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**LIVING CONDITIONS OF FOREST-DEPENDENT PEOPLE IN  
THE NORTHERN BOLIVIAN AMAZON:  
A CASE STUDY OF EL SENA MUNICIPALITY**

submitted by  
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This thesis is dedicated to my father, who taught me to love and respect nature.

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## Abbreviations and Acronyms

ARFM	<i>Areas de Reserva Forestal Municipal</i> (Municipal Forest Reserve Areas)
ASL	<i>Asociaciones Sociales del Lugar</i> (Local Associations)
BMZ	<i>Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung</i> (Federal Ministry for Economic Cooperation and Development)
BPRS	Bolivia's Poverty Reduction Strategy
CCs	<i>Consejos Consultivos</i> (Advisory Councils)
CIFOR	Center for International Forestry Research
CIRABO	<i>Central Indígena de la Región Amazónica de Bolivia</i> (Indigenous Head Office from the Amazon Region of Bolivia)
DFID	Department for International Development
FPS	<i>Fondo Nacional de Inversión Productiva y Social</i> (National Fund for Productive and Social Investment)
HIPC	Highly Indebted Poor Countries
INE	<i>Instituto Nacional de Estadística</i> (National Institute of Statistics)
INRA	<i>Instituto Nacional de Reforma Agraria</i> (National Institute of Agrarian Reform)
MST	<i>Movimiento sin Tierra</i> (Movement of Landless)
NBI	<i>Necesidades Básicas Insatisfechas</i> (Unsatisfied Basic Needs)
NGO	Non-Governmental Organization
OTB	<i>Organización Territorial de Base</i> (Grassroots Territorial Organization)
PDM	<i>Plan de Desarrollo Municipal</i> (Municipal Plan of Development)
PNUD	<i>Programa de las Naciones Unidas para el Desarrollo</i> (United Nations Development Programme)
RRA	Rapid Rural Appraisal
SBPC	<i>Sistema Boliviano de Productividad y Competitividad</i> (Bolivian System of Productivity and Competitiveness)

SIF	<i>Superintendencia Forestal</i> (National Forestry Administration)
SLA	Sustainable Livelihood Approach
TCO	<i>Tierra Comunitaria de Origen</i> (Communal Lands of Origin)
UFM	<i>Unidad Forestal Municipal</i> (Municipal Forest Unit)

## 1. Introduction

The Northern Bolivian Amazon is located in the northernmost part of Bolivia. It is a tropical forest region, covering an area of approximately 100.000 km<sup>2</sup> (Bojanic, 2001). The economy of the region has been based for more than 150 years on the extraction of forest products such as rubber, palm hearts, gold, timber and Brazil nuts (CNF, 1997 and 1998 in Henkemans, 2001). The boom to bust cycle of the rubber production was particularly crucial in shaping the current socio-economic situation of the Northern Bolivian Amazon (Stoian, 2000a). Nowadays, the Brazil nut is the main export product of the region (Bojanic, 2001).

The prevailing social situation in the region is precarious from an economic, political and social point of view (de Jong et al., 2004). The Bolivian index of Unsatisfied Basic Needs shows that in the year 2001, around 70 percent of the population in the Northern Bolivian Amazon were poor (INE, 2002b). To a great extent, this is the result of the geographic isolation experienced by the whole area up to 1985 (PNUD, 2003). Furthermore, the relations between the different social groups of the region are very problematic due to a history of economic, labour and power relations, which favoured the strongest economic and political groups. The labour relations were until recently semi-feudal, since many patrons managed to make their labourers dependent on them. (de Jong et al., 2004)

Since forests and their natural resources form the base of the regional economy in the Northern Bolivian Amazon, they have played and still play a crucial role in the livelihoods of the rural population. The extraction of Brazil nuts has had since the 1990s great importance for rural forest-dependent households, because the majority of them make the greatest income out of this activity. However, the monetary income generated through the extraction of Brazil nuts is, in many cases, not enough to sustain rural people's livelihoods. Deprived of access to agricultural markets, people who live in rural areas usually derive their livelihoods from a mixture of forest extraction, hunting, fishing, subsistence or semi-subsistence agriculture, informal trade and wage labour (Henkemans, 2001).

Bolivia passed during the 1990s a number of progressive laws with the purpose of increasing effective governance, fostering the participation of the rural population, promoting a more sustainable use of the region's natural resources and improving the living conditions of the rural population. The significant laws in this context are: Popular Participation Law [*Ley de Participación Popular* (1994)], Administrative Decentralization Law [*Ley de Descentralización Administrativa* (1995)], National Agrarian Reform Law [*Ley del Servicio Nacional de Reforma Agraria* (*Ley INRA*, 1996)], and the new Forestry Law [*nueva Ley Forestal* (1996)] (de Jong et al., 2004). This new legal environment has greatly changed the ownership situation of land and forest resources (Stahl, 2002a).

The implementation of structural changes in public administration, specifically the process of decentralization put into practice in Bolivia, has the objective of delegating power, resources and responsibilities from the central government to regional and local authorities. The main result of this process is that local governments have greater and better opportunities to address local needs. (CIFOR, 2003) These governments could implement more successfully poverty alleviation programs if local decision makers had better tools and strategies adapted to their realities for prioritizing actions and evaluating impacts (CIFOR, 2004). Starting from this premise, it is essential to develop and use indicators to measure rural poverty and the impacts that government programs have on poverty, trying to make these tools fit in the socio-cultural context of a specific region.

In addition, in view of the high levels of poverty found not solely in the Northern Bolivian Amazon region but in the country as a whole, the Bolivian Government, together with civil society, developed in the year 2000 a strategy to reduce poverty [Bolivia's Poverty Reduction Strategy (BPRS)]. The BPRS essentially proposes actions to aid the neediest people of the country, giving great importance to the development of rural areas and to making improvements in basic services and in human capital (Bolivian Authorities, 2001).

Considering this scenario, the present study examines the productive activities of forest-dependent communities in relationship to their livelihoods and local self-perceptions of poverty and human well-being. It is being carried out as a Master



thesis under the supervision of Prof. Dr. Michel Becker of the Institute of Forest and Environmental Policy, Market and Marketing Section of the Albert-Ludwigs-University at Freiburg, Germany.

Research for this study was conducted in two communities of El Sena Municipality, Department of Pando, in the Northern Bolivian Amazon region, as a part of the research program of CIFOR (Center for International Forestry Research) "Making Local Governments More Responsive to the Poor: Developing Indicators and Tools to Support Sustainable Livelihood Development under Decentralization". CIFOR's applied investigation program examines two municipalities in Bolivia (Bolpebra and El Sena) and two in Indonesia (Kutai Barat and Malinau), whose rural populations are dependent on tropical forests, and whose governments are undergoing a process of decentralization (CIFOR, 2003). The aim of the program is to improve the impact of local government poverty alleviation policies and actions on rural poor. The program intends to develop and propose methods and adequate tools (indicators) to measure regional poverty and the impacts government programs have on poverty. It will prepare tools to help local governments develop, implement and evaluate efficient programs for improving the well-being of poor forest-dependent people. (CIFOR, 2003) The program is organized and coordinated by CIFOR and funded by the Federal Ministry for Economic Cooperation and Development [*Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (BMZ)*] of Germany. The Institute of Forest and Environmental Policy is one of the research partners.

As stipulated by CIFOR, this study will contribute to the dissertation of the PhD student Dante Fuentes, who is writing a thesis within the framework of CIFOR's research program, by capturing and analyzing perceptions of poverty and well-being at the village level, as a starting point towards developing indicators to measure rural poverty.

This thesis is divided into ten chapters. Following an introduction to the Bolivian reform process and its impact on municipalities and rural communities in the Northern Bolivian Amazon region (chapter two), the BPRS is presented in chapter three. Then chapter four describes the living conditions of forest-dependent people in rural areas of the study region, centering the attention on the role of the forest in

the livelihoods of these people. The fifth chapter presents the research concept and the methods and sources. In chapter six, the municipality and the two communities, in which the fieldwork took place, are described. Chapter seven displays the results of the survey conducted in the communities, and chapter eight summarizes the principal findings of the study, discusses them and draws conclusions.

## **2. Decentralization Process in Bolivia<sup>1</sup>**

### ***2.1 Decentralization Context and Institutional Changes***

In recent years, followed by democratic processes that have taken place in Latin America and developing countries worldwide, central governments had begun to implement political reforms, which included Decentralization policies, empowering and transferring responsibilities to local governments. It was in this context that, despite the traditionally centralised form of government in Bolivia, significant changes began to take place in the country, in the end of 70s, towards Decentralization process. At that time, it would rather imply administrative measures, political Decentralization towards a democratic process, however, would only be carried out in the 90s, as a result of internal political changes, with international cooperation playing a decisive role in supporting the consolidation of that democratic process (Terrazas, 2002; Ferroukhi, 2003).

Indeed, besides the increasing leverage of international cooperation and the external influence of neighbouring countries towards Decentralization, reforms that had then taken place in Bolivia were also driven by internal processes of political democratisation and regional claims of grassroots movements within the country, organised by marginalised groups, such as indigenous people and peasant communities (Kaimowitz et al., 2000; Ferroukhi, 2003; Ruiz, 2004).

Aiming at tackling social internal conflicts, the Bolivian central government introduced, in the mid-1990s, major structural reforms and institutional changes in the country, assigning greater authority to municipal governments with the aim of improving social investment at local level and promoting greater regional participation in public management. Within the Decentralization process, the approval of the Popular Participation Law, in 1994, established the transference of responsibilities to municipal governments concerning the supply of public services, such as education, health services, road building, water systems, also enhancing institutional mechanisms for social participation in public investment planning and control of

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<sup>1</sup> This chapter has been written by Ligia Pereira (2004).

municipal expenditures (*Ley de Participación Popular*, 1994; Pacheco, 2002a). In order to finance these new responsibilities, the central government assigned to municipalities 20% of the national budget (*Coparticipación Tributaria*), which should be proportionally distributed among municipal governments according to its population size. By allocating one Boliviano<sup>2</sup> to each Bolivian citizen, the law aimed at establishing the distribution of public resources in a more equitable way, addressing historical social and regional exclusion of rural and some urban areas. Before that, nearly 92% of national expenditure used to go exclusively to the cities of La Paz, Santa Cruz and Cochabamba (*Ley de Participación Popular*, 1994; Terrazas, 2002; Pacheco, 2002 a).

Seeking to promote social participation process of formerly marginalised ethnic groups in municipal management and planning of public resources, the new law acknowledged social organisations represented by indigenous people, peasant communities, and neighbourhood committees, the so called grassroots territorial organisations (*OTBs - Organizaciones Territoriales de Base*). Legally recognised, these social organisations would then be able to propose and supervise the implementation of public services, as much as to control investment of public resources and municipal expenditures, as they have also acquired the right to appoint the representative members of Vigilance Committees (*Comités de Vigilancia*), created to fiscalise the activities of municipal authorities (*Alcaldes*) and municipal councils (*Consejos Municipales*) (*Ley de Participación Popular*, 1994; Pacheco, 2003).

The process of Decentralization in Bolivia went on with the approval, in 1995, of the Administrative Decentralization Law. While the Popular Participation Law had changed the responsibilities of municipal governments, Administrative Decentralization Law has modified the attributions of departmental governments, regulating the regime of administrative decentralization by transferring technical and administrative attributions from central governments to departmental levels. Even though it has modified the functions of departmental governments, the Administrative Decentralization Law did not represent, however, the assignment of political autonomy or legitimacy to departmental authorities (*Prefectos*), as they are still

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<sup>2</sup> The current Bolivian currency.

appointed by the central government. In that sense, departmental governments' main institutional task would rather consist in articulating the national government with the administration at municipal level (*Ley de Descentralización Administrativa*, 1995; Terrazas, 2002; Pacheco 2003).

The later approval of Municipality Law, in 1999, ratified the municipal regime in Bolivia, acknowledging the autonomy of municipal governments in defining municipal policies and management of their public resources. Different from departmental government, which is subordinated to central government, municipalities were then considered independent, having exclusive attributions and resources. Besides institutional autonomy, the new law has also acknowledged municipal legitimacy, as local authorities are directly elected<sup>3</sup> instead of being designated by central government, as occurs at departmental level. Moreover, beyond regulating the municipal regime and determining the attributions of municipalities and municipal governments, Municipality Law reiterated the premises of Popular Participation Law, by also reassuring participation of local organisations and vigilance committees in supporting municipal participative planning and controlling expenditures of municipal governments (*Ley de Municipalidades*, 1999; Terrazas, 2002).

These administrative and political reforms towards decentralization and democratic process in Bolivia were also extended to the forest sector and the management of natural resources by reinforcing local participation and assigning responsibilities to municipalities in forest management. Important institutional changes were introduced in Bolivian forest regime with the approval, in 1996, of the new Forestry Law, regulating the use of forest resources in the whole country and acknowledging the rights of traditional forest users. The establishment of the National Agrarian Reform Law, in the same year, reassured land property rights to indigenous people and peasant communities. These two laws have changed dramatically the way that land and public forests are allocated in Bolivia and how their use is to be managed (*Ley Forestal*, 1996; *Ley del Instituto Nacional de Reforma Agraria*, 1996, Pacheco, 2003).

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<sup>3</sup> Municipal election was, in fact, institutionally introduced in Bolivia in 1985 by reforms established on the former Municipality Law.

Aiming at promoting sustainable forest use and forest protection by improving control of forest activities and illegal practices, the new Forestry Law established the assignment of concessions, in areas to be declared as municipal forest reserves, to small-scale loggers, indigenous people, peasant communities and other traditional groups without formal access to forest areas, organised as local associations (*ASLs - Asociaciones Sociales del Lugar*) (*Ley Forestal*, 1996).

For that purpose, municipalities would have to indicate municipal forest areas, corresponding to up to 20% of the total amount of public forests within their jurisdiction, to be assigned by national government as Municipal Forest Reserve Areas (*ARFM - Areas de Reserva Forestal Municipal*). In order to be able to claim those forest reserve areas, municipal governments have to create Municipal Forest Units (*UFM - Unidades Forestales Municipales*), getting 25% of allocated funds from both royalties of forest concessions and revenues generated from forest clearing permits<sup>4</sup>, to finance the establishment of the *UFMs* and its activities (*Ley Forestal*, 1996; Kaimovitz et al, 2002; Pacheco b, 2002).

Also approved in 1996, the new National Agrarian Reform Law established the land distribution regime in the country, assuring property rights to indigenous people and peasant communities over their communal lands as a means of achieving more sustainable use of natural resources. For that, it has created the National Institute of Agrarian Reform (*INRA - Instituto Nacional de Reforma Agraria*), a public decentralised entity responsible for land distribution policies. Its attributions involved the definition of location and extension of public and original communal lands, being also in charge of clarifying land property rights through a process of title regulation

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<sup>4</sup> Annual compulsory forest royalties are meant to be paid for the right of forest resource use, calculated over the forest concession area established by forest management plans. Those fees correspond to US\$ 1 per hectare/year and are charged over the whole forest area, in the case of forest concessions; just over the area to be annually logged, in the case of private owners (including indigenous communities); and a combination of both, in case of concessions to *ASLs*. Exploitation of *NTFP* (non-timber forest products) is only charged in 30% of forest fees (US\$ 0.30 per hectare/year). Clearing permit fees, in turn, imply the payment of U\$ 15 per hectare, plus 15% of the estimated value of timber from the cleared area (*Forestry Law*, no 1700, art. 37; Pacheco b, 2002).

known as *saneamiento*<sup>5</sup>, and conciliating conflicts emerging from agrarian land rights (*Ley del Instituto Nacional de Reforma Agraria*, 1996).

The major importance of the new agrarian reform law of 1996 was that it established the allocation of forest areas to indigenous people and traditional communities, acknowledging the customary rights of these traditional groups in communal lands<sup>6</sup>. For that purpose, the *INRA* law incorporated indigenous territories as *Tierras Comunitarias de Origen (TCOs)*<sup>7</sup>, granting property rights to these local groups over forest areas, as well as the exclusive use of natural resources within those communal properties. (*Ley del Instituto Nacional de Reforma Agraria*, 1996; Ruiz, 2004).

Even though all those changes brought about by the Decentralization process introduced in Bolivia in the 90s aimed at promoting economic and social development in a more equitable and participative way, the country still held, in the end of that decade, one of the highest levels of poverty and inequity in Latin America. Indeed, although comparisons of the national scenario within the last decade have shown increased rates of life expectation and basic education, together with the decline of children mortality, these results remained below the average level for Latin American countries in the same period (*MDSP*, 2002; *UDAPE*, 2003).

In this context, in the year 2000, the Bolivian Strategy for Poverty Alleviation was elaborated, as a result from an ample and participative debate that took place at

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<sup>5</sup> *Saneamiento* refers to the technical and juridical process of agrarian property right regulation and consolidation. This process, conducted at national level by *INRA*, is locally implemented through its municipal offices.

<sup>6</sup> Even though the former Agrarian reform of 1956 did not hinder titling of communal lands, during the 60s and 70s considerable amount of land in Amazon region was titled as individual patches, in such a pattern of land distribution that was not suitable to the indigenous people due to the limited area that restricted their spatial mobility and social tradition (Ruiz, 2004).

<sup>7</sup> *Tierras Comunitarias de Origen* are defined as geographic territories that constitute the habitat of indigenous people and peasant communities to which they have traditionally had access and where these traditional groups particularly develop and maintain their forms of economic, social, and cultural organisation in order to assure their survival (*Ley del Instituto Nacional de Reforma Agraria*, 1996).

national level, the so called National Dialogue 2000 (*Diálogo Nacional*), introduced as a means to define criteria for resource distribution from the multilateral program of foreign debt relieve for poverty alleviation of Highly Indebted Poor Countries (*HIPC*), allocated to tackle poverty in Bolivia.

In order to provide the legal bases for the National Dialogue and establish the basic lines for the management of Bolivian Strategy for Poverty Reduction, the National Dialogue Law (*Ley del Diálogo Nacional*) was approved in 2000. One of major implications of the National Dialogue Law was that public resources from *HIPC* program, coming from the eight world's richest countries (*G-8*), were to be managed at municipal level, emphasising actions aiming at tackling rural and urban poverty that incorporate gender, environmental, and ethnic issues, benefiting marginalised groups within the country (*Ley del Diálogo Nacional, 2000; MDSP, 2002; Maldonado, 2004*).

With the premise that fighting against poverty would not succeed without a participative process, the National Dialogue Law was also introduced as a means to strengthening and assuring permanent social participation in poverty reduction. It also determined that resources from *HIPC* should not be allocated to administrative purposes, being the municipal governments subjected to social control of vigilance committees. In doing that, the present law has ratified, therefore, the control mechanisms established by the Popular Participation Law in 1994 (*Ley del Diálogo Nacional, 2000; MSDP, 2002*).

Furthermore, representing national efforts for poverty reduction, the National Dialogue Law has also determined the procedures for the application of a National Compensation Policy (*Política Nacional de Compensación*) as a means to support the poorest municipalities. Compensation funds were to be distributed to municipalities in such a way that a higher amount of resources should be allocated to municipal governments with higher poverty rates. With the National Dialogue Law, municipal funds were then created in order to allocate resources from *HIPC* to municipal governments to support local economic development and improvement of



public services. For that, these funds were distributed by assigning 10% of resources for municipal improvement of health services, 20% for educational reform, and 70% for municipal development programs (*Ley del Diálogo Nacional*, 2000; *MDSP*, 2002).

Moreover, the National Dialogue Law has contributed to strengthen institutional process implemented in the country since 1994 as, apart from reassuring the mechanisms of social participation introduced by then, it also consolidated the importance of municipalities by transferring additional resources from *HIPC*, international cooperation and National Compensation Policy to municipal governments. Following the Popular Participation Law which, as a first step, redistributed national resources in a more equitable way by assigning resources to municipalities according to their population size, the National Law represented a step forward in the Decentralization process, as it established the allocation of resources according to municipal poverty level, compensating the poorest regions that were not contemplated by population criteria (*Ley del Diálogo Nacional*, 2000; *MDSP*, 2002; Terrazas, 2002).

## ***2.2 Impacts of Decentralization on Forest Management and Poverty Alleviation in Bolivia***

Important advances towards implementation and consolidation of democratic Decentralization have been undertaken in Bolivia, since the mid 1990s. Indeed, the Decentralization process in the country has implied a redistribution of national resources to departmental and municipal levels to an extent that amounts 70% of public investment. Efforts have also resulted in increased importance of municipal governments in local development and democratisation process in the country, although it has not been yet extended to departments, which do not have autonomy and the prefects of which are still appointed by the central government (Caballero & Valderrama, 2003; Pacheco, 2003).

In addition, social participation has also established the democratisation of municipal planning and management of public resources, including marginalised groups, such as peasant communities and indigenous people, in decision-making process and

control of municipal investments that used to be monopolised by people living in urban centres (SHCD, 2003; Caballero & Valderrama, 2003; Pacheco 2003).

At administrative and political level, the participatory process of municipalities has also contributed, to some extent, to reduce corruption in the country. It was in this context that, in order to make public investments more efficient, transparent and effective, development funds for poverty alleviation were revised by the National Dialogue Law which created the Fund for Productive and Social Investment (FPS - Fondo de Inversión Productiva y Social)<sup>8</sup>. Coming from international cooperation, resources from FPS were to be allocated to finance municipal development planning and poverty alleviation programs, being only assigned to those municipal governments which elaborate development projects corresponding to established technical criteria<sup>9</sup> (MDSP, 2002).

Although the revision of development fund assignment aimed at reducing corruption and discretionary use of public resources to fight poverty, *FPS* resources have proved to be hardly allocated to some municipal governments due to institutional and technical constraints hindering the fulfilment of requirements established at national level<sup>10</sup>. Because of that, even though these funds were meant to be assigned proportionally to the poorest municipalities, only the ones with better technical or institutional means succeed in obtaining those funds (Caballero & Valderrama, 2003; Pacheco, 2003).

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<sup>8</sup> Former development funds for poverty reduction in the country such as Social Investment Fund (*FIS - Fondo de Inversión Social*) and Rural Development Fund (*FDS - Fondo de Desarrollo Campesino*) were strongly criticised as they were not able to fulfil the local needs. Lack of transparency in allocation of resources and inefficiency in implementing municipal development was attributed in many cases to corruption and discretionary use of public resources to fight poverty (MDSP, 2002).

<sup>9</sup> Projects must be formally approved by a technical commission that represents the central government at departmental level for the assignment of resources to the municipality.

