

Pacific Food System Outlook Meeting

INFRASTRUCTURE AND THE FOOD SYSTEM ECUADOR

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Recovery of Economy after 1999

- Monetary stability: growth rate 2003: 3%, forecasted 6% in 2004, 5% in 2005: uncertainty because of dependence on oil prices.
- Decline in inflation rate: stabilization at about 4% in 2005.
- External debt: 64.4% of GDP in 2003, and 1.85 times exports.
- Crude oil accounts for more than 31.0% of GDP.
- Agriculture: only 10% but important as food supplier and employer in the rural areas.

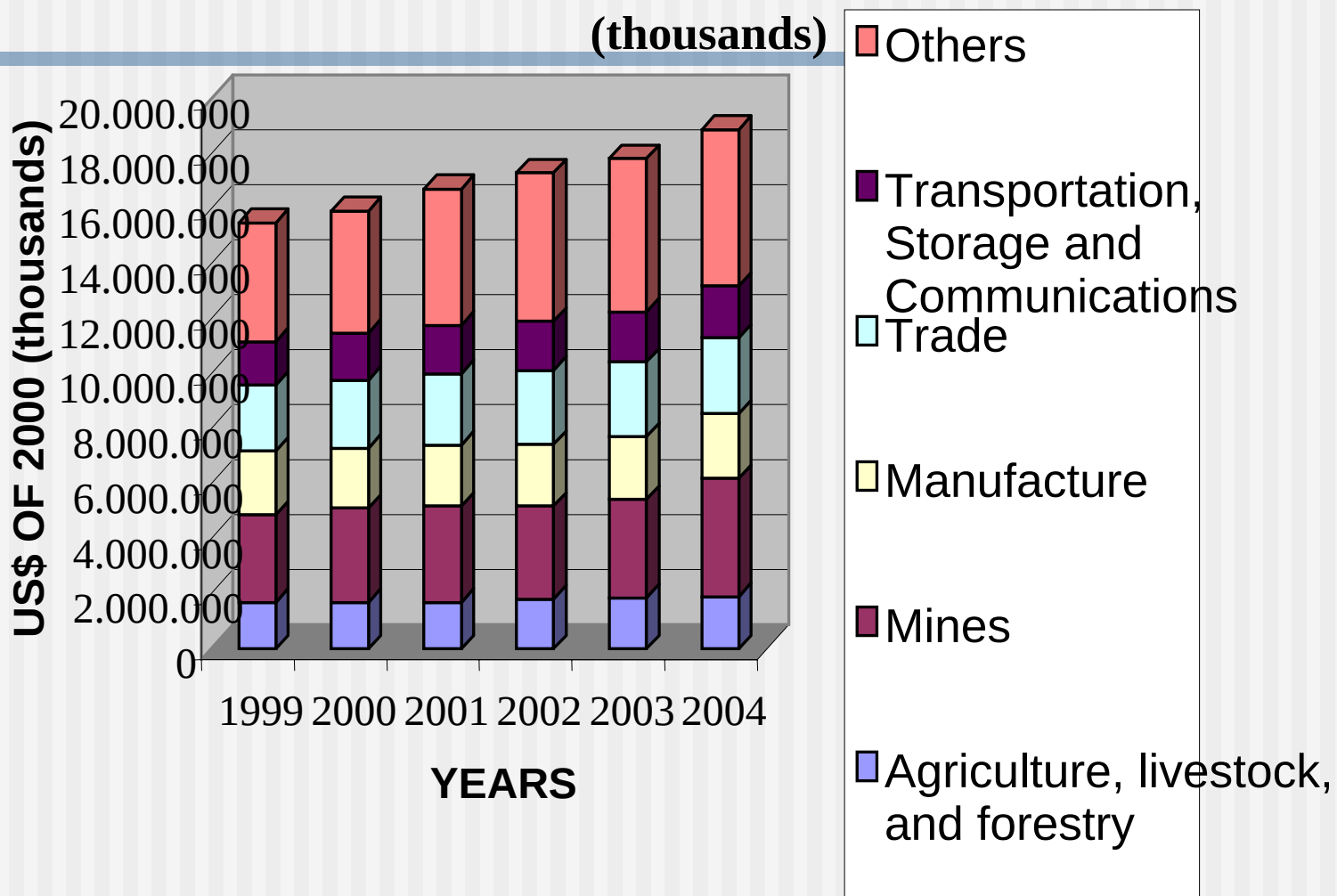
BREAKDOWN OF GDP

Activities \ Years	2000	2001	2002	2003	2004		
		(prelim.)	(prelim.)	(forecast)	(forecast)		
Agriculture, livestock, and forestry	10.6%	10.2%	10.6%	10.4%	10.0%		
Mines, including crude oil	21.5%	20.8%	19.4%	20.0%	22.8%		
Manufacture	13.6%	13.3%	13.0%	12.8%	12.4%		
Others	27.9%	29.7%	31.2%	31.2%	30.1%		
Trade	15.6%	15.5%	15.6%	15.3%	14.7%		
Transportation, storage, and communications	10.8%	10.4%	10.2%	10.2%	10.0%		
TOTAL %	100.0%	100.0%	100.0%	100.0%	100.0%		
TOTAL Thousand US\$	15,933,666	16,749,124	17,320,610	17,834,306	18,905,567		

