VELASCO
1994.1100
02
c.1

THE CHALLENGE OF CHILE: INFRASTRUCTURE AND PRODUCTIVE DEVELOPMENT

ADDRESSED BY:

MR. EUGENIO VELASCO MORANDE
CIVIL ENGINEER

PRESIDENT
CHILEAN CONSTRUCTION CHAMBER

XV Reunión Conjunta Comité de Cooperación Empresarial Chile-Japón

Tokio, NOVEMBER, 1994

- 03214 -
CAMARA CHILENA DE
LA CONSTRUCCION
Centro Documentación

The geographic location of Chile, distanct from great international markets, but strategically situated in the Pacific Basin; its irregular territorial structure; along with its small but open export-oriented economy and deeper international insertion, emphasizes the important role played by its transportation and communication infrastructure.

Gross Internal Product has increased at an average annual rate of 6.4% This has been achieved through a real effort of private investment which has permitted to start-up production in non-tratidional areas, both in the natural resources as in the manufacture and services areas. The above explains the increase recorded in the last 10 years by the investment rate from 13.3% up to 26.5% in Product permitting the outstanding exports increase at an average rate of 9.% per year.

However, this export success is not only explained by the remarkable increase in productive investmet. During this same period private sector has also invested in technology; has eliminated inefficiencies by expediting, rationalizing and modernizing administrative and production proceedings; has gradually, though significantly, reduced production costs consequently gaining in competitivity which has made it possible to penetrate new markets.

Although this modernization process of the private sector is not still over, nowadays people in Chile are aware that our international competitivity is being threatened mainly by infrastructure shortage and inadequacy, in spite of the investment efforts that displayed by the Government in this area during the last years.

This inadequacy of infrastructure affects directly our exports competitivity with international markets, producing a loss of resources that reduce domestic product.

Thus, for example, just in Santiago, the capital city, the road congestion represent losses of US$ 400 millions each year.

One of our most important exports product, fruit, is subject to damage while it is being transported from the field to the factory due to the bad condition of secondary roads. This losses are estimated in about US$ 100 millions per year; while their is a surcharge on freights of about US$ 430 millions per year for delays in highways and by the premature waste of vehicles due to lack of maintenance and consequent deterioration of inter-urban roads. In addition, US$ 120 millions should be added as a consequence of physical damages that highway accidents produce.

The effect over people health associated to several infrastructure problems are calculated in US$ 200 millions to which US$ 100 millions should be added from gastrointestinal illness caused by the lack of sewage systems and particulary, by the lack of sewage treatment.

Congestion at ports produces delays for more than US$ 85 millions per year.

Only these figures, which do not include total loss from infrastructure defficiencies, mean US$ 1.435 millions per year, which represents 3,5% of our Gross Internal Product.

However, the situation of different kinds of infrastructure is quite different.

In fact, in the electric power sector, since 1980, a regulatory and tariff framework has permitted the increasing incorporation of the private sector to the concession of services and to the owenership of facilities.

A present, 75% of annual investment in this area corresponds to private companies which have recorded sustained increase in productivity and efficiency, high coverage and substantial progress in quality and service, along with a sound financial situation and a profitable operation.

At present, there is no energetic shortage and the development programs of these companies may assure that they are prepared to meet the demand forseen for the middle and long term.

Success achieved by the private electric power companies in Chile has opened ways to increasingly enter in neighbouring countries such as Argentina and Peru where important investments are being made and our know-how and enterpreneurial capacity are being transmitted.

The Telecommunications sector in Chile, 92% of which was operated in 1984 by State companies, was totally transferred to the private sector between 1985 and 1990. At present, a strong participation of foreign capital investments is recorded.

This sector has, probably, been the most dynaminc sector in Chile's economy during the last years and shows a remarkable level of efficiency and great technological development.

The legislation ruling the sector has been improved in recent years, as well as its regulatory and tariff framework. Private companies have important investment programs ensuring and efficient development of the sector.

On the contrary, in transportation as well as in the sanitary service sectors, particularly in connection with sewage treatment – mainly managed by State companies – there are serious infrastructure defficiencies and severe shortages are evidenced in services.

In order to solve those defficiencies and to carry out works required, the present investment level of public infrastructure estimated today in US$ 900 millions, must be doubled.

