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Poverty, inequality and human development of indigenous peoples in Bolivia

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1. Introduction

Bolivia, with a GDP per capita of US\$ 980, is the poorest country in South America (EIU, 2005). This land-locked country has had since its independence in 1825 a legacy of extreme levels of poverty, high economic and social inequality, and political instability (Klein, 1982). With a population of about nine million people and thirty-five different ethnic groups, Bolivia is one of the most culturally diverse countries in Latin America. Official figures estimate that in 2001 approximately 4.6 million people, or 62% of the total population, are indigenous (INE, 2001).

Since the early 1990s, there has been a strong trend towards the reaffirmation of indigenous identity and culture, and important advances have been realized in terms of the protection of indigenous rights and the enhanced participation of indigenous peoples in national policymaking. These advances have mainly focused on political, social, and cultural aspects, culminating in the re-drafted 1994 Constitution which for the first time in history recognized Bolivia's pluricultural and multi-ethnic character and thus the rights of indigenous peoples:

To the extent covered by the Law the social, economic, and cultural rights of indigenous peoples are respected and protected, especially those rights relating to their communal territories of origin, guaranteeing the sustainable use of natural resources, and their identities, values, languages, customs and institutions... (Article 171, 1994 Bolivian Constitution).

In spite of indigenous peoples' important political advances, in particular since the 1990s they remain marginalized in economic terms and continue to live in extreme poverty (Jiménez et al., 2005; Psacharopoulos and Patrinos, 1994). This article provides an overview of the demographic characteristics and the socioeconomic situation of indigenous peoples in Bolivia, examines the persistent social and economic gaps between the indigenous and non-indigenous population, and analyzes the key underlying factors in the continuous economic and social exclusion of indigenous peoples in Bolivia.

Since the research was carried out before the election of Evo Morales in December, 2005 as the first indigenous president in Bolivia's history, the article does not include in its analysis the effects of the recent economic and political reforms of the new government. Instead it provides an analysis of the long-term processes and underlying

causes that have led to the situation of extremely high levels of indigenous poverty and social exclusion that persist until today.

1.1 The concept of indigenous peoples

Indigenous peoples have historically been among the poorest and most excluded demographic group throughout Latin America. They have not only faced serious discrimination in terms of their basic rights to their ancestral property, languages, cultures, and forms of governance, but also in terms of access to basic social services (education, health and nutrition, water and sanitation, housing, etc.) and the essential material conditions for a satisfying life (Partridge and Uquillas, 1998; Plant, 1998).

No universal definition of indigenous peoples exists and because of the history of political repression, discrimination, and assimilation policies¹ by states, indigenous peoples usually reject to be defined by external agencies. In order to identify rather than “define” indigenous identities, the research uses the working definitions provided by the International Labor Organization (ILO) Convention 169 (Tomei and Sweptson, 1996) and the Draft UN Resolution on Indigenous Rights.² Both approaches emphasize that self-identification by indigenous peoples should be used as the main criterion while at the same time underlying the following commonalities shared by indigenous identities, including i) historical continuity with pre-colonial societies; ii) strong link to territories; iii) distinct social, economic, and political systems; iv) distinct language, culture, and beliefs; and v) self-identification as different from national society. From an indigenous perspective, the right to self-identification is essential to ensuring that they are respected as peoples³ with their own identities, cultures, languages, worldviews, and religions (Stavenhagen, 2002).

1.2 The demographics of indigenous peoples

¹ These assimilation policies applied by all nation states of Latin America were based on the rational of the need of a unique “national identity” after the independence from the Spanish or Portuguese colonial powers. At the center of the policies was the attempt to “assimilate” indigenous peoples into the dominant sectors of society. This policy led to the systematic discrimination against indigenous peoples, with the objective of undermining their cultures, identities, and traditional subsistence economies.

² UN Doc.No.E/CN.4/Sub.2/1986/87

³ The concept of peoples acknowledges that indigenous communities have a distinct cultural identity, history, and institutions as a group distinct from the rest of society.

The number of indigenous peoples in Bolivia increased sharply from 1.7 million in 1950 to 4.6 million in 2001 due to a relatively higher fertility rate than that of the non-indigenous population (INE, 2001). The Aymara and Quechua people who live in the Andean highlands (*altiplano*) and central valleys (*valles*) form the majority of the indigenous population; the Quechua represent 31% and the Aymara 25% of Bolivia's population. The other indigenous groups inhabit the eastern lowlands and the Chaco region and account for only 6.1% of the country's population; however, they are extremely rich in cultural diversity and are distributed among thirty-two distinct ethnic groups. The Amazon indigenous peoples, such as the Chiquitano—a group of 112,000 hunter-gatherers—are culturally, as well as in their social organization, subsistence economy, and settlement pattern, very different from the Aymara and Quechua populations of the highlands. The Guaraní represent the largest indigenous group of the eastern lowlands (with a population estimated at 125,000) and inhabit the southern lowlands of the Chaco region, bordering Paraguay (MACIPO, 2000).

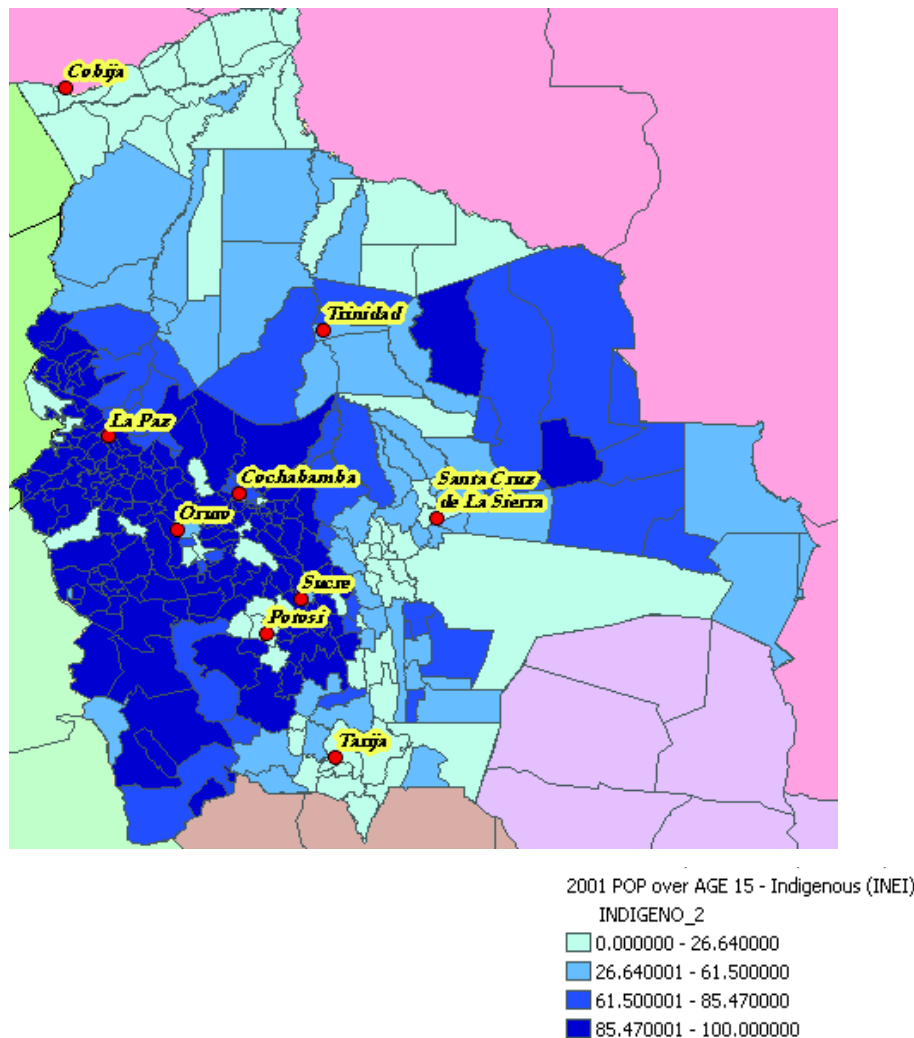
The demographics of the indigenous population differ from those of the non-indigenous. A 1994 survey indicates that the fertility rate per woman was significantly higher for the indigenous than for the non-indigenous. In the Andean highlands the fertility rate was 6.4 and in the eastern lowlands 7.1 in comparison to the average non-indigenous rate of 3.8 (Encuesta Nacional Demográfica y de Salud (ENDSA), 1994). While the majority of indigenous peoples are bilingual and speak Spanish as well as their own indigenous language, 40% of the indigenous population is monolingual (speaking only their native language). In particular, a large number of indigenous women tend to be monolingual and experience widespread discrimination from the dominant *mestizo*⁴ society. An important factor influencing the demographics of indigenous peoples is the increasing trend of urbanization in Bolivia.

While in 1976 only 41% of the overall population lived in urban centers, in 2002 approximately 64% lived in major cities or towns (World Development Indicators, 2004). This rapid urbanization is caused by the migration of indigenous peoples from the countryside to the cities. This trend is confirmed by the fact that in 2002 a majority (52%) of Bolivia's indigenous peoples lived in urban centers while 48% continue to live in rural

⁴ Mestizo is a term used to designate the people of mixed European and indigenous non-European ancestry.

communities (MACIPO, 2001). Nevertheless, rural areas continue to be inhabited predominantly by indigenous peoples (estimated at 78%) and the urban centers are by and large inhabited by the non-indigenous or *mestizo* population (estimated at 66%).

Graphic 1: Regional Distribution of Indigenous Peoples in 2001



Source: author's own map based on data from INE

As the above map visualizes in the highlands, the La Paz Department contains a majority indigenous population, estimated at 89%, while in the Sub-Andean valleys in Cochabamba and Chuquisaca 74 and 73% of the population, respectively, is indigenous. In contrast in the eastern lowlands the majority of the population is non-indigenous—with Santa Cruz's and Tarija's indigenous population estimated respectively at 23 and

16%. The main reason for this is that the overall number of indigenous peoples in the lowlands, about 250,000, is relatively small (Valenzuela, 2004:13-14).