SECTORAL DISTRIBUTION OF GDP

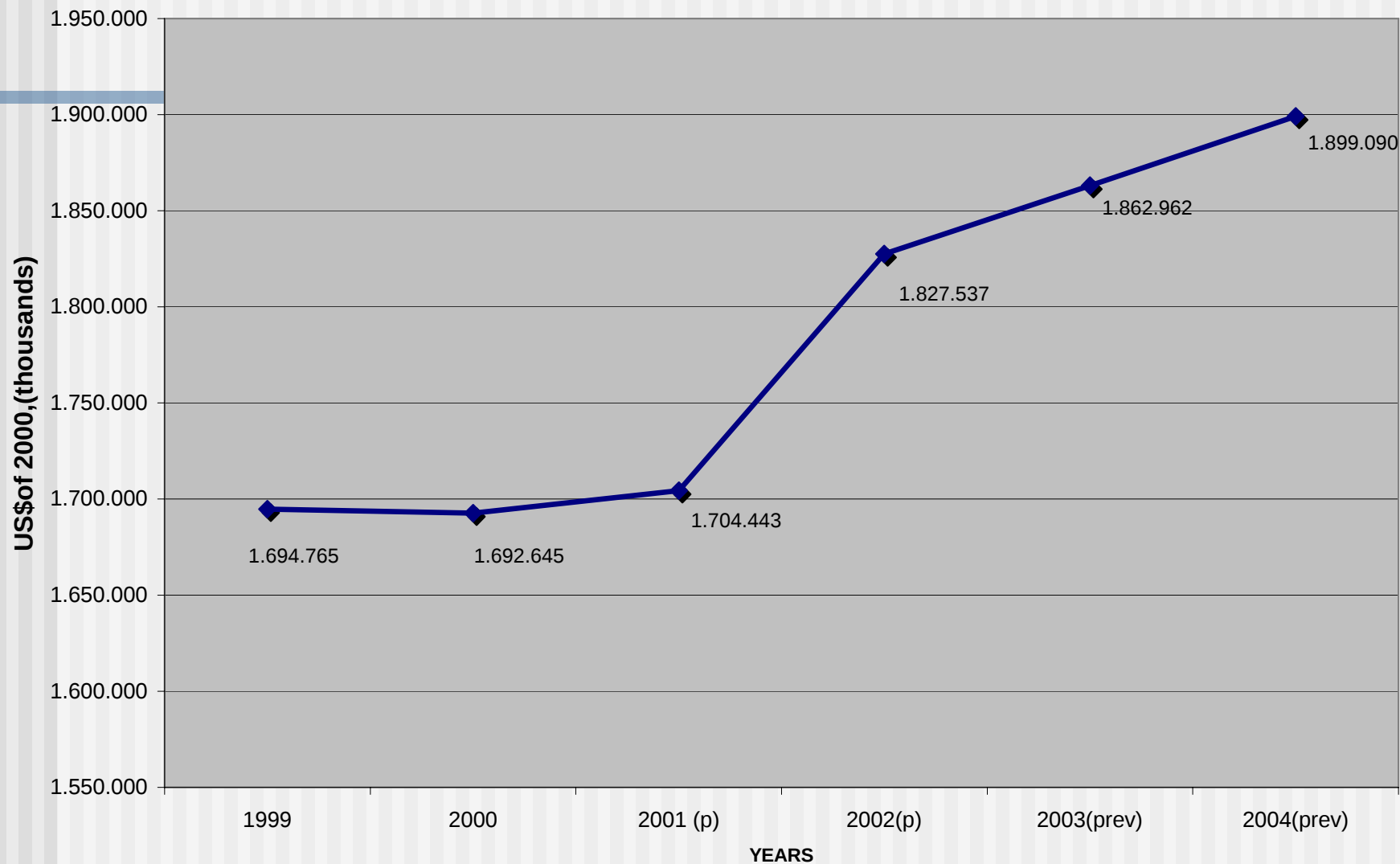
US\$ of 2000

(thousands)



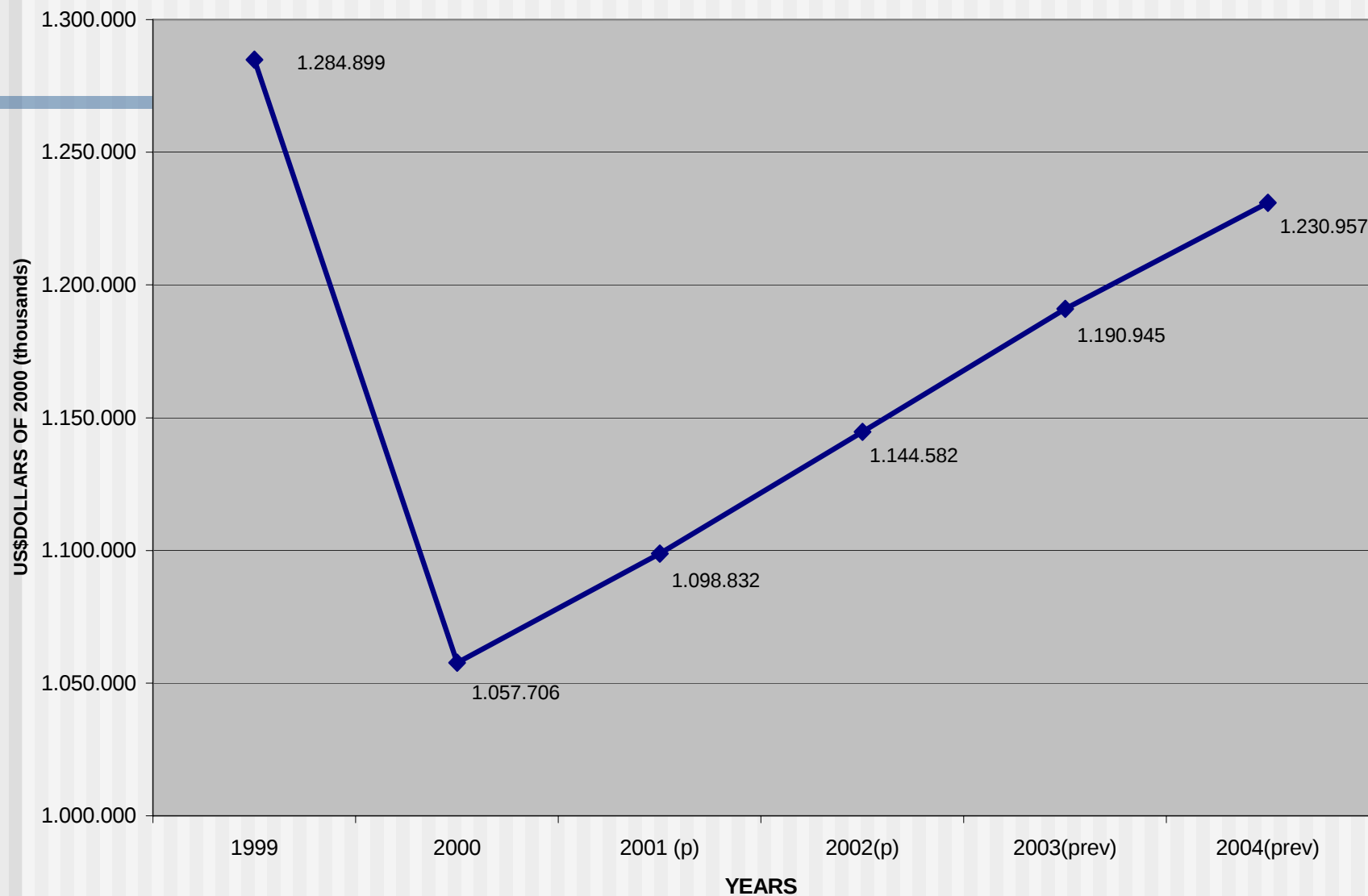
AGRICULTURE, LIVESTOCK AND FORESTRY VALUE ADDED

