



Until the mid-1970s, agriculture had been Syria's primary economic activity. At independence in 1946, agriculture (including minor forestry and fishing) was the most important sector of the economy, and in the 1940s and early 1950s, agriculture was the fastest growing sector. Wealthy merchants from such urban centers as Aleppo invested in land development and irrigation. Rapid expansion of the cultivated area and increased output stimulated the rest of the economy. However, by the late 1950s, little land that could easily be brought under cultivation remained. During the 1960s, agricultural output stagnated because of political instability and land reform. Between 1953 and 1976, agriculture's contribution to GDP increased (in constant prices) by only 3.2 percent, approximately the rate of population growth. From 1976 to 1984 growth declined to 2 percent a year. Thus, agriculture's importance in the economy declined as other sectors grew more rapidly.

In 1981 (the year of the latest census), as in the 1970s, 53 percent of the population was still classified as rural, although movement to the cities continued to accelerate. However, in contrast to the 1970s, when 50 percent of the labor force was employed in agriculture, by 1983 agriculture employed only 30 percent of the labor force. Furthermore, by the mid-1980s, unprocessed farm products accounted for only 4 percent of exports, equivalent to 7 percent of nonpetroleum exports. Industry, commerce, and transportation still depended on farm produce and related agro-business, but agriculture's preeminent position had clearly eroded. By 1985 agriculture (including a little forestry and fishing) contributed only 16.5 percent to GDP, down from 22.1 percent in 1976.

By the mid-1980s, the Syrian government had taken measures to revitalize agriculture. The 1985 investment budget saw a sharp rise in allocations for agriculture, including land reclamation and irrigation. The government's renewed commitment to agricultural development in the 1980s, by expanding cultivation and extending irrigation, promised brighter prospects for Syrian agriculture in the 1990s.

Cropping and Production

Because only about 16 percent of the cropped area was irrigated, the output of agriculture (both plant and animal) was heavily dependent on rainfall. The great variation in the amounts and timing of rainfall can immediately cause very substantial shifts in areas planted, yields, and production, but the effect on livestock is less predictable. When drought is unusually severe or prolonged, loss of animals may depress livestock production for several years. In 1984 crop production accounted for 72 percent of the value of agricultural output; livestock and animal products, 28 percent. Livestock alone, not counting products such as milk, wool, and eggs, were 11 percent of the total.

In 1984 crop production amounted to LS13.6 billion. The United States Department of Agriculture (USDA) valued Syrian 1985 production at US \$1.1 billion. Grains contributed 15 percent to the value of total crop production in 1984, in contrast to 41 percent in 1974. Industrial crops remained 20 percent of the total. Fruits rose from 15 to 25 percent of the total,

and vegetables rose from 16 to 35 percent. In 1984, grain continued to be planted on 66 percent of the cultivated land, consistent with the mid-1970s percentage.

Fluctuations in rainfall resulted in major variations in crop production throughout the 1980s. In 1980, wheat was planted on 1.4 million hectares, yielding 2.2 million tons--the largest wheat harvest since the early 1960s. In 1984, wheat planted on 1.1 million hectares produced only 1.1 million tons (see table 9, Production of Agricultural Products, Appendix). In 1980 and 1984, barley was planted on 1.2 million hectares, but production fell from 1.6 million tons in 1980, the peak year, to 303,500 tons in 1984, revealing the impact of the drought on rain-dependent crops. In 1985 wheat and barley crops rebounded to 1.7 million tons and 740,000 tons, respectively. In 1984, Syria grew a record 60,000 tons of corn.

Earlier stagnation of agricultural output meant primarily stagnation of grain production. Instead of exporting wheat, in the 1980s Syria became a net importer. In 1985 Syria imported 1.4 million tons of wheat, worth more than LS800 million. In addition, cereal imports rose from LS368 million in 1982 to LS1.6 billion in 1984, amounting to 56 percent of the LS2.85 billion bill for food imports that year.

During the 1970s and 1980s, the government encouraged greater grain production by providing improved high-yield seeds, raising prices paid to farmers, and urging shifts toward wheat growing on some irrigated land formerly planted in cotton. Its intent was to raise grain output at least to self-sufficiency to ease the pressure on the balance of payments. Beginning in the late 1970s, the government showed increased interest in improving rain-fed agriculture and acquired funding from the World Bank, International Fund for Agricultural Development, and the UN Development Program for a US\$76.3 million project to expand food production and raise the standard of living in Dar'a and As Suwayda provinces. In addition, Syrian agriculture benefited from research projects undertaken by the International Center for Agricultural Research in the Dry Areas' (ICARDA) branch office located near Aleppo. ICARDA helped develop the Sham-1 durum wheat and Sham-2 bread wheat used by Syrian farmers in the mid-1980s and demonstrated through its research the positive effect of phosphate fertilizers on barley crops in dry areas, encouraging the government to consider a change in agricultural strategy.

