

## Chapter One

### Introduction

#### I. Statement of Research Concern

Finding an effective alternative to coca production has been a goal of almost every Bolivian and American administration since the 1970's and a goal of various international institutions around the world as well. What appears to be a solution is the application of an Alternative Development program, which, according to Mansfield (1996-1997), consists of the creation of an "economic and social environment in which households can attain an acceptable standard of living, without the need for drug (coca) crop cultivation."<sup>1</sup> It means that throughout the application of this program, peasants who have been growing coca leaves should eradicate those crops and start growing alternative crops such as fruits, vegetables, coffee, etc. It is expected that in Bolivia these alternative crops are profitable enough to compete in international markets, providing Bolivian agricultural producers with a sustainable economic alternative; otherwise peasants will go back to the production of this sacred leaf.<sup>2</sup>

#### II. Definition of the Project

This thesis will analyze some of the challenges of the Alternative Development program in Bolivia. In order to analyze these challenges, first, I will study the economy throughout this 15-year period in Bolivia, specifying the role coca production plays in the economy as a whole. Then, I will examine some case studies of some alternative crops and their success in national and international markets. Next, I will compare the quantity and value of the exports of the most successful alternative crop which is bananas<sup>3</sup> with exports of other foreign countries in order to learn if this alternative crop that the government's Alternative Development program recommended to farmers can, first, compete with other producers in

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<sup>1</sup> D. Mansfield. Alternative Development: The Modern Thrust of Supply-Side Policy. Article published by UNODC (United Nations Office on Drugs and Crime) (1996-1997) [article online] [cited 12 April 2004]; available from [http://www.unodc.org/unodc/fr/bulletin/bulletin\\_1999-01-01\\_1\\_page004.html](http://www.unodc.org/unodc/fr/bulletin/bulletin_1999-01-01_1_page004.html); [INTERNET].

<sup>2</sup> The coca leaf is considered a sacred leaf since early times by the Andean people. A Short Background on Coca. Andean Information Network [article online] [cited 16 April 2004]; available from [http://www.ain.org.bo/coca\\_detail.php](http://www.ain.org.bo/coca_detail.php); [INTERNET].

<sup>3</sup> I chose this alternative crop for analysis because it is the most profitable and successful crop of the Alternative Development program.

international markets, and second, if it presents Bolivia with viable economic alternatives to coca in its agricultural sectors. The results of this research will yield information that can help develop future policies to benefit the Bolivian population and the Bolivian economy in general.

I am interested in Bolivia's Alternative Development program because I believe that if we find adequate alternative crops and the peasants switch to those alternatives, not only will we find a way to make the Alternative Development program work, but we will also find a way to improve the agricultural productivity of the Bolivian economy. Other countries that are also applying alternative development programs, such as Colombia or Peru, could use this information as well.

In Bolivia, agriculture has comprised on average 20 percent of the country's GDP in the past several years. With adequate alternative crops and sufficient state subsidies, agriculture could contribute more than 20 percent to the GDP, and the Bolivian economy could improve as a result. As the United Nations Human Development Report 2003 states:

A first step in economic progress often involves increasing the productivity of poor small farmers. This can happen when market forces yield agricultural advances or governments invest in research and development. Poor farming households often produce food for their own subsistence, with little left over for the market. So, increasing agricultural productivity through improved seed varieties and fertilizers raises household income and nutrition.<sup>4</sup>

In addition to examining some of the challenges that the Alternative Development program is encountering in Bolivia, this thesis will also provide some background information on the Bolivian economy from the late 1980's to 2003. This information will be followed by a profile of the *social* situation of Bolivia's reliance on coca cultivation, sketching the cultural and political side of the story and explaining the implications and consequences of the application of the Alternative Development program. I will also discuss the importance of the role of the American government in the creation of Alternative Development in Bolivia, as well as its control over those policies. Finally, I will conclude the thesis with some recommendations for policy making.

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<sup>4</sup> United Nations Development Programme (UNDP), Human Development Report 2003 (2003): 74.

### III. Expected Findings and Significance of Research

My preliminary research indicates that alternative crop development in Bolivia is not profitable. As Ted Galen Carpenter mentions, neither the projects, providing financial subsidies to induce farmers to switch to different alternative crops, nor providing infrastructure assistance to farmers, have achieved worthwhile results.<sup>5</sup>

Other reasons why the Alternative Development Program has not worked are explained by Francisco E. Thoumi. According to Thoumi, Alternative Development programs have seen five main obstacles. First, it has been almost impossible to find different crops or different rural activities that can generate the same income level as coca crops. Second, coca crops have a ready and secure market. Third, marketing of legal products such as bananas, oranges, potatoes, etc. tend to be difficult to organize and market prices are frequently subject to large fluctuations. Most of the coca production areas are distant from the main markets and transportation costs are very high. Most of the products such as fruits or vegetables need special handling and in some cases refrigeration. Coca leaves do not need any special care. Fourth, if a different crop with a higher income level than coca leaves is found, then traffickers will easily match the price of the new crop because traders' profit margins are very high. Fifth, even if eradication and crop substitution succeed, the price of coca leaves will increase and could generate incentives to expand coca production elsewhere in Bolivia or another country. This is the well known "balloon effect."<sup>6</sup> As Carpenter also mentions, coca crops have many advantages over any other crop:

- Farmers can make at least four, and often more than ten, times the income growing coca crops than growing any other legal crop.
- Coca crops can be grown in remote regions with poor soil, places where alternative crops cannot be grown and are not economically feasible.
- Coca crops can be harvested 18 months after planting, while many alternative crops require 4 or more years to mature.<sup>7</sup>

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<sup>5</sup> Ted Galen Carpenter, Declaring an Armistice in the International Drug War, Cato Foreign Policy Briefing No. 26 (26 July – 1993) [article online] [cited April 3 2004]; available from <http://www.cato.org/pubs/fpbriefs/fpb-026.html>; [INTERNET].

<sup>6</sup> Francisco E. Thoumi, The Profitability of Illicit Crops and Alternative Development in Latin America, Paper prepared for the International Conference on Alternative Development in Drug Control and Cooperation (8-12 January 2002) [article online] [cited 12 April 2004]; available from [http://www.alternative-development.net/downloads/documents/thoumi\\_francisco.html](http://www.alternative-development.net/downloads/documents/thoumi_francisco.html); [INTERNET].

<sup>7</sup> Carpenter, Declaring an Armistice in the International Drug War.

Solutions to help improve this situation may exist, such as opening new and more markets for those Alternative Development crops,<sup>8</sup> the creation of new micro-enterprises, building new transport routes to reach export markets, and finally, by providing producers with better technical knowledge of how to successfully produce and commercialize their products. Extending and deepening the Alternative Development programs for which additional international resources will be required may also prove beneficial. This way, the peasants will have better economic remuneration growing new alternative crops and accessing new markets.

What I expect my findings will also uncover is that Alternative Development has been encountering additional obstacles, namely, the problems that the peasants have with the drug traffickers as they are threatened if they stop producing coca; inadequate roads to facilitate access of the alternative products to markets; the difficulties of accessing international markets due to the poverty of the country and the low level of quality of the alternative products.

All in all, I expect my findings will determine if the Alternative Development program is failing and how it might work.

#### **IV. Methodology**

The methodology for this thesis involves a straightforward political economy approach. For that purpose, I will analyze the profitability of a specific alternative crop, bananas, which are the most successful alternative crop,<sup>9</sup> as the primary source for comparative analysis of alternative crops' commodity prices in international markets.

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<sup>8</sup> Opening new markets is not just Bolivia's job, it is also part of other countries' responsibility; other countries should also open their markets to Bolivia's alternative products, in that way tariffs will be lower.

<sup>9</sup> Compared with 2001, last year exports of high-quality bananas increased by 32 percent. Bananas definitely seem to be the crop that has achieved the best performance.

\*Development Associates, Inc., Assessment of The USAID/Bolivia Alternative Development Strategy - Final Report, Arlington, Virginia, May 15, 2003, p. 16-17.

The purpose of this study is to review the USAID/Bolivia Mission's past and current Alternative Development strategy. It was conducted during the months of March and April, 2003 by four international development specialists with over 100 years of collective professional experience. Much of this experience has been with USAID programs, including Alternative Development activities in the Andean countries. The four international development specialists are: Donald R. Jackson, David D. Bathrick, Patricia A. Martin, and Danielle Rodriguez-Schneider.

\*Development Associates, Inc. is a private management and governmental consulting firm that provides public policy research, and managerial, administrative, and technical services to Federal, State, and local government agencies and private organizations in the U.S. and abroad.

By looking at commodity prices as well as costs such as transportation, inadequate subsidies, etc., of alternative crops versus the coca crops, I will be able to explain more clearly the obstacles the Alternative Development program has faced and what the relevant sectors in the Alternative Development program are.

## **Chapter Two**

### **Bolivia and the Alternative Development**

In this chapter I present the definition and structure of the program of Alternative Development as well as its conceptual evolution and historical background. I will also present a condensed profile of the social-cultural-political situation in Bolivia as well as some background information about the Bolivian economy. Finally, I will conclude this second chapter by discussing some trade policies in Bolivia.

#### **I. Definition of the Program of Alternative Development in Bolivia**

At a meeting organized by the Inter-American Drug Abuse Control Commission (CICAD)<sup>10</sup> that took place on 13-17 September 1993, the Alternative Development experts stated that the following definition of the strategy of Alternative Development meets common themes that could be adaptable and applied to each country's situation:

The gamut of activities aimed at generating legal income for the producers and preventing the expansion and inducing the elimination of illicit cultivation, within an environmentally sustainable framework and in a dynamic context capable of absorbing into the lawful society the affected population as identified by each country.<sup>11</sup>

After a few years of having this definition of Alternative Development, and after some experiments developed in the field, the conclusion was the construction of a more revised and complete concept or definition of Alternative Development. After the twentieth special session of the General Assembly of the United Nations on International Drug Control which was held in Vienna from 8 to 10 June 1998, it was possible to refer to an officially recognized definition of Alternative Development, endorsed by this General Assembly. In the Action Plan on

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<sup>10</sup> The Inter-American Drug Abuse Control Commission (CICAD) was established by the General Assembly of the Organization of American States (OAS) in 1986 as the Western Hemisphere's Policy forum on all aspects of the drug problem. Each member government appoints a high-ranking representative to the Commission, which meets twice a year. CICAD promotes regional cooperation and coordination among the thirty-four OAS member states through action programs, carried out by CICAD's permanent Secretariat. CICAD's core mission is to harness the collective energy of its member states to reduce the production, trafficking and use and abuse of drugs in the Americas. CICAD is an agency of the Organization of American States (OAS). Available from <http://www.cicad.oas.org/EN/AboutCICAD.asp> [cited Nov. 2] [INTERNET].

<sup>11</sup> [http://www.cicad.oas.org/Desarrollo\\_Alternativo/ENG/About.asp](http://www.cicad.oas.org/Desarrollo_Alternativo/ENG/About.asp) [cited Nov. 2] [INTERNET].

International Cooperation on the Eradication of Illicit Drug Crops and on Alternative Development, resolution III E, adopted by the General Assembly, the concept was expressed as follows:<sup>12</sup>

Defining Alternative Development as a process to prevent and eliminate the illicit cultivation of plants containing narcotic drugs and psychotropic substances through specifically designed rural development measures in the context of sustained national economic growth and sustainable development efforts in countries taking action against drugs, recognizing the particular socio-cultural characteristics of the target communities and groups, within the framework of a comprehensive and permanent solution to the problem of illicit drugs.<sup>13</sup>

## **II. Structure of the Program of Alternative Development**

According to CICAD, the main objectives of Alternative Development are:

1. To reduce the supply of raw materials for drug production;
2. To consolidate a licit economy, allowing regions to return to the mainstream of the country's economic and social development.<sup>14</sup>

These two objectives are interrelated because the first will be achieved through the second. The specific objectives of the Alternative Development program will vary regarding its specifications, limitations, and strategic components, according to each location where it is applied.

I believe that if the program does not meet the two main objectives, it is not considered an effective means for the eradication of coca production. For example, if the program reaches just the first objective and not the second one, farmers and peasants who used to grow coca leaves and then decided to eradicate them do not have an alternative means of living. Without a sustainable economy, they are likely to return to coca cultivation. The government has to be sure to meet the two objectives of the program; otherwise, it will be difficult for eradication programs to succeed.

The governmental agencies that are designing and implementing the program of Alternative Development are The Inter-American Drug Abuse Control Commission (CICAD), the United Nations Office on Drugs and Crime (UNODC), and the United States Agency for

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<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

International Development (USAID). In Bolivia the agencies include the Ministry of International Relations and Cult; Vice-Ministry of Alternative Development which depends on the Ministry of Government; the Ministry of National Defense; the Ministry of Farming, Indigenous and Agriculture Subjects; the Vice-Ministry for Social Defense; Consejo Nacional de Lucha Contra el Trafico Ilícito de Drogas (CONALTID) [National Chamber of the Fight Against Ilicit Traffick of Drugs]; Dirección Nacional de Control de la Coca (DINACO) [National Organization to Control Coca] ; Dirección Nacional de Reconversión de la Coca (DIRECO) [Coca Eradication Directorate] ; Subsecretaría de Desarrollo Alternativo y Sustitución de Cultivos (SUBDESAL). All these agencies work together with the international agencies mentioned above to plan, coordinate, and implement the program of Alternative Development in Bolivia.