US\$ thousands

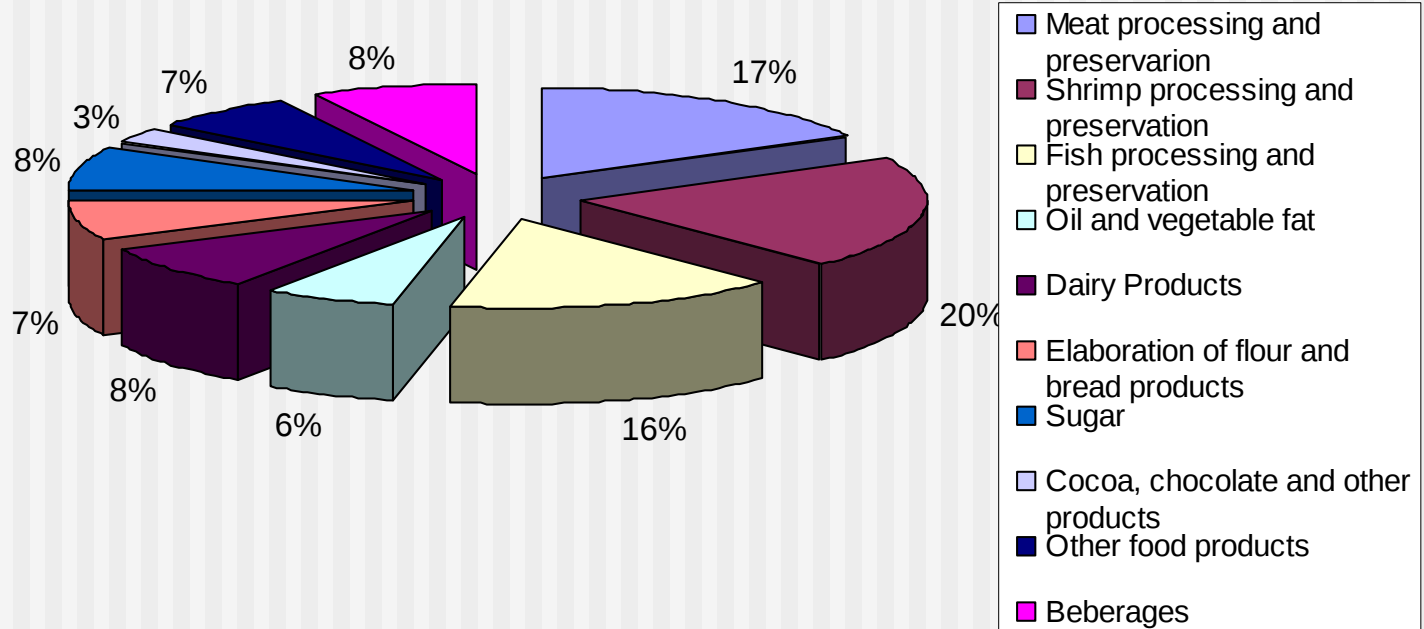


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- Food industry unable to recover the level it reached in 2000.
 - More than 50% of industry is accounted for by food production.
 - Primary and processed food products account for more than 38% of exports.

EVOLUTION OF FOOD INDUSTRY



COMPOSITION OF VALUE ADDED OF FOOD INDUSTRY, 2004

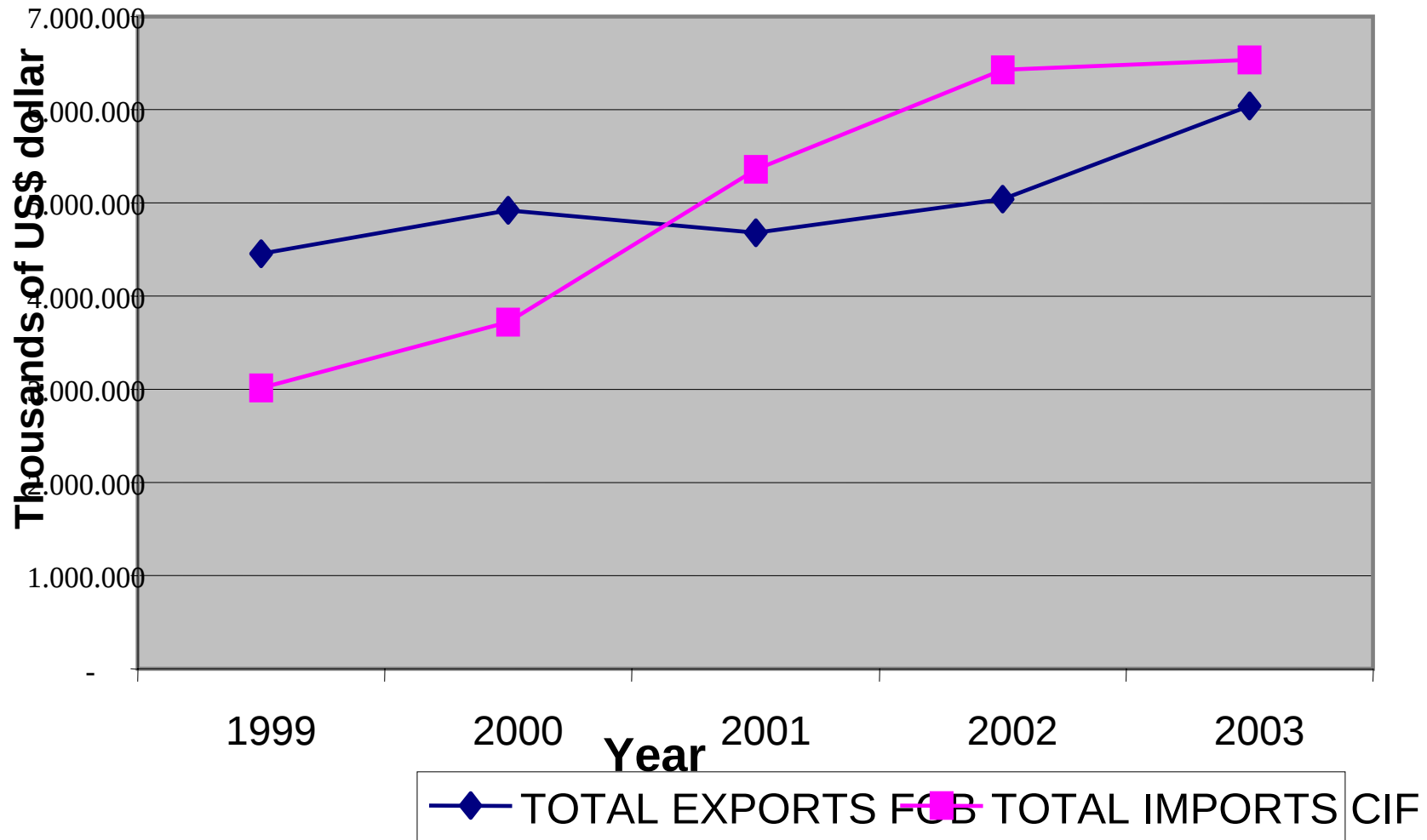


EXPORTS AND IMPORTS, RATES OF GROWTH

			RATES OF GROWTH	
YEAR	TOTAL EXPORTS FOB	TOTAL IMPORTS CIF		
	(thousand US\$)	(thousand US\$)	EXPORTS	IMPORTS
1999	4,451,084	3,017,256	5.9%	-45.9%
2000	4,926,627	3,721,201	10.7%	23.3%
2001	4,678,437	5,362,856	-5.0%	44.1%
2002	5,036,121	6,431,065	7.6%	19.9%
2003	6,038,499	6,534,404	19.9%	1.6%