Because of the lack of census data on indigenous peoples in Bolivia, studies frequently use “rural” as a proxy for “indigenous” and “urban” as a proxy for “non-indigenous.” However outdated such a conceptualization may be rendered because of the rapid urbanization trends of indigenous peoples over the past decade, and considering that most data available uses this correlation and that in fact rural areas continue to be heavily populated by a majority of indigenous population, the analysis will also rely on this correlation assumption. The data as such may obfuscate the situation of indigenous peoples in urban areas, considering that, although there is greater access to services basic infrastructure and social services in cities, the urban population lacking access to such services may be the poorer recent indigenous migrant population living in informal settlements.

1.3 National and indigenous poverty

Economic indicators reveal a high degree of poverty and income inequality in Bolivia. The poverty headcount ratio from 2002 indicates that more than 65% of the Bolivian population was living below the national poverty line and 14.4% were living on less than U.S. \$1 per day (World Bank, 2005). From 1993 to 1999, Bolivia experienced a period of stable economic growth and relative political stability during which poverty rates fell from about 70 to 62% (Klasen and al. (2004)⁵). The data reveal that from 1998 to 2002, GDP per capita fell from about \$1100 to approximately \$900. As a consequence of this economic crisis, poverty rates increased during 1999 to 2002 from 62 to 65% and extreme poverty slightly increased from 40 to 41% (Landa, 2003; World Bank, 2004).

It is important to emphasize that there is a high and persistent correlation between being poor and being indigenous. Using urban household data from 1989, a World Bank study (Psacharopoulos and Patrinos, 1994) demonstrated that indigenous peoples are systematically impoverished in the national economy. While approximately 65% of the urban indigenous population lived below the poverty line, less than 50% of non-indigenous peoples were poor. The incidence of poverty among indigenous peoples thus

⁵ Since there do not exist a national poverty data before 1997, these numbers are based on the estimates calculated from urban household surveys and nationally representative demographic and health surveys. See: Klasen and al. (2004): Operationalizing Pro-Poor Growth

was about fifteen percentage points higher than for the non-indigenous population. The average per-capita income of indigenous peoples was on average less than two-thirds the income of the Spanish-speaking population. Nationally, 73.5% of the indigenous population lived under the poverty line and 37% were categorized as extremely poor (ibid, p. 57). The national poverty statistics from 2002 confirm this tremendous indigenous/non-indigenous poverty gap—with the predominantly indigenous rural areas experiencing very high poverty rates estimated at 83% and with 67% considered to be extreme poor, while in the urban areas only 54% of the population was income-poor and 26% experienced extreme poverty (Klasen et al., 2004:7).

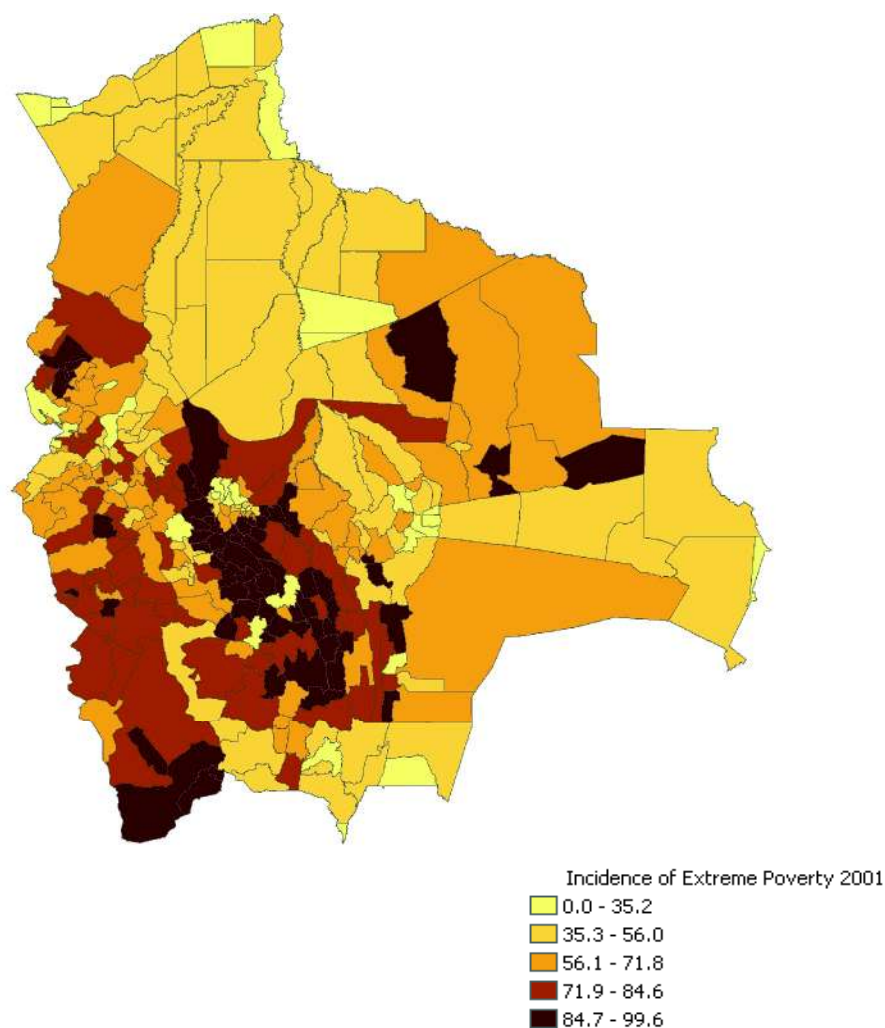
In terms of poverty trends, the data indicate that the poverty gap between indigenous and non-indigenous people widened between 1997 and 2002. While the poverty rate of the non-indigenous population declined from 57.0 to 52.5%, poverty among indigenous peoples decreased only slightly, from 74.6 to 73.9% (Jiménez et al., 2005:43). This means that in 2002 the difference in indices of poverty between the indigenous and non-indigenous population has worsened from 17 to 21 percentage points. This trend is due to the sharp differences between urban and rural poverty. The data indicate that urban poverty responds rapidly to macroeconomic developments, while rural poverty has followed its own dynamic, remaining at extremely high levels even during periods of strong economic growth (Klasen et al., 2004).

In economic terms, the degree of market integration varies significantly among the different ethnic groups. In general, the lowland indigenous peoples have been historically more excluded from the national economy than the Aymara and Quechua of the highlands.

1.3.1 Regional Distribution of Poverty

In terms of the regional distribution of poverty and inequality, one can divide Bolivia into three main geographical zones: highlands (*altiplano*); valleys (*valles*) and plains (*llanos*), also known as the Andean region, the sub-Andean region, and the lowlands. 42% of the population lives in the highlands, 29% in the valleys and 29% in the plains. In 2001, UDAPE and the Instituto Nacional de Estadísticas (INE) developed a consumption-based poverty map that allows for the analysis of poverty and inequality among geographic regions.

Graphic 2: Map of Extreme Poverty (less than US\$ 1 a day) in Bolivia



Source: author's own map based on data from INE

While poverty is widespread, the map above demonstrates that the regional distribution of poverty has one constant feature: the poorest regions are the ones where most of the indigenous peoples live. The highlands have a poverty incidence of 70%, followed by the valleys (69%) and the plains (54%) (Kay and Urioste, 2005). This is also illustrated by the fact that the departments of Potosi (66% indigenous) in the highlands and Chuquisaca (74% indigenous) in the sub-Andean region have the largest poverty incidence, followed by Beni, La Paz, and Oruro, while areas such as Santa Cruz (32% indigenous), Tarija (16% indigenous), Pando, and Cochabamba are the least poor (World Bank, 2005; Jiménez et al., 2005). The map above furthermore visualizes the extremely high rates of extreme poverty rates (71.9-84.6% and 84.7-99.6%) in the many indigenous

municipalities. In fact, a comparison between the indigenous peoples and the poverty map demonstrates the strong and direct correlation between extreme poverty and indigenous municipalities. The map furthermore highlights that the large majority of extreme poverty is concentrated in the western highlands, in particular in the departments of Chuquisaca, Oruro, La Paz and Potosi. At the same time, the spatial poverty analysis shows that the majority of municipalities in the eastern lowlands have significantly lower extreme poverty rates with either 0-35% or 35-56% of the population living in extreme poverty.

As the following section will show, these regional differences between the predominantly indigenous highlands and the eastern lowlands have increased sharply since the mid 1980s when the government's privatization agenda led to the closing of mines in the highlands, a process compounded by the rapid development of agro-businesses (soya, rice), and the timber, petroleum, and gas industries in the eastern lowlands, including Santa Cruz and Tarija. With the recent discovery of large gas reserves in the eastern lowlands, the regional inequalities are expected to sharply rise in the next decade. In fact, Santa Cruz has become the fastest growing city and the "economic capital" of Bolivia.

