WORKSHOP ON INDUSTRIALIZATION AND THE STATE IN LATIN AMERICA

AMSTERDAM, 23. - 25. NOVEMBER 1978

INDUSTRIALIZATION AND REGIONAL PLANNING IN BOLIVIA

BY WOLFGANG SCHOOP

Geografisches Institut der Rheinisch-Westfälischen

Technischen Hochschule

Interuniversitair Centrum voor Studie en Documentatie van Latijns Amerika
NIEUWE DOELENSTRAAT 16, 1012 CP AMSTEPDAM, TEL. (C2O) 5253498

CEDLA WORKSHOP 1978 (Amsterdam 23 -25 Nov. 1978) INDUSTRIALIZATION AND THE STATE IN LATIN AMERICA

Session I: Historical and Theoretical Perspectives

- Philip O'Brien, Centre for Latin American Studies, University of Glasgow, "Industrialization and the New Authoritarian State in Latin America"
- Dick Kruijt and Menno Vellinga, University of Utrecht, "Empresa, estado y clase obrera: caso de la minería Peruana (1900-1975)"

Session II: External Aspects of Industrialization and the Question of Imperialism

- Sandro Sideri, Institute of Social Studies, The Hague, "Latin America and the New International Division of Labour"
- David Slater, Interuniversity Center for Latin American Research and Documentation, Amsterdam, "Imperialism and the Limitations on Capitalist Transformation at the Periphery"
- Fred Jongkind, Interuniversity Center for Latin American Research and Documentation, Amsterdam, "Venezuelan Industrial Development: Dependent or Autonomous ?"
- R. Jenkins, University of East Anglia, Norwich, "Multinational Corporations in Mexican Industry"

Session III: The State, Public Enterprises and Industrial Strategies

- Adolfo Dorfman, Ex-Economic Commission for Latin America, "The New Power Groups and the Public Industrial Sector"
- E.V.K. Fitzgerald, University of Cambridge, "The State and Capital Accumulation in Mexico"
- Carlos Fortin, Institute of Development Studies, Brighton, "The State and Capital Accumulation in Chile"
- Dick Kruijt, University of Utrecht, and Oscar Ugarteche, "Autogestión como estrategia de industrialización: mitos y leyendas de la Propiedad Social en el Perú"

Session IV: Spatial and Regional Dimensions of Industrialization

- O. Verkoren, University of Utrecht, "Structural Change in the Industrial Apparatus of Argentina"
- W.Schoop, Geographisches Institut, Rheinisch Westfälische
 Technische Hochschule, Aachen, "Industrialization and Regional Planning
 in Bolivia"
- L. Vladar, Catholic University of Tilburg, "Spatial Aspects of Regional Development in Venezuelan Guyana"
- J.H. Stroom, Interuniversity Center for Latin American Research and Documentation, Amsterdam, "The State and Regional Planning in Venezuela: the Case of San Cristóbal la Fría"

Session V: Industrialization and Labour

- Jackie Roddick, University of Glasgow, "Labour Resistance under Authoritarian Regimes"
- John Humphrey, University of Liverpool, "The State and Labour in Brazil:
 Accumulation of Capital and Class Struggle"
- Juan Carlos Torre, St. Anthony's College, University of Oxford, "El movimiento laboral en Argentina"
- Menno Vellinga, University of Utrecht, "Working Class Bourgeoisie and State in Mexico"

Industrialization and Regional Planning in Bolivia

by Dr. Wolfgang Schoop (Aachen)

When analysing the influence of the state on spatial development and its function in the process of industrialization in South America, Bolivia cannot be regarded as a typical case study. The country is too small, its economy too unimportant. Nevertheless, with respect to this example, two aspects become obvious:

- 1. In Bolivia, the Indian country and landlocked state in the Andes, industrialization is still in its infancy. Therefore, planning decisions in this country are of particular importance for the spatial development.
- 2. The low standard of economic and technical development has clearly influenced the country's relations towards the more developed neighbouring states. One can say that between Bolivia and the industrial centres of the adjoining countries an extreme dependence relationship has come into being, which is a heavy burden for the industrial development of the country.

However, in a small country like Bolivia with about 5 million inhabitants the mechanisms of directing the distribution of new industrial plants can be relatively clearly perceived. Passionate discussions take place between forces favouring either central or regional interests and the tropical low-land town of Santa Cruz reveals itself as particular opponent of La Paz, which is the seat of government of Bolivia.

