

The Consejo Nacional de la Madera en la Construcción, National Council for Wood Construction, has worked with the government to promote wood-frame construction and to train carpenters.

Although these efforts have been slow to produce results, there is growing interest in wood construction. The market in the northem border region is heavily influenced by American building practices, and wood is also more acceptable in the forested regions of the country. Prefabricated wood homes are beginning to find a market among the wealthy, especially for vacation homes. In general, relatively affluent Mexicans have a better understanding of building techniques and are more willing to innovate.

#### THE HOUSING SECTOR

Construction has been the fastestgrowing sector in the Mexican economy for more than a decade, and the housing sector has grown steadily at a rate of 5 or 6 percent annually. But Mexican construction firms were hard hit by the December 1994 devaluation of the peso. A shortage of capital is likely to continue to constrain the housing sector in the short run.

# The Housing Shortage

Mexico faces a housing shortage of crisis proportions. By some estimates, seven million new housing units are needed to adequately house the current population. Unless the rate of new construction is greatly increased, the gap will continue to grow, along with the population reaching the age of family formation. According to the World Bank, more than 800,000 new houses are needed every year to keep up with the demand, but only 600,000 are built.

### The Housing Market

Spending on housing for 1994 was estimated at US \$10 billion, but this excludes considerable informal housing activity. It is estimated that roughly half of all new homes are constructed by the informal housing sector. Typically, homes are owner-built without access to formal financing and often without title to the land.

It is estimated that almost half of the current annual demand is for homes valued at less than US \$15,000, while only 10 percent of the requirement is for homes exceeding US \$40,000. This pattern suggests a total housing market of about US \$17 billion, including the informal sector.

## Technology

The level of technology used in Mexican home building varies according to the targetted market. The majority of homes are stucco and plaster over brick, concrete block or poured concrete. Larger projects tend to use more sophisticated technologies. The biggest projects tend to be low-income housing developments, and many of them use more advanced building methods than those for individual middle- or high-end homes. On the other hand, high-end houses use more sophisticated finishings.

Most technological advances are aimed at reducing costs and construction time. Several new technologies are being adapted to the construction of low-income housing. They include polyvinyl chloride (PVC) plastic, steel panels, cellular concrete and light concrete or rolling cement plants.

#### THE ROLE OF IMPORTS

Imports of construction materials have fallen dramatically as a result of the devaluation. The construction industry is in a slump and imports are simply too expensive for most builders in the current market.

Services are not included in the international trade data but industry analysts say that they have dropped proportionately. Most observers believe that imports will begin to recover gradually by mid-1996 or early 1997.

It is not possible to distinguish between imports of building materials used for housing and those for other types of construction. There are data for some prefabricated components, but Mexican imports of these products are relatively small. Total imports of wooden doors, windows, parquet panels, shingles and shakes, and prefabricated structural components were just over US \$23 million in 1994, up from US \$17.8 million the year before. The United States accounted for about 83 percent of this market. Canada's 1994 sales of these products were less than US \$200,000.

Canadian suppliers exported about US \$3 million worth of prefabricated buildings to Mexico in 1994. Most of them were silos. There were about US \$1 million in sales of other non-wood prefabricated buildings in 1993, but none were recorded in 1994.

### **HOUSING BUYERS**

Buyers of new homes can be divided into two groups: those who have access to financing and those who do not. For the most part, the available bank financing has been allocated to middle- and upper-class home owners. Middle-income buyers often have access to home loans from Mexico's system of mandatory pension plans, or they may get government-backed mortgages from the commercial banks. Lower-income purchasers either use government housing programs, or build their own homes with self-financing.

Prior to the devaluation of the peso in December 1994, one Mexican

