three levels. First, degradation of oak forests (in terms of stock and quality) caused mainly by excessive fuel wood collection, overgrazing, and over-harvesting of tree fodder; the two latter causes have been particularly acute since the mid-1980s, as a direct result from the dramatic expansion of small ruminants. Second, the degradation of productive high forests by illegal logging for commercial wood, accompanied with considerable waste of quality timber. This has become a significant problem in the early 1990s. Third, past State-organized deforestation in the 1960s, to convert forests into agriculture land, most of which is marginal land today.

153. Similarly, significant amounts of pasture have been converted into agriculture land (pasture area has decreased from about 700,000 hectares in the 1960s to about 400,000 hectares today), resulting in reduced grazing and fodder supply and an increase of land that is marginal for agriculture purposes.

154. Flooding is also increasingly a problem, especially in the northwestern part of Albania where watershed management is poor and drainage infrastructure is deteriorating. In 1996 for example, the area of Lezha was flooded three times, whereas previously floods occurred only once every two to three years. The total area estimated to be at risk of flooding is more than 40,000 hectares. A causal link also exists between deforestation, overgrazing, erosion, and flooding, which is compounded by the poor maintenance of drainage canals and pumping stations. One further element that has compounded flooding is the disruption of the torrent/river control program which was publicly funded in the past. Silting of reservoirs is a further result of

this erosion and flooding which has a seriously negative impact on the hydroelectric and irrigation potential of Albania.

155. Marine and aquaculture fishery resources are another example of poorly managed resources with high economic potential. Albanian waters are increasingly being fished by licensed and unlicensed larger foreign trawlers as well as by the domestic fishing fleet which have increased pressure on the demersal stocks off Albania. As a result, there have been strong signs of over-exploitation of demersal coastal fish resources in trawlable off-shore areas. Catch-per-unit effort have declined and average sizes of fish caught by trawlers have become smaller. Yet the fishery sector has an important economic potential with an estimated potential for sustainable exports around US \$30 million per year. Albania has very little reliable scientific information and institutional capacity to facilitate sound fish stock assessment, a pre-condition for effective management of this resource; it also lacks the capacity to enforce sustainable fish yields.

156. While the individual impact of these stresses on natural resources may be limited, in aggregate they are critical for future development of the agriculture and rural sector. The irreversibility of much of this degradation, and the almost total neglect of these issues by the public at large are further cause for alarm. Albania already has little agriculture land (some 700,000 hectares) and one of the highest ratios of population to agriculture land in Central Europe, so any loss of this land has great importance.

157. In order to safeguard the sustainability of agriculture production, GOA should: (a) develop and implement policies aiming at improved watershed management by facilitating the commune/village level management of mountain pastures and forests; (b) ensure the sustainable long-term use of water resources between competing uses; and (c) develop and implement policies of marine resource monitoring and surveillance.

158. Improved forest management would focus on the following three objectives: (a) restoration of degraded State-owned forest and pasture areas and promotion of their sustainable use; (b) promotion of conservation of natural forest ecosystems; and (c) undertake initial steps in the transition of the forestry/pasture sector to a market economy, separating commercial from regulatory functions and establishing mechanisms for self-financing of the commercial activities. This will require institutional reforms of the forest/pasture administration including the establishment of a forestry environmental management unit; and policy reforms with regard to controlling illegal forest harvesting, and marketing and price reforms. Major emphasis would be given to a participatory approach in managing State-owned forests and pastures by local Communes and villages granting of long-term user rights.

159. Improved watershed management would seek to gradually transfer user rights of state-owned forests and pastures to communes and villages on a long-term basis (20 and more year leases) in view of supporting the livelihood of these communities. By ensuring long-term user rights, it is also assumed that the interest of local communities in the sustainable management of these forest and pasture resources is increased, hence contributing, to reduced occurrence of erosion. Communal forest management is being piloted under the World Bank supported

Forestry Project in some 30 communities. While learning from this experience, expansion of this approach to pastures would be a high priority.

160. Albania's ample fresh water resources will be subject to increasingly competing demands between household consumption, industrial use, hydroelectric power generation, and irrigation application. In order to ensure a rational use of the country's fresh water resources a National Water Master Plan should be established. This Plan would project available resources and evolving demands, and propose approaches to reconcile a possible water supply gap. Ideally, such a National Water Master Plan should be prepared before major further irrigation rehabilitation or expansion is implemented.

161. At present no coherent approach exists to the sustainable use of Albania's marine and fresh water fishery resources. No management approach defining and implementing a sustainable catch policy has been developed to date. A National Marine Resource Master Plan should be developed, and focus on the role of public institutions in defining and enforcing sustainable catch levels.

REFERENCES

- Christensen, Garry. 1998: *Food Security and Cereal Distribution in the North and North-Eastern Regions of Albania*. Consultant report for The World Bank.
- Cungu, Azeta and Johan F. M. Swinnen, 1998: The Dramatic Rise of Individual Farming in Albania: Causes and Effects.
- Cungu, Azeta and Johan F. M. Swinnen, 1998: Albania's Radical Agrarian Reform. (chapter in forthcoming Economic Development and Cultural Change).
- Government of Albania, Ministry of Agriculture and Food, 1998: *The Strategy of Agricultural Development in Albania (The Green Strategy)*.
- Government of Albania, Ministry of Agriculture and Food, 1997 and 1998: *Review of Agricultural Policy, Market and Trade Developments in Albania*. Annual Reports to the OECD Expert Group on Agricultural Policies in Non-Member Countries.
- Government of Albania, Immovable Property Registration Project, 1998: *Report on the Progress of the Project for the Immovable Property Registration System*. (internal memo).
- Government of Albania, Central Office of the Immovable Property Registration System, Project Management Unit, and the Terra Institute, 1998: *Action Plan for the Immovable Property Registration System and other Land Market Activities (Extended)*.
- Government of Albania, 1998: *Albania on the Road to Stabilization and Development*.
- Government of Albania, 1998: *Albania – Public Investment Program 1998 – 2001*.
- Kunkel, David and Engjell Skreli, 1998: *Structure of Agriculture and Sources of Farm Income in Albania after the Transition*. Report prepared under the Support for Agriculture in Albania (SARA) Project.
- Swimbank, Alan. 1994: *Access for Agricultural and Food Products from Albania to the European Union*. Consultant draft report for the Food and Agriculture Organization.
- Terra Institute, 1998: *Legal and Institutional Framework for Land Administration in Albania*.
- United Nations, Economic Council for Europe, Meeting on Land Administration, 1998: *Technical Review of the Albanian Land Market Action Plan*. Draft Report.
- World Bank, 1998: *Albania – Country Economic Memorandum*. (to be published)
- World Bank, 1997: *Albania – Directions for Recovery and Growth. An Initial Assessment*. Prepared by The World Bank, the European Commission, and the European Bank for Reconstruction and Development, in consultation with the IMF.

World Bank, 1996: *Albania - Agriculture Sector Adjustment Credit: Note on Wheat Price Policies.* (internal memo)

World Bank, 1996: *Albania - Agriculture Sector Adjustment Credit: Monitoring and Evaluation Report of the PMU.* (internal memo)

World Bank, 1996: *Albania - Growing out of Poverty.* Country Poverty Assessment.

World Bank, 1992: *An Agriculture Strategy for Albania.* A Report prepared by a Joint Team from the World Bank and the European Community.

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