In the 1980s, vegetables and fruits exhibited the fastest growth rates of the various crops, although they started from a low base. Urbanization and rising incomes spurred cultivation of these products, which were also generally exempt from official price control. Fruits and vegetables were grown primarily in the northwest and coastal plain in irrigated fields and where rainfall and groundwater were greatest. However, Syria lagged considerably behind Lebanon in cultivation of fruits and vegetables in similar terrain, and seasonal fruits were consistently smuggled in from Lebanon in the 1980s.

Syria has produced cotton since ancient times, and its cultivation increased in importance in the 1950s and 1960s. Until superseded by petroleum in 1974, cotton was Syria's most important industrial and cash crop, and the country's most important foreign exchange earner, accounting for about one-third of Syria's export earnings. In 1976 the country was the tenth largest cotton producer in the world and the fourth largest exporter. Almost all the cotton was grown on irrigated land, largely in the area northeast of Aleppo. Syrian cotton was medium staple, similar to cotton produced in other developing countries but of lower quality than the extra-long staple variety produced in Egypt. The cotton was handpicked, although mechanical pickers were tried in the 1970s in an attempt to hold down rising labor costs.

Cotton production (cotton lint) rose from 13,000 tons in 1949 to 180,000 tons in 1965. However, land reform and nationalization of the cotton gins precipitated a sharp decline in output in the next few years. Beginning in 1968 and during the 1970s annual lint production hovered around 150,000 tons. However, in 1983 and 1984, Syria enjoyed a record cotton crop of 523,418 tons, and the third highest yield in the world, estimated at 3 tons per hectare. To a large measure, this increase was attributable to the government's raising cotton procurement prices by 44 percent in 1981-82, and by another 20 percent in 1982-83.

Although the area under cotton cultivation has declined since the early 1960s, yields have increased as a result of improved varieties of seed and increasing amounts of fertilizer. The area planted dropped from over 250,000 hectares in the early 1960s to 140,000 hectares in 1980. In response to the jump in procurement prices by 1984, it increased to 178,000 hectares. As domestic consumption of cotton increased in the 1960s and 1970s, the government built several textile mills to gain the value added from exports of fabrics and clothes compared with exports of raw cotton. In the 1980s, cotton exports averaged 120,000 tons, ranging from a low of 72,800 tons to a record of 151,000 tons in 1983. Syria's seed cotton harvest was 462,000 tons in 1985, about 3 percent higher than in 1984. Approximately 110,000 tons of the 1985 harvest were destined for export markets. Major foreign customers in 1985 included the Soviet Union (18,000 tons), Algeria (14,672 tons), Italy (13,813 tons), and Spain (10,655 tons).

The government's goal of expanding and diversifying food production created intense competition for irrigated land and encouraged the practice of double cropping. Because cotton did not lend itself to double cropping, the cultivated cotton area was declining in real terms. However, the area under cultivation and significance of other industrial crops substantially increased during the 1980s. For example, the government initiated policies designed to stimulate sugar beet cultivation to supply the sugar factories built in the 1970s and 1980s. The area under cultivation for sugar beets rose from 22,000 hectares in 1980 to 35,700 hectares in 1984, with sugar beet harvests totalling over 1 million tons in 1984. Syria, however, still imported LS287 million worth of sugar in 1984. USDA estimated that Syria would achieve tobacco self-sufficiency in 1985, with harvests of 12.3 million tons (dry weight) compared with 12.2 million tons in 1984. Although yields per hectare fell slightly in 1985, USDA expected imports to match exports. In 1984 Syria imported 559 tons of tobacco and exported 225 tons. Other important commercial crops included olives and tomatoes.

Agricultural Potential

In the mid-1980s, the government redirected its energies toward revitalizing the agricultural sector. Despite substantial increases in the 1985 investment budget allocations for agriculture, there was no quick solution to the problem of sustaining agricultural growth. Although since the 1950s farmers had steadily expanded use of fertilizers and new seeds and had adopted new techniques, which improved productivity in cotton, fruit, and vegetable cultivation, agricultural development had stagnated. Socialist transformation of the economy and the expanded role of the state in all aspects of economic life combined with the political instability of the 1960s to disrupt agriculture. Although the state drew up plans to use Syria's water resources more efficiently by expanding irrigation systems in the 1970s and 1980s, the government failed to devise an agricultural policy with appropriate incentives and pricing mechanisms to stimulate output. Although low rainfall in the early 1980s and the prolonged

drought of 1984 had an impact on agricultural output, economists linked agriculture's poor performance in the 1970s and early 1980s to government policy. The government's renewed interest in agricultural development in the mid-1980s signaled a guarded optimism for the future; economists questioned, however, whether Syria could raise future animal and crop production above its astoundingly high 3.8 percent annual population growth.