

CENTRAL EUROPE: AGRICULTURE IN THE NEW MARKET ECONOMIES

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The changes taking place in the Central and East European countries (CEE's) are remarkable not only for their scope, but also because few guideposts exist on transforming an economy managed by planners into one driven by markets. This paper looks at the transition to market-oriented agriculture in some countries of central Europe that make up the region and provides a brief overview and outlook for four countries: Albania, Bulgaria, Romania and Yugoslavia.

Yugoslavia, reforms amidst civil strife

Yugoslavia is officially a confederation of republics composed of major South Slav ethnic groups including Serbs, Croats, Macedonians and Slovenes, as well as a number of national minorities that include Albanians and Hungarians. The population approximates the combined size of New York state and New Jersey - about 24 million persons. Roughly 22 percent in mining and manufacturing.

Yugoslav territory covers an area of nearly 98,800 square miles, making it the largest country in the Balkans and the ninth largest in Europe. It is nearly 600 miles long, with the central portion of the country almost 300 miles wide. The republic of Serbia makes up 35 percent of Yugoslavia's territory and Croatia 22 percent.

Agricultural land covers 57 percent of total area. Although nearly three-fourths of the agricultural land is arable, only 2 percent of arable land is irrigated. The Pannonian Plain, an agriculturally rich lowland area in the North, produces at least 30 percent of the country's grain (table 1).

Despite the 21 rivers that flow through Yugoslavia, each longer than 100 miles, their energy, transport and agricultural potential has not been realized. Moreover, drought and flooding are frequent. Except for the Northern plains and a few major river valleys, the country is dominated by mountainous territory stretching from the northwest to the southeast along the eastern shores of the Adriatic Sea.

Yugoslav investment policy has not been especially supportive of agriculture. Agriculture's share of investments has been and still is low. The return on agricultural investment is generally lower than the average

Abstract

Past and present political events in the Balkan states make economic reform all the more challenging. Yugoslav farmers are caught up in civil unrest that reflects long-standing ethnic and national rivalries; Bulgaria is forging ahead with agricultural reform despite precious little experience with private operation in over four decades; Romanian farmers are attempting to rebuild the country's self-sufficiency in agriculture after the damaging policies of the Ceausescu regime; and Albania is overcoming 40 years of isolation from the rest of Europe and preparing to enter the community of developed countries.

As in the other CEE's (Central Europe Economics) agricultural profits are suffering as the countries undergo the painful transformation from centrally planned to market-driven economies.

Résumé

Les événements politiques présents des Etats balcaniques rendent la réforme économique très importante. Les agriculteurs Yougoslaves sont engagés dans une agitation civile qui reflète les rivalités ethniques et nationales. La Bulgarie continue à poursuivre la réforme agricole en dépit de la petite expérience qu'elle a acquis dans le secteur privé, pendant 4 décennies. Les agriculteurs de la Roumanie sont en train de recréer l'auto-suffisance agricole, après les politiques du régime de Ceausescu. Enfin, l'Albanie va dépasser 40 ans d'isolement du reste de l'Europe et elle se prépare à entrer dans la communauté des pays développés.

Comme dans d'autres EEC, les profits agricoles souffrent pour la transformation des économies planifiées de ces pays en économies de marché.

return in other sectors of the economy, partly because of low prices for agricultural products. Throughout the 1970's and 1980's, the Yugoslav government used foreign credit largely to develop the Adriatic coast's tourist industry in hopes of generating foreign currency earnings.

The socialized sector of agriculture has been made up of about 2,700 «kombinats», vertically-integrated enterprises that oversee every stage of production from farm to retail. Profits of the kombinats were severely curtailed by soaring interest payments and high debt to federal banks during the past 5 years.

However, for most of Yugoslavia's postwar

history, the private sector dominated Yugoslav agriculture. In contrast with most other CEE's, about 70 percent of the land is already in private hands, and the number of socialized farms are about 125 acres, but some large estates are over 12,000 acres. Since the early 1950's, following an unsuccessful attempt at complete nationalization of land, the Yugoslav government has allowed private ownership of arable land up to 25 acres. This maximum was based on what a single family was considered able to cultivate without hiring additional help. Most small family farms are 5 acres or less. In 1990, maximum private ownership was abolished, and legislation is currently being

Table 1 Grains dominate CEE agriculture* (1,000 metric tons).

