

# The modernization of the Mexican agricultural sector

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**T**oday, Mexican agriculture is in transition. The sector, stagnant over the past two and a half decades, has become the subject of government initiatives aimed at its modernization within a larger national context of economic reform. This paper reviews the challenges of the agricultural sector in the context of a redefined role of the state in the economy.

## Challenges of the agricultural sector

The agricultural sector, along with education and health, is one of the principal focal points of the Salinas administration.

Since the mid-sixties, sources of growth for the agricultural sector have diminished. From 1948 to 1965 growth of agricultural production was well above the rate of population growth, increasing by 6.7 percent annually; and from 1966 to 1979 as well. Although the rate diminished to 2.9 percent, it remained above population growth. Nevertheless, from 1980 to 1987 population increased more rapidly than agricultural production. During 1988 and 1989 production decreased at a rate of 3.9 and 4.3 percent, respectively. The sector has recovered in the last two years, as production grew 3.4 percent in 1990 and 4.2 percent in 1991.

The agricultural trade balance also deteriorated over the same period. Agriculture, livestock, forestry and processed foods and beverages, were an important source of foreign exchange. The agricultural trade balance registered a surplus of 2.3 percent of gross domestic product during 1960-65, a surplus of 0.7 percent during 1975-79 and a deficit of 0.3 percent during 1980-89.

Another symptom of the agricultural crisis is productivity. The area devoted to the production of corn, beans, sorghum and rice accounts for more than two thirds of the total area harvested. Although productivity levels for

these products doubled from 1960 to 1980, they have remained unchanged in the past decade.

Ecology is another area of concern. More than 75 percent of arable land has suffered some degree of deterioration. Mexico is among the 11 countries richest in forest resources. Yet, it is estimated that, since 1960, 34 percent of our forests have been lost through deforestation. Particularly worrisome has been the loss of rain forests, as their biodiversity can only be reproduced by nature, and that takes hundreds of years.

Finally, extreme poverty is the greatest challenge in rural areas. Various studies reveal that approximately 20 percent of Mexico's population lives under conditions of extreme poverty, with 70 percent of it living from agriculture. Moreover, while more than one fourth of Mexicans live in rural areas, the agricultural sector contributes only approximately 8 percent of total gross domestic product. This implies that average rural income is only one fourth the income earned in urban areas.

## Causes of the agricultural sector's stagnation

- 1. Macroeconomic instability.** During the eighties, high inflation, volatile real interest rates, and an unstable exchange rate made financing costly and sometimes unavailable. Projects could not materialize as the variability of economic conditions contributed to a substantial reduction of resources allocated to the sector. Furthermore, the high price volatility caused an inefficient use of resources as prices ceased to serve as market signals.
- 2. State intervention.** The state intervened directly in production, pricing, distribution, credit, insurance, inputs (water resources, fertilizers and seeds), transportation and storage. In most cases, since policies

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were not in accordance with domestic and international markets and prices did not reflect real costs, intervention created distortions and a misallocation of resources.

**3. International trade distortions for agricultural products.** Countries such as the United States, the E.E.C., Canada and Japan heavily subsidize domestic agricultural production and in some cases, exports as well. International prices for some products do not even cover costs of production, creating distortions in international trade. Mexican agriculture has been affected by this situation as lower import prices depress domestic production.

**4. Legal framework.** The Constitution instructs the executive branch to distribute land to any newly formed settlement (or group of peasants) without land. To comply with this, the executive could expropriate land from private owners, and through endowments constitute new *ejidos*. Land distribution in itself became one of the most important sources of land tenure insecurity that inhibited investment and the development of the agricultural sector. Regulations created many restrictions that hindered factor mobility, limited producers' decision-making, and did not guarantee the necessary certainty for producers to invest in long term development projects and for financial institutions to provide credit. The results were low levels of investment, low levels of productivity, and technological backwardness, all of which translated into low standards of living.

### The path of agricultural recovery

Opening the economy has required structural adjustments in many areas. Development of markets and correction of flaws are some of the fundamental conditions, since all factors of production -land, labor and capital- must have the mobility necessary to ensure an efficient allocation of resources. Enhancing the development of markets has been necessary to eliminate impediments to full development and to reduce the high costs of transaction associated with developing economies.

The North American Free Trade Agreement will be an important opportunity for Mexico, the United States, and Canada to benefit from the complementary aspects of their respective economies. With clearer and more transparent rules, investment horizons will expand, and each country will specialize in the production of those goods in which they have comparative advantages.

Consumers and producers in all three countries will be greatly benefitted: consumers will benefit from lower prices and higher quality products; producers, from economies of

scale and access to the largest common market in the world, the North American Free Market.

The government has replaced protectionist policies with market-oriented policies, taking a long term development perspective into consideration. The present administration has diminished government intervention in various sectors, encouraging the participation of the private sector and removing obstacles and market distortions that prevent Mexican agriculture from developing to its full potential.

State-owned enterprises such as: *Inmecafé*, *Azúcar S.A.* and *Tabamex* (in the coffee, sugar and tobacco markets, respectively) have withdrawn from production and distribution of agricultural products, and have been privatized or are exclusively involved in research, technical assistance and information services. Others like *Fertimex* and *Pronase*, which monopolized the fertilizer and seed markets, are now subject to private competition and an open border.

