fter 2000, in which the Chilean economy exhibited

an encouraging growth rate of 5.4 percent, 2001

### **Macroeconomic Situation**

showed a slowdown, reaching a rate of 2.8 percent, with growth led by fisheries and energy. Agricultural GDP grew by 4.7 percent, double the average growth rate for the economy as a whole. On the low end of the spectrum, manufacturing experienced a negative growth of -0.3 percent, and in general, the slowest economic growth took place in sectors more dependent on the behavior of domestic demand. There were two events that took place in the second half of 2001 that changed the external scenario of the global economy, increasing uncertainty in financial markets and reducing global growth: the terrorist attacks of September 11 and the rapid deterioration of Argentina's economy. The main consequences were lower export demand and a deterioration of the terms of trade. Terms of trade had a loss of 7.1 percent in respect to 2000, being responsible of this shortfall the reduction of the prices of copper, cellulose, salmon, and to a lesser extent, those of fresh fruits. Undoubtedly, Argentina's financial and political crisis affected Chile in many ways and will continue to do so probably even more drastically in the months to come. One way was by inducing a real depreciation of the Chilean peso due to the devaluation of the Argentine peso. Regardless of this depreciation, inflation was lower than expected, reaching a 2.6 percent rate during 2001, explained by the lower petroleum prices and a depressed domestic demand as could be expected from the 9.2 percent unemployment rate observed during 2001. Because of the peso depreciation, total Chilean exports continued to register growth (7.1 percent) despite weak external demand. For 2002, a deceleration of export activity is foreseen with a growth index near 4.2 percent, recovering again by 2003 (7.3 percent). Total imports have also declined in a slowdown linked to a reduction of domestic demand growth (-0.5 percent), which is expected to recover to rates of 4.1 percent by 2002. Such a recovery would sustain the 3.3 percent growth index for GDP expected for this year and 5.3 percent for 2003. The latest events in the Middle East conflict may add new uncertainties to the coming year such as a rise once more in petroleum prices. This may cause a further depreciation of the Chilean peso, which, if does not fuel inflation, may have favorable consequences on the outlook for the food and agricultural sector with a rise in food prices to consumers.

### **Food Prices and Consumption**

The inflation rate during 2001 was lower than expected, a 2.6 percent increase in consumer prices. Growth in wholesale prices slowed (3.1 percent), compared to 2000 (7.9 percent), due to the influence of the lower petroleum prices, depressed domestic demand, and good weather conditions. Food costs at the consumer level kept close to the general index, with a variation of 2 percent, meanwhile the wholesale food

price index had a -1 percent reduction. Inflation rates and food price increases are not expected to differ much during 2003 unless there are unexpected external shocks. The proximity of Argentina and the reduction of its export prices as a result of a drastic devaluation may in fact result in price reductions; prices of agricultural inputs have been declining, while there are no reasons to expect important changes in the Chilean real exchange rate.

## Food Processing and Marketing

At present, the most dynamic sectors in the food processing industry are wine production and the manufacture of meats and dairy products.

In the wine industry, as a result of the rapid expansion of vineyard plantations, there is a deficit in terms of processing, aging, and storage infrastructure that, coupled with a scenario of international expansion in plantations and slower growth in consumption, has resulted in major price reductions on grapes. The aim is to open new markets and set as a priority the creation of a country image abroad where Chilean wine is not known. It is expected that wine exports will rise from the present level of US\$600 million up to US\$1,000 million by 2006. The plan anticipates an investment of US\$18.6 million on international marketing and US\$1.5 million for domestic promotion.

During 2001, a rapid increase in milk deliveries to processing plants met with a reduction in producer prices while world prices were still rising and the depreciation of the Chilean peso should have made competing imports more expensive. The decline in producer prices was the outcome of unsold, accumulated imported stocks coupled with stagnant domestic demand. As a result, a continuous confrontation is observed between milk farmers and the dairy industry. Moreover, two major dairy industries, Soprole, controlled by the New Zealand Fonterra Cooperative Group Ltd., the world's major dairy exporting firm, and Nestle, announced their intention to create a strategic alliance for the joint industrialization and commercialization of selected dairy products in Latin America. The Antitrust Commission has so far objected to this alliance. Soprole and Nestle have a market share of 26 percent and 21 percent, respectively. Due to expected lower prices paid by the industry, milk production growth is expected to decline during 2003, while efforts will be made to increase exports, particularly within the Latin American market.