	Bulgaria	Romania	Yugoslavia	Albania	Total CEE's
Wheat	5,300	7,000	6,530	450	40,680
Corn	2,200	8,500	12,000	400	30,880
Barley	1,470	3,000	700	35	14,522
Rye	45	70	72	12	9,522
Total grains	9,107	18,859	19,597	927	102,365
Oilseeds	465	686	577	5	4,206
Meat & poultry	796	1,255	1,468	NA	9,470
Potatoes**	538	4,420	2,858	NA	46,202
Sugar	80	334	885	114	4,413
Fruit & Vegetables**	2,025	5,307	5,040	NA	24,700

NA = not available.

CEE countries: Poland, Hungary, Czechoslovakia, Bulgaria, Yugoslavia, Albania.

* 1991 output.

** Production in 1989 from Country Yearbooks, 1990.

Source: USDA.

(*) ERS-USDA, Washington D.C.

considered to return land confiscated from private individuals and churches after World War II.

Over the past few years, agricultural production has been relatively stable, dominated by cereal production (24 percent of agricultural output) and by livestock, including cattle (21 percent of output), hogs (14 percent) and poultry (10 percent). Industrial crops and vegetables contribute another 18 percent to total output.

Yugoslavia is the third largest grain producer of the CEE's, following Poland and Romania, with annual production averaging around 16 million tons over the past 5 years. It is one of the highest corn producers of the CEE's, averaging over 9 million tons annually. But Yugoslavia is the smallest producer of barley among the CEE's, except for Albania, averaging 653,000 tons during the past 5 years. Wheat yields are fairly high at 63 bushels per acre, as are barley yields at 51 bushels, but corn yields are low, averaging around 66 bushels.

The summer of 1991 saw a record grain crop in Yugoslavia, in contrast to the output following 1990's disastrous drought. The wheat harvest reached a record 6.5 million metric tons in 1991. Although farmers welcomed the large wheat harvest, they now face difficulties in transporting and selling the grain.

Among the most serious effects on agriculture during the current Yugoslav political and ethnic struggle has been the increased cost to producers for the inter-republic shipping, as well as for export of commodities. The higher costs are due to taxes imposed by the individual republics, and unreliable transportation as military skirmishes escalated.

The predominantly agricultural province of Voivodina in north Serbia, given its proximity to the areas of military conflict, has been particularly affected by the fighting that intensified throughout the summer months. Voivodina's farmers cannot be guaranteed that their goods will arrive safely to designated areas through inter-republic routes. In addition, sporadic confiscation of goods as they move across republic borders makes it even harder for surplus grain to be distributed to buyers. Previous transportation routes to Western Europe have been rerouted through Hungary, but this involves the added expense of duties imposed by the Hungarian government.

Before the harvest in mid-July, the Federal government announced austerity measures that eliminated traditional price supports for Yugoslav agriculture, as well as bank compensation for individual farmers' debts. But with the recent grain surplus, the government has agreed to set aside over \$ 1 billion in new credits to provide support for 60 percent of the estimated value of the 1991 harvest.

In addition to receiving Federal aid, grain producers are actively looking for buyers who are able to purchase the grain surplus, especially with convertible currency. Yu-



goslavia plans to export at least 1 million tons of grain with a 40 percent price subsidy this year. The Soviet Union reportedly has already contracted for delivery of at least 300,000 tons. If Yugoslav farmers can manage the successful export of grain, they would earn foreign currency that is badly needed for purchasing agricultural equipment as well as other farm inputs.