This leads to two key questions:

- 1. Should regional development planning originate from the local basis, i.e. from the regions concerned, or should it rather be directed by the central government?
- 2. Should policies relating to the location of industrial establishments follow the general South American tendency of concentration or should they support tendencies of decentralization?

Thus in the one case the question is whether the <u>political</u> <u>decision</u> is to be made by central institutions or by local authorities. In the other case, it is in the context of <u>spatial development</u> where either the traditional or the peripheral regions are to be favoured. In Bolivia, however, the scope of decisions about the location of industries will certainly be fairly restricted for a number of industries which are connected with mining.

1.1 Level of Industrialization

As a result of Bolivia's main emphasis on the production of raw-materials, the industrial development of the country has only recently begun. Admittedly there have been a few industrial plants in La Paz since the 1920's and in Cochabamba since the end of the 1930's, but the actual process of national industrialization began just a few years ago. The contribution of the secondary sector to the gross national product amounts to 14 per cent, which is still extremely modest. In 1975 the industrial growth rate was said to be 6.5% annually.

Production is concentrated on consumer goods (64%), which means that production of capital goods is, as expected, still of minor importance. Out of a total of 2.4 million employees only 8.4% or 205,000 people) work in industry. But these statistics also include small manufacturing businesses and workshops so that a mere 2.300 firms are classified as real industrial plants.

¹⁾ Cámara de Comercio..., 1976, No. 5

²⁾ Min. de Plan.: 1976-1980, p. 168 ff

³⁾ In some branches of industry in Santa Cruz this rate was 15 - 20% and thus far above the country's average growth rate. F.J. HEEKE (1974) gives this value for the metal working industry.

⁴⁾ Min. de Plan.: 1976-1980, p. 168 ff

⁵⁾ Altogether there are only 54 plants in the country with more than 100 employees and only 14,000 production and administrative workers are employed in relatively large plants.

(Secretaria de Coneplan, 1975)

Of these plants 46% are to be found in the province of La Paz, another 20% in Santa Cruz and 16% in Cochabamba. (a) La Paz and its immediate surroundings share 2/3 of the country's industrial output. (b)

Several reasons can be mentioned for the late and only gradual beginning of industrialization. 8)

- 1. Since the colonial era the Bolivian economy has been primarily interested in the exploitation of raw material. This was mainly done by foreign companies, who were not interested in further processing of resources in the country.
- 2. With a population of about 5 million people 9, of whom only about 2 million are involved in the market process the internal market for a consumer goods industry is extremely limited. Moreover as a result of the low per capita income in the country purchasing power is very limited.
- 3. In spite of the fact that import taxes exist the inland market cannot be protected against the illegal importation of cheaply produced consumer goods from neighbouring countries. This reduces the selling chances of the Bolivian products.
- 4. The unfavourable topography and the secluded location of Bolivia, which has no access to the sea, result in high transport costs. Moreover the quality of the Bolivian goods is often unsatisfactory. Therefore Bolivian industrial goods are not very competitive in the countries of the Andean Pact and on the world market.

1.2 Promotion of Industry in Bolivia

The secondary sector in Bolivia is intensively supported by a number of ministries, state-authorities, and corporations. 10)

⁶⁾ Secretaria de Coneplan, 1975

⁷⁾ INE, 1974, p. 28

⁸⁾ U. MÖSTA, 1973 and Cámara de Comercio..., 1976, No. 5

⁹⁾ INE, 1977

¹⁰⁾ See table 1

Some of these organizations restrict their activities to certain fields, for example, the state-oil company (YPFB)¹¹⁾ to the refinery system, the national electricity board to the installation of turbines etc. But at present there is not yet a central authority which could prepare and coordinate such industrial activities on the basis of a regional planning concept.

A great number of different industrial projects have been initiated by the central National Development Corporation (CBF), which was founded as early as in 1942. 12) Above all the important agro-industrial schemes of the 1960's (sugar refineries, slaughter-houses, dairies) but also several electro-energy projects and the development of the national concrete industry are achievements of the CBF. This corporation, whose work is partly financed by US-American development aid, participates in the above mentioned projects not only as an investment company but also as joint proprietor with capital resources.

A development organization of more recent origin, which gains particular importance because of the present political structure of the country, is the Corporation of the Military Forces for National Development (COFADENA). It paved the way for the construction of an explosives factory but it has also supported the establishment of other industries such as an assembly plant for lorries combined with a foundry and a forge.