As CICAD states, the strategic components that appear in a high or low degree in all Alternative Development programs are as follows:<sup>15</sup>

1. Income substitution (economic and productive strategy)
2. Establishment of conditions of peace and legality (political strategy)
3. Strengthening of farmers' organization (organizational strategy)
4. Improving the quality of life of the people involved (social strategy)
5. Dissemination of sustainable development models (environmental strategy)
6. Empowering women in the fight against drugs (gender strategy)<sup>16</sup>

The first component, income substitution, is the main goal of Alternative Development. But this study considers the other components to also be important.

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<sup>15</sup> Ibid.

<sup>16</sup> Ibid.



### **III. Conceptual Evolution and Historical Background of the Program of**

#### **Alternative Development**

In the conceptual evolution of Alternative Development, four periods are identified. The first period started in 1974, the second in 1983, the third in 1988 with the creation of the 1008 Law, and the fourth and last period started in 1997.<sup>17</sup> All the information for the four periods identified in the evolution of Alternative Development was taken from “Desarrollo Alternativo y Erradicación de Cultivos de Coca” elaborated by the Vice-Ministry of Alternative Development of Bolivia and USAID.

In the first period which begins in 1974, the governments of Bolivia and the United States detected the expansion of the coca crops, a consequence of the growth of cocaine consumption levels in European countries and in the US. For that reason, both governments decided to establish mechanisms able to paralyze and to eliminate the supply of cocaine. In this first period, 1974 – 1982, the governments assumed that coca leaf should be considered according to its licit and illicit uses. Among the licit uses are those related to the mastication of the coca leaf, its use in infusions, ritual acts and other customs and traditions. Its illicit use is as raw material for the obtaining of cocaine.

Based on these conclusions, both governments and some international organizations considered that the problem of its illegal use will be solved by substituting another crop for the coca crop. The central objective of the actions destined to eliminate the supply of cocaine was concentrated in the search of agricultural productive alternatives that could compete economically with the coca crops. In this period, the idea was the substitution of an agricultural crop by another in its primary productive phase, which meant the first step toward many more.

With this approach, the Project of Development Chapare-Yungas (PRODES) developed its activities until 1982. During this time, the main agricultural species with technical and economical viability for the regions of the Yungas and the Cochabamba tropic were identified and studied, establishing the basis for the formulation of programs of agricultural development. In this first period, an implicit assumption was noticed: the possibilities of substitution of coca

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<sup>17</sup> Vice-Ministry of Alternative Development, Desarrollo Alternativo y Erradicación de Cultivos de Coca [Alternative Development and Eradication of Coca Crops], La Paz, Bolivia, Empresa Editora Urquiza, 2002: 37-42.

This publication was possible thanks to USAID help. This publication answer to the objectives of the project Alternative Development/BOL/99/D69 “Articulación del Desarrollo Alternativo al SISPLAN” [Alternative Development Articulation to SISPLAN] from the ODCCP (Office of Drug Control and Crime Prevention) of the United Nations.

crops were subordinated to have equal or more profitable productive lines than coca crops have. This concept has proved to be wrong because it is not possible to think that the agriculturists should decide on the application of their resources (land, capital, and hand work) for a certain kind of agricultural production, in function of exclusively economic criteria, such as profitability. It also does not make any sense to compare the economic benefits of an illicit activity with respect to another licit one, because the spaces, mechanisms and laws, which are translated in indicators like profitability, and are totally different in formal economies from those in the informal ones.

In 1983, when the second period started, the growth of the coca crops became “uncontrollable” in the Cochabamba tropic, not only due to the factors of external market for the cocaine and the poverty of the population of Bolivia’s rural areas, but also due to the absence of legal instruments and internal mechanisms of interdiction. Under these circumstances, two different projects were created: the Project “Agro-Yungas” financed by the United Nations, and the Project “Desarrollo Regional Chapare” financed by the American government. Both projects were created under the concept of Alternative Development.

The third period was marked by the creation of the “Ley del Régimen de la Coca y Sustancias Controladas” [The Coca and Controlled Substances Law], better known as “Ley 1008” [1008 Law], of July 19, 1988. It was the first time that Alternative Development was being referred to and mentioned as a process that has as its objective the displacing of coca crop production, as the raw material for cocaine production. Of its situation of main axis in the generation of economic exedents, throughout the development of other activities, specially farming, forest, and agro-industry. According to the 1008 Law, up to 12,000 hectares of coca crops may be cultivated legally each year in Bolivia for traditional domestic uses, such as medicine or to mitigate the effects of the elevated altitude.

The 1008 Law also considers the implementation of processes of industrial transformation, to improve the conditions of transport, electrical energy, agricultural diversification, minimization of loss farming production, the improvement of the commercialization of agricultural production, improvement of health and education, and the support to the consolidation of social organization and the relocation of populations located in fragile regions, among other aspects.

In other words, the 1008 Law states that all plantations are illegal throughout the national territory and that coca crops can therefore be subject to forced eradication with the specific exception of zones identified as zones of traditional production (12,000 hectares) and surplus production. Traditional production is considered to be legal but may not be extended and marketing must be controlled by DIGECO<sup>18</sup>. Surplus production may not be expanded and must be reduced gradually and replaced until it has been completely eradicated.

The fourth period began in 1997, when the General Plan of Social and Economic Development was established by the Bolivian government. This General Plan established the concept of Sustainable Development as "an integral, systemic and complex process, that has as its main objective the task of improving the quality of life of all the population, throughout integral productive development, fair social development, and total citizen participation, under the rules of the conservation of the base of natural resources and the preservation of the environmental quality."<sup>19</sup>

In other words, Alternative Development constituted a previous process to Sustainable Development, which had the mission of contributing to the elimination of the coca crops destined to the manufacturing of cocaine, creating a social structure able to generate productive, sustainable, and licit processes. This process imposed the fulfillment of minimum conditions:

- 1) The processes that were implemented to obtain licit products of any nature must maintain and/or improve the productivity, conserving the productive resources, preserving the environment and guaranteeing their profitability.
- 2) The products that were obtained as a result from these processes must be useful to the society; measurable in terms of access, availability, quality of production and their contribution to the improvement of the quality of life of the population.

In this context, growing coca did not respond to these conditions because although it was a profitable productive activity, it also affected the productive resources and the environment. Concerning its social utility, the coca leaves constituted the raw material for the manufacturing of cocaine, which means it is detrimental to society.

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<sup>18</sup> Dirección General de la Coca [National Bureau of Coca]. DIGECO is responsible for legal coca and accredits the plantations and production concerned.

<sup>19</sup> Ibid., 40-41.

This set of characteristics makes coca a factor of unsustainability in the processes of agricultural and rural development or in processes of regional or national development, a reason why it must be removed as central to Bolivia's economic development.

#### **IV. Condensed Profile of the Social-Cultural-Political Situation in Bolivia**

According to the Office of Technology Assessment of the Congress of the United States: "long-term social inequities and economic and political unrest contribute to coca's dominant role in the economy of Bolivia."<sup>20</sup> Since colonial times, Bolivian rural population has suffered a progressive impoverishment, which was accelerated during the 1980s due to a very severe drought and unfavorable agricultural and trade policies against the farmers. This situation forced most of the farmers to migrate to more favorable and workable areas; many of those farmers migrated to the Chapare area, a center for coca cultivation. And it was the lack of employment due to a general economic decline that made the coca crops popular.

The growth of the coca crops in Bolivia happened fundamentally because of two causes: an internal cause, the closing of the mines and the economic crisis at the national level, which was related to the economic and social depression of the rural areas and aggravated by the presence of drought and floods; and an external cause, the increase in the international demand of cocaine. Both factors affected in a direct way the growth of a migratory population mass from the rural areas to the Chapare area, where these population started growing coca crops, because this activity not only assured a good income, but it also meant an income superior to the one obtained by any other legal economic profitable activity.<sup>21</sup>

The migration of populations from various points of Bolivia to the Chapare area, to start growing coca, remains very high and has been increasing throughout the years. According to the Vice-Ministry of Alternative Development and the national census realized in Bolivia in the last decades: the population of the Cochabamba tropic (Chapare) was 37,456 inhabitants in 1976, 107,536 inhabitants in 1992, and 143,795 inhabitants in 2001. And according to the

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<sup>20</sup> Office of Technology Assessment Congress of the United States, Alternative Coca Reduction Strategies in the Andean Region, Washington, DC, U.S. Government Printing Office, July 1993: 5.

<sup>21</sup> Vice-Ministry of Alternative Development, Desarrollo Alternativo y Erradicación de Cultivos de Coca [Alternative Development and Eradication of Coca Crops], 29.

Instituto Nacional de Estadística (INE) [National Institute of Statistics] the Chapare's average rate of growth is 5.2 percent annually, one of the highest rates in Bolivia.<sup>22</sup>

The farmers value coca production for several reasons, among them because it is simple to grow, it is a solid and regular source of income, it is commercialized in the Chapare itself, and it does not experience market limitations. Being a raw material for criminal activities, coca production allows an entrance, by hectare and by year, superior to any other licit agricultural activity (in 1992 it was considered to be valued at \$10,000 by hectare). Under these circumstances, the corruption related to narcotraffic damaged deeply the economic, political, and social structures of Bolivia.<sup>23</sup>

In Bolivia, social and political injustices still persist. Peasant populations have very poor educational and development opportunities, while a small part of the population has political power and the monopoly on Bolivia's financial resources. This situation is an impediment to the social, political, economic, and cultural development of Bolivia.

## **V. Background Information about the Bolivian Economy**

Since 1985, Bolivia had maintained a relatively open trade system with few restrictions on imports and with no subsidies on exports, when a severe structural adjustment program was applied. The tariff law established a general tariff of 10 percent on CIF value for all imports, except for capital goods which it only have a 5 percent tariff, and 2 percent on books and publications. The World Trade Organization (WTO) made a review of Bolivia's trade policies in which has emphasized the benefits of a 10 percent tariff system in terms of its predictability, transparency and promotion of an efficient allocation of resources. That means that Bolivia pursued a liberal trade policy for goods and services and did not apply permits or other types of non-tariff barriers. There is no trade discrimination, as there is no sector in the economy that is subsidized. Due to Bolivia's tax neutrality, there are no significant distortions in the trade regime.<sup>24</sup>

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<sup>22</sup> Ibid., 29-30.

<sup>23</sup> Ibid., 31-32.

<sup>24</sup> Bojanic, Alan, Bolivia's Participation in International Trade Negotiations, (October 2001) [article online] [cited October 30, 2004]; available from [http://www.odi.org.uk/iedg/participation\\_in\\_negotiations/bolivia\\_trade.pdf](http://www.odi.org.uk/iedg/participation_in_negotiations/bolivia_trade.pdf); [INTERNET].

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Bolivia is the poorest and least developed country in South America. The majority of Bolivians are low-income subsistence farmers, miners, small traders or artisans. Bolivia has the largest proportion of indigenous people of any South American country, comprising around two-thirds of its population.

#### *General Trend of Opening Bolivia's Economy to Foreign Markets*

In 1986, the government of Víctor Paz Estenssoro started a campaign against the drug trade, in return for which Bolivia expected to receive economic help from the U.S. His government announced a 'New Economic Policy' which consisted in curbing inflation, removing many of the restrictions on exports and imports, lifting most price controls, ending subsidies, instituting a freeze (with controlled thaws) on public sector wages, and decentralizing and thinning down many of the nationalized institutions.<sup>25</sup> Following the inclusion of this 'New Economic Policy' most of the restrictions on trade were removed. All of the products except sugar, public health supplies, and items involving the security of Bolivia, could be imported freely. Previously stated restrictions were applied to over 500 items in order to protect the market for domestic products; and a 20 percent Alternative Development valorem (cif) tariff was applied to almost all imported goods, except gold and wheat.<sup>26</sup>

#### *Mining*

Since early colonial times mining has played an important role in Bolivia's economy. Bolivia has long been one of the world's leading producers of tin and also exports significant amounts of natural gas. In the 1980's Bolivia suffered a deep economic recession. In 1985, the Bolivian state established an economic policy in which one of the key components of the structural adjustment program, implemented in government decree 21060,<sup>27</sup> was the closure of the inefficient state mining enterprises of the COMIBOL – Corporación Minera Boliviana [Bolivian Miner Corporation]. This led to the dismissal of 22,000 of 28,000 mineworkers

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projects on the relationship between the global economy, and global institutions, and poverty, and on how the developing countries can influence this.

<sup>25</sup> The Economist Intelligence Unit, "Country Profile: Bolivia 1986-1987," *Country Profile* (1986): 6.

<sup>26</sup> *Ibid.*, 21.

<sup>27</sup> Government of Bolivia, "Decreto Supremo [Government Decree] N° 21060," *Gaceta Oficial*, 29 August 1985, [data online]; available from <http://www.bolpress.com/BD/bol/marco/DS21060.pdf>; [INTERNET].

employed in this critical state-owned sector. Many of these former mineworkers scattered to various urban centers in Bolivia to engage in informal sector activity (transport, commerce).