Bulgaria, forging ahead with reform

Bulgaria's location near water transport points provides it with a number of natural advantages. Bulgaria borders Romania to the north, Turkey and Greece to the south, Yugoslavia to the west and the Black Sea to the east. Bulgaria is not a large country - only slightly larger than the state of Tennessee (42,683 square miles or 27.3 million acres). With 1990 GNP of \$ 43 billion — about the size of Iowa — Bulgaria had the lowest GNP of the CEE's, except for Albania. Its population of 8.9 million inhabitants is the second smallest of the CEE's, but the country has over 200 inhabitants per square mile, compared with the U.S. average of 70 inhabitants per square mile.

Two mountain ranges and two major rivers divide the country geographically and by commodities produced. The Balkan Mountains stretch west to east, trailing the Transylvanian Alps in Romania. To the north of the Balkan Mountains lies the granary of Bulgaria — the Danubian Plateau.

The second mountain range — the Rhodope Mountains — lies in the southwestern corner of Bulgaria. Vegetable and fruit production is concentrated in the Thracian Plain, the valley north of these mountains and the south of the Balkan range. The Danube River is the major source of irrigation and transportation for the Danubian Plateau and the Maritsa River for the Thracian Plain. Agriculture covers a large portion of Bulgaria's land. Of the 27.3 million acres in Bulgaria, 53 percent is agricultural, over two-

third of which is cultivated. Besides grains, the Danubian Plateau supports other food and fodder crops. Closer to the Balkan foothills, orchards dot the landscape, while reed and licorice grow wild in the area nearest the Danube River. The Thracian Plain's natural vegetation — mid-latitude forest and Mediterranean flora — has been replaced by truck vegetables, fruit orchards, berries, vineyards, cotton and tobacco.

Wheat, corn and barley are the most abundant Bulgarian crops, planted on over 50 percent of arable land. Other key crops include sugarbeets, alfalfa, sunflowerseeds, tobacco, fruits and vegetables. Bulgarian wheat yields of 64 bushels per acre in 1990 were almost 65 percent higher than the 1990 U.S. average. Barley and cotton yields in Bulgaria were 25 to 60 percent higher in 1990 than in the U.S., while sunflowerseed yields in the two countries were similar. Nearly 13 percent of the population is employed in agriculture, which shares the labor-intensive character of CEE agriculture. There are 62 workers but less than six tractors per 1,000 acres in Bulgaria.

Land collectivization after World War II was extensive; virtually all agricultural land came under state and cooperative farms, Bulgaria reorganized the structure of its farm sector several times. In the early 1970's, state and cooperative farms were consolidated into huge agro-industrial complexes, averaging 24,000 acres with several thousand workers, and comprising 84 percent of total agricultural land. The remaining 16 percent of agricultural land was allocated for private operation (but not ownership) in small plots of 1-2 acres. Only 1 percent of total agricultural land is actually privately owned (figure 1).

Beginning in 1986, the agro-industrial complexes were gradually broken up into much smaller components. With land reform in the forefront of agricultural change, the agro-industrial complexes have been disbanded altogether and await claims from previous owners.

After a slow start, Bulgaria is forging ahead to establish itself in the forefront of change

along with Poland, Hungary and Czechoslovakia. In spring 1990, while the other CEEs (excluding Albania) were ousting communist leaders and establishing democratic governments, Bulgarians initially used the ballot to re-elect their communist officials. This led observers to doubt that Bulgaria was on the road to reform. But in October 1991, the Bulgarians elected a democratic government.

Agricultural policy reform in Bulgaria has cut farm profits. In February 1991, almost all producer and consumer prices were decontrolled, leading to declines in producer prices fell relative to other prices. Despite the general liberalization, by July 1991 the government provided support for farmers by establishing minimum producer prices for pigs, poultry, calves and milk and minimum export prices for calves, lambs, pigs, meat and cheese. Ceiling were shortly placed on some consumer prices in response to high inflation.

However, the real economic picture for Bulgarian farmers is seen in the relative input and output prices. Input suppliers and output purchasers are still acting in a monopolistic fashion. Input prices have risen dramatically while procurement prices paid to farmers have risen more slowly. Thus, the short-term impact of price liberalization has been to decrease net returns to farmers and reduce incentives to produce.

