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Albania: Income Distribution, Poverty, and Social Safety Nets in the
Transition, 1991-1993

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Abstract

This paper examines developments in Albania's income distribution and poverty during the transition to a market-oriented economy. It pays particular attention to the impact of price liberalization on the agricultural terms of trade and production, the decline in state enterprise employment, emigrant remittances, and social safety nets. Income and consumption data produce conflicting results. Based on income data, including average presumptive agricultural incomes and state sector wages, there is a significant rise in real income in rural areas and a decline in real income in urban areas. Based on food consumption data, however, a large decline in urban real incomes is implausible. Poverty in both the urban and the rural population was mitigated by the presence of formal social safety nets, as well as informal arrangements in the form of emigrant remittances.

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Summary

This paper describes changes in income distribution and poverty in Albania during the transition period 1991-1993, drawing particular attention to the role of price liberalization and terms of trade shifts in favor of agriculture, an increase in unemployment in the state sector, emigrant remittances, and social safety nets. The study covers private agriculture, state enterprises, the civil service, pensioners, the unemployed receiving benefits, and those on social assistance. It presents estimates of average agricultural incomes by district, based on acreage, number of livestock, and yields, and of the urban household income distribution. As a check on the results, developments in per capita consumption of food items are examined.

Based on income and remittance data, real incomes in the rural sector increased by about 50 percent between 1991 and 1993. Real urban incomes, including government transfers, declined by 12 percent between the first half of 1991 and the second half of 1993, and the share of the urban population with incomes below subsistence levels increased from about 6 percent to 25-30 percent. The ratio of presumptive agricultural income to public sector income increased from 1/2 to 1 between 1991 and 1993. Consumption data indicate that per capita food consumption increased in urban areas, implying that a large decline in urban real incomes and increase in poverty is implausible.

The incomes of the recipients of government transfers who also receive remittances from abroad--that is, the incomes of half the government transfer recipients--exceeded the poverty line. The incomes of the other half fell below the poverty line.

The policy implications are that (1) targeting will be cost-effective and (2) an increase in benefit levels is necessary for those with incomes currently below subsistence levels. Recent government initiatives--block grants to communities and self-targeted public works--are in line with these prescriptions.

I. Introduction

The dislocation from the collapse of central planning and the restructuring of the state enterprise sector have led to a large decline in output and employment in Albania, as in other transition economies. At the same time, the Albanian Government, which faced severe supply shortages and annual budgetary deficits, progressively liberalized most consumer prices while raising the remaining administered prices to market-clearing levels. The Government also introduced a system of unemployment benefits and put in place compensating income transfers for price increases in order to protect low-income groups. This paper investigates the impact of these developments and policies on rural/urban income distribution and poverty. The main sources of data are cash income and emigrant remittances. As a check on the results, developments in the per capita consumption of food items are examined.

Income data reveal three main trends. First, there was a substantial shift in income distribution in favor of the agricultural sector. The ratio of average presumptive agricultural cash income to public sector income increased from 1/2 to 1 between 1991 and 1993. Second, real incomes in the rural sector increased by about 50 percent during this period. 1/ Real incomes in the urban sector (including government transfers and emigrant remittances) declined by about 12 percent between the first half of 1991 and the second half of 1993, and the share of the urban population (including pensioners) with incomes below subsistence levels increased from 6 to 25-30 percent. 2/ Based on annual data, real incomes in the urban sector declined by about 30 percent between 1991 and 1993, but this larger decline could reflect problems with the data for 1991 (see below). These developments reflect the mitigating impact of emigrant remittances and social safety nets (unemployment benefits, ad hoc indexation of pensions, social assistance, and transfers to low-income groups to compensate for price liberalization), without which poverty in urban areas would have encompassed the majority of the urban population. Poverty is difficult to

1/ Throughout the paper a distinction is made between the agricultural and rural population. The latter includes pensioners and/or public sector workers, depending on the context.

2/ Subsistence income is defined conservatively as the cost of 2,000 calories per day of food plus minimum necessary expenditures for a few other necessities (rent, soap, medicines, and firewood), evaluated at urban prices (Appendix II). Poverty based on cash income may have been higher than the 6 percent mentioned in the text in the first half of 1991 because some pensioners may have earned pensions below the subsistence income. The 6 percent was obtained by comparing average pensions with the subsistence income (see below). The subsistence income, which determines the measurement of poverty, is not a clearcut concept. There could be disagreement on what goods and how much to include. A lower level of subsistence income than used in this paper would reduce the estimate of the extent of poverty; a higher level of subsistence income would raise it."

measure in rural areas, but the introduction of a new law for social assistance in mid-1993 was aimed at eliminating rural poverty through the introduction of income supplements to all qualified applicants.

These results should be interpreted with caution because of several limitations of the data. First, for comparison with non-agricultural income, presumptive income in agriculture is estimated by assuming cash farming, notwithstanding the fact that a sizeable proportion of agriculture is for self-consumption (farmers' consumption of their own production). Second, comparison with the period before price liberalization is inherently difficult because, owing to widespread rationing, cash income is not a good measure of purchasing power for the period before liberalization. This problem is particularly acute for the first half of 1991 (and by implication, for the full year), because large temporary wage and benefit increases in mid-1991 in the face of declining production, led to unusually high excess demand, rationing, and monetary overhang, so that income data overstate true purchasing power. The presence of rationing also poses a problem for the first half of 1991 data, but to a smaller degree. Third, even for the nonagricultural sector, the income data used are not always precise. Income distribution data cannot be compiled for certain population groups--unemployed, pensioners, military personnel, for whom only average incomes are available--and there is also uncertainty regarding the size of emigrant remittances. At the same time, there is no information at all on support (in-kind or other) from family members within the country, nor is the degree to which urban dwellers have the opportunity to grow their own food known. 1/

Because of these data limitations, the results are checked against developments in per capita food consumption estimated on the basis of production and net imports of selected items. Estimated per capita food consumption increased by 28 percent between 1991 and 1993, implying--assuming unit income elasticity for food consumption--an increase of 12 percent in per capita urban food consumption, as well as a similar increase in real urban income. This finding is difficult to reconcile with a decline in real income in urban areas estimated at 30 percent between 1991 and 1993 and suggests caution in interpreting the income analysis.

The income data can be partially redeemed by purging the impact of large wage and benefit increases in mid-1991 which led to rationing in 1991.

1/ Recent data revisions for 1993 were not incorporated in the analysis. This is the case for the number of workers in budgetary institutions (184,000 persons at end-1993 compared with 197,000 assumed in this paper), average urban pensions (possibly 20 percent higher at end-1993 than assumed here), and average wages in budgetary institutions (12 percent higher by end-1993 than assumed here). These revisions imply somewhat lower poverty estimates than reported here. In January 1994, wages in budgetary institutions were increased by 30 percent on average, while social assistance and unemployment benefit levels were raised by 15 percent in most cases.

Between the first half of 1991, i.e., before the large wage and benefit increases, and the second half of 1993, real urban income declined by 12 percent, a finding which is somewhat more in line with urban consumption data.

Notwithstanding general data problems, available data suggest strongly that there is large inequality among households depending on whether they have access to foreign remittances. A policy implication is that targeted poverty alleviation measures will be more effective than universal benefits, which would be appropriate if poverty was more widely distributed.

The remainder of the paper is organized as follows. Section II provides background information on price and output developments. Section III describes the methodology employed in the paper and section IV provides qualifications. Section V describes real income developments by sector and provides estimates of poverty. Section VI analyses developments in food consumption. Section VII describes and partially assesses the efficiency of the social safety nets. Section VIII provides conclusions.

II. Price and Output Developments

By end-1993, price reform that had begun in mid-1990 was almost complete, with virtually no remaining price controls or consumer subsidies. The earliest steps, taken in mid-1990, included autonomy in the pricing of non-essential industrial goods and the tolerance of parallel markets for private agricultural produce. Further liberalization of prices followed, beginning with the early liberalization of industrial goods and vegetable prices at end-1991, dairy products in August 1992, and rice and sunflower prices in January 1993. ^{1/} Currently, among food items, only the prices of wheat and sugarbeet remain under control, and these are priced at or near world market levels. While still controlled, the official price of bread was raised by 370 percent in August 1992 and doubled in July 1993, parallel with increases in the producer price of wheat, to avoid the emergence of budgetary subsidies. Among nonfood items, the prices of heating products, medicines, textbooks, and public utilities remain controlled.

Price reform thus far has resulted in an improvement in the terms of trade of agriculture. Based on year-on-year averages, agricultural producer prices increased by about 440 percent between 1990 and 1992, compared with an increase of only 300 percent in the nonfood CPI (and 340 percent in the CPI, which is the relevant measure in the case of complete reliance on markets for food consumption) (Table 1). The improvement in the terms of trade was partially reversed in 1993, with estimated growth in producer prices of 50 percent and in the non-food CPI of 80 percent.

Real GDP recovered partially during 1993, after a drastic decline from 1990 to mid-1992, with agriculture taking the lead in the recovery.

^{1/} Blejer, et al. (1992), pp. 33-34.

Agricultural output fell by 30 percent between 1989 and 1991 because of the breakdown of public distribution channels for agricultural inputs and outputs, the chaotic process of privatization (agricultural cooperatives were dismantled spontaneously in the second quarter of 1991), and a shortage

Table 1. Price Indices (1990=100)

	1991		1992			1993		
	H1	H2	H1	H2		H1	H2	
CPI (urban)	136		294	442	589	763	817	872
CPI-nonfood	...		286	399	512	681	723	764
Subsistence CPI	101		106	309	512	725	788	851
Agricultural producer prices	132			544			826	
Crops	149			645			979	
Animal products	112			426			648	

Sources: Ministry of Agriculture, Ministry of Finance, and Department of Statistics

of foreign exchange for critical inputs. Agricultural output recovered in 1992 and 1993 by a cumulative 32 percent, as these factors worked themselves out and the agricultural terms of trade improved. Nonagricultural output fell by almost 50 percent between 1989 and 1992 and increased by about 10 percent in 1993. Correspondingly, unemployment increased from 130,000 (8 percent of the labor force) in 1990 to about 400,000 (23 percent of the labor force) in 1993, with the increase occurring almost entirely in urban areas. ^{1/}

Developments in nominal nonagricultural income were largely within the control of government policy, since the Government set wages in budgetary institutions, transfer incomes, and wage ceilings for state enterprises; the only exception was the private sector. ^{2/} The Government pursued an incomes policy as part of its stabilization measures and introduced compensatory income transfers in connection with the August 1992 and August 1993 agricultural price liberalization (see Section VII). In August 1992, workers in state enterprises and in budgetary institutions, the unemployed receiving unemployment benefits, the urban pensioners, and those on social assistance in cities received lek 280 per month, and an additional

^{1/} Including those not receiving unemployment benefits. The 1993 figures include 40,000 state farm workers, on average.

^{2/} Wage ceilings were introduced for state enterprises in August 1992, after a wage explosion in the state enterprises.

lek 200 per dependent, while low-income agricultural families received 100 lek per person. Rural pensioners were excluded, on account of low compliance with the requirement for social security contributions. ^{1/} In August 1993, compensation was 214 lek per person, again excluding rural pensioners. Table 2 shows the number of people covered by social safety nets. Table 3 provides information on benefit levels.

III. Methodology

This section outlines the main methodological issues surrounding the measurement of nominal and real incomes and poverty in Albania. Appendices I-III provide more details.

1. Nominal incomes

a. Agriculture

Income data are not available for the agricultural sector. The approach taken here is to estimate presumptive income--the market value of the full agricultural output net of costs--on the basis of acreage and livestock per household (the latter constitutes half of agricultural production) (Appendix I). These incomes are suitable for comparison with urban incomes as long as farmers had access to markets. To the extent they did not have access to markets, these incomes would overstate welfare, since farmers would be constrained to consume their own production rather than having the option to trade their production for a preferred bundle of goods. ^{2/} Based on available data, presumptive income can be calculated by district, giving an idea of dispersion of incomes across geographical regions.

b. Remittances

Emigrant remittances were an important source of income. With an estimated 300,000-400,000 emigrees (more than 10 percent of the population, or one migrant per two families) in 1993, \$200 million in remittances (20 percent of 1993 GDP), and assuming that each migrant supported one family, half the families received \$10 per month capita. Half the number of the poor (based on cash income) are assumed to have had access to remittances in 1993. This follows if each migrant supported one family and migrants were distributed across the poor population as they were across the population in general (i.e., one migrant per two families). If migrants supported more than one family, poverty would be less than estimated in the paper.

^{1/} Low-income rural households received compensation for the price increase of wheat, rather than bread, for a three-month period. Thereafter, this scheme was integrated with social assistance.

^{2/} However, the method underestimates true welfare to the extent that marketing margins are avoided by farmers' consumption of their own production.

Table 2. Population and Coverage of
Social Safety Nets, 1991-93

(In thousands of persons)

	1991		1992		1993	
	H1	H2	H1	H2	H1	H2
Total population	3,350	3,400	3,450	3,500	3,550	3,600
Coverage of social safety nets <u>1/</u>	738	903	1,037	1,246	1,476	1,543
Urban recipients of	450	614	719	781	1,010	1,002
Unemployment insurance <u>2/ 3/</u>	--	80	130	172	279	190
Their dependents	--	64	104	104	189	141
Social assistance	84	84	84	84	108	216
Pensioners <u>4/</u>	244	257	267	281	289	303
Their dependents	122	129	134	141	145	152
Rural recipients of	288	289	318	465	466	541
Unemployment insurance	--	--	--	62	62	21
Their dependents	--	--	--	84	84	28
Social assistance	167	167	167	167	167	334
Pensioners	121	122	151	152	153	158
Urban employees of	1,351	1,207	1,118	1041	747	736
Budgetary institutions <u>2/</u>	231	231	231	213	197	197
Their dependents	185	185	185	170	158	158
State enterprises <u>2/ 3/</u>	559	479	429	385	238	212
Their dependents	377	313	273	273	155	170
Rural workers of	1,935	1,935	1,935	1,789	1,789	1,886
State farms	127	127	127	65	65	--
Their dependents	171	171	171	88	88	--
Ex-cooperatives <u>2/ 4/ 5/</u>	1,636	1,636	1,636	1,636	1,636	1,886
Stock of emigrants and private sector employment	--	50	100	250	380	400
Total <u>6/</u>	3,857	3,927	4,022	4,159	4,224	4,230
<u>Memo items:</u>						
Double counting <u>7/</u>	507	527	572	659	674	630
Urban population <u>8/ 9/</u>	1,294	1,318	1,314	1,288	1,272	1,307
Rural population <u>9/</u>	2,056	2,082	2,136	2,212	2,278	2,293
Coverage of social safety nets <u>10/</u>						
Urban (percent)	25	34	39	43	57	58
Rural (percent)	13	13	14	21	21	22

Sources: Ministry of Labor, Ministry of Finance, Ministry of Agriculture, Institute of Social Security, Department of Statistics, and author's estimates.

1/ Includes urban and rural recipients of unemployment insurance, social assistance, and pensions. Price compensation for employees is not included. Includes some double-counting in 1993:H2 when pensioners became eligible for social assistance.

2/ Includes some state sector workers/unemployed in rural areas.

3/ Unemployment in the first half of 1992 refers to 80 percent payments to "idle workers." Reported employment is net of "idle workers."

4/ Includes pensioners from state farms.

5/ Includes recipients of social assistance in rural areas.

6/ Total of the above after removal of rural social assistance which is counted twice.

7/ Obtained as a residual and reflects (1) classification of rural state sector employees and unemployed and state farm pensioners under both ex-cooperatives in rural areas and under employed workers/unemployed from urban areas; (2) persons holding two jobs; and (3) persons with a job and receiving assistance.

8/ Excludes double counting.

9/ Includes half of migration and private sector employment.

10/ Number receiving benefits divided by number receiving benefits plus employed workers (excluding private sector workers).

Table 3. Wages and Benefit Levels under Social Safety Nets, 1992-93

(Lak per month)

	Per Head of Household			Per Dependent	
	Average	Minimum	Maximum	Compensation	Base Compensation
Urban sector					
State enterprises 1/					
Jan 1, 1992-June 30, 1992, average	1,718	8/			
July 1, 1992-July 31, 1992	2,350				
Aug 1, 1992-Jan 31, 1993	2,465			280	200
Feb 1, 1993-Mar 31, 1993	2,530			280	200
Apr 1, 1993-Jun 30, 1993	2,555			280	200
Jul 1, 1993 and after 2/	2,606			494	414
Civil service 1/3/					
Jan 1, 1992-June 30, 1992, average	1,037	2/			
July 1, 1992-July 31, 1992	1,200				
Aug 1, 1992-Sep 30, 1992	1,200			280	200
Oct 1, 1992-Jan 31, 1993	1,700			280	200
Feb 1, 1993-Jun 30, 1993	2,176			280	200
Jul 1, 1993 and after 2/	2,394			494	414
Unemployment benefits 1/					
	(70 percent of the last wage) 5/	(90-120 percent of the minimum wage)			
Before June 30, 1992 4/	770	607	1,012		130
July 1, 1992-July 31, 1992	673	607	810		130
Aug 1, 1992-Oct 31, 1992	673	607	810	280	200
Nov 1, 1992-Jan 31, 1993	838	756	1,008	280	168
Feb 1, 1993 and after	989	891	1,088	280	198
Jul 1, 1993 and after 2/5/	1,088	980	1,197	494	414
Pensions 1/					
	(60 percent of the last wage) 5/	(Set by legislation)			
Before July 31, 1992	706	660	1,050		
Aug 1, 1992-Oct 31, 1992	706	660	1,050	280	200
Nov 1, 1992-Jan 31, 1993	883	860	1,365	280	200
Feb 1, 1993-June 30, 1993	1,104	1,075	1,710	280	200
Jul 1, 1993 and after 2/5/	1,269	1,237	1,967	494	414
Social assistance 6/					
Jan 1, 1992-July 31, 1992	150				150
Aug 1, 1992-Aug 31, 1992	188			280	188
Sept 1, 1992-Jan 31, 1993	225			280	225
Feb 1, 1993-Jun 30, 1993	270			280	230
Jul 1, 1993 and after 10/	1300			494	100
Rural Sector					
	Pensions	Social Assistance per family of 5 7/10/			
Jan 1, 1992-June 30, 1992	424	500			
July 1, 1992-Oct 31, 1992	424	500			
Nov 1, 1992-June 30, 1993	530	500			
July 1, 1993 and after	530	2,275			

Sources: Ministry of Labor; Ministry of Finance and Economy; Institute of Social Security; and Fund staff estimates.