An undetermined number also fled to Cochabamba's Chapare<sup>28</sup> zone to open coca leaf farms.<sup>29</sup> Although Bolivia has long been dependent on mineral exports, declining tin prices and increased petroleum and natural gas production have changed the nature of the country's economy throughout the 1980's.<sup>30</sup> The contribution of mining to Bolivia's GDP in 2002 was 10.3 percent.

### *Agriculture*

Another main sector of the Bolivian economy is agriculture. Subsistence farming still prevails in Bolivia, accounting for over 60 percent of the agricultural labor force. The main Bolivian crops are soybeans, sugar, chestnuts, potatoes, cassava, bananas, maize, rice, plantains, and citrus fruits, some of which are exported to world markets.

By far Bolivia's most profitable agricultural export product is coca. Its high market price, rapid growing cycle, and its light weight and non-perishable nature, make of coca an attractive crop to produce. The impact on the economy of the exponential growth of coca cultivation during the 1970's and 1980's was significant. In 1988, the net market value of coca and related products was estimated at US\$874 millions, equivalent to 17.5 percent of Bolivia's Gross Domestic Product (GDP). Even though the fact that coca has contributed to Bolivia's GDP more than any other agricultural crop, it also depreciates the value of traditional crops. Furthermore, Bolivia has come under sustained pressure from the U.S. to eradicate coca cultivation, which had been supplying a rapidly developing domestic processing industry, making the country the second largest producer of cocaine base in 1998.<sup>31</sup>

Barbara Léons and Harry Sanabria state in their book Coca, Cocaine, and the Bolivian Reality, that "income from the export of coca's illegal derivatives circulates in the Bolivian

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<sup>28</sup> The demographic increase of the Chapare area was of such magnitude that from the 32,000 inhabitants of 1976, the numbers grow to 50,000 at the moment of the boom of the cocaine production in 1982-83. Francesc Relea, "Crónicas de la guerra de la coca" [Coca's War Chronicles], Página 12 [article online] [cited 4 May 2004]; available from <http://www.pagina12web.com.ar/diario/elmundo/4-27902.html>; [INTERNET].

<sup>29</sup> Madeline Barbara Léons and Harry Sanabria, Coca, Cocaine, and the Bolivian Reality, (New York: State University of New York Press, 1997), 228-229.

<sup>30</sup> Microsoft Encarta Online Encyclopedia, "Bolivia," (Microsoft Corporation, 2004) [cited 6 May 2004]; available from <http://encarta.msn.com>> 1997-2004; [INTERNET].

<sup>31</sup> *Ibid.*, 26.

economy, subsidizing the consumption of services and imported goods, replacing export revenues lost due to the collapse of the tin market.”<sup>32</sup> It can be concluded that the cultivation of coca appeared to be a viable economic solution to the high unemployment rate left by the closure of the mines. Léons and Sanabria also mentioned that in the mid 1990’s the Bolivian economy as a whole was actually stabilized by coca and cocaine production, which at that time contributed significantly to the Gross National Product (GNP) and employed a larger share of the population than in any other country.<sup>33</sup>

Over the last five years Bolivia’s agriculture sector has enjoyed annual growth rates of over 10 percent. The best prospects for U.S. trade and investment in the Bolivian economy in the coming years are in the mining, petroleum and agriculture sectors.<sup>34</sup> In the following chart, prepared by the International Monetary Fund, the economic growth of Bolivia’s economy between 1990 and 2002 can be observed:

<b>1990-97</b>	4.3%
<b>1998</b>	5.2%
<b>1999</b>	0.4%
<b>2000</b>	2.4% (estimate)
<b>2001</b>	-0.16% (Jan-Mar)
<b>2002</b>	2.8%
<b>2003</b>	2.6% (EIU estimates)
<b>2004</b>	3.0% (EIU forecasts)
<b>2005</b>	3.3% (EIU forecasts)

Source: IMF<sup>35</sup>

<sup>32</sup> Madeline Barbara Léons and Harry Sanabria, Coca, Cocaine, and the Bolivian Reality, 3.

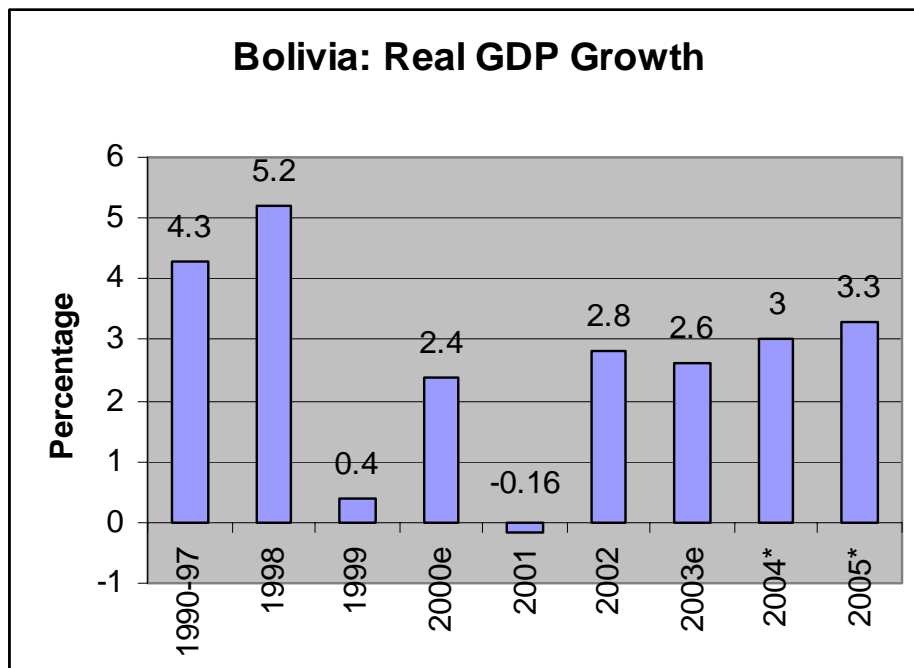
<sup>33</sup> Ibid.

<sup>34</sup> Market Access and Compliance (1999) [database online] [cited May 4 2004]; available from <http://www.mac.doc.gov/atpa/Bolivia/bolivia99.html>; [INTERNET].

<sup>35</sup> Andrew Enever, “Bleak Future for Bolivia’s Economy,” BBC News (21 June 2001) [article online] [cited 5 May 2004]; available from <http://news.bbc.co.uk/1/hi/business/1400337.stm>; [INTERNET].



**Figure 2.1: Bolivia's Real GDP Growth**



e: estimate

\* Forecast

However, as it was established in the “Country Report” of April 2004, with the population increasing at an annual rate of 2.3 percent these economic growth rates will do little to alleviate poverty, which will increase Bolivia's social and political tensions.<sup>36</sup> Another cause for this situation is the fact that Bolivia has received the negative impact of the economic crisis that affected Brazil and Argentina and sharply reduced exports and remittances. Internally, the policy to eradicate coca production has impacted rural incomes. As a result of this, Bolivia witnessed growing poverty, tension and social unrest, and growing unemployment. All these factors caused a series of conflicts in April 2000, September/October 2000, January 2002 and February 2003. But the worst episode was the one that occurred last year when a series of protests that began in September 2003 escalated in early October 2003 over the government’s plan to export natural gas to U.S. markets via a pipeline to a port on the Pacific coast, most likely in Chile. These protests ended with the resignation of President Gonzalo Sánchez de Lozada in October 17, 2003. Currently, this matter remains highly controversial because the

<sup>36</sup> The Economist Intelligence Unit, “Country Profile: Bolivia 2004,” Country Profile (2004): 5.

new government is still looking for an adequate and fair solution to export Bolivia's natural gas.<sup>37</sup>

Anoop Singh stated in July 2003 that in a period of only five years, between 1980 and 1985, Bolivia experienced an economic growth rate of 10 percent; between 1990 and 1997, Bolivia saw an economic growth rate of only 4.3 percent.<sup>38</sup> The only explanation to this is the fact that the coca boom occurred in the first half of the 1980's, as a result of the increment in international demand for cocaine and crack cocaine. Therefore, the price for such drugs increased; powder cocaine was an expensive drug that could cost as much as \$5,200 an ounce in illicit markets in the U.S. and Europe. And given that coca leaves are the base to produce those drugs, its price increased as well.<sup>39</sup>

To have a better overview of the percentages that different economic sectors that contribute to Bolivia's GDP in 2000, consider the below chart prepared by the INE (Instituto Nacional de Estadística - Bolivia) [National Institute of Statistic - Bolivia] for the EIU (Economist Intelligence Unit):

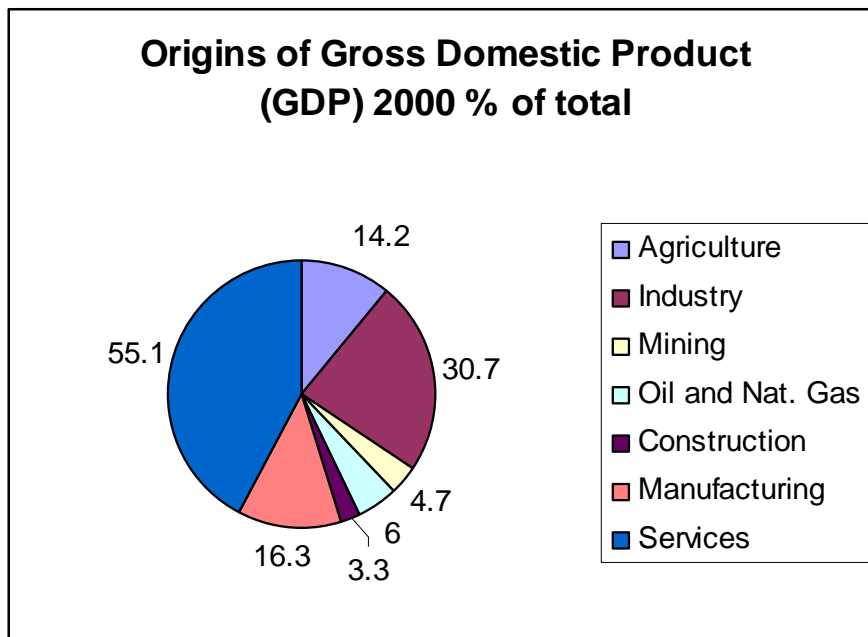
<b>Table 2.2: Origins of Gross Domestic Product (GDP) 2000</b>	
<b>% of total</b>	
Agriculture	14.2
Industry	30.7
- Mining	4.7
- Oil and natural gas	6.0
- Construction	3.3
- Manufacturing	16.3
Services	55.1
<b>GDP at market prices</b>	<b>100.0</b>

<sup>37</sup> Ibid., 3, 7.

<sup>38</sup> Anoop Singh, "CAINCO Economic Forum" (17 July 2003) [article online] [cited 19 April 2004]; available from <http://www.imf.org/external/np/speeches/2003/071703.htm>; [INTERNET].

<sup>39</sup> Robert H. Jackson, "Coca and Agriculture in Cochabamba, Bolivia: Historical and Contemporary Perspectives," *Ciberayllu*, (1998) [article online] [cited 26 April 2004]; available from [http://www.andes.missouri.edu/andes/especiales/rhjcooca/rhj\\_coca2.html](http://www.andes.missouri.edu/andes/especiales/rhjcooca/rhj_coca2.html); [INTERNET].

**Figure 2.2: Origins of GDP**



In the chart and graph we can observe the three main sectors that contribute to Bolivia's GDP: services, industry, and agriculture. The agriculture sector's share of GDP has more than halved since 1960, to just 14.2 percent of the total in 2000.<sup>40</sup>

#### *5a. The Role of Coca Leaf Production in the Bolivian Economy*

Bolivia's coca industry has been an important mainstay of the country's social, cultural, and economic life. It has become one of Bolivia's most profitable crops for export since the late 1970's when the international demand for cocaine began to grow dramatically.<sup>41</sup> The government of General Hugo Bánzer (1971 -1978) established the first program of Alternative

<sup>40</sup> The Economist Intelligence Unit, "Country Profile: Bolivia 2001," *Country Profile* (2001): 18.

<sup>41</sup> The demand for both powdered and crack cocaine in the United States is high. Among those using cocaine in the United States during 2000, 3.6 million were hardcore users who spent more than \$36 billion on the drug in that year. According to the NHSDA, the number of users consuming cocaine monthly or more frequently remained steady, between 0.5 percent and 0.6 percent, from 1992 to 1999. This estimate is significantly lower than the nearly 6 million individuals identified as regular cocaine users by the NHSDA in the mid-1980s. Cocaine is the second most widely abused illicit drug in Canada. Rates of lifetime use of powdered and crack cocaine in Canada have remained stable at slightly more than 3 percent. However, there are indications that use of powdered cocaine and crack is decreasing. In 1994, individuals reporting use in the past year had dropped to 0.7 percent from the 1989 rate of 1.4 percent (this is the latest data available).