In view of the multitude of organizations in the field of industrial promotion the co-ordinating work of the National Institute for Investments (INI)¹³⁾, which was founded in 1972, is of great importance. Between 1972 and 1975 a total of 275 applications for investment were granted by this authority.

¹¹⁾ For explanation of this and the following abbreviations see table 1.

¹²⁾ Corporación Boliviana de Fomento, 1972, 20 p.

¹³⁾ Instituto Nacional de Inversiones

Unfortunately the institute's work does not seem to be based on any recognizable concept for the regional location of industry. All control of the country's development planning is to be concentrated in the Ministry of Planning in La Paz. However, this new authority, which is answerable to the President, has amazingly little real power. The most important document of this Ministry was a five-year-plan produced in 1976 with the energetic support of the planning institutions of the provinces. However the goals within the field of industrial planning are vague. This publication only mentions general objectives such as:

- . promotion of existing handicraft
- . substitution of industrial import goods
- . increase of export in the industrial sector

Also the instruments to obtain these objectives are only vaguely suggested:

- · training of skilled workers
- · creation of industrial parks
- measures for tax relief and credit assistance (without further explanations)

What is particularly missing are recommendations which locations are to be preferred for the various branches of industry. Unfortunately the aims of spatial development (national integration, conservation of natural ressources etc.) and the aims of industrial development are not seen from a common viewpoint. In spite of the remarkable examples in the neighbouring countries the thought of nation-wide regional planning has not yet emerged.

2.1 The Importance of "Regional Development Corporations"

Since February 1978 a skeleton law 14) has been in operation which grants the regional development authorities a special

^{14) &}quot;Ley General de las Corporaciones Regionales de Desarrollo" (9-2-78)

position in the process of industrialization. Originally the planning institutions in the capitals of the nine provinces (or "Departamentos") came into being as Committees for Pablic Works. 15) In a first stage of development these regional planning authorities were mainly occupied with the extension of the infrastructure. Thus, the provincial capitals and the most important centres of the hinterland were supplied with water mains, roads and electricity, with schools and hospitals. These projects were mainly financed by 'Regalias', 16) i.e. tax money from the production of oil, gas and minerals.

In a second stage since the beginnings of the 1970's have less urgent tasks been taken into consideration. Especially since 1972 problems in regional planning have been tackled by using revenue from rapidly increasing oil taxes. 17)

The new law concerning the Regional Development Corporations delineates the tasks in the field of industrial planning in detail. According to the statute the corporations tasks are: 18)

- to conduct studies
- . to give financial support to research institutions
- . to grant technical aid
- . to conduct projects of their own
- . to co-ordinate all projects of the central authorities and of private enterprise

On the whole this law guarantees strong support for the regional development authorities. It does not appear accidental however that this law was passed under a government whose most prominent representatives came from Santa Cruz. For this law promoted the self-decreed development of this dynamic region. (Cf. the following chapter).

¹⁵⁾ Comité de Obras Públicas (C.00.PP.)

¹⁶⁾ These royalties paid to the respective province capitals amount to 11% of the revenue from mineral oil and natural gas.

¹⁷⁾ Entwicklungsberatung (EB), 1978, 116 p.

^{18) &}quot;Ley General...", (9-2-78)

However, it still remains to be seen in how far this law can be effectively put into practice, especially as at the moment the necessary juridical prerequisites for applying the law are not even available in all the cities. In the case of some of the Committees for Public Works conversion into a Regional Development Corporation has not yet taken legal effect.

2.2 Activities of the "Committee for Public Works" (C.00.PP.)

of Santa Cruz (the most important regional planning authority
in the country)

The foundation of the Committee for Public Works in Santa Cruz was brought about in the forties by a public initiative. 19)
Following the example of Santa Cruz further planning departments were founded in the capitals of the other provinces in the sixties.

With an investment budget of US-\$\mathbb{Z}\$ 44 million (1977) the Committee for Public Works in Santa Cruz is by far the most influential institution for regional planning in Bolivia and thus even has a larger budget than the Ministry of Planning in La Paz. Since 1971 the Committee's own revenue has increased more than tenfold to US-\$\mathbb{Z}\$ 22 million (1977). That is why US-\$\mathbb{Z}\$ 8 million, i.e. almost a fifth of the budget, could already be spent last year on industrial projects.