1/ Includes some workers/recipients from rural areas (see Table 2).

2/ Price compensation on July 1 and basic increase on August 1.

3/ Military personnel was paid the first price compensation out of Ministry of Defense reserve funds.

4/ Eighty percent wage payments to idle workers from July 1991 - July 1992, when unemployment benefits were introduced.

5/ Flat unemployment payments were introduced in October 1993, and the pension system reformed (maximum pensions were raised to two times minimum pensions, or 75 percent of the previous wage; 1 percent increment above the minimum for each year of insurance).

6/ For families without outside income. Amounts are reduced in line with the outside income.

7/ Rural wheat price compensation (August - October 1992 and after July 1993) is included; average amounts.

8/ See Table 9.

9/ See Table 10.

10/ Under the new Social Assistance Law, social assistance is a fraction of two times the flat unemployment benefit, varying from 70 percent for a two-person family to 92 percent for a 7 person family.

While there was sizeable migration as early as 1990, relocation expenses and difficulties in remitting earnings (illegal initially) meant that remittances were small until 1992, and this paper assumes that remittances were negligible in 1991.

c. Taxes

Very few people paid personal income taxes (the exemption level was very high, at leks 4,000 or about 130 percent of the average state enterprise wage in the first half of 1993), ^{1/} and social security contributions have thus far been exclusively paid by the employers. Agricultural workers paid neither social security nor income tax. ^{2/} For these reasons, taxes are not incorporated in the analysis.

2. Real incomes

Calculation of real incomes is difficult for Albania because of the importance of subsistence agriculture, and because there is no readily available price deflator which reflects the consumption pattern of (a) rural families and (b) poor urban families.

a. Rural families

When farmers market all their produce, income can be measured by presumptive cash income (defined above), and real income by presumptive cash income deflated by the rural CPI. However, when agricultural production is entirely for self-consumption--either because this solution maximizes utility or because farmers do not have easy access to markets--output is a more appropriate measure of real income. ^{3/} Below, both presumptive cash income and real output growth are reported. ^{4/} Data on the degree of self-consumption by crop and district is spotty, so that more precise quantification of real income growth is not possible. Also, the rural CPI is not available, and the urban CPI is used to deflate presumptive income.

b. Poor urban families

Because of the timing of price liberalization, the prices faced by the poor (i.e., the prices of necessities) followed a different path from the CPI. In the early period, the prices of necessities were relatively flat,

^{1/} In 1992, total revenue from this tax was less than 0.1 percent of GDP.

^{2/} Agricultural workers are subject to the social security tax, but the collection rate is almost zero.

^{3/} The choice of production for the market or for self-consumption is easily modeled by extending the Ricardian model of comparative advantage to include a cost of visiting the market (consisting of transportation and opportunity cost). In such a model, subsistence farming results from a high cost of visiting the market relative to the benefits from trade.

^{4/} Real gross output is reported. There is no data on output net of farm-produced inputs (seeds, fertilizer).

while in the later period, with price liberalization, the increases in the prices of necessities outpaced the CPI. As a result, changes in the CPI overestimate the erosion in real incomes of low income

groups early on, and underestimate it later on. ^{1/} In the long run, the deflators move similarly, as long as relative prices were in equilibrium before liberalization. The CPI faced by the poor is calculated in Appendix II. Figure 1 shows the behavior of this subsistence CPI against the urban CPI. ^{2/}

3. Poverty

a. Urban areas

A poverty estimate is derived for urban areas, on the basis of an estimate of the poverty line (defined in absolute terms, as the level of income necessary to purchase basic foodstuffs ^{3/} (at 2,000 calories per adult and 1,600 calories per child), and a few other necessities (housing, soap, medicines, and firewood) and income distribution data where available. The poverty estimate consists of both an estimate of the number of people receiving an income below the poverty line and the gap between their incomes and the poverty line (i.e., the "depth" of poverty). The poverty line, or the subsistence income, is estimated to be the following:

Table 4. Subsistence Income in Urban Areas

(In lek per month)

	1990	1991		1992		1993	
		H1	H2	H1	H2	H1	H2
Adult	166	166	168	177	852	1,207	1,416
Dependent	140	140	142	151	700	987	1,154
Family ^{1/} (per capita)	153	154		470		1,191	

Source: Table 23, Appendix II.

^{1/} Family with equal number of adults and dependents.

^{1/} This bias would be smaller, if the poor did not have access to necessities at controlled prices.

^{2/} The subsistence CPI is defined as an index of subsistence income for an adult. In the early period, from July 1990 to July 1992, the subsistence CPI increased by 6 percent, while the CPI increased by 280 percent. From July 1992, just before the prices of necessities were raised substantially, to August 1993, the subsistence CPI increased by 700 percent, while the CPI increased by 120 percent. Over the entire period, the subsistence CPI increased by 750 percent, close to the increase in the CPI of 740 percent.

^{3/} Based on a basket of foodstuffs used by the Ministry of Finance.

The number of the poor is assessed by comparing incomes with these subsistence incomes, taking into account family size and composition. The choice of unit is the nuclear family. That is, incomes of pensioner households and worker households are each checked against corresponding subsistence incomes. The impact of extended family arrangements is considered by estimating the effect on poverty of transfers from family members (see below).

Family composition by labor market status is not known, and two scenarios are investigated for the urban active family (80 percent of the working-age population is active, with two children on average). 1/ In the first, families are homogenous, that is, in two-parent households, both are either employed, unemployed, or retired. The estimate of poverty under this assumption will approximate true poverty to the extent that unemployment is localized and as long as the difference between unemployment benefits and wages (and pensions) is not too great (both of which appear to be the case in Albania).

In the second scenario, there is random matching among unemployed and employed workers with dependents. The pensioners are excluded, and unemployed and employed workers without dependents are treated as single. In this random matching scenario, the income distribution for two worker households is obtained by approximating the wage distribution by a gamma function, a function for which the distribution of the sum of two functions is easily derived. 2/ Figure 2 shows the (approximated) wage distribution and two-worker household income distribution. 3/ 4/

Income distribution data are available only for state enterprises and civil service. For recipients of transfer incomes and workers in defense and police, average incomes have to be used. Appendix III describes the method used to derive the number of poor persons from income distribution data in the public sector.

1/ The Ministry of Finance estimates that there are 0.8 dependents per worker (employed or unemployed) and two children per household on average. Labor force participation is almost full. There are 0.5 dependents per pensioner. Families on social assistance typically have 2-3 members in the cities and 5 members in the countryside.

2/ The gamma function is defined as $x^{(\alpha-1)} \cdot e^{(-\lambda x)} / G(\alpha)$, where $G(\alpha) = (\alpha-1)(\alpha-2)(\alpha-3) \dots (\alpha) \cdot (1)$.

3/ The wage distribution is the union of the wage distribution in the civil service and in the state enterprise sector. The wage distribution is approximated by a gamma function with parameters $\alpha=5$ and $\lambda=8$ ($G(\alpha)=24$); the 2-worker household income distribution is characterized by a gamma function with parameters $\alpha=10$ and $\lambda=8$ ($G(\alpha)=362,880$); The wage distribution is the union of the wage distribution in the civil service and in the state enterprise sector.

4/ Employees in defense and police are not included in this figure, as their wage distribution is not known.

Figure 1. Developments of Prices To Date
(December 1990=100)

- 10a -

Figure 2. State Sector: Approximate Wage Distribution, 1993

b. Rural areas

It is difficult to estimate the number of poor persons in rural areas, for two reasons. First, there are no data on land distribution. Only district average presumptive cash income and average output are available. Second, establishing a benchmark for the rural subsistence level entails caloric analysis of production by district, when production is for self-consumption. In view of these limitations, this paper does not solely rely on average presumptive cash income, but also considers the number of families receiving social assistance as an indicator of poverty.

Both nuclear and extended family arrangements are considered, but the results based on extended family arrangements are considered as more reliable, given the prevalence of such arrangements in rural Albania. In the case of nuclear families, rural pensions are compared to the urban subsistence level.

Some information can be compiled on the "depth" of poverty in rural areas. The method (developed at the Ministry of Agriculture in Albania) consists of deriving and pricing a food deficit on the basis of the average amount and productivity of land held by social assistance recipients. The method is described in greater detail in Appendix II.

IV. Qualifications

This section describes some of the limitations of income data, which have led to the use of consumption data as a check on the results.

1. Impact of rationing on comparisons

Comparison with the period before price liberalization is inherently difficult because cash income is not a good measure of purchasing power for the period before liberalization, owing to widespread rationing. 1/ Price liberalization took place in 1992-93, and in the base-year for comparison (1991), there was excess demand, implying that incomes overestimated true purchasing power.

2. Exclusion of certain incomes

Little is known about private sector incomes, and they are not incorporated in the analysis. Formal private sector employment--that corresponding to registered businesses--was about 130,000 by end-1993. The average wage in this sector was \$200 a month in mid-1993, or about seven

1/ For instance, excess demand registered at retail stores was 16 percent of goods sold by internal trading enterprises in 1990 (IMF, 1991, pp. 40-41).

Table 5. Cost of Gap between Subsistence Consumption and Production in Poor Rural Households 1/

(In lek per month)

	1990	1991		1992		1993	
		H1	H2	H1	H2	H1	H2
Family of 5	166	166	168	177	852	1,207	1,416

Source: Table 27, Appendix II.

1/ Cost of an unchanged bundle of goods corresponding to the deficit in food production for a family with 0.25 hectare of land.

times the public sector average. 1/ With a range of \$50-\$250 a month, very few private sector workers earned incomes below subsistence levels, and the exclusion of this sector imparts an upward bias to the share of the population in poverty reported in this paper.

Although there are no estimates of employment or of wages in the informal private sector, it is safe to say that wages in the informal sector are lower than in the formal private sector. Some of informal sector jobs are held by either recipients of unemployment benefits or by employees in the public sector as second jobs. The exclusion of this informal sector income from the measurement of incomes of the unemployed and public sector employees is thus a second reason for upward bias to the estimate of poverty.

Finally, in-kind incomes are not incorporated in the analysis. The ability of urban dwellers to grow their own food is documented to be significant in many former centrally planned economies, but data are not available for Albania.

3. Use of averages

The measurement of poverty among recipients of government transfers is imprecise because data on the size distribution of pensions and unemployment benefits--which depend on work history--are not available. When average pensions or unemployment benefits fall below the subsistence income, the estimate of the number of poor persons is potentially biased upward (some recipients have incomes above the subsistence income), and the converse is

1/ The exchange rate was stable at around 100 lek per dollar from end-1992 to the present.

true when average benefits are above subsistence levels. 1/ The same limitations apply to district averages for presumptive agricultural incomes, emigrant remittances, and incomes of workers in defense and police.

Agricultural land was not returned to the pre-World War II landowners in the south, where unequal land distribution prevailed before collectivization, but was instead divided--presumably equally--among the people working the land. In the north, land was returned to the families of the pre-World War II smallholders, implying potentially larger variance in distribution than in the south. Correspondingly, poverty could be overestimated in the north when average incomes fell below subsistence levels.

Emigrant remittances were not equally distributed across districts. The number of migrants per family was highest in the south (about one per family) and lowest in the north (about one migrant per five families). In this case, the use of averages is likely to lead to an underestimate of poverty in rural areas, because both (presumptive) agricultural incomes and remittances were low in the north.

Further, if emigrant remittances per emigrant are higher in urban areas than in rural areas because of the tendency of rural workers to obtain less highly paid and less permanent seasonal jobs, the use of averages is likely to lead to an underestimate of poverty in rural areas and an overestimate of poverty in urban areas.

V. Income and Poverty Developments

1. Income developments by sector

This section studies incomes defined narrowly. The income measures do not include informal incomes, support from families (domestically or abroad, in-kind or other), or own food production. The impact of emigrant remittances is studied in a sub-section.

a. Agricultural income excluding emigrant remittances

Based on the methods outlined above and in Appendix I, nominal incomes in the agricultural sector (measured as the market value of private agricultural value added) increased by 270 percent between 1991 and 1992 and by a further 110 percent in 1993 (Table 6). Real incomes, measured as nominal incomes deflated by the CPI, rose 29 percent between 1991 and 1993 (25 percent in 1992 and an additional 5 percent in 1993). 2/ Real output,

1/ The size of the bias is likely to be small, because of narrow wage dispersion before the collapse of communism and concomittant narrow pension and unemployment benefit dispersion. Further, unemployment benefits are provided at a flat rate since October 1993.

2/ Recall the terms of trade decline in 1993 (Table 1).

which is the appropriate measure of real income when subsistence agriculture dominates, grew by 31 percent (13 percent in 1992 ^{1/} and 16 percent in 1993). ^{2/}

Table 6. Income Developments in Agriculture (1991=100)

	1992	1993
Value added (current prices)	403	777
Real output (1992 prices)	113	131
Value added deflated by CPI	124	129
Value added deflated by subsistence CPI	118	98

These increases correspond to an increase in average agricultural income per worker from 50 percent to 100 percent of the public sector average between 1991 and 1993 (Table 7). In one third of the districts, the agricultural wage exceeded public sector incomes by 1993 (Table 8). ^{3/}

Agricultural incomes varied widely among districts, and the ratio between the highest and the lowest district average was 3 to 1 (Table 8). Incomes in the northeastern regions of the country--the remote mountainous areas--were 75 percent of the country average for in 1993. Taking into account the fact that there were fewer migrants per family in the northeast, income disparities were larger than indicated by agricultural income alone.

b. Nonagricultural income excluding emigrant remittances

Most categories of nonagricultural income declined substantially in real terms in 1992 and in the first half of 1993, and recovered partially in the second half of 1993 (Tables 9 and 10). ^{4/} By the second half of 1993,

^{1/} This output growth reflects a combination of a decline in planted acreage (of 15 percent) and across-the-board increases in yields (except for wheat and maize). Growth in crop production exceeded growth in livestock production. See Tables 7, 8, and 9 in Appendix 5. The Ministry of Agriculture estimates that output for the entire agricultural sector grew even faster, by 20 percent.

^{2/} Real gross output is reported. There is no data on output net of farm-produced inputs (seeds, fertilizer).

^{3/} Agricultural income per worker is calculated as income from the cooperative and private land divided by an estimate of the agricultural population excluding the state farm and pensioner population. This method in fact understates agricultural income, because rural public sector workers are not removed from the rural population for lack of data.

^{4/} There was a substantial real increase in nonagricultural income during 1991.

Table 7. Income Developments in Private Agriculture and Public Sector, 1991-93

(Annual average)

	Average Monthly Income ^{4/}			Real Income Index (1991=100)	
	Employment (In thousand persons)	(In lek)	(Percent change)	Without remit- tances	With remit- tances
<u>1991 averages</u>					
Private agriculture ^{2/}	565	430	...	100	100
Northeast mountain regions ^{3/}	196	330	...	100	100
Public sector	917	790	27	100	100
State enterprises ^{4/}	686	780	29	100	100
Budgetary institutions	231	830	21	100	100
Civilian	173	830	21	100	100
Defense and police	58	830	21	100	100
<u>1992 averages</u>					
Private agriculture ^{2/}	565	1,800	303	124	...
Northeast mountain regions ^{3/}	196	1,400	326	131	...
Public sector	663	2,180	163	81	...
State enterprises ^{4/}	450	2,300	195	90	...
Budgetary institutions	213	1,600	96	60	...
Civilian	155	1,400	75	54	...
Defense and police	58	2,100	151	77	...
<u>1993 averages</u>					
Private agriculture ^{2/}	565	3,400	92	129	171
Northeast mountain regions ^{3/}	196	2,500	81	128	187
Public sector	455	3,300	57	68	87
State enterprises ^{4/}	258	3,200	42	69	88
Budgetary institutions	197	3,300	102	66	84
Civilian	145	2,900	101	58	76
Defense and police	52	4,300	106	86	104

Sources: Department of Prices and Wages, Ministry of Finance, and Ministry of Labor; staff estimates.

^{1/} Without remittances.

^{2/} 1993 projection based on output increase of 6 percent for livestock, 31 percent for crops; price increase of 66 percent for livestock and 77 percent for crops; excludes social assistance benefits and pensions.