National Drug Intelligence Center of the 'United States Department of Justice,' (December 2001) [cited 15 April 2004]; available from <http://www.usdoj.gov/ndic/pubs07/794/794p.pdf>; [INTERNET].

Development<sup>42</sup> in 1975 when it founded the “Instituto Boliviano de Tecnología” (IBTA) [Bolivian Institute of Technology]. This Institute provided technical assistance to enhance local farmers’ production.<sup>43</sup>

The cocaine trade made Bolivia earn at least \$500 millions a year and offered much more rewards to those who were involved in the business of cocaine, than to those who were involved in the legal economy.<sup>44</sup>

### *5b. The Political Economy of Alternative Development*

The main questions this thesis will explore are:

- How has the Alternative Development program been defined and implemented by the Bolivian government?
- Which institutions are involved in its definition and implementation?
- Has Alternative Development led to a decrease in the cultivation of coca in Bolivia?
- Has this program met its broader objectives: to reduce the supply of raw materials for drug production and to consolidate a licit economy for the peasants formerly growing coca crops, allowing them to return to the prevalent practices of the country’s economic and social development?
- What have been the results of the Alternative Development program in Bolivia?
- What actors are responsible for this program’s success or failure?

By “economic success” of the Alternative Development program, I mean that the alternative crops should be profitable enough to serve as a main support for the peasants’ subsistence, they should provide the peasants enough economic profitability to serve as their mainstay of life<sup>45</sup>, and they should also be exportable. Alternative crops should be able to reach a competitive export and quality level for this purpose.

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<sup>42</sup> Fernando Salazar Ortuño, *El Rostro Oculto del Desarrollo Alternativo* [The Hidden Face of the Alternative Development], (2003), 146.

<sup>43</sup> *Ibid.*, 4.

<sup>44</sup> The Economist Intelligence Unit, “Country Profile: Bolivia 1986-1987,” *Country Profile* (1986-1987): 6.

<sup>45</sup> Coca cultivation provides a livelihood for around 40,000 peasant farmers. For these peasants “livelihood” means that either coca crops or alternative crops should provide them enough money to pay for school, health, and food for their families.

The Economist Intelligence Unit, “Country Profile: Bolivia 2000,” *Country Profile* (2000): 25.

My research focuses on a fifteen-year period: 1988, when the “1008 Law” was created, to 2003, the year in which the most up-to-date information can be found. And since the main area of Bolivia where coca leaves are being produced and eradicated is the Chapare area, the Alternative Development’s success will be discerned from studying this region in particular.

It is important to discover if the alternative crops recommended by the Bolivian government are profitable and competitive enough in local and international markets. Otherwise, those alternative crops do not leave enough profit for the peasants, and peasants will revert back to coca farming.

One of the most negative consequences of the drop in commodity prices is Bolivia’s increased reliance on coca production. The profit margin is much higher than that of traditional crops such as fruits, vegetables, or coffee. Estimates by the Information Center on Drugs and Development indicate that total world cocaine production reached 1.200 tons per year in 1993. Drug trafficking is currently the second biggest business in the world after trade in arms with an annual output of hundreds of billions US\$.<sup>46</sup> A great part of the Bolivian population depends on coca-related activities and the only way to shift coca producers away from coca plantations is by offering better prices and more favorable market conditions for alternative exports. As it was established in a seminar in Brussels in 1993: “the problem can only be solved through a multilateral effort harmonized with the macroeconomic policies of the involved countries.”<sup>47</sup> It was also established that trade should be one of the main financial sources to ensure a sustainable development.

## **VI. Trade Policies in Bolivia**

The fact that Bolivia is geographically located in the center of South America makes the import/export relations with the rest of South American countries closer and cheaper. For that reason, Bolivia belongs to a group of economic integration agreements such as ALADI (Latin American Integration Agreement), the Andean Community of Nations (Bolivia, Colombia, Ecuador and Venezuela) and MERCOSUR (Argentina, Brazil, Paraguay and Uruguay).

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<sup>46</sup> “Euro-Amazon Roundtable I,” EWGA - European Working Group on Amazonia, 28 December 1993, in NativeNet [database online] [cited 9 May 2004]; available from <http://nativenet.uthscsa.edu/archive/nl/9312/0154.html>; [INTERNET].

<sup>47</sup> Ibid.

Under the Presidency of Gonzalo Sánchez de Lozada, between 1993 and 1997, Bolivia signed a free trade agreement and became an associate member of the Southern Cone Common Market (MERCOSUR); Bolivia was interested in becoming a full MERCOSUR member because it would facilitate the access to a larger market and new technological innovations. In other words, Bolivia has been to enjoy the benefits of being part of a “bigger club” than the Andean community which does not provide as many opportunities. It seems that Bolivia does not want to rush its entrance on MERCOSUR because it wants to maintain good relations with the Andean community. Bolivia maintains favorable relations within Andean countries such as Colombia, Peru, Ecuador, Brazil, and Argentina.<sup>48</sup> As a result of this agreement, the benefits that Bolivia enjoys for just being an associate member and not yet a full member of MERCOSUR are: removal of tariffs resulting in a slight benefit in preferences and regarding agriculture, Bolivia enjoys the benefits from the Free Trade Area of the Americas (FTA) for exports of some agricultural products, such as canned hearts of palm and fruits.<sup>49</sup>

Regarding international trade, Bolivia also enjoys unilateral preferential and zero tariffs for a list of products from the United States (in the framework of the preferential tariffs law for Andean countries) and from the European Union under its General System of Preferences (GSP), which gives additional preferences to the Andean Community as part of the strategy against drugs production (Andean GSP). This agreement was signed in 1990 and allows most Andean countries' exports to enter the European Union countries with a zero tariff, and no quota restrictions. Bolivia is also a member of the Cairns group since 1996. This group supports liberal agricultural trade policies, in search of new markets for its agricultural produce.<sup>50</sup> The purpose of Bolivia being part of all these agreements is to promote the liberalization of trade and find more and better market opportunities for its products.

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<sup>48</sup> Ibid.

<sup>49</sup> Ibid.

<sup>50</sup> The Cairns Group is a coalition of 17 agricultural exporting countries who account for one-third of the world's agricultural exports. Since it formed in 1986, the Cairns Group has succeeded in putting agriculture on the multilateral trade agenda and keeping it there. It was largely as a result of the Group's efforts that a framework for reform in agricultural trade was established in the Uruguay Round and agriculture was for the first time subject to trade liberalizing rules, which are set out in the WTO Agreement on Agriculture. Following the conclusion of the Uruguay Round, the Group has continued to push for fair trade in agricultural exports, a cause that unites the Group across language, cultural and geographic boundaries. The Cairns Group is an excellent example of successful coalition building in the trade area. By acting collectively it has had more influence and impact on the agriculture negotiations than any individual members could have had independently. Members of the Group are: Argentina, Australia, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Guatemala, Indonesia, Malaysia, New

### *Bolivia and the World Trade Organization (WTO)*

In September 1995, under national law, Bolivia was accepted as a member of the World Trade Organization (WTO). Bolivia decided to become a member of this international organization with the only purpose to increase its access to developed country markets and to obtain reductions in the non-tariff barriers to trade, which are the main constraint to Bolivian exports.

In 1996, during the Seattle conference, Bolivia expressed that instead of receiving benefits from developed countries, the country has been penalized by having to compete with subsidized exports or with products that have received much domestic support, and that it faced sanitary barriers, which were used as an excuse to avoid imports from developing countries. During this conference, Bolivia worked for its liberal policy within the WTO and has encouraged a reduction in trade barriers (tariff and non-tariff) as well as in all types of subsidies, which can alter trade, affecting developing countries' competitiveness. But the conference of Seattle had no success. Bolivia did not obtain any benefit from this conference and for being a member of the WTO.<sup>51</sup>

### *Trade Negotiations*

Regarding the trade negotiations Bolivia maintains with different international organizations and groups, there are some negative aspects such as sending a small delegation of inexperienced and non-skilled negotiators, with budget restrictions. Since Bolivia lacks adequate trade policies, aggressive trade strategies, and experts on this matter, there is no much hope in obtaining what is being pursued. These limitations are present when there is some trade negotiation, for that reason, Bolivia "has not been very successful in expanding its export earnings, and maintains a chronic deficit in its balance of trade."<sup>52</sup>

On the other hand, on November 14, 2001, U.S. negotiators successfully gained World Trade Organization (WTO) member agreement to launch a full range of trade negotiations called the Doha Development agenda. This agenda is a critical agreement to assure that agriculture will be a significant focus of the next round of WTO negotiations. Negotiations

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Zealand, Paraguay, the Philippines, South Africa, Thailand and Uruguay. [data online] [cited 31 October 2004]; available from <http://www.cairnsgroup.org>; [INTERNET].

<sup>51</sup> Bojanic, *Bolivia's Participation in International Trade Negotiations*.

<sup>52</sup> Ibid.

also are continuing to establish a Free Trade Area of the Americas by 2005. Among other things, the agricultural objectives for these negotiations include the elimination of export subsidies that affect trade in the Western Hemisphere.<sup>53</sup>

In conclusion, in this second chapter I wanted to present an overview of the background of the program of Alternative Development, and an overview of Bolivia and its social, political and economic situation. As a result I present the definition, structure, conceptual evolution, and historical background of the Alternative Development, background information about the Bolivian economy, as well as the role of coca leaf in this economy; a condensed profile of the social-cultural-political situation in Bolivia; and finally, I conclude this second chapter presenting some trade policies in Bolivia.

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<sup>53</sup> United States Department of Agriculture, FY 2001 Annual Program Performance Report, March 2002 [report online] [cited November 10, 2004]; available from <http://www.usda.gov/ocfo/ar/ar2001/ar2001.pdf>; [INTERNET].



## Chapter Three

### Coca, Alternative Crops, and Additional Obstacles

In this chapter I present the price of coca leaves as well as its process of cultivation and eradication. I also present case studies of some alternative crops and their success in national and international markets as well as subsidies and international assistance provided to import and export these alternatives commodities. I also make a comparison among the quantity and value of the exports of Bolivia's alternative crop (bananas) with exports of other foreign countries. Finally, I conclude this third chapter with the additional obstacles encountered by Alternative Development in Bolivia and the limitations that this study has encountered.

#### I. Price of Coca Leaves

Coca has become one of the largest and most profitable cash crops due to the high demands of cocaine, a powerful stimulant derived from coca leaves, around the world. According to Jo Ann Kawell, around 600,000 people live directly from cocaine production in Andean Nations; from which 450,000 are coca growers and 150,000 are the ones who make the cocaine paste.<sup>54</sup> To produce and to sell cocaine has become a profitable activity and an alternative to work. As a result, many people in the Andean region depend on the income it produces.

Due to this situation, the eradication of coca crops is applied in order to disintegrate this illegal business. First, I must mention that the drastic reduction of coca crops produced an increment over 350 percent in the price of coca leaves between December 1998 and January 2001.<sup>55</sup> Historically, until 1997, the average annual price per kilogram of coca leaves has been maintained around \$1.20. Between 1998 and 2001, the average annual price per kilogram of coca leaves increased from \$1.50 to \$5.60. In the following graphic the change of prices of the coca leaves per kilogram between 1988 and 2003 can be observed:<sup>56</sup>

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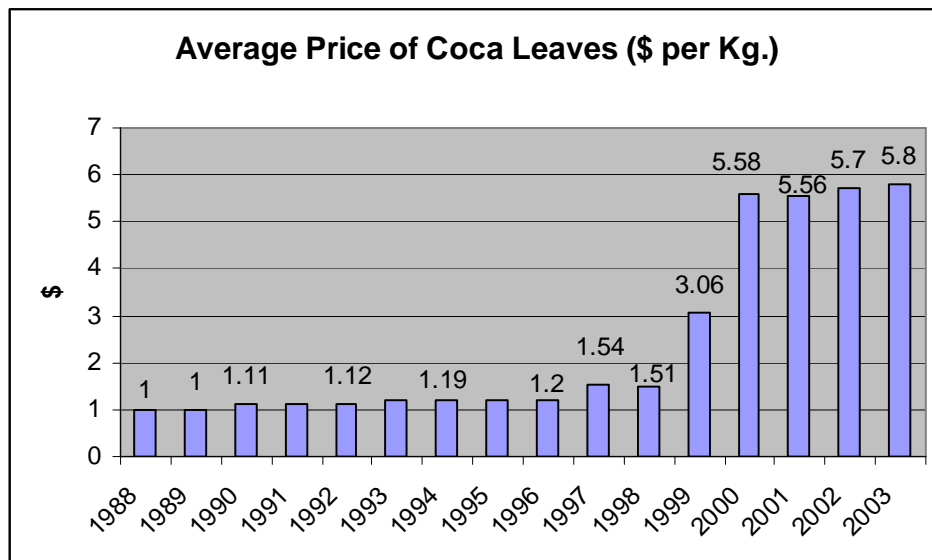
<sup>54</sup> Kawell, Jo Ann, *The Addicted Economies*, Report on the Americas, Vol.22, N.6, March 6, 1989:35.

<sup>55</sup> Vice-Ministry of Alternative Development, *Desarrollo Alternativo y Erradicación de Cultivos de Coca [Alternative Development and Eradication of Coca Crops]*, 102-103.

