

**KATHOLIEKE UNIVERSITEIT LEUVEN**

FACULTY OF SOCIAL SCIENCES  
MASTER IN CULTURES AND DEVELOPMENT STUDIES

**ECOLOGICAL ANALYSIS OF THE PROJECT  
'RICE AS AN ALTERNATIVE FOR COCA'**  
TOWARDS NEW INCENTIVES FOR BETTER LIVING CONDITIONS IN THE INDIGENOUS  
COMMUNITIES OF THE PERUVIAN-COLOMBIAN PUTUMAYO REGION

Promoter : Prof. Dr. A. CASSIMAN

DISSERTATION  
submitted to obtain the degree of  
Master in Cultures and Development  
Studies  
By **Koenraad VANCRAEYNEST**

Academic year 2006-2007



## ACKNOWLEDGEMENTS

I am very thankful to Prof. A. Cassiman, because of the possibilities she offered and the time she spent to support me when I came back from my research activities in Peru. Special thanks go to Ellen Desmet, who took a lot of time to read this thesis intensively in order to give me feedback. Her remarks were interesting and the extra information very useful! I wish her a lot of success in her further research activities in the Putumayo region.

I would like to thank my CADES colleagues, for a great year with interesting chats, nice group work and great parties. Although everyone seems to be spread around the world, I hope we can reunion once in the near future.

Bedankt aan iedereen van VZW Putumayo, voor de vele schitterende momenten hier in België maar ook aan de Putumayo rivier en in Iquitos. Ik hoop dat we er nog lang kunnen mee doorgaan, en dat deze thesis daarvoor een kleine duw in de rug mag zijn.

Solo unas palabras -que significan mucho para mí- para agradecer a toda la gente del río Putumayo. He pasado un tiempo muy bonito; muchas gracias para la hospitalidad y la amistad! Espero que todo les vaya bien en el futuro, y que el proyecto MOK+A+ siga avanzando para que puedan mejorar sus condiciones de vida. Muchas gracias doña Elisabet y don Arcenio, doña Yolanda y don Félix, doña Sara y don Froilan y don Moisés para recibirnos como sus propios hijos en su casa. También mis compañeras de campo, Katrien y Carla, muchas gracias para los momentos muy bonitos por el Putumayo.

También una palabra especial para Leyla Ferreyra Ramos (Putumayo Perú), que está haciendo un trabajo muy importante para nosotros. Espero que podamos seguir contando en sus capacidades en el futuro!

Ook het thuisfront wil ik niet in het minst bedanken voor de steun en compagnie tijdens de periodes van onoverbrugbare afstanden. Ik beloof plechtig dat ik met deze thesis een punt zet achter mijn studentenleven, het is heel mooi geweest, bedankt!

## CONTENTS

|   |    |
|---|----|
| <b>ACKNOWLEDGEMENTS</b> .....   | I  |
| <b>CONTENTS</b> .....   | II |
| <b>LIST OF FIGURES</b> .....  | IV |
| <b>LIST OF TABLES</b> .....   | V  |
| <b>PART I: INTRODUCTION</b> .....   | 1  |
| Chapter I  General introduction and objective.....  | 1  |
| I.1    Overall framework of study.....  | 1  |
| I.2    Objective and research questions.....  | 2  |
| I.2.1  Objective.....   | 2  |
| I.2.2  Research questions .....   | 2  |
| I.3    Structure.....   | 3  |
| <b>PART II: BACKGROUND</b> .....  | 4  |
| Chapter II  Geographical, historical and ecological setting.....                                      | 4  |
| II.1    Geographical setting.....   | 4  |
| II.2    Historical setting.....   | 6  |
| II.2.1  Colonisation .....  | 6  |
| II.2.2  Neo-colonialism .....   | 6  |
| II.2.3  The current situation.....  | 8  |
| II.3    Ecological setting .....  | 11 |
| II.3.1  The natural environment .....   | 11 |
| II.3.2  The subsistence family and the production system .....  | 12 |
| II.3.3  The subsistence livelihood .....  | 15 |
| II.3.4  Subsistence versus cash cropping.....   | 17 |
| II.3.5  The local market.....   | 19 |
| II.3.6  The community structure .....   | 20 |
| II.3.7  Communal activity: the <i>minga</i> system .....  | 23 |
| II.3.8  Population and provisions .....   | 24 |
| II.3.9  Family organisation.....  | 26 |
| II.4    Conclusion.....   | 27 |
| Chapter III  Indigenous peoples.....  | 28 |
| III.1   Defining “indigenous”.....  | 28 |
| III.2 <i>Indigenismo</i> and <i>mestizaje</i> .....   | 29 |
| III.3   Indigenous peoples in the Putumayo region.....  | 30 |
| III.4   Conclusion.....   | 31 |
| Chapter IV  The project ‘rice as an alternative for coca’ .....                                       | 32 |
| IV.1   Introduction .....   | 32 |
| IV.2   Why <i>should</i> the cultivation of rice be an alternative for the cultivation of coca? ..... | 33 |
| IV.3   Why <i>can</i> the cultivation of rice be an alternative for the cultivation of coca? .....    | 34 |
| IV.4   Project history.....   | 35 |
| IV.5   Management and recent evolution of the communal enterprise MOK+A+ .....                        | 36 |
| <b>PART III: METHODOLOGY</b> .....  | 39 |
| Chapter V  On field research and data collection .....  | 39 |
| V.1    General levels of study .....  | 39 |
| V.2    Participatory observation.....   | 40 |
| V.3    Collection of data.....  | 41 |
| V.4    Time scheme.....   | 41 |
| V.5    Conclusion.....  | 42 |
| <b>PART IV: ECOLOGICAL ANALYSIS</b> .....   | 44 |
| Chapter VI  Actors of change and ecological analysis.....   | 44 |
| VI.1   Actors of change.....  | 44 |