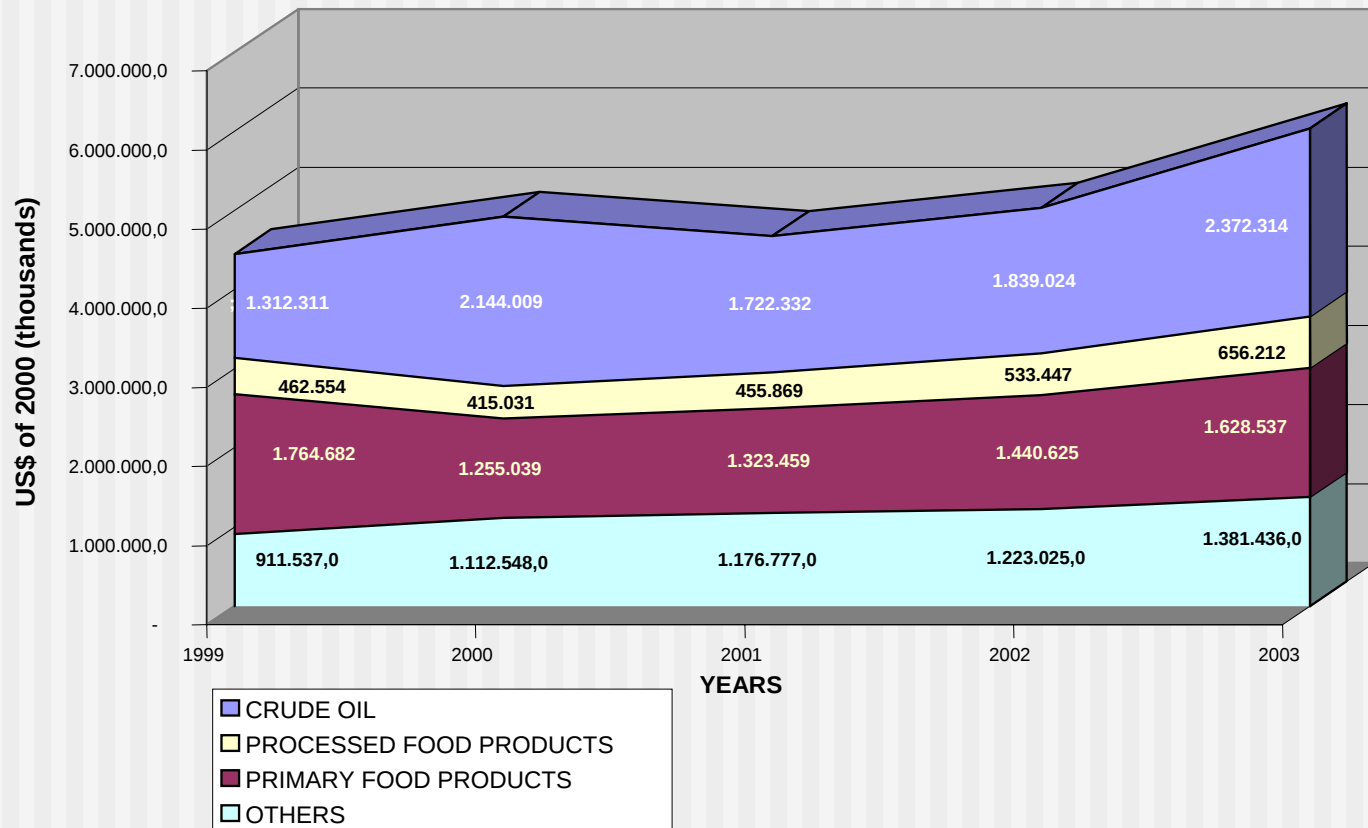
Source: Statistical Information, Central Bank of Ecuador

EXPORTS AND IMPORTS

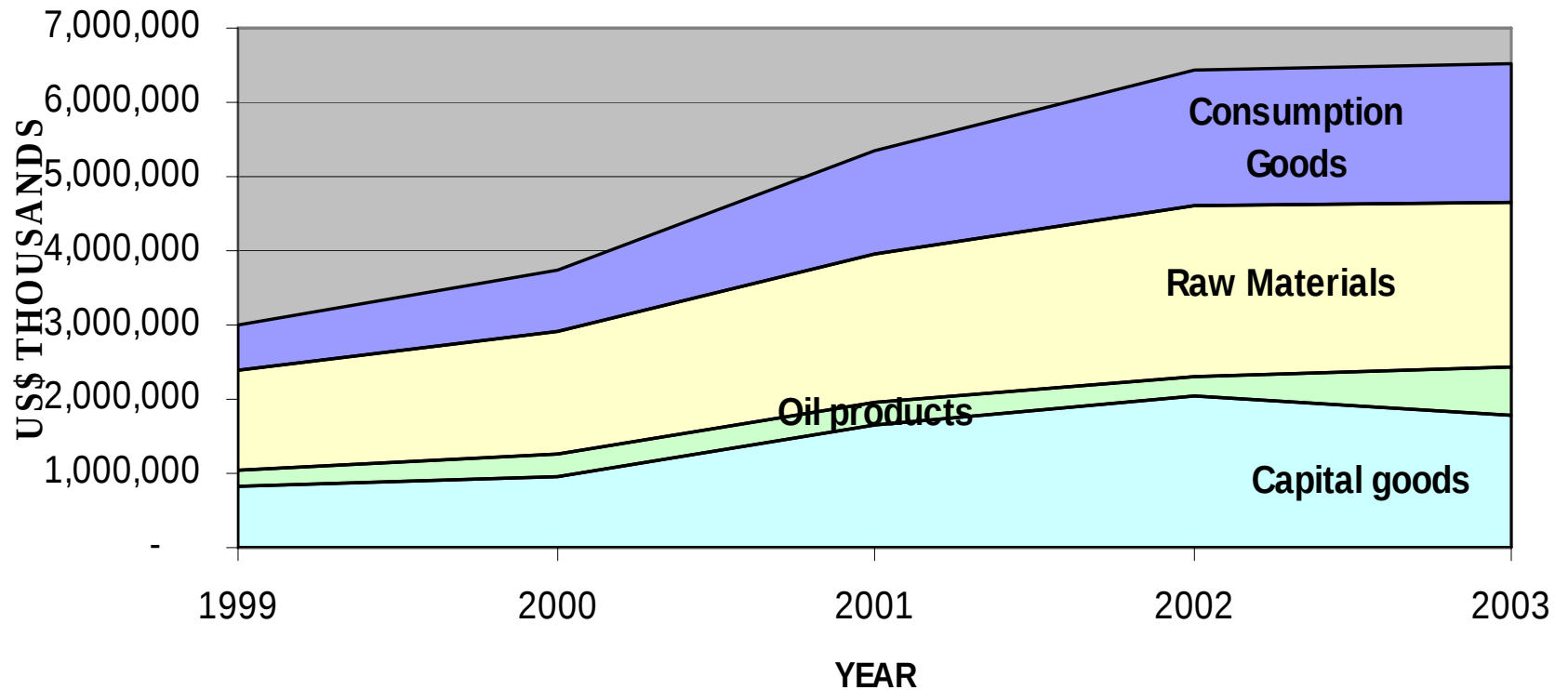


EXPORTS BY GROUP OF PRODUCTS

US\$ thousands



COMPOSITION OF IMPORTS



Capital goods Oil products Raw Materials Consumption Goods

PROSPECTS IN THE FRAMEWORK OF THE FREE TRADE AGREEMENT (1)

- Involves costs and benefits.
- The agricultural sector is very sensitive to liberalization and, as a consequence, food security.
- Convenient to open the market for imports of products not produced in Ecuador.
- Harmful for the domestic economy to import subsidized products from the USA.
- Comparative advantage for Ecuador: tropical fruits and vegetables.

PROSPECTS IN THE FRAMEWORK OF THE FREE TRADE AGREEMENT (2)

- The USA is consolidating its bilateral relationship with the Andean Community countries.
- As a member of the Andean Community, Ecuador should enforce intellectual property protection.
- It is estimated that a substantial rise of imports will occur, compared to exports: 38% vs 7% .
- Net trade earnings are not very significant. One of the factors is the increase in labor costs in the country. Strong competition from other countries, Colombia, Perú, Brazil and Argentina.