^{3/} The northeast and mountain regions comprise Shkoder, Tropoja, Puke, Kukës, Has, Mirditë, Diber, Bulqizë, Librazhd, Pogradec, and Mat.

^{4/} Excludes idle workers receiving 80 percent of pay. Income levels are rounded.

Table 8. Agricultural Incomes by District, 1993

(In lek)

	Cultivated Ha/Family	Annual Income Per Family	Monthly Per Worker 1/	Family Size	Per Capita Monthly Income 2/	
					Nuclear Family	Extended Family
Total (or average)	0.9	81,000	3,400	4.3	1,600	1,500
Northeast Mountain 3/	0.5	61,000	2,500	4.7	1,100	1,100
Gjirokaster	1.2	105,000	4,400	4.2	2,100	1,900
Shkoder and Malesi (NEM)	0.8	79,000	3,300	4.0	1,600	1,500
Korce	0.8	80,000	3,300	3.4	1,900	1,800
Fier	1.2	101,000	4,200	4.5	1,900	1,800
Elbasan	1.0	83,000	3,400	4.2	1,600	1,500
Lushnje	1.3	122,000	5,100	5.1	2,000	1,900
Berat	1.0	78,000	3,200	3.4	1,900	1,800
Sarande	1.1	112,000	4,700	4.7	2,000	1,800
Tirana	0.9	105,000	4,300	5.2	1,700	1,600
Permet	1.1	99,000	4,100	4.0	2,100	1,900
Durres	1.0	91,000	3,800	3.9	1,900	1,800
Kruje	0.9	87,000	3,600	3.5	2,100	2,000
Kolonje	1.5	120,000	5,000	4.6	2,200	2,000
Tepelane	0.7	76,000	3,200	4.3	1,500	1,400
Vlore	1.0	76,000	3,200	3.7	1,700	1,600
Lezhe	0.7	67,000	2,800	3.7	1,500	1,400
Gramsh	1.0	87,000	3,600	5.3	1,400	1,300
Skrapar	1.1	103,000	4,300	4.5	1,900	1,800
Tropoje (NEM)	0.6	70,000	2,900	4.3	1,300	1,300
Pogradec (NEM)	0.7	52,000	2,200	4.1	1,100	1,000
Librazhd (NEM)	0.6	59,000	2,400	5.2	900	900
Mat (NEM)	0.5	60,000	2,500	4.7	1,100	1,000
Kukes and Has (NEM)	0.5	62,000	2,600	5.6	900	900
Mirdite (NEM)	0.4	51,000	2,100	5.4	800	800
Diber and Bulquize (NEM)	0.5	49,000	2,000	4.9	800	800
Puke (NEM)	0.3	41,000	1,700	4.8	700	700

Sources: Ministry of Agriculture and author's estimates.

1/ Based on assumption of two workers per family.

2/ Excluding social assistance.

3/ The Northeast and Mountain (NEM) region comprises Shkoder, Tropoje, Puke, Kukes, Has, Mirdite, Diber, Bulquize, librazhd, Pogradec, and Mat.

Table 9. Income Developments in the Public Sector, 1991-93

(Half-year averages)

	Average Monthly Income 1/			Real Income Index (1991:HI=100)	
	Employment (In thousand persons)	(In lek)	(Percent change)	Without remitt- ances	With remitt- ances
<u>1991 (first half average)</u>					
Public sector	917	630	2	100	100
State enterprises	686	620	3	100	100
Budgetary institutions	231	680	--	100	100
Civilian	173	680	--	100	100
Defense and Police	58	680	--	100	100
<u>1991 (second half average)</u>					
Public sector	837	940	49	108	108
State enterprises 2/	606	940	52	109	109
Budgetary institutions	231	970	42	102	102
Civilian	173	970	42	102	102
Defense and Police	58	970	42	102	102
<u>1992 (first half average)</u>					
Public sector	787	1,600	66	96	...
State enterprises 2/	556	1,700	84	108	...
Budgetary institutions	231	1,200	25	69	...
Civilian	173	1,000	7	59	...
Defense and Police	58	1,700	80	99	...
<u>1992 (second half average)</u>					
Public sector	663	2,600	65	79	...
State enterprises	450	2,900	66	89	...
Budgetary institutions	213	2,000	65	57	...
Civilian	155	1,900	78	52	...
Defense and Police	58	2,400	38	68	...
<u>1993 (first half average)</u>					
Public sector	500	3,000	15	65	85
State enterprises	303	3,000	5	66	86
Budgetary institutions	197	2,900	46	63	83
Civilian	145	2,600	39	55	74
Defense and Police	52	3,900	61	83	102
<u>1993 (second half average)</u>					
Public sector	409	3,500	19	73	91
State enterprises	212	3,500	15	73	92
Budgetary institutions	197	3,600	24	70	87
Civilian	145	3,200	25	62	79
Defense and Police	52	4,700	20	89	106

Sources: Department of Prices and Wages; Ministry of Finance and Economy; Ministry of Labor; and Fund staff estimates.

1/ Including compensation for food price liberalization. Income levels are rounded.

2/ Excludes idle workers receiving 80 percent of pay.

Table 10. Income Developments for Units below Subsistence Levels (Using Subsistence CPI)
(In thousands of persons or index)

	1991		1992		1993	
	H1	H2	H1	H2	H1	H2
<u>(Homogenous households)</u>						
Weighted real income, urban sector (1991H1=100) 1/						
Excluding remittances	100	152	179	53	49	61
Including remittances 2/	100	152	...	...	75	87
Total below subsistence levels, urban sector						
excluding remittances (1,000 persons) 3/	84	84	84	823	1,114	952
Recipients	84	84	84	740	943	857
Of which:						
Social assistance recipients and dependents	84	84	84	84	108	216
Urban pensioners and dependents	--	--	--	281	289	303
Unemployment insurance recipients and dependents	--	--	--	375	546	338
Workers and dependents	--	--	--	84	172	96
<u>(Random matching)</u>						
Weighted real income, urban sector (1991:H1=100) 1/						
Excluding remittances	100	153	162	54	50	63
Including remittances 2/	100	153	...	...	79	90
Total below subsistence levels, urban sector						
excluding remittances (1000 persons) 3/	84	84	84	570	972	817
Recipients	84	84	84	496	724	697
Of which:						
Social assistance recipients and dependents	84	84	84	84	108	216
Urban pensioners and dependents	--	--	--	281	289	303
Unemployment insurance recipients and dependents	--	--	--	131	327	178
Workers and dependents	--	--	--	74	248	119
<u>(Nuclear family concept)</u>						
Weighted real income, rural sector (1991H1=100)						
Excluding remittances	100	137	156	34	26	55
Including remittances 2/	100	137	...	...	88	115
Total below subsistence levels, rural sector						
excluding remittances (1000 persons) 3/	--	--	--	319	320	158
<u>Memorandum items:</u>						
Total recipients, urban sector 1/	450	614	719	927	1,155	1,050
Total recipients, rural sector	288	289	318	319	320	492
Total urban workers and dependents 1/	1,650	1,506	1,416	1,193	900	736

Source: Table 31.

1/ Includes state farm workers and state farm pensioners.

2/ Assuming half the population receives remittances of \$10 per capita.

3/ Assuming pensioners do not receive support of extended family.

average real urban incomes declined to 65 percent of first half of 1991 levels excluding emigrant remittances (see below). Rural non-agricultural incomes--pensions and social assistance payments--declined to 55 percent of first half of 1991 levels. Real public sector wages declined to 73 percent of first half of 1991 levels.

The decline in real wages was less marked for workers in defense and police than in the civil service. While initially less severe than that in budgetary institutions, the decline in real wages in state enterprises was more prolonged, extending into the first half of 1993.

Real income declines for enterprise and civil service workers in the bottom quartile of the wage distribution (based on the subsistence CPI) were slightly more severe than those experienced by average income workers between the first half of 1991 and the second half of 1993 (Tables 9 and 31).

Real incomes of urban recipients of government transfers declined to 40-60 percent of first half of 1991 levels (Table 10 and Table 31, Appendix IV). 1/ The subsistence CPI is used in these calculations, since prices faced by the poor followed a different path from the overall CPI: they were relatively flat initially, but later outpaced the CPI as the prices of necessities were liberalized (Figure 1). 2/ The declines were more moderate for the more vulnerable groups, because compensation was more important for those transfer recipients at low levels of income (i.e., for those with dependents and those with relatively low levels of benefits such as social assistance recipients).

By the second half of 1993, the value of rural pensions declined to 30 percent of first half of 1991 levels, as the collapse of social security contributions from the rural sector, after the privatization of cooperatives, led the Government not to award pension increases or price compensation. 3/ The value of rural social assistance payments to families with little land declined to 70 percent of first half of 1991 levels.

As indicated above, these measures of income do not include informal income, support from families (domestically or abroad, in-kind or other), or

1/ The subsistence CPI is defined as an index of subsistence income for an adult.

2/ Using the CPI would lead to substantial bias when it comes to the path of real incomes. Urban recipients of social assistance, for example, experienced real income declines of 40-50 percent between the first half of 1992 and the second half of 1992, using the subsistence CPI. However, on the basis of the CPI real income increased by around 30 percent.

3/ While the decline in real cash pensions was large, the impact of the reduction in real pensions on poverty was moderated by the fact that Albanian pensioners were organized in the extended family system, especially in the countryside (see poverty estimates below).

own food production, and comparison with the first half of 1991 is subject to the caveat that income did not correctly measure purchasing power before price liberalization because of widespread shortages.

c. Income developments including remittances

Taking into account remittances of \$10 per person for half the families in 1993, real income developments are substantially more favorable. By the second half of 1993, average urban incomes declined to 88 percent of their level in the first half of 1991 (rather than to 65 percent as in the case without remittances). Average public sector wages declined to 91 percent, and incomes for those at or below subsistence levels (including public sector workers) declined to 83 percent, of their level in the first half of 1991. Real rural pensions and rural social assistance payments increased by 15 percent on average (rather than declining).

For comparison with developments in per capita consumption (see below) it is useful to express these developments in terms of annual averages for the urban and rural sectors. In urban areas, these developments translate into a decline in real incomes of 28 percent in urban areas (13 percent in the public sector, and 36 percent for those close to subsistence levels). In rural areas, developments in agricultural income and in pensions and social assistance imply a real income increase of 47 percent (71 percent in agricultural income and -15 percent for rural pensions and social assistance). The declines using annual data exceed those using semi-annual data (above) on account of large increases in wages and benefits in the second half of 1991.

2. Poverty developments

Poverty developments cannot be estimated precisely for Albania, as there is a general lack of data on the statistical distribution of benefits and wages. Again, comparisons over time are difficult, because income was not a relevant measure of purchasing power before mid-1992 owing to the existence of shortages. Finally, for lack of data no allowance can be made for informal sector income, transfers from family members (except foreign remittances), or access to land by urban dwellers for use in growing food.

Several restrictive assumptions are maintained in view of the data limitations. First, average incomes are used when the distribution is not known. Second, urban families are assumed to be nuclear and rural families extended. Third, in the case of urban families, marriage partners are assumed to have equal labor force status (active or inactive), with two variants: homogenous (with both marriage partners either employed or unemployed), 1/ 2/ and random matching among members of the labor

1/ This model is applicable when unemployment is concentrated geographically.

force. 1/ In each case, the family size is assumed to be four. These two variants can be considered the extremes within which the true family composition lies.

The section covers both the extent and the depth of poverty, and includes a discussion of the impact of transfers from family members abroad.

a. Extent of poverty

(1) Urban sector

Before remittances, and using income estimates based on the assumption of homogenous families and the estimate of the urban subsistence level (see methodology above), the number of individuals with incomes (including government transfers) below subsistence levels in the urban sector is estimated to be 950,000 people (or 56 percent of the urban population 2/) in the second half of 1993, up from 85,000 people in the first half of 1991 (Table 10). Before the second half of 1992, only those on social assistance had incomes below subsistence levels; the other groups had incomes above subsistence levels. Average incomes of the unemployed receiving benefits and urban pensioners with dependents were less than subsistence incomes, from the second half of 1992. A fraction of workers with dependents also began to receive less than subsistence incomes from the second half of 1992. Incomes for workers in the military and police were higher than subsistence levels throughout the period.

The number of persons with incomes below subsistence levels in the urban sector (assuming homogeneous families) fell somewhat between the first and the second half of 1993 on account of an increase in real wages for state sector employees at the bottom quartile (Table 31). 3/

2/ (...continued)

2/ When both partners are employed, it is assumed for simplicity that they have the same jobs as well (both in the civil service or both in state enterprises).

1/ See Section III.3.a for detailed explanation of definitions and methodology.

2/ Both the numerator and denominator include part of the rural population (state farm workers and pensioners, and civil service workers in rural areas).

3/ The number of recipients in the urban sector fell from 940 to 860 thousand persons between the first and the second half of 1993 mostly on account of a shift from unemployment insurance (classified as urban in Tables 10 and 31) to rural social assistance of state farm workers upon distribution of state farm land. The number of state enterprises employees earning incomes below subsistence fell on account of the decline in overall state enterprise employment, reflecting in part the elimination of state farm employment.

Tables 11 and 12 show the wage distribution in state enterprises and in the civil service which form the basis for the calculation of the number of workers earning less than the subsistence wage. Wages were distributed relatively equally, with the ratio of the highest wage to the lowest wage equal to three in the civil service and four in state enterprises. 1/ These wage distributions imply that 50,000 workers (15 percent of state enterprise workers and 12 percent of civil service workers) earned less than subsistence levels in the second half of 1993 (half the previous semester's peak), while all workers earned more than subsistence levels before the second half of 1992. The validity of this comparison is in doubt, however, given widespread shortages of goods prior to mid-1992.

Under the assumption of random matching, the estimate for the number of poor persons in urban areas in the second half of 1993 is 820,000 (48 percent of the urban population), which is less than the estimate under the assumption of homogenous families (950,000, see Table 10) as incomes of the unemployed receiving benefits are raised above subsistence more frequently than the incomes of the employed are lowered below subsistence

Table 11. Wage Distribution in State Enterprises, 1987

Wage (In leks per month)	Employment (Share)	Cumulative Employment	Percent Deviation from Average Wage
(In percent)			
<250	1	1	-56
251-350	5	6	-47
351-450	18	24	-30
451-550	26	51	-12
551-650	22	73	-6
651-750	14	87	23
751-850	7	94	41
851-950	3	97	58
950-1,000	2	99	76
>1,000	1	100	85
Average wage	568		
Standard deviation	165		

Source: Albanian Government Enterprise Survey, 1987.

1/ After restructuring in 1993 and 1994, the ratio remained at three in the civil service. Including special units in the central administration (such as the presidency), the ratio was 12.5. There are no recent data for state enterprises.

Table 12. Wage Distribution in Civil Service, February 1993

Wage (In leks per month)	Employment (Share)	Cumulative Employment	Percent Deviation from Average Wage
(In percent)			
1090	2	2	-43
1170	5	7	-39
1240	3	10	-35
1310	2	12	-32
1410	8	20	-26
1510	5	25	-21
1710	2	28	-11
1810	11	39	-6
2040	12	64	6
2150	11	75	12
2260	12	87	18
2370	6	92	24
2500	2	95	30
2620	2	97	37
2750	2	99	44
2870	1	99	50
3000	--	100	57
3600	--	100	88
Average of wage	1,916		
Standard deviation	420		

Source: Ministry of Finance, Wage and Price Department.

through marriage to someone with a different employment status. Only forty percent of families with at least one unemployed member received less than the subsistence income in the second half of 1993 under the assumption of random matching, compared to all households under the assumption of homogeneous families. Sixty thousand workers (15 percent of two-worker families and 30 percent of the mixed unemployed-employed households) received less than the subsistence income, compared to 50,000 under the assumption of homogeneous families. Families with a member working in defense and police received more than the subsistence income (on average), irrespective of the employment status of the spouse.

Including remittances, the range of estimates for the number of persons with incomes below the subsistence level is 410,000-475,000 persons in the

urban sector in the second half of 1993 (higher figures pertain to homogenous families). These estimates represent a halving of the estimates based on income excluding remittances and are based on (i) the fact that average receipts of \$10 per person (total remittances divided by the number of recipients of remittances) are sufficient to bring incomes of the poor above the subsistence level; and (ii) the assumption that half of poor Albanian families have access to remittances (see above).

(2) Rural sector

Based on income data (district averages), rural sector poverty on an extended family basis (average presumptive agricultural income plus pensions and social assistance) increased from 12 percent of the private rural population in 1991 and 1992 to 27 percent (485,000 persons) in 1993 (Table 13). These are rough estimates, as data on the household income distribution are not available, and the use of district averages will lead to the classification of some poor persons as having incomes above the subsistence level in rich districts, and vice versa. The surprising increase in poverty between 1991 and 1993 reflects both declining real incomes for pensioners and social assistance recipients, and a decline in value added deflated by the subsistence CPI between 1991 and 1993, for regions depending on animal production; these regions correspond to the low-income regions of the northeast. 1/ These figures are of limited relevance, however, because poor agricultural families tend to produce for their own consumption, rather than for the market. 2/ Under those circumstances, the number of families with little land together with real output developments provide a better guide to poverty developments.