<sup>10</sup> The majority of municipal governments do not count with enough qualified human resources and material supply to formulate such local development program and poverty alleviation projects. Besides, municipal technicians are not aware of procedure to elaborate those projects, which makes process slower and more inefficient. In some cases it even requires external services that are not always carried out with transparent mechanisms, resulting sometimes in desabilitation of municipality for further access to financial resources (Pacheco, 2003).

Constraints at municipal level make the allocation of resources still a very slow process. Official data account that, from 2001 to 2002, only 48% of *HIPC* was assigned to the municipalities, much less than initially expected. The reasons for that refer to the institutional mechanisms through which the resources are allocated, the difficulties of municipalities involved in identifying projects, defining priorities and assigning a counterpart for its implementation. The frequent delay in assignment of the planned amount of resources has required a revision of mechanisms for resource assignment to municipal governments, once it is predicted that *EBRP* will not be able to accomplish the proposed goals for the future years. Up to date, improvements of local development have still been insufficient to accomplish significant poverty reduction in Bolivia and this institutional system has yet to be strengthened (*UDAPE*, 2003).

Concerning forestry, the introduction of a new forest regime in 1996 established the transference of forest revenues and responsibilities for forest management to municipal governments, also promoting access to forest resources by indigenous people, small-scale loggers and other traditional forest users, who could claim the assignment of forest concessions. In order to have access to forest resources, they must be organised as *TCOs*, *OTBs* or *ASLs*. The establishment of those organisations proceeds in a rather slow and bureaucratic process, with no clear information about procedures to be followed by municipalities and national administration. Because of bureaucracy and lack of institutional means, it is observed that especially the constitution of *ASL* in the country is still poor. At national level, only 15 *ASLs* have succeeded to formalise their access to forest resources within *ARFMs*, comprising a total area of 407,721 hectares (Pacheco, 2003; Ruiz, 2004).

Clear cut permit and concession authorisation for the use of forest resource with commercial purpose require former approval by the National Forestry Administration (*SIF - Superintendencia Forestal*)<sup>11</sup>, of a forest management plan<sup>12</sup>. Indigenous

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<sup>11</sup> *Superintendencia Forestal* is the national organisation in charge of regulating the forest regime and assigning forest rights, such as forest concessions and permits, approval of forest management plans; fiscalisation and monitoring of forest management; distribution of forest resources; and defining technical requirements for forest resource use (*MDSP*, 2002, Ruiz, 2004)

groups and peasant communities developing forest commercial activities have been compelled to adapt forest management practices to the new regulations, which implies fulfilment of several technical and legal conditions that also represents high costs. In fact, indigenous groups and peasant communities often can not afford demanding forest inventories and lack the managerial skills to elaborate and implement forest plans, being rather dependent on technical and financial support (Pacheco, 2003).

Municipal governments are supposed to support *ASLs* in elaborating and implementing forest management plans through their established forest municipal units. Nevertheless, the limited budget of *UFMs* makes it difficult to operate them, restricting the assistance these units provide in helping local actors to adjust their practices to the new forest and land use regulations. In fact, despite the Decentralization process has resulted in assignment of forest resources to municipalities, and part of these forest revenues have been allocated to *UFMs*, its amount has not been enough to support forestry initiatives within jurisdiction of many municipalities in the country. As the transference of forest resources to municipal governments has not sufficed and the technical assistance *UFMs* have provided to forest users in order to formulate forest management plans have been little, support has rather come, to a considerable extent, from international cooperation and *NGO's* forestry projects (*SHCD*, 2003; Ruiz, 2004).

It is observed, however, that *UFM* establishment and operation rather depend on a range of municipal priorities, which is related to political composition of municipal governments and importance of forest resources in the local economy. While it is observed that some *UFMs* have been very active in *ARFMs* delimitation, control of illegal logging and development of forest projects, in other municipalities the forest sector has less priority and municipal forest resources are only assigned to more urgent expenses, with financial resources from forest administration being sometimes even invested in other more demanding sectors, so that the municipal forest unit does not have the means to operate (Pacheco, 2003; Ruiz, 2004).

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<sup>12</sup> Those forest management plans are based on technical norms, which include elaboration of forest inventories, rotation cycle of 20 years and minimum diameter for cutting.

Municipal governments are not always able to fulfil the necessary conditions to accomplish satisfactory enforcement of the Forestry Law premises, because they depend on financial and technical support to control forest use and help the *ASLs* to elaborate and implement the forest management plans required for concession assignment. Indeed, in order to obtain land rights more easily in such a way that forest management plans are not required, people have sometimes opted, instead, to converting land for agricultural purposes (Maldonado, 2004; Pacheco, 2002 b).

Apart from that, besides the requirements for establishing *ASLs* and *UFMs* and implementing management plans, the assignment of forest concession in *ARFMs* to obtain the right to access forest resources would also imply a process of land right titling administered by the National Institute of Agrarian Reform, in order to avoid encroachment on other already acknowledged communal lands<sup>13</sup>. As in some public forest areas there are often land overlapping conflicts with indigenous territories and other private property land claims, the process of enforcement of indigenous territorial titling and creation of *ARFMs* depend yet on a long<sup>14</sup> and bureaucratic process of title regularisation (Pacheco, 2003; Ruiz, 2004).

Different from the historical background of Bolivia, where government used to assign concessions to large-scale landowners, and from Forest Law of 1974, which excluded access of forest resources to anyone that was not constituted as a forest enterprise, the new forestry law has acknowledged the rights of traditional forest users, prioritising those groups in assignment of concessions and assuring exclusive right of forest resource access to indigenous people or peasant communities within their lands (Pacheco, 2003; Ruiz, 2004).

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<sup>13</sup> Because the payment of forest royalties was formerly based on volume exploitation of resources, concession areas used to have unclear limits. As long as forest royalties have been charged over the forest area, concessions should present then clear limits. Nevertheless, social conflicts resulting from land encroachment still remain in the country (Ruiz, 2004).

<sup>14</sup> The Agrarian reform law was supposed to last 10 years, however, in Pando Department, until end of 2003, only 2.5% and two municipalities of the territory have had the property rights assigned, which means that *saneamiento* in Northern Amazon is still at its starting point. That is owed to great number of social conflicts between the regional actors, the size of the region, and lack of technical and financial means presented by *INRA*. Considering all the impugnation among the actors that disagree with the land distribution process, it is estimated that at least 5 years are still needed to conclude land *saneamiento* in all Pando Department. (*SHCD*, 2003; Maldonado, 2002).

The new forest regime has to some extent succeeded in breaking the monopoly of local elites that used to hold 40% of the forested lands in the country. It has resulted in decreased amount of forest lands assigned to large-scale and absent landowners, with forest concessions being increasingly allocated to other forest users organised as *TCOs*, *ASLs*, private or communal properties or even set aside for scientific research or Private Reserves of Natural Heritage<sup>15</sup>. Even though the forest enterprises still hold 78% of the total amount of Bolivian forest lands, experience shows that forest management increasingly is being carried out by other forest users since 1997 (Ruiz, 2004).

There is no doubt that the process of land distribution and the decision of recognising territorial demands of formerly marginalised groups have created new patterns of land tenure in the country prioritising peasant communities and indigenous people and favouring them in case of land conflicts. In Bolpebra, one of the two municipalities in Northern Amazon where the land titling process has been concluded, over half of the territory was assigned as communal lands to peasant communities and indigenous groups. Nevertheless, it is argued that within land regularisation process carried out in the country, it is likely that only a part of claimed lands will be effectively allocated to indigenous groups as *TCOs* in Bolivia<sup>16</sup>, even though *TCOs* can potentially control up to 20 millions of hectares in the country, 7 millions of which are forest land<sup>17</sup> (Ruiz, 2004; Stock, 1999).

More equitable distribution of land and investment of public resources and social participation have surely been established by the institutional changes undertaken in Bolivia during the last decade. It must also be acknowledged that Bolivia is one of the countries where major progress has been achieved regarding the decentralization

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<sup>15</sup> In 2001, official data from the National Forest Administration account that 7% of the total amount of forest lands in Bolivia is managed by *TCOs*, 6% by *ASLs*, 4% by private or communal properties, and 5% by other forest users with different purposes as forest concessions set aside for scientific investigation or Private Reserves of Natural Heritage (Ruiz, 2004).

<sup>16</sup> Until 2001, only 11 permits of forest use in *TCOs* were assigned at national level, being 2 of them allocated in Northern Amazon (Ruiz, 2004).

<sup>17</sup> The surface covered by *TCOs* is, however, considerable as the total indigenous land area comprises nearly 18% of the Bolivian territory (SHCD, 2003).

and transferring of responsibilities to municipal governments in Latin America. Nevertheless, in spite of all efforts in the country to reorganize forest management and to alleviate poverty, many constraints still exist and are to be overcome.

### 3. Bolivia's Poverty Reduction Strategy

Bolivia is the poorest country in South America and has one of the highest rates of poverty in Latin America. According to the Population and Housing Census of 1992, 70,0 percent of the population had unsatisfied basic needs, and in the late 1990s, 63,0 percent of the people had family incomes below the poverty line. The latest National Census carried out in 2001 showed that 58,6 percent of Bolivia's population is poor: 24,8 percent are on the poverty threshold, 34,2 percent are moderately poor, 21,7 percent are extremely poor and only 16,6 percent meet their basic needs. Those people located below the poverty line live mainly in rural and peri-urban areas. (Bolivian Authorities, 2001)

The high incidence of poverty in rural areas is mostly a result of the low productivity of the farm sector, the poor access to markets and the low prices that farm products obtain in the market. The Bolivian Government identified in the year 2001 important factors that affect productivity, such as small-scale production units, lack of basic production infrastructure and techniques, unskilled labour, water shortages, the high cost of capital and lack of definition of ownership rights concerning land and natural resources. (Bolivian Authorities, 2001)

Taking into consideration the high levels of poverty in Bolivia and the need to reduce them, the Bolivian Government consulted with civil society through the National Dialogue 2000 with the aim of reaching agreements on high-priority economic and social policies for the fight against poverty (Bolivian Authorities, 2001). It was a bottom-up process and the roundtable discussions took place first at the municipal level, then on the regional level and finally at the national level. The conclusions of the National Dialogue 2000 were of key importance to develop Bolivia's Poverty Reduction Strategy (BPRS) [*Estrategia Boliviana de Reducción de la Pobreza* (EBRP)]. The draft of the BPRS was shared with civil society for discussion and the changes suggested were included. Finally, the Cabinet approved the BPRS in February 2001. (IMF & IDA, 2001)

The BPRS basically proposes actions to help the neediest segments of the population, based on the demands stated in the conclusions of the National



Dialogue. The strategy gives great importance to rural development, in addition to improvements in human capital and basic services. In sum, the BPRS establishes four components for reducing poverty: (i) increasing opportunities for employment and income, mainly for small agricultural producers and micro enterprises, placing emphasis on better infrastructure as a key component to promote rural development; (ii) improving the capabilities of people by offering them greater access to and better quality of primary education and preventive health care; (iii) increasing social protection and security of the poor; and (iv) promoting increased citizen participation and organization, intensifying thereby the Popular Participation and Decentralization initiatives. The strategy also establishes three cross-cutting topics intended for promoting greater participation by indigenous people and incorporates gender and environmental issues. (Bolivian Authorities, 2001)

A closer look into the four strategic components of the BPRS helps to identify the actions to be carried out in order to reduce poverty in Bolivia, and the most important ones will be presented next.

(i) To achieve the goal of expanding employment and income opportunities for the poor, the BPRS proposes among other things to expand the production infrastructure by constructing and maintaining local roads and irrigation and microirrigation systems, creating and maintaining electric power facilities, increasing access to telecommunications, expanding and improving access to land, enhancing competitiveness, promoting greater participation by the private sector, especially of small companies and microenterprises, in rural development, and diversifying and expanding microfinance coverage to overcome the lack of access to credit in urban and rural areas, in addition to improving the quality of supply of microfinance, principally credit. The BPRS highlights the importance of expanding the road infrastructure as a key element to reduce poverty, since it boosts the commercial activities, allows people to have access to vital products and consequently facilitates the progress of poor communities creating employment and making the access to indispensable services possible.

(ii) The development of the productive capacities of the poor can be promoted through several actions, as stated in the BPRS. First, it is required to improve the quality of education and access to education, placing priority on the primary school level. Secondly, it is essential to improve the health services and access to them.

The priority of the BPRS in the health area is to reduce maternal and infant mortality rates and to keep the main transmissible diseases under control. And last but not least, it is of prime importance to improve the living conditions of the poor through basic sanitation and housing. The focus should be on the one hand on the construction and upgrading of the sanitation infrastructure, giving priority to making safe drinkable water and sewerage systems accessible to the poor, and on the other hand on the improvement of the housing infrastructure, which implies the construction of social housing in rural municipalities.

(iii) In order to increase social protection and security for the poor, it is necessary to strengthen social safety nets aimed at children, teenagers and older adults, and to make efforts to sustain food safety. It is also required to invest in childcare and child development as an important measure to increase the capabilities and living standards of the poor population. Furthermore, it is essential to establish emergency programs to deal with natural disasters, and emergency employment programs that will create short-term jobs for the neediest people in case of natural disasters or external shocks. In addition, it is of key importance to guarantee the legal security of assets, being a priority to complete the process of regularization of land tenure in rural areas.

(iv) To reach the aim of increasing citizen participation and organization, it is required to support and instruct the people in how to do it. The Popular Participation initiative will play an important role in strengthening the effort to increase social organization and participation. Social control and participation will be encouraged through advisory councils [*Consejos Consultivos* (CCs)] established in each municipality, and policies will be promoted to connect rural development projects with citizen participation. Furthermore, a national framework for institutional strengthening will be set up, which emphasizes the expansion of the coverage of municipalities and social organizations. (Bolivian Authorities, 2001)

On August 1st, 2003, the Bolivian Government published a report about the advances and perspectives of the BPRS and proposed to make some changes in the original BPRS to be able to reach the goals of the Strategy. This report was shared with civil society for discussion through the National Dialogue 2003, which has not finished yet. The aspiration is to include the suggestions made by civil society in a reformulated BPRS.

The changes proposed by the government in the report basically strengthen the four components for reducing poverty established in the BPRS. The main changes proposed are to promote an economic growth model with a broad base and to prioritize actions that will secure the fulfillment of universal goals in the areas of education and health. (UDAPE, 2003) The focus here will be on the broad base growth.

The idea of broadening the economic base implies that new productive and social actors (small producers, micro enterprises, local councils and other social organizations) must be included in the generation of wealth and employment. Thus, it is important to prioritize and promote within the productive sector the progress of those sectors that extract and transform raw materials, and that are capable of absorbing manpower. Moreover, it is essential to encourage a greater and better participation of micro-, small- and medium enterprises, and artisans and peasants, in the increment of the supply of national goods and services. (UDAPE, 2003)

There are several structural limitations hampering the development of the productive sector, such as low productivity and technological backwardness, high transaction costs and weak development of the markets of goods and services, limited access of the domestic production to internal and external markets, and low coverage of the productive infrastructure (e.g. roads and irrigation). The proposal of the government to counteract these limitations is to put into action the four platforms of intervention of the Bolivian System of Productivity and Competitiveness [*Sistema Boliviano de Productividad y Competitividad* (SBPC)], namely technology and technical assistance, production support services, access to markets and productive infrastructure. The government expects that the productive processes will be expanded and modernized in this way. (UDAPE, 2003)

The Bolivian Government also identified three priority topics in the strategy of broad base growth:

1) *The expansion of the rural property right*

Bolivia has a total surface area of 109.858.100 ha and almost 98 percent corresponds to land that has to go through a process of land titling. So far, in 14

percent of the area the process of regularization of land tenure has been completed, 29 percent of the area is in the process of regularization, and in the remaining 56 percent of the area the process has not started yet. Considering that having access to land is a legitimate right of indigenous and peasant communities and that during past years new actors [Movement of Landless (Movimiento sin Tierra)] have emerged in rural areas demanding also access to land, in view of the absence of possibilities of finding employment in other activities, the government regards it as a priority to continue with and accelerate the process of land titling, following the guidelines of the INRA Law, in order to give these people a tangible possibility to improve their lives. Furthermore, this process will reduce the uncertainty that limits nowadays medium and large enterprises from investing more in areas where the process of regularization of land tenure has not been completed yet. The goal of the government is to complete the process of regularization of land tenure in the year 2006, as it is established in the INRA law.

## *2) The growth of the national productive chains*

The concept “national productive chain” is founded on a set of criteria of selection applied for the first time during the National Dialogue 2000, based on which a total of 14 productive chains in the areas of agroindustry, manufacture and services have been identified and constituted in Bolivia<sup>18</sup> till this day. (UDAPE, 2003) Productive chains are formed through the establishment of strategic alliances and agreements between different productive actors of a region. The main aim of constituting such chains is to secure the development and permanence of small and medium enterprises and associations of producers (especially small producers) within the productive sector, in order to promote the development of their competitive capacities and ultimately to alleviate poverty. (Presidencia de la República, 2002) The 14 productive chains generate around 15 percent of the GDP, without taking into account the production of hydrocarbons, and they provide employment to 400.000 people. Given the impact of the productive activity developed by these chains, the government aims to improve the transformation of primary products within the domestic productive structure, in addition to improving the channels of commercialization. (UDAPE, 2003)

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<sup>18</sup> The Brazil nut production is considered one of these productive chains.

### 3) *The strengthening of the local economic development*

Although the national productive chains comprise a significant percentage of the productive activity, the fact that the population in Bolivia is highly dispersed (7,6 people/km<sup>2</sup>) and that the rural population also practices other productive activities directed more towards domestic and/or regional markets, makes it necessary for the government to take a more active role in the promotion of the local economic development. Therefore, the government seeks to encourage greater investments and production in rural areas, taking into account the productive vocation of the people and trying to involve as much local people as possible in the productive activities. (UDAPE, 2003)

Taking into account that the communities of the region in which I did my research extract Brazil nuts and so form part of the productive chain of the Brazil nut, it was interesting to analyse the perceptions of the inhabitants of two communities regarding poverty and well-being and to find out what, according to them, could be done to improve their living conditions, seeing in this way if there are similarities with the actions proposed in the BPRS and the changes proposed for a reformulated BPRS. This will be discussed in chapter 8.

## 4. Living Conditions of Forest-Dependent People

This chapter gives a general description of the living conditions of forest-dependent people in rural areas in the Northern Bolivian Amazon. In the first part, the main features of the setting are presented. The second part focuses on socio-historical influences, which have caused great impact on the living conditions of rural dwellers in the study region. The third part gives a general overview of the living conditions in rural settlements, regarding levels of poverty and access to basic services. The fourth part describes the role of the forest in the livelihoods of the rural population, and the fifth part introduces the Sustainable Livelihood Approach and presents diverse livelihood strategies.

### 4.1 Setting

The Northern Bolivian Amazon is situated in the northernmost part of the country bordering Brazil in the North and East and Peru in the West. It is a semi-evergreen tropical forest region, which covers an area of roughly 100.000 km<sup>2</sup>, of which 94 percent comprises tropical moist forest. The remaining six percent consists mainly of patches of savannas, water bodies, agricultural fields and urban spaces. (Bojanic, 2001) The study area includes the Department of Pando and the North of the Departments of Beni (Vaca Diez Province) and La Paz (Iturralde Province), representing around 10 percent of the total territory of Bolivia (SNV, 2003). Map 1 shows the study area.

MAP 4.1: THE NORTHERN BOLIVIAN AMAZON REGION (Bojanic, 2001)



The study area has an estimated population of about 160.000 people, of whom five percent are Indians, while *mestizos*, referred to as *Cambas*, make up the majority of the population. Around 70 percent of the total population lives in urban areas, while the rural areas are sparsely inhabited by approximately 40.000 people (Bojanic, 2001).

There are three important characteristics that differentiate the study region from the rest of the country. First, the region is covered by rain forests, which are geographically separated from the rest of the country by seasonally flooded savannas. Secondly, in the past rubber extraction was the main activity, which was then replaced by the Brazil nut extraction; it is the only region in Bolivia where it is possible to find Brazil nut trees, and thirdly, it is culturally different for example due to the presence of indigenous tribes that live in the region or the neighbourhood to Brazil. (Bojanic, 2001)

#### **4.2 Socio-Historical Background**

To facilitate an understanding of the living conditions of the rural population in the Northern Bolivian Amazon, it is of key importance to take a look into the past. The rubber production, which started around 1850, has been crucial in shaping the current demographic and socio-economic situation of the region (Stoian, 2000a; Henkemans, 2001). It all began in the 1850s, when Bolivian and Brazilian explorers entered the Northern Bolivian Amazon to tap rubber (*Hevea brasiliensis*). The production of rubber was organized on *barracas*, which were established on forestlands that were formerly inhabited by indigenous people. The term *barraca* referred to the territorial extension of a rubber estate and its functional centre, which was usually located close to the hut of the owner or patron of the *barraca*. (Henkemans, 2001) Most of the rubber tappers (*siringueros*) worked and lived in the *barracas* under extremely poor conditions (Bojanic, 2001).

In the beginning of the rubber era, *barracas* were the only type of rural settlement found in the region, besides a small number of indigenous communities that were not integrated into the rubber production (Ormachea & Fernández, 1989 in Henkemans, 2001). The rubber economy was dominated just by a few large rubber export

houses, being the Casa Suárez Hermanos and Co. the most powerful one (Bojanic, 2001). Bolivia experienced its first rubber crisis after 1913, when it became cheaper to buy rubber from plantations in Southeast Asia than from the Amazon region. During this first crisis, many rubber patrons left their *barracas*. The abandoned *barracas* were occupied by their labourers and became independent communities. Even though the rubber exports boomed again during World War II and in the 1970s and early 1980s, the rubber economy finally collapsed in 1986 after the Brazilian government abrogated its rubber subsidies and was replaced by a booming Brazil nut industry. (Henkemans, 2001)

The “*habilito*”, a local institutional system of debt-peonage that was established by the rubber industry in the *barracas* and still exists, marked the labour relations in forest exploitation up to the present. The *habilito* functioned in the following way: a *barraca* labourer received from a patron in advance subsistence goods in exchange for labour force. Since most of the *barracas* were located in remote forest areas, the *siringueros* did not have access to subsistence goods unless these were provided by their patrons. Furthermore, patrons prevented the *siringueros* from farming and hunting, so that they would rely on them for access to food. Usually, the patrons charged very high prices for food products, which made the labourers incur debts. (Henkemans, 2001) Unfortunately, the *habilito* shaped the frame of a system of profoundly vertical and excluding social relations, which made poor people completely dependent on their employers and hindered them to improve their living conditions but promoted their stagnation (PNUD, 2003).