As dictated by the economic structure of the province of Santa Cruz the first projects envisaged by the Committee in 1972 were production and service enterprises for the processing and sale of tropical agricultural products. ²¹⁾ The selection of sites was not exclusively determined by questions of profit but also by socio-economic criteria. The preference for sites

¹⁹⁾ BRUHLING, U.-Chr. and J.P. UDER, 1975, 90 p. See also: Comité de Obras Públicas/Kienbaum-EB, 1976, Vol. I and Comité de Obras Públicas, 1978

²⁰⁾ U. REYE, 1978 and Entwicklungsberatung, 1978

²¹⁾ U. MÖSTA, 1973 and Comité de Obras Públicas, 1976. See also W. SCHOOP, 1975

in the provincial areas was meant to counteract the tendency towards agglomeration around Santa Cruz.

The sites had to fulfil the following minimum requirements:

1. existence of sufficiently fertile soils for the
necessary agricultural production (orientation towards

raw materials)

2. an existing infrastructure for the establishment of medium sized industrial plants (power supply, transport facilities)

3. centres with increasing population (labour supply)

The agro-industrial enterprises, which the Committee set up in Santa Cruz, are in future to be transferred to private ownership or to be taken over by co-operatives. Here private enterprise is very active. Sometimes there is also competition between the plans of the local planning authorities and the plans of private investors for the realization of similar plans. Occasionally this even leads to project duplication.

For the control of the regional distribution of industries a "Commission for Industrial Sites" was founded in Santa Cruz some years ago. 22) Up to now this commission has operated without legal foundation but nevertheless very efficiently. Besides representatives of the Committee for Public Works this commission also comprises representatives of the municipal planning authority of the water board and of the regional electricity company. By making available or withholding water and power supplies this commission has an important tool for the prevention of uncontrolled industrial settlements.

The regional planning activities of the committee in Santa Cruz are even appreciated outside Bolivia. This is indicated by the enthusiastic response which the founding assembly of the "Latin American Association for Regional Development

²²⁾ Entwicklungsberatung, 1978, 116 p.

Associations" (ALCORDES) received in December 1977 in Santa Cruz. 23)

3. Controversy between Centralistic and Regional Interests

More than 90%²⁴⁾ of the contributions made by the manufacturing sector to the BIP derive from the four provinces situated along the national economic axis La Paz - Oruro - Cochabamba - Santa Cruz. This reveals an unbalanced situation, which may even be aggravated through cumulative processes - as has been shown by MYRDAL. Planning efforts designed to reduce regional disparities by establishing industrial counterbalances in the northern and southern parts of the country, go back to the end of the sixties. The concept of the "growth pole" (after PERROUX/FRIEDMANN)²⁵⁾ which is meant to promote the development of its hinterland in the sense of a generative extension process, first appears in Bolivian literature in the "National Strategy Programme" of 1970.²⁶⁾

But it can be fairly said that in comparison with its eastern neighbour Bolivia shows only modest beginnings for the rise of such "poles", as the infrastructural facilities even near the economic axis are still inadequate. It remains also doubtful whether available resources permit the extension of industries in the desired way in several little towns like Cobija, Vallegrande or Tupiza. Furthermore industrial decentralization in Bolivia may mean the splitting-up of too small a whole and may thus weaken the already existing beginnings of industrial growth. 27)

²³⁾ Asociación Latinoamericana de Corporaciones Regionales para el Desarrollo. See "El País" (7-12-1977); "Presencia" (8-12-1977)

²⁴⁾ CONEPLAN, 1972: "Diagnostico Regional"

²⁵⁾ See F. PERROUX, 1955; J. FRIEDMANN, 1972 and the first more comprehensive analysis in German by J. SCHILLING-KALETSCH, 1976

²⁶⁾ Min. de Plan.: "Estrategia Socio-económica...", 1970. See also S. BOISIER, 1972. See map 1

²⁷⁾ See S. BOISIER, 1972 and the report by G. SANDNER, 1975

The "Five-year-plan 1976-80" 28) indicates that the highest amounts of money for industrial projects under construction were allocated in the provinces of Oruro, Potosi and Santa Cruz. 29) In the highland provinces the high-cost smelteries and the large-scale chemical projects, for which national institutions are responsible, take up a large amount of funds. In Santa Cruz, however, the projects supported are mainly numerous small and medium sized establishments initiated principally by the Committee for Public Works. Taking into consideration only those industrial projects which have been promoted by the Bolivian regional development institutions, the schemes of the Committee for Public Works of Santa Cruz make up one half of these enterprises.