Additionally, the state-owned purchaser and seller of agricultural products, *Conasupo*, has withdrawn from trade in grains and oil seeds, except for corn and beans which are basic staples. Its previous distribution and pricing policies were costly and misdirected subsidies; they also inhibited efficient participation of the private sector. The government is loosening the reins in commodity price controls. Currently, corn and beans are subject to price guarantees established prior to the harvesting season.

In order to promote efficient marketing and create markets to replace state intervention, an organism called *Aserca* was created. Its role is to provide marketing support by providing information on national and international prices, aiding producers in finding distribution channels, and facilitating credit, transportation and related services. Additionally, and to consolidate these efforts, a commodities market for agricultural products is expected to open in Mexico next year.

### Land tenure reforms

A crucial component of agricultural modernization was the reform of Article 27 of the Mexican Constitution. Perhaps no other single issue could have been more controversial and difficult to resolve than this. The fact that such a sensitive matter came about peacefully and democratically demonstrates Mexico's strength and political stability, as well as its ability to adapt its institutions and regulations to the rapidly changing needs of its people.

Article 27 revamps Mexico's land tenure system and recognizes three forms of land tenure: private property (known as *pequeños propietarios* or smallholders, with limits to property holdings), *ejidos* and communities. The *ejido* is not private property, since ownership is communal

and individual rights are restricted to the direct exploitation of specific plots of land.

In 1988, *ejido* land amounted to 95 million hectares, equivalent to 49 percent of Mexico's total land area. Moreover, *ejidatarios* and communal farmers constitutive more than 60 percent of all rural producers. *Ejidos* are principally devoted to agricultural production (84 percent) and of these, the majority engaged in corn production destined principally for subsistence. Agricultural production on private farms is more diversified and livestock is more in evidence.

Legally, under previous legislation, the *ejidatario* could not sell, rent, or mortgage his plot of land and inheritance was regulated by certain legal stipulations that could prevail over his explicit will. In addition, the land could not be retained by judicial decree or any other authority, effectively prohibiting its use as loan collateral. The ownership of *ejido* land could not be individual; instead the lands could only be held by the *ejidatarios* as a group.

Land was utilized for production in one of two fashions: 1. the *ejidatarios* and their families could each work individually on their plots within the *ejido* or 2. the *ejidatarios* could work the entire area collectively. Labor on the *ejido* had to be performed by the *ejidatario* and his family since the hiring of outside labor was prohibited by previous legislation. The result: limited opportunities and subsequent fall in the standard of living of the Mexican rural population.

The restrictions on *ejido* land tenure and the lack of land mobility created one of Mexican agriculture's most serious problems, known as *minifundismo* (very small land holdings). According to recent sources, more than 60 percent of *ejidos* cover an area of less than five hectares. Smallholdings are generally associated with inefficient production, low productivity and low incomes for the peasants and their families.

Poorly defined property rights, restrictions on the establishment of contracts for a period of more than one year on *ejido* lands, and the ability of *ejidatarios* to unilaterally revoke them, created great uncertainty as to the future use of the natural resources, inhibiting long term development projects. Participants sought to obtain maximum benefit in the short run, with no provision for future conservation of resources.

The amendment to Article 27 of the Mexican Constitution, formally ends land distribution, in recognition of the fact that there is simply no more land in Mexico to distribute. Under today's conditions, continued land distribution would no longer imply justice and equality in the rural sector.

Since the Revolution, more than 104 million hectares have been redistributed, equivalent to 53 percent of Mexican territory. Currently, the rural sector is composed of 28

thousand *ejidos* and approximately 2.8 million *ejidatarios*. However, the great number of still unresolved demands for land by approximately 2.5 million citizens, who theoretically have a right to land, would require 250 million hectares for their successful resolution, an area which is greater than Mexico's total land area.

Clearly, previous legislation was out of phase with the realities of the rural sector, and the lack of action to resolve this issue only promoted uncertainty, since the pressure to either distribute land and break up land holdings into even smaller plots was great. The reform will encourage development by insuring investment in land and transfer and development of technology.

Changes also grant *ejidatarios* the freedom to organize and produce as they see fit; this includes the freedom to buy or rent land, to hire labor or to associate with other producers and third parties, and to sign contracts or establish joint venture schemes with domestic or foreign private investors.

Additionally the changes also grant the necessary legal safeguards for private investors to participate in long term development projects. Principally, both domestic and foreign corporations will now be able to buy and operate land for agriculture, livestock and forestry, within the limits established by the Constitution.

By permitting *ejidatarios* to enter into associations, their income and the welfare of their families will significantly improve as economies of scale will be attained. For example, if two *ejidatarios* who produce corn, with 3 hectares each, join their plots, each one would increase his production by 25 percent and his income by 30 percent. In the case of beans, if an *ejidatario* joins with a smallholder, both with 5 hectares, the incomes of each would increase by 35 percent.

Associations greatly benefit *ejidatarios*, smallholders and private investors. One example of potential joint ventures is the pilot project that *Gamesa* (one of Mexico's largest industrial bakers) formed in 1989 to produce wheat and beans on 3.5 thousand hectares.

With an initial investment of 12 million dollars, the project has used available water optimally, as two good crops a year are now harvested where barely one was possible in the past. Producers participating in the project (mostly *ejidatarios*) have been able to increase their income sixfold over what they previously received.

With better access to international markets, well-defined property rights and free and developed markets in which to operate, Mexican agriculture enters a new era with a solid foundation for a period of long term sustained growth 