

### **3 Information about Bolivia**

#### **3.1 General demographic data**

Bolivia is situated in the centre of South America neighbouring with Brazil, Argentina, Peru, Paraguay and Chile. Bolivia has an extension of 1.098.581 km<sup>2</sup> and a population, estimated for the year 2000, at 8,33 millions of habitants.

The official language is Spanish and the principal native languages are Quechua, Aymara and Tupi Guaraní. The State recognizes as official the catholic religion, but respects freedom of religion. There is an important ethnical and cultural diversity (37 groups and 10 linguistic families) in the country. The right to differ and be different and the recognition of the diversity mentioned above are contained in the Political Constitution of the State, which establishes that Bolivia is multiethnic and multicultural.

The Bolivian population is still young, in the year 1992, 40% was between 0 and 14 years old and 6% were older than 60 years. The annual growth rate exceeds 2%, and the urban growth rate is four times bigger than the rural growth rate (3.3% y 0.8%, respectively). The population distribution is uneven, the average density is 8 persons per Km<sup>2</sup>, between areas that have less than 1 person per Km<sup>2</sup>. There exists areas with more than 20 persons per Km<sup>2</sup>.

The majority of the population concentrates on the central axis, integrated into the three main cities of the country (La Paz/El Alto, Cochabamba, Santa Cruz). On this axis, we find the bulk of infrastructure and economic activities.

The social capital in Bolivia is expressed in nets and solidarity ties of the community, work and family, which constitute an important aspect of human development.

#### **3.2 Social indicators**

Although the social indicators improved in the last two decades, Bolivia could not overcome the poverty conditions in which greater part of the population live. Six of every ten Bolivians live in poverty conditions (63%), more than the half of which live in abject poverty (37% of the population) and the majority of the poor live in the rural area (82% poverty and 59% abject poverty).

According to the IDH 1999 (rate of Human Development), Bolivia has the position 112 of the 174 countries in the human development ranking, being in the group of countries with an average human development and having the lowest rate of the South American countries

### **3.3 Economic rates**

In the 90ies, Bolivian showed an annual growth rate of the GNP (gross national product) of 4%. The inflation rate reached 3,1% in 1999.

The international investment growth and all whole public organizations were privatized. Nevertheless, as the Bolivian economy is very vulnerable in relation to the international context, the economic crises of Asia and Brazil in particular have had a negative impact on the growth rate of the GNP, which had fallen to 0.61 in 1999. The quick reduction of the coca production between 1998 and 1999, the major observed in the last ten years, also made a negative impact on the Bolivian economy.

In this context, the public debt which reached 4,3 thousand millions of American dollars in 1998 (50% of the GNP), has been reduced to 1.300 millions of US\$ through the initiative of „poor countries high indebted“.

Bolivia takes part in the globalization process, as is mentioned in the report on human development 2000 of the United Nations. This fact is reflected in the capitalization<sup>2</sup> of the main public companies, the internationalization of many national organizations, the presence and quick development of transnational financial capital, the integration to regional markets together with the neighbor countries, and the expansion of the industry and the cultural market through communication nets as television and internet.

### **3.4 Political and Institutional development**

The efforts to modernize in Bolivia are being made in a democratic environment favorable to the development of the citizens. Social relationships are established on

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<sup>2</sup> Capitalization emerges as an alternative to privatisation. The principal objective was to maximise the efficiency and productivity of the new capitalized firm. Transfer of public firms to the private sector through an injection of fresh private capital as the exchange of 51% of participation and 100% of the administration. The investor paid an amount to the National Treasury for the company and should invest another amount to reactivate, expand and modernise the firm.

more equal levels and terms, which leads to active and broader participation and, thus propitious for the human development.

The context and the conditions mentioned above are radically different from those of political instability, which were characteristic of the country until 1981, and are the result of the joint actions of various social agents. In the process of their activities there emerged the bases for a new political culture supported with respect to diversity and human rights as well as regarding the negotiations and political agreements.

The process of modernization and transformation of the Nation, that followed the program of economic stabilization initiated in 1985, is oriented at a state which regulates and facilitates private activities, and to a decentralization that facilitates the regional development processes making them more efficient, fair and participative.