|  |  |           |
|--|--|-----------|
| VI.1.1   | The production system .....                                | 44        |
| VI.1.2   | The market and the communal enterprise environment .....   | 46        |
| VI.1.3   | Intercultural contact.....                                 | 46        |
| VI.2   | Ecological analysis .....                                  | 46        |
| VI.2.1   | The production system .....                                | 47        |
| VI.2.2   | The legal market and communal enterprise environment ..... | 50        |
| VI.2.3   | Intercultural contact.....                                 | 53        |
| VI.2.4   | Conclusion.....  | 55        |
| <b>PART V: NEW INCENTIVES AND GENERAL CONCLUSION .....</b> |  | <b>56</b> |
| Chapter VII  | New incentives .....                                       | 56        |
| VII.1  | Integrated cooperative production environment .....        | 56        |
| VII.2  | Innovations .....  | 57        |
| Chapter VIII   | General conclusion.....                                    | 60        |
| <b>REFERENCES .....</b>                                    |  | <b>62</b> |
| <b>PICTURES.....</b>                                       |  | <b>65</b> |
| <b>ANNEXES.....</b>  |  | <b>67</b> |

## LIST OF FIGURES

|   |    |
|---|----|
| Figure 1: The location of Peru in Latin America, its hydro-geographical situation and the location of the study area (square). .....  | 4  |
| Figure 2: Study area with the relative location of all visited communities. The location of the communal enterprise, local market and radio provisions (3) are indicated with a symbol.....   | 5  |
| Figure 3: The occupation, components and processes of different spaces in the Amazon production system (Adapted from Alonso Vélez, 1998). .....   | 13 |
| Figure 4: Regeneration of the <i>chacra</i> -after a period of cultivation- to restored secondary forest (Adapted from Alonso Vélez, 1998).....   | 14 |
| Figure 5: Terminology to indicate the position of land relative to the river. The difference in fertility, occurrence of plagues, erosion/sedimentation and production cost between regularly, rarely or never inundating land is crucial for land use (Adapted from Alonso Vélez, 1998). .....   | 15 |
| Figure 6: The subsistence circle (Adapted from Poats et al., 1988). .....   | 16 |
| Figure 7: Evolution of the community structure due to various intercultural influences and processes (Chaumeil, 1986). The communal house was the central unit of the community (1). With the arrival of the missionaries, colonial constructions (square houses) were introduced, but the traditional communal house remained the basic unit (2). Colonial construction became later the norm (3), and also football pitches were introduced when mestizo teachers settled in the communities (4). ..... | 21 |
| Figure 8: Alliances between the members of the communities of San Francisco de Ere, Puerto Alegre and Puerto Limón. Women are symbolised by ● while men are symbolised by ▲. Only adults are taken up in the figure. The persons represented in grey are not living in the community or died. ....  | 27 |
| Figure 9: Schematic representation of the different levels of study in the insider/originally involved communities and the outsider/(in)directly involved communities.....  | 40 |
| Figure 10: Schematic summary of the research path, including the three levels of study, the distinction between intensive research and exploring research and chronological indications.....  | 42 |
| Figure 11: Labour intensity and peak moments during various stages of the cultivation period of rice. A rudimentary comparison is made with the cultivation of a subsistence crop.....  | 45 |
| Figure 12: The communication and transport network in the location of study. Communication facilities are present on strategic points, although a strong need is present to establish a satellite radio in the communal enterprise too. ....  | 51 |
| Figure 13: The practical communication and transport network in case satellite radio would be present in the communal enterprise.....   | 59 |