This publication was coordinated by USAID, being an answer for the objectives of the project Alternative Development/BOL/99/D69 "Articulación del Desarrollo Alternativo al SISPLAN" of the ODCCP (Office of the United Nations for the Control of Drugs and Prevention of the Crime.

<sup>56</sup> *Ibid.*, 102-103.

**Figure 3.1: Average International Price of Coca Leaves**



Source: Vice-Ministry of Alternative Development and United Nations<sup>57</sup>

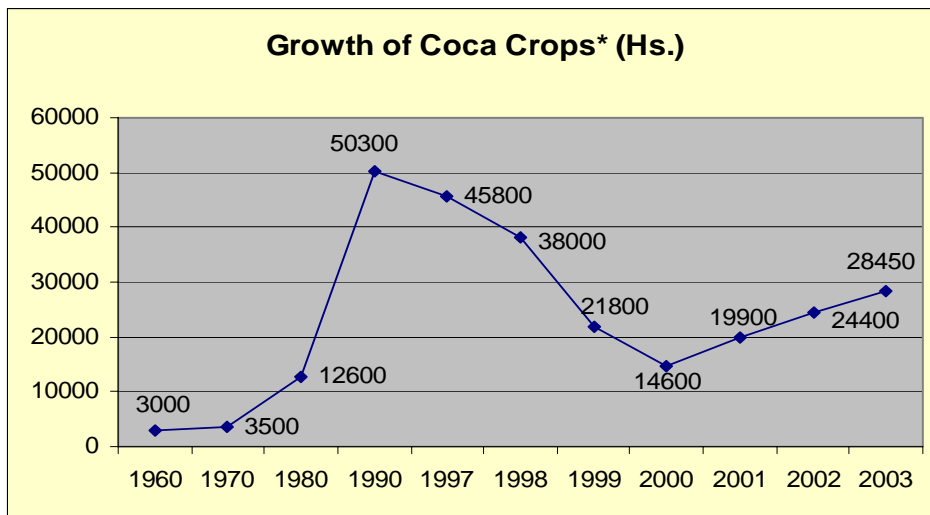
The accelerated eradication of coca crops during the period 1998 – 2000, added to the persistent demand of coca leaves from various groups tied to the production of cocaine, and its illicit traffic, have caused a great increase on the price of coca leaves.<sup>58</sup> The kilogram of coca leaves once cost an average of \$1.50 until the beginning of 1999 when it started incrementing its price reaching \$5.58 in 2000, and it has been maintaining its price on an average of \$5.28 until 2003.<sup>59</sup> The price of coca leaves increased due to the eradication efforts and the criminal activities of the illegal production and traffic of cocaine. But this increment of prices is one of the main reasons why some peasants and farmers insist on the illegal production of coca leaves, leading to new techniques to grow coca. This situation has also caused the increase of coca crops to 28,450 Hs. in 2003, including the 12,000 Hs. allowed by the 1008 Law, as it can be observed in the figure below:

<sup>57</sup> Plan Nacional de Desarrollo Alternativo 2004 – 2008 [National Plan of Alternative Development 2004 – 2008]. July 2004.[data online] [cited October 23]; available from <http://www.desarrolloalternativo.gov.bo/archivos/PNDA2004-2008.pdf>; [INTERNET]. This plan was developed by the Vice-Ministerio de Desarrollo Alternativo [Vice-Ministry of Alternative Development] as a subdivision from the Ministerio de Asuntos Campesinos y Agropecuarios [Ministry of Farmers and Farming Affairs] in conjunction with the Project Alternative Development/BOL/99/D-69 Oficina contra la Droga y el Delito from the United Nations.

<sup>58</sup> Ibid., 8.

<sup>59</sup> Ibid.

**Figure 3.2: Average Growth of Coca Crops**



Source: Ministry of Alternative Development and United Nations<sup>60</sup>

\* Includes 12,000 Hs. allowed by 1008 Law.

With this increment of coca crops, the efforts made by the Bolivian government concerning the eradication of illicit crops and the program of Alternative Development were endangered. As it can be observed in Figure 3.1, another negative aspect of this remarkable increment is the fact that the price of legal coca destined to traditional uses such as medicine, also increased; affecting negatively the economy of various sectors of the Bolivian population.<sup>61</sup> These increments in coca leaf price impeded the success of the program of Alternative Development. In other words, the higher the coca price was, the more difficult it was for the Alternative Development program to achieve success.

## II. Coca Cultivation and Eradication

During the 70s coca crops covered 3,500 Hs. in the Yungas area. During the 80s this amount increased to 12,600 Hs. and during the 90s overall production in Bolivia reached to 50,300 Hs. mainly in the Chapare area. The anti-drug policies from the end of the 90s allowed reducing the coca crops to 14,600 Hs. in 2000, from which 12,000 Hs. were allowed by the 1008 Law in the area of Yungas in La Paz.<sup>62</sup>

<sup>60</sup> Ibid., 7.

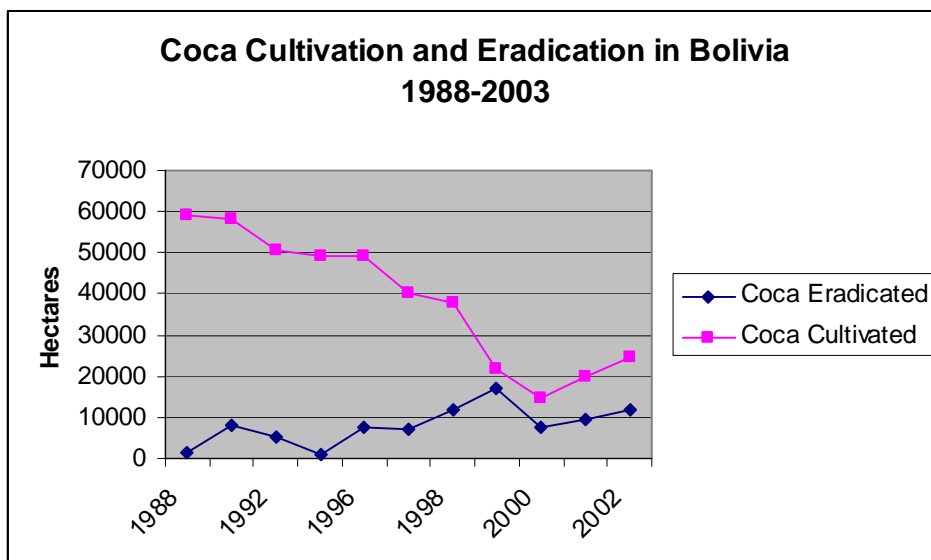
<sup>61</sup> Vice-Ministry of Alternative Development, Desarrollo Alternativo y Erradicación de Cultivos de Coca [Alternative Development and Eradication of Coca Crops], 104-105.

<sup>62</sup> Plan Nacional de Desarrollo Alternativo 2004 – 2008 [National Plan of Alternative Development 2004 – 2008].

Another main problem that is endangering the success of the program of Alternative Development is the fact that the amount of coca eradicated is much lower than the amount of coca cultivated. The process of eradication is going very slow in comparison to the cultivation process. It is clear that since 1998 the cultivation of coca leaves has been decreasing, but the process of eradication should have been increasing too. Besides, the process of eradication has suffered some falls, as it can be observed on the graphic below. According to the Andean Trade Preference Act Bolivia's attempts to have a successful eradication of coca crops have diminished from 1990 to 1994 due to political reasons. In 1994 the amount of coca leaves eradicated was 1,058 hectares, being only one eighth of what was eradicated in 1990. Gonzalo Sánchez de Lozada, President of Bolivia in 1994, attempted to eliminate illegal coca, but he considered that forced eradication was divisive<sup>63</sup> within the population.<sup>64</sup>

In the graphic below, the comparison between the coca cultivated and the coca eradicated between 1988 and 2003 is shown:

**Figure 3.3: Coca Cultivation and Eradication in Bolivia**



Source: United Nations Office on Drugs and Crime [www.unodc.org]

<sup>63</sup> Cultivation of coca leaves is legal in Bolivia and a measured amount of coca is licit for domestic consumption purposes. Forced eradication is regulated by the 1008 Law.

<sup>64</sup> U.S. International Trade Commission, Andean Trade Preference Act: Impact on U.S. Industries and Consumers and on Drug Crop Eradication and Crop Substitution, Second Report, United States International Trade Commission, 1994: 41-43.

As the Vice-Ministry of Alternative Development and USAID stated on their publication “Desarrollo Alternativo y Erradicación de Cultivos de Coca” [Alternative Development and Eradication of Coca Crops], the government of Bolivia has eradicated 105,558 Hs. from 1986 to 2003, avoiding a production of approximately 170 tons of cocaine. From which 43.6 percent of the illicit crops were eradicated under the regime of economic compensation<sup>65</sup>; each of the peasants from whom the coca was eradicated, was compensated with \$2,500 per hectare eradicated. This was another factor that needed supervision because until 1997, the policy of economic compensation for coca crops eradicated created a vicious circle among eradication of licit crops, economic compensation, and new crops. As a result of this policy, between 1988 and 1997, there was no reduction of illicit coca crops. In 1998 this policy of economic compensation was replaced by another communitarian policy, which let the amount of eradicated coca crops grow between 1998 and 2000.<sup>66</sup>

### **III. Case Studies of Some Alternative Crops and their Success in National and International Markets**

Many kinds of fruits, vegetables, and plants are being grown, imported, and exported throughout Alternative Development projects funded and supported by national and international organizations such as USAID (The United States Agency for International Development), European Community, UNODC (United Nations Office on Drugs and Crime), and the Bolivian government. The Chapare region, one of the two main areas of Bolivia where coca is grown, supplies the domestic needs for fresh fruit and vegetables, while also exporting banana, pineapple, tinned heart of palm, and dried fruit to Argentina, Chile, Peru, United States, and Europe.

It is important to mention that in 1995, it was revealed that there has been limited success in making the transition to actual drug crop substitution, when staff from USITC (United States International Trade Commission) interviewed some USAID officials who stated that in terms of profitability, USAID could not identify yet a substitute<sup>67</sup> product for coca

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<sup>65</sup> The 1008 Law states that each peasant who voluntarily decides to eradicate his/her coca crops will receive from the Bolivian government the amount of \$2,500 per hectare eradicated.

<sup>66</sup> Vice-Ministry of Alternative Development, Desarrollo Alternativo y Erradicación de Cultivos de Coca [Alternative Development and Eradication of Coca Crops], 8-9.

<sup>67</sup> Bolivian alternative development project information received from USAID, Washington, DC, cites advances in the cultivation of bananas, citrus, pineapple, heart of palm, passion fruit, and black pepper.

crops.<sup>68</sup> And this was due to the fact that Bolivian researchers supervised by USAID have found that the Chapare area is not suited for many alternate crops because of high rainfall and humidity, while inadequate economic infrastructure would make getting alternative crops to market difficult.<sup>69</sup>

As Development Associates, Inc. stated on its report submitted to USAID/Bolivia, the agro-ecological conditions of the Chapare area are not ideal. With annual rainfall in excess of two meters in most areas, and soils appropriate for the vast majority of crops amounting to between 15 and 20 percent of the total land area, there are few realistic crop choices for either CONCADE<sup>70</sup> or farmers to make. On the other hand, coca can grow under a much wider variety of rainfall and soil conditions. In the early 1990s, the CORDEP (Cochabamba Regional Development Project) project began with a list of 40 crops that held at least some potential for cultivation in the Chapare, and for which some degree of market potential also existed. However, as the years progressed, the list of 40 was gradually reduced for either agro-ecological or marketing reasons until the five major crops were determined to be: bananas, pineapple, heart of palm, passion fruit, and black pepper. The selection criteria also included the fact that these five crops are permanent to semi-permanent, requiring substantial start up costs that would “tie” a farmer to them and reduce the risk of eradicating them to plant coca. Nevertheless, the potential does exist for other crops such as cocoa, tea, and some spices, which might be attempted using alternative technologies in the future.<sup>71</sup>

In the following paragraphs, I will examine the success in national and international markets of the alternative products: banana, pineapples, passion fruit, black pepper, and heart of palm.

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<sup>68</sup> U.S. International Trade Commission, Andean Trade Preference Act: Impact on U.S. Industries and Consumers and on Drug Crop Eradication and Crop Substitution, 46.

<sup>69</sup> U.S. International Trade Commission, Annual Report on The Impact of the Andean Trade Preference Act: Impact on U.S. Industries and Consumers and on Drug Crop Eradication and Crop Substitution, First Report, United States International Trade Commission, 1993: 57.

<sup>70</sup> Counter Narcotics Consolidation of Alternative Development Efforts Project.

<sup>71</sup> Development Associates, Inc., Assessment of The USAID/Bolivia Alternative Development Strategy - Final Report, 15.

### *3a. Banana*<sup>72</sup>

There were 12,804 Ha. used for banana crops in 2003, from which 6,136 Ha. were assisted by the program of Alternative Development. In total, there are two banana farmers' comprised of 23 banana farmers associations; and six export companies. In the same year, 2003, 1.3 million cases (approximately 26,457 tons) of bananas were exported; and 89,640 tons were sold in Bolivian markets.