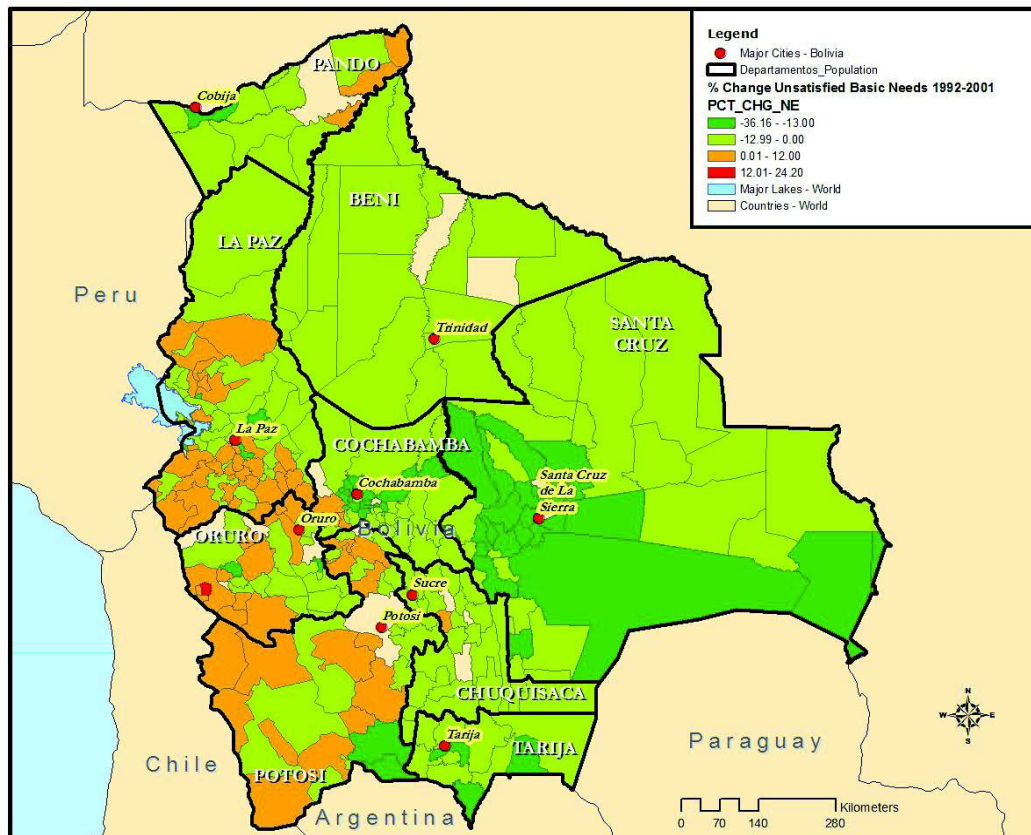
1.3.2 The Unsatisfied Basic Needs approach

Recognizing that there are many more dimensions to poverty than income or consumption, the following section will focus on the non-income/consumption dimensions of poverty. The analysis uses the "unsatisfied basic needs approach" that defines poverty in terms of a household's living conditions through the following six social indicators: (i) quality of housing material; (ii) number of household members; (iii) access to water and sanitation services; (iv) access to energy services; (v) access to education; and (vi) access to health care.

Based on these indicators, measured in the unsatisfied basic needs index, Bolivia has made considerable progress in improving the living conditions of the poor. In terms of unsatisfied basic needs, poverty has decreased at the national level from 70.9% in 1992 to 58.6% in 2001. While in 1992 about 76% of the population did not have access to water and sanitation services, by 2001 this figure had declined to 58%. Similarly, major improvements have been made to health care access, which was available to 63% of the

population in 2001 (from 47% in 1992). It is, however, important to point out that the improvements have been enjoyed primarily in urban areas and the eastern lowlands, while the living conditions in the rural indigenous areas remain at extremely low levels.

Percentage Change - Unsatisfied Basic Needs 1992-2001



Source: author's own map based on data from INE

The above map visualizes that the regional inequalities, in terms of living conditions, have significantly increased in Bolivia during the 1990s. The map illustrates the opposing trends in the unsatisfied basic needs index between the municipalities of the western highlands and the eastern lowlands, based on a comparison between the census data from 1992 and 2001. The data analysis reveals that while Bolivia has made important progress in enhancing people's living conditions at a national level, the gains have been divided extremely unequally within the country. In fact, as the map shows the municipalities located in the eastern departments of Santa Cruz, Beni, Pando and Tarija, where approximately 65-75% of the population is non-indigenous, the unsatisfied needs index has been improved between 10-36% (light and dark green areas on the map). In

contrast, in the municipalities in the western departments of La Paz, Oruro, Potosi and the central Andean department of Cochamba, the living conditions have either stagnated or even worsened by up to 24% (orange or red areas on the map). In fact, the data analysis carried out with the help of a Geographic Information system (GIS) identified that all the 39 municipalities, in which the unsatisfied basic needs have either worsened or stagnated, were (i) located in the western highlands and (ii) had a primarily indigenous population of 79% and above. Thus, the disaggregation of the statistical data reveals that—in spite of the important improvements made in Bolivia at the national level—the living conditions of rural indigenous communities have either stagnated or even worsened.

On the other hand the living conditions have been significantly improved, in particular in urban areas.

TABLE 1: Poverty According to Unsatisfied Basic Needs

	1992			2001		
	National	Urban	Rural	National	Urban	Rural
Overall Index	70.9	53.1	95.3	58.6	39.0	90.8
Housing Materials	48.2	22.5	83.6	39.6	15.6	75.7
Housing Crowding	80.0	76.3	85.1	70.8	68.9	76.3
Sanitary Services	75.9	60.0	97.6	58.0	44.3	78.9
Energy Services	51.8	21.2	93.8	43.7	14.1	91.2
Education	69.1	53.9	90.1	52.5	36.5	70.9
Health Care	53.6	44.2	66.6	37.9	31.0	54.5

Source: World Bank Poverty Assessment, 2005

The Table 1 above illustrates that, while the overall index decreased from 53% to 39% in urban areas, the index has only slightly improved in rural areas, where 91% of the population continues to suffer from unsatisfied basic needs (World Bank, 2005; INE, 2001). For instance, while in urban areas 44% of the population remains without access to water and sanitation services, 79% of the rural population lacks access to these services.

1.4 Income inequality

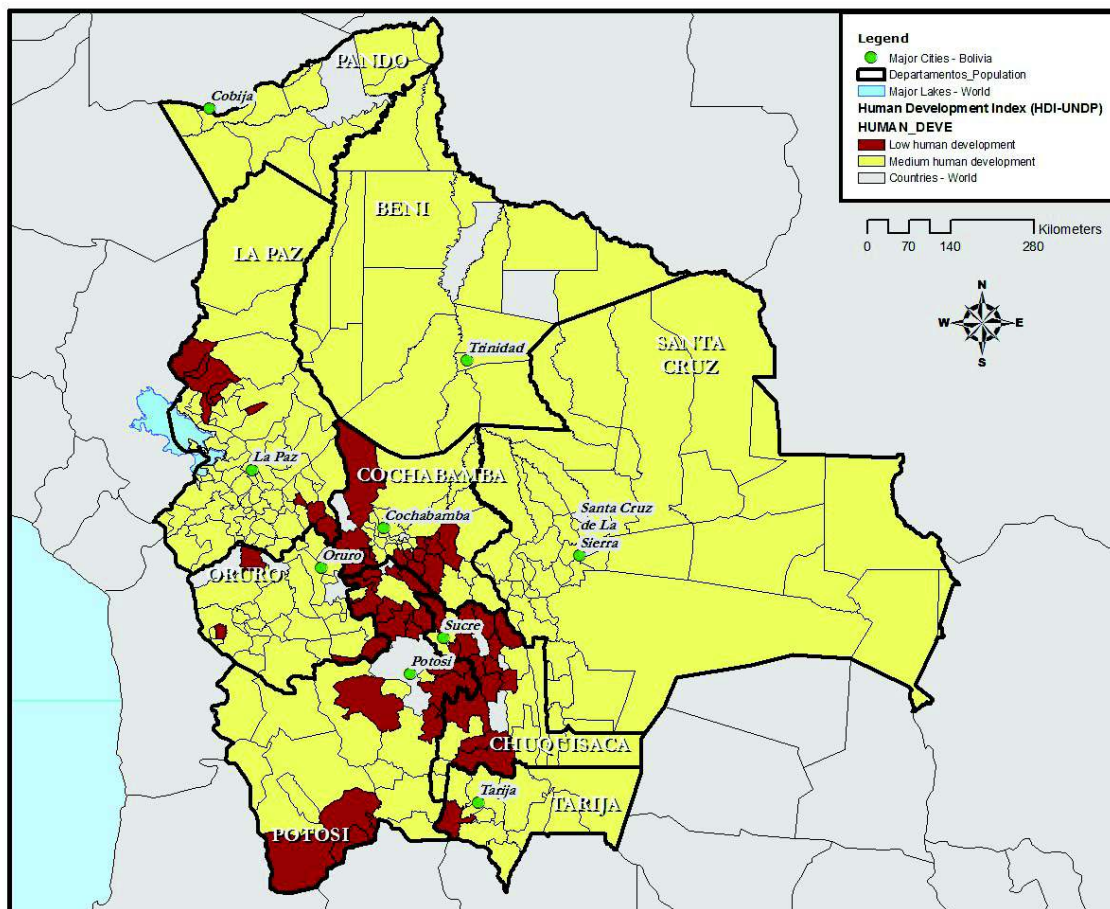
Bolivia is among the most unequal countries in the world. With a share of only 4.0% of national income, the bottom 20% of households live in extreme poverty, while 62% of the income is concentrated in the hands of the top 20% of the population (World Development Indicators, 2002). This inequality affects indigenous peoples disproportionately, since almost two-thirds of them fall into the poorest 5 deciles—the

poorest 50% of the population. During the period between 1990 and 2000 the gap between the rich and the poor sharply increased, particularly in rural areas, suggesting that indigenous peoples' living conditions have worsened during the 1990s. This is also reflected in the substantial increase in the Gini coefficient over the last decade. In fact, inequality as measured by the Gini, has increased by approximately 10% from 0.53 in 1989 to 0.62 in 2000, placing Bolivia second only to Brazil as the Latin American country exhibiting the highest income inequality, even though Bolivia's GDP per capita is only about one-third of Brazil's (Glassman and Handa, 2005 and Gray, 2004). Income inequality was also more severe in rural areas (0.632) than in urban areas (0.554) (ECLAC, 2004: 301-5).

1.5 The human development of indigenous peoples

Finally, the article uses the Human Development Index (HDI) and the Millennium Development Goals (MDGs) in order to broaden the analysis of indigenous peoples' socioeconomic situation and to include the multiple aspects of poverty. The HDI as developed by the United Nations Development Program (UNDP) measures the following basic indicators: life expectancy at birth, adult literacy (over 15 years), enrollment in primary, secondary and post-secondary education, and GDP per capital. Bolivia has achieved important improvements in social services in the last decade. For instance, the national child mortality rate was cut almost by half from 120 per thousand in 1990 to 66 per thousand in 2003.