Supermarkets continue to expand in Chile, particularly under the hypermarket format (28 percent of the market). Four chains dominate the market: D&S (Chilean ownership), the leader; Santa Isabel, belonging to the Ahold multinational group; Jumbo; and the French chain Carrefour. The number of pharmacies has also expanded very rapidly, particularly large chains, which include some food items such as sodas, snacks, cereals, baby foods and sweets and chocolates.

New products such as pre-cut vegetables are now commonly found in supermarkets, with just a few manufacturing companies producing these products. Vacuum-packed ostrich meat is also a novelty to be found in supermarkets as well as vacuum-packed fresh lamb meat, Chilean fruits, wine, legumes, and forest products. The products with positive outlooks are grapes, apples, wine, and salmon. Also, after three years of negotiations, Chilean lily bulbs have been authorized for exportation to Japan. Exports of flower bulbs, nonexistent less than a decade ago, have been growing rapidly, mostly for export to the United States and Europe. Trade perspectives for 2003 and 2004 are positive, with the main question marks placed on future cereal, beef, oilseeds, and milk imports from Argentina, which could skyrocket following the huge devaluation that has recently taken place.

The "El Niño" phenomenon is predicted to increase winter rains and ocean water warmth this year. It can cause severe damage, although experts predict that it will not be as damaging as it was in 1997. Weather conditions have already affected agricultural production this year. Rain at harvest time caused losses in berries and in red vines, and will negatively affect potatoes and beans, with the most damages to small farmers.

# Food and Agricultural Policy

Agricultural and food policies in Chile continue to be designed to achieve competitiveness in the context of an open economy with prices set in the international marketplace and exchange rates determined by market forces. The main challenges identified are two: rural development and the need for coordinating the regulations for the whole agri-food system. The first issue is a long-term goal that requires redefining the scope and actions to be implemented by the Ministry of Agriculture. The latter is expected to require incorporating food regulations within the ministry's regulatory functions. As will be seen in the last section of the paper, this is not the case today and will require several institutional changes over the next few years.

The main strategies adopted within the scope of agricultural and food policies are the following: a) ACHIEVING A STABLE SCENARIO for investments in agriculture with instruments such as a still-novel agricultural insurance scheme, and either maintaining the price band system for wheat, sugar, and edible oil or replacing it with other stabilization mechanisms; b) PROMOTING MARKET DEVELOPMENT, including conducting trade negotiations and perfecting the Agricultural Export Promotion Fund in terms of foreign markets, and improving anti-trust legislation, strengthening the control of food and agricultural imports, and generating market information on the domestic front; c) IMPROVING NATURAL RESOURCES PRODUCTIVITY, devoting more public and private resources to instruments such as soil recuperation, improved irrigation infrastructure and management, forestation, and maintenance of the phyto-zoo-sanitary patrimony; d) **ENHANCING COMPETITIVENESS**, by supporting innovation and research, technology transfer, the development of farm management skills, human resources development, and improved irrigation and by channeling financial resources to small farmers and stimulating partnership among producers; e) PROMOTING CLEAN AND QUALITY PRODUCTION IN AGRICULTURE; and g) SUPPORTING RURAL DEVELOPMENT actions to

improve the livelihoods of the rural population, including increasing the competitiveness of peasant farming.

The major policy issue for farmers continues to be protecting their activities from unfair foreign competition and highly unstable world prices, in view of the fact that the main instrument used so far —price bands in three commodities — is being challenged by the major trading partners, given the WTO declaration that price bands are an illegitimate pricing policy tool. Although the Chilean government is appealing this verdict, it is quite possible that this mechanism will not be accepted. With respect to safeguards, the Chilean committee responsible for applying this policy instrument has been extremely conservative in approving its use, and there is a 1-year limit for its application. The government is evaluating other alternatives to the price band system, including the creation of price insurance, a stabilization fund, or another mechanism that would enable applying more flexible tariffs within the maximum levels consolidated at the WTO. The final decision by the WTO will probably be known at the end of 2002.