The predominance of Santa Cruz is revealed even more clearly by the fact that it has been allocated 42% of the total investment funds for projects which are in the planning stage between 1976-80. The situation can be typified by the fact that in 1976 the sites had not yet been selected for 21 out of 110 industrial projects.

Projects involved are for example the petro-chemical enterprises of the National Oil Company (YPFB) which could either be established in the highlands at the refinery centre of Cochabamba or in the immediate vicinity of the drilling area in the lowlands near Santa Cruz. Nor had a decision been reached in 1976 concerning the planned ironworks complex and associated plants. The dispute concerning these problems has already continued for several years. In 1977 the feasibility study for a rolling mill near Mutún (Prov. Santa Cruz) on the Brazilian border was finally carried out. 30)

²⁸⁾ Min. de Plan.: 1976-1980

²⁹⁾ See table 2

³⁰⁾ Cámara de Comercio..., 1978, No. 1

With regard to the industrial projects of private investors
Santa Cruz manages to secure 60% of the total planned investments. Out of 33 projects the locations of which have so far
been determined 11 have been carried out in the Santa Cruz
area. Thus the importance of the lowland capital as the most
significant industrial centre of the future has been again

Santa Cruz, with today a quarter of a million inhabitants is sometimes referred to as the continent's most quickly growing city. Table 2 additionally stresses the attractiveness of this city for national and foreign investors.

The discussion about industrial sites has roused strong interregional tensions, which led to the common strategy of several provinces under the leadership of one provincial capital, so that a collective standpoint towards questions of interregional interest could be taken. Accordingly Santa Cruz together with the remaining oil producing provinces protested with vigorous demonstrations against centralistic measures from La Paz, which were designed to give the respective provinces little say in the selection of sites for new industries. Against the background of these regional tensions the support of the Regional Development Corporations brought about by the law of 1978 attains special importance. For this law has to be regarded as a successful counter measure against the centralistic tendencies, which characterized above all the post-revolutionary era of the fifties. At that time several new national institutions, particularly the newly established mining company (COMIBOL), the Agrarian Reform Board or later the foundry board (ENAF) were located in La Paz. 31) This led to an enormous functional strengthening of the main centre. In reply separatistic voices

This can partly be explained by the extreme differences beween the various local political powers. For regional interests are not only represented by the great landowners in Santa Cruz

came from Santa Cruz at the end of the fifties.

³¹⁾ The abbreviations are explained in table 1

but also by the leaders of the National Revolutionary Party in Cochabamba, who are supported by the rural peasant unions, or by the miner's syndicates of the southern Cordillera. For these groups any form of outside determination by central government authorities, even in connection with industrial promotion, is a permanent cause of friction. 32)

4. The Super-National Component in Bolivian Regional Planning

A Country, surrounded by five neighbours lacking access to the sea is obliged to co-ordinate its regional planning activities with those of its neighbouring countries. Especially in the peripheral areas of the extreme north and south, which are strongly influenced by the neighbouring countries, Bolivia sees her national identity endangered and is consequently forced to organize an active regional policy there.

An unconventional proposition was recently made by R.AGUILERA³³⁾ whose model for spatial development³⁴⁾ has three striking characteristics:

- 1. Relief of the existing centres of development (i.e. the provincial capitals) by creating new "growth poles" in the hinterland. Since the discussion of strategies in 1970, beginnings of such measures have been observed in planning practice. However using the term "growth pole" would exaggerate the significance of such centres.
- 2. Transfer of industrial activities into the peripheral areas as yet neglected, aiming at a stronger integration of the different parts of the country. At the moment, however, the infrastructural prerequisites for such an undertaking are lacking and it will possibly take a generation or two until they are available. The development of the peripheral

³²⁾ See W. SCHOOP: Ciudades Bolivianas (in preparation)

³³⁾ R. AGUILERA, 1977, p. 24-29

³⁴⁾ See map 2

areas still undoubtedly remains an important concern, especially as some of the neighbouring countries cast expansionist eyes on these regions.

3. Co-ordination of industrial activities in the border areas with those of adjoining regions. Thus the already existing co-operation between some towns on both sides of the border receives strong support. Due to active measures taken by the Bolivians the existing predominance of foreign poles could be reduced, so that the Bolivian position in border areas would be strengthened.