The two banana farmers' associations count with the following productive infrastructure capacity which is currently installed:

- There are 21 packing facilities that meet the program's specifications.
- There are 43 simpler packing facilities for school breakfast program in Bolivia.
- There are more than 300 Kilometers of cable transportation system installed.

In addition to these facilities, there is the potential for the following production capacity:

- Construction of 56 more packing facilities.
- Plans to export 2 million more cases in 2004.
- 10,000 cases packed per week for school breakfast program.
- Banana to be exported to Europe using vacuum technology.
- New packaging to be tested for exports to Chile, in vacuum packed plastic bags to reduce costs.
- 600 new hectares of banana to be implemented with certified material.

### *3b. Pineapple*<sup>73</sup>

There are 2,937 Hs. of pineapple in production (satellite images), in which there are around 1,200 families involved. Low and medium technology crop management is being used for the production. In 2003, the total production was approximately 20,000 metric tons of pineapple. In the same year, there were 45,000 cases of pineapple exported with an approximate value of 160,000 dollars. Currently, new markets in Argentina, Chile, and Italy are being tested.

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<sup>72</sup> All the information for these five alternative crops was found on the sixth edition of this Magazine which is prepared by the Vice-Ministry of Alternative Development and USAID. USAID, *Unexplored Business Opportunities: Bolivia*, April 2004: 11.

<sup>73</sup> *Ibid.*, 11-12.

The production capacity that is currently installed consist of:

- Technical assistance for two pineapple farmers Associations Unions and other smaller groups.
- Plan to increase productivity by input use.
- Programmed harvesting to coincide with market requirements.
- Introduction of new varieties for export (MD2 and Champaca).
- Production of high quality genetic material.
- Specialized training for technical and extension staff.

In addition to these facilities, there is the potential for the following production capacity:

- Installation of new pineapple packing facilities in 2004.
- Export volume grows to 100,000 cases by 2004.
- Diversification of pineapple varieties for export.
- A 20 percent increase in productivity.
- Opening of new European markets.

### *3c. Passion Fruit*<sup>74</sup>

There are 245 hectares of passion fruit with different levels of technology, where around 248 families participate in seven OSNs (Second Level Organizations) and one private company. The production and commercialization of passion fruit has been organized using the following criteria:

- Areas of 0.5 to 5 Hs. per farmer
- 50 percent of counterparts in new plantations

Yield varies between 5 and 15 metric ton per hectare depending on production of the area. The life cycle of a crop of passion fruit is on average two years and the annual harvest season is from December to May. There are 1,450 metric tons sold to wholesale market and extract processing companies.

The production capacity that is currently installed is:

- The commercialization system in 2003 reached 1,450 metric tons of fresh passion fruit generating \$217,500 for farmers.

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<sup>74</sup> Ibid., 12-13.



- There are two passion fruit extract processing plants which buy more than 50 percent of passion fruit produced in the Chapare area, transforming it into pulp with a value of approximately \$381,000.
- There are six organizations that have a farmer's commercialization committee, which improve income by exploring direct markets.
- There is one micro-processing plant for jams operated by ASPROPI – Asociación de Productores de Piña [Association of Pineapple Producers], producing 2,000 jars for a value of \$1,527 per year.
- The PIL Company (Planta Industrializadora de Leche) [Milk Processing Plant], the biggest milk processing plant in Bolivia, buys 70 tons of pulp at \$112,000 from the passion fruit processing plants to cover the national market.
- Another milk processing plant from the capital, Delizia, buys 30 tons of pulp of passion fruit at \$34,800 to cover the Bolivian market.

In addition to these facilities, there is the potential for the following production capacity:

- 300 hectares of new plantation by 2004.
- Increased production up to 2,400 metric tons.
- Provide farmers with continuous training in good agricultural harvest and post-harvest practices to minimize losses and improve product quality.
- Select different quality fruit to obtain greater added value in some market segments.
- Reduce the size of the bags from 50 Kg. to 30 Kg. in order to reduce damage to fruit handling and transportation.
- Possible export market to Chile of approximately 20 tons representing a value of \$40,000.
- Improve passion fruit pasteurizing process to enhance organoleptic quality.

### *3d. Black Pepper*<sup>75</sup>

Regarding the production of black pepper in the Chapare area, there are 432 hectares with different levels of technology, where around 646 families from 41 Associations and 2

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<sup>75</sup> Ibid., 15-16.

private companies participate. There is also one private company that processes and markets the product. The crop life cycle is from eight to ten years on average. The annual harvest season lasts six months, from May to October.

The production and commercialization of black pepper has been organized using the following criteria:

- Areas of 0.15 to 2 hectares per farmer.
- A 20 percent of counterpart in new plantations.

The production capacity that is currently installed consist of:

- In 2003 the sales volume was 26,500 Kg. generating \$47,700.
- There are two drying facilities installed by farmers' organizations with drying capacity of 800 Kg. per day, improving quality of product.
- Post-harvest using five threshing machines and fans to improve the quality of the selected seeds.
- There are eleven organizations with potential to increase the crop area in the Chapare area.
- There are four organizations that have farmers' commercialization committees, which serve to improve their income by 20 percent.
- There are three plant centers with a capacity to produce 200,000 young plants per year.
- There are two private companies that grow black pepper in areas larger than five hectares, applying the necessary technology to achieve a greater and better production.

In addition to these facilities, there is the potential for the following production capacity:

- Rehabilitation and implementation of additional 37 hectares by end of November 2004, increasing yield by 10 percent.
- Finalization of three model black pepper farms with technical management.
- Project to launch sub-products such as green and white pepper in order to obtain higher added value.
- Prioritization of areas with highest production by increasing the area dedicated to black pepper.

### *3e. Heart of Palm*<sup>76</sup>

There are 6,300 hectares in production of heart of palm in the Chapare area (satellite images), where around 2,500 families are involved in it. In 2003 eight million stalks were packed. The farmers are organized into Associations, which receive technical assistance through Second Level Organizations and the Heart of Palm Farmers Union. By 2003, 240,000 cases of heart of palm were exported with an approximate value of \$3.7 million. There is a diversification into markets such as the U.S., France, Chile, Argentina, and Spain.

The production capacity that is currently installed consists of:

- Three heart of palm processing plants installed, with a capacity to pack 60,000 stalks of heart of palm per day.
- Technical assistance for 125 heart of palm farmers Associations.
- Plan to increase productivity through fertilizer use.
- Diversification into new tropical products produced by heart of palm processing plants.
- Production of local seed and nurseries trained to supply heart of palm seeding.
- Generation of new technology to increase productivity and quality of heart of palm.

In addition to these facilities, there is the potential for the following production capacity:

- 300 to 500 new hectares with heart of palm crops by 2004.
- Installation of a new processing plant for heart of palm and other tropical products by 2004.
- Export volume increased to 280,000 by 2004.
- Diversification of presentation of heart of palm packaging.
- 20 percent increase in productivity.

In the following table, the annual crop season of these five alternative crops and coca crops as well, can be observed.

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<sup>76</sup> Ibid., 18-19.

**Table 3.1: Annual Crop Season**

PRODUCT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Coca												
Bananas												
Pineapple												
Passion fruit												
Heart of palm												
Black pepper												

Source: <http://www.desarrolloalternativo.com/Inversion/Leyes/CartillaIng.pdf>

#### **IV. Subsidies and International Assistance**

The economic growth of the areas where coca leaf is produced, therefore, of the areas where the alternative development is applied, had not been possible without the economic aid of the Bolivian government and public investments. The investment of the Alternative Development in these regions approximately reaches \$532 million with an average of \$26.6 million per year. This amount covers all projects executed from 1984 to 2004, including those being executed until December. USAID is one of the major investors covering 74 percent of this amount. The rest has been provided by the European Union, ODCCP<sup>77</sup>, and the German government.<sup>78</sup> Another of the main actors regarding subsidies is private investments. By 2001, private investments reached approximately \$54 million.<sup>79</sup>

The additional facilities are planned to be implemented through government subsidies and international assistance. It is clear that subsidies given to promote Alternative Development are creating a tendency of dependence. Most of these subsidies have been

<sup>77</sup> Office of Drug Control and Crime Prevention. ODCCP's objective is to strengthen the ability of countries and organizations to fight money laundering. This objective is promoted by assisting legal, financial and law enforcement authorities, through various forms of technical assistance, to develop the necessary infrastructure.

<sup>78</sup> Vice-Ministry of Alternative Development, *Desarrollo Alternativo y Erradicación de Cultivos de Coca* [Alternative Development and Eradication of Coca Crops], 56-62.

<sup>79</sup> *Ibid.*, 78.

necessary to keep farmers in the production of alternative crops, rather than reverting to coca production. For example, during a blockade on September 2000, an entire harvest of pineapple was lost, estimated at \$823,000. During the same blockade, losses of bananas and palm hearts totaled \$1.8 million. As a result, managers of the Alternative Development determined that maintaining the interest of Alternative Development farmers and private enterprise investors was crucial. CONCADE also provided \$2.5 million to establish support subsidies to 30 affected producer groups, and loans to 82 businesses.<sup>80</sup> It is for these reasons that some organizations and governments are thinking of reducing and eliminating these subsidies in order to promote sustainability and erase the idea of dependency.

By 2002 the total private investment in the Chapare area was \$53 million. Return to capital in the Chapare area is around 35 percent, a decrease of 68.2 percent on the return to capital means a net decrease of 23.8 percent leaving the return to capital to roughly 11.2 percent.<sup>81</sup> Since Alternative Development assumes competitive markets, actual levels of investment will require a subsidy of around \$16 million per year. The fact is that subsidies cannot continue forever, but what is clear is that the eradication process and crop substitution is a long-run project.

The large dependency of the Alternative Development on the export market plays an important role in the success and survival of this program and makes the Free Trade Agreement of The Americas (FTAA) a crucial component in the analysis to determine whether the legal crop program in Chapare is likely to succeed. The FTAA could open markets for the new crops in the Chapare area but at the same time, it could threaten the survival of the program by increasing foreign competition from more efficient economies in the production of the same crops, especially Brazil and Chile.

## **V. Institutions Involved**

In June 1999, the Bolivian and U.S. governments, represented by the Ministry of Agriculture, Livestock and Rural Development, and the International Development Agency, USAID, created the Counter Narcotics Consolidation of Alternative Development Efforts,

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<sup>80</sup> USAID, Unexplored Business Opportunities: Bolivia, April 2004.

<sup>81</sup> Toledo, The Illicit Coca-Cocaine Economy and the Potential Impact of Free Trade on the Licit Economy of Alternative Crops in Bolivia, European Trade Study Group, 2003. Available from <http://www.etsg.org/Papers/Toledo.pdf> [cited November 12, 2004] [INTERNET].

CONCADE, having as its main purpose the generation of a diversified, licit economy, which, in turn, will reduce coca production. Since that date, CONCADE has played an important development role in the tropical region of the Chapare area.

CONCADE provides two types of financial support depending on the type of investment involved:

1. Guarantee fund: Fund created to facilitate credit as part of the agreement between CONCADE and some financial institutions. This system aims to mitigate the risks associated with investment projects.
2. External fund: Assistance for investor in loan negotiations and leverage with national financial system, private funds, risk funds and international cooperation agencies.

CONCADE also has international agreements with some countries with which Bolivia has signed agreements and which offer preferential market access conditions for products from the Chapare area. Some of these agreements are:

- Andean Community of Nations (CAN for its initials in Spanish).
- Southern Common Market – MERCOSUR (Agreement of Economic Complementation # 36).
- Chile (Agreement of Economic Complementation # 22).
- Mexico (Agreement of Economic Complementation # 31).
- Andean Preferential Customs Duties (SGP United States and Andean Community).
- European Union Preferential Customs Duties (SGP Bolivia and European Union).
- Japanese Preferential Customs Duties (SGP Bolivia and Japan).

These agreements support investors in the Chapare area with an additional element of international competitiveness not offered to investors by other countries in the region. Alternative development products also receive preferential customs treatment in 100 percent of the following markets:

- Andean Community of Nations (Bolivia, Colombia, Ecuador, Peru, Venezuela).
- Mercosur (Argentina, Brazil, Paraguay and Uruguay).

- Unites States under the Law of Andean Trade Promotion and Drug Eradication.
- Generalized System of Preferences – SGP initials in Spanish (Canada, Japan, European Union, Australia).

## **VI. Comparative Analysis of Commodity Prices**

To have a better understanding of why alternative crops are not profitable enough to compete against coca crops, I present a table comparing the international commodity price of coca leaves and bananas (the most successful alternative crop). First, I will provide the concept of “commodity price”: Commodity price movements are primarily described by indices largely based on “spot market prices,” and therefore exclude transactions governed by longer-term contracts. Price indices for such commodities as food, beverages, agricultural raw materials, minerals, non-ferrous metals, fertilizers and crude petroleum are obtained from IMF International Financial Statistics. Aggregates for all primary commodities and for non-fuel primary commodities are calculated using IMF weights.

The information below is based on “Commodity Trade and Price Trends”<sup>82</sup> prepared by the International Economics Department of the World Bank. The prices are mentioned in US dollars per kilogram of the product throughout 1988 and 2003.