A further factor that has contributed in shaping the living conditions of the rural population in the study area is the isolation experienced by the whole region. Until the 1980s, the Northern Bolivian Amazon seemed to be disconnected from the rest of the country due to a poorly developed communication network (PNUD, 2003). This situation began to change in 1985 when the Riberalta - La Paz road was build. Seven years later Cobija could also be linked through this road to the capital of Bolivia and to other cities of the country, and at the end of the 1990s even an airport was inaugurated in Cobija. (PNUD, 2003)



The improved communication network promoted migration towards the North of Bolivia and to a lesser extent from the Northern Amazon region to big cities like for example La Paz, Cochabamba or Santa Cruz. Additionally, people also migrated from the rural areas of Northern Bolivia to urban centres such as Cobija, Riberalta and Guayaramerín, with the hope of finding better opportunities there. (PNUD, 2003) Especially after the latest rubber crisis many *siringueros* emigrated from the *barracas* to urban centres, trying to improve their living conditions (Henkemans, 2001). The migration wave had such an impact that in the last decade the population in the Department of Pando and in the Province Vaca Diez of Beni grew more rapidly than the national average (PNUD, 2003). According to the National Institute of Statistics [*Instituto Nacional de Estadística* (INE)], in 1992 the Department of Pando and the Province Vaca Diez of Beni had together a population of 122.723 individuals, and by the year 2001 their population had reached 168.946 individuals, which can be translated into an annual growth rate of 3,4 percent (INE, 2002a). But what has to be emphasized particularly is the fact that the urban population grew enormously. Riberalta, Guayaramerín and Cobija became the most important urban centres of the region, with 70% of the total population. Considering only the department of Pando, in the year 2001 40% of its population resided in urban areas, while in 1976 no more than 10,6% of the people did so. In short, it can be stated that due to an improved communication network and the resulting migration wave, the Northern Amazon region of Bolivia experienced since the 1990s an accelerated population growth, principally in the urban centres. (PNUD, 2003)

It is important to mention that the isolation experienced by the Northern Bolivian Amazon until 1985 led to an extremely weak presence of the state in the study area. The difficult access to the region was a great barrier for the central government to assist the inhabitants of the area. It was only since the region got more integrated into the rest of the country that the central government managed to institute a stronger link between the Amazon and the state. (PNUD, 2003)

#### **4.3 Living Conditions in Rural Settlements**

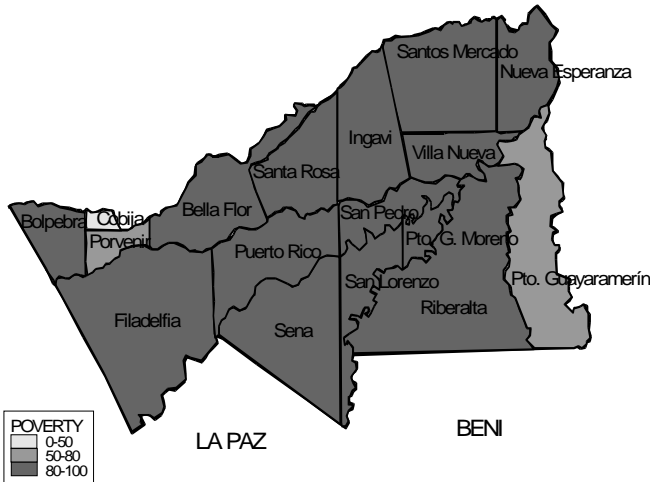
In order to give a general overview of the living conditions in rural settlements in Northern Bolivia, it is helpful to use the analysis of the index of Unsatisfied Basic

Needs [*Necesidades Básicas Insatisfechas (NBI)*] at the level of departments and municipalities, which was created with data from the census of 2001 (PNUD, 2003). The NBI indicators define minimum levels of housing, connection to electricity, basic sanitation, health, education and income, based on which different degrees of poverty are distinguished (Maldonado, 2004)<sup>19</sup>. The focus will be mainly on the poverty situation in the Department of Pando and the Province Vaca Diez (Department of Beni).

According to the analysis of the index of NBI, during the year 2001 more than 70 percent of the population of Pando and Beni were considered poor, while 30 percent were considered extremely poor, placing these two departments between the poorest of the country (INE, 2002b).

The municipalities of the departments are being affected by different levels of poverty. The poverty map below indicates that more than 80 percent of the households in 14 of the 17 municipalities of Pando and Vaca Diez (Beni) experience poverty (PNUD, 2003). It can also be seen that the Municipality of Cobija, which has an important urban center (Cobija), has the lowest level of poverty.

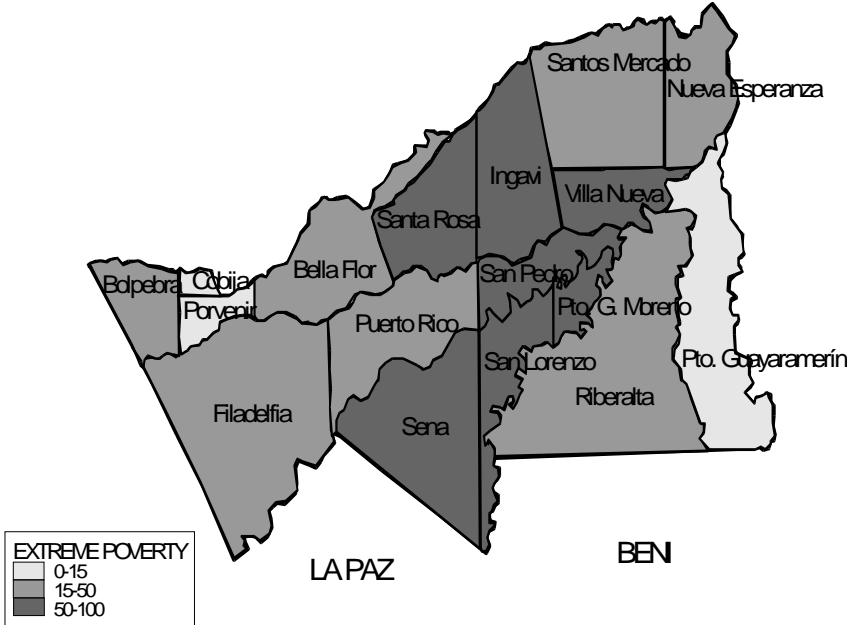
MAP 4.2: POVERTY OF PANDO AND VACA DIEZ PROVINCE (BENI) (PNUD, 2003)



<sup>19</sup> This “method” to measure poverty presents several flaws, like for example that it seems to give too much importance to the aspects of housing and basic services when measuring poverty. Furthermore, some standards chosen as the minimum level do not take sufficiently into account the socio-cultural context of indigenous people (PNUD, 2003). For these reasons it is advisable to use it carefully, keeping these flaws in mind.

Map 4.3 illustrates the distribution of the extremely poor population. In Cobija, Porvenir and Guayaramerín, less than 15 percent of the households experience extreme poverty, while more than 50 percent of the households in seven municipalities, which are located in the central part of the Amazon region, are extremely poor (PNUD, 2003).

MAP 4.3: EXTREME POVERTY OF PANDO AND VACA DIEZ PROVINCE (BENI) (PNUD, 2003)



More than 80 percent of the households in 13 municipalities of Pando and Vaca Diez do not have an adequate access to water and sanitation services, and in the remaining municipalities (Cobija, Porvenir, Puerto Rico and Guayaramerín), no more than 30 percent of the families have a satisfactory access to these facilities. With respect to access to adequate electricity supply, the only municipalities in which more than 50 percent of the households dispose of this service are Cobija and Guayaramerín. (PNUD, 2003)

Regarding the existence of and accessibility to health care services in the region, most of them are located in urban areas (e.g. Cobija) and a few in the main settlements of rural areas. As a matter of fact, hospitals can only be found in Cobija,

Riberalta and Guayaramerín, whereas in the main settlements of rural areas just small and often poorly equipped health care centres exist to assist ill people. The situation of the people who live in small rural communities that lie dispersed all over the region is very serious, since health care services are almost nonexistent there, and very often people do not go to see a doctor due to the great distances that they would have to travel to reach a health care center. (PNUD, 2003) Since last year a team of doctors usually visits once a month each community to treat sick people. This has helped to improve the accessibility of the inhabitants of small isolated rural communities to health care services. A further problem is that there are no adequate maternity services in the rural areas (PNUD, 2003).

With respect to the educational situation in the Department of Pando and the Province Vaca Diez, some basic indicators show favourable results when being compared with the national averages. Data from the census of 2001 shows that 89,6 percent of the population of Pando can read and write, a percentage above the national average (INE, 2002a). The ratio of illiterate people in Cobija and Guayaramerín lies below five percent and four municipalities (Bolpebra, Bella Flor, Santa Rosa del Abuná and Santos Mercado) have even managed to reduce their rates of illiteracy in more than 20 percent (INE, 2002a).

Even though these basic educational indicators show favourable results, there are great problems concerning attendance at school, school desertion and quality of the educational services in the region. People's attendance at school in the majority of the municipalities, with the exception of Pto. Gonzalo Moreno and Guayaramerín, lies below the national average (INE, 2002a). Furthermore, many students abandon school. In fact, Pando has the highest rate of school desertion in Bolivia, above all due to high desertion rates at the initial levels of primary school (SIE & INE in PNUD, 2003). With respect to the quality of education offered in the region, the outcomes of the tests carried out in the years 2000 and 2001 with the help of the System of Measurement and Evaluation of the Quality of Education (*Sistema de Medición y Evaluación de la Calidad de la Educación*) reveal that the performance of the students in Pando was the worst in the country (SIMECAL in PNUD, 2003). An important reason for the low quality of education offered in Northern Bolivia is that there are a great number of interim teachers working in the public sector. Since they

do this job only temporarily, they are not really professionals in the area of education, which has had a negative impact on the quality of education. A further factor that should be considered is the difficulty that many children experience in reaching the schools. This is particularly the case of children who live in small rural communities. (PNUD, 2003)

#### **4.4 People's Livelihoods Based on Forest Use**

The infrastructure and economy of the Northern Bolivian Amazon region has been based for more than one and a half century on the extraction of forest products. It began with the rubber era in the 1860s, which lasted roughly 130 years. When the rubber economy finally collapsed in 1986, it was replaced in the 1990s by a booming Brazil nut industry that has placed Bolivia as the world's largest exporter of shelled nuts. (CNF, 1997 and 1998 in Henkemans, 2001) Parallel to the Brazil nuts production, other export products were included to the production structure, namely first timber and then palm hearts and alluvial gold mining. However, the Brazil nut (*Bertholletia excelsa*) is currently the main export product of the region on which the regional economy is based. (Bojanic, 2001)

As it has just been explained, forests and their natural resources form the base of the regional economy in the Northern Bolivian Amazon, and for that reason they play a decisive role in the livelihoods of the rural population. In general, it is of prime importance for the subsistence of poor rural households to have access to natural resources. Since rural dwellers often do not have enough financial capital, the natural environment becomes their main capital source, which provides them with valuable natural resources (Henkemans, 2001). Forests offer a great diversity of renewable resources, providing local households with subsistence products in addition to goods for income generation. For instance, fuel products are mainly extracted from the forest, and houses are built using materials from the forest. Furthermore, rural dwellers often use the forest land for potential development of agricultural fields or grazing land (Henkemans, 2001). Forests also have an interesting role as "saving banks" in case that forest dwellers go through difficult times. They sell timber trees and palm leaves found in the forest, alleviating thereby their financial pressures. (Chambers & Leach, 1987 in Henkemans, 2001)

In the Northern Bolivian Amazon people who live in rural areas derive their livelihoods from a mixture of forest extraction, subsistence or semi-subsistence agriculture and wage labour (Henkemans, 2001). Since the Brazil nut industry plays such an important role, not only in the regional economy, but also in the livelihoods of rural people, the focus will be first on this topic.

In many rural communities where forest cover is high, the main source of income is Brazil nuts collected on their own territories. Usually the nuts are sold to traders or contractors employed by urban-based nut processing factories (*beneficiadoras*) who pass by the communities. Once the rural dwellers have finished collecting the nuts on their own territories, a proportion of them leave for the *barracas* during the Brazil nut season (January to March) with the aim of gaining additional income as seasonal labourers. (Henkemans, 2001)

It can be said that the Brazil nut industry definitely plays an essential role in the region, since it provides jobs and income to 5.500 people, mainly women, who work in *beneficiadoras*, and to roughly 12.500 collectors from both urban and rural areas. In addition, around 500 contractors and several hundreds of intermediaries organize the transportation of the nuts. Regarding the wages, a Brazil nut sheller earns per month an average of USD 120 for 220 hours of work. According to Bojanic, this wage is 2,5 times higher than the national minimum wage per month. (Bojanic, 2001) Inside the region the salary of a person involved in the Brazil nut industry is a little higher compared to other sources of income for unskilled labour. As an example, people who carry the bags with the nuts earn 91 USD per month, while they would earn only 80 USD per month for weeding. (Bojanic, 2001) To have a better idea of the overall relevance of the Brazil nut industry for a rural household, Stoian calculated in 1998 that Brazil nuts yielded a mean rural household an income of roughly USD 500-650 (Stoian, 2000b).

Besides Brazil nuts, there are other extractive products from the forest that rural dwellers make intensive use of primarily for their subsistence. There is a wide range of plant products being used for food, medication, construction and fuel wood. A great number of plants are multi-functional, which means that different parts of the same plant are used for numerous purposes (Henkemans, 2001). Henkemans notes

that with an average of three products per plant, the forests in Northern Bolivia offer the people an impressive diversity of around 500 useful plant products. An interesting example of a multifunctional plant is *asaí* (*Euterpe edulis*). The bark of this forest palm is used as construction material for walls of houses, and its fruits can be eaten or used for making juice. Furthermore, its roots are used as medicine, the leaves are useful as roofing material and the shoot can be eaten or sold as palm heart. (Henkemans, 2001)

Even though many rural communities are surrounded by trees, commercial timber extraction is barely practiced by the forest dwellers themselves, owing to lack of capital, machinery and the required skills. Further limitations are that many households do not have valuable timber trees in their forest plots or they do not have an official permit (*Plan de Manejo Forestal*) to commercialize timber due to unsolved land tenure conflicts in the region. (Henkemans, 2001)

For extraction of timber, most communities depend on contracts with logging companies. Generally, landowners sell the standing trees to one of the logging operators that extract the commercially valuable species. As a result, the communities have low expenses regarding labour time but also a low income, because the logging companies pay them only a small stumpage fee. Ironically, it is not unusual to see that rural communities buy processed wood for construction purposes, in spite of living surrounded by trees. (Henkemans, 2001)

The rural population also makes use of the forest fauna as part of their resource base. The highest diversity and density of fauna species can be found in the old-growth forests of distant and sparsely populated areas, where men go hunting to provide their families with meat (Henkemans, 2001). In the communities located close to regional towns, hunting takes much more effort, because there is a lower diversity and density of wildlife. Commonly hunted animals include birds, rodents, wild pigs, deer, bush cats and monkeys. (Henkemans, 2001) In addition to hunting, fishing is also an important activity practiced by rural dwellers to complement their food supply. Usually, the caught wildlife and fish is for their own consumption and represents their main source of protein (Henkemans, 2001). Sometimes, when men have a successful hunt, they exchange a part of the meat for foodstuffs with

neighbours or sell it for cash to them, and occasionally they sell a small amount to merchants or people in towns (Henkemans, 2001).

Since pure extractive activities (like e.g. the extraction of Brazil nuts), which are typically cyclic, cannot sustain a family the whole year through (Stoian, 2000b), people are forced to look for additional ways in which they can secure their food supply. In most communities, subsistence agriculture is crucial to supplement the food security of the inhabitants (Henkemans, 2001). For this reason, rural dwellers usually make their own agricultural fields and produce part of their food consumption themselves, although many of them are unfortunately still dependent on traders that pass by or on the patrons of the *barracas* for the supply of basic goods such as sugar, salt and oil. The agricultural fields are created in the forest, normally not far from the home compound, after cutting and burning the existing vegetation and are known as *chacos*. A *chaco* is cultivated with annual crops like for example maize and rice for a period of one to two years, combined with or followed by manioc for an extra one to two years. Depending mostly on the quality of the soil, some people plant in the *chaco* perennial plants such as bananas during the second year. (Henkemans, 2001) Consequently, the rural dwellers have differently cultivated fields to supply themselves with food.

Agricultural production, though, is not always oriented towards meeting exclusively subsistence needs, but it is also for commercial purposes. Rural dwellers who practice semi-subsistence agriculture try to commercialize a part of their crops, with the aim of having an additional source of income. Henkemans notes that the average area cultivated per family in Bolivia's Northern Amazon has indeed increased over the years, particularly in communities situated close to urban centers (Henkemans, 2001, p.52), since people can take advantage of their relative proximity to towns to sell their agricultural products in urban markets.

With the purpose of increasing their incomes, rural dwellers try to get involved in seasonal extractive activities. As already mentioned, many of them leave for the *barracas* during the Brazil nut season to gain additional income as seasonal labourers (Henkemans, 2001). They also become temporarily involved in other forest activities, such as timber or palm heart extraction. It is not uncommon that



rural dwellers get involved in the urban economy, too. Some of them move for a short period to urban areas, where they perform casual labour activities, such as driving taxis or working in the industrial processing of forest products. (Henkemans, 2001)

#### **4.5 The Sustainable Livelihood Approach and Livelihood Strategies**

It has been shown that people who live in rural areas derive their livelihoods from a combination of different productive activities. According to Derichs and Rauch (2000 in Stahl, 2002a), peasant households can secure only to some extent their existence through subsistence or market production. To be able to survive, they must combine various economic activities (Derichs & Rauch, 2000 in Stahl, 2002a). The Sustainable Livelihood Approach (SLA) can be of great help to understand the complex livelihoods and economic strategies of rural people. Moreover, it facilitates a holistic and flexible analysis of the backgrounds, alternatives and incentives that shape people's livelihood strategies<sup>20</sup>. (Stahl, 2002a)

In a simple way, the framework of the SLA, which has been elaborated by the Department for International Development (DFID) to help understand and analyse the livelihoods of the poor, views people as operating in a context of vulnerability. Within this context, people have access to specific assets or to factors that reduce poverty. These obtain value and meaning through the prevailing social, institutional and organizational environment. "This environment also influences the livelihood strategies that are open to people in pursuit of beneficial livelihood outcomes that meet their own livelihood objectives." (DFID, 1999, 1.1)

Households, as the autonomous institutions of production and consumption, represent the main units of analysis in the SLA. The analysis of sustainable livelihood systems begins with the examination of the assets to which households have access. These assets are the human, natural, financial, social and physical capitals, which give people the capacity to choose their livelihood strategies

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<sup>20</sup> The term "*livelihood strategies*" is applied to indicate the range and combination of activities and options that people make or undertake with the aim of achieving their livelihood goals (DFID, 1999, 2.5).

(Fig. 4.1). (DFID, 1999) The human capital refers to skills, knowledge, ability to labour, education, health etc., which enable people to use different livelihood strategies (DFID, 1999, 2.3.1). The natural capital includes a great variety of natural resources, from intangible public goods such as biodiversity or the atmosphere, to divisible assets such as land, forests, water etc. (DFID, 1999, 2.3.3). The financial capital comprises credits, savings and regular flows of income (DFID, 1999, 2.3.5). The social capital refers to social relations between people and the institutions in which these are expressed (e.g. groups, organizations etc.) (DFID, 1999, 2.3.2). And finally, the physical capital includes infrastructure (transportation, energy and water supply, information etc.) and producer goods (tools, machinery etc.) (DFID, 1999, 2.3.4).

The access of people to these five capitals is influenced both by the vulnerability context as a whole, and by transforming structures and processes in particular (e.g., levels of government, public or private sector, laws, etc.). “Being capable of overcoming these shocks and stresses is what makes a livelihood sustainable.” (Derichs & Rauch, 2000, p.63 in Stahl, 2002a)

These five categories of assets make it possible to show the strengths and weaknesses of the livelihoods of people. Knowing these strengths and weaknesses, one can analyse the livelihood strategies that people use to compensate for the weaknesses and take advantage of the strengths. Stahl (2002a) categorizes the different livelihood strategies in a typology adapted to fit the Bolivian Amazonian context, which was originally developed by Zoomers (1999 in Stahl, 2002a) based on her experience from the Bolivian Andes. The main categories of livelihood strategies are the following ones<sup>21</sup>:

- Accumulation strategies try to establish a minimum resource base and to prepare it for future expansion.
- Consolidation strategies attempt to stabilize the well-being of the households and to improve its quality in the short term. These strategies are particularly used by relatively prosperous households that have surplus assets to invest.

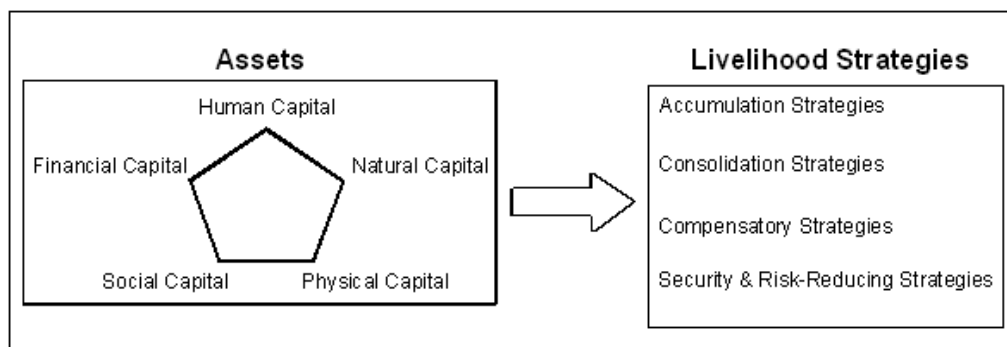
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<sup>21</sup> For a detailed description of the main categories of livelihood strategies see Stahl (2002).

- Compensatory strategies try to cope with a momentary crisis (medical emergencies, crop failure etc.) or the structural scarcity of labour in incomplete households (widows/widowers, abandoned women etc.).
- Security and risk-reducing strategies serve to minimize risk uncertainty and risk resulting from the context of vulnerability. A particular group that can be found within this category is the diversification or “multi-tasking” strategies, which attempt to increase security. People who use these strategies get involved in different activities (natural resource exploitation activities, agriculture, wage labour etc.) to avoid depending on just one activity for their survival.