## LIST OF TABLES

|   |    |
|---|----|
| Table 1: Periodisation, chronology and socio-historical characteristics of the Amazon basin history (adapted from Ayarza Uyaco, 2004).....  | 7  |
| Table 2: Indication of seasonality and river water level as indicated by the people from the communities of the Putumayo river.....   | 12 |
| Table 3: Overview of recent introduced livelihood products (left column) and instruments (right column) (Adapted from Chaumeil, 1986).....  | 20 |
| Table 4: Population data of the visited Peruvian communities (unpublished source, 2006 & INADE, 1995).....  | 25 |
| Table 5: Basic provisions of the visited Peruvian communities (FONCODES, 2005).....   | 25 |
| Table 6: Chronological overview of the farmers from different communities which have visited the communal enterprise to make use of the peeling services. The quantity of peeled rice they produced is indicated in the right column..... | 37 |
| Table 7: Crop diversity in rice fields, observed in Puerto Limón. ....  | 49 |



## **PART I: INTRODUCTION**

### **Chapter I General introduction and objective**

#### **I.1 Overall framework of study**

Development cooperation is today the concept by which people try -being it through politics or in a nongovernmental way- to equalise the opportunities of development across borders. The UN Millennium Development Goals (MDGs) are a milestone in this sector of global society and pretend to provide us a clear focus on how the global situation and problems should be under control by the year 2015. Many critics argue that these goals -which are formulated from a western point of view- are too much concentrated on problems in the South, without recognising that at least part of the solution should be found in the North. Moreover, in this generalised focussing on the South, the MDGs neglect the factor of locality and particularity of development.

More drastically, one can state that we are unable to understand local processes of development in the South because of cultural differences. In this case, development cooperation is seen as an improper intervention in the cultural flow of development, and always falling back in a form of paternalism through which an intercultural exchange or cooperation is made impossible.

The truth lies probably in between. We should recognise that the MDGs are lacking some very important nuances. At the same time, we can not neglect the fact that intercultural processes are a reality in this intensively explored and interconnected world. In other words, we have to acknowledge on the one hand that development cooperation is a delicate undertaking because of the fact that it incorporates change; but on the other hand, one has to admit that change based on intercultural contacts are a reality in every society.

In theory, the sustainable development process is described as a search for equilibrium between three pillars: society, economy and environment (Swinnen, 2004, p. 21). As such, it is clear that each analysis of a development project should focus on these three dimensions of development. This report is not an exception on this rule; however, this particular analysis recognises the fact that the connection between the dimensions of development can not be ignored and should be the basic assumption of both the analysing process and the conclusion towards the incentives for adjusting the development process. Therefore, the title of this report mentions an *ecological* analysis, because in the local logic of the research area, social, economic and environmental aspects are related in such a way that considering them apart would lead to a contradictory approach.

The research took place from July to September 2006, from which 45 days were spent in the indigenous communities along the Putumayo river. Beside intensive visits of the communities that are directly involved in the project, other non-involved communities were visited shortly during the stay.

The remaining time was used for information exchange with the relevant institutions along the Putumayo river as well as in the city of Iquitos.

## **I.2 Objective and research questions**

### **I.2.1 Objective**

The main objective of this study is mapping the ecological situation of a small scale agricultural development project in the indigenous communities of the Peruvian-Colombian Putumayo region (Amazon basin).

As a starting point, this report wants to enhance the understanding of the complex interaction between the different actors of the society in this particular region. Therefore, some parts of this report will have a descriptive and holistic character in order to give the reader insight in the dynamics of the indigenous communities along the Putumayo river. This descriptive part is used as a reference for the later analysis, which is far more detailed and only focussing on the local situation: first the influence of the agricultural project on the local production system will be investigated, secondly, the functioning of the communal enterprise in the particular environment and the access to the and ultimately the intercultural contact between a western and an indigenous organisation, aimed at an improvement of the living conditions of the indigenous communities. The operational research questions are logically a translation of these objectives of study.