The number of families in the countryside with little or poor quality land is currently 40,000 (or 208,000 persons) according to the Ministry of Labor. 3/ Data on land distribution are not available country-wide. This estimate instead reflects the number of families eligible for rural social assistance under the old social assistance law

1/ The value of animal production increased only 5-fold between 1991 and 1993, while the subsistence CPI increased almost 7-fold, and value added in crop production increased 12-fold.

2/ On a nuclear family basis (that is, treating active households and pensioner households as individual units), the number of poor increased from 315,000, (18 percent of the rural population), of which none were pensioners, in 1991 to 455,000 (33 percent of the population), of which 150,000 pensioners, in 1993. Because of the prevalence of the extended family in rural Albania, only the result for the extended family is maintained.

3/ The number of persons is derived on the basis of the average nuclear family size in the northeast of the country (4.7) and an allowance of 10 percent corresponding to the ratio of pensioners to the nuclear family population, giving an average family size of 5.2.

Table 13. Districts with Rural Incomes below the Subsistence Level, 1991-93

	Monthly Income			Population 5/			
	Per Worker 1/	Per capita 2/		Nuclear family concept		Extended family concept	
		Nuclear family	Extended family	Active 3/ workers	Pensioners	Total 4/ Pensioners	
		(In lek)			(Thousands)		
<u>1991</u>							
Pogradec (NEM)	290	150	170	48	4	51	4
Librazhd (NEM)	340	150	170	61	4	65	4
Kukes and Has (NEM)	370	150	170	82	5	87	5
Mirdite (NEM)	300	110	130	40	2	42	2
Diber and Bulqize (NEM)	280	130	150	126	7	133	7
Puke (NEM)	250	130	150	41	2	44	2
Below subsistence	..	...	..	398	--	219	12
Percent rural population	..	..	..	18	--	12	1
Rural population	430	210	230	1,636	151	1,787	151
<u>1992</u>							
Mirdite (NEM)	1,200	440	440	40	2	42	2
Puke (NEM)	1,000	420	420	41	2	44	2
Below subsistence	..	..	..	81	76	86	4
Percent rural population	..	..	..	5	4	5	--
Rural population	1,800	810	780	1,636	151	1,787	151
<u>1993</u>							
Pogradec (NEM)	2,200	1,080	1,040	48	4	51	4
Librazhd (NEM)	2,400	1,010	970	61	4	65	4
Mat (NEM)	2,300	1,090	1,050	57	5	62	5
Kukes and Has (NEM)	2,600	990	970	82	5	87	5
Mirdite (NEM)	2,200	800	790	40	2	42	2
Diber and Bulqize (NEM)	2,000	890	870	126	7	133	7
Puke (NEM)	1,700	800	790	41	2	44	2
Below subsistence	..	..	..	455	151	485	30
Percent rural population	..	..	..	25	8	27	2
Rural population	3,400	1,580	1,490	1,636	151	1,787	151

Source: Table 32.

1/ Based on assumption of two workers per family.

2/ Including social assistance.

3/ Household with two members in the labor force.

4/ Household with two members in the labor force and average number of pensioners.

5/ Excludes state farm workers.

when eligibility was determined by the size and quality of land-holding. A total of 35,000 families qualified under this law. 1/ The new social assistance law introduced in mid-1993 broadened eligibility--previously restricted to families in the northeast of the country--to poor farmer families across the country, raising the estimate of the number of families with little land to 40,000. While the number of families receiving assistance in the countryside is currently about 100,000 families, this reflects both aid to families without land as a result of the recent break-up of state farms (about 11,000 families) and possibly generous application of the new law which devolves administration of social assistance to the local level. 2/ This paper uses the Ministry of Labor estimate of 40,000.

Since real output increased in all districts in 1992 and 1993, the number of families producing insufficient food for subsistence must have been above 40,000 in 1991 and 1992. 3/ Since social assistance was insufficient to provide transfers to raise all incomes up to the subsistence income in the second half of 1992 and the first half of 1993, the number of families with incomes below subsistence level must also have been above 40,000 families during that period (Table 31). 4/ While social assistance was sufficient to raise all incomes up to the subsistence level in the first half of 1992, restricted eligibility under the old law meant that about 5,000 families with little land were not covered under the old system of social assistance, and that 5,000 families had incomes below the subsistence level in 1991 and the first half of 1992. Assuming that all families with insufficient land were identified, no families had incomes below the subsistence level after mid-1993 when social assistance benefits were raised substantially and eligibility extended to the entire country.

Note that the estimate of the number of people whose agricultural income falls below the subsistence level in 1993 is much smaller when based on the number of families receiving social assistance (208,000) than when based on presumptive cash income (485,000). This paper retains only the former estimate.

Based on the preceding analysis on an extended family, the number of rural residents with incomes falling below the subsistence level is estimated at 26,000 in 1991 (2 percent of the rural population excluding

1/ On average, families receiving assistance under the old law owned plots that were about 40 percent as large as the average. Among those receiving assistance, the size of land varied widely.

2/ Most families only receive a supplement to agricultural income, rather than full benefits.

3/ This estimate of the number of families whose agricultural income falls below subsistence in 1993 is much smaller than one based on presumptive cash income (100,000 families).

4/ Benefit levels were insufficient to raise family incomes to subsistence levels (see Attachment I).

state farms 1/) and 208,000 in the second half of 1992 and the first half of 1993, and zero in the second half of 1993. On a nuclear family basis, with pensioners relying on their own income, the number of rural residents with incomes falling below subsistence levels is estimated at 24,000 in 1991 (5,000 nuclear families) and 340,000 in the second half of 1992 and the first half of 1993 (40,000 nuclear families and 150,000 pensioners), and 150,000 in the second half of 1993.

b. Depth of poverty

The depth of poverty, measured as the difference between average and subsistence incomes, increased significantly after the first half of 1992 for those without access to emigrant remittances (Table 31). Incomes fell below subsistence levels in the second half of 1992 for a substantial fraction of the urban population, when recipients of unemployment insurance and pensioners with dependents and a fraction of state sector workers joined social assistance recipients whose benefits were already below subsistence incomes. The depth of poverty almost doubled in size in the first half of 1993 for the urban poor, but declined substantially in the second half of 1993, to about 200 lek per person (8 percent of the 1993 per capita GDP) in unemployed and pensioner households with dependents, and 350 lek per person in families on social assistance.

The value of rural pensions declined in real terms, and the average rural pension fell below (urban) subsistence levels in the second half of 1992 and grew very wide (to lek 900) in the second half of 1993, as the collapse of social security contributions from the rural sector after the privatization of cooperatives led the Government not to award pension increases or price compensation. Social assistance payments also fell below the subsistence income for families with little land in the second half of 1992, and the gap widened to lek 160 per person in the first half of 1993 but was closed in the second half of 1993 following the introduction of the new social assistance law. 2/

VI. Developments in Per Capita Consumption

Income data have clear limitations in the case of Albania. First, comparison with the period before price liberalization is inherently difficult because cash income is not a good measure of purchasing power for the period before liberalization, owing to the rationing associated with price controls. Second, income data are not always available or precise, as in the case of informal sector income, formal sector private income, or

1/ Six thousand nuclear families and associated pensioners. The pensioner population is 10 percent of the nuclear family population.

2/ Real income developments for the agricultural poor depend on the terms of trade changes they face and thus on the composition of their production. The figures presented here are for a typical family with less than .25 hectare of land (Appendix II).

emigrant remittances. Because of these data limitations, the results are checked against developments in per capita food consumption estimated on the basis of production and net imports. If per capita food consumption were a measure of purchasing power--which seems reasonable at the present low levels of income--a finding of rising per capita urban consumption between 1991 and 1993 would indicate that 1991 income overestimates real purchasing power, and/or that 1993 real income is underestimated using the methods in this paper.

Indeed, price liberalization began after the 1991 base-year for the comparisons, when there had been widespread excess demand and food shortages (in the wake of the spontaneous privatization of cooperatives, the uncertainty about ownership rights, shortages in agricultural inputs, and the breakdown of the state distribution and marketing system), large wage increases for all state employees in response to political pressures, and high financial savings. 1/

The facts to be reconciled with per capita consumption of food are an increase of 47 in real rural incomes (71 percent in agriculture and -15 percent for pensions and social assistance) and a decline of 28 percent in real urban incomes (-13 percent for average public sector incomes and -36 percent in incomes of those at or close to subsistence levels in urban areas) between 1991 and 1993. Per capita consumption is derived on the basis of data on gross production, net imports, use of food as inputs, and the change in food stocks (large for wheat in 1992 and 1993).

For the country as a whole, per capita consumption increased between 9 and 110 percent depending on the item (Table 14). This finding is difficult to reconcile with income developments. Assuming real income elasticity of 1 and relative price elasticity of 0, growth in per capita consumption implied by income developments is only 6 percent between 1991 and 1993. Growth in per capita consumption consistent with income is positive (47 percent) in rural areas and negative (-28 percent) in urban areas. 2/

In fact, the increase in per capita consumption exceeds 6 percent for all food items considered. The range of increases in per capita food consumption for different items in urban and rural areas implies, based on CPI expenditure weights, an increase of 28 percent in food consumption. This increase in turn implies that, if one assumes the figure for rural areas (47 percent), urban consumption grew by 12 percent. The difference between this 12 percent growth, and the -28 percent implied by the income estimates of this paper, must reflect (1) excess demand in the base year or

1/ Blejer, et. al. (1992), p. 46.

2/ Since the relative price of food increased during this period, food consumption should have increased by less than the increase in income if the relative price elasticity were not zero. If the income elasticity were less than one, the increase in food consumption would have been dampened further. The assumptions of high income elasticity and low relative price elasticity are reasonable, however, in view of the low overall level of income.

Table 14. Food Production and Consumption, 1990-1993

	1990	1991	1992	1993
Expenditures (at 1993 prices)				
Index 1991=100	113	100	118	128
Value (in million lek)				
Total	9,455	8,332	9,792	10,677
Grains	4,126	3,343	3,532	4,231
Potatoes	685	786	858	952
Fruits ^{1/}	675	361	606	757
Milk	2,704	2,870	3,809	3,455
Eggs	1,264	972	986	1,282
Memorandum items:				
Production (1,000 tons)				
Grains	621	399	261	430
Potatoes	80	86	79	102
Fruits ^{1/}	71	39	65	80
Milk	517	527	612	648
Eggs ^{2/}	343	271	270	350
Net exports and change in stocks (1,000 tons) ^{3/}				
Grains	(50)	(161)	(326)	(263)
Potatoes	4	-5	-19	-6
Fruits ^{1/}	--	--	--	--
Milk	--	-38	-133	-18
Eggs ^{2/}	--	-1	-3	--
Per capita consumption (kg)				
Grains	206	167	177	212
Potatoes	24	27	30	33
Fruits ^{1/}	22	12	20	24
Milk	159	169	224	203
Eggs (units)	105	81	82	107

Sources: Ministry of Agriculture and Ministry of Finance, Department of Counterpart Funds.

^{1/} Apples, pears, peaches, and figs.

^{2/} In thousands.

^{3/} Wheat stocks were 100,000 ton in 1992 and 237,000 ton in 1993.

(2) incomplete measurement of incomes (urban or rural informal incomes, emigrant remittances).

Part of the impact of rationing in 1991 can be removed by focussing on the period just before mid-1991 when large wage and benefit increases were granted. Between the first half of 1991 and the second half of 1993, real urban income fell by only 12 percent, which is somewhat more in line with developments in urban consumption.

VII. Social Safety Nets

The income data indicates that the net outcome of the dislocation from the collapse of the command economy, the adjustment of relative prices, and the restructuring of the state enterprise sector, mitigated by a social safety nets and remittances, has been an increase in poverty from 5 to some 25 percent of the population and a widening of the depth of poverty, between 1991 and 1993. While a more extensive safety net would have been able to avoid poverty, the gains would have to be balanced against higher costs (higher taxes, higher deficit, or lower other essential expenditures). Social safety net expenditures, defined to include spending on permanent institutions such as pensions, were already 15.4 percent of GDP in the second half of 1993 (Table 15), which was sizeable for countries in Albania's GDP per capita range (\$300 per year). A comprehensive assessment would involve an assessment of the mix of expenditure and revenue, expenditure composition, and the efficiency of individual categories of expenditures. Such a comprehensive assessment is beyond the scope of the paper, and only the efficiency of social safety net expenditures is considered here. The question addressed here is how well were poverty alleviation goals met, given the resources spent. This involves an assessment of how many members of the target group were not adequately covered by the safety net (the exclusion error) and of how many members of non-target groups were covered by it (the inclusion error). Various components of the social safety net introduced in the course of the transition (and still in place) are considered in turn. Table 2 (above) shows the number of people covered by the safety net. Table 3 (above) provides information on benefit levels.

1. Components of the social safety nets

a. Unemployment insurance

The unemployment insurance (UI) system was introduced in mid-1992 to provide support to those becoming unemployed as a consequence of economic reform (in practice, those being laid off from the state sector). Prior to the introduction of the unemployment insurance system, enterprises had been required to pay idle workers 80 percent of their wages (financed by the Government).

Table 15. Social Safety Net Expenditures

(In percent of GDP)

	1990	1991	1992		1993	
			H1	H2	H1	H2
Total	21.0	27.8	23.9	15.6	15.5	16.2
Price subsidies	1.8	2.5	5.6	2.5	1.7	2.6
Pensions	8.6	12.0	9.8	5.3	6.5	6.4
Unemployment benefits	—	—	2.5	3.7	5.6	3.2
Eighty percent wage payments to "idle workers"	12.4	13.3	6.0	1.1	—	—
Targeted poverty programs	—	—	—	0.7	0.6	1.7
Price compensation employed persons 1/	—	—	—	1.7	0.9	1.9
Ex-Political prisoner program	—	—	—	—	0.2	0.4
<u>Memorandum items:</u>						
Total compensation for price increases 2/	—	—	—	7.8	6.8	8.1

Source: Author's estimates.

1/ Includes rural bread price compensation in 1992 (0.4 percent of GDP).

2/ Price compensation for transfer recipients (subsumed under pensions, unemployment benefits, and targeted poverty programs) plus price compensation for employed persons.

The UI system did not cover new entrants to the labor force, and eligibility to unemployment insurance benefits expired after one year, after which certain applicants qualified for social assistance. Under legislation introduced in mid-1993, earnings-related unemployment benefits were replaced with flat payments linked to the minimum pension, supplemented with dependency allowances. The replacement rate was about 70 percent, which in 1993, was above subsistence levels only for those without dependents.

The exclusion of new labor market entrants and of those losing their job in the private sector was intended to facilitate exclusion of non-target groups (i.e., those working in the informal sector). The cost of this feature was the exclusion of a number of unemployed people. The availability of social assistance provided a safety net for those excluded.

To protect the system from being used by employed persons, or from being used twice by a same individual, the recipient of unemployment benefits was required to leave his (or her) "work-book" with the labor office to which he (or she) applied for benefits. A "work-book" is a record, maintained by the employing enterprise, of consecutive labor market activities, for the purpose of determining pension eligibility. It would thus be impossible to both register for unemployment and be employed in the formal sector (the sector covered by social security). It was nevertheless possible for workers in the informal sector to be included. Anecdotal evidence points to a possibility of abuse of the system by migrant workers returning from Greece once a month to claim unemployment benefits.

b. Increases in social insurance and social assistance benefits

Albania's social security institutions, apart from unemployment insurance, included social assistance and a pension system. Social assistance was means-tested, requiring proof of lack of revenues (including social security benefits) as certified by the labor office, agency of social insurance or office of cadastre. With the introduction of the new social assistance law in mid-1993, social assistance became administered by the municipalities and communes, and from 1994 a system of block grants came into effect aiming to improve targeting by limiting the financial means available to municipalities and communes. Under the new social assistance law, eligibility for social assistance extended to all low-income rural families, whereas the old law had provided for benefits only to families in the northeast of the country, with less land than 0.2 ha per person. To improve targeting, the Ministry of Labor is moving away from the previous practice of assessing eligibility based on office interviews, toward one which includes social worker visits to the homes of the recipients, to check for the presence of assets. It further intends to introduce public works, as a self-targeting mechanism, in mid-1994.

The pension system covered old age and disability pensions and maternity benefits. Pensions were earnings related, except for the minimum pension which was related to an estimate of subsistence (determined by the Government).

The Government selectively increased transfer benefits, with higher increases in urban areas. The increases did not always keep up with inflation, mostly as the result of both incomes policy and the effort to reduce the budget deficit. Also, large increases were granted in mid-1991 for political reasons, and the Government sought to offset these real gains with an incomes policy in mid-1992. Increases were particularly limited for rural pensioners on account of low compliance, after privatization of cooperatives, with the requirement to pay social security contributions. Social assistance payments increased substantially in mid-1993 with the introduction of the new social assistance law. These increases were intended to protect the large number of former recipients of unemployment benefits who became ineligible after one year and shifted to social assistance. Benefits increased in rural areas, as a consequence of the unification of treatment of urban and rural areas foreseen under the law.

c. Compensation for price increases for elimination of subsidies

A rapid pace of price liberalization and of price increases was implemented both because food security required a supply response in agriculture and because there was strong political support for improving the rural terms of trade. At the same time, the Government opted out of providing explicit subsidies, since these would have supported the countryside and the private sector which were gaining from the reform. The Government chose instead to provide categorically and geographically targeted compensation for price increases.