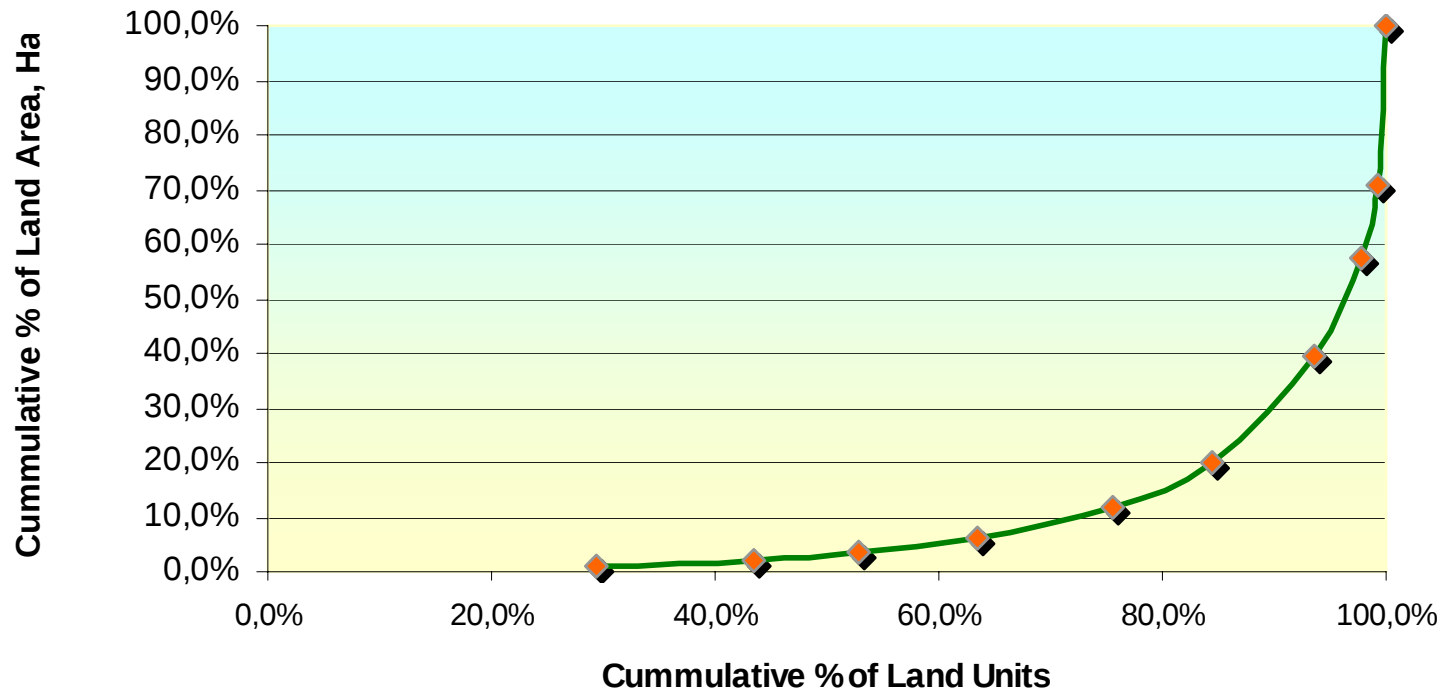
PROSPECTS IN THE FRAMEWORK OF THE FREE TRADE AGREEMENT (3)

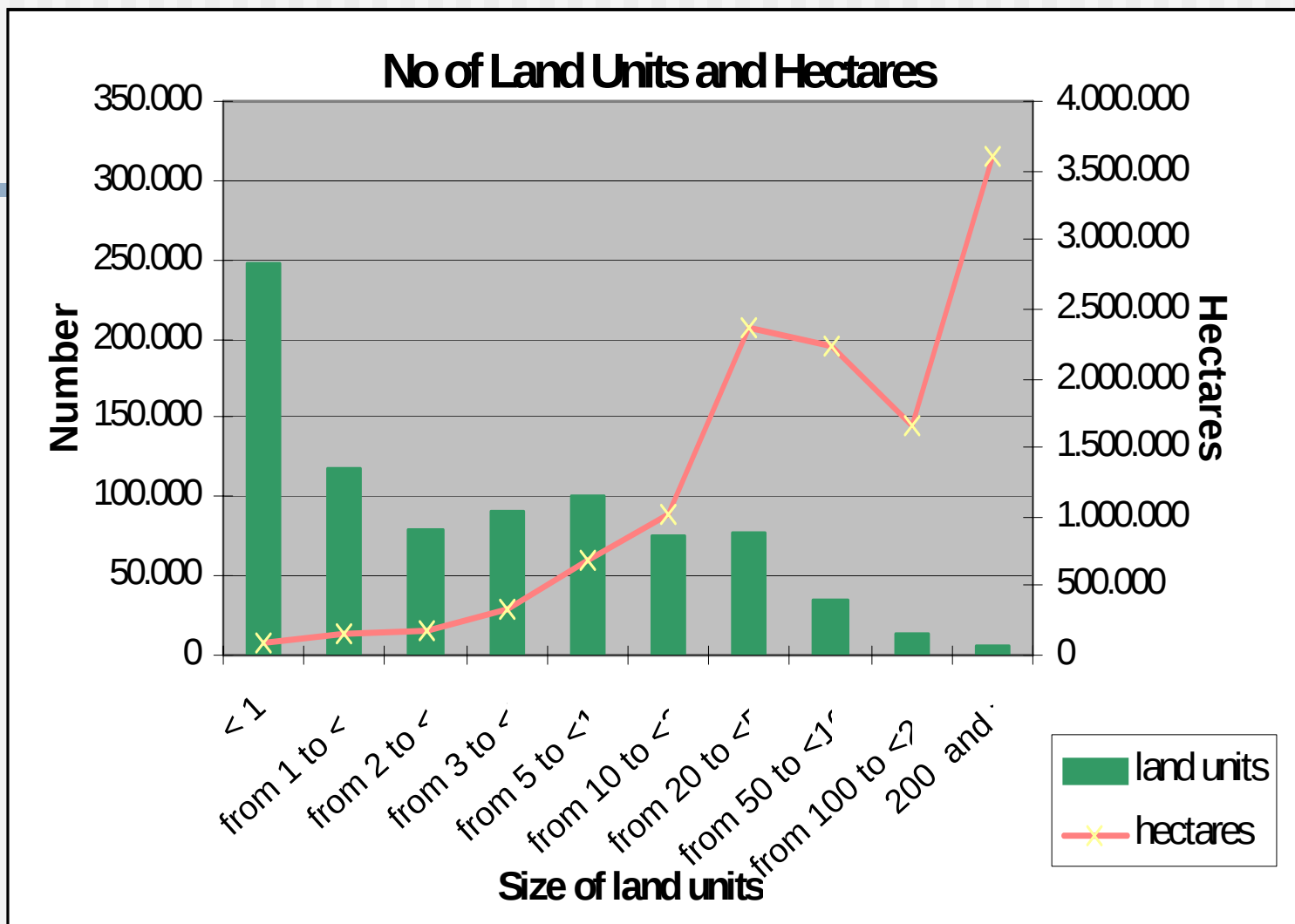
- Social impacts: risk of decline in employment especially in agricultural sector, but it is supposed that it will be only minor.
- However, mobility of labor force will not be easily accomplished nor is there much possibility of increasing the demand for labor in other sectors of the economy.
- Nevertheless, no participation in the American Free Trade Agreement might entail even more negative consequences because the country cannot remain isolated.