Bearing in mind the main categories of livelihood strategies can be of great help to understand the objectives and priorities that people have.

FIGURE 4.1: THE ASSETS THAT INFLUENCE LIVELIHOOD STRATEGIES



Source: Stahl (2002b), based on Zoomers (1999) & Carney (1998)

This chapter provided an insight into rural livelihoods in the Northern Bolivian Amazon region. Using this information as a basis, the following chapters will examine the productive activities of two forest-dependent communities in relationship to their perceptions regarding poverty and well-being. The SLA and the main categories of livelihood strategies will facilitate the discussion.

## 5. Research Concept, Methods and Sources

### 5.1 Objective and Research Questions

An important part of CIFOR's research program "Making Local Governments More Responsive to the Poor: Developing Indicators and Tools to Support Sustainable Livelihood Development under Decentralization" was a survey conducted during December 2003 and January 2004 in 7 communities in the Municipality of El Sena and 7 in Bolpebra, to deepen the available information regarding the socioeconomic situation in the Department of Pando in general and in both municipalities particularly. Through this survey it was possible to identify the two main productive activities of the 14 communities. 87% of the interviewees identified agriculture and the extraction of Brazil nuts as their principal activities (CIFOR, 2004). However, most survey respondents did not seem to give equal weight to both of these activities. Accordingly, the present study was designed to find out whether the populations of two forest-dependent communities give primary importance to one of these two productive activities, and if so, why. Additionally, this study investigates the perceptions of the community members in regard to poverty and human well-being.

The study's aim is to analyse the reasons for the predominance in importance of a certain productive activity, and relate this to community members' livelihoods and perceptions of poverty and well-being.

The research questions are:

**Research question 1:** What do the community members take into account when ranking the importance of their two main productive activities?

**Research question 2:** What are the perceptions of the community members regarding poverty and well-being?

**Research question 3:** Do the community members recognize a relationship between their state of poverty or well-being and the productive activities that they practice?

**Research question 4:** What is the role given by the community members to the forest when thinking about their well-being and the fulfillment of their needs?

**Research question 5:** In the opinion of the community members, what should be done to improve their living conditions within the next years and whom do they expect to do this?

## **5.2. Methods and Sources**

The information for this thesis was obtained on the one hand from written sources, and on the other hand from the fieldwork, which took place in two communities of El Sena Municipality. The focus will be first on the written sources, and then attention will turn to the fieldwork phase.

### *5.2.1 Written Sources*

Before I went to Bolivia I had literature from which I got to know about the situation in the study region. Most of this literature had been collected by Master and PhD students that were previously involved in different projects in the Northern Bolivian Amazon region. The literature covered various topics such as the history of the region, institutional changes that are having impact on the region and data concerning the economic and social situation. During my stay in Bolivia, which lasted from the end of March 2004 to the middle of July 2004, I managed to collect additional important literature that dealt with my study topic. The information which I obtained through the internet was also very valuable.

### *5.2.2 Fieldwork*

The first thing that I did was to choose two of the seven communities, all located in El Sena Municipality, that had been categorized by the project as “advisable” for

undertaking the fieldwork. After having visited four communities, I chose El Turi and Santa Trinidad for doing my fieldwork there. Several aspects were considered for taking that decision, and they are presented in the following table:

TABLE 5.1: ASPECTS THAT WERE CONSIDERED FOR CHOOSING THE COMMUNITIES

<b>Santa Trinidad</b>	<b>El Turi (road)<sup>22</sup></b>
It is an indigenous community	It is a peasant community
I would be the first researcher in staying there	I would be the first researcher in staying there
The people showed a lot of interest	The people showed interest
It has a total of 16 families	It has a total of 14 families
It was always an independent community	The people used to work for a patron
It was not too difficult to reach the community	It was not too difficult to reach the community

The fact that one community was indigenous and always independent and the other not, although they were only separated by 10 km, attracted my attention and I became interested in seeing if their living conditions were different. Furthermore, when I visited the communities for the first time to introduce myself, my research study and CIFOR’s project, the people showed interest and were glad to hear that for the first time a researcher wanted to come to stay with them for a while. The interest shown by the people was a very important aspect to me, since it was a sign that they would cooperate with my study. The number of families was also an essential aspect, because I was looking for medium-sized communities, in which I could interview all or most of the heads of the households in order to have complete results of the communities. A further characteristic that I considered was the accessibility of the communities. I regarded it as important to be in relatively accessible communities, to rule out the possibility that people do not get from the municipal government what they need due to the difficulty of reaching the communities. Moreover, I did not want to be in a too isolated community, considering that an emergency situation could arise.

The next thing that I did was to look for a woman who would be interested in coming with me to the communities, since I did not really know what to expect during my

<sup>22</sup> It is necessary to include the word “road”, because there are two communities in El Sena Municipality that have the same name, but one of them is located close to a road and the other one close to a river (El Turi (river)).

fieldwork there. I thought that it was a good idea to be in someone's company in case of an emergency. Rolando Haches helped me to contact a student of the university of Cobija called Patricia, who agreed to be my traveling companion. This was of key importance to make me feel relaxed and confident that everything would be okay.

As soon as we got in Santa Trinidad I organized with the help of the OTB's President, *Don Miguel Mendoza*, a meeting with the people of the community, with the purpose of giving a more in-depth explanation about the topic of my study within the framework of CIFOR's project and the reasons to carry out this study. I made clear that I was just going to collect information, so as to create a basic knowledge that could ultimately result in an improvement of the impact of local government poverty alleviation policies and actions on communities like Santa Trinidad and El Turi. It was essential to emphasize this, in order to avoid creating false expectations within the community. I also stressed that I would send them a copy of the summary of my thesis as soon as I finished it, because I wanted to share the information with them. I organized a similar meeting in El Turi with the same content. My general impression is that the people felt satisfied with the explanations I gave. In contrast to other communities, where people oftentimes expect money or gifts from the researchers, the inhabitants of Santa Trinidad and El Turi explained to me how happy they felt that I would be staying there for a while and guaranteed me support for my research. I was very touched by their words.

I think that thanks to the fact that I come from Ecuador I had no difficulties in approaching the people and integrating myself into the communities. First of all, there was no barrier regarding communication, because my mother tongue is Spanish and they all speak Spanish<sup>23</sup>. Right from the start I was very careful in not using complicated words or phrases to avoid confusing the people. And secondly, they regarded me almost as a friend who came from a country located in the same continent as theirs to visit them and talk with them. I was always a very open person, I ate what they gave me, I did what they suggested me to do, I participated in

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<sup>23</sup> I would like to add that in Santa Trinidad, although it is an indigenous community, I never heard anybody speaking in their native language. *Don Miguel* told me that most of the people within the community do not know their native language and those who know it barely speak it.

different activities with them such as in a football match, and I showed them how much I respect and admire them and their lives.

The collection of information within the communities was based on the Rapid Rural Appraisal (RRA). “The RRA is defined as a systematic, semi-structured activity, which focuses on obtaining quickly and efficiently information and new hypotheses about resources and life in the countryside.” (Schönhuth & Kievelitz, 1994, p.4) The information was basically obtained through direct observation, semi-structured interviews, informal interviews and a technique for ranking preferences (analytic game) (Schönhuth & Kievelitz, 1994).

Direct observation was a simple way to gather information about everyday life activities. Furthermore, it allowed me to skip questions that could be answered through my observations, such as if people had electric light or not in their homes. Through this technique I also obtained additional interesting information, like for example during a communal reunion in Santa Trinidad where I observed how the President of the OTB led the reunion and that decisions were taken democratically.

In Santa Trinidad I conducted 15 semi-structured interviews with all the male heads of the households in the privacy of the respondents' own homes. In El Turi I conducted seven semi-structured interviews<sup>24</sup>. These interviews focused specifically on the productive activities practiced by them and on the role of the forest in their lives (see Appendix I). Additionally, semi-structured interviews about poverty and well-being were carried out with ten men and nine women in Santa Trinidad, and with six men and four women in El Turi (see Appendix II). Following the advice of Prof. Michel Becker, Wil de Jong and Peter Cronkleton, I did not mention the words “poverty” and “well-being” during the interviews, but tried to find out what the perceptions of the people concerning poverty and well-being are by using questions like the following ones: “What makes you feel happy?” or “Which conditions of your life make you feel unhappy or cause you trouble and you would like to change?” I think that in this way I gave the people freedom to develop their own statements. It was also of key importance to me to conduct interviews with women, because I

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<sup>24</sup> It was not possible to conduct more interviews in El Turi, because right before I got there an old woman passed away in the community and consequently, five families left to Riberalta above all to attend the funeral.



wanted to find out if they had different perceptions than men, and I wanted to avoid underrepresenting the views of female informants in my study. Moreover, I thought that it would be important to take advantage of the fact that I am a woman to interview them, since I would probably have fewer difficulties in approaching women than a man would have and maybe they would tell me more and/or other things than they would tell a man.

I also conducted three informal interviews with key informants, namely with Miguel Mendoza (President of the OTB) and Rolando Mendoza (son of *Don* Miguel and former President of the OTB) in Santa Trinidad and with Félix Queteguari (President of the OTB) in El Turi, with the aim of finding out general information about the communities, like for example the way in which the communities were formed.

To be able to rank the different reasons why the people practice certain productive activities according to their importance, I used a special technique for ranking preferences. “The techniques for ranking/prioritization are analytical tools to identify qualitatively important problems, preferences or significant information” (Schönhuth & Kievelitz, 1994, p.72). The preferences or priorities are established by giving values to the different options. For applying the “ranking preferences or priorities technique”, I organized at the end of my stay in each community a workshop in the school. In Santa Trinidad 17 people came to the workshop and in El Turi ten people. The first thing that I asked the people to do was to tell me all the reasons why they collect Brazil nuts and practice agriculture. While they were thinking about it, I decided to also include the other activities practiced by them in order to have an overall picture. So they also did “brainstorming” to list the reasons why they fish and hunt and participate in different teamwork activities. I wrote all the reasons why they practice each activity on big paperboards down, so that everyone could see and read it. Then I told them to rank the reasons according to the importance that they have to them. I explained that if there were for example five reasons why they collect Brazil nuts, they should give a value to each reason, in this case five points to the most important reason and one point to the less important reason. Every person copied on a sheet of paper what I wrote on the paperboards down and they individually gave a value to the different reasons. With the results that I got from each person I could finally rank the reasons according to their importance (see Appendix III and IV).

Although I had at the beginning some difficulties in explaining the analytic game to the people, I realized that they were excited about participating and we had fun.

The most important tool to record the information collected are the notes that one takes during the fieldwork (Schönhuth & Kievelitz, 1994). What I did every day late in the afternoon was to write down the information that I managed to gather from my observations and conversations with the people, so that I would not forget it. During the interviews I wrote down right away what the people said to me. All the gathered information, to some extent with the exception of the workshop activity, was analysed qualitatively using the approach proposed by Lamnek (see Lamnek, 1993).

## 6. The Research Region

The fieldwork of my study took place in the Municipality of El Sena, specifically in two communities that belong to this municipality. With the aim of giving an insight on the situation that prevails there, a general description of El Sena Municipality will be presented, followed by a brief description of the two communities.

### 6.1 The Municipality of El Sena

El Sena Municipality is located in the southeastern part of the Department of Pando bordering the Province Manuripi in the North, the Department of La Paz in the South and West and the Municipality of San Lorenzo in the East. It belongs to the Province Madre de Dios and it is defined as its third section. The capital of El Sena Municipality is the locality El Sena where the municipal government has its seat, and it has a population of around 900 people. (PDM, 2002) The municipality covers an area of 7.564 km<sup>2</sup>, of which almost 100 percent comprise primary forests (PDM, 1998).

El Sena Municipality has a population of 2.240 people, 58,5 percent are men and 41,5 percent women. A total of 405 families live in the municipality, concentrated in 20 different communities, with an average of 5,53 persons per family. (PDM, 2002) According to the INE, the whole population of the municipality is rural and the great majority of the people are *mestizos*<sup>25</sup>. Only around five percent of the inhabitants identify themselves as indigenous. (INE, 2002c) 53 percent of the population is under 20 years old (PDM, 1998). The annual population growth rate between 1992 and 2001 was 0,23 percent (INE, 2002a).

The poverty situation in the municipality is serious. This is reflected through the index of NBI established for El Sena Municipality for the year 2001. According to the calculations made, during the year 2001, 96 percent of the population of El Sena Municipality were considered poor (PNUD, 2004).

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<sup>25</sup> Mestizos are the offspring of extra-regional immigrants who came to the Bolivian Northern Amazon during the rubber boom and the traditional Indian inhabitants (Henkemans, 2001).

Unfortunately, there is no specific information regarding birth rate, mortality rate, and life expectancy in the Municipality of El Sena. The only information available refers to the Province Madre de Dios<sup>26</sup>, which can be used to reflect the general situation prevailing in the region. The birth rate in the Province Madre de Dios per 1.000 of the population is 32,15 births, whereas the mortality rate is 85 per 1.000 of the population. With respect to life expectancy, it is on average 59,4 years (60,3 years for women and 58.5 years for men). (PDM, 2002) The birth and mortality rate, as well as life expectancy often reflect the availability or lack of health care. In El Sena Municipality there is only one health care center, which is located in the capital of the municipality. Many people who do not live in the capital do not have access to medical care due to the long distances that they would have to travel. So people rely heavily on traditional medicine (medicinal plants) to treat illnesses. The most common illnesses found in the region are malaria, diarrhea, respiratory diseases and undernourishment (PDM, 1998).

Concerning the educational situation, there are many difficulties due to lack of access to educational facilities and lack of educational infrastructure and teachers. These difficulties arise in part, because generally the population in the communities is very low and most of the communities are widely dispersed and isolated. The other problem is that the municipal government does not invest enough money in the educational sector or it does not have enough capital for investing it in this sector. As a result, the illiteracy rate among people over 15 years old in the Municipality of El Sena is 17,11 percent. (PDM, 2002) Illiteracy reaches 33,5 percent among women over 15 years old and only 10,8 percent among men (PDM, 2002), which could be a sign of gender inequality concerning access to education.

With respect to the availability of purified drinking water and electricity, only the people who live in the capital of the municipality have access to these services (PDM, 2002). The inhabitants of the communities depend mostly on firewood as their main energy source and on water from rivers or streams to cover their necessities. For being able to communicate, only a few communities and the locality El Sena have a radio transmitting apparatus. The Municipality of El Sena is linked

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<sup>26</sup> For a better understanding, it is important to mention that the Province Madre de Dios consists of the following municipalities: the Municipality of Gonzalo Moreno, the Municipality of San Lorenzo and the Municipality of El Sena.

with the capital of the Department of Pando, and with the Departments of Beni and La Paz through a road, which becomes difficult to pass along during the rainy season (December to March). The rivers (e.g the *Madre de Dios*, *Beni* and *Manupare* River) also serve as important routes for transportation, and the inhabitants of the communities located close to rivers make use of them.

The region where the Municipality of El Sena is situated has historically been characterized by the production of rubber and Brazil nuts. The society of the region was divided into two different strata: there were on the one hand the owners of the huge *barracas*<sup>27</sup> and on the other hand the labourers (rubber tappers and later on collectors of Brazil nuts). (PDM, 1998) During the rubber crises experienced in the region in the past, some estate owners were forced to abandon their land, and their labourers founded independent communities (Henkemans, 2001). Nowadays, most of the communities are independent and are situated on *ex-barracas*, although there are still a few *barracas* managed by their owners. A few indigenous communities can also be found within the Municipality of El Sena. Most of the inhabitants of the communities invest their time in collecting Brazil nuts and practicing subsistence agriculture. (PDM, 1998)

The main commercial activity in the Municipality of El Sena is the extraction of Brazil nuts. This activity also attracts a significant number of people from urban centers, who move to this region during the phase of extraction that usually lasts from January to March. As soon as the Brazil nuts have been collected, the people who migrated temporarily to the municipality return to the urban centers and some communities and *barracas* within the area become abandoned until the start of the next phase of extraction. (PDM, 2002) Although the Municipality of El Sena is covered by forests, people do not practice commercial timber extraction, because there are serious land tenure conflicts that have not been solved yet.

With the aim of increasing their income, people also try to get involved in other periodic activities, such as in the extraction of palm heart. Furthermore, through the Intensive Program of Employment (*Programa Intensivo de Empleo*) created with

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<sup>27</sup> The term "*barraca*" refers nowadays to the former rubber forest estate on which Brazil nuts are collected (Bojanic, 2001).

Poverty-Reduction Funds (*Fondos de Alivio a la Pobreza*), it has recently been made possible to generate new jobs within a few communities, but mostly in the capital of the municipality where the greatest amount of money is being invested for infrastructure. These jobs consist in building sidewalks, parks or repairing roads. (PDM, 2002) What has also been observed is that several people from the communities emigrate momentarily and sometimes permanently to urban centers, since they expect to find better job opportunities there (PDM, 2002).

## **6.2 The Community El Turi (road)**

This community used to be a *barraca* controlled by Mr. Hecker, a man of Swiss nationality who came to the region many years ago and became involved in the activity of extracting Brazil nuts. So the people of the community used to work for this man who was their patron, and they lived under miserable conditions. When Mr. Hecker left, the community became an independent community, which means that there was no patron anymore exerting control over them. The community is officially an OTB since 1994 (CIFOR, 2004).

The community is located in El Sena Municipality, 45 km northeast of the capital of the municipality. A road in a bad state links the community to the main road, which connects the capital of the municipality with Cobija and Riberalta. A total of 14 families live in El Turi (64 persons). There is a primary school, a house for the teacher and a well in the community, which were built by the municipality a couple of years ago. Besides the water from the well, people also use the water from a stream that passes close to the community for cooking, drinking, washing their cloths and having a bath. All the families have a house of their own and there is also a football pitch. In case of an emergency, people have to travel at least one and a half hours by motorcycle to get to the health center located in the capital of the municipality in order to get medical attention.

The community's territory of 4.000 ha of forested land is used as a communal resource by the 14 families, although the community has not received the title deed yet. The forest provides the community members with many essential products such as bush meat, firewood, wild fruits and medicinal plants. During the Brazil nut

season, it is not uncommon that families who usually do not live in El Turi come to collect Brazil nuts together with the inhabitants of the community. Generally they are friends or relatives of the people who live in El Turi. They are allowed to stay there for a couple of months and collect nuts, but the condition is that they can sell only half of the amount of the collected nuts and the rest of the nuts have to be handed over to the community.

### **6.3 The Community Santa Trinidad**

The Community Santa Trinidad is an indigenous community, which forms part of the Communal Lands of Origin [*Tierra Comunitaria de Origen (TCO)*] *Multiétnico II*. 80 percent of the people who currently live in Santa Trinidad belong to the *Tacana* ethnic group, the others are not indigenous. The community was founded in 1954, when *Doña Mercedes de Mendoza* (Mrs. Mendoza)<sup>28</sup> and *Don Miguel Mendoza* (Mr. Mendoza) came for the first time to tap rubber trees in the region and decided to stay there. After some time, they decided to invite a total of 12 families to come and settle down in the same place. So this is how the community was formed. In contrast to El Turi, Santa Trinidad has never been under the control of a patron. It became an OTB in the year 2002 (CIFOR, 2004).

The community is located in El Sena Municipality, 55 km northeast of the capital of El Sena. Santa Trinidad can be reached by taking the same road as to El Turi. It can be said that El Turi and Santa Trinidad are neighbouring communities. Santa Trinidad covers an area of 10.000 ha, of which 3.000 ha are covered by water<sup>29</sup>. In the year 1996 the TCO as a whole made a demand for land. So far, the TCO has received a title deed for 289.000 ha, but the inhabitants of the TCO are still expecting that the National Institute of Agrarian Reform [*Instituto Nacional de Reforma Agraria (INRA)*] will recognize further 118.000 ha as part of their official territory.

At the present time, 16 families live in Santa Trinidad (72 persons). The living conditions of the people are basically the same as in El Turi. There are only two

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<sup>28</sup> The parents of *Doña Mercedes* were both *Tacanos*.

<sup>29</sup> The TCO *Multiétnico II* covers a total area of 407.000 ha and comprises 32 communities.

differences. The first one is that the municipality did not build in Santa Trinidad a school for the teacher, and the second one is that not every family has a house, because a few families just moved to the community and they have not had time to build their own houses. These people are now living temporarily with other families of the community. Since Santa Trinidad is situated further away from the capital of El Sena than El Turi (Santa Trinidad is more isolated), people have to travel at least two hours by car when they need to see a doctor.

As in El Turi, the forest is used in Santa Trinidad as a communal resource by all families and the people benefit from it in many ways, such as through the extraction of Brazil nuts, hunting and fishing, etc. A difference between Santa Trinidad and El Turi is that in Santa Trinidad, people who want to come to the community to gather nuts during the Brazil nut season are not really welcomed, because the inhabitants of Santa Trinidad prefer not to share the nuts with other people.

In the next chapter, the results of the survey conducted in both communities will offer a more detailed description of the living conditions within the communities.



## 7. Results

The interviews and observations conducted in the communities Santa Trinidad and El Turi (road) revealed important information, which will be presented below.

**What activities do you practice? When do you practice each activity?  
How do you distribute the work between the members of the family and  
why do you do it in that way?**

All families within the community Santa Trinidad collect Brazil nuts, practice subsistence agriculture, fish and hunt, and participate in different teamwork activities, such as building houses for people who just moved to the community, constructing and repairing bridges and canoes, cutting paths through the branches and cleaning up the community and the football pitch. Only a few people usually move once a year for a short period of time to Riberalta to work as taxi drivers or construction workers, and one person noted that he leaves to work as a gold seeker in the Madre de Dios River.

The situation regarding the productive activities practiced by the community members of El Turi is similar to the one found in Santa Trinidad. In El Turi, all families also collect Brazil nuts, practice subsistence agriculture, fish and hunt, participate in different teamwork activities, like the ones mentioned above, and a small minority works once a year during a short period of time in Riberalta as carpenters, construction workers and/or taxi drivers.

Depending on the kind of activity, it is either practiced occasionally, during a few months or the whole year through. The phase of collecting Brazil nuts only lasts from January to March, and during the rest of the year the members of both communities spend most of their time practicing subsistence agriculture (see Table 7.1), although a few people leave the communities for getting involved in short-term casual labour activities, as already explained. The phase of slashing and burning, in order to prepare a new piece of land for seeding, is carried out during June and August. Fishing and hunting are practiced throughout the year, although they diminish

significantly during the phase of extraction of Brazil nuts. With respect to the teamwork activities, all male community members carry these out when there is a need for it, and depending on the task, their women and children sometimes help them out.