The Government used the mechanism of compensation on two occasions. First, in August 1992, price compensation reflected the new cost--based on average consumption--of five basic items (bread, rice, vegetable oil, sugar, and soap). The targeted categories of beneficiaries were workers in the public sector, recipients of government transfers, and those rural families with land below 0.2 ha per person. The latter category was further targeted geographically to the northeast. The number of people covered by compensation was 2.2 million (64 percent of the population). Workers in state enterprises and in budgetary institutions, the unemployed receiving unemployment benefits, the urban pensioners, and those on social assistance in the cities received a compensation of lek 280 per month, and an additional lek 200 per dependent, and poor agricultural workers in the northeast received 100 lek per person. The significance of this compensation to recipients varied widely, ranging from 8 percent for a state enterprise worker without dependents, to 100 percent of previous monthly income for those on social assistance. 1/ Rural pensioners were excluded, because of low compliance with the requirement for social security contributions. In August 1993, the Government gave lek 214 per month because of the doubling in the bread price to the same recipients, this time including poor farmers outside the northeast region.

1/ Poor rural households received compensation for the price increase of wheat, rather than bread, for a three-month period. Thereafter, this scheme was integrated with social assistance.

2. Budgetary cost of social safety nets

The changes in social safety nets have meant a change in the level and structure of government expenditures. Table 15 shows the budgetary cost of the social safety nets. Total social safety net expenditures peaked in 1991 (28 percent of GDP), when large increases in benefits were granted because of political pressure, while a large number of idle workers received 80 percent wage payment. Expenditures remained at a high level in the first half of 1992 when price subsidies peaked because of the maintenance of fixed prices despite increases in costs. These gains were scaled back in the second half of 1992 with the introduction of the Government's adjustment program. Unemployment benefits came to replace the 80 percent payments to idle workers and formed a large component of the total in the second half of 1992 and the first half of 1993. The cost of unemployment benefits declined in the second half of 1993, when benefits expired after one year for a large fraction of the unemployed. At that time expenditures on social assistance increased substantially as a result of a shift from unemployment insurance to social assistance. Compensation accounted for a large share of government expenditures from the second half of 1992. Its cost is currently about 8 percent of GDP.

3. Policy implications

The social assistance system described above is still in effect. At current benefit levels, urban social assistance recipients, urban pensioners, most recipients of unemployment benefits, and a fraction of workers in the public sector, earn incomes below subsistence levels if they have at least one dependent and do not have access to remittances or other family support, which in this paper is assumed to be the case half the time. While most pensioners, particularly in rural areas, have access to incomes of family members under the extended family system prevalent in Albania, pensioners without such access appear to be left without necessary support.

It would be worthwhile to conduct surveys to find out how many poor families do not have access to remittances and how many pensioners are not covered by the extended family. The income data suggest very low income levels for certain groups. Rural pensioners have incomes of only 40 percent of urban subsistence incomes, social assistance recipients have incomes equal to 75 percent, and those unemployed workers receiving benefits and pensioners with dependents have incomes of 80-85 percent.

Improving the coverage of the safety nets without errors of inclusion involves administratively complex solutions. Raising dependency allowances for workers in the state sector and transfer recipients, would likely involve a substantial inclusion error, as most public sector workers earn incomes above the subsistence level and probably half the transfer recipients have access to remittances. Raising all rural pensions would have a similar inclusion error.

Under the circumstances, it may be preferable to use other mechanisms, such as self-targeted public works or programs to which eligibility is

determined by a social worker. Such mechanisms are already envisaged by the Ministry of Labor for introduction in 1994. The additional administrative cost associated with these programs would be justified by the avoidance of the large inclusion error which would result from increasing semi-universal dependency allowances or pensions.

At current costs and given the stabilization objective of the Government and the need to maintain other categories of expenditures, there are no budgetary resources to expand the social safety nets. Expanded coverage for the truly needy will need to be financed from savings resulting from the exclusion of social assistance recipients with access to remittances and through improved targeting of the existing social assistance program.

VIII. Conclusions

Poverty developments would have been less unfavorable had social safety nets not been in place. Between July 1991 and July 1992 the system of the 80 percent payments to idle public enterprise workers in place and, thereafter, unemployment insurance and price compensation, mitigated the effect of the breakdown of production and price liberalization. Without emigrant remittances, the number of poor persons would have been twice as high.

In contrast with income developments, food consumption developments have been more favorable. From 1991 to 1993, per capita food consumption has increased on average by 28 percent.

The available data point to large changes in income distribution across sectors and income groups in Albania in recent years. Between 1991 and 1993, real agricultural incomes increased by 30 percent from 1991 to 1993 (and rural incomes including remittances increased by 50 percent). The number of people earning below subsistence incomes in the countryside declined from 26,000 to zero, using the extended family concept and assuming perfect implementation of the new law for social assistance. Between the first half of 1991 and the second half of 1993, urban incomes declined by 35 percent excluding remittances, and by 12 percent including remittances. The number of people in urban areas earning below-subsistence incomes (after remittances) is estimated to have increased from 85,000 to 410,000-475,000, depending on the assumption about family composition. The comparison over time should be made with care, because the presence of shortages meant cash income was not a good measure of purchasing power in 1991.

Dislocation from the collapse of the command economy, the adjustment of relative prices, and the restructuring of the state enterprise sector were inevitable. The choice of providing a flat absolute amount of price compensation per person in the design of the social safety nets had desirable features: (1) compensation was limited to the amount necessary to meet the need of the poor and (2) the agricultural and private sectors that were gaining from the reform were excluded for the most part. The rapid

pace of price liberalization and price increases was chosen because food security required a supply response in agriculture and because there was strong political support for improving the rural terms of trade. Under these circumstances, options to ease the adverse effects of the transition on the poor, without increasing the fiscal deficit, would have included better targeting of social assistance, which was not administratively feasible, and expanding funding of the social programs by broadening the tax base to agriculture. 1/

Looking ahead, the paper's results indicate that an improvement in targeting is worthwhile, given the large income inequality which resulted for the most part from unequal access to remittances.

1/ Agriculture is currently tax only indirectly, through customs duties. Plans are under way to introduce a presumptive income tax in mid-1994.

Measurement of Cash Income in Agriculture

This appendix presents estimates of (1) presumptive cash incomes in agriculture, at the district level, on the basis of acreage, number of livestock, yields, prices and costs; and (2) the corresponding population (Table 16). Only former cooperative land is taken into consideration.

Data are available by district on acreage allocated to different crops, on yields in cultivation and on number of livestock. For prices and costs of agricultural production, and for yields in animal production only country-wide data exist. The district data is unfortunately only readily available for one year (1993) and country-wide changes are used as a basis for estimating district data in other years.

1. Incomes from cultivation

For simplicity, the amount of land for which presumptive income is calculated is restricted to former cooperative land. 1/ State farm land, which was not privatized until relatively late in the period, is not included, and state farm employment is included in the state enterprise sector. 2/ Incomes from former cooperative land are then matched to the rural population, excluding the state farm and pensioner population, by district. 3/

To avoid double-counting, incomes from cultivation are based on land used for crop production, excluding acreage devoted to livestock (grazing and fodder production). Correspondingly, costs of raising livestock are ignored, as the main element of cost--fodder production from own land--is incorporated implicitly by not counting acreage devoted to livestock.

The data include: (1) acreage devoted to individual crops by district (1993) and total acreage by crop for other years in the private sector (Table 17); (2) the yield structure in private farming in each district (1993) and average yields in total agriculture for other years (Table 18); (3) selling price per unit of produce for 1991, 1992, and 1993 (Table 19); and (4) costs per unit of produce for 1991, 1992, and 1993 (Table 20).

1/ In 1990 there were 16 state farms and 400 cooperatives. Of total arable land in 1991, 170,000 hectare was state farm land and 530,000 hectare belonged to private workers or cooperatives, of which 300,000 hectare was cultivated. The remainder was used for the raising of animals.

2/ Former cooperative and private land constitutes the vast majority (75 percent) of total arable land.

3/ While rural state enterprise employment and rural civil service employment should in principle be deducted from the rural population, data are not available to do this.

Table 16. Population

(In thousand persons)

	(1) Rural Population	(2) Families to Receive Land	(3) Rural Pensioners	(4) State Farm Population 2/	(5) Private Population (1) - (3) - (4)	(6) Family Size (5)/(2)
Albania	2,060.3	376.4	151.3	272.9	1,636.1	4.3
Northeast Mountain	683.3	130.7	47.0	22.4	613.9	4.7
Gjirokaster	39.9	7.2	4.1	5.4	30.4	4.2
Shkoder and Malesi	157.2	32.2	14.1	13.7	129.4	4.0
Korce	143.1	25.6	13.8	41.8	87.5	3.4
Fier	178.3	27.5	10.8	43.7	123.8	4.5
Elbasan	147.6	27.6	10.2	20.3	117.1	4.2
Lushnje	106.1	19.2	7.5	--	98.6	5.1
Berat	90.0	20.5	8.4	11.5	70.1	3.4
Sarande	62.7	9.3	5.4	13.9	43.3	4.7
Tirana	121.3	14.5	6.6	39.1	75.7	5.2
Permet	30.7	6.3	3.3	2.4	25.1	4.0
Durres	125.7	25.7	9.3	15.9	100.5	3.9
Kruje	67.5	12.5	3.9	20.0	43.6	3.5
Kolonje	17.6	3.4	2.0	--	15.6	4.6
Tepelene	36.6	7.5	2.6	1.5	32.5	4.3
Vlore	92.2	17.8	7.8	18.5	65.8	3.7
Lezhe	50.7	9.6	3.0	12.5	35.3	3.7
Gramsh	36.6	6.0	3.0	1.8	31.8	5.3
Skrapar	30.3	5.6	2.7	2.2	25.4	4.5
Tropoje	35.9	6.8	2.9	3.6	29.4	4.3
Pogradec	53.2	11.6	3.8	1.8	47.6	4.1
Librazhd	65.0	11.6	4.4	--	60.5	5.2
Mat	63.2	12.1	5.1	0.9	57.2	4.7
Kukes and Has	87.4	14.9	4.9	--	82.5	5.6
Mirdite	43.7	7.3	2.1	1.9	39.7	5.4
Diber and Bulquize	133.5	25.6	7.4	--	126.1	4.9
Puke	44.2	8.6	2.4	0.4	41.4	4.8

Sources: Rural population -- Ministry of Agriculture (1990); Rural pensioners -- Social Security Institute (January 1993); Workers and those on social assistance on state farms; and Number of families to receive land -- An Agricultural Strategy for Albania.

1/ August 1992.

2/ About half state farm workers were placed on assistance in August 1992. Assuming family size of 4.3 and 2 workers per family, state farm population is estimated by multiplying the number of state farm employees plus state farm workers on assistance by half of 4.3.

Table 17. Private Land Under Cultivation By District, 1993, and Aggregates, 1990-1993

(In thousand of hectares)

	Wheat	Maize	Rice	Potatoes	Beans	Tobacco	Cotton	Sugar- beet	Vegeta- bles	Grapes	Olives	Other 1/	Cultiva- tion	Grazing	Total Private
Cooperative and private land															
1990	182.0	51.4	2,400.0	10.2	20.2	22.7	10.8	4.3	20.0	11.2	28.1	47.3	410.6	...	...
1991	136.5	35.0	1,200.0	9.8	15.5	16.0	5.2	2.7	20.0	11.2	28.1	37.9	319.1	...	...
1992	83.3	60.7	200.0	8.2	20.4	11.7	1.1	0.8	25.4	11.2	28.1	18.9	270.1	...	...
1993	138.8	71.4	200.0	8.7	20.2	12.6	1.1	0.9	26.6	11.2	28.1	18.9	338.7	...	...
Private agriculture, 1993															
Total	99.6	75.1	200.0	8.5	19.7	13.3	0.8	2.0	21.5	11.2	28.1	47.3	327.2	210.7	537.8
Gjrokaster	2.5	2.5	--	0.1	0.3	1.5	--	--	0.2	0.5	0.1	1.0	8.7	4.2	12.9
Shkoder and Malesi	5.4	7.3	--	0.6	1.3	3.6	--	--	3.0	0.9	0.5	2.4	25.0	12.0	37.0
Korce	7.7	2.1	--	1.2	1.2	0.1	--	2.0	0.7	1.0	--	3.4	19.4	27.9	47.2
Fier	11.0	5.5	--	0.6	2.3	1.2	0.3	--	2.5	1.2	5.4	4.0	33.9	15.9	49.8
Elbasan	10.8	4.2	--	0.4	1.2	3.9	--	--	1.4	0.8	2.0	3.4	28.0	8.9	36.9
Lushnje	10.0	5.4	--	0.5	1.6	0.6	0.4	--	2.4	0.4	1.7	2.7	25.8	9.9	35.6
Berat	6.9	2.2	--	0.5	0.7	1.0	0.1	--	1.0	0.8	4.3	3.4	20.7	14.7	35.4
Sarande	2.4	2.1	--	0.3	0.5	--	--	--	0.9	0.1	2.5	1.7	10.4	4.9	15.3
Tirana	2.9	2.6	--	0.1	0.5	--	--	--	1.7	0.5	2.7	1.4	12.4	7.5	19.9
Permet	2.0	2.0	--	0.2	0.5	0.1	--	--	0.1	0.2	--	1.9	7.0	6.5	13.5
Durres	8.7	4.5	--	0.5	2.5	0.3	0.1	--	2.9	0.9	2.6	3.7	26.7	13.3	40.1
Kruje	3.0	3.3	--	0.2	0.8	0.1	--	--	1.1	0.2	0.5	1.6	10.7	5.8	16.6
Kolonje	2.3	1.6	--	0.1	0.4	--	--	--	0.1	0.1	--	0.5	5.1	4.5	9.6
Tepelene	1.2	1.4	--	0.1	0.3	--	--	--	0.3	0.2	0.5	1.2	5.2	7.0	12.2
Vlore	4.7	2.6	--	0.1	0.4	0.2	--	--	1.3	0.9	5.0	1.7	17.2	9.3	26.5
Lezhe	2.0	2.4	--	--	0.4	0.1	--	--	0.3	0.3	0.2	0.8	6.6	6.1	12.7
Gramsh	2.5	1.4	--	0.1	0.5	0.2	--	--	0.2	0.2	--	0.7	5.9	3.6	9.5
Skrapar	2.7	1.3	--	0.1	0.4	--	--	--	0.2	0.4	--	1.1	6.3	4.5	10.8
Tropoje	0.1	1.8	--	0.2	0.5	--	--	--	--	0.1	--	1.1	3.8	2.0	5.8
Pogradec	2.4	1.8	--	0.1	0.5	0.1	--	--	0.2	0.3	--	2.3	7.7	9.0	16.7
Librazhd	1.7	3.0	--	0.2	0.6	0.1	--	--	0.2	0.2	--	1.2	7.3	6.0	13.3
Mat	1.2	2.9	--	0.2	0.5	0.1	--	--	0.3	0.2	--	1.1	6.4	6.8	13.1
Kukes and Has	2.7	2.8	--	0.8	0.2	--	--	--	0.2	0.2	--	1.2	8.1	5.0	13.1
Mirdite	0.4	1.4	--	0.1	0.3	--	--	--	0.2	0.2	--	0.4	3.0	2.4	5.4
Diber and Bulqize	2.5	5.5	--	1.2	0.8	--	--	--	0.2	0.2	--	2.7	13.1	11.0	24.1
Puke	0.1	1.5	--	0.1	0.5	--	--	--	0.1	0.1	--	0.5	2.8	1.9	4.7

Sources: District data, 1993--Albania, Prospects for Agricultural Taxation, and An Agricultural Strategy for Albania. Aggregate data for 1990-1993--An Agricultural Strategy for Albania.

1/ Other includes sunflower, citrus, apples, rice and soybean.

Table 18 Yields in Cultivation
(In quintal) 1/

	Wheat	Maize	Rice	Potatoes	Beans	Tobacco	Cotton	Sugar beet	Vegeta- bles	Grapes	Olives
All agriculture:											
1990	30	34	23	64	6	6	10	267	140	82	19
1991	21	29	29	78	8	6	5	128	141	82	19
1992	26	19	30	91	12	9	10	217	180	82	19
1993	25	35	50	115	12	10	10	300	185	98	23
Private agriculture, 1993:											
Total 2/	29	40	50	110	12	10	16	400	204	98	23
Gjrokaster	29	42	--	95	12	10	--	--	200	40	4
Shkoder and Malesi	33	47	50	130	13	11	--	--	210	105	12
Korce	37	43	--	160	15	9	--	400	190	34	
Fier	34	42	--	100	13	11	17	--	260	76	10
Elbasan	31	42	--	100	12	11	--	--	240	75	9
Lushnje	39	45	--	95	14	10	18	--	250	128	5
Berat	30	40	--	110	12	10	17	--	220	55	15
Sarande	34	45	--	90	14	--	--	--	240	223	20
Tirana	33	42	--	95	13	10	--	--	240	89	7
Permet	31	41	--	100	11	10	--	--	190	194	63
Durres	33	42	--	90	12	10	16	--	250	64	4
Kruje	33	47	--	95	14	10	--	--	250	178	19
Kolonje	29	37	--	120	13	--	--	--	180	110	--
Tepelene	29	42	--	105	12	10	--	--	190	41	8
Vlore	32	40	--	95	12	10	15	--	220	5	5
Lezhe	35	42	--	105	14	10	--	--	255	98	118
Gramsh	27	35	--	90	11	9	--	--	190	103	38
Skraper	27	39	--	100	12	--	--	--	180	101	19
Tropoje	17	32	--	130	10	--	--	--	150	398	--
Pogradec	32	40	--	120	12	9	--	--	195	19	--
Librazhd	24	38	--	110	11	9	--	--	190	80	--
Mat	22	40	--	105	11	10	--	--	170	52	--
Kukes and Has	20	30	--	140	10	8	--	--	160	25	--
Mirdite	20	39	--	110	11	--	--	--	160	52	--
Diber and Bulquize	22	30	--	140	11	--	--	--	170	55	--
Puke	18	33	--	130	11	--	--	--	150	161	--

Agricultural Taxation (for grapes and olives).