LAND PROPERTY, LAND USE, AND AGRICULTURE

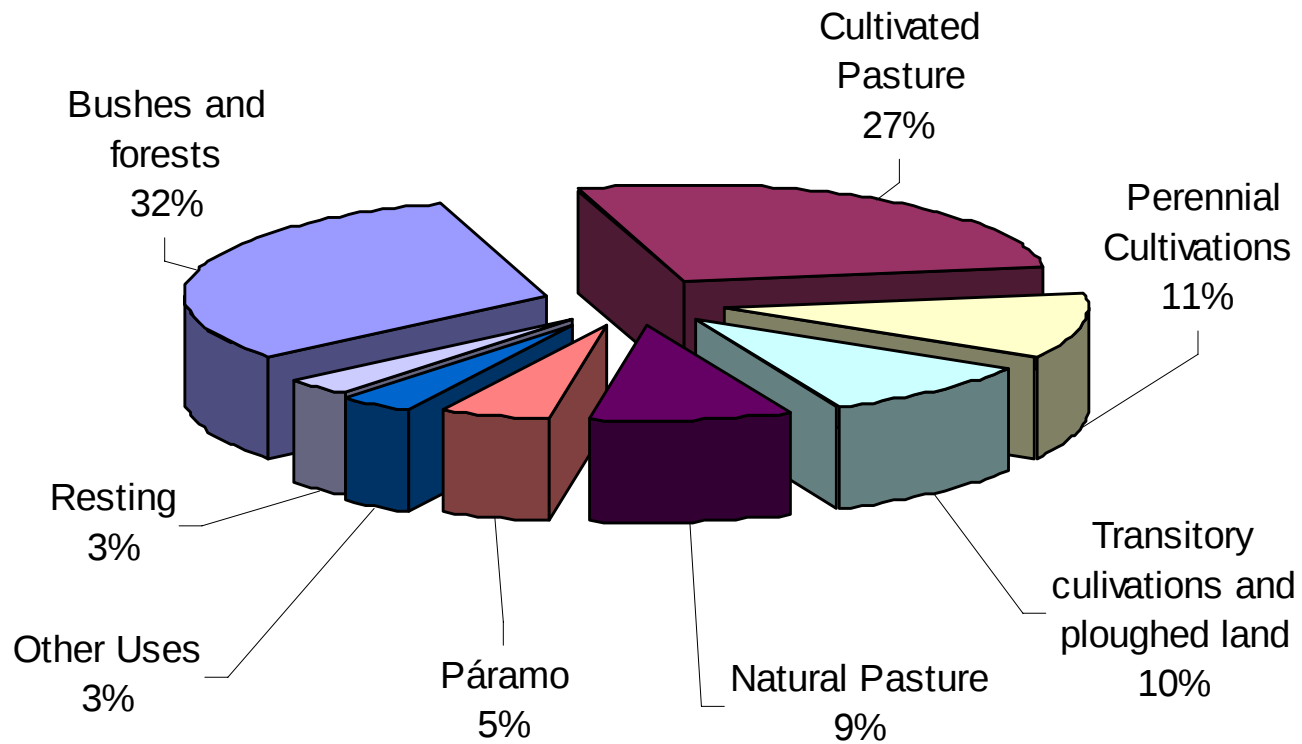
- **The characteristics of land property and distribution can impose some constraints on the use of equipment and technologies for improving efficiency and therefore reaching competitiveness.**
- **Land property reflects the skewed distribution of income prevailing in the economy:**
 - **The properties with an extension up to 1ha accrue for 30 % of the total number of productive land units, occupy only 0.8 % of the total area dedicated to agriculture and livestock.**
 - **Meanwhile, the land units with 50ha and more, which represent 6.4 % of the total number of land units, cover 60 % of the total area.**
 - **Those land units of 200 ha and more, which represent 0.8 % of the total number of land units, occupy more than 29 % of the total area.**

Gini Coefficient: 0,85 Land Tenure





LAND USE



SOME PROBLEMS OF THE AGRICULTURAL SECTOR

FUNDING

- Only 7.4 % of the land units have access to credit.
- About 71 % of the credit is for agriculture, 15 % for livestock buying, only 1 % for machinery acquisition, 0.07 % for irrigation systems, and 12.6 % for others.
- Sources: 26 % provided by banks, more than 24 % comes from informal lenders, who charge high interest rates; 12.1 % is provided by private firms.

TECHNICAL ASSISTANCE

- Only 6.3 % of the total number of units have access to T.A., of which 15.3 % is from the Ministry of Agriculture and Livestock (PROMSA)
- **LAND DEGRADATION IN SOME AREAS**
- **INTERMEDIARIES**

INFRASTRUCTURE: NECESSARY BUT NOT SUFFICIENT

- Infrastructure by itself is necessary but not enough to promote food security and agriculture production growth.
- Management of that infrastructure is a key factor in order to use those resources efficiently.

INFRASTRUCTURE: NECESSARY BUT NOT SUFFICIENT

Sustainability of good maintenance of infrastructure is an important element, because experience has demonstrated that some projects suffer premature deterioration and even the loss of assets as maintenance and expansion have not been considered at the planning and execution stages.

IRRIGATION

Water Scarcity and Rational Use

- Water scarcity: one of the most severe environmental problems, caused by high levels of waste.
- Competition by different users of water.
- Agricultural demand accounts for 70% to 90% of all fresh water used in developing countries.
- In Ecuador: sources of fresh water from the Andes.

IRRIGATION

Experience of Ecuador

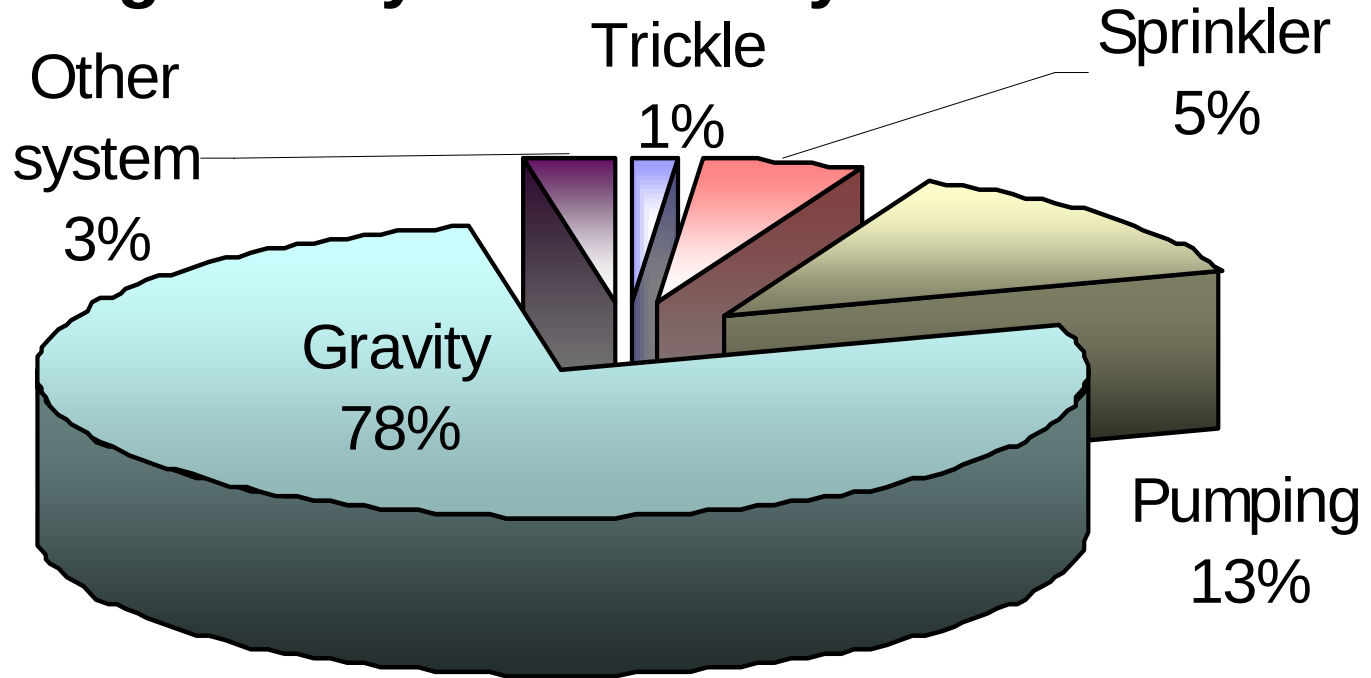
- Large project implementation: not successful; prolonged planning and building process. Only a fraction of the capacity is used.
- Irrigation systems cover 69% of the surface area used for farming and cattle-raising or 14% of the production units (less than 240,000 units are irrigated)
- Institutional framework: National Water Resource Council (CBRH)
 - Planning and regulatory duties, management policies, approve all water use, flood control, drainage.
 - Water resource management is decentralized in the Regional Development Corporations.