Under the new key role played by this State, in the economy, privatization as well as capitalization of public organizations have been implemented. Foreign investment and the expansion of the private sector have been promoted through those changes.

Currently, the government's general objective is to continue with the battle against poverty in the framework of the reforms carried out by the past government, but also implementing newly conceived reforms, e.g. the customs reform, education reform, basic services and creation of a health care system. Successful Strategies to eradicate illegal coca cultivations are worked out and implemented for modernizing and transforming the nation.

### **3.5 Historical precedents of industry in Bolivia**

In Bolivia, the tradition of the large mining industry relegated the industrial sector to a subsidiary position in the context to the national economy. Therefore, the current manufacture structure is the result of the countries delayed process of industrialization as well as the protectionism politics procedures and substitution of importation which accompanied this process.

At the beginning of 1937, an inflationary process occurred, which produced a severe lack of currencies, due to higher expenses caused by the Chaco War.

1939-1951

Perceived in international context, the 1940s were dominated by the second World War and its terrible consequences. The War and the subsequent Europe Programs of

reconstruction ended with the world wide leadership consolidation of the United States of America.

Specifying on the Bolivian industry and its inland context, the second big fall of the mineral prices which Bolivia was exporting produced a lack of international currencies that characterized the whole decade, creating a lot of problems in the industry sector. Especially those who imported machinery, equipment and industrial resources for the installation or expansion of industrial plants and production processes were affected.

In 1939 the difficulties to acquire petroleum increased significantly. The leather industry among other industries suffered from raw material shortage which were supposed to supply internal and external market demands.

In 1941 as a result of the economic situation, efforts of the Bolivian industry began to attract American investors who aimed at the increase of production levels. In this year, the first efforts to industrialize the country began. One significant event was the formulation of the Industrial Promotion Law in 1945, as well as the promulgation of Commercial Treaties with their neighbor countries Peru and Argentina especially in 1946 and 1949.

1952-1957

The industry in the decade of the fifties was influenced by urgent financial needs in industrial companies, an increase of the irregularities in the labor discipline and an open American campaign to lower the international tin prices, (the principal of Bolivian export product.)

The bloody revolution in April 1952 created a populist government, which declared a transforming accent on the production forms and a strong intervention of organizations and labor union leaders in political and production activities. The government defined itself as the representative of the “great national majorities” whose purpose was to end with the great landowners.

The overall characteristic of this period was, that due to the inflation it got out of control since the labor unions pressured the government who were not able to not stop giving in to their demands. The economy circle and the enterprise’s activities were strongly affected and many limited industries became bank credits in order to pay employees salaries.

In these complicated years, a low growth rate of internal consume was threatening to result in an economic depression. Several employee's and worker's strikes reduced the industrial production level dramatically. Between 1952 and 1958 the industrial economy fell in a recessive circle and registered the participation of the industry sector at about 14% of the gross national product.

1958-1965

Protectionism Economic Development characterized this period with the Latin America of free Commerce Agreement.

In an environment of recovery for the industrial economy, the model of substitution of importation permitted Bolivia the creation of a basic industrial infrastructure, although frequently, the production plans exceeded the installed infrastructure and corruption threatened the model.

In the second half of this decade, the industrial sector reached 16% of the gross national production: one of the higher averages that showed a recovery of the industrial circle.

In respect to the foreign trade of industrial products, the exportation of sugar to the United States represented a great conquest in the industrial strategies.

The state structure showed features of a patrimonial-state system, which exceeds collectively benefited the politic class although it was not proprietary of the principles production resources.

This elite was interested in expanding the state functions, including the government economic activities. The administration of the big state enterprises and the near enough monopoly of the more important positions of the bureaucratic system made up the two columns on which the politic elite was placed. The administration of this enterprise was technically mediocre and ethically corrupted and the control, which the civic society held was insufficient. The politic elite came from an ethnic-cultural sector with a high formal education and international contacts but was very reluctant to technology, politic-institutional and behavior innovations.

In 1962, the general situation was favorable to the expansion of the state functions in all fields, including the economic field. The Bolivian state tried to modernize the

industrial sector and the general infrastructure of the nation in a very centralized way.