Human Development Index UNDP



Source: author's own map based on data from UNDP (2002)

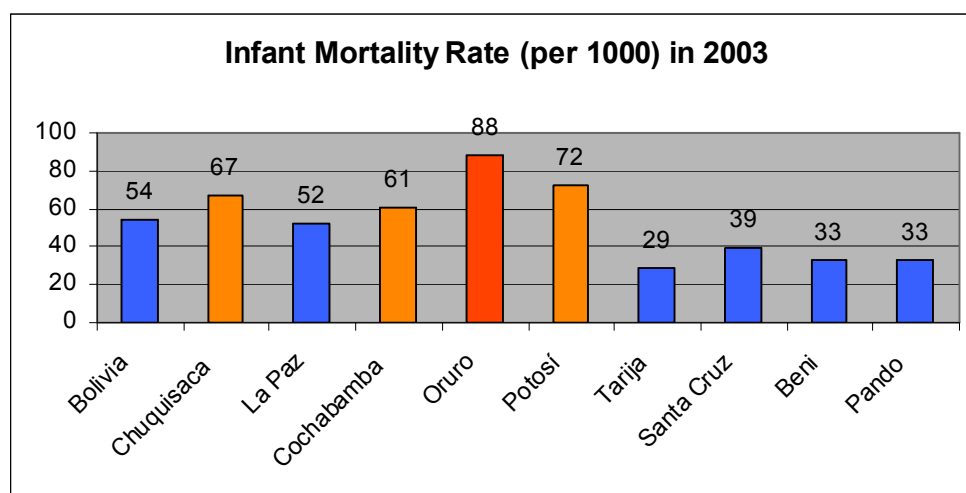
Similarly, infant mortality rates declined drastically from 85 to 53 per thousand during the same time period. In terms of education, net primary enrollment reached 95% and the proportion of girls to boys in primary and secondary education reached 97.9%. In spite of these improvements, the HDI⁶ locates Bolivia in 2004 in 114th place indicating that its social standards are still comparable to those of many Sub-Saharan African nations (UNDP, 2004).

Bolivia's maternal and infant mortality rates are among the highest in Latin America and it also suffers from high occurrences of malnutrition, malaria, chagas, and tuberculosis. Most important, as the above map demonstrates the progress achieved in improving human development has been extremely uneven within Bolivia. In fact, sixty-

⁶ UNDP, Human Development Report 2004

two municipalities continue to only reach low levels of human development with an HDI smaller than 0.5. The data analysis also revealed that eighteen municipalities suffer under extremely low human development of an HDI lower than 0.4 which compares to the levels of human development reached several Sub-Saharan countries such as Mali (0.391) or Ethiopia (HDI=0,389). It is particularly noteworthy that all the municipalities with either low and/or extremely low levels of human development are located in the western highlands and have a predominant indigenous population.

Furthermore, Bolivia's progress in reaching the MDGs has been uneven with stark differences within the country. The critical reason that the country is highly unlikely to reach the goals formulated in the MDGs until 2015, are (i) the continuously tremendous differences in geographic terms and (ii) the continuously tremendous gaps in the access to basic social services between the indigenous and non-indigenous population (Valenzuela, 2004). For instance, Bolivia's national infant mortality rate fell by almost half from 96 in 1000 in 1989 to 54 in 2003. The graphic below, however clearly demonstrates the huge gaps in terms of this indicator within Bolivia whereby infant mortality rates have been dramatically reduced in the departments of the eastern lowlands and remain at unacceptable high levels in the western highlands. For instance, in the department of Oruro infant mortality rates remain three times as high as in the department of Tarija in the eastern lowlands.

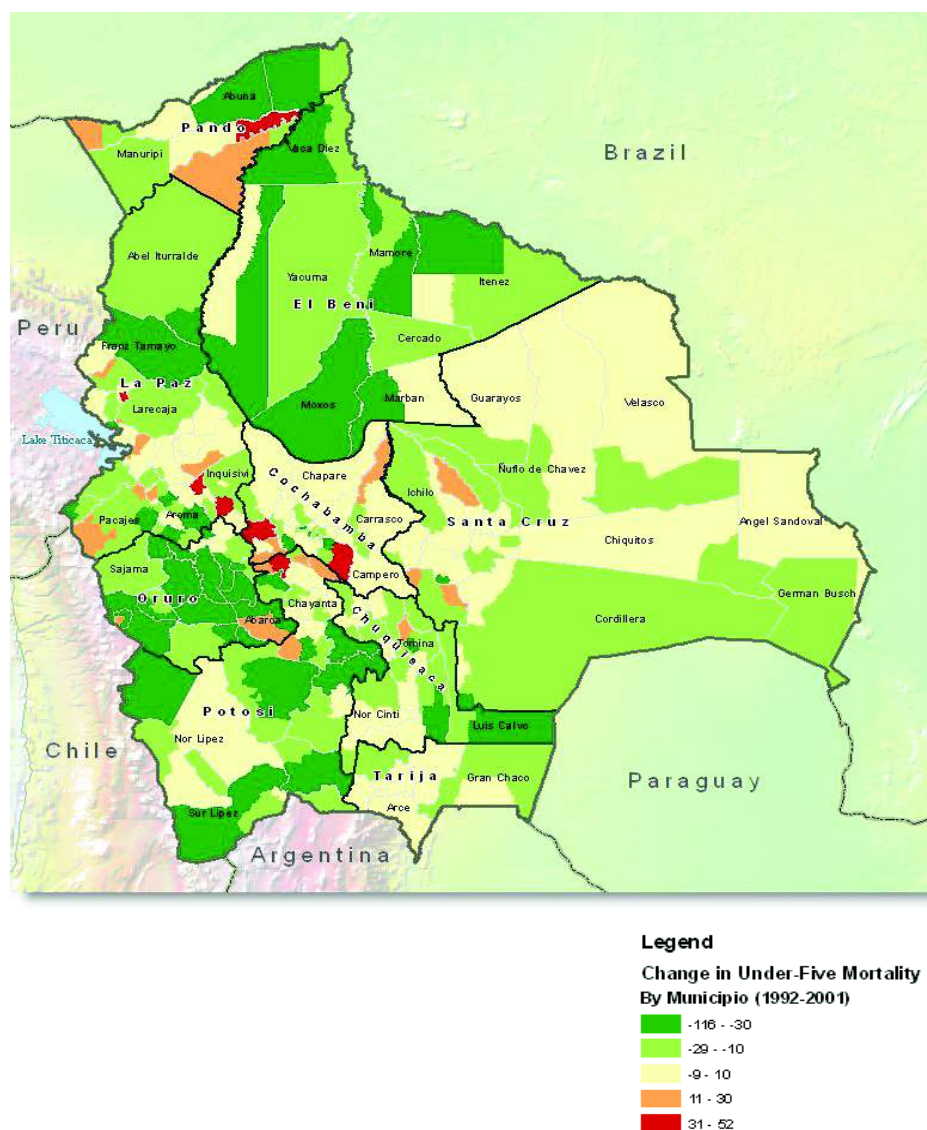


Source: author's own calculation based on data from INE

Finally, a World Bank study has recently found that important differences remain between the different income groups, whereby infant mortality rates fell by 27% for the richest households it only fell by 5% for the poorest (WBI, 2003).

The map below illustrates that under-five mortality rates have even increased in twenty-six municipalities during the 1990s. The in-depth data analysis of this indicator revealed that in nineteen municipalities this indicator worsened by 11-30% and in seven

**Graphic: 5 Change in Under-Five Mortality Rates (1992-2003)
at the municipal level**



Source: author's own map based on data from INE

municipalities under-five mortality rates even increased by up 31-52%. This additional data analysis confirms the above finding of the continuous tremendous gaps in living conditions between indigenous and non-indigenous communities. It is however striking that basic living conditions as measured in infant and under-five mortality rates have stagnated or even worsened in many indigenous communities in the 1990s.

1.7 Historical context of economic, political and socio-cultural processes of social exclusion

Based on the above findings of the stark differences between the indigenous and non-indigenous population, in terms of poverty and their general living conditions, the following section analyzes historical context of economic, political and socio-cultural processes that have led to the systematic marginalization of indigenous peoples within Bolivia.

1.7.1 The economic dimension

To understand why the majority of indigenous peoples live in extreme poverty today, one has to analyze the historical and social processes that have led to their impoverishment. In order to analyze the process of economic exclusion, this section distinguishes between the following four main periods: a) Spanish colonization (1538-1824); b) the Republican Period (1825-1952); c) the Agrarian Reform of 1953; and d) the recent economic and political reforms (1985-2000).

As Olivia Harris points out, the cause of indigenous poverty is not that indigenous peoples have participated in markets for centuries, but rather “the unequal terms on which indigenous Andean populations so often entered—and still do—into market relations with others and how closely this inequality is linked to ethnic differentiation” (Harris, 1995: 358).

Ethnic historians, in particular John Murra, have outlined the disruptive effects of colonization on the very complex economic and social system of the Inca Empire (Murra, 1975). Murra developed the main theoretical concept explaining the wealth of Tawantinsuyu (the Inca Empire) and argues that its economic and political success was based on a combination of centralized political organization and a decentralized economic system, bringing together a network of diverse productive zones—spanning from the *altiplano* region to the eastern tropical slopes of the Andes, as well as to the

western Pacific coastal zones (ibid.). The pre-colonial economic wealth was the result of a very complex system of social and spatial organization around the notions of reciprocity, ecological complementarity, and self-sufficiency (Brooke, 1995).