Such a development can apparently be realized at least in three places:

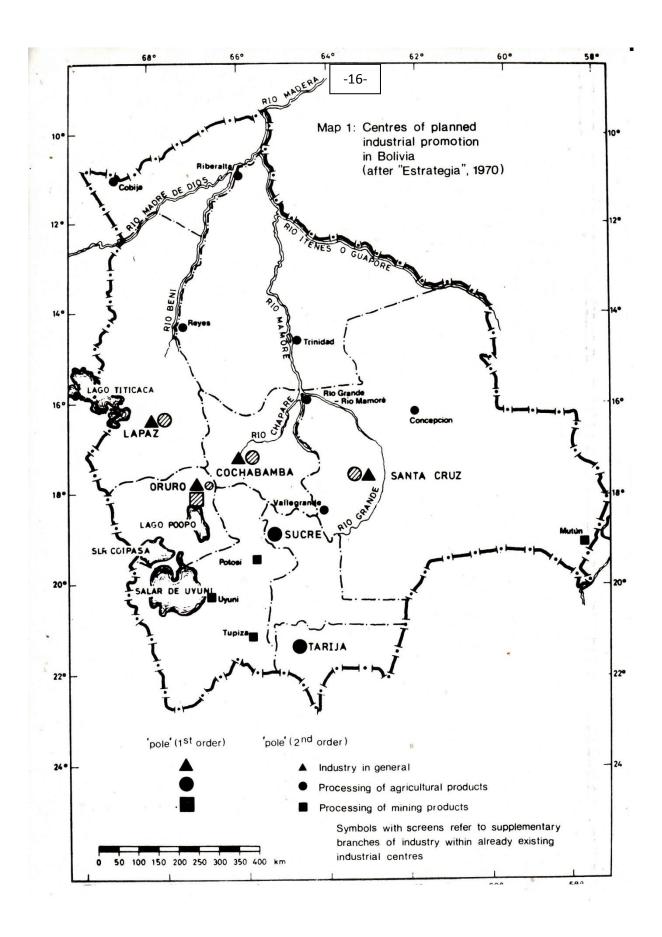
- 1. In the southern oil-producing areas of Bermejo and Yacuiba. Here the power lines as well as the pipelines for natural gas already connect neighbouring border areas.
- 2. In Mutun, on the Brazilian border, said to be the largest iron ore deposit on the continent where in a few years a vast ironworks will be established, the construction of which is being assisted by the neighbouring countries.
- 3. In Riberalta, the capital of the collection areas for rubber and Brazil-nuts in the north. Particularly because internal communications with the central region will still remain inadequate for decades, there are good chances for a continuing development of this centre.

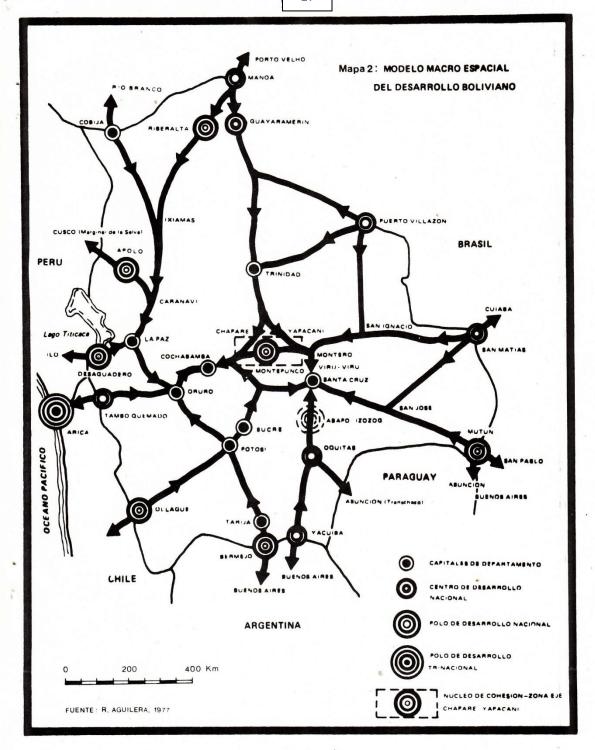
The AGUILERA model was neither developed by the central authorities in La Paz nor by the local planning institutions of the provincial capitals. AGUILERA presented this certainly very abstract model from the perspective of a non-official. The special value of this model proposition lies in its contribution to the integration of the Latin American nations. Such plans are all the more important in the central part of the continent, since Bolivia plays the role of a connecting link between the Andean countries, the La Plata countries and Brazil. This must be regarded as an important political function of the country.