1/ Yield for "other" assumed equal to average district monetary yield.

2/ Simple average of district data.

Table 19. Producer Prices
(Lek per quintal, unless indicated)

	Wheat	Maize	Rice	Potatoes	Beans	Tobacco	Cotton	Sugar- beet	Vegeta- bles	Grapes	Olives	Others	Milk (tons)	Meat (tons)	Eggs (000)
1991	230	220	320	200	700	2,200	7,000	32	200	260	250	566	2,800	12,500	900
1992	850	910	1,520	1,500	2,800	15,000	12,000	110	1,100	1,080	1,050	2,264	8,000	50,000	6,000
1993	1,400	1,300	2,100	1,200	2,200	15,000	18,000	270	1,200	2,000	1,500	3,397	12,000	75,000	9,000

Source: Ministry of Agriculture and assumption for cotton, others, and animal products in 1993.

Table 20. Producer Costs

(Lek per quintal)

	Wheat	Maize	Rice	Potatoes	Beans	Tobacco	Cotton	Sugar- beet	Vegeta- bles	Grapes	Olives	Others
1991	185	160	340	120	270	2,200	1,744	32	85	260	220	174
1992	695	570	970	850	1,800	11,000	5,667	90	800	700	750	567
1993	750	820	1,300	480	920	9,000	8,500	130	460	850	770	567

Source: Ministry of Agriculture and estimates (see text).

Details on the data follow:

(a) Data on land under cultivation (excluding fodder production) are taken from the distribution register kept by the Ministry of Agriculture, for the period 1990-1993.

(b) The 1992 and 1993 yield and crop structure data were gathered by two agronomists from the Ministry of Agriculture who are responsible for surveying output in each ex-cooperative. Previously, data were reported by the cooperatives themselves.

(c) The 1993 Ministry of Agriculture projection for selling prices is based on an annual average CPI increase of 70 percent between 1992 and 1993, except in the case of wheat and sugarbeet, where the price announced by the government is used.

(d) Cost data are from the Ministry of Finance and include costs of renting agricultural equipment, and of fertilizer, seeds, pesticides, and water. There were three anomalies in the 1991 data, where the unit costs of tobacco, grapes, and sugarbeet exceeded their price. In those cases costs were set equal to price. 1/

The data on land under cultivation (a) and on the yield and crop structure (b) are probably quite accurate as they originate from the cooperative days of detailed planning and structural classification of the land (though the data must have suffered during Albania's episode of anarchy in 1991). Total private land, estimated as the sum over the districts, is 538 thousand ha. Of this land, 327 thousand ha are cultivated, and 211 thousand ha are used for grazing and fodder production.

The data for selling prices (c) are less accurate, both historically and for the 1993 projection. The historical averages are calculated on the basis of only a few observations during the year. This is particularly problematic for 1991, as prices varied widely over the course of the year. As indicated by the anomalies, the data for costs are the least accurate, despite being based on detailed norms for use of agricultural equipment, fertilizer, seeds, pesticides, and water, by crop, apparently because the year averages are obtained as a weighted average of two seasons (e.g. 1991 is the average of 1990-91 and 1991-92).

2. Incomes from livestock

To derive income from livestock by district, the following data were employed: (1) animals (by type) by district (1990 data) and totals for other years (Table 21); (2) country average for yield per animal in terms of milk, meat and eggs for 1991, 1992, and 1993 (Table 18); (3) prices by product for 1991, 1992, and 1993 (based in part on an inflation forecast of 70 percent)

1/ These anomalies in 1991 may be the result of taking a moving average of costs in the 1990-91 season and in the 1991-92 season (see below).

(Table 19). Costs are ignored, as the main element of cost--fodder production from own land--is incorporated implicitly by not counting income from land used for fodder production (in calculating incomes from cultivation). Raising animals does not involve large cash expense, as grazing fees are very low and concentrates are not used widely.

Table 21 gives the total number of animals in agriculture in 1990. To arrive at the number of animals in the private sector, the fraction of animals in private ownership is applied. While the proportion of animals in cooperative or in private ownership is known to have increased as state farms have sold off livestock, a constant proportion in private ownership is assumed (the one prevailing in mid-1992) because of lack of readily available data.

To arrive at total livestock by district in other years, the country-average for growth of livestock is applied to the 1990 district data. Note that this reduces the usefulness of the data in income comparisons across districts since growth rates of livestock have varied across districts.

The estimate for production thus obtained is comparable to the estimate for aggregate GDP of the Ministry of Agriculture. My calculations indicate that net production in private agriculture was 25 billion leks in 1992 (at 1992 prices) (Table 22). 1/ This can be compared with a Ministry of Agriculture estimate of 30 billion leks for total agriculture. 2/ The difference reflects the exclusion of state farms, 3/ and in small part also the exclusion of honey, wool, and silk.

3. Agricultural population

Because incomes are derived for the private agricultural sector in each district, an appropriate estimate of population on private land is required. This estimate is derived as the rural population in each district (1990 census), diminished by an estimate of the state farm and pensioner population in each district (Table 16). The state farm population is derived on the basis of the state farm labor force and the number of state farm workers on assistance. To derive population from the labor force it is assumed that there are 2 workers per family and 4.3 members per family in state farms. 4/ This measure of the private agricultural population includes all recipients of social assistants, government workers, and those who have migrated since 1990 (abroad and to the city).

1/ Production is net of output used as inputs, such as seeds and fodder production.

2/ The Ministry of Agriculture estimates gross output at 62 billion lek.

3/ The state farm sector represented 29 percent of total output in 1990, and 37 percent of total output in 1991.

4/ Ministry of Agriculture estimate for number of workers per family in state farms, and number of family members (excluding pensioners) in private farming.

Table 21. Livestock by District, 1990, and Aggregates, 1990-93

(In thousands)

	Cattle ^{1/}	Cows	Sheep	Goats	Pigs	Chickens
All agriculture						
1991	643.9	306.0	1,696.0	1,194.0	147.0	3,704.0
1992	662.8	315.0	1,770.0	1,230.0	140.0	3,800.0
1993	683.8	325.0	1,900.0	1,300.0	150.0	4,000.0
All agriculture, 1990						
Total	632.5	300.6	1,646.3	1,144.9	219.5	5,259.0
Gjirokaster	11.3	4.9	109.7	53.5	7.9	101.9
Shkoder and Malesi	42.6	19.0	109.5	78.4	28.5	401.3
Korce	49.3	22.4	144.4	57.8	9.7	365.3
Fier	56.0	25.7	98.5	31.9	18.3	455.1
Elbasan	46.5	20.5	86.7	67.7	6.0	376.9
Lushnje	47.7	20.4	59.9	2.7	31.4	270.8
Berat	33.6	16.6	72.7	55.5	10.6	229.7
Sarande	15.4	6.1	120.5	71.3	12.4	160.0
Tirana	33.7	18.5	50.4	45.9	9.1	309.7
Permet	11.6	5.6	37.0	59.6	1.2	78.4
Durres	46.9	22.0	58.8	14.0	18.5	320.9
Kruje	23.0	10.1	30.3	20.5	19.8	172.3
Kolonje	8.9	4.1	33.8	37.3	0.5	44.9
Tepelene	10.7	5.7	68.6	52.5	0.5	93.4
Vlore	23.6	10.2	131.4	106.5	7.6	235.2
Lezhe	15.6	6.0	20.2	15.2	16.3	129.5
Gramsh	11.9	5.3	28.9	45.4	0.4	93.5
Skrapar	10.4	5.1	48.6	59.2	0.2	77.4
Tropoje	11.9	6.5	41.1	23.6	2.6	91.6
Pogradec	13.6	7.0	39.6	26.1	1.0	135.8
Librazhd	18.0	8.6	41.3	33.2	0.4	165.8
Mat	18.3	10.8	47.2	39.3	1.5	161.2
Kukes and Has	24.4	13.0	65.1	39.2	0.3	223.0
Mirdite	8.9	4.3	11.7	27.0	8.7	111.6
Diber and Bulquize	31.1	17.0	80.1	49.8	1.1	340.8
Puke	7.6	5.2	10.3	31.8	5.0	112.8
Private sector share						
1992	0.9	0.9	0.9	1.0	0.6	0.6

Source: District data--An Agricultural Strategy for Albania; Aggregate data--Ministry of Agriculture. District data (1990) and total private sector (1992)--An Agricultural Strategy for Albania. Aggregates 1991-1993--Ministry of Agriculture.

^{1/} Includes cows.

Table 22 Private Agricultural Production by District
(Thousand ton)

	Wheat	Maize	Rice	Potatoes	Green Beans	Tobacco	Cotton	Sugarbeet	Vegetables	Grapes	Olives
1991											
Total	313.2	103.7	--	63.8	12.9	10.4	2.7	34.6	319.0	68.5	24.7
Gjrokaster	7.1	3.5	--	0.6	0.2	1.1	--	--	2.6	1.7	0.0
Shkoder and Malesi	17.4	11.8	--	8.6	0.9	3.0	--	--	40.3	7.9	0.5
Korce	28.0	3.1	--	15.6	0.9	--	--	34.6	8.2	2.9	--
Fier	36.7	7.8	--	4.5	1.6	1.0	1.0	--	41.4	7.5	4.4
Elbasan	32.9	6.0	--	3.1	0.7	3.1	--	--	21.3	5.2	1.5
Lushnje	36.3	6.3	--	3.9	1.2	0.4	1.4	--	38.7	3.8	0.7
Berat	20.5	2.9	--	4.5	0.4	0.7	0.2	--	13.5	3.8	5.4
Sarande	7.6	3.3	--	1.8	0.4	--	--	--	13.9	2.1	4.2
Tirane	9.4	3.7	--	1.0	0.3	--	--	--	25.6	3.7	1.5
Permet	6.1	2.6	--	1.5	0.3	0.1	--	--	1.5	3.8	0.0
Durres	28.1	6.4	--	3.7	1.6	0.2	0.2	--	46.7	5.0	0.8
Kruje	9.7	5.3	--	1.3	0.6	0.1	--	--	17.6	2.5	0.8
Kolonje	6.6	2.0	--	1.3	0.3	--	--	--	0.9	0.7	--
Tepelene	3.4	2.0	--	1.0	0.2	--	--	--	3.3	0.7	0.3
Vlore	14.7	3.9	--	0.6	0.3	0.1	0.0	--	18.6	0.4	2.3
Lezhe	6.9	3.5	--	0.3	0.3	0.1	--	--	4.6	2.5	2.1
Gramsh	6.6	1.7	--	0.9	0.3	0.1	--	--	1.9	2.1	0.0
Skrapar	7.3	1.7	--	0.9	0.3	--	--	--	2.5	3.3	0.0
Tropoje	0.1	2.0	--	1.6	0.3	--	--	--	0.3	2.9	--
Pogradec	7.5	2.4	--	1.4	0.3	0.1	--	--	2.1	0.5	--
Librazhd	4.0	3.9	--	2.0	0.4	0.1	--	--	3.0	1.0	--
Mat	2.6	4.0	--	1.6	0.3	--	--	--	2.9	0.8	--
Kukes and Has	5.3	2.8	--	8.1	0.1	--	--	--	2.2	0.4	--
Mirdite	0.7	1.9	--	0.7	0.2	--	--	--	2.3	1.0	--
Diber and Bulquize	5.4	5.6	--	13.6	0.5	--	--	--	2.1	0.8	--
Puke	0.1	1.6	--	0.5	0.3	--	--	--	0.9	1.5	--
1992											
Total	237.3	118.0	--	81.8	24.9	11.8	1.1	17.4	517.2	68.5	24.7
Gjrokaster	5.4	4.0	--	0.8	0.4	1.3	--	--	4.2	1.7	0.0
Shkoder and Malesi	13.2	13.4	--	6.5	1.7	3.4	--	--	65.4	7.9	0.5
Korce	21.2	3.5	--	15.2	1.7	--	--	17.4	13.3	2.9	--
Fier	27.8	8.9	--	4.4	3.0	1.1	0.4	--	87.1	7.5	4.4
Elbasan	24.0	6.8	--	3.0	1.4	3.8	--	--	34.6	5.2	1.5
Lushnje	29.0	9.4	--	3.8	2.3	0.5	0.5	--	62.7	3.8	0.7
Berat	15.5	3.3	--	4.4	0.8	0.8	0.1	--	21.9	3.8	5.4
Sarande	5.9	3.7	--	1.8	0.7	--	--	--	22.6	2.1	4.2
Tirane	7.1	4.2	--	1.0	0.6	0.0	--	--	41.5	3.7	1.5
Permet	4.6	3.2	--	1.4	0.5	0.1	--	--	2.5	3.8	0.0
Durres	21.3	7.3	--	3.8	3.0	0.3	0.1	--	75.7	5.0	0.8
Kruje	7.4	6.0	--	1.3	1.1	0.1	--	--	26.5	2.5	0.8
Kolonje	5.0	2.3	--	1.2	0.5	--	--	--	1.5	0.7	--
Tepelene	2.6	2.2	--	1.0	0.4	--	--	--	5.4	0.7	0.3
Vlore	11.1	4.4	--	0.6	0.5	0.1	--	--	30.4	0.4	2.3
Lezhe	5.2	3.8	--	0.3	0.6	0.1	--	--	7.4	2.5	2.1
Gramsh	5.0	1.9	--	0.9	0.6	0.2	--	--	3.0	2.1	0.0
Skrapar	5.5	1.9	--	0.9	0.5	--	--	--	4.1	3.3	0.0
Tropoje	0.1	2.3	--	1.5	0.5	--	--	--	0.5	2.9	--
Pogradec	5.7	2.7	--	1.3	0.6	0.1	--	--	3.4	0.6	--
Librazhd	3.0	4.4	--	1.9	0.7	0.1	--	--	4.8	1.0	--
Mat	2.0	4.5	--	1.6	0.5	--	--	--	4.7	0.8	--
Kukes and Has	4.0	3.2	--	8.9	0.2	--	--	--	3.5	0.4	--
Mirdite	0.5	2.2	--	0.7	0.3	--	--	--	3.8	1.0	--
Diber and Bulquize	4.1	6.3	--	13.3	0.9	--	--	--	3.3	0.8	--
Puke	0.1	1.9	--	0.5	0.6	--	--	--	1.5	1.5	--
1993											
Total	364.7	254.4	--	109.4	24.9	13.1	1.1	26.4	555.5	82.2	29.7
Gjrokaster	8.7	6.6	--	1.1	0.4	1.4	--	--	4.5	2.0	--
Shkoder and Malesi	21.3	28.8	--	8.7	1.7	3.8	--	--	70.4	9.5	0.6
Korce	34.4	7.5	--	20.3	1.7	--	--	26.4	14.4	3.5	--
Fier	45.1	18.2	--	5.8	3.0	1.2	0.4	--	72.2	9.0	5.3
Elbasan	40.4	14.6	--	4.0	1.4	4.0	--	--	37.2	8.2	1.8
Lushnje	47.0	20.3	--	5.0	2.3	0.6	0.6	--	67.5	4.5	0.8
Berat	25.1	7.2	--	5.8	0.8	0.9	0.1	--	23.5	4.6	6.5
Sarande	9.6	8.0	--	2.4	0.7	--	--	--	24.3	2.5	5.0
Tirane	11.5	9.1	--	1.3	0.6	--	--	--	44.8	4.5	1.8
Permet	7.5	6.9	--	1.9	0.5	0.1	--	--	2.7	4.5	0.1
Durres	34.5	15.8	--	4.8	3.0	0.3	0.1	--	81.5	6.0	1.0
Kruje	11.9	12.9	--	1.7	1.1	0.1	--	--	30.7	3.0	1.0
Kolonje	8.0	5.0	--	1.7	0.5	--	--	--	1.6	0.8	--
Tepelene	4.2	4.8	--	1.3	0.4	--	--	--	5.8	0.8	0.4
Vlore	18.1	9.5	--	0.8	0.5	0.1	--	--	32.7	0.5	2.7
Lezhe	8.4	8.5	--	0.4	0.6	0.1	--	--	7.9	3.0	2.5
Gramsh	8.1	4.1	--	1.1	0.6	0.2	--	--	3.3	2.5	--
Skrapar	8.9	4.1	--	1.2	0.5	--	--	--	4.4	4.0	--
Tropoje	0.1	4.9	--	2.1	0.5	--	--	--	0.6	3.5	--
Pogradec	9.3	5.8	--	1.8	0.6	0.1	--	--	3.7	0.6	--
Librazhd	4.9	9.6	--	2.6	0.7	0.1	--	--	5.2	1.2	--
Mat	3.2	9.7	--	2.1	0.5	--	--	--	5.0	1.0	--
Kukes and Has	6.5	7.0	--	11.9	0.2	--	--	--	3.8	0.5	--
Mirdite	0.8	4.7	--	0.9	0.3	--	--	--	4.0	1.2	--
Diber and Bulquize	8.8	13.7	--	17.8	0.9	--	--	--	3.8	1.0	--
Puke	0.1	4.0	--	0.7	0.6	--	--	--	1.6	1.8	--

(Billion lek, 1992 prices)

	Milk	Meat	Eggs	Livestock	Growth (percent)	Cultivation	Growth (percent)	Total	Growth (percent)	Crops (percent)
1991	3.8	6.1	0.8	10.6	--	11.7	--	22.3	--	52.3
1992	4.4	6.4	0.9	11.7	9.7	13.6	16.9	25.3	13.5	53.8
1993	4.5	6.6	0.9	12.0	2.7	17.4	27.6	29.4	16.1	59.2

Sources: Ministry of Agriculture and An Agricultural Strategy for Albania.