The Spanish crown imposed a policy of homogenization on indigenous peoples, exploited indigenous labor, and made indigenous communities subject to colonial tributes. In particular, through the introduction of the *encomienda* system⁷ and the emerging mining production in Potosi, which extracted precious metals from the colony for the Spanish Crown, in this way leading to a massive exploitation of indigenous labor (Nash, 1979). The colonial political and economic system, though it tolerated the communal holdings of indigenous lands, fragmented indigenous communities and had very destructive effects on the indigenous livelihood. The colonial economy was based on the principle of mercantilism.⁸ Under this doctrine the wealth of a nation was linked to the accumulation of precious metals, like gold and silver. Bolivia, with its rich mineral resources, became an important supplier of silver, among other metals and goods, for the Spanish crown. The economic logic of mercantilism had negative consequences for the colonies. Spain imposed a trading monopoly and monopsony on the colonies, forcing Bolivia to purchase all of its commodity imports from Spain and allowing it to export goods only to the same market. In sum, the colonial period was devastating for the indigenous population. Disease, warfare, and massacre caused the population of seven or eight million to fall by two-thirds from 1530 to 1560 and by a further 40% by 1590 (Rivera, 1991).

The liberal reforms of the late nineteenth century, based on the concept of individual political and economic liberties, had similar negative effects on indigenous communities. The original intent of the republic period—to create a new political democratic system that would abolish the colonial economic system and grant indigenous peoples the same rights as the rest of society—was never attained. Due to economic recession and the collapse of the fiscal system, the state was forced to reinstate the “Indian tribute” as its main source of state revenues. The new administration was too weak to collect taxes from powerful landowners and from the *mestizo* class, so it

⁷ Under the *encomienda* system, *cerellios* were authorized by the Spanish crown to establish *haciendas* on previously indigenous lands and to exploit indigenous labor as a free resource

continued to rely on indigenous tributes as its principal source of state revenues (Blumer-Thomas, 1994: 29). Until the mid-nineteenth century, these tributes contributed 50% of the total tax revenues. Moreover, the *hacienda* land-tenure system, with its high-concentration of land remained unchanged. For Bolivia's indigenous peoples, independence meant the continuance of the colonial economic structures (Harris, 1995: 359-360).

During the liberal period, the emerging *mestizo* class took advantage of the increased participation by the Andean highlanders in national and international markets. The liberal ideology, emphasizing the need for individual property rights, represented a major assault on communal indigenous lands. *Mestizo* landowners, supported by local bureaucrats, acquired, on rather dubious terms, indigenous lands. In addition, *mestizos* took advantage of the emerging trade of traditional products—for example, marketing wool as an “export crop” through a monopolized system of commercialization. The indigenous population remained a source of free or cheap labor and became increasingly excluded from participation in the market exchange. These processes of market exclusion were compounded by a continued encroachment on indigenous lands leading to a concentration of property in the hands of a few landowners; this in turn resulted in increasingly impoverished indigenous communities. Instead of relying solely on agriculture for their subsistence, a large number of indigenous peoples became dependent on income from temporary employment. In 1952, on the eve of the Bolivian revolution, 6% of landowners who owned one thousand or more hectares of land also controlled over 90% of all cultivated land, most of which was being under-utilized (Klein, 1982).

As a result of the 1952 popular insurrection under the leadership of the Nationalistic Revolutionary Movement (MNR), a major land reform was implemented in 1953. An integral part of this land reform was to redistribute land to indigenous communities and to restore indigenous communal lands. Under the new law, a significant amount of land was distributed among Aymara communities in the highlands; however, Bolivian lowland communities were basically excluded from the benefits of this reform. The regional power structure of landowners, *haciendas*, and urban *mestizos* represented a much too strong political force in the lowlands, which could not be ignored by the

⁸ For a detailed description of the disruptive effects of colonialism on the economies of Latin America see:

national government. The reforms clearly intended to break with the colonial system of traditional *hacienda* production and indigenous tributes and planned to establish a labor market across all sectors of the economy (Dunkerley, 1984).

Like the liberal reforms of the nineteenth century, however, the land reform focused on the rights of individuals to own land and did not take the communal structure of indigenous organizations into account. The reforms were based on the ideology of the “peasantry,” thus assuming peasants to be the natural ally for the urban “working class” in a common class struggle against the entrepreneurial class. The agrarian reform had a double-edged effect on indigenous peoples. On the one hand, the Aymara as a group benefited from the redistribution of lands, but on the other the class ideology of the reform undermined indigenous identity and tried to “integrate” indigenous peoples into the “*campesino*” class (Healy, 2001).

1.7.2 The political dimension

The focus of this section is on how the political structures imposed by the Spanish Crown, and later by national governments, ignored traditional indigenous social organizations and democratic practices. Since colonization, the political system of the Bolivian State has focused its policies on the “integration” and “assimilation” of indigenous peoples into “western” society. The liberal concept of citizenship, based on individual rights, has been unable to recognize indigenous organizational structures. Frequently, the distinct cultural identity of indigenous peoples and their very strong communal links have been considered major obstacles to economic development, political modernization, and democratization. Indigenous communities have reacted to such policies throughout Bolivian history with strong resistance, based on their communal values and ethnic identity.

Throughout the Andes the *ayllu*⁹ continues to represent the main social indigenous organization. Many *ayllus* have retained their institutional structures of close kinship ties to other *ayllus*, evidenced by the communal distribution of resources and the vertical land tenure system, which brings together indigenous communities otherwise

Blumer-Thomas, (1994:22-28).

⁹ an *ayllu* represents the main social organizational structure of indigenous groups in the Andean, linking different territorial groups with each other and thus ensuring the system of ecological complementarity and reciprocity as basic economic survival strategies.

dispersed in several ecological tiers along the highlands, valleys and lowlands, and on both sides of the Andes. This political structure has enabled indigenous communities over centuries to maintain a complex system of inter-ethnic relations, reciprocity and ecological complementarity. One of the most important functions of this structure is to guarantee the “economic survival” of the community and to ensure an equitable distribution of productive resources among the families of the *ayllu* (Rivera, 1990: 100). The Inca Empire took advantage of this existing structure to ensure its political domination, while tolerating ethnic diversity.

During the colonial period, the Spaniards divided the political system of the Andean world into two entities, the Republic of Spain and the Republic of Indians, each with its own legal and political rights. This idea of the two republics was embedded into the colonial legislation through the *Leyes de Indias*. This agreement enabled indigenous communities to sustain their own political system and manage their own resources. In exchange, indigenous peoples agreed to perform the forced labor edicts (*mita*) and to pay tribute. Indigenous land rights were partially formalized through land titles granted by colonial authorities. Although the system granted indigenous communities enough space for self-government, it endorsed at the same time a dualistic model of the Andean political and economic structure, which to a certain degree continues to exist until today (Klasen et al. 2004: iii).

The liberal reforms of the late nineteenth century had far-reaching consequences for the political and organizational structure of the *ayllu* system. The liberal understanding of the role of the individual was in sharp contrast to the communal rationale of the indigenous political structure. In 1874 the “Law of Expropriation” decreed the abolition of the *ayllu*, the parceling of all communal lands, the distribution of private property titles among community members, and a tax reform that abolished the colonial tribute system (Harris, 1995: 353). This law strengthened the *mestizo* landowners in political and economic terms and reinforced their dominant role through the civic and church authorities in small towns. It was clearly intended to undermine traditional indigenous political and social structures. The identity of indigenous communities, however, was in many cases strong enough to ensure the continuity of traditional ways of self-government.

The Agrarian Reform of 1953 had the most severe impact on the *ayllu* system. The government began to heavily promote the unionization of indigenous peoples. In the *altiplano* many Aymara communities adopted new forms of political organizations in place of the traditional ones. In political terms most Aymara communities were subordinated into the structure of the peasant union of the *Confederación Sindical Única de Trabajadores Campesinos de Bolivia* (CSUTCB). Indigenous peoples were increasingly known as “*campesinos*,” as such becoming part of the capitalistic production system and the national political sphere. However, they maintained their own social practices based on the traditional *ayllu* system. Hahn has highlighted that the political organizational structure of the CSUTCB was too closely tied to the western politics of the Bolivian national state, and thus rather than “adequately representing the non-capitalist indigenous population” it became an instrument of the State “to assimilate its constituency economically (e.g., as capitalist farmers) and control it politically.” (Hahn, 1996:102-3).

In spite of the positive effects of agrarian reform in removing the *hacienda* system in wide parts of the country, the reforms did not effectively increase the political participation of indigenous people. The paternalistic colonial approach was replaced through a political system based on the principles of dependency and clientelism. Although the system introduced universal suffrage, indigenous peoples remained “second-class” citizens, and the state continued to exercise the domination of the urban *mestizo* minority over the indigenous majority (Rivera, 1990:106).

1.7.3 Social and Cultural Factors

An analysis of indigenous poverty has to take social and cultural factors into account, which define the social structure of a society. In Bolivia the social structures have led to a process of informal discrimination based on ethnicity. As Xavier Albó asserts, “major divisions continue to mark and divide Bolivian society” (Albó, 1994: 120). Officially, however the state is organized as if everybody has the same rights and access to economic resources and social services. Ethnic discrimination expresses itself subtly and is not obvious to the outsider. Every aspect of social life, however, is defined by the dominant *mestizos*, and ethnic minorities and indigenous peoples rarely have access to important social networks within society. Indigenous peoples become the

“invisible others,” working for the dominant class as domestic servants, rural workers, peddlers, and other forms of cheap labor (ibid: 129). In particular, indigenous women are subject to labor exploitation and daily ethnic discrimination, when working as domestic servants, or market women on the streets of the urban centers.

A large number of indigenous peoples have tried to overcome social exclusion by migrating to urban centers. In Bolivia, an entire new group of *mestizos*, or *cholos*, has emerged. *Cholos* is a derogatory term used to refer to indigenous peoples who have migrated to urban centers, leaving many parts of their traditional way of life behind, while at the same time keeping many elements of their indigenous identity. For example, most *cholas* keep their traditional clothing and work exclusively in the urban centers, mainly as street vendors. As a result of their mobility they are generally excluded from their communities, and only partially “included” in the life of the urban centers. Considering that socially and culturally, they remain “excluded” and stigmatized within the *mestizo* culture. For Xavier Albó, this group, whose “identity is constantly between two worlds” represents the most vulnerable group of Bolivia’s society (ibid: 121-124).