In those years the private companies sector considered that the founts for the industrialization model should come from the mining industry especially from the state mining industry. The private sector understood its role as secondary and the principal function was to stay under state control.

#### 1966-1974

At the beginning of this period the international lack of petroleum increased its price all over the world. The market became saturated with the “petrodollars” and the undeveloped countries obtained easy bank credits. This scenery of available currencies added to the efforts of the government and the private sector to boost the industrialization, configuring a property environment for the expansion of production activities.

The industry ended in the 1960s representing 17% of the gross national product. Between 1970 and 1975 it achieved almost 18% and a yearly growth rate of 6%. It was a period in which the relative importance of the industry in the national economy was recovered.

#### 1975-1981

The disposal of resources and plans of development generated an economic growth in the country but increased the national debt simultaneously. At the end of the 1970s and beginning of the 1980s a tremendous economic and political chaos with disastrous consequences began, demonstrating the sensibility of private industry agents towards the political instability of the previous dictatorial times. The growth rate of the industry which in the previous decade registered higher than in the last fifty years, began to decline notoriously at the end of the 1970s and registered negative valuations (-1,6%; -3,3% and -7,2% for 1979, 1980, and 1981 respectively). With great difficulty the industry was able to represent 16% of the gross national product and the smuggling and informality consolidated as the economic scenery showed clear tendencies of an imperfect internal market.

This perspective, before dictatorial governments, social movements orientated themselves in order to recover the democracy, basing their efforts on the strong dissatisfaction of the population, who were, due to the lower salary levels, unemployed and corrupted.

One important aspect which accelerated the Bolivian economic crisis was the confrontation with the high interest rate of the “flexible” bank credits in the petrodollars times which was negotiated by almost the whole of Latin America.

This were the conditions in which Bolivia recovered its democracy.

1982-1992

Between 1981 and 1983 Bolivia experienced a gradual decline of the industrial production and showed severe tendencies of paralysis in the productive processes that typified a dangerous economic recession and hyperinflation. Bolivia entered an inflationary spiral with rates that exceed all the phenomena of hyperinflation of the post war in European countries. This environment conditioned a permanent social and political instability riddled by protest expressions such as strikes, blockade of public routes, factories occupations. The government gave up to the pressures of trade unions, and increased the salaries without objective criterion and without any support of productivity.

When the external sources of financing were exhausted the government resorted the Central Bank of Bolivia which increased the inflation rate and displaced the country to a hyperinflation status in 1984.

The economic crisis in 1985 outlined the following growth rates: gross national product: -1,9%; industry: -5,4%; agriculture: 1,2%; mining industry: -10,8%; Petroleum: 1%.

In order to stop the situation the government took action in several fields, such as the reduction of the public expenditure, free commerce and reformation of the work market which resulted in the establishment of free hire workers. This politic-economic measurements consolidated the transition of a State Capitalism model, valid since 1952, to a model in which the market plays a fundamental economic role.

The two positive consequences that followed were the stability of the macroeconomics and the process of transparent economic relations. The costs of this transition were the massive dismiss of workers and the increase of unemployment and informal markets.

1993-1997

The 1990s is without doubts a decade of transformations in Bolivia. The systems of regulation, the markets reforms, the capitalization and its consequences meant, that the Bolivian economics were open to international commercial tendencies.

The industry sector was not ready to face up to the globalization because of the extremely politicized national environment. Structural deficiencies (infrastructure, education and population density) prevent a great general growth rate (4% annual) and industry of 17% respect to the gross national product.

1998-2001

In the middle of 1997 began a new recessive cycle in the industry sector. The Asia crisis and the late government reaction to the economy contraction, made the negative impacts of the economic world collapse in the productive sector worse and caused serious financial problems in the industry companies.

In this context some measurements were adopted to strengthen the industry's activity in order to generate wealth, employment and exportable offers. For example joint actions were developed between private and public sector in ways of strategic alliances or the creation of the Centre of sustainable technology Promotion (CPTS).

In the last ten years, the continuity of a deficit balance of trade, a average fiscal deficit of 4% annual and a extern debt of more than 4.000 millions American Dollars configured a macro economic environment which was not competitive but stable. The decrease tendency of the inflation level (3,4% for the year 2000) and the continuing foreign investment levels superior to 600 millions American Dollars permit (taken from an average of the last five years) understand the macro economic stability in Bolivia.