Based on the above circumstance and since it is not possible to face such a challenge only through public resources, new openings are necessary to the private sector participation in the generation, construction and management of infrastructure works subject to the Public Infrastructure Investment Framework outlined by the Government's Program.

With regard to the sanitary services sector, for example, a US$ 450 millions average investment is required for the next 4 years in order to carry out the development plan of the area. This amount includes the urgent need of plants construction for sewage treatment – where investment is estimated in about US$ 1.500 for this only purpose – to conclude commercial agreements possibilities with countries coalition or with developed countries, where these sanitary conditions will be an essential requirement.

On the other hand, since 1988 several legal regulations have been set forth offering a new legal frame, more complete, modern and consequent for the development of sanitary services, making possible to transfer these services to the private area, the Government keeping the function of policy planning, regulation and superevision of quality and coverage.

Twenty sanitary service companies are presently operating, thirteen of which are State-owned with a 93% share in these services. Sanitary services concessions grant domain right, this right may be transferred in part or as a whole and even the exploitation right may be transferred. This has erroneously been called sub-concession provided these legal processes have been previously approved by the regulatory institution.

Three services sub-concessions have been recently tendered within the area of public works concessions. A new strategy for the sector is presently being outlined to determine the way and scope of private participation in this area of infrastructure.

In relation with the ports sector, export dynamics has already surpassed the limits of progress achieved in the 80's through ports modernization, which permitted the private sector to participate in the operation of some port activities.

Main Chilean ports, all under the Estate administration, surpass internationally accepted limits and are evidencing "bunching" levels.

In addition, present port capacity will be subject to pressure from increasing freight volume which produces additional foreign trade activities, for the convenience to provide service to neighbouring countries and for higher internal coastal sailing volume once - as it is forseen - highway freight transportation is required to pay for the use of infrastructure and for environmental costs that it produces.

Even though private sector has improved port yield through innovative systems and the incorporation of specialized machinery, according to international standards, for certain freigh, efficiency should improve in the use of semi-fixed facilities at quayside where private sector has been restrained from investing.

Our geographical location, along with our political and economic stability, the availability of efficient companies in different kinds of port services, our "know-how" and business dynamics are advantages to place Chile as the passageway between America and Asia.

To face this challenge, it is necessary to complement the present competitive model at Chile's ports through local competition between them but leaving to the private sector the coordination between port development and foreign trade needs.

In order to carry out the above, new legal and institutional changes are under study to nomin. . .. Regulatory Authority, not involved in port operations, only dedicated to establish rules; a maritime concession system provinding some type of regulated ownership; and a clear and pre-defined tariff system for port services.

With regard to railway transportation, where Chile was the Continent's precursor, a remarkable development took place up to mid of the Century, through which large territorial extensions isolated at the time, could incorporate to the economic and social life of the country.

However, the construction of the Panamerican Longitudinal Highway lowered the railway use which started a clear retrocession process since then.

The railway network, constructed and managed by the State Railroad Co. (ERC) is only being used at 10 to 15% of its capacity, with low traffic density and high fixed costs. It is seriously deteriorated for lack of maintenance due to the financial incapacity of the company, which has for several years been subject to operational losses that the State must absorb.

A couple of years ago, a new Railway Law was enacted whereby the private sector could participate through freight transportation concessions and, occasionally, in passenger transportation paying ERC a fee for the use of the railway line and associated services.

At present, only a poor investment program is underway for US$ 80 millions for the restoration of the railway line and rolling material. A tender for the concession of freight transportation is being opened in these days.

It is, precisely, in the Road System sector where a greater investment effort is needed and to which the State should direct public resources to infrastructure.

The Law for the Concession of Public Works has opened the possibility to private participation in public infrastructure, particularly that related to the [illegible]opment of roads infrastructure.

A project to improve the Law for Concession of Public Works is presently under way to make it more operative and to allow the proper increase in the use of the.

In relation to the Urban Road System, the important problems existing in main urban centers ought to be solved. The solution in this regard groups several steps, both to expand offer through the increase of investment, as to rationalize and lower down demand. Investments required by the urban road system only for the next five years will amount to US$ 1,700 millions, whereas today, only US$ 140 millions are invested per year. The investment plan will be complemented with measures to improve transportation and traffic administration.

A Law Project is also under way to establish a road tariff system to expedite the use of roads and to collect from the users the necessary resources for the construction and maintenance of road infrastructure, in general and urban areas in particular, e [illegible] public projects or strictly private initiatives.

