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uring 2000, the Mexican economy continued to grow under conditions of macroeconomic stability. The Gross Domestic Product increased 7.2 percent (2.5 percentage points above the original target), while GDP growth for 1999 was 3.7 percent. This allowed for a significant rise in employment and household income. The rate of growth in GDP for 2001 is estimated in a range between 3.5 to 4 percent, reflecting expectations of reduced economic growth in the US.

Since the macroeconomic crisis that hit the country in 1995, Mexico has experienced economic recovery, while inflation and interest rates have followed a downward trend. The annual rate of inflation dropped from 52 percent in 1995 to 9 percent in 2000 and the official estimate for 2001 is 6.5 percent. Simultaneously, interest rates (Treasury Bonds 28 days) followed a similar path, decreasing from 48.6 percent to 17 percent over the same period. Nevertheless, real interest rates are still at a relatively high level (6.8 percent in 2000), posing a burden to small- and medium-sized firms and agricultural production units.

Mexico kept a floating exchange rate regime. Due to the large private capital inflows that financed the current account deficit, the average exchange rate for 2000 was 9.5 pesos per dollar (a level similar the one in 1999 and 4.7 percent lower than in 1998), while the country's foreign exchange reserves reached a historically high level (33.5 billion dollars). The fundamentals of the Mexican economy are strong and the degree of confidence regarding economic performance for the future is high.

In the first months of 2000, the export price for Mexican crude oil mix registered a significant recovery, even beyond initial expectations (for 2000, the expected average price for the Mexican export oil mix was around US\$18 per barrel but during the year averaged US\$25 per barrel). Oil revenues increased considerably. A Stabilization Fund was created to prevent volatility in public finance resulting from fluctuations in world oil markets. The public budget for 2001 is based on conservative assumptions regarding oil prices. It estimates a deficit of 0.5 percent of GDP for the current year, while in 2000 it amounted to 0.9 percent of GDP.

Exports of goods and services play a key role in the Mexican economy. During 2000, total exports grew at 23 percent compared to the previous year. It should be recalled that total exports were US\$60.8 billion in 1994 and US\$137.1 billion in 2000. The expansion of exports is a result of the structural adjustments carried out in Mexico during the nineties. In particular, preferential trade arrangements with our main trading partners fueled a process of investment and modernization of firms that fueled export-oriented growth.

Food Prices and Consumption

Opening the Mexican economy to international competition, mainly in the context of NAFTA, has influenced most consumer prices, including food. It must be stressed that no single food price in Mexico is under control of the government. The last remaining price control, for tortillas, was eliminated in December 1998.

The consumer price index for food grew 6.2 percent in 2000, 2.8 percentage points below the general rate of inflation. Nevertheless, some agricultural products suffered from frosts that reducing their supply. For example in the period between December 1999 and December 2000, the price of tomatoes increased 61.5 percent; peppers, 88.6 percent; avocados, 17.5 percent; and guavas, 19.2 percent. On the other hand, the main agricultural products that showed price decreases in the same period prices were: rice (2.8 percent); dry edible beans (7.8 percent); oranges (15.4 percent); apples (9.1 percent); and lemons (9.6 percent).

Consumption of agricultural products was estimated by using production plus imports minus exports. Consumption of agricultural products has increased because of population growth (1.9 percent annually) and economic growth. Some changes in consumption patterns are worth pointing out. Per-capita consumption of beans fell 40.7 percent between 1990 and 1999, while rice and wheat increased 28.6 percent and 6.7 percent, respectively, over the same period. Dry edible beans are time- and energy-intensive to cook and therefore some households are switching away from this product. In the livestock sector, the largest increase in per-capita consumption is shown in poultry (an increase of 105 percent over the same period), followed by eggs (36.8 percent), bovine meat (20.2 percent) and pork meat (16.5 percent). Poultry is considered the cheapest source of animal protein and the expectation is that per-capita consumption will increase even further. Eggs and poultry will be completely liberalized under the terms of NAFTA in 2003.