The mechanisms of ethnic discrimination work mostly through indirect channels of everyday life. For example, the education or public administration systems are characterized by a lack of respect for cultural differences, which places indigenous peoples in a vulnerable position (ibid.:130).

1.8 Economic and Political Reforms during the 1990s

Recent economic and political reforms have significantly altered the economic structures of Bolivia and thus have had significant consequences on the dual challenges of reducing poverty and improving the living conditions of the poor. The following section provides an overview of the more recent economic and political reforms and analyzes the effects the reforms have on indigenous peoples’ livelihoods.

1.8.1 The Economic Dimension

After a period of hyperinflation hit Bolivia in the early 1980s, in 1985 the Bolivian government initiated a structural adjustment program, known as the “New Economic Policy,” based on the policy recommendations by the International Monetary Fund and the World Bank. Jeffrey Sachs, the main architect of the program, emphasizes

that the new policies “went beyond macroeconomic stabilization to include fiscal reform, trade liberalization, internal price decontrol and the decentralization or privatization of public enterprises” (Sachs, 1987: 281). The recommended policies were based on those propagated by the “Washington Consensus” and aimed at stabilizing and restructuring the Bolivian economy. Unlike other countries, the structural adjustment program of the mid-1980s was followed by a series of second-generation reforms in the 1990s.

A key reason for this continuity is that Sánchez de Lozada, the main architect of the radical economic stabilization program of 1985 was reelected President in June 1993. Sánchez de Lozada was forced to form a coalition between his neo-liberal party of the *Movimiento Nacionalista Revolucionario* (MNR) with the small indigenous party of the *Movimiento Revolucionario Tupak Katari de Liberación* (MRTK) (Albó, 1994). The coalition between two unequal partners—President Gonzalo Sánchez de Lozada and Vice President Victor Hugo Cardenas—resulted in the election of the first Aymara indigenous to a high political position in South America since the conquest (Economist, September 30, 1995).

The fact that the Sánchez de Lozada government (1993-97) was based on a coalition between two parties that represented very different interests was reflected by its policies combining far-reaching economic reforms, such as the privatization of state-owned enterprises, with progressive policies of decentralization, education reforms, and land reforms. The centerpieces of these policies were the Law of Capitalization (1994), the Law of Popular Participation (1994), the Law of Educational Reform (1994), and the Law of Agricultural Reform Services or *Ley INRA* (1996). These reforms had a major impact on the socio-economic situation of indigenous peoples (Cárdenas, 1997).

The initial effect of the structural adjustment programs on indigenous peoples was positive, since the policies led to a stabilization of prices and the economy as a whole. As shown in a study by Jemio (2000), these policies resulted in a dramatic reduction of income inequality as the Gini coefficient decreased from 0.59 in 1985 to 0.43 in 1989. This significant improvement in income distribution favoring the poor can be explained by the fact that in a situation of hyperinflation, the poorest segments of the population (i.e., urban indigenous population) typically possess much lower means to protect the real value of their income than do the wealthier segments of society (Thiele, 2003).

In the long-term, however, the structural reforms had a significant negative impact on indigenous peoples, in particular on the Aymara and Quechua people, who are more embedded into the market economy than many of the other indigenous peoples from the eastern lowlands.

First, indigenous peoples suffered from the consequences of the privatization of several key sectors of the Bolivian economy. The privatization of the state-owned mining companies—which led to the closure of the mines—had particularly severe consequences for many Aymara and Quechua mining communities. The closure of the mines resulted in the layoff of 35,000 miners and caused massive out-migration from the highlands to urban centers, the valleys, and eastern lowlands. In the highland departments of Oruro, Potosi, and Chuquisaca—the regional economic centers of the mining sector—the privatization was devastating and led to a prolonged economic crisis (Urioste, 2001: 9). The national statistics on the overall labor force employed in the mining sector confirms this sharp decrease, as the labor force sharply shrank from 3.0% in 1985 to 0.9% in 1999 (Thiele, 2003: 314).

A second sector that suffered from the economic reform program was the traditional agricultural sector. Based on the principles of the Washington Consensus, the government implemented the liberalization of trade and promoted the growth of export-oriented sectors. With the liberalization of markets, the economic situation of smallholders in the highlands worsened while new incentives were created for agro-industry in the east. Small-scale peasant-farmers had to compete with cheap imports, and stagnating yields prevented them from participating in the export economy (Arze and Kruse, 2004 and Pérez, 2004). According to the most recent World Bank Poverty Assessment, “the rural economy is increasingly polarized between the small peasant sector producing foodstuffs, on the one hand, and the agro-enterprises sector producing cash crops for export, on the other hand” (World Bank, 2005: 30).

Moreover, the Law of Capitalization led to the partial privatization of the five strategic industries: (i) oil and gas; (ii) telecommunications; (iii) airlines; (iv) electricity; and (v) railroads. These industries represented 12.5% of Bolivia’s Gross Domestic Product and employed a significant percentage of the labor force (Kohl, 2002, p. 450).

Despite government expectations¹⁰ and assumptions that such a privatization undertaking would increase annual GDP growth by 6 points and create 500,000 new jobs, the new private investments failed to have major multiplier effects on the overall economy and achieved neither faster economic growth nor job creation (EIU, 2000, p.20). While the newly privatized industries did make investments and increase productivity they eliminated more jobs than were added (Kohl, 2002: 459). Thus, unemployment in the formal sector increased and workers were forced to find new employment in the informal sector (Villegas Quiroga, 1997). This has had negative implications for the urban indigenous population, as they are mostly employed by the informal sector, and an increase in the labor supply in this sector leads to downward pressure on their wages. (Thiele, 2003: 317).

Another consequence of the privatization of key basic services and the reduction of energy subsidies was the sharp increase in energy and water prices. In 1997, for instance, the price for liquid natural gas—the cooking fuel for most urban poor—increased by more than 25%; electricity and water prices increased by over 50% between 1995 and 1997 (Kohl, 2003, p. 460). The increase of prices particularly hurt indigenous households and recent rural migrants in peri-urban neighborhoods. The grave impact of these price-hikes on their livelihoods was confirmed by the broad-based protests that took place during February 2000 in Cochabamba, where water-privatization led to price increases of up to 100%. After several weeks of ongoing protests, street blockades, and violent confrontations between police and protesters, the government was forced to return the water company to public control (Assies, 2001 and Farthing & Kohl, 2001).

These processes were compounded by the fact that the privatization of the main state-owned enterprises resulted in a sharp decline in revenues for the central government and in a serious and prolonged fiscal crisis. Before privatization the public industries accounted for 60% of government revenues—48% came from the oil and gas sector alone. This policy resulted in a growing budget deficit, which forced the Banzer government in December 1997—under pressure from the IMF— to impose an economic austerity plan and to announce the reduction of public spending. Such a contractionary fiscal policy particularly hurt indigenous peoples in rural areas, since they are frequently

¹⁰ For details on the expected results of the privatization see Gobierno de Bolivia (1994) 'El cambio para

dependent on government programs for improving rural infrastructure and for general basic and social services provision. As a consequence, indigenous peoples have frequently mobilized to protest the economic liberalization policies and have increasingly demanded the nationalization of Bolivia's gas and oil industry (Shifter, 2004).

Finally, the economic reform process of the 1990s has made Bolivia one of the most open economies of Latin America and has thus made the country extremely vulnerable to external shocks (Nina and Brokks, 2001). Bolivia was seriously affected by the financial crisis suffered by its large neighbors, Argentina and Brazil. In February 1999, for instance, Brazil's financial crisis had an immediate negative impact on the Bolivian economy, particularly affecting Santa Cruz's economic growth—which is primarily based on commercial agriculture and on the exploitation of natural resource (Urioste, 2001:10).

Bolivia's economic vulnerability has been exacerbated by the lack of employment opportunities, which forced a large number of Bolivians to emigrate to foreign countries. A large percentage of these immigrants can be characterized as unskilled indigenous workers from the highlands and the central valleys who are forced to leave their country in order to secure their family's livelihood. For instance, it is estimated that up to 1.5 million Bolivians—or one in six workers—have temporarily or permanently migrated to Argentina. Thus, many poor indigenous households increasingly depend on the inflow of remittances to secure their livelihoods (La Prensa, 1999 as quoted in Kohl, 2003, p. 454). As a consequence of this openness, the severe economic crisis from 1999-2002, during which poverty increased sharply (Landa, 2003), can be attributed to a large extent to external factors and, to a much lesser degree, to internal factors. As Patrinos and Hall (2005) have shown, indigenous peoples are particularly vulnerable to external shocks. While in the short-term indigenous peoples are less affected by economic crisis¹¹, they recover much more slowly from the losses incurred; the net impact of any economic crisis is worse for indigenous peoples than for the non-indigenous (Patrinos and Hall, 2005:3).

todos: plan general de desarrollo económico y social de la república'. La Paz.

¹¹ This is mainly due to the fact that a large percentage of indigenous people depend for their livelihoods on a combination of activities in subsistence farming and non-agricultural activities. Thus, in particular in rural areas they are more 'sheltered' from the immediate negative effects of any economic crisis.

1.8.2 The Political Dimension

Since the early 1990s, the indigenous movement has gained tremendous political momentum in Bolivia. In August 1990, the indigenous movement culminated in a 750-kilometer march of indigenous communities from the Bolivian lowlands to La Paz. The “March for Territory and Dignity” was a clear political statement against the further encroachment on indigenous lands for commercial purposes by lumber companies and cattle ranchers. The march also highlighted the severe socioeconomic conditions of indigenous peoples and showed that indigenous communities would no longer be willing to accept their economic and political exclusion within the Bolivian State. It represented the climax of a new self-confidence and political consciousness of Bolivia’s indigenous population (Ströbele-Gregor, 1994). As a reaction to the growing political indigenous movement and in response to demands from Hugo Cardenas’s MRTK coalition government, the Bolivian government passed several important reforms in the 1990s, including the 1994 Law of Popular Participation, the Law of Education Reform (1994) and the Law of Agricultural Reform Law (1996), all seen as important cornerstones of a new progressive legislation (Hendrix, 1997).