Thus, Chile offers excellent business opportunities in the infrastructure sector where there is a great need of important and urgent investments.

The Government has specifically assigned first priority to the solution of the problems of this sector and is, therefore, concentrated on the fastest implementation of measures to attract increasing flows of private investment through, either concessions or through total or partial privatization of public companies operating in the area.

Foreign investors interested in investing in Chile, may benefit from the Foreign Investment By-Laws which promotes investments through benefits and guarantees to bring and return foreign capital.

These By-Laws guarantee foreign investors a non-discriminatory treatment, free access to foreign exchange and no State intervention in their activities.

Chile's future development greatly depends on our ability to channel investments towards public infrastructure - task that will require the joint effort from the State and both local and foreign private investors.

Chile, as Japan, looks towards the Pacific Ocean. Our strategy for domestic development is absolutely determined by our condition of maritime country and by our particular geographical location.

It is not a coincidence that our trade market tripled during the last 10 years and that of Japan and Asia was almost multiplied by five.

Together with this new stage of development that we are starting up, we expect to consolidate our country as the geographic trade axis for countries in the Pacific Basin with South America, while Japan should be its natural partner as a bridge to continue increasing our commercial trade with Asia.

Along with this and beyond commercial exchange, we believe that we may establish interesting business relationship with your country in our areas with infrastructure shortages.

Thus, for example, you have got the most advanced technologies and one of the most efficient railroad system of the world, which may be a sustantial contribution to this sector, helping us to restore ... transportation system through the outline of the best solutions and introduction of investment needed.

Likewise, as previously mentioned, the port area provides a field of wide projections for investment development and joint ventures between Chilean and Japanese enterprises.

There are also openings for investments in other infrastructure areas, as sanitary concessions for construction of sewage treatment plants and concessions in highway works.

Entrepreneurs in Chile have been up to know able to overcome most of the obstance to place Chile in the road to development. We are certain that we will, once again, face this new challenge successfully and the possibility of achieving this goal through mutual cooperation with Japan, makes us optimistic in our success.

****

ANNUAL COMPETITIVENESS LOSSES DUE TO INFRASTRUCTURE SCARSITY

ITEM	MM US$
ROAD CONGESTION IN SANTIAGO........................	400
ROAD DAMAGE TO FRUIT...................................	100
DELAY IN HIGHWAYS AND WASTE OF VEHICLES..	430
PHYSICAL DAMAGE CAUSED BY ACCIDENTS.......	120
EFFECTS OVER HEALTH.......................................	200
GASTROINTESTINAL ILLNESS.............................	100
DELAY AT PORTS..	85
TOTAL	1,435

RELATIVE SITUATION OF INFRAESTRUCTURE (1993)

	TOTAL INVESTMENT US$ M	PRIVATE INVESTMENT TOTAL %	SCARCITY LEVEL
COMMUNICATIONS	480	98%	NONE
ENERGY	500	74%	NONE
IRRIGATION	50	10%	MEDIUM
SANITARY SERVICES	141	24%	HIGH
TRANSPORTATION	563	5%	HIGH