Abbreviation Name El Banco Industrial Indus COFADENA Corporación de ment Pomento COFADENA COrporación de ment Desarrollo COMIBOL COPPORACIÓN BOLIV MINETA BOLIVIANA COPPORACIÓN ENAF Empresa Nacional Armed de Fundiciones Comps INI GE Plan Ministerio de Minis Planeamiento y Plana COORDINACIÓN de La República YPFB Yacimientos Petro-Natio Liferos Fiscales BOLIVIANOS BANCO ÚNDAÍSI WORLO	Translation	Field of activity or project	"Dengrtament
Corporación Boliviana de Fomento Corporación de las Fuerzas Armadas para el Desarrollo Corporación Minera Boliviana de Fundiciones Instituto Nacional de Inversiones Tacimiento y Coordinación de la República La Rep			
Corporación Boliviana de Fomento Corporación de las Fuerzas Armadas para el Desarrollo Corporación Minera Boliviana de Fundiciones Instituto Nacional de Inversiones de Inversiones Tacimiento y Coordinación de la República La R	Industrial Bank	private investments	especially Santa Cruz
SOL Corporación de las Fuerzas Armadas para el Desarrollo Corporación Minera Boliviana de Fundiciones Instituto Nacional de Inversiones de Inversiones Coordinación de Plan Ministerio de Plan Ministerio de Planeamiento y Coordinación de la República Yacimientos Petroliferos Fiscales Bolivianos Banco interamentanos Desarrollo Banco Mundial	Bolivian Develop- ment Corporation	sugar works dairy	Santa Cruz
Minera Boliviana Empresa Nacional de Fundiciones Instituto Nacional de Inversiones de Inversiones Decordinación de la República Yacimientos Petro- liferos Fiscales Bolivianos Banco inter- americano de Desarrollo Banco Mundial	Development Corporation of the Armed Forces	van factory, explosives factory, foundry	Cochabamba
Empresa Nacional de Fundiciones Instituto Nacional de Inversiones de Inversiones la Instituto de Planeamiento y Coordinación de la República Yacimientos Petro- liferos Fiscales Bolivianos Banco Inter- americano de Desarrollo Banco Mundial	Bolivian Mining Corporation	zinc sulphide processing plant bismuthic works	La Paz Potosi
Instituto Nacional de Inversiones de Plan Ministerio de Planeamiento y Coordinación de la República Yacimientos Petro- liferos Fiscales Bolivianos Banco inter- americano de Desarrollo Banco Mundial	National Foundry Company	artificial fertilizers	
de Plan Ministerio de Planeamiento y Coordinación de la República Yacimientos Petroliferos Fiscales Bolivianos Banco interamericano de Desarrollo Banco Mundial	National Invest- ment Institute	general approval of projects	all "Departament
Eliferos Fiscales Liferos Fiscales Bolivianos Banco Inter- americano de Desarrollo Banco Mundial	Ministry of Planning	coordination; formulation of 5-year plans	all "Departament
Banco Inter- americano de Desarrollo Banco Mundial	National Oil Company of Bolivia	refineries	Cochabamba Santa Cruz
Banco Mundial	Inter-American Develoment Bank	concrete works	Santa Cruz
	World Bank	turbine installation	Santa Cruz
CAF Corporación And Andina de men Pomento	Andean Develop- ment Corporation	factories for pesticides, tungsten-carbide pro- cessing plant	La Paz

Tab. 2:				1)
Regional Dist	ribution of Inves	Regional Distribution of Investments in Industry (5 - year Plan of Bolivia, 1976 - 80)	ear Plan of Bol	ivia, 1976 - 80)
	Proje	Projects under Governmental Control	ntrol	Projects of Private Investors
Departa- mentos	Under construction (million US-\$)	Thereof: Under supervision of Regional Planning Authorities(mill. US-\$)	In the stage of planning (million US-\$)	Under construction (million US-5)
La Paz	30,0	1,6	35,6	21,4
Oruro	118,8	2,6	1	2,1
Potosı	104,5	0,9	58,3	1
Cochabamba	51,9	4,2	225,7	5,6
Sucre	5,3	4,1		1
Tarija	13,1	1,3	42,0	5,1
Santa Cruz	63,1	27,9	302,3	62,0
Trinidad	9,8	9,8	46,8	3,4
Cobija	0,2	0,2	ı	1
Unspecified	15,0		1	5,7
Sum	410,5	57,1	710,7	105,3