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<sup>82</sup> World Bank, Commodity Trade and Price Trends, prepared by the International Trade Division, International Economics Department, Washington, DC., 1993: 61.

**Table 3.2: International Commodity Prices in US\$/Kg.**

<b>YEAR</b>	<b>COCA*</b>	<b>BANANAS</b>
1988	1.00	0.48
1989	1.00	0.55
1990	1.11	0.54
1991	1.11	0.56
1992	1.12	0.44
1993	1.21	0.42
1994	1.19	0.40
1995	1.20	0.39
1996	1.20	0.40
1997	1.54	0.52
1998	1.51	0.48
1999	3.06	0.38
2000	5.58	0.42
2001	5.56	0.57
2002	5.70	0.52
2003	5.80	0.37

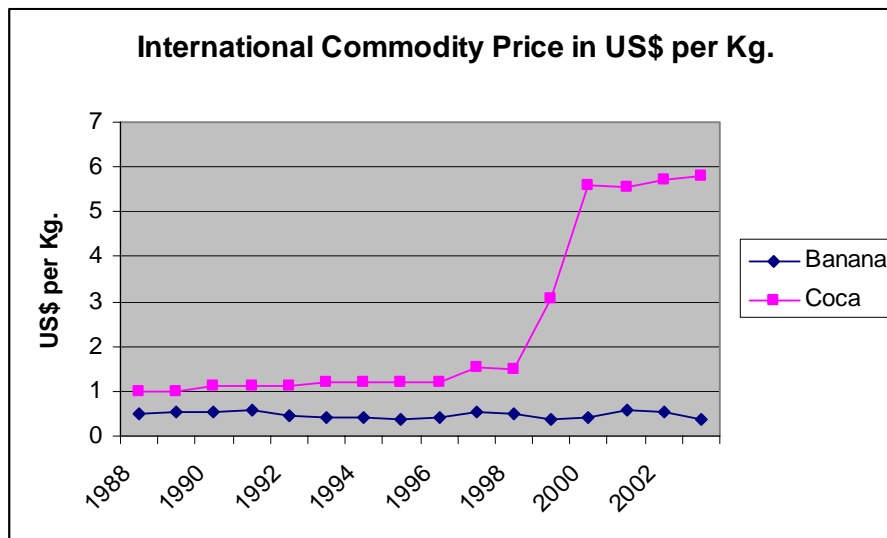
\*Prices of coca dry leaf were collected by United Nations Office on Drugs and Crime.  
[http://www.unodc.org/pdf/bolivia/bolivia\\_coca\\_survey\\_2003.pdf](http://www.unodc.org/pdf/bolivia/bolivia_coca_survey_2003.pdf)

For this comparison I just used bananas to compare with coca because I could not find the international commodity prices for pineapple, black pepper, heart of palm, and passion fruit.

Below, is a graphic illustration based of these price differentials:



**Figure 3.4: International Commodity Prices in US\$/Kg**



After looking at the table and the graphic illustration above, it is clear the space between the profit that bananas and coca leave. It is easy to understand why the alternative crops, in this case bananas, cannot compete economically against coca crops. If an economically profitable alternative crop to replace and fill the economic hole that coca crops leave is not found, then peasants will continue to grow and produce coca because it is much more profitable than any alternative crop.

There are numerous national and international organizations that have been actively involved in coca crops substitution throughout the program of Alternative Development. The economics of coca is often seen as the main reason for the widespread adoption of alternative crops. Coca profits are more than twice that of bananas, and it has to be remarked that bananas is the most successful crop of the program of Alternative Development. Coca profits are at least four times greater than other alternative crops such as pineapples or citrus.<sup>83</sup>

The economics of coca crops production has been perhaps the biggest obstacle to successful crop substitution efforts. The application of a high value, low-volume alternative crop with clear market potential into an integrated development package may offer much better results. Coca leaf products are high value – low volume commodities that cover high transportation costs particularly where transportation is primitive. And because of the coca

<sup>83</sup> Office of Technology Assessment Congress of the United States, Alternative Coca Reduction Strategies in the Andean Region.

economy's size, it may not be realistic to believe that alternative crops will be enough to substitute coca crops. Coca remains the best alternative for most of the farmers and, if its price declines, growers always have the option of simply leaving the leaves on the bush until the price improves.<sup>84</sup>

## **VII. Comparison among Exports of Bolivia's Alternative Development Crops and Foreign Countries**

In order to learn if the alternative crops that the governments' Alternative Development program recommended to farmers can compete in international markets, and present Bolivia with viable economic alternatives to coca in its agricultural sectors, I compare the value (in million dollars) of the exportations of bananas with exports of other foreign countries. I do this comparison using just bananas because there is no data available for the other four alternative crops. For these purposes, I show below a table and a graph of the comparison of exportation in value (in million dollars) of bananas, among the twenty principal producers.

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<sup>84</sup> Ibid., 5 – 70.

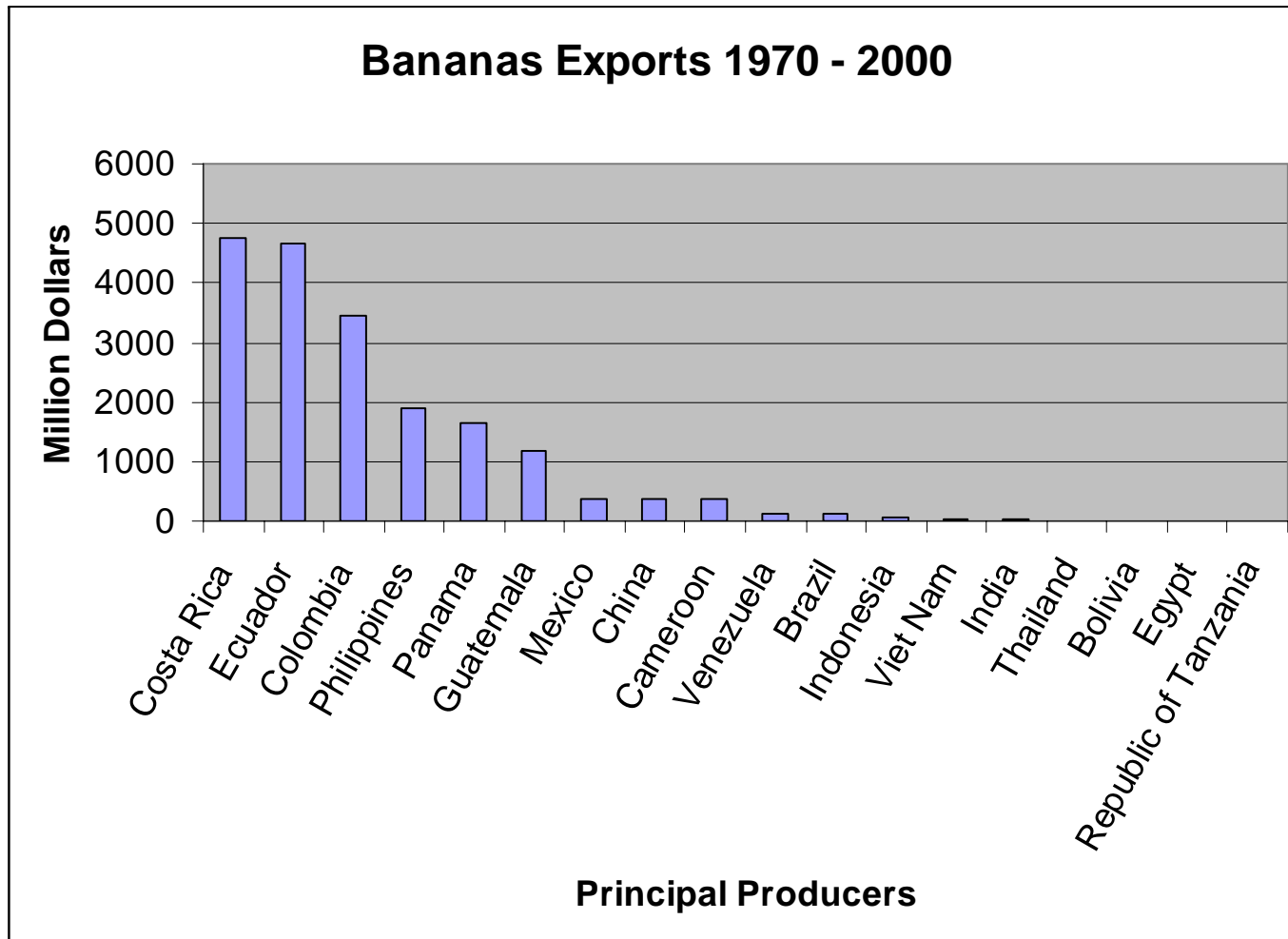
**Table 3.3: Bananas Exports**

Country	Value (USD) millions											
	1970	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000	Total
Costa Rica	67.6	145	214.5	195.5	318.8	686.6	644.4	606.9	697.7	641.6	553.2	4771.8
Ecuador	83.3	138.7	195.6	186.3	468.5	845.1	973	1'327	1'070.1	954.4	820.6	4665.5
Colombia	18.1	31.6	94.1	156.2	318	431.2	459.2	503.2	476.1	478	480.6	3446.3
Philippines	6.1	73.1	114.2	113.5	149.3	223.7	236.3	216.6	217	240.7	291.7	1882.2
Panama	59.1	77.1	120.8	165.1	213	190.4	184.2	179.9	139.5	184.1	148.5	1661.7
Guatemala	14.5	17.6	51.8	62.8	70.1	138.6	155.7	152.2	193.4	140.7	175.3	1172.7
Mexico	0.1	0.3	0.7	5	40.3	48.1	72	68.2	72.5	37.9	19.9	365
China	32.5	23.2	26.7	43.3	29.4	32.6	40.1	29.7	35.5	37.9	33	363.9
Cameroon	2.7	6.2	5.4	1.7	33	75.6	62.9	49.5	36.5	43	43	359.5
Venezuela	1.5	1.3	1.6	8.9	15.2	15	14.3	21	23.7	23.7	12.3	138.5
Brazil	10.7	30.7	11.2	16.6	8.7	3.9	6.1	8.4	11.6	12.5	12.5	132.9
Indonesia	..	..	..	0	0.3	8.6	19.3	13.2	14.1	11.1	0.4	67
Viet Nam	0.3	0.9	1.1	2.2	0.5	3.4	4.8	1.6	3.2	4.8	2.2	25
India	0.5	0.2	0	0.1	0	0.7	0.1	3.4	4.1	3	4	16.1
Thailand	0.1	1.2	1.4	0.8	0.7	1	1.2	0.9	0.7	2.4	3	13.4
Bolivia	..*	..*	..*	..*	..*	0.2	0.4	0.3	0.3	0.9	1.1	3.2
Egypt	0.1	0.1	0	0	0.2	0	0	0	0			0.4
Republic of Tanzania	0.1	0	..	..	..	..	..	..	..	..	..	0.1

Source: United Nations Commodity Yearbook 2003, Volume II: 103-104.

\* No data available.

Figure 3.5: Bananas Exports 1970 –2000



This comparison was about the value (in million dollars) of the twenty principal producers of bananas in the world, among them is Bolivia, occupying the eighteenth place.

After looking to the table and chart, I concluded that it is clear that since 1999 the value of banana exports in Bolivia began to improve compared to the value in 1970; and it even improved a little bit more by 2000. This was likely due to the fact that the eradication process started to gain success since 1999; as a result, the amount of bananas being grown increased as well as the amount exported.

As we can observe, Bolivia has been increasing its exportation throughout the years, but it did not grow by much. According to the United Nations, Bolivia has exported a total of 3,845.20 thousand tons in thirty years since 1970. It has been exporting an average of 349.6 thousand tons per year from 1970 to 2000, being the lowest amount among South American countries; I believe this is due to the fact that Bolivia is the poorest country and therefore the country with the key technology available. It is clear that the competition is very hard. Bolivia is competing against countries that export an average of 8,615.1 thousand tonnes per year, like India; or Brazil with an export average of 5260.5 thousand tonnes per year.

Now that Bolivia is in the list among the twenty principal producers of bananas in the world, it should improve the quality of the product. In that way it could export more of the product and to many more countries. If so, Bolivia will keep a place in the list and reach a higher position.

## **VIII. Additional Obstacles encountered by the Alternative Development in**

### **Bolivia**

At the beginning of this research thesis I mentioned that according to some authors, the program of Alternative Development is continually facing different kinds of obstacles on its way to success. Obstacles such as the lack of profitability of the alternative products recommended to farmers who decide to switch crops, the lack of adequate infrastructure to transport the products to the markets, the fact that coca crops have a secure market, the lack of marketing of the alternative products, its reliance on large fluctuations, and the fact that producing and handling alternative products (most of

them fruits or vegetables) is much more difficult and expensive than producing or handling coca leaves. But there are some additional obstacles that the Alternative Development program has been encountering in Bolivia that I have been discovering throughout this research. These additional obstacles are: the problems that the peasants have with the drug traffickers as they are threatened if they stop producing coca, the lack of adequate roads to facilitate the access of the alternative products to markets, the difficulties of accessing international markets due to the poverty of the country, the low level of quality of the alternative products, the fights among farmers due to the existence of one group that wants to stop producing coca crops and another group that does not, and lots of struggle, marches, and blockades to stop the eradication of coca crops and stop the alternative products from reaching the markets.