Among the novel policy tools introduced during 2001 was an agricultural insurance scheme to insure climatic risks, as well as an Agricultural Products Exchange. The insurance scheme is providing a service to cover climatic risk to farmers producing annual crops, not including fruit orchards, with subsidized fees for small farmers. Last year, US\$6 million in public funds were spent for this purpose. The target number of farmers that were expected to contract this insurance was 4,000, but the actual number has been considerably lower. Farmer associations consider the fees still too high and believe the scheme should cover fruit orchards. A private commodity exchange project is still being discussed in Parliament, as it requires legal changes for its operation, but it is expected to be approved this year. The exchange being organized will comprise forest products, fish, and aquacultures besides agricultural commodities, especially cereals. The main purpose of this exchange is to enable financial derivatives to be placed in the market, making it possible for agricultural producers and others wishing to store these products to obtain short-term financing, thus avoiding the price falls that typically occur at harvest time.

The very dramatic devaluation of the Argentine peso is posing a serious threat to Chilean agriculture, as several important commodities such as beef, milk, and cereals could begin coming into the country at extremely low prices, and the restriction of imports by way of safeguards or other means is limited. This is coupled with a drastic fall in internal demand within Argentina, potentially resulting in important commodity surpluses finding their way into Chile. Thus, avoiding the economic damage that could arise from unchecked imports from Argentina will probably be an important policy issue for the remainder of this year. With respect to rural development, the existing institutional arrangement supporting small farmers has virtually collapsed because of accusations that it has not provided checks and balances, but rather gave further loans to a large number of cooperatives that faced financial insolvency. The whole institutional set-up to support small farmers is being scrutinized, and a proposed new strategy is anticipated.

## **Food Safety**

Food safety considerations have been an important issue for the food export sector in Chile for over a decade now, especially after a "poisoned grapes" accusation involving two grapes in cargo exported to the United States. Though the accusation was never proved, it paralyzed Chilean grape exports to the United States and the rest of the world during the 1989 season, and caused an estimated income loss of about \$400 million. This cost was borne by the grape marketing chain, producers, and government. Around 1990, a complete set of standards and inspection controls for food safety was applied rigorously and efficiently in the fisheries and aquaculture sector, an important exporting sector with a higher risk of presence of food-transmitted diseases. SERNAPESCA, the government agency responsible for this sector, is a service dependent of the Ministry of Economy. This agency validates the HACCP programs implemented by the private exporting plants of fish and seafood by conducting control visits, auditing, and verification programs. Private sector professionals at the plants are trained by HACCP experts from SERNAPESCA. Over the last few years, a number of other food processing companies have implemented HACCP programs, but this has been more consistent in the case of export- oriented industries as a result of the standards required by foreign clients, particularly for meat processing plants (poultry and pork) and now for some other agro industries. For the meat processing plants, the regulatory agency for exports is SAG: the Sanitary Service for Agriculture and Livestock Sectors from the Ministry of Agriculture. SAG also implements phyto-sanitary controls on agricultural exports. But it is the Ministry of Health with several of its services that is responsible for regulating food safety in the case of food consumed within the country and for controlling environmental conditions in the food sector.

With fresh fruits as the main item in the agricultural sector's export basket, the Association of Fruit Exporters has targeted this quinquenium for the adoption of Good Agricultural Practices by 100 percent of the fruit producers involved in the exporting chain. Good Agricultural Practices will become the minimum standard imposed on the food production process by Europe for their purchases of fresh fruits, among other products. The application of these practices, which will have positive effects on food safety, the welfare of workers involved in the process, and the environment, will require training and assistance both to farmers and workers, impose sophisticated recording of amounts and dates of application of agricultural inputs, product tractability, and demand new infrastructure at the farm level. Its application will mean important additional costs to the fruit export sector, probably a very difficult target to be achieved by smaller farmers.