1) Min. de Plan: "Plan de Desarrollo Economica y Social", 1976 - 80, S. 169 - 177





List of Sources

- AGUILERA, Rolando: Modelo Macroespacial del Desarrollo Boliviano. In: Revista Económica. Vol. III, 1977, No. 10, p. 24-29
- BOISIER, S.: Polos de Desarrollo. Estudio de Bolivia, Chile y Perú. UNRISD (Informe No. 72.1) Genf, 1972
- BRÜHLING, U.-Chr. und J.-P. UDER: Regionale Entwicklungsgesellschaften als Trägerorganisationen für Programmhilfe. (Institut für Allgemeine Überseeforschung) Forschungsarbeit im Auftrage des BMZ. Bonn/Hamburg, Dez. 1975, 90 p.
- Cámara de Comercio e Industria Boliviano-Alemana: La Paz (Bolivia) Informationsbriefe. Jan. 1976 - Sept. 1978
- Comité de Obras Públicas / Kienbaum-EB: Regionalplanung Santa Cruz - Bolivien. Düsseldorf, März 1976, Vol. I Regionale Makrodiagnose, 160 p.; Vol. II Regionale Entwicklungsstrategie, 298 p.
- Comité de Obras Públicas (Oficina Técnica del Plan Regulador):
 Modelo de Ordenamiento para la Microregión de Santa Cruz
 (MOT). Vol. I Modelos. Vol. II Diagnósticos Sectoriales.
 Santa Cruz (Bolivia), 1978
- CONEPLAN. Diagnóstico Regional, La Paz, 1972
- Corporación Boliviana de Fomento: Treinta Años al Servicio del Desarrollo Nacional. La Paz, 1972, 20 p.
- El País (7-12-1977): Santa Cruz Sede de Organismo Financiero de Corporaciones
- Entwicklungsberatung (EB) Abschlußbericht zum Projekt "Regionalplanung Santa Cruz / Bolivien". Santa Cruz de la Sierra / Düsseldorf, Juni 1978, 116 p.

- HEEKE, F.J.: Stand und Perspektiven der metallverarbeitenden Industrie im Großraum von Santa Cruz de la Sierra. (Kienbaum UB) Düsseldorf, Dez. 1974, 49 p.
- Instituto Nacional de Estadística (INE): Bolivia en Cifras 1973. La Paz, 468 p.
- Instituto Nacional de Estadistica (INE): Adelanto Estadistico Industrial 1970-71. La Paz, 1974, 58 p.
- Instituto Nacional de Estadística (INE): Resultados Provisionales por Departamentos. Censo Nacional de Población y Vivienda. La Paz, 1977, 9 Cuadernos
- "Ley General de las Corporaciones Regionales de Desarrollo". (Ley No. 15307). 9. Febr. 1978. La Paz Bolivia
- Ministerio de Planeamiento y Coordinación de la Presidencia de la República. Plan de Desarrollo Económico y Social. 1976-1980. Resumen. La Paz, 1976, 333 p.
- Ministerio de Planificación y Coordinación: Estrategia Socio-Económica del Desarrollo Nacional. 1970, Vol. I, 266 p.
- MÖSTA, Ulrich: Bericht über die Kurzzeitberatung zur Finanzierung agroindustrieller Vorhaben im Rahmen der Regionalplanung Santa Cruz / Bolivien. (Kienbaum - EB) Sept. 1973, 61 p.
- Presencia (8.12.1977) Se creó Asociación Latinoamericana.de Corporaciones para el Desarrollo
- REYE, Ulrich: Regionalplanung Santa Cruz / Bolivien. (Bericht No. 18), Mai 1978, 11 p.

- SANDNER, G.: Wachstumspole und regionale Polarisierung der Entwicklung im Wirtschaftsraum. (Festschrift für E. OTREMBA). Beihefte zur Geographischen Zeitschrift, Vol. 41, 1975, S. 78-90
- SCHILLING-KALETSCH, I.: Wachstumspole und Wachstumszentren. Hamburg, 1976, 206 p.
- SCHOOP, Wolfgang: The Potential and Limits of Bolivian Agriculture. In: Economics. Vol. 12. Institute for Scientific Co-operation (Tübingen), 1975, p. 34-62
- SCHOOP, Wolfgang: Ciudades Bolivianas. In: Encyclopedia Boliviana. (Amigos del Libro) Cochabamba 1979, 201 p.
- Secretaria de Coneplan: Estudio Industrial de Bolivia. La Paz, 1975