Based on the number of families which have received cooperative land (380,000), one can derive per family income by district. Per family income will be translated into per worker income for comparison with income per worker in other sectors by assuming that there are two workers per family in private agriculture.

Poverty Line

1. Urban poverty line

The urban poverty line is derived on the basis of consumption of 2,000 calories of food and a few necessities. The Ministry of Finance has calculated household spending on the basis of average consumption patterns. The food basket analyzed in the Ministry of Finance study corresponds to calory intake of 2,650 per person. To be conservative, 2,000 calories are taken as a subsistence minimum. 1/ The only other included items are rent, soap, medicines, and firewood. 2/ Food consumption of a dependent is assumed to be 80 percent of adult consumption, with other consumption equal to that of an adult. The results are given in Table 23.

2. Rural poverty line

The Ministry of Agriculture has carried out an exercise to determine the need for social assistance for poor households. The study uses size and quality of landholding to estimate production (details on landholding of those receiving social assistance are given in Table 24), and derives the need for social assistance as the market cost of the shortfall of production from consumption. It concludes that the amount of social assistance needed per person is typically about 400 leks, or four times as large as provided under the social assistance scheme in place at the time the study was conducted. Benefit levels were raised subsequently, to about 450 leks per person (including an additional 200 leks for wheat price compensation). The study takes a family of five with 0.25 hectare of average quality (grade V) land as an example. The production from such land satisfies the need for meat, milk, eggs, fruit, and grape. The table indicates that a family would need an additional 0.46 ha of land, or a total of 0.71 ha to cover its needs for the items in the table. The shortfall in production corresponds to 13,500 leks at end 1992 prices. To this, one needs to add the cost of purchasing sugar, oil, rice, and salt (all basket items) of about 10,200 leks. Per person the total cost of necessary purchases is about 400 leks per month. Applying this methodology for families with different sizes or quality of land the study estimates needs for social assistance shown in Table 26.

The Ministry of Agriculture method may provide an overestimate of the cash requirement for subsistence, as explained below, and the text uses an alternative estimate. While, the Ministry of Agriculture does not make explicit what figure for caloric intake it uses as a base for estimating subsistence income. The implied per capita bread consumption of 264 kg per

1/ The ratio 2,000/2,650 is applied uniformly to quantities consumed of different food items. As inexpensive items such as bread dominate the bundle in any event, this method is not likely to lead to an overestimate of the poverty line.

2/ The Ministry of Finance study also included consumption of clothing, furniture, and electrical equipment.

Table 23. Subsistence Income in Urban Areas

Unit	Consumption per year	Price (in lek) 1/						Expenditures						Share in Expenditures						
		Until Nov 91	Dec 91/ Jul 92	Aug/ Dec 92	Jan 93	Feb/ Jun 93	Jul/ Dec 93	Until Nov 91	Dec 91/ Jul 92	Aug/ Dec 92	Jan 93	Feb/ Jun 93	Jul/ Dec 93	<Until Nov 91	Dec 91/ Jul 92	Aug/ Dec 92	Jan 93	Feb/ Jun 93	Jul/ Dec 93	
Food (2,650 calories per day) 1/																				
Bread	Kg	256	3	3	13	13	13	25	55	55	266	266	266	532	26	25	21	17	17	29
Flour	Kg	5	5	5	18	18	18	36	2	2	7	7	7	14	1	1	1	0	0	1
Macaroni	Kg	5	6	6	13	34	37	36	2	2	5	13	14	14	1	1	0	1	1	1
Rice	Kg	6	8	8	28	60	61	61	4	4	14	29	30	30	2	2	1	2	2	2
Beans	Kg	5	6	6	40	55	56	56	2	2	17	23	24	24	1	1	1	2	2	1
Sugar	Kg	9	8	8	28	60	61	61	6	6	21	46	46	46	3	3	2	3	3	3
Oil	Kg	7	17	17	55	100	102	102	10	10	33	61	62	62	5	5	3	4	4	3
Butter	Kg	2	36	36	142	270	275	275	5	5	21	41	41	41	3	2	2	3	3	2
Beef	Kg	10	17	17	125	150	153	153	14	14	104	125	127	127	7	6	8	8	8	7
Fish	Kg	4	5	5	56	70	71	71	2	2	19	23	24	24	1	1	1	2	2	1
Milk	Kg	91	3	3	13	17	17	17	19	19	99	129	132	132	9	9	8	8	8	7
Cheese	Kg	6	17	17	102	200	204	204	8	8	49	97	99	99	4	4	4	6	6	5
Gjize	Kg	4	6	6	39	55	56	56	2	2	12	17	17	17	1	1	1	1	1	1
Eggs	Kokra	90	1	1	8	12	12	12	6	6	57	90	92	92	3	3	4	6	6	5
Potatoes	Kg	29	3	3	18	28	29	29	6	6	43	68	69	69	3	3	3	4	4	4
Vegetables	Kg	100	3	3	41	41	42	42	21	21	343	342	348	348	10	9	27	22	22	19
Fruit	Kg	26	4	4	31	30	31	31	8	8	65	64	65	65	4	4	5	4	4	4
															0	0	0	0	0	0
Other															0	0	0	0	0	0
Firewood	m3/	3	63	63	220	220	220	220	14	25	50	50	50	50	7	11	4	3	3	3
Rent	2 room+ kitchen	6	30	30	60	60	60	60	15	15	30	30	30	30	7	7	2	2	2	2
Soap	bar (250g)	6	3	3	17	25	27	27	1	1	8	13	13	13	1	1	1	1	1	1
Medicine		8	7	7	18	18	18	18	5	5	12	12	12	12	2	2	1	1	1	1
Total at 2,000 calories per day (subsistence for adult)									166	177	987	1,192	1,210	1,416						
Total at 1,600 calories per day (subsistence for dependent)									140	151	810	975	989	1,154						

Source: Ministry of Finance, Price and Wage Department.

1/ When goods are sold at both controlled and free prices, the controlled price is chosen.

Table 24. Population Receiving Social Assistance
(Pre-July 1993 legislation)

	Population Receiving Assistance (thousand persons)	Percent Receiving Assistance	Ha per Person	Ha per Person on Assistance
Total/Average	167.4	8	0.33	0.14
Mountain and North	120.8	18	0.21	0.14
Gjirokaster	1.9	5	0.42	0.13
Shkoder and Malesi	27.0	17	0.27	0.11
Korce	2.2	2	0.42	0.13
Fier	--	--	0.38	--
Elbasan	14.1	10	0.31	0.13
Lushnje	--	--	0.48	--
Berat	0.5	1	0.45	0.11
Sarande	--	--	0.38	--
Tirana	10.0	8	0.25	0.16
Permet	--	--	0.48	--
Durres	--	--	0.42	--
Kruje	4.2	6	0.36	0.14
Kolonje	--	--	0.64	--
Tepelene	2.1	6	0.35	0.13
Vlore	2.6	3	0.40	0.19
Lezhe	3.5	7	0.36	0.13
Gramsh	3.7	10	0.16	0.15
Skrapar	2.0	6	0.40	0.17
Tropoje	8.1	23	0.21	0.18
Pogradec	3.4	6	0.33	0.17
Librazhd	15.1	23	0.20	0.15
Mat	7.6	12	0.17	0.13
Kukes and Has	17.9	20	0.17	0.15
Mirdite	2.6	6	0.14	0.10
Diber and Bulquize	26.0	20	0.21	0.15
Puke	13.1	30	0.12	0.10

Distribution of Recipients of Social Assistance
(By per capita landholding and grade of landholding)

Ha\grade	V	VI+VII	VIII-X	Total
0.000-0.050	0.0	2.4	0.2	2.7
0.070-0.075	0.3	4.5	0.5	5.3
0.075-0.100	1.5	8.5	1.3	11.3
0.100-0.125	0.8	11.4	4.8	17.0
0.125-0.150	1.4	21.1	1.8	24.3
0.150-0.175	1.6	16.3	2.6	20.5
0.175-0.200	1.6	15.9	1.4	18.8

Source: Ministry of Agriculture and An Agricultural Strategy for Albania.

year much exceeds the amounts included in the calculation of urban subsistence levels (193 kg/year). If subsistence requirements for rural households for bread, beans, rice, sugar, and oil, were equal to those for urban households, the total cost is only about 300 leks for an adult and 240 leks for a child, at February 1993 prices, for a family of five with 0.25 hectare of land of grade V (Table 27), compared to the Ministry of Agriculture estimate of 400 lek per person per month. After the bread price increase of July 1993, the costs increase to 450 and 360 lek respectively. These estimates (and the ones for the urban subsistence level) are somewhat arbitrary, as they are not based on a study on minimum nutritional standards.

Table 25. Yield of 0.25 hectare of Grade V Land

(In quintal, per year)

	Surface (ha)	Production (quintal)	Needs (quintal)	Shortfall (quintal)	Shortage of Land (ha)
Cereals	.12	2.0	11.0	-9.0	.45
Potatoes	.01	1.5	1.5	--	--
Vegetables	.03	4.0	4.0	--	--
White beans	.02	0.3	0.5	-0.2	.01

Source: Ministry of Agriculture

Table 26. Shortfall from Subsistence, by Acreage and Type of Land

(in lek per person, per month)

	Grade of Land		
	V	VI-VII	VIII-X
m ² per person			
<500	400	426	468
501-1,000	300	340	400
1,001-1,500	225	250	300
1,501-2,000	175	200	240

Source: Ministry of Agriculture.

Table 27. Cash Deficit In Subsistence Agriculture, before Social Assistance
(Per person)

	Consumption per year (In kg)		Expenditures per month (In lek)					
	Total <u>1/</u>	From Market	<= Nov 91	Dec 91 - Jul 92	Aug - Dec 92	Jan 93	Feb - Jun 93	Jul - Dec 93
Food (at 2,650 calories/day)								
Bread	256	216	47	47	225	225	225	433
Beans	5	5	2	2	16	22	24	24
Rice	6	6	4	4	14	29	31	31
Sugar	9	9	6	6	21	46	49	49
Oil	7	7	10	10	33	61	65	65
Total food at 2,000 calories <u>2/</u>			52	52	233	289	297	454
Total food at 1,600 calories <u>2/</u>			42	42	187	231	238	363

Sources: Ministry of Finance and Ministry of Agriculture.

1/ Includes production for own consumption, for person in family with 0.25 ha land of grade V.

2/ All food items are discounted by 2,650/2,000 or 2,650/1,600 for comparison with urban subsistence.

Derivation of Poverty in the Public Sector
based on Wage Distribution Data

The wage distribution in state enterprises (Table 11) and in the civil service (Table 12) form the basis for calculating the number of workers earning less than subsistence incomes. In estimating the number of poor, the wage distribution in enterprises is assumed unchanged from 1987. In the civil service, it is assumed unchanged from February 1993. The subsistence wage is defined as a percent of the average wage, and the cumulative employment (as a percent of total employment) at this wage is obtained from the wage distribution. By applying the percent of employment to current employment, the number earning below subsistence incomes is obtained.

As an example, take the case of enterprise workers with one dependent in the second half of 1992. Subsistence income for workers with 1 dependent was 1,552 leks. Because wage distribution data give wages excluding compensation and dependency allowance, subsistence income needs to be reduced by the compensation and dependency allowances in order to be able to compare it with the wage. Such allowances were 480 for 5 of the 6 months and zero for the other month. Call the difference between the subsistence income and compensation and dependency allowances the subsistence wage. The subsistence wage thus calculated is 1,152. This corresponds to a wage which is 54 percent less than the average wage of 2,480. Table 11, and linear interpolation, indicates that just 3 percent of workers earns less than 54 percent of the average wage. The total number of workers with 1 dependent is about 360,000 (based on the assumption that 80 percent of workers have 1 dependent). This means that about 11,000 workers have incomes below subsistence levels.

Table 28. Agricultural Prices compared to CPI—Based on 1990 Quantities

Product	1990	1991	1992	1993
		(Index)		
Producer Prices	100	132	544	783
Crops	100	149	645	898
Livestock	100	112	426	648
CPI	100	136	442	817
		(Percent change)		
Producer Prices	...	32	311	44
Crops	...	49	332	39
Livestock	...	12	279	52
CPI	...	36	225	85
<u>Memorandum items:</u>				
		(Value, in billion lek)		
Wheat	2.1	2.3	8.5	14.0
Rye	3.0	3.2	12.0	19.8
Maize	1.9	2.2	9.1	13.0
Potatoes	1.2	2.0	15.0	12.0
Soya	3.2	7.0	60.0	110.9
Sunflower	4.6	4.0	12.0	22.2
Rice	4.2	3.2	15.2	21.0
Vegetables	0.9	2.0	11.0	12.0
Beans	4.0	7.0	28.0	22.0
Fruits	0.9	2.0	20.0	37.0
Olives	1.1	2.5	10.5	15.0
Citrus	1.4	3.0	25.0	46.2
Grapes	1.2	2.6	10.8	20.0
Tobacco	11.0	22.0	150.0	150.0
Cotton	35.0	70.0	120.0	180.0
Sugarbeet	0.3	0.3	1.1	2.7
Milk	2.5	2.8	8.0	12.0
Meat	12.0	12.5	50.0	75.0
Eggs	0.7	0.9	6.0	9.0
Wool	23.5	47.0	250.0	462.1

Source: Ministry of Agriculture.

Table 29. Developments in the Urban CPI, 1989–1993
(December 1990=100)

Items	Weight	Dec 1989	Dec 1990	Dec 1991	July 1992	August 1992	Dec 1992	July 1993	August 1993	Dec 1993
Total	1.00	98	100	204	377	550	687	828	839	899
Food, beverages and tobacco	0.63	97	100	211	372	592	753	898	911	956
Clothing and footwear	0.13	98	100	212	392	440	571	608	615	638
Rent, water, fuel and power	0.05	105	100	115	182	360	432	566	570	933
Household goods	0.06	100	100	217	631	750	845	839	842	850
Medical care	0.01	100	100	100	100	283	283	342	342	342
Transportation and communication	0.05	96	100	123	212	391	400	962	964	964
Recreation, education and culture	0.07	100	100	203	398	412	520	671	670	804
Personal care	0.01	100	100	495	894	1,006	1,224	1,422	1,443	1,458
<u>Memorandum item:</u>										
Non-food CPI	0.37				387	478	575	710	715	803

Table 30. Land by Grade
(In percent of total)

	Grades I-II	Grades III-IV	Grade V	Grades VI-VII	Grades VIII-X
Gjirokaster	1	49	18	22	10
Shkoder and Malesi	11	36	14	21	18
Korce	2	37	26	31	4
Fier	6	55	14	16	9
Elbasan	4	41	20	30	5
Lushnje	22	61	9	5	4
Berat	5	28	18	33	15
Sarande	5	54	15	19	7
Tirana	5	46	21	23	5
Permet	--	19	22	39	20
Durres	10	58	14	12	6
Kruje	21	60	6	10	4
Kolonje	1	31	31	27	9
Tepelene	--	19	20	41	19
Vlore	4	26	15	34	21
Lezhe	9	67	13	8	3
Gramsh	2	19	22	33	23
Skrapar	--	16	27	39	17
Tropoje	--	4	33	44	19
Pogradec	--	3	5	53	39
Librazhd	--	15	24	46	15
Mat	--	21	33	42	4
Kukes and Has	--	1	8	63	28
Mirdite	--	5	18	58	19
Diber and Bulquize	8	33	33	11	14
Puke	--	4	16	52	28

Source: Ministry of Agriculture

Table 31. Income Developments for Units below Subsistence Levels (Using Subsistence CPI)
Before Remittances

(In thousands of persons or thousands of leks)