The structural restriction of the industry to higher growth rate levels and more participation in the economy, is encouraged by the concentration of the Bolivian offer in foodstuffs and beverages (almost 40%). This composition was not improved although the national efforts of investment promotion were localized to the hydrocarbon industry and services. These investments were high in capital but generated low rates of employment and a low generation of added value.



To encourage foreign investments in the Bolivian industry is yet an unresolved theme.

In the half and long term, the potential of the industry is clear. Only the directed and purposeful investments with coherent incentives would correct the economic tendency to be a country of “excesses without accumulation”.

### **3.6 Important rates of the Bolivian Industry**

The economy in Bolivia showed a continued growth since 1988 and reached a national gross product growth of 4,2% in 1994. Principally, this can be explained by the agricultural modern dynamic (Soya, cotton), the hydrocarbon industry and manufacture.

In 1994 the industry sector reached a growth of 4,8%. On the one hand this statistic was superior to the 4,3% in 1993 but on the other hand, it decreased to 4,2% in 1995.

In relative terms this sector contributed to the national gross product in an almost constant way the last years; with a participation near to the 14% and with a growth a little superior to 4%.

Another characteristic was centralism (which came before the Decentralization law and Participación Popular law). On the one side, the manufacture industries were in principle developed in the three most important states (La Paz, Cochabamba, Santa Cruz), concentrating 77,7% of the national industrial gross product, 81% of the industrial employment and 75% of the industrial establishments.

On the other side, the analysis of the production rate for 1988/1992 shows that the principal industry activity contains the foodstuff area with 31,6% of the industry production, and the petroleum refinery with 28,2%. Both areas add up to the 60% of the Bolivian industrial activity.

Lower rates are shown in the beverages production with 9,6% of the total industry production, not iron metals 5%, not metal minerals 4,3%, textiles 3,3% and 2,6% for paper and derives. Finally wood production contributes with the 2,1%. As a whole these products represent the 27% of all of Bolivia's industrial production.

The analysis of the growth rates of principle activities shows the dynamic of every area: 1990/1992, the beverage production had the higher growth rate with 22%, followed by foodstuff production with 14,3% and tobacco industry with 14,2%.

The rest of the Bolivian industry had minimal growth rates, showing its stagnation. For example textile industry has only 0,17% of annual growth, wood industry 0,06% and petroleum refinery 0,10%. Consequently the industry sector growth depends basically on the production of foodstuff, beverage and tobacco.

In respect to the size of the companies, the structure of the present Bolivian industry shows a strong participation of small productive units, compared to middle and big establishments (micro companies 1-4 workers/employees; small industry companies 5-14 workers/employees; middle industry companies 15-29 workers/employees; big industry companies more than 30 workers/company). The presence of small and micro companies became stronger in the 1980s because of the crisis and the structural adjusts. At the present, its quantitative importance in the industry is of high significance.

During the first years of the economic structural adjustments (1985-1987), employment in the private sector (services, commerce, transport) grew to an average of 32% annual and only 3,6% in the industrial sector.

According to the National Industry Association and the National Institute of Statistics, between 1993 and 1996 the industry sector contributed with 17% of the national employment and for the year 1997 the employment in this sector reached the number of 80.000 workers, of whom 47% correspond to the big and middle industry companies and the rest 53% to the small and micro industry establishments.

Therefore the manufacture sector incorporated between 1990 and 1995 inhabits approximately 21.000 workers, meaning that 3.000 new work places were created. The growth annual rate of employment reached 6% in average.

Respect to the sector distribution of the employment, textile and jewellery production incorporated a lot of workers between 1990 and 1995, with an increase of 18% to 22% in the first case and of 2% to 3,5% in the second. Other important sectors like foodstuff, beverage and tobacco industry generate the 26% of employment in the industry.

### **3.7 Previous studies in industry sector.**

In the Bolivian Industry, few studies have been carried out in the Human Resources area, most of these were in the metal-mechanical field. The results showed that these

companies were facing many problems, and furthermore, were exposed to global competition risks. Therefore, they must expand to satisfy the national demand and reach the international market while simultaneously improving their product. This does not happen overnight, it is a process of adjustment, growth and modernization that implicates all aspects of a company.