IRRIGATION

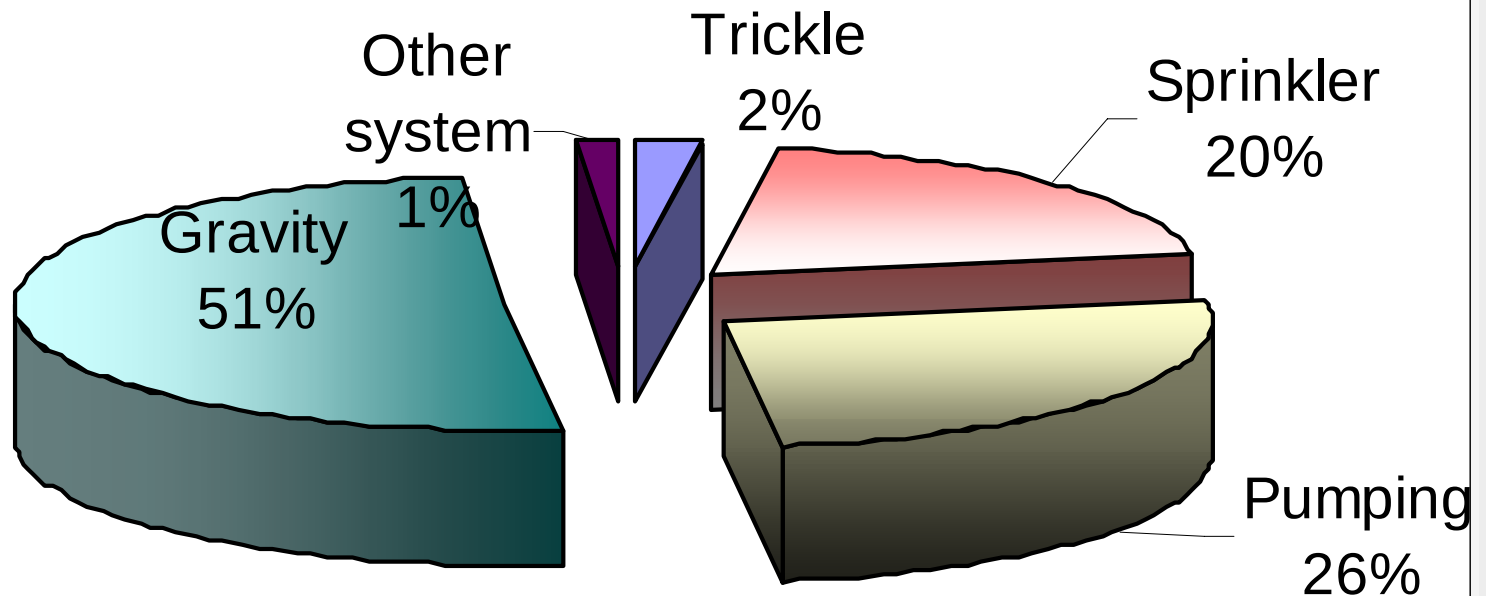
Experience of Ecuador

- Participation of private sector (water user boards) by granted concessions for irrigation systems--either for the total management of or for their operation and maintenance.
- Regional corporations: enforcing policies of the CNRH, supervising water user boards.
- Users boards: operate and maintain
- State subsidies:
 - On the investment, when the systems are transferred completely to the users.