The new administration of President Fox, who was sworn in December 2000, reshaped the Ministry of Agriculture (officially the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food) to face the new challenges that are foreseeable for the future. Now the Ministry will oversee not only agriculture and livestock, but fisheries and agrifood issues as well. The aim is to put in place a consistent set of policies that foster competitiveness along the value-added chains, including production, marketing, processing, and distribution. Strong evidence shows that in cases where producers' organizations are weak or non–existent, middlemen are able to make profits that otherwise might have been earned by the producer. Moreover, marketing costs are considered to be high in Mexico compared to international standards.

Currently, the Mexican tax system exempts food from the Value Added Tax (VAT). The general VAT is 15 percent. The new government is committed to a broad tax reform aimed at increasing public revenue in order to channel more resources to social programs targeted at poor families across the country. Among other measures, eliminating the VAT exemption for food is under discussion in Congress. Some impact on food consumer prices might be expected. For high-

income families price elasticities for food are low. In the mid-income strata some substitution in consumption toward lower-priced food might take place.

Finally, direct compensatory payments for poor families are considered in the tax reform package, since food expenditure amounts to 56 percent of total expenditure in the lowest decile of the population. Therefore, large changes in the pattern of consumption are not anticipated. The tax reform package should be voted in Congress sometime in 2001.

Agricultural Production and Trade

In 2000, aggregate production for the ten most important commodities (rice, dry edible beans, maize, wheat, sesame seed, safflower, soybeans, cotton seed, barley, and sorghum) in Mexico remained practically at the same level as that observed during 1999, growing slightly from 29 to 29.4 million tons. The products that registered the highest annual growth rate were barley (62.9 percent), sesame seed (30.1 percent), and wheat (12.5 percent). On the other hand, some commodities like cotton and dry edible beans showed a negative growth rate, as a consequence of adverse agroclimatic conditions.

The performance of the livestock sector during 2000 was positive. Meat production grew from 4,194,000 tons in 1999 to 4,323,000 tons in 2000 (3.1 percent). Egg production increased from 1,635,000 during 1999 to 1,801,000 tons in 2000 (10.2 percent). Honey showed a 7.3 percent increase. Likewise, milk production increased 4.8 percent from 1999 to 2000.

The Mexican agrifood sector has successfully integrated into world markets. During the period 1993—99, agrifood exports showed an annual rate of growth of 11.6 percent, a figure that is 5.5 percentage points higher than the rate of growth of agrifood imports (a 6.1 annual rate of growth).

Real appreciation of the exchange rate, higher domestic demand, and low international prices of some key export products, such as coffee, are some of the factors that negatively influenced trade figures during 2000. Total agrifood exports increased from US\$6.99 billion in 1999 to US\$7.69 billion in 2000 (a 10.1 percent increase).

Total agrifood imports amounted to US\$8.56 billion in 1999 and US\$9.73 billion in 2000 (a 13.7 percent increase). Agrifood deficit increased from US\$1.57 billion in 1999 to US\$2.04 billion in 2000.

Mexico's agricultural export products that showed a significant increase between 1999 and 2000 were: peppers (40.9 percent growth), onions (17.5 percent), chickpeas (22.2 percent), avocados (25.7 percent), bananas (36.3 percent), strawberries (20.3 percent), melon (16.5 percent), bovine live cattle (41.4 percent), pork meat (28.8 percent), honey (37.3 percent), and beverages (22.2 percent). Import products that showed considerable growth between 1999 and 2000 were: bovine meat (a 30.2 percent annual growth rate), poultry meat (29.4 percent), raw cotton (41.5 percent), milk powder (26.8 percent), and apples (36.2 percent), among others.

During 2000, the Free Trade Agreements (FTAs) between Mexico

and the European Union and between Mexico and Israel entered into force. Also, the negotiations to reach an FTA between Mexico and the European Free Trade Association (EFTA) and between Mexico and Guatemala, Honduras, and El Salvador concluded successfully. The FTA between Mexico and the Central American countries entered into force on January 1st of 2001. The agreement with EFTA, which comprises Iceland, Norway, Switzerland, and Liechtenstein, will presumably enter into force in the second half of 2001.

Food Processing and Marketing

For 2000, the processed food and beverages sector had a 25 percent share of the manufacturing GDP and a 6 percent share of the national GDP. The agrifood subsectors with the most dynamic performance were beverages, sugar, meats, fruits, and vegetables. Other subsectors showing good performance were tobacco, animal feed, and processed maize.