Particularly at the Human Resource Management area, most companies acknowledge that many of the problems they are faced with relating to working conditions are due to their own irresponsibility; for example, the difficulty to reduce labor risk, unsanitary conditions, as well as the use of inadequate equipment.

Ergonomic theories are practically unknown by the Bolivian industries. Executives, technicians and workers tend to solve problems through practice, experience and intuition, without using a scientific approach.

In regards to external rotation and absenteeism, studies confirm that the voluntary rotation of professionals, technicians and qualified workers is not as significant as absence and unpunctuality.

There are also diverse and important intrinsic difficulties in relation to the salary system, among the ones mentioned by the companies there are: the implementation of a performance system, performance evaluations at the individual and team level, inadequate incentives and promotional systems.

Companies are also faced with a lack of qualified labor at the technical level, most of the technicians and managers limitations (mainly lack of professional technicians and manager's inadequate qualification) are the difficulty to assume responsibilities and make decisions.

The absence of training programs, workers/employees incentives to participate in training, the difficulties to retain qualified labor, and the lack of special programs for managers and supervisors were also identified as clear basic problems. Other important reasons is orienting training programs to the specific technical requirements of the company and the high cost of these programs. The most benefited by training programs were managers and supervisors, and the least was the feminine labor.

The principal criterion to select workers in the industry is previous experience in the area, academic level and specific technical qualifications. On the other hand, identi-

fication with the company values, team work skills or the disposition to learn new skills are not considered crucial factors.

In counted cases, companies turn to specialized institutions or consulting firms to select staff, because it is hard to find compatible time frames and the economic cost involved.

Most companies recognize their limits and difficulties in the Human Resources area. Many of them consider as the main problems the lack in communication and cooperation between employees. Other difficulties rely on the workers resistance to technical and organizational changes, lack of communication between supervisors and workers/employees and the absence of technical and economical information to the staff.

Also a lack of motivation, identification and commitment with the job characteristics and with the company itself, according to some studies, affect negatively on human relations.

These problems make it difficult for industrial companies to become competitive and to participate in international markets.

Although some efforts have been made. The State Government, from a political-economical perspective, has boosted structural reforms (capitalization from public enterprises, administrative decentralization, education reform, popular participation, to name a few) that translate into productive investment growth and consequently in improved Human Resources staff development strategies in many Bolivian companies.

Nevertheless, this process seems to be poorly systematic, without specific goal in mind. Motivation to change positively, comes from external incentives and is not a planned and coherent process.

The steps and solutions taken so far tend to be at a structural level, like fire alarm systems and in the technical area, without mentioning the high economic investment that a modernization process implies.

Despite the secondary role that the industry sector occupies in Bolivian economics, international tendencies and internal processes have experienced important modifications. Both managers and workers/employees confront many changes. Probably the

principal challenge that Bolivian industries are faced with is to attract the main international markets. Therefore, it will be necessary to develop competitive aptitudes and skills to confront global competition. Such been the case, the next tasks should be identifying and comparing other markets advantages in order to improve quality and productivity levels.

Achieving this objectives would require the joint efforts of companies and employees. The experience in other countries demonstrate the importance of qualified labor and environmental protection to succeed in global markets. Workers and employees challenges are important. First, technology innovation reduces job demand which affects directly on the less qualified staff, mainly women and older employees. Considering the importance of the negotiation process and diversifying the demands beyond the salary could improve job conditions and encourage more participation of workers/employees in organizations.

An open mind, managers broad vision and committed workers are necessary to reach consciousness on this issues. One of the most important pillars of consciousness could be a healthy leadership that spurs committed employees.

In this new era of multiple changes, it is the effect of new organizational cultures and leadership styles that influence the working environment. Employees are key pieces of an organizations and can only be motivated, for the company's benefit, once they become truly engaged with the organization and its goals.

To achieve goals like entering international markets and becoming productive organizations, it is necessary to consider many areas of a company, not only high technological issues but satisfied employees and committed workers who improve as one force for the succeed of the organization.