TABLE 7.1: HARVEST CALENDAR OF SANTA TRINIDAD AND EL TURI

Name of Specie	Harvest Calendar	
	Sown	Harvested
Rice	Nov	Mid Mar-End of Apr
Beans	Apr-May	Aug
Banana	It does not matter when	After 9 months
Manioc	It does not matter when	After 6-8 months
Brazil Nut		Jan-Mar

Source: Interviews

The tasks are distributed in different ways between the members of the families. In Santa Trinidad, husband and wife usually collect Brazil nuts and plant and harvest their crops together. Several reasons were mentioned for doing it in this way. First of all, they can collect and harvest faster a greater quantity of nuts and crops when they do it jointly. Alluding to the Brazil nuts, one man explained that thanks to the fact that his wife helps him collecting them, they “are able to make more money” than if he would do it alone. And secondly, they can divide the work up between them, for example it was noted that during the period of collecting Brazil nuts, the man cracks the pod that resembles a coconut, inside which the nuts can be found, and then the woman takes the nuts out of the pod. Besides helping their husbands, women also do the housework, which includes cooking, cleaning the house, and washing the cloths. Children who are old enough typically help their mothers with the housework, especially the girls. Women and their children also do the tasks of collecting firewood and bringing water from the well or stream, and sometimes men do this, too. But women cannot always accompany their husbands to the forest, since most of them have little children who need to be taken care of. When the children are old enough, they also participate in these activities in the forest. In general, it was seen as an advantage to have a big family, since this means more labour force.

Only some of the interviewed males stated that it is men’s task to collect Brazil nuts and practice agriculture, and that it is women’s task to stay at home. One man said that he prefers doing his work alone, “without the intervention of anybody”, another man said that “it is dangerous to take women to the forest, since they are weaker than men, and they cannot tolerate the bite of a snake as good as men do.” With respect to the activities of fishing and hunting, solely men practice these due to the dangers found in the forest.

In the community El Turi it is also common that husband and wife practice agriculture and collect Brazil nuts collectively. The reason for doing it like this is the same as in Santa Trinidad, namely that together they can collect and harvest faster more crops and nuts. Furthermore, it was mentioned that they like to be in someone’s company while working instead of being alone. Besides participating in these activities, women also have to do the housework. The only obstacle mentioned that hinders women from working together with their husbands was that they have to take care of their small children. The children who are old enough help their parents to collect nuts and to plant and harvest in the *chaco*. The aim of this is to teach children how to work in the forest and to have more labour force.

In El Turi, there are also a few men that like better working alone. They argued in the following ways: “women belong at home”, “my wife has a lot of work to do at home”, “women are too fragile to take them to the forest” and “the forest is too dangerous for a female.” Regarding fishing and hunting, only men practice these, and this is also the case in Santa Trinidad (see Table 7.2).

TABLE 7.2: DISTRIBUTION OF TASKS IN SANTA TRINIDAD AND EL TURI

Activity	Men	Women	Children	Children*
Collection of Brazil nuts	X	X		X
Agriculture	X	X		X
Housework		X		X
Collect firewood & bring water	X	X	X	X
Take care of small children		X		X
Teamwork activities	X	X	X	X
Fishing & hunting	X			

\* who are old enough

Source: Field observations and interviews

**According to you, which is the main (most important) and the second most important activity that you practice? Why do you give more importance to activity X?**

People did not hesitate when they were asked to identify the main and second most important productive activity practiced by them. In the community Santa Trinidad, the great majority sees the extraction of Brazil nuts as the most important productive activity and subsistence agriculture as the second most important one. The different reasons for giving the greatest importance to the extraction of Brazil nuts were: “It is my only source of income”, “it is the activity that gives me the greatest income”, “thanks to the Brazil nut we can buy our provisions”, “the Brazil nut gives me more options, with agriculture I can only barter.”

One person identified subsistence agriculture as the main activity and the extraction of Brazil nuts as the second most important one. His argument was that he can practice agriculture throughout the whole year, but he can only collect Brazil nuts from January to March. Another person affirmed that from his point of view, both productive activities have the same importance, but he did not explain why both are equally important to him. A third person recognized the extraction of Brazil nuts as the activity number one and his job as gold seeker as the second most important activity, followed by subsistence agriculture. In his case, he has earned good money as a gold seeker, and this is why it is the second most important activity for him, but he noted that “it is a job in which you put your life in danger”.

Most of the people who live in the community El Turi also identified the extraction of Brazil nuts and subsistence agriculture as the main and second most important productive activities, respectively. But there were a few persons who said that for them, subsistence agriculture is the most important activity and the extraction of Brazil nuts the second most important one, by arguing that “one grows all comestible goods there”, moreover “it is an activity that can be practiced the whole year round, not like the gathering of Brazil nuts, which is only a three months activity.”

## Why do you practice these activities (reasons)? (Brainstorming!)

There are a variety of reasons why the community members extract Brazil nuts and practice agriculture. The focus will be first on the extraction of Brazil nuts, followed by agriculture (see Appendix V to look at the reasons why they practice the other productive activities).

### Santa Trinidad

#### **- Extraction of Brazil Nuts**

The first reason mentioned by the people with respect to why they practice this activity was because of the income that it generates. People expressed themselves in the following ways:

- “I collect Brazil nuts because of the income that suffices for a whole year. Thanks to the Brazil nuts I can buy clothes, comestible goods and school equipment for my family.”  
*[“Yo recolecto la castaña por los ingresos que me alcanzan para todo el año. Gracias a la castaña puedo comprar ropa, víveres y materiales escolares para mi familia.”]*
- “It is the principal basis to purchase provisions.”  
*[“Es la base principal para comprar víveres.”]*
- “The Brazil nut gives me the greatest income.”  
*[“La castaña me da el mayor ingreso.”]*
- “In one month each family earns Bs. 6.000; this is good to live all year long.” (Bs. 6.000 equals USD 756)  
*[“En un mes cada familia gana Bs. 6.000; esto está bien para vivir todo el año.”]*
- “With the money I earn, I can buy the provisions for the whole year (sugar, soap, oil, salt, remedies, cloths, etc.).”  
*[“Con el dinero que gano puedo comprar los víveres para todo el año (azúcar, jabón, aceite, sal, remedios, ropa, etc.).”]*
- “I collect Brazil nuts to purchase the foodstuffs for the whole year and to pay off debts.”  
*[“Yo recolecto la castaña para comprar los víveres para todo el año y para pagar deudas.”]*

Some people said that one more reason why they extract Brazil nuts is because it is not a difficult task<sup>30</sup>. They argued saying:

- “It is not necessary to look after the trees. The “pods” fall from the trees and one simply has to gather them.”  
*[“No hay necesidad de cuidar del árbol. Los cocos caen de los árboles y uno simplemente tiene que recogerlos.”]*
- “It is not really a difficult job.”  
*[“No es realmente un trabajo difícil.”]*
- “It is an easy job.”  
*[“Es un trabajo fácil.”]*
- “The tree does not have to be cultivated.”  
*[“El árbol no tiene que ser cultivado.”]*

A further explanation given was that this activity unites the families:

- “This activity brings my family together.”  
*[“Esta actividad reúne a mi familia.”]*

Another reason for extracting Brazil nuts is that it is a tradition:

- “We do it because it is a tradition, my grandfather also gathered Brazil nuts.”  
*[Lo hacemos porque es una tradición, mi abuelo también recolectaba castañas.]*
- “I do it by habit.”  
*[“Lo hago por costumbre.”]*

Some people pointed out that they extract Brazil nuts, because it is their only option:

- “We have no other choice.”  
*[“No tenemos otra opción.”]*
- “There is no place where we could sell our crops, thus there is no other option.”  
*[“No se tiene donde vender lo que cultivamos, así que no hay otra opción.”]*

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<sup>30</sup> At this point I would like to clarify that even though some of the interviewees said that the extraction of Brazil nuts is not a difficult job, it is considered a dangerous activity, since people have to deal with all the hazards that exist in the forest, such as avoiding getting bitten by a poisonous snake or getting hit by a pod of Brazil nuts right at the moment when it falls from a tree. Furthermore, it is an activity that requires being in good physical shape, because people have to walk long distances carrying the collected nuts.

- “We cannot extract timber, we cannot do something else, we have no other option.”

*["No podemos sacar madera, no podemos hacer otra cosa, no tenemos otra opción."]*

A few people noted that they gather Brazil nuts due to the fact that they like to consume them:

- “We like to eat Brazil nuts.”
- “We extract the oil out of the nuts.”

*["Nos gusta comer castañas."]*

*["Nosotros extraemos el aceite de las castañas."]*

Furthermore, thanks to the Brazil nuts they are able to buy expensive things:

- “It is possible to buy things that we cannot buy thanks to agriculture, e.g. a bike. Agriculture does not provide us with enough money to buy something like that.”

*["Se puede comprar cosas que no podemos comprar con la agricultura, p.ej. una bicicleta. La agricultura no da suficiente dinero como para comprar algo así."]*

## **- Agriculture**

One of the reasons why the people of Santa Trinidad practice agriculture is to have food for their subsistence:

- “I sow rice to feed my family.”  
*["Yo siembro arroz para alimentar a mi familia."]*
- “We do it to be able to subsist.”  
*["Lo hacemos para poder alimentarnos."]*
- “We live from the food we grow.”  
*["Vivimos de los alimentos que sembramos."]*
- “Food for autoconsumption.”  
*["Alimentos para el autoconsumo."]*

Another explanation given was that agriculture gives them independence:

- “I do not depend on another person to have food, I grow it and I harvest it.”  
*["No dependo de otra persona para tener alimentos, yo siembro y yo cosecho."]*

People also said that thanks to agriculture they could exchange or sell a part of their crops:

- “When I harvest lots of rice, I can give some rice in exchange for something that I do not have.”  
*[“Cuando cosecho mucho arroz, puedo cambiar un poco de mi arroz por algo que no tengo.”]*
- “Thanks to agriculture I can barter with my neighbours and neighbouring communities.”  
*[“Gracias a la agricultura puedo practicar el trueque con mis vecinos y comunidades vecinas.”]*
- “If I spend all my money, I can sell one part of my crop.”  
*[“Si gasto todo mi dinero puedo vender una parte de mi cosecha.”]*
- “When I need something (e.g. sugar or oil), I sell rice.”  
*[“Cuando tengo necesidad de algo (p.ej. azúcar o aceite) vendo el arroz.”]*

A further reason for practicing agriculture is that it is not a difficult job.

It was also noted that they practice agriculture, because there is the need to do it:

- “I do it out of necessity, there is no place close to the community to buy rice, beans, etc.”  
*[“Lo hago por necesidad, no hay un lugar cerca de la comunidad donde comprar arroz, fréjol, etc.”]*
- “The person who does not sow, does not harvest and does not eat!”  
*[“El que no siembra, no cosecha y no come!”]*

Two additional reasons for practicing agriculture are that it is a tradition to do it and they can practice it the whole year round.

## El Turi

### **- Extraction of Brazil Nuts**

One reason stated by the community members of El Turi with regard to why they extract Brazil nuts was that this activity generates income:



- “I gather Brazil nuts because of the earnings.”

*[“Yo recolecto la castaña por las ganancias.”]*

- “I do it, because the income is good.”

*[“Lo hago porque las ganancias son buenas.”]*

Another reason pointed out by the people was that they do it, because it is a tradition.

Furthermore, they see the extraction of Brazil nuts as their only option:

- “There is no alternative.”

*[“No hay otra opción.”]*

They also mentioned that they practice this activity, because it is not difficult:

- “The job is not difficult, and it is possible to earn up to Bs. 250 per day.”

*[“El trabajo no es difícil y se puede hacer hasta Bs. 250 por día.”]*

An additional reason is that the activity of extracting Brazil nuts helps to unite the families:

- “I collect the Brazil nuts together with my family, this activity unites my family.”

*[“Yo recolecto la castaña con mi familia, esta actividad nos une.”]*

The people indicated as well that thanks to the Brazil nuts, they could buy a great variety of things:

- “With the income of the Brazil nuts I can buy comestible goods, school equipment, cloths, shoes, etc.”

*[“Con los ingresos de la castaña puedo comprar víveres, útiles escolares, ropa, zapatos, etc.”]*

- “It is possible to buy a bike, a rifle, etc.”

*[“Se puede comprar una bicicleta, un rifle, ropa, etc.”]*

Additionally, it was noted that they practice this activity due to the fact that it only lasts three months:

- “It lasts just three months, the rest of the year I can do other things.”

*[“Sólo son tres meses, el resto del año puedo hacer otras cosas.”]*

Some interviewees said that they gather Brazil nuts, because they like to eat them.

### **- Agriculture**

The community members of El Turi practice agriculture to have food for their subsistence:

- “I grow food to feed my family. I cannot sell what I harvest, because there is no good road to transport the products.”  
*[“Yo cultivo para alimentar a mi familia. No puedo vender lo que cosecho, porque no hay buen camino para sacar los productos.”]*
- “We do it to have food for us.”  
*[“Lo hacemos para tener comida para nosotros.”]*

They noted that agriculture gives them the opportunity to sell a part of their crops or exchange them for other things:

- “When there is no money, I try to sell a part of my crop.”  
*[“Cuando no hay dinero trato de vender una parte de mi cosecha.”]*
- “I sell a part when the provisions run out to be able to buy more provisions.”  
*[“Vendo una parte cuando los víveres se acaban para poder comprar más víveres.”]*

A further reason for practicing agriculture is that it is not a difficult job.

The people also pointed out that they do it out of necessity:

- “The peasant must sow what he needs to eat; nobody would do it for him.”  
*[“El campesino tiene que sembrar lo que necesita para comer; nadie le va a dar haciendo eso.”]*
- “There is no place to buy anything, so we have to sow.”  
*[“No hay en donde comprar nada, así que tenemos que sembrar.”]*

They explained as well that they practice agriculture, because they can do it the whole year round and also because they need to feed their animals (pigs, chickens, dogs and ducks).

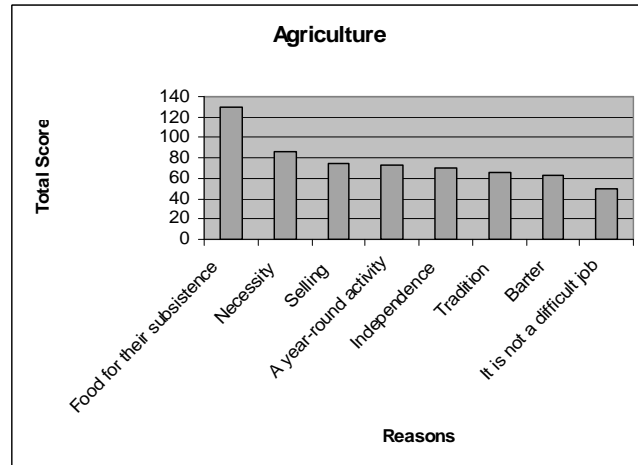
## WORKSHOP OUTCOMES:

FIGURE 7.1: WORKSHOP OUTCOMES SANTA TRINIDAD

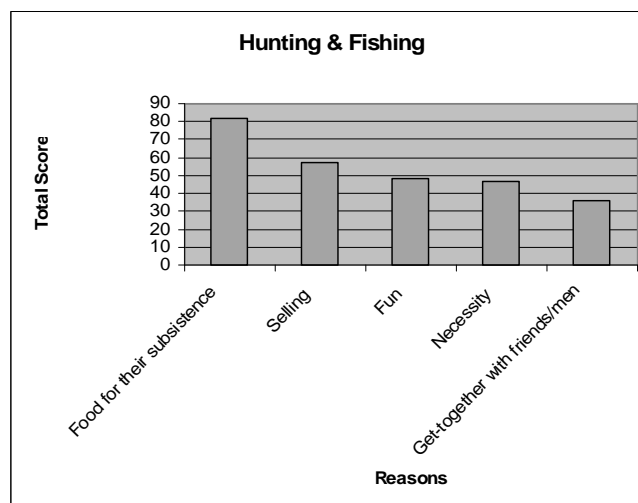
Extraction of Brazil Nuts	
Reasons	Ranking
Income	1
Tradition	2
Only option	3
Brings families together	4
It is not a difficult task	5
Buy expensive items	6
Autoconsumption	7



Agriculture	
Reasons	Ranking
Food for their subsistence	1
Necessity	2
Selling	3
A year-round activity	4
Independence	5
Tradition	6
Barter	7
It is not a difficult job	8



Hunting & Fishing	
Reasons	Ranking
Food for their subsistence	1
Selling	2
Fun	3
Necessity	4
Get-together with friends/men	5



Teamwork Activities	
Reasons	Ranking
Do it faster	1
They are organized	2
Tradition	3
Everybody should have a house	4
Fun	5
Improve the community	6

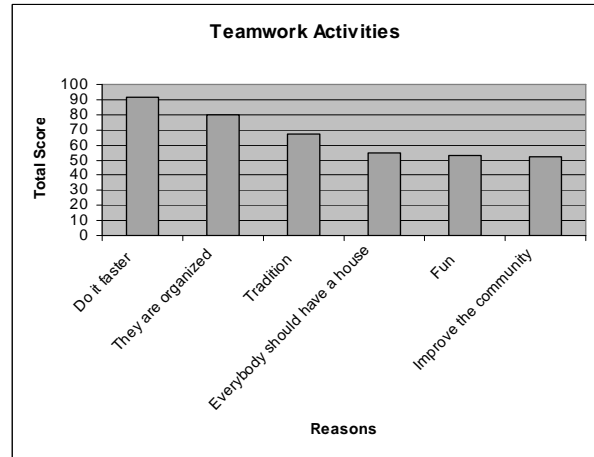
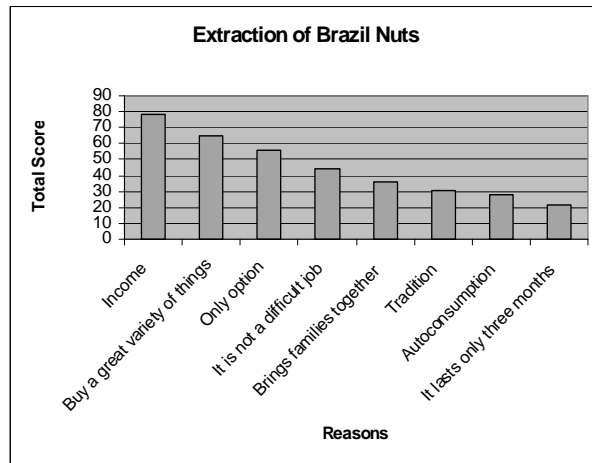
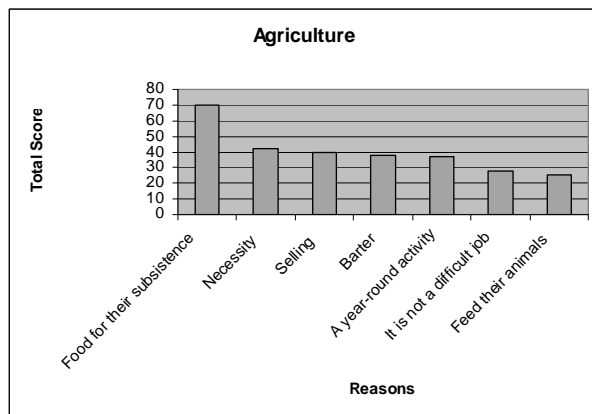


FIGURE 7.2: WORKSHOP OUTCOMES EL TURI

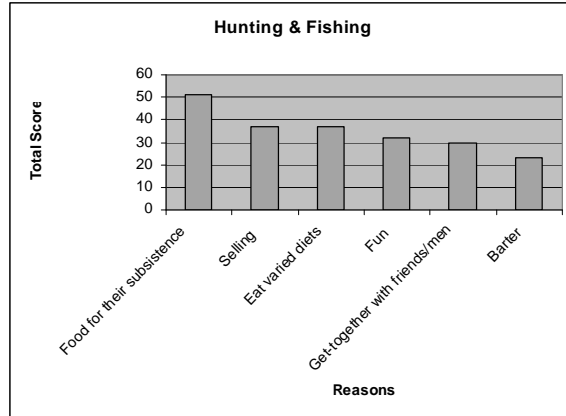
Extraction of Brazil Nuts	
Reasons	Ranking
Income	1
Buy a great variety of things	2
Only option	3
It is not a difficult job	4
Brings families together	5
Tradition	6
Autoconsumption	7
It lasts only three months	8



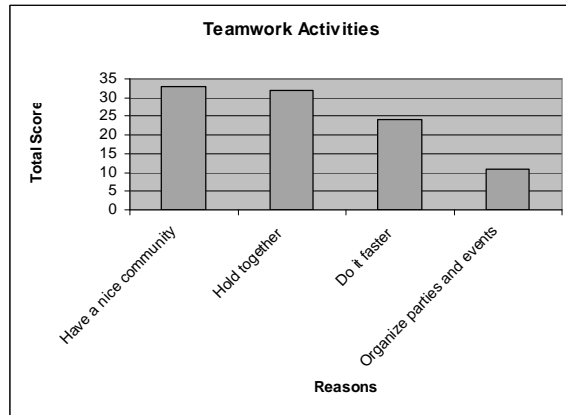
Agriculture	
Reasons	Ranking
Food for their subsistence	1
Necessity	2
Selling	3
Barter	4
A year-round activity	5
It is not a difficult job	6
Feed their animals	7



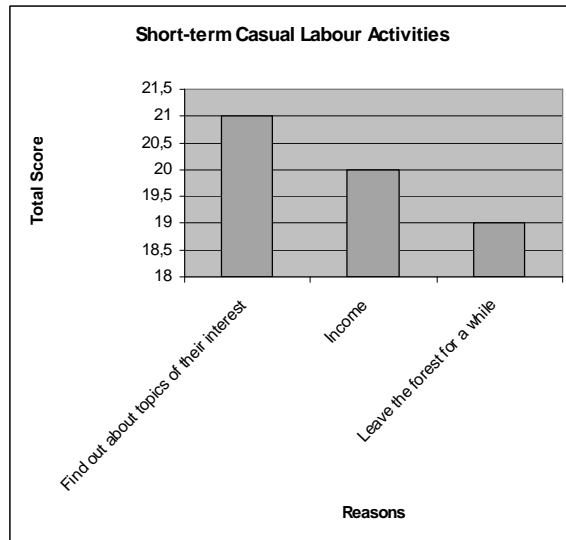
<b>Hunting &amp; Fishing</b>	
Reasons	Ranking
Food for their subsistence	1
Selling	2
Eat varied diets	2
Fun	3
Get-together with friends/men	4
Barter	5



<b>Teamwork Activities</b>	
Reasons	Ranking
Have a nice community	1
Hold together	2
Do it faster	3
Organize parties and events	4



<b>Short-term Casual Labour Activities</b>	
Reasons	Ranking
Find out about topics of their interest	1
Income	2
Leave the forest for a while	3



## Living Conditions within the Communities

### Santa Trinidad

When the community members of Santa Trinidad were asked to talk about what makes them feel happy or satisfied, they gave a great variety of answers. First, the different responses of the male interviewees will be presented, followed by the answers of the women.