The Law of Popular Participation (LPP) addressed the need to reform the historic system and its inherent urban bias, which was based on the concentration of power and resources in the main cities of Bolivia, leaving large parts of the population, particularly rural indigenous communities, excluded from the political system. The LPP aimed to transfer authorities and resources from the central state to local municipalities and rural communities. The responsibilities for administering and maintaining the infrastructures of education, health, local roads, irrigation systems, and sports were delegated to local governments. To enable the local authorities to administer these sectors, the government established a new fiscal revenue sharing system, through which 20% of the national tax revenues were to be transferred to the municipalities, in direct proportion to the number of their local population. Furthermore, indigenous organizations gained, for the first time, legal status as formal representatives of their constituent populations through a newly created legal entity known as the Grassroots Territorial Organizations (GTOs). Finally, a process of participatory budgeting was introduced through the creation of Oversight Committees comprised by GTO representatives given veto power over municipal

budgets. It is important to mention that these goals went hand in hand with the objectives of the indigenous political movement to strengthen the rights and self-development of indigenous peoples (Albó, 1994 and Ströbele-Gregor, 1994:115-9). The outcomes of the LPP are mixed and very much depend on the local socio-political context and the strength of local elites and grassroots organizations. In some municipalities, traditional party clientelism prevailed; local elites co-opt new institutional structures, and corruption rather than democracy flourishes (Blackburn, 2000; Blanes et al., 2000; Booth et al., 1996). In others, the enhanced participation of strong local indigenous organizations resulted in more effective governance and a more equitable distribution of economic resources (Faguet, 2002; Kohl, 1999).

The Education Reform Law (1994) was designed to enhance primary enrollment rates of rural indigenous children and to promote the use of bilingual and intercultural education programs. Both of these aspects of the reform were important steps to enhancing access to education among the rural indigenous population and to making primary education more relevant to the cultural needs of indigenous people.

Finally, the Agricultural Reform Law (1996) represented an important legislation for indigenous peoples, as it introduced a mechanism for communal land titling. These policies particularly benefited the indigenous peoples of the eastern lowlands, who successfully pressured the government to title lands for indigenous communities. In particular, during the Mesa government, many indigenous groups from the lowlands benefited from the law by obtaining communal land titles.

In spite of the important progress made by Bolivian legislation in redressing previous structural inequities suffered by indigenous peoples, the new legal framework has suffered from inconsistent implementation. As such, the condition of indigenous peoples has not been much improved; they continue to live in severe poverty and are confronted with widespread discrimination and its consequences at the local, regional, and national level (Patrinos and Hall, 2005). Furthermore, contradictions within many laws have led to undermine indigenous people's rights in one area, while strengthening their rights in other areas. For instance, the Agricultural Reform Law, while benefiting indigenous communities of the lowlands, has also led to the increased titling of individual land plots for colonizers in the eastern valleys; it formally recognizes the rights of colonizers to occupy previously indigenous territories (Healy, 2004). A good example of

the continued political exclusion of many indigenous peoples is the lack of documentation, particularly among elders and women. A recent report by DFID estimates that 750,000 to 2 million Bolivians (8-20% of the population) were “functionally undocumented” in 2002 (DFID, 2002). The report emphasizes that mostly indigenous peoples from rural areas face the issues with incomplete registers or do not possess at all a valid identification card. People who lack documentation face a series of obstacles in their relationships with the State and the market, since without identification they cannot exercise their basic citizen rights (i.e., participate in the political processes); are unable to access government services (e.g., health and education services) and are extremely limited in their interactions with the market (e.g., access to credit) (Goulden, 2003).

1.9 Underlying Causes of Indigenous Poverty

This section analyzes some of the main underlying causes of indigenous poverty. As the above analysis has shown, Bolivia is a highly fragmented society, with sharp distinctions along a formal/informal, rural/urban and indigenous/non-indigenous divide. Based on the historic context, the Bolivian economy has developed a high degree of dualism. The economy is divided into (i) a formal sector dominated by *mestizos* and closely linked to global markets through the export of natural resources and the inflow of international investments, and (ii) a rural and informal sector of primarily indigenous peoples reliant on a combination of subsistence agriculture, informal commerce, and temporary or permanent labor.

The analysis below studies the underlying factors that have led to a persistent high level of poverty among indigenous peoples. It will be argued that the continuous lack of access to social services (i.e. education and health) and productive assets (i.e. land) are critical factors that have impeded indigenous peoples from significantly improving their living conditions. In fact, the main social indicators (such as illiteracy rate; mother and child mortality; primary and secondary enrollment rates) indicate that indigenous peoples have significantly less access to social services than non-indigenous peoples.

1.9.1 Limited access to education

The human capital approach has demonstrated an important and positive relationship between education, earnings, and poverty (Shultz, 1961; Minzer, 1974). A key reason for the continuous high levels of poverty among indigenous peoples in Bolivia

is the significantly lower level of schooling of indigenous peoples in comparison to the non-indigenous population. A recent study covering four isolated indigenous communities in the eastern lowlands has shown that this relationship even holds for remote communities, where the positive impact of education on income increases the closer an individual is to a town with a market (Goday et al., 2005). Using household data from 1989, Psachorapoulos and Patrinos (1994) demonstrate that there is a strong correlation between schooling attainment, being indigenous, and being poor in Bolivia. While non-indigenous people (age eighteen or over) completed on average 9.7 years of education, indigenous peoples only completed 6.5 years. This difference is even greater for indigenous women, who only complete on average 5.5 years of schooling—suggesting that indigenous women are the most disadvantaged group within Bolivian society. Furthermore, illiteracy remains widespread in the indigenous population. While the overall illiteracy rate in Bolivia has decreased to about 15%, the rate is well over 40% for indigenous people and ranging as high as 58-64% for indigenous women (Jiménez et al., 2005:59). In spite of the significant progress Bolivia has made in enhancing access to education in terms of overall school enrollment rates¹² in the last two decades, a high drop-out rate, especially among indigenous children, is responsible for a persistent education gap between the indigenous and non-indigenous (Valenzuela, 2004:23-4).

Several factors are responsible for this gap in schooling levels. First, indigenous children often leave school earlier than their wealthier classmates in order to contribute to household income (McEwan, 2004). The household data from 2002 show that the incidence of child labor among indigenous was almost four times higher than among non-indigenous children. While only 8.4% of non-indigenous children between the ages of nine and eleven worked, 31.2% of indigenous children had to work (Jiménez et al., 2005:54). Second, in many rural areas, access to schools, and particularly bilingual and intercultural education, remains limited. Many indigenous children still cannot take full advantage of schooling resources because of language and cultural barriers (McEwan, 2004). Third, rural areas also often suffer from low quality of schooling and are confronted with teacher shortages, and a lack of teaching materials and classroom

¹² The primary enrollment rates increased significantly from 86.5 percent in 1985 to 91 percent in 1990 and 95% in 2003 (World Bank 2000).

equipment. While recent test scores for language and mathematics place Bolivian students in general well below the Latin American average, McEwan (2004) shows that indigenous students score significantly lower than non-indigenous students in math and Spanish exams. Finally, in urban areas many indigenous households do not have the resources to cover the direct costs of schooling. While public school is free, a recent study shows that the related expenses including uniforms, school materials, and transportation can reach up to U.S. \$120 per year in urban areas, a high percentage for many indigenous families whose annual income might be no more than \$500 (Inchauste, 2000).

1.9.2 Lack of access to health

Major inequalities in access to basic health services between indigenous and non-indigenous peoples persist. Indigenous women and children, particularly, continue to have less access to basic health services.

Table 2: Selected Health Indicators

Indicator	1985	1989	1994	1998	2000
Infant mortality rate (per 1000 live births)	108	96	75	67	59
Under five mortality rate (per 1000 live birth)	148	130	116	92	69
Maternal Mortality rate (per 100,000 births)		416	390		
Percentage of births in medical facilities		37.6	42.3	52.9	
Child malnutrition		13.3	15.7	7.6	

Source: World Bank (2000)

The data in table 2 demonstrate that most basic health indicators have significantly improved at the national level since the mid-1980s. Infant mortality, for instance, declined by almost 40% between 1985 and 1998. However, health conditions for indigenous peoples continue to be much worse. In the mid-1990s, for example, infant and child mortality rates were more than twice as high for the poorest quintile, which consists largely of indigenous peoples (World Bank, 1999). A key reason for this is their continued lack of access to health. While in 2002, indigenous peoples were more likely (21%) to have suffered an illness or injury in the past thirty days than non-indigenous peoples (13%), they were much less likely to receive medical attention. Of the non-

indigenous population, more than 50% received medical care but only 37% of the sick or injured indigenous peoples did so. This is also confirmed by the fact that while 55% of non-indigenous women have their babies in hospitals only 30% of their indigenous counterparts do the same (Jiménez et al., 2004:62-4).

Finally, indigenous children are twice as likely to be malnourished as non-indigenous children. While in 1998 about 20% of Spanish-speaking children suffered from chronic malnutrition, more than 40% of indigenous children were malnourished (ECLAC/WFP 2004). As noted earlier, a key reason for the lack of access to health by indigenous peoples is the low level of public health expenditures throughout the 1990s. Overall public health expenditure amounted to less than 1.0% of GDP in 1998, a very low figure in comparison to the average 2.6% for all lower middle income countries (Thiele, 2003:316).

1.9.3 Lack of access to land

One factor that clearly determines poverty is access to land (Plant and Hvalkof, 2001). It is important to highlight that in Bolivia's geographic extremes, arable land is scarce and equivalent to a mere 2.67% of the national territory. In spite of the 1953 agrarian reform, which abolished the old *hacienda* system and established a new class of communal peasant owners, distribution of land remains extremely unequal. According to the official data from the National Council for Agrarian Reform, 87% of usable land (28 million hectares) is owned by only 7% of landowners. The remaining % own only 4 million hectares. Moreover, only 5% of the land belonging to the big landowners is being utilized through productive uses (Urioste, 1994: 184-5). As Kevin Healy has shown, the 1953 agrarian reform had opposite effects in the western and eastern regions of Bolivia. While in the west the "*latifundia*" disappeared, new *latifundia* emerged in the east as a result of the giveaways of huge tracts of "public" land (Healy, 2004). As a result, the Gini coefficient for land inequality reached 0.768 in 1989, pointing to very high land concentration (Deininger and Squire, 1998).