The process of replacing coca crops with alternative crops has been causing many different conflicts among the Bolivian government, coca producers, and cocaine traffickers. Development Alternatives, Inc. (DAI)<sup>85</sup> stated in an article about keeping markets open in the middle of hostility in Bolivia, that for three consecutive years, from 2000 to 2003, roadblocks and violence paralyzed all pineapple exports from the Chapare area. As a result, farmers and exporters lost thousands of dollars. Roadblocks, road spikes (known as miguelitos), and rock throwing are common methods used by the coca producers in order to restrict the growing licit economy over the coca economy. The results of these methods are higher insurance costs for exporters and importers, a refusal to insure trucks and production, and the opposition by some importers to send their own trucks to pick up the alternative products. This last motive is understandable because nobody wants to risk a truck that cost around \$85,000.<sup>86</sup> For that reason CONCADE is

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<sup>85</sup> DAI's mission is to help countries around the world achieve their development goals. They place their highest priority on ensuring that their projects are well managed and sustainable and, most important, that they improve people's lives.

DAI holds a project "Bolivia Counter-Narcotics Consolidation of Alternative Development Efforts (CONCADE)" from June 1999 to May 2005. The project focuses on agricultural technology transfer, agribusiness marketing, private-sector investment promotion, strengthening of alternative development organizations, alternative development policy, and a geographically based performance monitoring information system. CONCADE is also implementing activities through local Bolivian subcontractors, primarily in agricultural extension technical assistance to farmer organizations. Available from [www.dai.com](http://www.dai.com) [cited November 5, 2004] [INTERNET].

<sup>86</sup> Glick, Kim and Foster, Charles, Keeping Markets Open amid Hostility in Bolivia, Fall/Winter 2003 [article online] [cited November 5, 2004]; available from [http://www.dai.com/dai\\_news/text\\_only/fall\\_markets\\_open\\_in\\_bolivia\\_text\\_only.htm](http://www.dai.com/dai_news/text_only/fall_markets_open_in_bolivia_text_only.htm); [INTERNET].

constantly working in developing creative ways to meet orders on time and guarantee the arrival of the alternative products. For example, in 2002, CONCADE established storage facilities in places outside the conflict area in order to prevent the products from rotting due to blockades. The results of these blockades are not only economic loss but also lives lost due to the increment of trip-wire bombs and hidden grenades in roadblocks which are intended to target the military and stop eradication efforts.<sup>87</sup>

Another problem that Alternative Development encounters is the shortage of refrigerated trucks in Bolivia and the opposition of countries such as Argentina to send their own trucks due to the violent environment. As a result, CONCADE has developed a solution; it developed an alternative route via the Andes that eliminates the need for refrigerated trucks and avoids roadblocks.<sup>88</sup>

One of the additional obstacles the Alternative Development program also encounters in Bolivia is the many struggles, marches, and road blockades that farmers who are pro-coca production organize to stop the eradication of coca crops and prevent the alternative products from reaching the markets. In other words, these farmers do whatever they can to prevent the success of the Alternative Development program. These coca producers also collect “taxes” from persons and vehicles traveling through the Chapare area. They also have been threatening and intimidating those farmers who produce alternative crops instead of coca crops as well as any worker related to the Alternative Development program. These kinds of acts are just another way to show their opposition to Alternative Development programs in Bolivia.<sup>89</sup>

Another obstacle of the Alternative Development program is faced by the workers pro-Alternative Development. In March 2002, some facilities and equipment from USAID and other donor-funded, as well as some plantations and farms were burned, sacked, or destroyed by farmers who were pro-coca production. As a result, workers who invested most of their time trying to make the Alternative Development program work, were very affected by this kind of vandalism and violence. But these workers are not the only ones who suffered from this violence; the Vice-Ministry of Alternative

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<sup>87</sup> Ibid.

<sup>88</sup> Ibid.

<sup>89</sup> Development Associates, Inc., Assessment of The USAID/Bolivia Alternative Development Strategy - Final Report, 1.

Development was recently visited by “thieves” who removed the hard drives from about 25 computers which contained about 20 years of information and studies about the program of Alternative Development in Bolivia.<sup>90</sup>

## **IX. Limitations Encountered**

While elaborating this research thesis I encountered many limitations mainly concerning the availability of accurate and valuable information since most of it is not public yet. It was very difficult to find accurate information because the Bolivian government shows in most of its information about the program of Alternative Development, that it is working and it is being successful. There are some people, especially in the most recent administrations, who might not release the real data because they are afraid of the negative implications of their comments. I believe that the most accurate information will show up in the following years, not now that the program of Alternative Development is still in a test period. But this is just because if they show that the program of Alternative Development is working, the government will keep receiving economic help, especially from the U.S. government and from international organizations which are interested in making this program of Alternative Development work.

Due to the few available data, I had to study just the case of bananas for my international economic comparisons and not the case of the other four alternative crops as I planned to do at the beginning of my research.

I believe that another major limitation I encountered while doing this research thesis was my lack of resources. A study such as this one focused in such controversial topic, and the fact that it occurs in another country were some of the obstacles that did not let this research have better results.

Another limitation that I encountered while elaborating this thesis, was to find the international commodity price for coca leaf, which I needed to perform an economic comparison between coca crops and alternative crops. Since selling coca leaf internationally is prohibited, it was impossible to find this data; however, I used the prices inside Bolivian markets to do the comparisons.

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<sup>90</sup> Ibid., 1-2.



In conclusion, in this chapter I wanted to present an overview of coca crops, alternative crops, and establish additional obstacles encountered by the program of Alternative Development. As a result, I established the price of coca leaves as well as its process of cultivation and eradication. I also presented some case studies of alternative crops and their success in national and international markets as well as some of the subsidies and international assistance provided to import and export these alternatives commodities. Finally, I concluded this third chapter with the additional obstacles encountered by the Alternative Development in Bolivia and the limitations that this study has encountered.

## **Chapter Four**

### **Conclusions and Recommendations**

The purpose of this thesis has been to explore some of the obstacles or challenges that the Alternative Development program has been encountering in Bolivia. The preceding chapters have presented evidence about the existence of such obstacles and the possibility of these obstacles could endanger the possible success of the program of Alternative Development in Bolivia. In order to analyze these challenges, first, I studied the economy throughout this 15-year period in Bolivia, specifying the role coca production plays in the economy as a whole. Then, I examined some case studies of some alternative crops and their success in national and international markets. Next, I compared the quantity and value of the exports of the most successful alternative crop which is bananas<sup>91</sup> with exports of other foreign countries in order to learn if this alternative crop that the government's Alternative Development program recommended to farmers can, first, compete with other producers in international markets, and second, if it presents Bolivia with viable economic alternatives to coca in its agricultural sectors. The results of this research yielded information that could help develop future policies to benefit the Bolivian population and the Bolivian economy in general.

In this thesis I am not attempting to conclude or present information to evaluate the economic viability of the program of Alternative Development in Bolivia. This is too ambitious due to the existence of some limitations. What I have achieved throughout this research is to find out about some challenges that this Alternative Development program is encountering. Such challenges as the problems that the peasants have with the drug traffickers as they are threatened if they stop producing coca; inadequate roads to facilitate access of the alternative products to markets; the difficulties of accessing international markets due to the poverty of the country and the low level of quality of the alternative products; the fights among farmers due to the existence of one group that wants to stop producing coca crops and another group that does not; lots of struggle, marches, and blockades to stop the eradication of coca crops and stop the alternative products from reaching the markets; some facilities and equipment from USAID (The

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<sup>91</sup> I chose this alternative crop for analysis because it is the most profitable and successful crop of the Alternative Development program.

U.S. Agency for International Development) and other donor-funded, as well as some plantations and farms have been burned, sacked, or destroyed by farmers who are pro-coca production; the fact that USAID has refused to work with the farmers or the unions representing these farmers or coca producers, which are a key part on finding a permanent solution for this problem. The evidence presented in this thesis is important in accepting first, the existence of these challenges and second, the necessity to do something about them.

There are some limitations I encountered while doing this research, such as the lack of available, accurate, and valuable information since most of it is not public yet; due to the limited available data, I had to study just the case of bananas for my international economic comparisons and not the case of the other four alternative crops as I planned to do at the beginning of my research; lack of time and resources; having difficulty in finding the international commodity price for coca leaf; I did not find commodity prices for the other 4 commodities; data does not exist because these four commodities are “insignificant.” A study such as this one focused in such controversial topic, and the fact that it occurs in another country were some of the obstacles that did not let this research have better results.

The fact I encountered these limitations will help to have a clear idea of the relevant questions that need to be answered with later researches.

- If the WTO pressures Western countries to open their markets to countries that are interested in switching from coca crops to other crops, in order to apply an Alternative Development program, then Alternative Development programs could reach a permanent success and provide a stable economy to those countries.
- If the U.S. spends more money on the control over drugs such as cocaine here in the U.S., and if it focuses more on consumption instead in just focusing on production of coca, then not only the supply but also the demand will be reduced.
- The World Bank should do more research on the four commodities (pineapples, passion fruit, black pepper, and heart of palm), because it could deploy valuable information to reinforce the success of the Alternative Development program in Bolivia.

It would be really helpful, to have a research on the economic viability of the program of Alternative Development in Bolivia completed at some time in the future. This study should not only evaluate the potential success or failure of the program of Alternative Development from an economic and technical point of view but also from a socio-political point of view. The Bolivian government should also find a way to not leave out of the picture the people involved in the process, such as the producers and consumers.

In conclusion, I should say that from the results of this research thesis I have found that alternative crops are profitable to farmers, but Alternative Development has been encountering some obstacles. Because of those obstacles the Alternative Development program has not been a success. Besides, this program of Alternative Development could be backed up reinforcing policies that already exist and regarding the regulation of demand of cocaine in the domestic market. That way, both the supply and the demand will be reduced.

Finally I must add that the potential success or failure of the program of Alternative Development is usually discussed from an economic and technical point of view. But I consider that in order to improve its economic viability, the Bolivian government should find a way to replace coca crops with viable and sustainable alternative crops, being very careful in making smart investments with the help of experts in the area, but most important, not leaving out of the picture the people involved in the process, such as the producers and consumers.

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## **List of Acronyms and Abbreviations**

Akullicu = Chewing coca leaves

Alternative Development, Alternative Development

ALADI, Latin American Integration Agreement

CEDIB, Centro de Documentación e Información Bolivia [Center of Documentation and Information Bolivia]

CICAD, Comisión Interamericana para el Control del Abuso de Drogas [Inter- American Commission for the Control and Abuse of Drugs]

COMIBOL, Corporación Minera Boliviana [Bolivian Miner Corporation]

CONALTID, Consejo Nacional de Lucha Contra el Tráfico Ilícito de Drogas [National Chamber of the Fight Against Ilicit Traffick of Drugs]

CONCADE, Counter-Narcotics Consolidation of Alternative Development Efforts.

DINACO, Dirección Nacional de Control de la Coca [National Organism to Control Coca]

DIGECO, Dirección General de la Coca.

DIRECO, Dirección Nacional de Reversión de la Coca [Coca Eradication Directorate]

EIU, The Economist Intelligence Unit

Excedentaria = the excess of coca crops

FELCN, Fuerza Especial de Lucha Contra el Narcotráfico [Special Force of Fight Against Drug Trafficking]

FTA, Free Trade Area of the Americas

Gini Index = Measures the extent to which the distribution of income (or in some cases consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index score of zero implies perfect equality while a score of one hundred implies perfect inequality.

GDP, Gross Domestic Product

GNP, Gross National Product

GSP, General System of Preferences

Ha., Hectare

IADB, Inter-American Development Bank

ICREAS, International Commodity Related Environmental Agreements

IBTA, Instituto Boliviano de Tecnología [Bolivian Institute of Technology]

IMF, International Monetary Fund

INE, (Instituto Nacional de Estadística - Bolivia) [National Institute of Statistics – Bolivia]

LCD, Less Developed Countries

MERCOSUR, (Mercado Común del Sur) [Southern Cone Common Market]

ODCCP, Office of Drug Control and Crime Prevention.

OECD, Organization for Economic Co-operation and Development

PDAR, Programa de Desarrollo Alternativo Regional [Program of Regional  
Alternative Development]

PIDYS, Plan Integral de Desarrollo y Substitución [Integral Plan of Development  
and Substitution]

PRODES, Project of Development Chapare-Yungas

SUBDESAL, Subsecretaría de Desarrollo Alternativo y Sustitución de  
Cultivos

UDAPE, Unit for the Analysis of Economic Policies

UMOPAR, Unidad Móvil de Patrullaje Rural [Mobil Unit of Rural Patrolling]  
(also known as “Leopardos” or “Leos”)

UN, United Nations

UNDCP, United Nations International Drug Control Programme

UNODC, United Nations Office on Drugs and Crime

US, United States of America

USAID, The United States Agency for International Development

USITC, United States International Trade Commission

WTO, World Trade Organization