#### *Men's responses:*

- The answer given most frequently was that they are happy, because they have free access to the forest and its natural resources, referring most of the time to the fact that they can gather Brazil nuts.
- Another answer given by many of them was that they feel happy, since there is no patron controlling them; in other words, they feel free [*"No estamos empatronados, nos sentimos libres."*].
- It was also repeatedly mentioned that they feel glad about having a school in the community.
- One more thing stated by many of the interviewees was that they feel happy, because the community members get together regularly to play football or do something fun jointly.
- A few men said that they feel satisfied, since they enjoy good health.
- A few persons also noted that they feel untroubled, because they have food to eat.
- Some men pointed out that they feel happy due to the fact that the people of the community work together for the sake of the community (teamwork activities). They also mentioned that most of the people get along well with the others.
- A couple of men talked about how happy they feel to be able to fish after work, since it makes so much fun.
- Another person feels glad, since there are no temptations in the forest for spending money like in the city.
- One man mentioned that he feels happy due to the fact that the community's entitlement to land will be legalized in August.

TABLE 7.3: WELL-BEING INDICATORS FOR SANTA TRINIDAD (MEN’S POINT OF VIEW)

<b>Men</b>	
Most frequently mentioned	Access to the forest
Very frequently mentioned	Self-determination Education, knowledge Recreation
Mentioned by a few people	Enough food Health Social relations
Mentioned by one person	No temptations for spending money Entitlement to land will be legalized soon

Source: Interviews

*Women’s responses:*

- The great majority of the women pointed out that they feel happy due to the fact that their children are healthy.
- Many women noted that they are happy because they are free (there is no patron exerting power over them). Consequently, they can sell the Brazil nuts for the price they want [*“... podemos vender la castaña al precio que queremos.”*].
- A great number of women stated that they feel glad about having free access to the forest, since they can cultivate crops and gather Brazil nuts.
- Several women said that they feel satisfied, because the community members are very kind and collaborate.
- A couple of interviewees mentioned that they feel happy, because they have a house of their own.
- One woman said that she feels satisfied about having enough food to eat.
- Another woman said that she feels happy, since she can always be beside her husband.
- A survey respondent indicated that she feels glad, because there is almost no malaria in the community.
- Another one said that she feels happy, because the people of the community get together to play football.

TABLE 7.4: WELL-BEING INDICATORS FOR SANTA TRINIDAD (WOMEN'S POINT OF VIEW)

<b>Women</b>	
Most frequently mentioned	Healthy children
Very frequently mentioned	Access to the forest Self-determination Social relations
Mentioned by a few people	Housing
Mentioned by one person	Enough food Health Be in her husband's company Recreation

Source: Interviews

Subsequently, the community members of Santa Trinidad were requested to talk about conditions of their lives that make them feel unhappy or cause them trouble and that they would like to change.

*Men's responses:*

- The topics mentioned most frequently were:
  - The absence of a radio transmitting apparatus within the community.
  - The nonexistence of electricity.
  - The road that is in a very bad state, which makes it difficult to reach the main road.
  - The lack of means of transportation in order to facilitate the mobility of the people and their goods (only three people have motorcycles and another one has a bike).
  - The difficult situation experienced by the people who fall ill, since there is no health center in the community, which forces them to travel long distances to see a doctor.
- A couple of men stated that they feel unhappy due to the fact that they moved recently to the community together with their families and they still do not have a house of their own (they are living temporarily with other families until they can build their own houses).



- A few men pointed out that they feel unsatisfied with the water from the well and the stream and that they would like to have access to drinking water.
- A couple of persons said that they would feel happier if there would be a church in the community.
- There was one interviewee who indicated that the school is too small for 38 pupils and that there is not enough didactic material for the upper school levels, which is causing trouble. Furthermore, they need an additional teacher, because the current teacher cannot work with so many pupils.
- Another one noted that he feels unhappy when the teachers strike, because the children cannot go to school.
- One person said that most of the community members do not know the laws, and consequently, they do not know their rights and duties. He said that they need somebody to come and teach them the laws.
- An interviewee mentioned that he feels unhappy when there are conflicts within the families and quarrels between the community members.
- One of the men pointed out that he feels unhappy about not having had the chance to continue studying.

TABLE 7.5: POVERTY INDICATORS FOR SANTA TRINIDAD (MEN'S POINT OF VIEW)

<b>Men</b>	
Most frequently mentioned	No radio transmitting apparatus No health center Bad state of the road No electricity Lack of transportation
Mentioned by a few people	No Housing No drinking water No church
Mentioned by one person	School too small, no high school, not enough didactic material Lack of knowledge of laws Family conflicts Not having had the chance to continue studying

Source: Interviews

### *Women's responses:*

- The most often discussed topics were:
  - The state of anxiety and concern of some women due to the fact that their oldest children had to leave to be able to go to high school in Riberalta. They feel very worried about their children and they feel unhappy, because they cannot be close to them.
  - The aggressiveness of men when they get drunk. They said that they feel very sad when their husbands or other men of the community get drunk, because they become violent.
  - Their fear when their children or husbands fall ill, since there is no health center in the community, and it is difficult to go and see a doctor in town.
  - The bad state of the road, which isolates the community.
  - The fact that they feel neglected by the Municipal Government, since they still do not have electricity and a radio transmitting apparatus.
- Some women noted that they feel unhappy because of the gossip within the community.
- A few interviewees mentioned that they often argue with their husbands and that this makes them feel unhappy. They would like to change this situation by trying to promote more communication between the members of their families.
- A couple of women indicated that they feel unsatisfied, since they can hardly go to town because of the lack of means of transportation.
- A few women pointed out that they do not have a house of their own, since they recently moved to the community.
- Some women stated that they would like to have drinking water to feel happier.
- A couple of women mentioned that they feel sad, because the school is too small for so many children and there is not enough school equipment.
- One woman said that she feels unhappy, because she has some personal problems with her neighbour.
- One of the interviewees noted that she feels unhappy, because she is sick and cannot work.
- Another woman said that she feels sad due to the fact that she did not have the opportunity to study.

- A survey respondent expressed her wish of having a church in the community.

TABLE 7.6: POVERTY INDICATORS FOR SANTA TRINIDAD (WOMEN'S POINT OF VIEW)

<b>Women</b>	
Most frequently mentioned	No radio transmitting apparatus No health center No electricity No high school Alcoholism of men Bad state of the road
Mentioned by a few people	No drinking water No housing Family conflicts Lack of transportation School too small Gossip
Mentioned by one person	Personal problems with her neighbours No church She is sick and cannot work Did not have the opportunity to study

Source: Interviews

The inhabitants of Santa Trinidad were also asked to talk about specific events, which might have caused changes in their living conditions. The event that was pointed out most frequently was the land reform (INRA law), followed by the Popular Participation Law and the health brigade, which were mentioned equally often.

According to the survey respondents, thanks to the INRA law the patrons and businessmen were forced to hand over a part of their territory and the community received 10.000 ha land. They expressed themselves in the following ways:

- “The patrons and the businessmen are sad; the land was taken away from them, because they had too much territory.”

*[“Los patrones y los empresarios están tristes, se les ha quitado tierras porque tenían demasiado.”]*

- “The peasants and the indigenous people are happy, because they fought to obtain land.”  
*[“Los campesinos y los indígenas están felices, porque pelearon para obtener sus tierras.”]*
- “We are happy, because the land was distributed to the people who most needed it.”  
*[“Estamos contentos, porque se distribuyó tierra a la gente que más lo necesita.”]*
- “I feel calm, because we know now which land belongs to us.”  
*[Me siento tranquila, porque ya sabemos cual es la tierra que nos pertenece.”]*

The interviewees pointed out that the Popular Participation Law has also had a great impact over their lives, since it has allowed them to participate more actively:

- “All the community is happy, because we all have the same right to participate and give our opinion.”  
*[“Toda la comunidad está feliz, porque todos tenemos el mismo derecho de participar y dar nuestra opinión.”]*
- “We are happy, because we have freedom to give our opinion.”  
*[“Estamos contentos, porque tenemos libertad de opinar.”]*
- “We feel happy, because now we know our rights.”  
*[“Estamos felices, porque ya conocemos nuestros derechos.”]*
- “This law has benefitted all of us, but I think that 30% of the people within the community do not understand the law.”  
*[“Esta ley nos ha favorecido a todos, pero creo que un 30% de la gente de la comunidad no la entiende.”]*

The health brigade is also of great importance to the people who live in Santa Trinidad. A team of doctors comes usually once a month to the community to treat the diseases of the people:

- “We all felt happy; they brought us medicines and examined the sick persons.”  
*[“Todos nos sentimos felices; nos trajeron remedios y examinaron a los enfermos.”]*
- “We feel calmer knowing that the health brigade comes once a month, but they have not showed up since one and a half months.”  
*[“Nos sentimos más tranquilos sabiendo que la brigada de salud viene cada mes, pero ya desde hace un mes y medio que no vienen.”]*

Various inhabitants also talked about the importance of the workshop on human rights, in which the community members participated.

- “They explained to us what to do when we have conflicts in our families.”  
*[“Nos explicaron que hacer cuando tenemos conflictos familiares.”]*
- “They gave us good ideas to be able to have a good relationship with our families and neighbours.”  
*[“Nos dieron buenas ideas para poder tener una buena relación con nuestras familias y con los vecinos de la comunidad.”]*

A few interviewees mentioned that the consolidation of the community as OTB was also a significant event:

- “The president of the OTB takes our requests to the mayor and puts pressure on him in order to get what we need.”  
*[“El presidente de la OTB lleva nuestras peticiones al alcalde y lo presiona para recibir lo que necesitamos.”]*
- “We now have a person who represents us and takes care of the needs of the community. We are happy about it.”  
*[“Tenemos ahora una persona que nos representa y vela por las necesidades de la comunidad. Estamos felices por eso.”]*

According to a couple of persons, the construction of the new school a couple of years ago was a key event:

- “We were pleased, because our children would study more comfortable.”  
*[“Nos pusimos contentos, porque nuestros niños iban a estudiar más cómodos.”]*

Another important event mentioned by a few survey respondents was the visit of representatives of the indigenous organization CIRABO (Central Indígena de la Región Amazónica de Bolivia):

- “We were glad, because they came to teach us how to defend our land.”  
*[“Estábamos felices, porque vinieron a enseñarnos como defender nuestras tierras.”]*

One person mentioned that the process of decentralization was important, since the resources are being distributed in a better way, i.e. directly from the municipalities to the communities.

The construction of the road, which connects Santa Trinidad with El Turi and with the main road, was a significant event, too. The person who stated this explained that the traders who come to buy the Brazil nuts that they gather felt angry about the road, because thanks to the road more traders have access to the community and for that reason they have to pay a higher price for the nuts. The community members were very happy, because they could sell the Brazil nuts for a higher price than before.

### El Turi

The answers given by the community members of El Turi when they were requested to talk about things that make them feel happy or satisfied were diverse.

#### *Men's responses:*

- The majority said that they feel satisfied, since they do not spend much money living there, because they have access to the forest resources.
- Many of the interviewed men also talked about feeling calm, because they have enough food. One of them mentioned that it is easier to have access to food in the forest than in the city.
- Some men stated that they feel good, because they are free (there is no patron).
- One interviewee pointed out that he feels happy due to the fact that they breathe clean air living in the forest.
- Another one noted that he feels happy, because in the forest there is more tranquility than in the city.
- One person said that he feels glad about having land.

TABLE 7.7: WELL-BEING INDICATORS FOR EL TURI (MEN’S POINT OF VIEW)

<b>Men</b>	
Most frequently mentioned	Access to the forest
Very frequently mentioned	Enough food
Mentioned by a few people	Self-determination
Mentioned by one person	No pollution Tranquility Access to land

Source: Interviews

*Women’s responses:*

- The two answers given most frequently were that they feel happy, because they have access to the forest (hence they do not spend much money living there), and there is a lot of peace due to the absence of car noises.
- One of the women mentioned that she feels glad, since life is easier when one lives in the forest.
- Another woman said that she is happy, because there is no pollution.
- One interviewee pointed out that they feel happy, since they are free.
- Another one noted that all the community members are happy, because they have enough food to eat.

TABLE 7.8: WELL-BEING INDICATORS FOR EL TURI (WOMEN’S POINT OF VIEW)

<b>Women</b>	
Most frequently mentioned	Access to the forest Tranquility
Mentioned by one person	Enough food Self-determination No pollution

Source: Interviews

The inhabitants of El Turi also talked about conditions of their lives that make them feel unhappy or cause them trouble and that they would like to modify.

*Men's responses:*

- The issues pointed out most often were the following ones:
  - The lack of a health center within the community. People feel worried when someone falls ill, because there is no health center in the community. They said that it is very difficult to go to El Sena to see a doctor there. One man mentioned that the health brigade seldom comes to visit them.
  - The absence of a radio transmitting apparatus and electricity.
  - The bad state of the road, which makes it impossible to field their products.
- Several men complained, because the community does not have access to sufficient forest and they have not received the title deeds yet. They said that the reason why the community did not get enough forest is that when the representatives of the INRA came to El Turi, there were only a few families at the community, the rest of the people were working for a short period in Riberalta. Each family received 500 has, which is too little if it is considered that in El Turi live far more families than the ones who were present on that day.
- A few men stated that they feel anxious about not having a stable job all the year round and that they would like to earn a regular income. They wish to have more job opportunities in the community.
- Some interviewees noted that they feel unhappy, because they do not have drinking water in the community. They have only water from the well and the stream, and they do not really know how the quality of the water is.
- One man mentioned that he would like to have a motorbike.
- Another one talked about the need of having a high school in the community; otherwise all the teenagers have to leave the community to go to high school in Riberalta.
- One survey respondent mentioned that they would feel happier if the Mayor of El Sena Municipality would come once in a while to visit them, so that he could see what their needs are.
- Another one pointed out that he is worried because of the mosquitoes and the malaria.



TABLE 7.9: POVERTY INDICATORS FOR EL TURI (MEN’S POINT OF VIEW)

<b>Men</b>	
Most frequently mentioned	No radio transmitting apparatus No health center Bad state of the road No electricity
Mentioned by a few people	No access to sufficient forest No title deeds yet No drinking water No stable job throughout the whole year
Mentioned by one person	Lack of transportation No high school Mayor does not come to see their needs Illnesses

Source: Interviews

*Women’s responses:*

- The most mentioned problems were:
  - The lack of a health center and a radio transmitting apparatus.
  - The need of having drinking water and electricity.
  - The fact that men get drunk and sometimes hit their wives. Some of them noted that this serves as a “bad example” for the children who see their fathers drunk and violent.
- Several interviewees stated that they feel worried, because they have to confront family conflicts.
- A couple of women also mentioned that they would like to have a stable job throughout the whole year to earn a regular income.
- One woman pointed out that she feels unhappy, because her children do not obey and this is causing her trouble.

TABLE 7.10: POVERTY INDICATORS FOR EL TURI (WOMEN'S POINT OF VIEW)

<b>Women</b>	
Most frequently mentioned	No radio transmitting apparatus No health center No drinking water Alcoholism of men
Mentioned by a few people	Family conflicts No stable job throughout the whole year
Mentioned by one person	Children do not obey

Source: Interviews

Regarding particular events which might have caused changes in their living conditions, the inhabitants of El Turi mentioned most frequently the visits of the health brigade to the community, followed by the land reform (INRA law) and the workshop on human rights.

The people said that they feel happy when the health brigade comes to see them, since they examine the sick people and they bring medicines and vaccinate the small children. A person complained about the irregularity of the visits:

- “They only come when they remember that they have to come.”  
*[“Sólo vienen cuando se acuerdan de que tienen que venir.”]*

Even though the community members feel happy about having access to the forest, they noted that there is not enough land for everyone. They expressed themselves in the following ways:

- “We feel more or less happy, because there is not enough land to satisfy everybody.”  
*[“Nos sentimos más o menos felices, porque no hay suficiente tierra para satisfacer a todos.”]*
- “We feel unhappy, because we do not agree with the decision taken by the people who came representing the INRA.”  
*[“Nos sentimos infelices, porque no estamos de acuerdo con la decisión que tomó la gente que vino del INRA.”]*

- “We do not know exactly which our territory is; we still do not have any title deed.”

*[“No sabemos exactamente cual es nuestro territorio; aún no tenemos ningún título de propiedad.”]*

Many survey respondents also talked about the significance of the workshop on human rights held in their community. The aim of the workshop was to reduce family violence. The people were taught how to live in harmony with the members of their families and with their neighbours and neighbouring communities, too:

- “We all felt happy, because they taught us to engage in a dialogue with the people instead of to fight.”

*[“Todos nos sentimos felices, porque nos enseñaron a conversar con la gente en vez de pelearnos.”]*

**The fact that you practice these productive activities makes you feel satisfied/happy, more or less happy or frustrated/dissatisfied/sad?  
Why?**

The inhabitants of the communities were encouraged to explain if the activities practiced by them make them feel happy, more or less happy or unsatisfied.

### Santa Trinidad

In Santa Trinidad all of the people noted that they feel happy, since thanks to these activities they can cover their needs. Some of them compared their situation when they used to live in the city with their current situation in the forest. They said that in the city they did not earn enough money and they spent much more money than now. Furthermore, they did not have land to grow their food. They pointed out that they have more opportunities and freedom and that life is easier living in the forest, considering that they have access to the forest to extract the resources they need.

## El Turi

In El Turi only one person noted that he feels more or less happy, the rest of the interviewees said that they feel happy about practicing these activities. The majority of them pointed out that thanks to the forest they have what they need to live. One man explained that this year he felt particularly happy, because the price of the Brazil nut rose almost 100 percent (from 42 Bs. up to 80 Bs. per box). Another person said that he is glad about being able to sell the Brazil nuts to whom he wants, since there is no patron. It was also mentioned that life in the city is more difficult for them than in the forest. The person who felt more or less happy argued by saying that he would have liked to study law and that is the reason why he is a little bit frustrated with his life in the forest.

**What resources do you extract from the forest? What other important functions does the forest have? How much importance does the forest have in your life? Can you imagine living here without the forest?**

A further topic that was discussed with the people of both communities was the role of the forest in their lives. There was strong consensus among them on the great importance that the forest has to them.

## Santa Trinidad

In Santa Trinidad, the majority of the people give enormous significance to the forest because of the resources that they can extract from it, such as Brazil nuts, different fruit varieties like *asaí*, *majo*, *motacú* and cacao, wood to construct their houses and fences, firewood, palm leaves (*jatata* or *motacú*) to build roofs, honey and many different animals, including fish for their meals. Furthermore, the forest is an immense source of medicinal herbs that they regularly use.

Another issue that was mentioned was that the forest protects them against illnesses. They think that life is healthier in the forest than in the city, since in the city there are many illnesses and the air is polluted, which makes many people sick. The

community members see the forest as a barrier that does not allow illnesses and pests from other places to reach them. One of the members of the community summarized in a few words what the forest means to them: “It is like a mother to us; we gather from the forest what we need, it protects us against illnesses and we have fun living here.”

They also talked about other vital functions that the forest has. People referred to the clean air provided by the forest, the shadow of the trees that keeps the temperature in the forest moderate, the tranquility and peace found in the woods and the protection that it offers against strong winds.

The inhabitants stated that they cannot imagine living there without the forest. The forest protects them, and without the forest, they would be in danger. Moreover, they would not have the resources that they need to stay alive.

### El Turi

The community members of El Turi also give great importance to the forest, mainly due to the resources that they find there. As in Santa Trinidad, the inhabitants of El Turi go to the forest to supply themselves with Brazil nuts, fruits, medicinal herbs, animal meat, palm leaves for the roofs of their dwellings, firewood and wood to construct their houses. The interviewees pointed out that the forest gives them everything they need to live and that thanks to the forest and the Brazil nut trees they are able to earn some money.

Various persons stated that the forest has other important functions as well. They spoke about the shade, the clean air and the protection against the wind and illnesses provided by the trees.

The interviewees think that it would be impossible to live there without the forest. One of them said that the area would be a desert with no life. The people stressed that they need the protection and the natural resources from the forest.

## **Would you like to intensify the use of the forest in the next years? Are there any obstacles for doing it?**

The community members were confronted with the idea of intensifying the use of the forest in the future.

### Santa Trinidad

In Santa Trinidad only one person did not show interest in doing it, and the rest of the people would definitely like to intensify agriculture and the extraction of Brazil nuts in order to be able to generate a bigger income. Indeed, the great majority is willing to work harder to increase their income. A few people mentioned that they have to take advantage of the fact that they are still young and have a lot of energy to work hard. However, the interviewees recognized that there are some obstacles for being able to intensify their productive activities.

In the case of the Brazil nut, some survey respondents mentioned that they would need more labour force to be capable of collecting a greater amount of nuts. They also stated that they would like to transport the nuts to the city, so that they do not have to depend on the merchants who come to buy their nuts for a price that is not so good, but the problem is the bad state of the road, which makes it very difficult to reach the main road. Most of the survey respondents stressed that they could earn more money if there would be the possibility to sell their nuts directly in the city. One man also pointed out that even though there is the wish to collect more nuts, the Brazil nut trees do not produce the same amount of nuts each year, which is also an obstacle.

With respect to agriculture, they would like to orient it towards commercial purposes as well and not solely for their subsistence. To achieve this they would need bigger *chacos* and to invest more time in agriculture. The main obstacle that people see is that they would not be able to transport their crops to sell them in town due to the terrible state of the road, and nobody would come to the community to buy their crops because of the same reason. An additional difficulty mentioned by one person

was the lack of agricultural tools, such as a plow, and the lack of fertilizers and insecticides to be able to intensify their agricultural practices.