The government's land policy, particularly between 1953 and 1996, clearly benefited the elites and the *mestizos* and significantly hurt the indigenous peoples both from the highlands and lowlands (Ballivian and Zeballos, 2003; Vargas, 2003). In the Andean highlands, the scarcity of arable land and the demographic pressures have led to

an increased subdivision and fragmentation of land. Recently, this trend has increasingly forced indigenous peoples into landlessness. In the eastern lowlands, where the state actively promoted, through colonization and infrastructure programs, the expansion of the agricultural frontier towards the east, many indigenous communities lost their lands to the growing commercial agro-industry and colonizers (Gill, 1987).

Since the livelihoods of indigenous peoples continue to depend largely on either subsistence farming (mostly in the highlands) or hunting/gathering (eastern lowlands), secure access and the right to collective land management remain essential to them. Thus indigenous peoples' struggle to protect their ancestral land and territories has resulted in frequent confrontations with large landowners, logging companies, cattle ranchers, and the state.

1.9.4 The Government's neglect of the rural sector

In addition to the lack of access to agricultural land by the *minifundistas*, there is a detrimental public-investment bias against the small-scale agriculture characteristic of the highlands and in favor of the large-scale commercial agriculture well known in Santa Cruz and the eastern lowlands (Healy, 2001). The policies of structural adjustments during the mid-80s favored an economic model which was based on export-led growth. As such, the government's policies focused on promoting the rapid growth of commercial agriculture and the extraction of natural resources—especially natural gas from the eastern lowlands (Kay and Urioste, 2005). According to Demeure (1999), this policy led to a dramatic increase in Santa Cruz's land cultivation from sixty thousand hectares in 1950 to over a million hectares at the end of the 1980s. This expansion of agri-businesses relied on new cash crops including soya, wheat, cotton, and sunflowers. In contrast to this rapid expansion of the large-scale agri-businesses characteristic of Santa Cruz, the small-scale subsistence agriculture of the highlands stagnated. A Rural Productivity Study carried out by the Vice-Ministry of Popular Participation in forty communities of the Bolivian highlands and valleys found that rural productivity sharply declined in the 1980s (World Bank, 1998). The study showed that many Aymara and Quechua small farmers were immersed in a vicious cycle of severe land fragmentation, declining soil fertility, and environmental degradation. The study emphasized that indigenous farmers were

constrained by the lack of public investment in rural infrastructure (e.g., rural roads) and productive agricultural activities (e.g., irrigation systems, extension services).

Over the past two decades, the government has focused its efforts to reduce poverty by investing in social sectors—particularly education—and has put relatively few resources towards supporting the productive sector. Bolivia's expenditures on education have more than doubled from 2.5% of GDP in 1985 to 5.7% in 1998. Public investments remained constant during the 1990s. The numbers demonstrate that the government has neglected the agricultural sector; public investments in this sector accounted for a mere 0.48% of GDP in 1985 and decreased to 0.27% in 1998. The consequence of this neglect in the rural sector is the severe economic crisis in the Andean highlands and valleys and the stagnation of indigenous poverty in rural areas at very high levels (Thiele, 2003). Most small-scale indigenous farmers face the immense challenges of low rural productivity, growing population, division and sub-division of land, migration and emigration, and the degradation of natural resources.

1.9.5 The Failure of Traditional Rural Development Strategies

Several authors have also indicated that the economic crisis of the rural sector is not only the consequence of the lack of public investment in the rural sector but the resulting failure of traditional rural development strategies (Healy, 2004; Bebbington, 1996). The programs are based on Western models of agricultural extension and on the “modernization” of the Bolivian highlands. Frequently these programs failed to incorporate indigenous cultural identity, values, and worldviews into their design. Indigenous human capital, organizational structures and traditional knowledge and technologies have been generally ignored with many programs implemented by new organizational structures at the community level provoking cultural disruption. Furthermore, the overemphasis on a sectorial approach by many development projects has contributed to the fragmentation and disintegration of traditional community structures. The result has been a significant transfer of financial resources from international donors to rural areas, which has failed to achieve a sustainable impact on the well-being of indigenous communities.

1.9.6 Labor market discrimination

Valenzuela has shown that indigenous peoples' labor force participation is at 80% considered to be significantly higher than that of the non-indigenous population, estimated at 64%. The reason for this is the noticeably higher participation of indigenous women in the labor market (70% versus 50% of non-indigenous women). It is important to emphasize that 67% of the unskilled workers are indigenous and that only 4% of the indigenous occupy a position requiring strong qualifications (Zamora, 2000). As a consequence, there are marked earnings differentials between the indigenous and the *mestizo* population. The following table shows that the average earnings for urban/rural areas and for the indigenous/non-indigenous population.

First, table 3 demonstrates the tremendous income differentials between urban and rural areas in all categories. Second, the data points to large earnings differentials between the Spanish-speaking and indigenous population. A stark fact, illustrating this point, estimates that the Aymara earn only about 45% of what Spanish-speakers earn. These numbers clearly demonstrate the unequal participation of indigenous peoples in the labor market. A recent World Bank study analyzing earnings differentials in terms of education and labor market discrimination concluded that 73% of the earnings differential was due to observable factors (i.e., differences in schooling) and that the remaining 27% was due to discrimination against indigenous peoples in the labor market.

Table 3: Average Income per geographic area (in Bolivianos)

Language spoken (at home)	Urban	Rural	Country as a whole
Quechua	577	213	302
Aymara	584	168	306
Guarani	419	262	289
Other indigenous	236	243	242
Spanish	931	373	783

Source: Valenzuela (2005) p. 22, CEPAL

The labor earnings that indigenous peoples derive from each year of schooling are lower than for non-indigenous people. In Bolivia, the returns for schooling are significant, whereby each additional year of education results in 9% earning increases for non-indigenous, but in only 6% for indigenous. Patrinos (2002), using 1989 and 1993 data, estimates that 23 to 29% of earning differentials in Bolivian cities between

indigenous and non-indigenous men is due to discrimination. Chiswick et al (2000) confirm this finding by demonstrating that among men and women, controlling for all observable characteristics, monolingual Spanish speakers earn about 25% more than bilingual Spanish-indigenous language speakers.

These numbers clearly demonstrate that an important underlying cause for the urban poverty of indigenous peoples is the open discrimination of indigenous peoples in Bolivian society.

1.9.7 Indigenous Peoples and Natural Resources

The Bolivian economy has been based for centuries on the exploitation of natural resources, particularly from the mining sector and more recently from the hydrocarbons and the agri-business sectors. Bolivia's high dependency on natural resources is an important factor in the impoverishment of indigenous peoples.

First, indigenous peoples were, from the Spanish conquest to, forced to provide free labor (*mita*) for the rapidly growing mining industry in the Western highlands. This systematic exploitation of indigenous labor had severe consequences for many indigenous communities, because of the very difficult living conditions of the highlands and the extremely dangerous and labor-intensive work in the mines. Even after the mines were nationalized after the 1952 revolution, the highland communities continued to suffer from extreme adverse living conditions with extremely low life expectancy rates, high levels of child labor and in general high levels of poverty (Nash, 1979). Furthermore, the mining production made the miners almost completely dependent on the state for their livelihoods (Sanabria, 2000).

Second, dependency on natural resources made Bolivia, and in particular the indigenous population, extremely vulnerable to external shocks. Consequently, indigenous peoples directly suffered from the volatility of a "boom and bust" economy, which is subject to price fluctuations of minerals and other natural resources on the global markets. For instance, the world economic crisis in the early nineteenth century led to a sharp decline in global mineral prices and forced many mines to close. During the structural adjustment program of the mid-1980s, the government privatized the state-owned mining company. As a consequence more than 35,000 miners and their families

lost their livelihood and were forced to migrate to the urban centers of La Paz and El Alto to find new employment opportunities mainly in the informal sector.

In addition, these extractive industries frequently negatively affect the environment of indigenous communities and thus undermine their ability to secure their livelihoods based on subsistence farming and hunting and gathering activities. For instance, the rubber boom in the early nineteenth century led to the invasion and destruction of indigenous lands in the Amazon regions. While local communities benefited from this boom for a relatively short time, they suffered the long-term consequences of environmental degradation and loss of territory to *mestizo* farmers who continued to settle on indigenous lands even after the boom was over. The agri-business boom of the 1990s had similar consequences: both soybean production and cattle ranching displaced indigenous communities from their traditional lands.

The most recent boom of the 1990s was spurred by the discovery of large natural gas deposits in the eastern lowlands, which are believed to be the second largest in South America and are expected to be worth U.S. \$70 billion. Export statistics point that hydrocarbons (natural gas and oil) have become a key export good of the Bolivian economy. While in 1999 only 5.6% of exports were hydrocarbons in 2001 already 21% of the total exports were accounted for by this sector (Economist Intelligence Unit, 2003). Based on the experience with the mining sector, most indigenous peoples are extremely critical of the government's policies to promote the exploitation of natural gas. Plans to build a new gas pipeline through a highly disliked neighbor often referred to as the "enemy"—Chile—and to export the gas to the United States served to rally strong support for the overthrow of the Sanchez de Lozada government in October 2003. A recent study on pro-poor growth demonstrates that the expansion of gas exports would benefit only the urban population and lead to rising inequalities. The study shows that due to the expected dutch disease effect of resource booms, rural poverty would even increase (Klasen et al., 2004: 40). These examples show that both in the highlands and lowlands, the exploitation of natural resources has only benefited a very small elite class within Bolivia and has worsened, rather than improved, living conditions for indigenous communities.