	1991		1992		1993	
	H1	H2	H1	H2	H1	H2
Urban sector						
	(Homogenous households)					
Total below subsistence, urban sector	84	84	84	823	1,114	952
Recipients below subsistence	84	84	84	740	943	857
Social assistance recipients and dependants	84	84	84	84	108	216
Pensioners and dependants	--	--	--	281	289	303
UI recipients and dependants	--	--	--	375	546	338
Workers and dependants below subsistence	--	--	--	84	172	96
Social assistance--per capita 1/						
Number of recipients	84	84	84	84	108	216
Income	130	140	150	395	467	941
Real incomes	100	107	108	59	50	85
Change in real income	--	7	2	-45	-17	72
Gap	23	15	14	381	630	345
Pensioner with dependent						
Number of pensioners and their dependants	244	257	267	281	289	303
Income	407	672	706	1,165	1,547	2,177
Real incomes	100	163	163	56	52	63
Change in real income	--	63	--	-66	-6	20
Gap (1 pensioner and dependent)	-100	-362	-378	387	647	393
Pensioner without dependent						
Number of recipients	122	129	134	141	145	152
Income	407	672	706	998	1,347	1,763
Real incomes	100	163	163	48	46	51
Changes in real income	--	63	--	-71	-5	12
Gap	-267	-530	-555	-299	-360	-609
UI recipient with dependent						
Number of unemployed and their dependants	--	128	208	375	546	338
Income	507	755	1,255	1,271	1,637	2,194
Real incomes	100	147	233	49	45	51
Change in real income	--	47	58	-79	-9	14
Gap (1 unemployed with dependent)	-200	-445	-927	281	557	376
UI recipient without dependent						
Number of unemployed	--	16	26	47	68	42
Income	507	755	1,255	961	1,244	1,582
Real incomes	100	147	233	37	34	37
Changes in real income	--	47	58	-84	-9	8
Gap	-367	-613	-1,105	-262	-257	-428
Enterprises						
Workers and their dependants	1,234	1,090	1,000	810	545	382
Of which: below subsistence	--	--	--	22	112	61
Income bottom quartile 2/	432	655	1,202	2,121	2,254	2,683
Real incomes	100	150	261	96	72	73
Change in real income	--	50	74	-63	-25	1
Budgetary institutions 3/						
Workers and their dependants	416	416	416	383	355	355
Of which: below subsistence	--	--	--	62	60	35
Income bottom quartile 2/	540	764	830	1,560	2,158	2,720
Real incomes	100	140	144	56	55	59
Change in real income	--	40	3	-61	-2	7

Table 31 (continued). Income Developments for Units below Subsistence (Using Subsistence CPI)
Before Remittances

(In thousands of persons or thousands of laka)

	1991		1992		1993	
	H1	H2	H1	H2	H1	H2
<u>Urban sector</u>						
	(Random matching)					
Total below subsistence, urban sector	84	84	84	570	972	817
Recipients below subsistence	84	84	84	496	724	697
Social assistance recipients and dependents	84	84	84	84	108	216
Pensioners and dependents	--	--	--	281	289	303
UI recipients and dependents	--	--	--	131	327	178
Workers and dependents below subsistence	--	--	--	74	248	119
Social assistance--per capita 1/						
Number of recipients	84	84	84	84	108	216
Income	130	140	150	395	467	941
Real incomes	100	107	108	59	50	85
Change in real income	--	7	2	-45	-17	72
Gap	23	15	14	381	630	345
Pensioner with dependent						
Number of pensioners and their dependents	244	257	267	281	289	303
Income	407	672	706	1,165	1,547	2,177
Real incomes	100	163	163	56	52	63
Change in real income	--	63	-0	-66	-6	20
Gap (1 pensioner and dependent)	-100	-362	-378	387	647	393
Pensioner without dependent						
Number of pensioners	122	129	134	141	143	152
Income	407	672	706	998	1,347	1,763
Real incomes	100	163	163	48	46	51
Change in real income	--	63	-0	-71	-5	12
Gap	-267	-530	-555	-299	-360	-609
UI recipient (both parents unemployed) with dependent						
Number unemployed and their dependents	--	11	29	98	221	115
Income	507	755	1,255	1,271	1,637	2,194
Real incomes	100	147	233	49	45	51
Change in real income	--	47	58	-79	-9	14
Gap (1 unemployed and dependent)	-200	-445	-927	281	557	376
UI recipient without dependent						
Number unemployed	--	16	26	47	68	42
Income	507	755	1,255	961	1,244	1,582
Real incomes	100	147	233	37	34	37
Change in real income	--	47	58	-84	-9	8
Gap	-367	-613	-1,105	-262	-257	-428
Working couples 3/						
Workers and their dependents	1,466	1,222	1,080	784	476	432
Of which: Below subsistence	--	--	--	41	143	56
Income bottom quartile 2/	459	685	1,093	1,941	2,216	2,701
Real incomes	100	148	224	83	67	69
Change in real income	--	48	51	-63	-19	4
Mixed unemployed/employed households 3/						
Workers and their dependents	--	234	357	554	649	445
Of which: Below subsistence	--	--	--	66	211	127
Income bottom quartile 2/	523	760	1,043	1,415	1,897	2,457
Real incomes	100	143	187	53	50	55
Change in real income	--	44	30	-72	-5	10
Single workers 3/	183	167	157	133	100	82

Table 31 (concluded). Income Developments for Units below Subsistence (Using Subsistence CPI)
Before Remittances

(In thousands of persons or thousands of leks)

	1991		1992		1993	
	H1	H2	H1	H2	H1	H2
Rural sector						
	(Nuclear family)					
Total below subsistence, rural sector	--	--	--	319	320	158
Social assistance--per capita						
Number of people on assistance	167	167	167	167	167	334
Income	80	90	100	100	100	455
Real incomes	100	111	117	24	17	67
Change in real income	--	11	6	-79	-29	288
Gap 4/	-34	-44	-54	79	160	-55
Pensions 5/						
Number of pensioners	121	122	151	152	153	158
Income	200	350	424	459	530	530
Real incomes	100	173	199	45	37	31
Change in real income	--	73	15	-77	-19	-15
Gap	-34	-182	-247	393	677	886
Memorandum items:						
Urban subsistence level at 1 dependent	307	310	328	1,552	2,194	2,570
Per adult	166	168	177	852	1,207	1,416
Per dependent	140	142	151	700	987	1,154
Total recipients, urban sector	450	614	719	927	1,155	1,050
Total recipients, rural sector	288	289	318	319	320	492
Workers and dependents	1,650	1,506	1,416	1,193	900	736

Source: Ministry of Labor, Ministry of Finance, Ministry of Agriculture, Institute of Social Security, Department of Statistics, and Appendix II.

- 1/ Based on three person family.
- 2/ Includes compensation for 1 dependent; the wage at the bottom quartile of employment is 30 and 21 percent below the average in enterprises and civil service respectively.
- 3/ Including defense and police; these have average incomes above subsistence.
- 4/ See Appendix II.
- 5/ Pensioners from state farms are included under urban pensioners.

Table 32. Agricultural Incomes by District

	Annual Incomes (in lek)				Worker 1/	Monthly		Population			
	Live-stock 4/	Culti-vation 4/	Total 4/	Per family		Per Capita 2/		Nuclear Concept		Extended Concept	
						Nuclear	Extended	Active	Pensioners	Total	Pensioners
1991											
Total (or average)	2,946	973	3,919	10,411	434	208	227	1,636,093	151,337	1,787,430	151,337
Northeast Mountain 3/	855	176	1,031	7,887	329	157	176	613,879	47,012	660,891	47,012
Below subsistence	...	...	...	...	...	...	...	397,849	--	129,118	11,837
Gjirokastr	79	11	90	12,424	518	252	272	30,379	4,118	34,497	4,118
Shkoder and Malesi (NEM)	201	78	279	8,658	361	197	220	129,439	14,055	143,494	14,055
Korce	216	49	265	10,347	431	254	277	87,519	13,775	101,294	13,775
Fier	227	149	376	13,690	570	253	267	123,777	10,803	134,580	10,803
Elbasan	194	56	250	9,061	378	188	207	117,133	10,243	127,376	10,243
Lushnje	181	164	345	17,993	750	292	301	98,611	7,489	106,100	7,489
Berat	153	52	205	9,983	416	244	263	70,145	8,351	78,496	8,351
Sarande	100	31	130	14,023	584	251	270	43,350	5,444	48,794	5,444
Tirana	154	43	197	13,584	566	228	244	75,655	6,571	82,226	6,571
Permet	65	12	77	12,253	511	256	275	25,056	3,284	28,340	3,284
Durres	184	103	286	11,155	465	237	253	100,543	9,287	109,830	9,287
Kruje	97	37	134	10,677	445	264	277	43,563	3,926	47,489	3,926
Kolonje	47	8	56	16,263	678	297	311	15,627	1,973	17,600	1,973
Tepelene	69	11	79	10,559	440	209	225	32,518	2,616	35,134	2,616
Vlore	139	39	178	9,987	416	228	249	65,844	7,788	73,632	7,788
Lezhe	64	14	79	8,251	344	195	213	35,263	2,997	38,260	2,997
Gramsh	59	9	68	11,329	472	188	208	31,821	2,994	34,815	2,994
Skrapar	63	11	74	13,163	548	250	267	25,411	2,666	28,077	2,666
Tropoje (NEM)	60	6	66	9,716	405	211	230	29,414	2,916	32,330	2,916
Pogradec (NEM)	65	14	79	6,841	285	145	166	47,556	3,842	51,398	3,842
Librazhd (NEM)	81	13	93	8,046	335	150	169	60,533	4,437	64,970	4,437
Mat (NEM)	93	11	104	8,598	358	163	184	57,177	5,050	62,227	5,050
Kukes and Has (NEM)	114	17	131	8,835	368	151	166	82,479	4,875	87,354	4,875
Mirdite (NEM)	46	6	52	7,125	297	114	130	39,746	2,086	41,832	2,086
Diber and Bulqize (NEM)	148	27	175	6,815	284	133	149	126,116	7,382	133,498	7,382
Puke (NEM)	47	5	51	5,952	248	130	146	41,419	2,369	43,788	2,369
Memorandum item:											
Percent rural population below subsistence	..	..	..	..	..	..	..	18	--	12	1

Table 32 (Continued). Agricultural Incomes by District

	Annual Incomes (in lek)				Monthly			Population			
	Live-stock 1/	Culti- vation 1/	Total 1/	Per family	Worker 1/	Per Capita 2/		Nuclear Concept		Extended Concept	
						Nuclear	Extended	Active	Pensioners	Total	Pensioners
1992											
Total (or average)	11,245	4,566	15,811	42,002	1,750	806	775	1,636,093	151,337	1,787,430	151,337
Northeast Mountain 3/ Below subsistence	3,263 ...	1,131 ...	4,394 ...	33,620 ...	1,401 ...	597 ...	585 ...	613,879 81,165	47,012 75,669	660,891 85,620	47,012 4,455
Gjirokastra	308	114	413	57,141	2,381	1,134	1,052	30,379	4,118	34,497	4,118
Shkoder and Mallesi (NEM)	771	537	1,308	40,603	1,692	843	803	129,439	14,055	143,494	14,055
Korce	825	261	1,086	42,471	1,770	1,034	954	87,519	13,775	101,294	13,775
Fier	872	498	1,369	49,887	2,079	922	883	123,777	10,803	134,580	10,803
Elbasan	744	413	1,157	41,971	1,749	824	792	117,133	10,243	127,376	10,243
Lushnja	693	428	1,121	58,490	2,437	948	912	98,611	7,489	106,100	7,489
Berat	581	237	818	39,875	1,661	972	915	70,145	8,351	78,496	8,351
Saranda	382	149	532	57,178	2,382	1,022	957	43,350	5,444	48,794	5,444
Tirana	585	203	788	54,358	2,265	868	834	75,655	6,571	82,226	6,571
Permet	246	74	319	50,950	2,123	1,062	991	25,056	3,284	28,340	3,284
Durres	703	432	1,135	44,201	1,842	941	898	100,543	9,287	109,830	9,287
Kruje	372	176	548	43,705	1,821	1,049	998	43,563	3,926	47,489	3,926
Kolonje	179	39	218	63,790	2,658	1,165	1,084	15,627	1,973	17,600	1,973
Tepelene	259	55	314	41,781	1,741	804	777	32,518	2,616	35,134	2,616
Vlora	531	162	694	38,961	1,623	878	832	65,844	7,788	73,632	7,788
Lesha	249	78	327	34,201	1,425	772	746	35,263	2,997	38,260	2,997
Gramsh	223	56	279	46,423	1,934	730	705	31,821	2,994	34,815	2,994
Skrapar	239	59	298	52,807	2,200	977	926	25,411	2,666	28,077	2,666
Tropoje (NEM)	229	46	275	40,381	1,683	779	748	29,414	2,916	32,330	2,916
Pogradec (NEM)	250	69	319	27,545	1,148	559	550	47,556	3,842	51,398	3,842
Librazhd (NEM)	309	72	381	32,788	1,366	525	519	60,533	4,437	64,970	4,437
Mat (NEM)	351	63	414	34,227	1,426	604	590	57,177	5,050	62,227	5,050
Kukes and Has (NEM)	436	106	541	36,450	1,519	548	541	82,479	4,875	87,354	4,875
Mirdite (NEM)	176	35	211	28,921	1,205	443	442	39,746	2,086	41,832	2,086
Diber and Bulqize (NEM)	566	172	738	28,788	1,199	489	485	126,116	7,382	133,498	7,382
Fake (NEM)	176	30	207	24,052	1,002	417	417	41,419	2,369	43,788	2,369
Memorandum item:											
Percent rural population below subsistence	...	...	...	...	...	...	...	5	4	5	..

Table 32 (Concluded). Agricultural Incomes by District

	Annual Incomes (lek)				Worker 1/	Monthly		Population			
	Live-stock 4/	Culti- vation 4/	Total 4/	Per family		Per Capita 2/	Nuclear Concept		Extended Concept		
							Nuclear	Extended	Active	Pensioners	Total
1993											
Total (or average)	17,804	12,624	30,428	80,835	3,368	1,578	1,489	1,636,093	151,337	1,787,430	151,337
Northeast Mountain 3/ Below subsistence	5,169 ...	2,783 ...	7,952 ...	60,846 ...	2,535 ...	1,134 ...	1,175 ...	613,879 455,026	47,012 151,337	660,891 485,067	47,012 30,041
Gjrokastrë	477	283	760	105,088	4,379	2,103	1,915	30,379	4,118	34,497	4,118
Shkodër and Malësi (NEM)	1,222	1,339	2,562	79,498	3,312	1,707	1,592	129,439	14,055	143,494	14,055
Korçë	1,305	737	2,042	79,837	3,327	1,951	1,758	87,519	13,775	101,294	13,775
Fier	1,375	1,403	2,778	101,198	4,217	1,870	1,763	123,777	10,803	134,580	10,803
Elbasan	1,176	1,101	2,276	82,573	3,441	1,653	1,563	117,133	10,243	127,376	10,243
Lushnjë	1,091	1,241	2,332	121,639	5,068	1,971	1,869	98,611	7,489	106,100	7,489
Berat	918	677	1,595	77,780	3,241	1,897	1,752	70,145	8,351	78,496	8,351
Sarandë	611	431	1,043	112,112	4,671	2,004	1,840	43,350	5,444	48,794	5,444
Tirana	923	593	1,517	104,639	4,360	1,707	1,613	75,655	6,571	82,226	6,571
Permet	391	227	618	98,611	4,109	2,056	1,879	25,056	3,284	28,340	3,284
Durrës	1,106	1,239	2,345	91,348	3,806	1,944	1,824	100,543	9,287	109,830	9,287
Krujë	587	510	1,096	87,417	3,642	2,124	1,922	43,563	3,926	47,489	3,926
Kolonjë	285	128	413	120,479	5,020	2,200	2,013	15,627	1,973	17,600	1,973
Tepelenë	414	155	568	75,625	3,151	1,474	1,404	32,518	2,616	35,134	2,616
Vlorë	848	501	1,348	75,745	3,156	1,718	1,592	65,844	7,788	73,632	7,788
Lazër	393	246	639	66,936	2,789	1,538	1,459	35,263	2,997	38,260	2,997
Gramsh	355	170	525	87,367	3,640	1,407	1,331	31,821	2,994	34,815	2,994
Skrapar	381	199	580	102,755	4,281	1,923	1,790	25,411	2,666	28,077	2,666
Tropojë (NEM)	362	111	474	69,626	2,901	1,418	1,338	29,414	2,916	32,330	2,916
Pogradec (NEM)	395	211	607	52,398	2,183	1,083	1,042	47,556	3,842	51,398	3,842
Librazhd (NEM)	488	193	681	58,635	2,443	1,007	974	60,533	4,437	64,970	4,437
Mat (NEM)	555	168	724	59,849	2,494	1,091	1,046	57,177	5,050	62,227	5,050
Kukës and Has (NEM)	689	233	923	62,127	2,589	992	966	82,479	4,875	87,354	4,875
Mirditë (NEM)	279	94	373	51,051	2,217	799	786	39,746	2,086	41,832	2,086
Dibër and Bulqizë (NEM)	896	359	1,256	48,958	2,040	887	867	126,116	7,382	133,498	7,382
Pukë (NEM)	280	74	355	41,297	1,721	802	787	41,419	2,369	43,788	2,369
Memorandum item:											
Percent rural population below subsistence	...	...	...	...	...	...	...	25	8	27	2

Source: Ministry of Agriculture, Institute of Social Security and estimates.

1/ Based on assumption of 2 workers per family.

2/ Including social assistance.

3/ The Northeast and Mountain (NEM) region comprises Shkodër, Tropojë, Pukë, Kukës, Has, Mirditë, Dibër, Bulqizë, Librazhd.

4/ Million lek for totals.

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