Besides being interested in intensifying agriculture and the extraction of Brazil nuts, the interviewees stressed that they would like to extract wood from the forest to sell it and increase their income. Only a couple of persons disagreed, arguing that they prefer to preserve the forest for future generations. However, several survey respondents explained to me that they would never fell young trees. In any case, there are some obstacles to make their idea a reality. First of all, they would need a Forest Management Plan in order to legally extract wood, but to be able to have one, it is essential for the community to possess first a title deed. The problem is that they still do not have a title deed for their whole territory. Secondly, they lack the required tools or equipment to fell trees efficiently (they only have some axes).

A few survey respondents also mentioned that they would be interested in raising cattle in the future. Only one person said that he would like to do it to have milk and meat for his family, the rest of them would like to sell the meat, “since this productive activity generates a good income.” According to one of them, they would not need to fell trees to make room for pastures, since there are already some sites in the forest, which he referred to as *chaparrales*<sup>31</sup>, where they could raise cattle.

Several community members also expressed their wish to become involved in short-term casual labour activities in the city, with the intention of having more income. As one person said, “what they earn working in the forest is just enough to live, but they cannot save any money.” One of the impediments that people mentioned for going to the city to work is that they are not allowed to leave the community for more than a month, since they have to accomplish different duties, like for example to participate in teamwork activities. It should be emphasized that the president of the OTB wants to avoid that people leave for long periods, since this would cause instability within the community. This is the reason why he established that the community members are not allowed to go away for longer than one month. In case that they decide to do it, they risk to be expelled from the community. Another impediment is that they have

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<sup>31</sup> “*Chaparral*” refers to an area with thickets.

to take care of their families and crops, which makes it difficult for them to go to the city to work.

### El Turi

In El Turi all the people stated that they would like to intensify agriculture to sell a part of their crops, thereby increasing their income. A few interviewees mentioned that their children are growing up and that they would all work together. According to the survey respondents, the main impediment for intensifying their agricultural practices is that they would not be able to bring their crops to the city, because they do not have any means of transportation and the road is in a very bad condition. One of them said that in order to cultivate more crops, he would need to hire one or two men to help him. Another one said that he would need more land to cultivate more crops and this would be a problem, because the community is not going to receive an adequate amount of land.

The inhabitants of El Turi also have a great interest in extracting wood from the forest in the near future, to put it up for sale and increase thereby their earnings. They stressed the importance of doing it in a sustainable way so as to not destroy the forest. To achieve this they would not fell a huge number of trees and they would reforest as soon as possible. But the great problem is that the community does not have a land title deed yet, so they have to wait to become one, and then they will need to have a Forest Management Plan for being able to legally extract wood for commercial purposes.

A couple of survey respondents noted that they would like to raise cattle, but only to have milk and meat for their subsistence. The obstacle for doing it is that they do not have the required capital to buy cattle.



## **What do you think should be done to improve your living conditions?**

The last question of the interview focused primarily on actions that could be taken to improve the living conditions of the community members within the next years. First, the people were encouraged to think about what they could do for themselves to improve their lives. Then they were asked to give their opinion about what the Municipal Government of El Sena should do to help them improve their living conditions. Subsequently, the conversation was guided towards the role of the president of the OTB and what he should do so as to achieve an improvement in their living conditions. Finally, they were requested to reflect about what other government bodies, non-governmental organizations or international organizations could do to help them improve their lives within the next years.

### Santa Trinidad

In Santa Trinidad most of the people talked about working harder, mainly in agriculture and the extraction of Brazil nuts, to try to have better living conditions. They hope to be able to sell their crops and nuts directly in the city in the near future.

According to the survey respondents, there are two things of prime importance that the municipal government should do:

1. They want the Mayor of El Sena to come and visit them, so that he can see what their needs are.
2. They expect from the municipal government that the road be repaired.

The interviewees also mentioned that their living conditions would improve if the municipal government would build a health center in the community and give them a radio transmitting apparatus and connection to electricity. Only a few people expressed their wish of having access to drinking water. One person pointed out that the government should assist them in having access to means of transportation, at least once a week, and another one noted that their lives would improve if the government would help them in creating jobs within the community, for instance initiating agroforestry practices.

The majority of the survey respondents affirmed that they know what the role of the president of the OTB is and only a few did not know it or were confused. According to the interviewed people, the president of the OTB has four basic functions:

1. To take care of the community.
2. To demand help from the municipal government by pressuring the mayor to execute the required infrastructural projects in the community. One person mentioned that if they do not demand from the mayor what they need, they do not receive any help “and the money is kept in El Sena.”
3. To organize meetings with the community members to discuss how to enhance their living conditions.
4. To supervise that there is order within the community.

It was also discussed what the president of the OTB should do to help them improve their living conditions. The interviewees mentioned the following things:

- To put more pressure on the municipal government, so that the needed infrastructural projects are carried out in the community.
- To keep an eye on the projects executed by the municipal government in the community and the surrounding areas, in order to check that they do a good work. Some people mentioned that when the road, the bridges and the school were built, nobody from the community supervised what they were doing and now the road and the bridges have to be repaired, because the municipal government did a bad job. With respect to the school, there are cracks in the walls, but they hope that the situation does not worsen.
- To have more meetings to discuss about their needs and try to find solutions to improve the life of the community members. Since not all the people come always to the meetings, they want the president of the OTB to pressure them to come, for example through a fine, because it is important to take decisions collectively.

The survey respondents reflected with respect to what other government bodies, NGOs or international organizations could do to help them, and they came up with the following ideas:

- Most of the interviewees noted that they need an agronomist to come to the community to show them where to plant their crops. Right now the majority of the

community members do not know where to plant them so that they can grow well. One person expressed his wish to be taught how to practice agroforestry.

- A great number of survey respondents said that it is important that somebody comes to teach them about the Popular Participation Law, because nobody has ever explained it to them and they feel quite confused. Some of them mentioned that many people who live in the forest do not know about this law.

- One person stated that it would be of great help if any organization could donate a vehicle to them.

- Another one pointed out that he would like to learn how to intensify their productive activities in a sustainable way, in order to prevent causing harm to the environment.

- A man requested help to learn how to prevent becoming ill and what to do in case that somebody falls ill, taking into account that there is no doctor in the community.

### El Turi

In El Turi the great majority of the survey respondents think that they could improve their living conditions by working harder. They talked about cultivating more crops, but they are worried about how to transport them to the city, since they do not have any means of transportation. Only one person said that he could improve his life if he would have the possibility to study.

Concerning what the municipal government should do to improve their living conditions, all the interviewees said that they would like the mayor to come to visit them in the community, so that he could see what they are lacking. One person told that the mayor came once and promised them to provide them with connection to electricity and a radio transmitting apparatus, but he never came back. Another one mentioned that they have asked the municipal government many times for help, but nobody comes and the community members do not get what they need.

The great majority of the survey respondents think that their living conditions would improve if the municipal government would repair the road and give them a radio transmitting apparatus and connection to electricity. One man talked about the urgent need of having access to a vehicle in order to transport their crops and sick people.

All the interviewees stated that they are acquainted with the role of the OTB's president. They identified four fundamental functions that he has:

1. To take care of the community.
2. To ask the municipal government for the things that the community needs. They think that it is of key importance to pressure the mayor to be able to receive the help that they need.
3. To participate in different workshops (for example like in the one organized by CIFOR on April 2004 in El Sena) in order to learn new things and then teach them what he learned.
4. To meet every two weeks with the community members to talk about the needs that the community has. Through the president of the OTB they also want to find out what the authorities say.

When they were asked to give their opinion regarding what the president of the OTB should be doing for promoting an enhancement in their living conditions, the survey respondents said that he should be putting more pressure on the municipal government with the aim of receiving what they need (electricity, a radio transmitting apparatus etc.). They also stated that he should make a greater effort to organize meetings to talk about what the community is lacking and what the community members want.

In addition, they expressed their ideas regarding assistance that could be offered by other government bodies, NGOs or international organizations:

- The majority of the interviewees would like to receive help from an agronomist to learn where it is better to plant their crops.
- Most of them would also like to be taught about their rights and duties (Popular Participation Law) to be able to defend themselves.
- Furthermore, it was stated that they need to learn how to protect themselves from different illnesses and they said that they would like to receive first aid training.
- One man explained that many community members do not have identification documents. Therefore, they need somebody to come to help them obtain these documents. He added that without possessing an identification document, it is very difficult to get a job in the city.

## **8. Discussion and Conclusions**

### ***8.1 The Significance of Gathering Nuts and Practicing Agriculture***

The community members of Santa Trinidad and El Turi practice diverse productive activities: they collect Brazil nuts, grow crops, fish and hunt, engage in informal trade and short-term casual labour and participate in diverse teamwork activities. However, the great majority of the people identified the extraction of Brazil nuts and subsistence agriculture as the main and second most important activities, respectively. There were only a few people who gave more importance to subsistence agriculture than to the extraction of Brazil nuts, arguing that thanks to agriculture they can grow their own food, and they can practice it throughout the whole year, while it is only possible to collect Brazil nuts from January to March.

The investigation to find out the reasons why people gather Brazil nuts and practice subsistence agriculture, together with the workshop outcomes, brought out the aspects that are mainly considered and the ones that are least considered by the community members (see Fig. 7.1 and 7.2). It stands out that only some aspects were ranked similarly in both communities.

In the case of the activity of collecting Brazil nuts, the people of both communities placed the factor “income” in the first position, and the issues “only option” and “autoconsumption” in the third and seventh position, respectively. In my opinion, the fact that the issue “only option” was ranked third indicates that people regard it as an important reason, since they do not see at the moment another alternative to earn good money, considering all the limitations that exist, for example that they do not have a Forest Management Plan to be able to extract and sell wood, and they do not have the required infrastructure to direct their efforts towards commercial agriculture. I think that “autoconsumption” occupies only the seventh place, because just a small minority consumes nuts and the majority prefers to sell all the collected nuts.

Focusing now on aspects that were ranked very differently, the factor “tradition” was placed in the second position in Santa Trinidad, while in El Turi people placed it in the sixth position. In my opinion, due to the fact that Santa Trinidad has always been an independent community, where the tradition of gathering nuts passed down from

generation to generation, people gave great importance to this aspect. In contrast, the inhabitants of El Turi gave little importance to this issue, because when thinking back they relate the gathering of nuts above all to the period when they used to collect nuts for Mr. Hecker and lived under miserable conditions.

Another remarkable result is that in Santa Trinidad the issue “buy expensive items” was ranked only sixth, because the majority of the community members use their earnings to buy essentials, such as foodstuffs for the whole year, medicine, cloths, etc., and only some of them sometimes purchase costly items, like for example a gun. This is the reason why in El Turi the aspect “buy a great variety of things” was ranked second, given the importance of being able to acquire many indispensable things with the money they earn.

The reason “it only lasts three months” was just mentioned in El Turi. The people in El Turi placed during the workshop this issue in the last position, because they do not really care that this activity only lasts three months, but what matters to them is to have the chance to earn some money. I believe that if they could collect Brazil nuts for a longer period than just three months, they would feel very glad about it, because they would have a higher income.

With respect to the aspects that were ranked similarly concerning the activity of practicing agriculture, the people of both communities ranked the issue “food for their subsistence” first, and the aspects “necessity” and “selling” second and third. It was not surprising to me that “food for their subsistence” and “necessity” occupied the first and second place, if it is considered that the communities are located in the middle of the forest, far away from any kind of grocer’s shops or markets, so people are forced to practice agriculture, otherwise they would not have enough food to satisfy their hunger. They placed the issue “selling” in the third position. Indeed, people told me that they try to sell part of their crops to their neighbours or to other people of the community when they need money. In the case of hunting and fishing, people also gave great importance to the aspect “selling”, ranking it second after “food for their subsistence”. This helped me realize how important it is to them to have an income. They try not to depend solely on the extraction of Brazil nuts to have an income, so

they look for other ways, like for example through selling part of their crops, fish and/or meat to earn some extra money.

There was only one aspect that was ranked very differently. The issue “barter” was ranked fourth in El Turi and seventh in Santa Trinidad. I think that the inhabitants of El Turi gave more importance to this aspect, because they possibly barter more than the people from Santa Trinidad.

The community members placed the issue “a year-round activity” in a relatively good position. In Santa Trinidad it was ranked fourth and in El Turi fifth. I think that the fact that they can practice agriculture throughout the whole year is vital, because it helps them to always have something to eat, namely depending on the time of the year they have certain crops that can be consumed (see Table 7.1). In contrast, they almost did not give importance to the issue “it is not a difficult job”. In Santa Trinidad they placed it in the last position, and in El Turi it occupies the last but one place. Personally, I think that the reason for this is that many community members do not consider agriculture an easy job, if one takes into account that they have to invest a lot of time and energy to plant and harvest their crops. Moreover, even if it would be an extremely difficult job, they would not have the choice not to do it, since they depend in large measure on agriculture to have food.

Although the people take diverse aspects into consideration to gather Brazil nuts and practice agriculture, they regard the issues “income” and “food for their subsistence” as the most important ones. But when one analyses the reason/s why the community members give primary importance to one of these two productive activities, the issue that plays a decisive role is “income”, keeping in mind that the extraction of Brazil nuts gives them the greatest earnings. Money offers them many options, such as buying provisions, cloths, medicines, etc. or paying the bus ticket from El Sena to Riberalta, their children’s living expenses when they go to high school in Riberalta, etc. As the interviewees said, the Brazil nut gives them more options than agriculture, referring to all what they can do with the money they earn from this activity.

## **8.2 The Complexity of Livelihoods**

The fact that the community members were asked to identify the main and second most important productive activities practiced by them, should not lead the readers of this thesis to suppose that these people could depend solely on the activity identified as “the most important one” to survive. As stated by Derichs and Rauch (2000 in Stahl, 2002), peasant households can secure only to some extent their existence through subsistence or market production. To be able to survive, they must combine various economic activities. Indeed, if one thoroughly analyses the life of the community members as a whole, one can see that they use diversification strategies to be able to subsist. Analysing it in a simple way, through the extraction of Brazil nuts, informal trade and wage labour they earn money, which they basically use to buy essentials; agriculture provides them with basic crops; they hunt and go fishing to have meat and fish for their meals; and they participate in teamwork activities for the sake of the community’s well-being. All these activities, when combined, make it possible for them to live in the forest.

The capacity to choose livelihood strategies depends on the access that households have to the human, natural, financial, social and physical capitals (DFID, 1999). An in-depth look into the poverty and well-being indicators created for Santa Trinidad and El Turi can be of great help for seeing from the point of view of the community members to what capitals they do or do not have access (see Table 7.3-7.9).

The most frequently mentioned capital to which all of them have access is the forest. It definitely plays a key role in their lives, since it provides them with numerous resources, such as Brazil nuts, land to cultivate their crops, streams and lakes to fish, clean air and many more. Furthermore, as stated by the interviewees, the forest protects them against illnesses and against the sun and the wind. The free access to the forest also gives them a feeling of self-determination; each person or family decides how much time to spend gathering nuts, to whom sell the nuts etc. The oppression experienced by many of them while they used to work for a patron is a thing of the past.



Regarding the human capital, some interviewees expressed that they feel satisfied, because they enjoy good health. In general, all the people look healthy and work hard. The community members are aware of the great importance of being healthy, since it gives them the ability to labour. They fear to become sick due to the difficulty of reaching a health center. Furthermore, becoming sick means that they cannot continue working as usual or that they have to stop working. Another component of their human capital is that they have a lot of experience working in the forest. Only the newcomers have to get used to working there.

What the people are lacking is agronomy knowledge. Most of the survey respondents pointed out that they would like an agronomist to come to show them where to plant their crops so that they can grow well. A few people also expressed deep frustration over not having had the opportunity to study or continue studying. During my stay in the communities I realized that they give enormous importance to having access to education. Especially in Santa Trinidad, people showed great concern due to the lack of a high school. It was also mentioned that they are lacking knowledge of the laws, which limits their capacity to exercise their rights.

With respect to the social capital, the interviewees talked frequently about how much they hold together and support each other. According to my observations, the social relations within the communities are good. This is very important to them, since the feeling of being united gives them strength to go ahead.

Their financial capital consists principally of the income generated through the extraction of Brazil nuts, and occasionally they gain some money through informal trade and/or wage labour. However, the monetary income generated through these activities is, in most cases, not enough to sustain their livelihoods.

In Santa Trinidad, as well as in El Turi, there is a serious lack of physical capital. The poverty indicators for both communities show that there is strong consensus among the population of both communities with regard to what their principal needs are. It is of paramount importance to them to have a radio transmitting apparatus, a health center, a road in good condition and electricity.

This brief analysis has shown that the inhabitants of Santa Trinidad and El Turi have only limited access to the human, financial and physical capitals. Taking into account their weaknesses (what they are lacking) and strengths (what they have), one can understand in a better way why they base their livelihoods on a combination of diverse productive activities.

### ***8.3 Rural Perceptions of Poverty and Well-Being and the Method of NBI***

Poverty refers to the incapability of people to live a bearable life (PNUD, 1997 in Feres & Mancero, 2001). A bearable life is made up of different aspects, such as enjoying good health and human rights, having access to food and education, having political freedom and the opportunity to participate in community life, etc. Nevertheless, giving the difficulty of measuring some of these aspects, studies on poverty have generally focused on those aspects that can be quantified (Feres & Mancero, 2001), leaving subjective and qualitative aspects aside. In the same way, most methods used to measure levels of poverty and well-being focus on quantifiable, material aspects. The method of Unsatisfied Basic Needs (NBI), which has been widely used in Latin America, is a good example for this.

The method of NBI is based on a conception of poverty as “need” (Feres & Mancero, 2001). “The concept “need” refers to the lack of material goods and services required to live and function as a member of society” (Feres & Mancero, 2001, p.9). Therefore, it focuses only on aspects like for example minimum levels of housing, basic sanitation, income, health etc., based on which different degrees of poverty are distinguished (Maldonado, 2004), and it does not include subjective and qualitative aspects. Furthermore, as noted in chapter four, some standards chosen as the minimum level do not take sufficiently into account the socio-cultural context of indigenous people (PNUD, 2003).

When looking into what makes the inhabitants of Santa Trinidad feel happy, satisfied or unhappy and causes them trouble (see Table 7.3 - 7.10), one realizes that some of the aspects mentioned by the inhabitants of the communities are certainly considered in the NBI method, such as having connection to electricity and access to education. However, there are several aspects that are not being considered in the method of

NBI. People mentioned for example the lack of a radio transmitting apparatus (communication) and the bad state of the road.

The most frequently mentioned well-being indicator was having access to the forest. As the interviewees said, the forest is of prime importance to them, because “it gives them everything they need to live”. This aspect is not being taken into account in the NBI method. Of course it needs to be considered that having access to the forest is important to people who live in the Northern Bolivian Amazon region, but it would not be so important to someone who lives in a city and whose livelihood does not depend upon forest resources. However, this implies that the method of NBI does not consider the natural and social peculiarities of each region. An additional aspect that is very significant to the community members and that is not being taken into account in the NBI method is “self-determination.”

Women’s perceptions of poverty and well-being are not necessarily the same as men’s. Women mentioned for example the problem of alcoholism within the communities. They also gave more importance to having good social relations than men did, yet these aspects are not considered in the method of NBI either.

The case studies in two villages made evident that the NBI method presents several flaws, since it focuses mainly on quantifiable aspects, ignoring important qualitative and subjective issues. Moreover, it does not take sufficiently into account the cultural, social, gender and natural differences found in every region. For this reason it is advisable to use the rates of poverty created with the NBI method with caution, bearing all this in mind.

#### ***8.4 Possible Ways to Improve the Living Conditions of Rural Poor***

The results from the fieldwork have shown that the productive activities practiced by the community members play a decisive role in their lives, since they are able to cover their needs through them. So there is a clear relationship between their state of well-being and the productive activities practiced by them, if one considers that thanks to these activities they have what they need to live, as stated by one of the interviewees. However, the key issue is that the populations of Santa Trinidad and El

Turi have access to the forest and can therefore benefit from the natural resources of the forest through these productive activities.

Although these activities help the community members to cover their main needs, their living conditions are seriously affected principally by the lack of access to telecommunications (a radio transmitting apparatus), medical attention in the communities (a health center) and electricity and by the bad state of the road, which causes negative repercussions on the living conditions and the economic development of the people. However, in order to improve their living conditions, the community members are willing to work harder.

Through the outcomes of the survey it became clear that when thinking on improving their lives the community members focus their attention on increasing the productivity. Specifically they would like to intensify agriculture and the extraction of Brazil nuts to be able to generate a bigger income. Most of the community members would also like to extract wood from the forest and some people said that they are interested in raising cattle in the near future. However, there is a serious lack of infrastructure, and this is exactly what the people demand from the municipal government. They expect from the municipal government to repair the road, with the hope of being some day able to sell their crops and nuts directly in the city in order to increase their income. This is precisely the proposal of the reformulated BPRS, namely to promote economic development through an economic growth model with a broad base, which tries among other things to incorporate new productive and social actors (small producers, micro enterprises, local councils etc.) in the generation of wealth and employment as an important step towards alleviating poverty (UDAPE, 2003). For expanding employment and income opportunities for the poor, the BPRS places great emphasis on better infrastructure as a key component to promote rural development (Bolivian Authorities, 2001).

There are also other similarities between the strategic components of the BPRS (and reformulated BPRS) and the requests made by the community members, such as enhancing the productive capabilities of people through an improvement of access to and quality of education and health services and access to basic sanitation. Furthermore, the BPRS emphasizes the importance of guaranteeing the legal

security of assets, being a priority to complete the process of regularization of land tenure in rural areas (Bolivian Authorities, 2001). As shown in the survey results, it is of great significance to the people of the communities to have their access to the forest legalized. Another aspect of the BPRS that is also being requested by the community members is to increase citizen participation and organization by supporting and instructing people in how to do it. Regarding this, the inhabitants of the communities are asking to be taught about the Popular Participation Law.

In my opinion, the Bolivian Government will have a good chance to reduce the high levels of poverty in Bolivia in case that the concrete actions established in the BPRS and reformulated BPRS to alleviate poverty can be taken, considering that most of them are similar to the requests made by the community members, which indicates that these actions are rightly directed towards covering the needs of the neediest segments of the population. However, it will be a very difficult task to take these actions.

The survey respondents gave very specific answers with respect to whom they expect to help them in improving their living conditions. They mostly asked for the municipal government's help, but they also gave great importance to the role of the OTB's president. The community members expect from him to put more pressure on the municipal government, so that the needed infrastructural projects are carried out and to play a more active role in organizing meetings within the communities to discuss about their needs. Furthermore, they pointed out that they could also get help from other government bodies, NGOs and international organizations, above all stressing that they need to learn where it is best to plant their crops and that they want to fully understand the Popular Participation Law. I think that knowing exactly what the people of each region need, it is possible to help them more efficiently.