Area sown to spring crops of corn, soybeans and potatoes in 1991 was down as much as a third from 1990. Vegetable production is reported down 37 percent from a year earlier. Animal numbers and milk and egg production are also reported lower.

So far, the combination of reduced supply and a fall in demand because of lower incomes has averted shortages. To ensure full shelves this winter, however, Bulgarian officials set restrictions on exports of some basic agricultural commodities, such as bread, coarse grains, sunflowerseeds and vegetable oils. Other measures include a surtax of 15 percent for most imports and minimum export prices to discourage livestock sales to foreign buyers.

The foreign trade sector has undergone significant reform in the past year. And, while many of the changes are trade enhancing, the economic and political disruption in the region, including the Soviet Union, has put strong downward pressure on Bulgaria's exports as it has for other CEE's. Bulgaria has historically been closely tied to the Soviet Union, but making new efforts to attract the interest and investment of Western countries.

Romania, recapturing agricultural productivity

Romania borders the Black Sea to the east, Bulgaria to the south, Yugoslavia and Hungary to the west and the Ukraine and Soviet Moldavia to the north. The third largest CEE

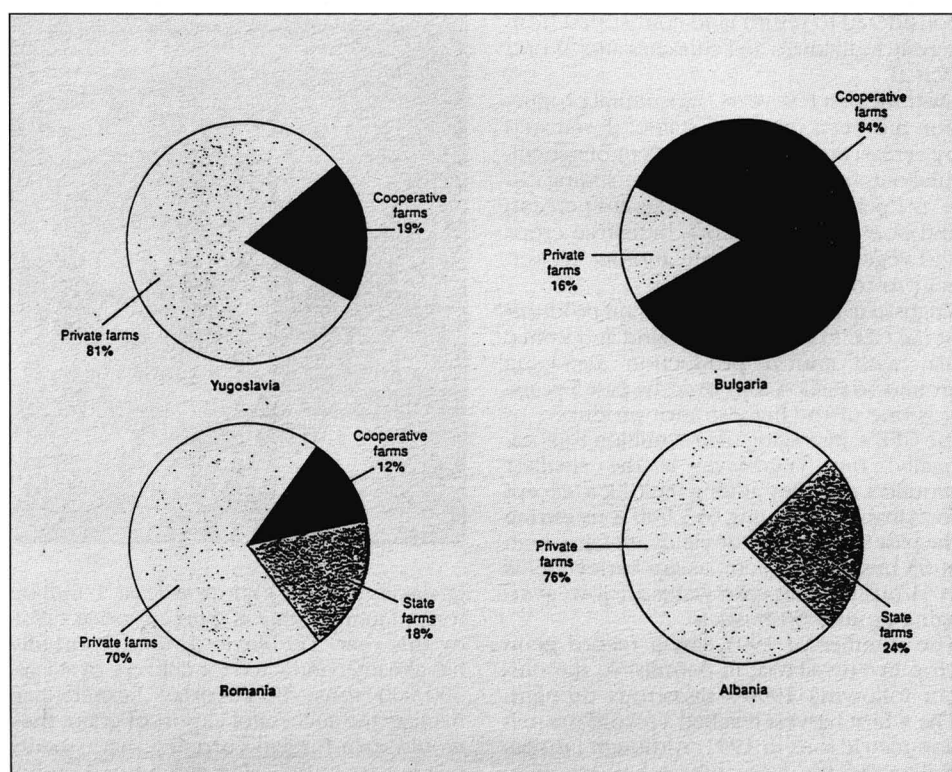


Figure 1 - Most farms in Bulgaria are still collectivized: structure of land ownership, 1991.

with an area of 91,699 square miles (58.7 million acres), Romania is about the size of Oregon or Wyoming. But its 23 million inhabitants make it one of the most densely populated CEEs with 253 persons per square mile.

Romania's GNP in 1990 was estimated at \$ 94 billion, the fourth largest among CEEs with per capita GNP at \$ 4,043. Over half the population is urban, and about 20 percent of the population is engaged in agriculture.

Sixty-two of Romania's land are arable and approximately 13.5 million acres are planted to cereal crops. Romanian agriculture is labor intensive, with approximately 100 workers — but only seven tractors — for every 1,000 acres.