INVESTMENT FRAMEWORK IN INFRASTRUCTURE 1994-1998
AND ESTIMATED INVESTMENT 1990-1993
(IN 1993 MILLIONS DOLLARS)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
SECTORIAL INVESTMENT									
Airports	4.9	6.2	12.1	34.9	13.0	20.0	29.0	9.0	10.0
Arquitecture	81.4	60.5	54.3	57.3	61.5	65.1	69.0	73.0	77.3
Port Works	3.3	15.8	25.9	38.1	24.0	28.0	18.0	13.0	8.0
Irrigation and Basins	9.8	16.3	41.6	52.2	50.0	40.0	49.0	60.0	64.0
Interstate Highway System	183.3	240.6	273.4	294.5	343.0	511.0	585.0	629.0	640.0
Urban Highway System	62.4	52.5	87.6	114.6	152.0	217.0	231.0	267.0	300.0
Subtotal	345.1	391.9	494.9	591.6	643.5	881.1	981.0	1,051.0	1,099.3
DESCENTRALIZED INVESTMENT									
FNDR (Min.Publ.W-Sanitary-Urban Rds.)	38.6	48.8	54.4	56.3	59.6	63.2	67.0	71.0	75.3
Municipalities	34.0	39.7	45.4	45.4	48.1	51.0	54.0	57.3	60.7
Subtotal	72.6	88.5	99.8	101.7	107.7	114.2	121.0	128.3	136.0
GOVERNMENTAL INSTITUTIONS									
Port	8.4	9.4	7.5	10.2	5.7	6.0	6.4	6.8	7.2
Railroad Co. (ERC)	1.5	2.0	1.9	2.0	35.0	35.0	35.0	5.0	6.0
Subway	10.3	2.0	10.4	26.0	37.0	90.0	90.0	83.0	30.0
Sanitary	52.0	82.7	108.8	127.4	179.0	136.0	123.0	119.0	107.0
Subtotal	72.2	96.1	128.6	165.6	256.7	267.0	254.4	213.8	150.2
SUBTOTAL PUBLIC INVESTMENT	489.9	576.5	723.3	858.9	1,007.9	1,262.3	1,356.4	1,393.1	1,385.5
PRIVATE CORPORATIONS									
Sanitary	11.3	11.3	11.3	17.0	17.5	18.1	18.6	19.2	19.7
Ports	2.3	15.0	25.0	10.0	22.0	57.0	52.0	23.0	15.0
Highway Concessions	0.0	0.0	0.0	9.1	53.0	224.0	295.0	210.0	211.0
Interstate	0.0	0.0	0.0	9.1	53.0	188.0	213.0	137.0	138.0
Urban	0.0	0.0	0.0	0.0	0.0	36.0	82.0	73.0	73.0
Airport Concessions	0.0	0.0	0.0	0.0	16.0	8.0	0.0	5.0	5.0
Irrigation and Basins	0.0	0.0	0.0	0.0	2.0	28.0	38.0	38.0	23.0
Railroad	0.0	0.0	0.0	0.0	22.7	22.7	34.0	34.0	35.0
Public Sanitary Corporations	0.0	0.0	0.0	0.0	23.0	60.0	86.0	105.0	325.0
D.W. & S.S Subconcessions	0.0	0.0	0.0	0.0	8.0	13.0	21.0	30.0	38.0
Sewage Treatment	0.0	0.0	0.0	0.0	15.0	47.0	65.0	75.0	287.0
SUBTOTAL PRIVATE INVESTMENT	13.6	26.3	36.3	36.1	156.2	417.8	523.6	434.2	633.7
TOTAL INVESTMENT	503.5	602.8	759.6	895.0	1,164.1	1,680.1	1,880.0	1,827.3	2,019.2

SOURCE: "SUMMARY OF GOVERNMENT INFRASTRUCTURE AND TRANSPORTATION PROGRAM".

INVESTMENT NEED IN INFRASTRUCTURE
TOTAL PERIOD 1995-1999
(MILLION DOLLARS)

SECTOR	1995-1999
SERVICES	
ELECTRIC	2,500
GAS	1,200
TELECOMMUNICATIONS	2,250
SANITARY	2,000
TOTAL	7,950
IRRIGATION	
TOTAL	275
TRANSPORTATION	
PORTS	350
AIRPORTS	150
RAILROADS	350
URBAN HIGHWAY SYSTEM	1,750
INTERSTATE HIGHWAY SYSTEM	3,500
TOTAL	6,100
TOTAL INFRASTRUCTURE	14,325

SOURCE: INFRASTRUCTURE COMMISSION, CHILE'S CHAMBER OF CONSTRUCTION.

INVESTMENT DEFICIT IN INFRASTRUCTURE
(MILLION DOLLARS)

SECTOR	*ANUAL AVERAGE INVESTMENT* 93-94	95-99	*Deficit*
SERVICES			
ELECTRIC	500	500	0
GAS	240	240	0
TELECOMMUNICATIONS	480	450	0
SANITARY	150	400	(250)
TOTAL	1,370	1,590	(250)
IRRIGATION			
TOTAL	50	55	(5)
TRANSPORTATION			
PORTS	48	70	(22)
AIRPORTS	24	30	(6)
RAILROADS	8	70	(62)
URBAN HIGHWAY SYSTEM	150	350	(200)
INTERSTATE HIGHWAY SYSTEM	345	700	(355)
TOTAL	575	1,220	(645)
TOTAL INFRASTRUCTURE	1,995	2,865	(900)

SOURCE: INFRASTRUCTURE COMMISSION, CHILE'S CHAMBER OF CONSTRUCTION.