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### ***The Lesson Learned***

Personally, I think that I used the proper questions and methods to be able to answer the research questions. I also think that the results from my fieldwork were appropriate to reach the study's aim. However, looking back I think that I should not have designed this study to find out whether agriculture or the extraction of Brazil nuts had primary importance, because as shown here they are both essential for the community members, although the Brazil nut gives the community members more options than agriculture when thinking about all they can do with the money they earn from this activity.

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## 10. Appendixes

### 10.1 Appendix I

#### ENCUESTA ACTIVIDADES PRODUCTIVAS

1)

- a) A qué actividades te dedicas?
- b) En qué meses del año practicas qué actividad?
- c) Cómo distribuyen el trabajo entre los miembros de la familia?  
Por qué lo hacen de esta manera? (**Prof. Becker:** Haushaltsstrategie! Familienstruktur berücksichtigen!)

2) Según tú, cuál es/son la actividad principal (más importante) y la secundaria (segunda más importante) que practicas? Por qué le das más importancia a esta actividad?

3) Por qué practicas la actividad X (razones)? Lluvia de ideas!

4) Tus condiciones de vida/tu situación actual dependen de las actividades que realizas?

- El hecho de que practiques tales actividades te conlleva a estar satisfecho/contento, más o menos bien o frustrado/insatisfecho/triste? Por qué?
- Hay otros factores, aparte de las actividades que practicas, que influyen en tu vida (en que estés feliz/satisfecho, más o menos feliz o triste)?

5)

- a) Qué cosas/productos extraes del bosque?
- b) Qué otras funciones importantes tiene el bosque?
- c) Qué/cuánta importancia tiene el bosque en tu vida? Por qué?
- d) Puedes imaginarte vivir sin el bosque? Por qué?

6)

#### Bosque

- a) Quisieras/quieres utilizar más el bosque en los próximos años?  
Por qué? Qué obstáculos hay?
- b) Quisieras/quieres cambiar el uso del bosque en los próximos años?  
Por qué? Utilizarlo para qué otra actividad? Por qué?

#### Actividades productivas

- a) Quisieras/quieres trabajar más (con más intensidad) en las actividades productivas que practicas? Por qué? Qué obstáculos hay?
- b) Quisieras/quieres trabajar haciendo otras cosas (en otras actividades) en los próximos años?  
Hacer qué? Por qué? Qué obstáculos hay para que lo puedas hacer?

7)

(**Prof. Becker:** Von außen kommende Unterstützung und Veränderungen)

- a) Qué puedes hacer TU para mejorar tu vida dentro de los próximos años?
- b) Qué debería hacer el gobierno municipal para que tus condiciones de vida mejoren dentro de los próximos años?
- c) - Conoces las funciones/el rol que tienen los dirigentes de las OTBs? Cuáles son?  
- Qué deberían hacer para que tus condiciones de vida y las de la comunidad mejoren?  
(**Prof. Becker:** Gespräch auf die Rolle der OTB-Vertretung lenken!)
- d) Qué mejoras esperas tú para los próximos años? Qué cambios?
- e) Qué podrían hacer otras entidades gubernamentales, ONGs u organizaciones internacionales para que tus condiciones de vida mejoren dentro de los próximos años?

## 10.2 Appendix II

### ENCUESTA POBREZA Y BIENESTAR

- Qué tienes (luz, agua, escuela, posta de salud, carretera, acceso al bosque, acceso a transporte, chaco)?
- Qué no tienes?
- Con qué estás satisfecho, contento?
- Qué condiciones de tu vida te hacen infeliz o te causan problemas y quisieras cambiar?

Incluir actividades del taller:

- a)
- Quiénes están contentos en la comunidad ☺, quiénes están más o menos, quiénes se sienten frustrados, infelices?
  - Por qué?

| Quiénes?    | Por qué? |
|-------------|----------|
| ☹           |          |
| Más o menos |          |
| ☺           |          |

b) Actividad “Cambios en el Tiempo”

- “Lluvia de ideas” sobre eventos que han traído cambios a la comunidad (sobre todo en los últimos 10 años: POR EJEMPLO 1994 Ley de Participación Popular, 1995 Descentralización Administrativa, consolidación de la comunidad como OTB, saneamiento por parte del INRA, ejecución de proyectos por parte del municipio, por parte de ONGs)?
- Identificar los 3 eventos más importantes (que han causado mayor impacto)

| Evento | Quién se puso ☹, más o menos feliz, ☺? | Por qué? (descripción del impacto causado) |
|--------|----------------------------------------|--------------------------------------------|
| 1      |                                        |                                            |
| 2      |                                        |                                            |
| 3      |                                        |                                            |

### 10.3 Appendix III

Santa Trinidad:

| <b>Extraction of Brazil Nuts</b> |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |             |         |   |
|----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------------|---------|---|
| Reasons                          | Respondents |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Total Score | Ranking |   |
|                                  | A           | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |             |         | Q |
| Income                           | 7           | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7           | 115     | 1 |
| Tradition                        | 6           | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 2 | 5 | 2 | 6 | 6 | 4 | 6 | 4 | 6           | 90      | 2 |
| Only option                      | 5           | 5 | 5 | 5 | 5 | 5 | 2 | 6 | 3 | 4 | 3 | 5 | 2 | 5 | 5 | 3 | 5           | 73      | 3 |
| Brings families together         | 4           | 4 | 4 | 3 | 4 | 4 | 4 | 2 | 6 | 6 | 6 | 3 | 3 | 3 | 4 | 6 | 4           | 70      | 4 |
| It is not a difficult task       | 3           | 3 | 3 | 2 | 3 | 3 | 5 | 4 | 1 | 2 | 1 | 2 | 4 | 2 | 3 | 5 | 3           | 49      | 5 |
| Buy expensive items              | 2           | 2 | 2 | 4 | 2 | 2 | 3 | 1 | 5 | 3 | 5 | 4 | 5 | 1 | 2 | 1 | 2           | 46      | 6 |
| Autoconsumption                  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 4 | 1 | 4 | 1 | 1 | 6 | 1 | 2 | 1           | 33      | 7 |

7 = most important, 1 = least important

| <b>Agriculture</b>         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |             |         |   |
|----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------------|---------|---|
| Reasons                    | Respondents |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Total Score | Ranking |   |
|                            | A           | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |             |         | Q |
| Food for their subsistence | 8           | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 7 | 8 | 8 | 8 | 4           | 130     | 1 |
| Necessity                  | 4           | 4 | 4 | 3 | 7 | 7 | 5 | 7 | 7 | 5 | 1 | 3 | 3 | 7 | 5 | 6 | 8           | 86      | 2 |
| Selling                    | 6           | 6 | 6 | 5 | 4 | 4 | 7 | 6 | 1 | 2 | 5 | 5 | 5 | 4 | 1 | 3 | 5           | 75      | 3 |
| A year-round activity      | 1           | 1 | 1 | 1 | 6 | 5 | 2 | 2 | 6 | 7 | 2 | 8 | 8 | 5 | 6 | 5 | 7           | 73      | 4 |
| Independence               | 7           | 7 | 7 | 7 | 2 | 1 | 1 | 1 | 2 | 6 | 7 | 6 | 6 | 2 | 4 | 1 | 3           | 70      | 5 |
| Tradition                  | 2           | 2 | 2 | 6 | 3 | 6 | 4 | 4 | 3 | 1 | 3 | 2 | 2 | 6 | 7 | 7 | 6           | 66      | 6 |
| Barter                     | 5           | 5 | 5 | 2 | 5 | 3 | 3 | 5 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 2 | 2           | 62      | 7 |
| It is not a difficult job  | 3           | 3 | 3 | 4 | 1 | 2 | 6 | 3 | 5 | 4 | 6 | 1 | 1 | 1 | 2 | 4 | 1           | 50      | 8 |

8 = most important, 1 = least important

| <b>Hunting &amp; Fishing</b>  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |             |         |    |   |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------------|---------|----|---|
| Reasons                       | Respondents |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Total Score | Ranking |    |   |
|                               | A           | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |             |         | Q  | R |
| Food for their subsistence    | 5           | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 1 | 5           | 4       | 82 | 1 |
| Selling                       | 4           | 4 | 4 | 4 | 3 | 1 | 3 | 3 | 3 | 5 | 3 | 4 | 4 | 1 | 2 | 2 | 4           | 3       | 57 | 2 |
| Fun                           | 3           | 2 | 3 | 2 | 2 | 5 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 5 | 3 | 4 | 2           | 5       | 48 | 3 |
| Necessity                     | 1           | 1 | 1 | 3 | 4 | 2 | 4 | 4 | 4 | 2 | 4 | 3 | 3 | 2 | 4 | 3 | 1           | 1       | 47 | 4 |
| Get-together with friends/men | 2           | 3 | 2 | 1 | 1 | 3 | 1 | 1 | 1 | 3 | 2 | 1 | 1 | 3 | 1 | 5 | 3           | 2       | 36 | 5 |

5 = most important, 1 = least important

| <b>Teamwork Activities</b>    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |             |         |    |   |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------------|---------|----|---|
| Reasons                       | Respondents |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | Total Score | Ranking |    |   |
|                               | A           | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |             |         | Q  | R |
| Do it faster                  | 6           | 1 | 1 | 5 | 5 | 6 | 6 | 6 | 6 | 2 | 6 | 6 | 1 | 5 | 6 | 6 | 6           | 6       | 92 | 1 |
| They are organized            | 2           | 6 | 4 | 6 | 6 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 4 | 6 | 3 | 2 | 3           | 3       | 80 | 2 |
| Tradition                     | 3           | 4 | 2 | 3 | 2 | 4 | 5 | 4 | 5 | 1 | 3 | 3 | 2 | 2 | 5 | 4 | 5           | 5       | 67 | 3 |
| Everybody should have a house | 5           | 3 | 6 | 4 | 1 | 1 | 1 | 2 | 2 | 6 | 4 | 4 | 5 | 1 | 2 | 5 | 1           | 1       | 55 | 4 |
| Fun                           | 1           | 5 | 3 | 2 | 3 | 3 | 3 | 1 | 1 | 3 | 2 | 1 | 3 | 3 | 4 | 3 | 4           | 4       | 53 | 5 |
| Improve the community         | 4           | 2 | 5 | 1 | 4 | 2 | 2 | 3 | 3 | 5 | 1 | 2 | 6 | 4 | 1 | 1 | 2           | 2       | 52 | 6 |

6 = most important, 1 = least important

## 10.4 Appendix IV

El Turi:

| <b><u>Extraction of Brazil Nuts</u></b> |             |   |   |   |   |   |   |   |   |   |             |         |
|-----------------------------------------|-------------|---|---|---|---|---|---|---|---|---|-------------|---------|
| Reasons                                 | Respondents |   |   |   |   |   |   |   |   |   | Total Score | Ranking |
|                                         | A           | B | C | D | E | F | G | H | I | J |             |         |
| Income                                  | 8           | 8 | 8 | 8 | 7 | 8 | 8 | 8 | 8 | 7 | 78          | 1       |
| Buy a great variety of things           | 5           | 5 | 7 | 6 | 8 | 7 | 7 | 7 | 5 | 8 | 65          | 2       |
| Only option                             | 6           | 4 | 6 | 4 | 6 | 6 | 5 | 6 | 7 | 6 | 56          | 3       |
| It is not a difficult job               | 7           | 7 | 5 | 3 | 4 | 3 | 6 | 5 | 1 | 3 | 44          | 4       |
| Brings families together                | 4           | 6 | 4 | 2 | 2 | 2 | 4 | 4 | 6 | 2 | 36          | 5       |
| Tradition                               | 2           | 3 | 2 | 1 | 5 | 4 | 2 | 3 | 4 | 5 | 31          | 6       |
| Autoconsumption                         | 3           | 2 | 3 | 7 | 3 | 1 | 1 | 1 | 3 | 4 | 28          | 7       |
| It lasts only three months              | 1           | 1 | 1 | 5 | 1 | 5 | 3 | 2 | 2 | 1 | 22          | 8       |

8 = most important, 1 = least important

| <b><u>Agriculture</u></b>  |             |   |   |   |   |   |   |   |   |   |             |         |
|----------------------------|-------------|---|---|---|---|---|---|---|---|---|-------------|---------|
| Reasons                    | Respondents |   |   |   |   |   |   |   |   |   | Total Score | Ranking |
|                            | A           | B | C | D | E | F | G | H | I | J |             |         |
| Food for their subsistence | 7           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 70          | 1       |
| Necessity                  | 6           | 5 | 5 | 4 | 4 | 1 | 4 | 4 | 5 | 4 | 42          | 2       |
| Selling                    | 3           | 1 | 6 | 6 | 5 | 4 | 5 | 1 | 3 | 6 | 40          | 3       |
| Barter                     | 5           | 4 | 1 | 5 | 6 | 2 | 3 | 3 | 4 | 5 | 38          | 4       |
| A year-round activity      | 2           | 2 | 3 | 3 | 2 | 6 | 6 | 5 | 6 | 2 | 37          | 5       |
| It is not a difficult job  | 4           | 3 | 4 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 28          | 6       |
| Feed their animals         | 1           | 6 | 2 | 1 | 1 | 5 | 1 | 6 | 1 | 1 | 25          | 7       |

7 = most important, 1 = least important

| <b><u>Hunting &amp; Fishing</u></b> |             |   |   |   |   |   |   |   |   |   |             |         |
|-------------------------------------|-------------|---|---|---|---|---|---|---|---|---|-------------|---------|
| Reasons                             | Respondents |   |   |   |   |   |   |   |   |   | Total Score | Ranking |
|                                     | A           | B | C | D | E | F | G | H | I | J |             |         |
| Food for their subsistence          | 6           | 6 | 6 | 3 | 5 | 5 | 4 | 6 | 4 | 6 | 51          | 1       |
| Selling                             | 5           | 2 | 2 | 5 | 6 | 6 | 2 | 5 | 1 | 3 | 37          | 2       |
| Eat varied diets                    | 1           | 5 | 5 | 6 | 3 | 4 | 1 | 1 | 6 | 5 | 37          | 2       |
| Fun                                 | 4           | 3 | 3 | 2 | 2 | 2 | 5 | 4 | 3 | 4 | 32          | 3       |
| Get-together with friends/men       | 3           | 4 | 4 | 1 | 4 | 1 | 6 | 3 | 2 | 2 | 30          | 4       |
| Barter                              | 2           | 1 | 1 | 4 | 1 | 3 | 3 | 2 | 5 | 1 | 23          | 5       |

6 = most important, 1 = least important

| <b><u>Teamwork Activities</u></b> |             |   |   |   |   |   |   |   |   |   |             |         |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|-------------|---------|
| Reasons                           | Respondents |   |   |   |   |   |   |   |   |   | Total Score | Ranking |
|                                   | A           | B | C | D | E | F | G | H | I | J |             |         |
| Have a nice community             | 4           | 4 | 4 | 3 | 4 | 1 | 4 | 4 | 3 | 2 | 33          | 1       |
| Hold together                     | 3           | 2 | 3 | 4 | 2 | 4 | 3 | 3 | 4 | 4 | 32          | 2       |
| Do it faster                      | 2           | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 24          | 3       |
| Organize parties and events       | 1           | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 11          | 4       |

4 = most important, 1 = least important

**Short-term Casual Labour Activities**

| Reasons                                 | Respondents |   |   |   |   |   |   |   |   |   | Total Score | Ranking |
|-----------------------------------------|-------------|---|---|---|---|---|---|---|---|---|-------------|---------|
|                                         | A           | B | C | D | E | F | G | H | I | J |             |         |
| Find out about topics of their interest | 1           | 2 | 3 | 3 | 3 | 1 | 2 | 2 | 3 | 1 | 21          | 1       |
| Income                                  | 3           | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 1 | 3 | 20          | 2       |
| Leave the forest for a while            | 2           | 3 | 2 | 1 | 2 | 3 | 1 | 1 | 2 | 2 | 19          | 3       |

3 = most important, 1 = least important



## 10.5 Appendix V

### Santa Trinidad

#### **- Hunting and Fishing**

One reason pointed out by the community members with respect to why they fish and hunt was that they do it to obtain food for their subsistence:

- “I do it to have meat and fish for my family.”  
[*“Lo hago para tener carne y pescado para mi familia.”*]
- “We fish and hunt for our subsistence.”  
[*“Nosotros pescamos y cazamos para nuestras necesidades personales.”*]

Another explanation given was that thanks to the activities of hunting and fishing, they can sometimes sell some meat or fish:

- “When I catch many *paiches* I sell some of them.”  
[*“Cuando pesco muchos paiches vendo algunos.”*]
- “You can sell meat and fish and earn some money.”  
[*“Se puede vender la carne y el pescado y ganar un poco de dinero.”*]

The people also said that they fish and hunt, because those are activities that they enjoy doing:

- “I love fishing!”  
[*“Me gusta mucho pescar!”*]
- “I do it because I enjoy it!”  
[*“Lo hago por diversión.”*]

An additional reason stated was that these activities give them the opportunity to share a moment with their friends and with the men of the community:

- “I like to hunt and fish in order to have a good time with my friends of the community.”  
[*“Me gusta cazar y pescar para pasarla bien con mis amigos de la comunidad.”*]
- “Hunting and fishing allows us to get together among men.”  
[*“La caza y la pesca nos permiten reunirnos entre hombres.”*]

It was also mention that they fish and hunt, because there is the need to do it:

- “We need meat and fish, a greater variety of food.”  
[*“Necesitamos carne y pescado, es decir comida más variada.”*]
- “There is no farm with animals, so this is another way in which we can get meat.”  
[*“No hay granja de animales, así que este es otro camino para conseguir carne.”*]

#### **- Teamwork Activities**

One of the reasons for participating in different teamwork activities is that together they do it faster:

- “The community works together to be able to do it faster.”  
[*“Para poder hacerlo más rápido la comunidad trabaja en grupo.”*]
- “Working together there is more strength.”  
[*“Trabajando juntos hay más fuerza.”*]

A further reason why they carry out teamwork activities is that they enjoy doing it together:

- “We have more fun doing it together, we laugh a lot.”  
[“Nos divertimos más haciendo las cosas en grupo, nos reímos mucho.”]

The people pointed out that they engage in teamwork activities due to the fact that they are organized:

- “We do it, because we are organized.”  
[“Lo hacemos porque somos organizados.”]
- “We organize ourselves quickly to do the work.”  
[“Nos organizamos rápido para hacer los trabajos.”]

It was also mentioned that they do it so that everybody can have a house:

- “We want everybody to have a house, so we build them together.”  
[“Queremos que todos tengan una casa, así que las construimos juntos.”]
- “Everybody has the right to have a house.”  
[“Todos tienen derecho a tener una casa.”]

Two additional explanations given were that they participate in teamwork activities to improve the community and because it is a tradition to do such type of work together.

## El Turi

### **- Hunting and Fishing**

One of the reasons why the people hunt and fish is to have food for their subsistence:

- “I hunt and fish for our subsistence.”  
[“Yo cazo y pesco para nuestras necesidades personales.”]
- “The meat I hunt is for my family.”  
[“La carne que cazo es para mi familia.”]

Two additional reasons are that thanks to these activities, they have the opportunity to sell some meat and fish or exchange them for other items:

- “Sometimes I sell some meat to my neighbors.”  
[“A veces vendo un poco de carne a mis vecinos.”]
- “For example I give fish in exchange for oil and sugar.”  
[“Por ejemplo yo doy pescado a cambio de aceite y azúcar.”]

They also mentioned that hunting and fishing gives them the chance to get together with their friends of the community:

- “It is like a meeting between friends.”  
[“Es como una reunión entre amigos.”]
- “I hunt and fish together with my son and my friend.”  
[“Yo cazo y pesco con mi hijo y mi amigo.”]

The people noted as well that they do it, because they enjoy it:

- “It is fun!”  
[“Es divertido!”]

Furthermore, it was pointed out that they fish and hunt to be able to eat varied diets:

- “We do it, because we do not want to eat just rice.”  
[*Lo hacemos, porque no queremos comer puro arroz.*”]

### **- Teamwork Activities**

People participate in diverse teamwork activities with the purpose of having a nice community:

- “We participate to have a beautiful community.”  
[*Participamos para tener una comunidad hermosa.*”]
- “The community has to be clean, otherwise it looks ugly.”  
[*La comunidad tiene que estar limpia, si no se ve fea.*”]
- “We do it for the good of the community.”  
[*Lo hacemos por el bien de la comunidad.*”]

Another reason for doing it is that collectively they work faster:

- “It is faster when we do it together.”  
[*Es más rápido entre muchos.*”]

They also take part in different teamwork activities, because they hold together:

- “We do it, because we hold together, for the good of the community.”  
[*Lo hacemos porque somos muy unidos, por el bien de la comunidad.*”]

They do it as well due to the fact that they like to organize parties and events for celebrating that they have finished a certain task.

### **- Short-term Casual Labour Activities in Urban Areas**

One reason why the people get involved in short-term casual labour activities is because of the income they earn:

- “When I do not have more money I go to Riberalta to work as a carpenter.”  
[*Cuando ya no tengo dinero me voy a Riberalta para trabajar como carpintero.*”]

Another reason is that they like to leave the forest for a while:

- “I work in Riberalta to be able to leave the forest for some time.”  
[*Yo trabajo en Riberalta para poder salir un tiempo del bosque.*”]
- “It is boring to be only in the forest, and this is the reason why I try to find a job in Riberalta.”  
[*Es aburrido estar solo en el bosque, por eso trato de encontrar un trabajo en Riberalta.*”]

It was also indicated that a further reason for involving themselves in short-term casual labour activities is that they use the opportunity to find out about topics of their interest:

- “When I work in Riberalta I try to verify if it is right what the politicians say to us.”  
[*Cuando trabajo en Riberalta trato de verificar si lo que nos dicen los políticos es cierto.*”]
- “We need to be informed, so when I am working in Riberalta I get information, otherwise the politicians and the dealers deceive us.”  
[*Necesitamos estar informados, así que cuando estoy trabajando en Riberalta me informo, si no nos meten los políticos y comerciantes cuentos.*”]

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Claudia Oemer  
Freiburg, Summer 2004

### **Written declaration**

I hereby certify that this paper was written without using illicit help. All the information that was extracted from publications has been cited. Furthermore, I have never written a paper with a similar content.

Freiburg, September 23<sup>rd</sup>, 2004

Claudia Oemer