The Carpathian Mountains and the Transylvanian Alps, along with the Danube and Prut Rivers, define the major agricultural areas of Romania. In southern Romania, between the Transylvanian Alps and the Danube River, lies Walachia — the breadbasket of Romania — which provides half the annual grain harvest and roughly half the fruit and grapes.

To the west of the Carpathians and north of the Transylvanian Alps in Transylvania, with poor soils and rough terrain restricting large-scale mechanized farming. Livestock production dominates in the mountains of Transylvania, while potatoes and some grains are grown in the central basin.

The major grains planted in Romania are corn, wheat (predominantly winter varieties), and barley. Corn and wheat area comprise

over half of all arable land and 90 percent of land planted to grains. Important non-grain crops include hay and silage, sunflower, potatoes, soybeans and sugarbeets.

Crop yields in Romania vary considerably — especially compared with those in the U.S. For example, corn yields at 47 bushels were about 40 percent of the 1990 U.S. corn yield, while soybean yields at 11 bushels per acre were less than a third of 1990 U.S. yields. On the other hand, Romania's wheat yields of nearly 53 bushels per acre, and barley at 55 bushels, were almost 20 percent higher than U.S. yields in 1990. Sunflowerseed yields are about equal in the two countries.

The transformation from centrally planned to market economy in Romania is especially challenging because of the economic policies of former President Ceausescu during the last 20 years. Ceausescu's economic policy was an extreme example of the East European communist emphasis on industry over agriculture. Rural villages were literally destroyed in order to force people into urban industrial areas.

During the 1920's and 1930's, before communist rule, Romania's abundant production enabled it to export agricultural products to the rest of Europe. But by the 1970's and 1980's, Romania could scarcely feed its own people.

Wherever possible, Ceausescu and his predecessors consolidated land into large state and cooperative farms. By 1990, 73 percent of agricultural land had been collectivized into cooperative farms and 18 percent into state farms, leaving only 9 per-

cent under private ownership. At an average size of over 12,000 acres, state farms had priority access to machinery, chemicals and irrigation. Workers on cooperative farms, which averaged over 7,000 acres, owned their own land and certain basic equipment, but these farms had little more autonomy than the state farms.

Private farms, on the other hand, were usually less than 1 acre and located in relatively inaccessible mountainous regions where use of heavy machinery was impractical. Nevertheless, productivity on this land had higher yields per acre than cooperative and state-operated land.

In addition to the 9 percent of agricultural land under private ownership, about 8 percent of land on cooperative farms was reserved for individual farming needs, so that 15 percent of total agricultural land was effectively under private, rather than state, control.

Privately operated land yielded four times more fruit output per acre than state farms and had significantly higher yields in grain, milk, beef, pork and vegetable production. Data from 1987 show that 50 percent of sheep meat, 40 percent of beef, 28 percent of pork and 63 percent of fruit production came from private production sources.

Throughout 1990 and 1991, Romania experienced high inflation and profitability in farming has suffered. Food prices were decontrolled in February 1990. However, this first round of price revision applied to only a small portion of available supply. On April 1, 1991, the second and broader round of price deregulation on agricultural commodities was instituted. Within the month, food prices rose 58.6 percent, while prices of nonfood products and services rose 5.4 and 16.1 percent.

Laws were abolished in 1990 that had required producers to sell all agricultural commodities to the state and prices paid by the state for agricultural products were raised 40 percent on average. Since then, more agricultural commodities have been sold in a free market, at prices higher than those prescribed by the state - products such as fruit, vegetables, live animals and cheese. In addition, private supplies of wheat, corn and other storable commodities have increased dramatically with the abolition of obligatory sales.

Agricultural trade was an important source of hard currency earnings to Romania both before and during communist rule, but has been a major cause of hard currency by selling scarce agricultural products to the West at the expense of domestic food supplies. Through these measures, the government was able to pay off all its foreign debt.