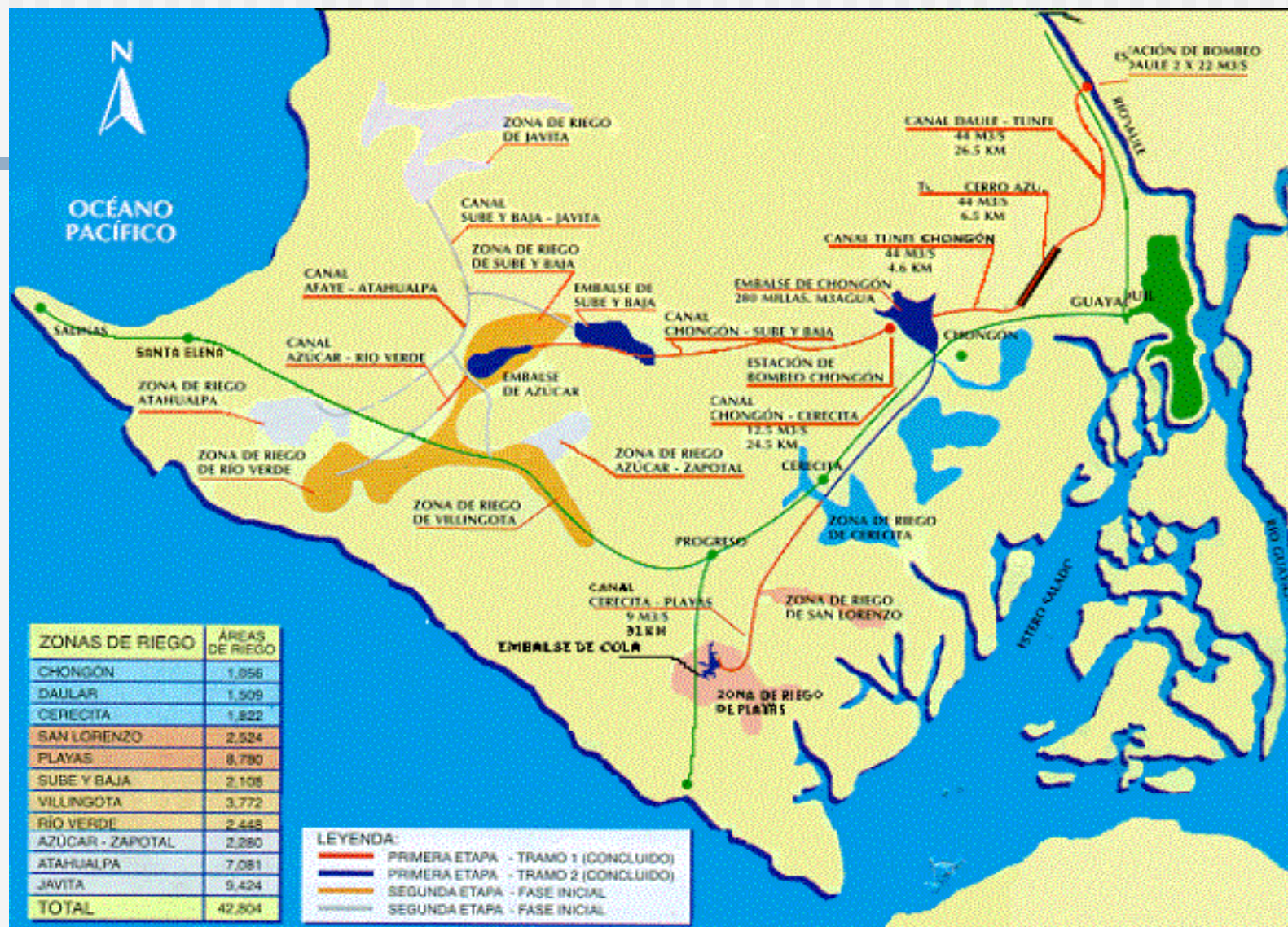
Irrigation System used by land units



Irrigation System used by hectares



IRRIGATION SYSTEM OF SANTA ELENA PENINSULA



REGIONAL CORPORATIONS AND IRRIGATED AREAS

	Irrigable Area	Irrigated Area	% used	Beneficiary families
	Hectares			Nº
CORSINOR	50276	16597	33,00%	24455
CODERECO	42806	8260	19,30%	22742
CORSICEN	18600	7686	41,30%	19321
CODERECH	16927	7220	42,70%	13986
CREA	17004	4070	23,90%	10800
CEDEGE	220171	48820	22,20%	18996
PREDESUR	95730	4302	4,50%	8163
CRM	48950	6400	13,10%	8115
CODELORO	85384	20200	23,70%	3210
TOTAL	595848	123555	20,70%	129788
Source: The National Water Resources Council				

CEDEGE IRRIGATION SYSTEM

	IRRIGABLE	IRRIGATED	BENEFICIARY	MAIN
IRRIGATION SYSTEMS	AREA	AREA	FAMILIES	CROPS
CURRENTLY OPERATING	hectares	hectares		
Manuel de J. Calle	50	17	1.1	Sugar cane, bananas, rice
Milagro	10.88	8	1.049	Sugar cane, bananas, rice
América Lomas	14	5.5	500	Rice, fruit
Transfer (S. Elena Phase I)	20	5	800	Vegetables
Babahoyo	5	4	443	Rice
Higuerón (Daule)	5	3.49	163	Rice, fruit
El Mate	2.45	2.4	50	Rice, fruit
San Jacinto (Daule)	2.5	1.98	88	Rice, fruit
Under construction	40.39		3.96	Rice, corn, soybean, potato, barley, vegetables
Projects	66.02		9.47	Sugar cane, bananas, rice, corn, cacao
TOTAL	220.171	48.82	18.995	

GEOGRAPHIC DISTRIBUTION OF PORTS



EXPORTS BY PORT

2003

Total Exports

PORT	Metric Tons	US\$ Thousands	Metric Tons %	US\$ Thousands %
ESMERALDAS	106,981.70	115,445.90	1.80%	4.20%
GUAYAQUIL	5,640,929.60	2,420,093.90	96.20%	88.70%
MANTA	108,709.00	189,687.20	1.90%	7.00%
PUERTO BOLIVAR	4,439.80	3,720.20	0.10%	0.10%
Total	5,861,060.20	2,728,947.30	100.00%	100.00%
AIRPORTS				
QUITO	209,822.30	424,916.50	85.30%	77.10%
GUAYAQUIL	36,212.50	126,099.80	14.70%	22.90%
Total	246,034.80	551,016.20	100.00%	100.00%

Source: Central Bank of Ecuador, Customs Statistics

TOTAL IMPORTS BY PORT

	2003			
	Total Imports			
PORTS	Metric Tons	US\$ Thousand CIF	Metric Tons %	US\$ %
ESMERALDAS	1.474.999,80	752.051,60	24,30%	15,90%
GUAYAQUIL	3.659.213,20	3.378.690,50	60,30%	71,40%
MANTA	368.806,40	371.666,60	6,10%	7,90%
PUERTO BOLIVAR	566.908,20	226.755,80	9,30%	4,80%
Total	6.069.927,50	4.729.164,40	100,00%	100,00%
AIRPORTS				
QUITO	52.891,30	911.001,20	88,50%	73,80%
GUAYAQUIL	6.888,90	322.988,70	11,50%	26,20%
Total	59.780,10	1.233.989,90	100,00%	100,00%

ROADS

- It comprises state and non-state roads, depending on the institution in charge of management.
- The Ministry of Public Works: responsible for state roads and for controlling and supervising the concessioned state roads.
- The provincial governments: responsible for the secondary and tertiary network and for controlling and supervising the concessioned provincial roads.
- The private sector: in charge of the management of concessioned roads.

ROADS

- State roads: 12 arterial corridors that rank as the principal network and 39 medium-ranking collector roads that are connected to the arterial corridors and receive or direct traffic from and toward these corridors.
- Extension of the state network: 8662 km
- Extension of the arterial roads: 5735 km that run from North to South along the Pacific seaboard, through the Andean highlands, and in the Amazonas region.
- Extension of the collector roads: 2927 km that run across these regions, from East to West.
- According to the assessment of the Ministry of Public Works: the general status of the network is qualified as “average”.

ROADS

- The above-mentioned roads are linked to the port and airport facilities of Guayaquil, as well as to the services of the agents comprising the system, for example, shippers and cargo dispatchers, among others. As a consequence, the good condition of the province of Guayas roads contributes substantially to create positive externalities for the agriculture production of the province and its area of influence, especially when about 80% of the country's agribusiness exports pass through or come from that zone.

ROADS

- The provincial government of Pichincha (where Quito, the capital, is located) is also in charge of operating various roads: one connecting Quito to the Coast through the Northwest and other highways connecting the city to one of the valleys. In the case of Pichincha, the private operators are not in charge of enlarging the roads.
- The Ministry of Public Works has studies for rebuilding and extending more than 2,500 Km of roads. Most of the investment will be financed by credit through the Andean Development Corporation (Corporacion Andina de Fomento).
- Despite those achievements, there is still much to do:
 - Various bridges need to be partially or completely rebuilt;
 - Some roads have been affected by mudslides and landslides;
 - About 200 km of highways must sustain traffic that is greater than their capacity;
 - The artery network of collector roads shows deficiencies.

RURAL ROADS: an innovative project

- The overall road service index for Ecuador is roughly 3.4 km per thousand inhabitants, lower than the regional average of 5.4 km.
- For rural areas, that index is much lower.
- Current conditions of some segments of the rural network don't allow enough access to the production and market centers, mainly during the rainy season.
- In the mountain areas, residents have to face high transportation costs because of: scarcity of service, unsafe conditions on steep and narrow roads, long travel times.
- Communication to some rural communities is only through non-motorized transportation.
- Provincial and municipal governments are in charge of the construction, rehabilitation, and maintenance of rural roads.

RURAL ROADS: an innovative project

- With the exception of those provincial governments where the larger cities are located, most of them show institutional weaknesses and all of them are highly dependent on the budgetary allocation from the Central Government.
- In rural areas, one of the factors that contributes to poverty is isolation.
- Therefore, as part of a program of fighting poverty, the Ministry of Public Works is implementing a project financed by the World Bank, the Inter-American Development Bank, and the Andean Development Corporation on the basis of a pilot project that was already implemented:
 - To provide funds for rehabilitation and maintenance of rural roads.
 - To create a culture of maintenance in the local and provincial governments and strengthen their institutional capacities.
 - To organize the process of participatory planning that involves the rural communities.
 - To promote the participation of local contractors.
 - To promote the creation of microenterprises.



Thanks...