Finally, this analysis should be appropriate for the formulation of new and proper incentives for a further development of this small scale project.

### **I.2.2 Research questions**

#### **Primary research question**

The primary question which was always behind every research activity for this analysis is:

What are the ecological consequences of change induced by the project 'rice as an alternative for coca' in the indigenous communities of the Peruvian-Colombian Putumayo region?

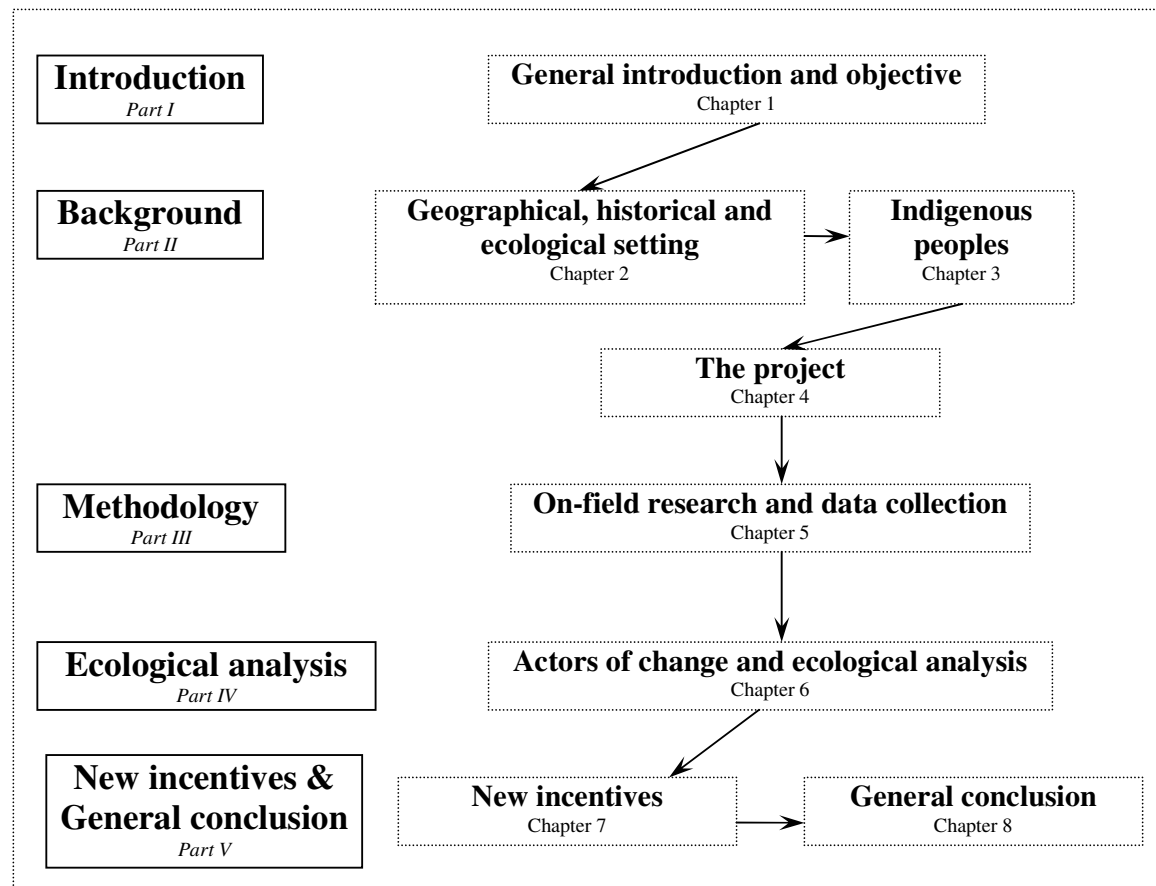
#### **Operational research questions**

- (1) How does the production of rice as a cash crop influences the **production system**?
- (2) To what extent is the population of the different communities able to participate in the **enterprise environment** and **market** structure?
- (3) In which way are the population of the different communities and the foreign organisation receiving the elements of **intercultural exchange** in relation with the project?

These questions –because they should provide relevant and constructive answers- are answered from within the cultural dynamics of the indigenous communities themselves. Finally, this impact analysis should lead to the formulation of new incentives towards a further sustainable development of the project.