When Ceausescu fell, the interim government halted the export of food in order to improve domestic availability. In addition, imports of agricultural commodities were allowed, in order to satisfy pent-up demand for basic commodities such as sugar, coffee and meat. In the last 2 years, Romania's agricultural trade deficit with the U.S. alone

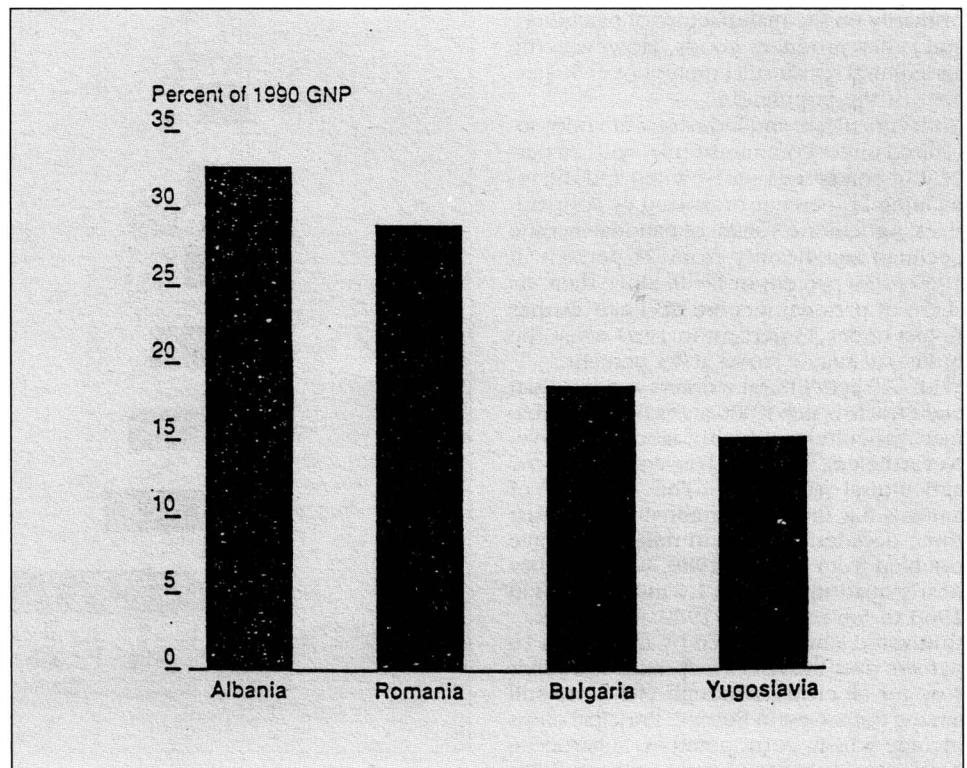


Figure 2 - Agriculture remains a large sector in the Balkan economies. Source: PlanEcon, July 1991.

has been over \$ 250 million. As this winter approaches, the government is concerned again about the adequacy of food supplies. The EC and the U.S. are currently considering food aid packages.

Romanians hope that in the near future, their new freedom combined with the country's natural resources will enable the country to regain prominence in agricultural production (figure 2).

Albania, leaving isolation behind

Situated on the Adriatic coast and bordering Yugoslavia and Greece, Albania was the most isolated country in Europe and the last to relinquish communist rule. It is now attempting to become a democracy with a market-oriented economy. But 20 years of isolation will make reintegration into the communist of European countries difficult. In fact, Albania's relatively high population growth of over 2 percent per year, and its large proportion of GNP in agriculture — 33 percent in 1990 — cast it as a less developed country rather than a developed, centrally planned economy. A relatively primitive industrial sector distinguishes Albania markedly from most of its CEE neighbors. Enver Hoxha, Albania's Stalinist leader for 40 years, became Party First Secretary in 1944, and in 1946 proclaimed the country the People's Republic of Albania. With the help of Yugoslav communists, Albania became a tight-fisted Marxist-Leninist system modeled after the Soviet Union. Forced in-

dustrialization, political repression and a one-party system followed. Throughout the next 44 years, Albania successively aligned itself with Yugoslavia, the Soviet Union and the People's Republic of China.