Some large food services companies that serve restaurants, companies, hospitals, schools, and large institutions have also implemented HACCP programs, as have some other food processing plants serving the domestic market, so food safety is also becoming an important issue for the food sector within Chile. A few firms also implement ISO 9000, but there is still a long way to go before HACCP and other practices become standard procedures in the non-exporting food

sector, particularly in the small and medium-sized segments of the food manufacturing industry and food services. In fact, several food poisoning episodes have shaken public opinion over the last decade, with consumers reacting very fast and forcing the involved firms to adopt improved food safety procedures. Some of these episodes took place following articles published by SERNAC, a public sector institution with a mission to inform, educate, and protect consumers.

For example, in 1991, the periodical magazine published by SERNAC included an article describing the results of a microbiological analysis of sausages from many manufacturing brands, which found excessively high levels of salmonella, staphylococcus aureus, and polyphosphate additives. As a result, consumption of these products fell by about 70 percent for several months, and while some firms went out of business others introduced quality control procedures and certification, as well as vacuum-packing. Another scandal happened in 1999 with a massive episode of food poisoning from salmonella in freshly made mayonnaise. Early this year, large press coverage was given to an accusation of food poisoning from Escherichia coli 0157: H7 said to have been caused by a chicken hamburger sold at a McDonald's restaurant. Although the sanitary authorities failed in favor of McDonald's, sales fell by about 50 percent, and the company has been forced to substantially increase its advertising. These are only some examples of foodborne diseases (FBD) outbreaks that have had wide press coverage.

The most prevalent FBDs in the country are salmonella, hepatitis, and infections with E. coli. According to statistics provided by the Ministry of Health, between 1993 and 1999, a total number of 1,710 outbreaks of foodborne diseases took place in Chile, which involved 16,078 persons reported sick in a population totaling about 15 million. The legislation on food safety and food quality control has generated a significant improvement. The latest Food Sanitary Regulations, created in 1997, established sanitary and environmental conditions in workplaces, including all production stages up to food sales, and was recently modified to include a classification of foods according to their risk for human consumption and the sampling procedures and microbiological standards to be used for food sample analysis. On the other hand, the Ministry of Health has imposed on the food industry a set of regulations related to sanitary and environmental conditions, with sanctions for non-compliance, some of which are in fact unnecessary for the agricultural sector to follow.

Training in food hygiene and manipulation has increased substantially during these last few years. According to SENCE, the national service agency channeling public resources for training and capacitating workers and entrepreneurs, in 2000, there were 403 courses in this field, involving some 14,000 persons, which represents about 2 percent of all persons receiving financial support for short-term training through SENCE. But there are no compulsory training requirements and not all firms offer training, even for new employees.

There are several problems to be resolved in the near future. First, an overlap of regulations and inspections imposed by different agencies responding to different ministries imposes a severe burden in some

#### CHILE

cases on the food industry; thus there is an urgent need to unify criteria, coordinate actions, and impose the same set of standards on food for exports or for domestic consumption. Second, government agencies do not have the financial and human resources required to adequately control food sector safety systems, so there is an urgent need to compel the private food sector to undertake responsibility for implementing Good Manufacturing Practices, HACCP, and other systems such as ISO 9000 and for developing a new inspection system by certified private inspectors. Third, there is a need to increase consumer education and create private advocacy groups to protect consumers, and finally, many food items are not characterized by quality standards, so unit price serves as the main determinant for purchase decisions. As a result, many suppliers decrease quality in order to increase

sales. In fact, there is still a segment of informal food vendors that do not comply with even the minimum food safety standards and constitute a focus of FBD. But there is a trend to differentiate products by branding, possibly enabling the private sector to introduce food safety standards that can be financially compensated.

Finally, the production of genetically modified food (GMOs) in Chile for the domestic market is so far banned (Chile produces GM seed for the foreign market only) but there are no rules or labeling requirements on GM food imports. The whole legislation for GMOs is under debate, but a proposal is being discussed at the regional level for health and environmental risk assessment procedures to be adopted in line with international protocols.