In the agrifood sector, foreign investment reached a cumulative level of \$7.8 billion during the period between 1994 and 2000. Foreign investment fosters productivity and competitiveness through technology transfer.

Food and Agricultural Policy

Currently, the most important support programs are: PROCAMPO, Marketing Support Program, and Alliance for Agriculture *(Alianza para el Campo).* These programs were phased in during the nineties to allow producers in sensitive sectors to adjust to the conditions of an open economy.

The PROCAMPO program supports farmers' income through direct payments per hectare decoupled from prices, production, or production requirements. Producers who are entitled to the program payments are those who grew grains and oilseeds in the base period (average of previous three years to 1993 agricultural year). In 2000, PROCAMPO payments for the autumn/winter 1999-2000 crop season amounted approximately to US\$75 per hectare; they were US\$82 per hectare for the spring/summer 2000 crop season. Nevertheless, PROCAMPO payments have fallen in real terms in the period between 1994 and 2001, by 27 percent for the autumn/winter crop season and 31 percent for the spring/summer crop season.

For 2001, the new government designed more flexible rules to benefit small farmers. Farmers who own less than one hectare will receive the same payment those who own one hectare. Moreover, legislation has been passed by Congress to front-load the PROCAMPO payments of future years, in order to facilitate rural capitalization and, by doing so, foster technological progress and crop substitution toward alternative crops.

The Marketing Support Program was completely reshaped by the new government. Previously, a target price was established for certain commodities in regions that are distant from the main consumption centers. The supports were granted per ton, to those buyers who com-

mitted themselves to paying the target price to the producers.

For 2001, this program has been reformed to improve equality and efficiency. The basic principles are: equal treatment to all regions; involvement of local authorities in the decision-making process; a wider range of eligible crops, and direct delivery of support payments to the producer. Target prices per region and crop were eliminated. All transactions will be carried out under market conditions.

The Alliance for Agriculture supports specific measures aimed at improving farmers' skills and stimulating technological development to increase the productivity and competitiveness of the farm sector. Key features of the Alliance are the decentralization of decision-making from the federal to the state level through state councils of agricultural producers, and greater emphasis on consumer interest. The program contains several subprograms at national, regional, and local levels. The main Alliance for Agriculture subprograms are: Rural Development, Ferti-irrigation, Livestock Improvement, Improved Seeds, Rural Equipment, Coffee Program, Sustainable Development in Rural Zones, and Rural Micro-Financing and Technical Assistance, among others.

Water Resource Issues

Mexico faces serious problems concerning water availability, waste, and pollution:

- Water resources in Mexico are unevenly distributed in both space and time. Two-thirds of the national territory is arid or semi-arid. The availability of water in the south and southeast is eight times greater than it is in the rest of the country. Seventy percent of the annual rainfall is concentrated in only four months of the year.
- Areas with higher rainfall are to a large extent not suitable for agriculture, due to wetlands or mountainous areas.
- 77 percent of the total population is located in areas receiving only 28 percent of the total rainfall.
- The use of water for agricultural activities accounts for 83 percent of total water consumption; 5 percent is consumed by industry, and 12 percent by the general population.
- Mexico has approximately 6 million hectares of irrigated agricultural land. Only 1.2 million hectares is cultivated with efficient technology.

- 86 percent of the water that is wasted is from agricultural activities.
- Underground water supplies two-thirds of human consumption and one-third of agricultural consumption. It is worrisome that 50 percent of the underground water consumed comes from aquifers that are overexploited.
- The challenges for Mexico regarding water management are great: 12 million inhabitants still lack potable water services.
- Only 18 percent of total residual water is collected, of which 24 percent is treated.
- Leakages in the water distribution system are estimated between 30 and 50 percent.
- Increases in the total population have caused the annual water availability per capita to diminish from 11,500 m3 to 4,900 m3 over the last 40 years.
- Assuming that currents trends continue, in 25 years water availability per capita will be around 3,500 m3.