By 1968, relations were effectively severed with the Warsaw Pact countries and China and by 1970, Albania had retreated into self-imposed isolation. Not until after Hoxha's death in 1985 did relations with other countries begin to thaw. In the process, some political liberalization was permitted.

A railway established with Yugoslavia in 1986 (closed in 1988 following ethnic conflicts involving Albanians in Yugoslavia) brought broader contact with the «outside world». A movement toward political and economic freedom followed, culminating in March 1991 with the first free elections in over 40 years. The elected government is comprised of both communists and democrats. Albania has since reestablished ties with the U.S. and other countries, and in June 1991 was admitted to the Conference on Security and Cooperation in Europe.

Neither the country nor the economy of Albania is large. Its population of 3.2 million is comparable to Connecticut's, although with about 6 million acres, Albania's area is about twice the size of Connecticut. The government does not report national income, but Albanian GDP in 1990 was estimated at \$ 3.8 billion. That translates into about \$ 1,200 per capita, making it poorest country in Europe.

As in many centrally planned economies, growth in the industrial sector was emphasized over the last 40 years and focused

primarily on the manufacture of machinery and other producer goods. However, the agricultural sector still employs over 50 percent of the population.

Both agriculture and industry were fully socialized under communist rule, with 74 percent of enterprises state-owned and the remaining 26 percent organized as cooperatives. Agriculture's share of national income declined significantly from 74 percent in 1950 to 39 percent in 1960. Since then, its share of national income declined further to just under 33 percent in 1989 when the industrial sector stood at 45 percent.

With 520 agricultural workers and less than eight tractors per 1,000 acres of land, Albanian agriculture is highly labor intensive. Nevertheless, Albania has enjoyed some agricultural successes. The number of animals has increased gradually in the last three decades. Cattle and milk cows have doubled from 1960 to 1989, while poultry nearly quadrupled from 1.6 million birds in 1960 to 5.6 million in 1989.

Cultivated land increased by more than 16 percent over the last two decades and yields rose for all crops, although yields are still among the lowest in Europe. Principal crops include wheat, corn, potatoes, sugarbeets, cotton and tobacco. Average wheat yields in 1990 were 36.8 bushels per acre — comparable to U.S. yields but much lower than other European wheat yields which average from 50 to 75 bushels. Corn yields were under 60 bushels per acre in 1990 — half the U.S. average.

Although Albania's balance of payments deficit is small relative to other CEE's — about \$ 92 million in 1989 — the deficit has led to serious economic hardship. In 1989, imports consisted mainly of machinery and equipment (28 percent), minerals and metals (26 percent), nonfood raw agricultural materials (18 percent) and chemicals (12 percent).

In normal weather, Albania is self-sufficient in food production. In recent years, however, drought in southern Europe has forced Albania to import food for its own population. With a shortage of hard currency, Albania is currently unable to import enough food to maintain previous consumption levels. The current food shortage, due both to weather and structural adjustments with reform, is leading Albania to seek help from the international community, and the EC has provided grain shipments.

Albania specializes in the export of energy, minerals and metals. Of chief importance in the export of chromium, copper and nickel, as well as the sale of hydroelectric power to Yugoslavia and Greece. Other important exports are food and other agricultural products, but there has been little excess for export in the last 5 years.

Socialization of property was extensive in Albania immediately after World War II. To date, some privatization and foreign joint ventures are still being discussed, while a land repatriation bill was passed in early