Legal and institutional issues regarding water management in Mexico include:

- In Mexico water resources are in the public domain.
- The National Water Commission is the executive agency empowered to manage and oversee water resources. It is directed by the Ministry for the Environment and Natural Resources.
- Concessions are granted to users, generally for a period of ten years.
- Legislation allows the transmission of water use rights; they can be transferred independently of land property rights.
- Entities that operate potable water systems and provide service to the general population are controlled by local and municipal authorities.
- There are 159,000 federal state and municipal users, 129,000 agricultural users, and 13,000 industrial users.
- Irrigated areas in agriculture are generally grouped in *Distritos de Desarrollo Rural* (DDRs), which are geographic areas surrounding hydraulic infrastructure. Almost all DDRs are operated by the beneficiaries.

References

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	Units	1997	1998	1999	2000	2001 <i>E</i>	2002F
INCOME AND FOOD PRICES							
Per capita income	US\$/capita	4,214	4,355	4,928	5,062	na	na
% of disposable income spent on food	%	na	25.5	na	na	na	na
Food price index a	1990 = 100	332.0	461.0	434.0	461.0	474.0	na
General price index (CPI)	1990=100	345.0	410.0	460.0	501.0	534.0	na
POPULATION b							
Total population	Million	94.7	96.7	98.1	99.5	101.1	na
Urban	Million	70.3	72.1	73.6	74.5	75.8	na
Nonurban	Million	24.4	24.6	24.5	25.0	25.3	na
Share of population in the following age groups							
0-4 years	%	12.1	12.3	12.5	10.8	10.8	na
5–14 years	%	24.1	24.4	24.8	22.4	22.4	na
15–19 years	%	11.4	11.6	11.7	10.6	10.6	na
20-44 years	%	35.2	35.8	36.4	39.0	39.0	na
45-64 years	%	11.7	11.9	12.1	12.5	12.4	na
65–79 years	%	3.4	3.4	3.5	3.8	3.8	na
80–over years	%	1.0	1.0	1.0	1.0	1.0	na
Median age of population	Years	23.2	23.6	24.0	24.2	24.6	na
Female labor force participation	%	33.9	32.0	34.0	37.0	na	na
LIFE EXPECTANCY							
Males	Years	69.8	70.2	70.3	71.0	na	na
Females	Years	76.7	77.4	77.6	78.0	na	na
FOOD INFRASTRUCTURE							
Trade capacity Grain exports	1.000 Tons	568	481	385	583	na	n 2
Grain imports	1,000 Tons	6,259	7.261	17.763	18,245	na	na na
Total food and agricultural trade c	Million USS	14,077	15,501	15,541	17,421	na	na
Total food and agricultural exports	Million USS	6,379	6.868	6.986	7.693	na	na
Fishery exports	Million US\$	784	629	645	658	na	na
Total food and agricultural imports	Million USS	7.698	8.633	8.555	9.728	na	na
Fishery imports	Million USS	138	101	125	146	na	na
Road access	1.000 Kms	322	322	330	332	na	na
Rail access	1.000 Kms	27	27	27	27	na	na
Telecommunications	1,000 lines	9,254	9,927	10,927	12,376	na	na
Power Generation (domestic sales)	Million US\$	6,759	6,795	7,887	9,583	na	na
FOREIGN INVESTMENT IN THE FOOD SECTOR							
Inward FDI in the food sector, total <i>d</i>	Million US\$	2,953	725	1,041	203	22	n 2
From other PECC economies	Million USS	1.133	622	794	na	na na	na na
		1,155	022	7.54	11a	11a	11a
ROLE OF AGRICULTURE AND TRADE IN THE E							
Agriculture as a share of GDP	%	5.2	4.9	4.5	5.1	na	na
POLICY TRANSFERS							
Consumer subsidy equivalents	%	-9.0	-10.0	-18.0	na	na	na
Total transfers (subsidy/tax)	Million US\$	2.8	5.8	6.7	na	na	na
Total transfers per capita	US\$/capita	28.0	60.2	68.2	na	na	na
MACROECONOMICS INDICATORS							
GDP growth	%	6.8	4.8	3.7	6.9	3.5	na
Interest rate (CETES 28 days)	%	19.8	24.7	21.4	17.1	12.4	na
Exchange rate	MXPeso/US\$	7.92	9.30	9.56	9.50	10.10	na
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na = not available E = estimate F = forecast

a. Index for food, beverages and tobacco.
b. Population increase rate of 2.06%.
c. Includes food and agricultural results.

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