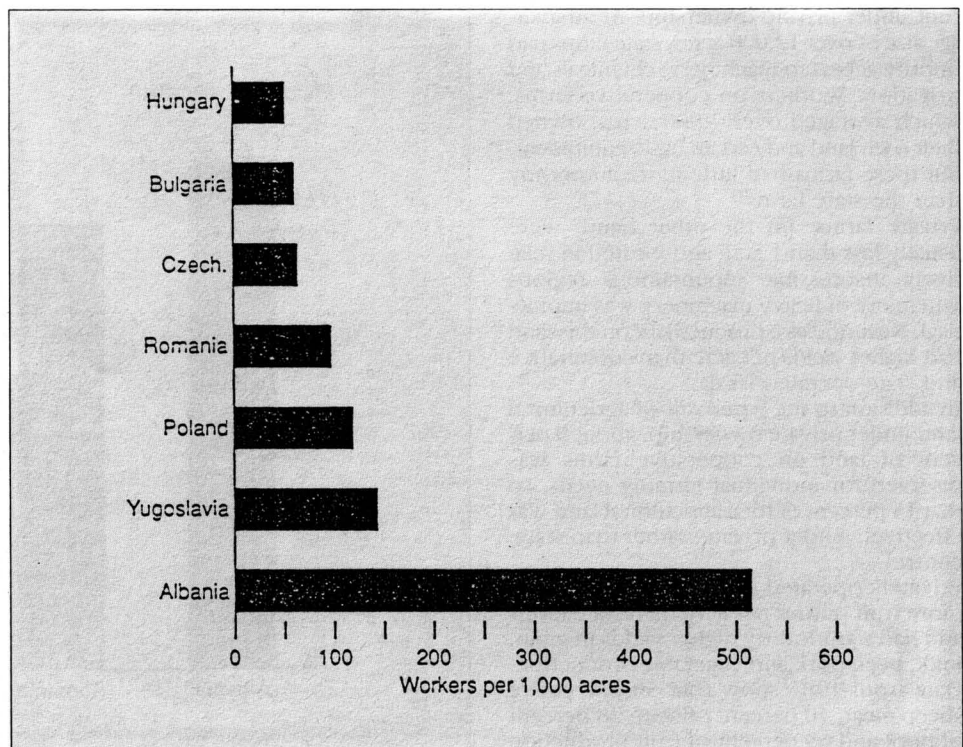


Figure 3 - Albania has more farm workers per acre than other CEE's.

1991. One major area to be addressed involves safety and environmental conditions in both the industrial and agricultural sectors of the economy. As these problems are tackled, joint ventures and economic aid may be offered to Albania (figure 3).

1992 outlook uncertain in the Balkans

Economic and political turmoil in the Balkan economies adds considerable uncertainty to the agricultural outlook for 1992 in these countries. For Bulgarian agriculture, stability in supply and demand is likely to return gradually, following the imbalances of 1991. Assuming normal weather and stable policy, production is expected to fall more into line with the recent declines in demand. This should help stabilize most commodity prices and shrink exportable surpluses.

But the outlook for Romanian agriculture in 1992 looks no brighter than 1991's performance. Decreasing consumer demand from higher prices and declining incomes is partially masking more severe food shortages. But unless significant gains are made from policies designed to restore economic stability, especially in controlling inflation, imbalances in agricultural output and input marketing will continue to result in shrinking supplies of food delivered to retail channels.

Although Romania appears to have sufficient food stocks on hand, it is appealing for food aid. This appeal is partly due to producer reluctance to sell to state procure-

ment agencies, and subsequent stockpiling by producers. Producers' reluctance to sell their output stems from dissatisfaction with current prices and uncertainty about future inflation.

Other problems affecting food availability in Romania include a breakdown in input markets and farmer uncertainty over ownership and control of the land. Because Romanian land privatization has proceeded quickly and haphazardly, crop production has been disrupted. Severe restrictions on farmers' crop choice, and on the sale of land, are still enforced in Romania.

Yugoslavia's outlook for 1992 is clouded by the civil unrest that continues to plague the country. Farmers in key producing regions are uncertain that their output can be delivered to domestic or foreign markets. Inter-republic border trade faces rising nontariff trade barriers.

Meanwhile, the future for Albania agriculture in 1992 is contingent on effective economy-wide market reforms and clarification of the land ownership rights. Although Albania's land reform has been successful in distributing cooperative (though non state) lands to peasant farmers, the lack of available inputs and the rapid pace of change have left many farmers confused. Many of them view themselves as unemployed, rather than as new landowners. State farms and food aid from the U.S. and EC will be relied upon to meet domestic food demand and forestall further social discord. ●

Tratto da: *Agricultural Outlook*, ERS-USDA, november 1991.