### I.3 Structure

The first part of this research paper focuses on the overall framework, relevance and objectives of this study. The second part provides the steppingstones of the particular framework of this study: an overview of the geographical, historical and ecological setting (Chapter II), the way in which the concept of ‘indigenous peoples’ is approached (Chapter III) as well as basic information about the project itself (Chapter IV). As such, the second part has a rather descriptive and certainly wide approach, aimed at offering some basic and necessary elements that the reader should be familiar with to understand the following parts. Part III sheds light on the methodology of working to come to the ecological analysis which is discussed in part IV. The ecological analysis focuses on the production system, the enterprise environment and intercultural contact, analogous to the objective and operational research questions. With the results of this analysis, new incentives will be formulated in part V. This last part can be seen as a synthesis of the information that has been brought together in the previous parts.

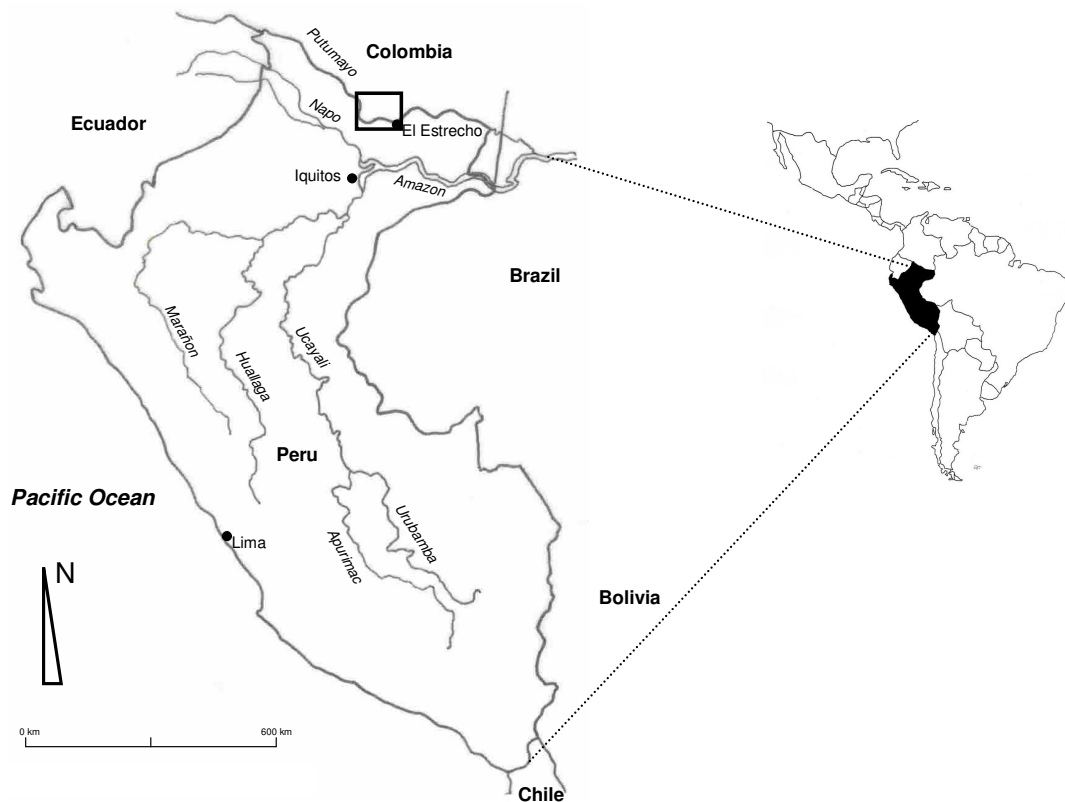


## PART II: BACKGROUND

### Chapter II Geographical, historical and ecological setting

#### II.1 Geographical setting

The Peruvian borders enclose the three ecological and climate zones -desert coast, Andean highlands and tropical rainforest- which characterize the South American continent. Peru borders on Ecuador in the north, Colombia in the north-east, Brazil in the east, Bolivia in the south-east and Chile in the south. The tropical rainforest forms 62% of the Peruvian territory and contains the border region of Ecuador (partly), Colombia, Brazil and Bolivia (partly). Important rivers rise in the Peruvian highlands of the Andes to flow out in the Amazon river and form the Amazon basin, the network of rivers constructing the South American tropical rainforest.



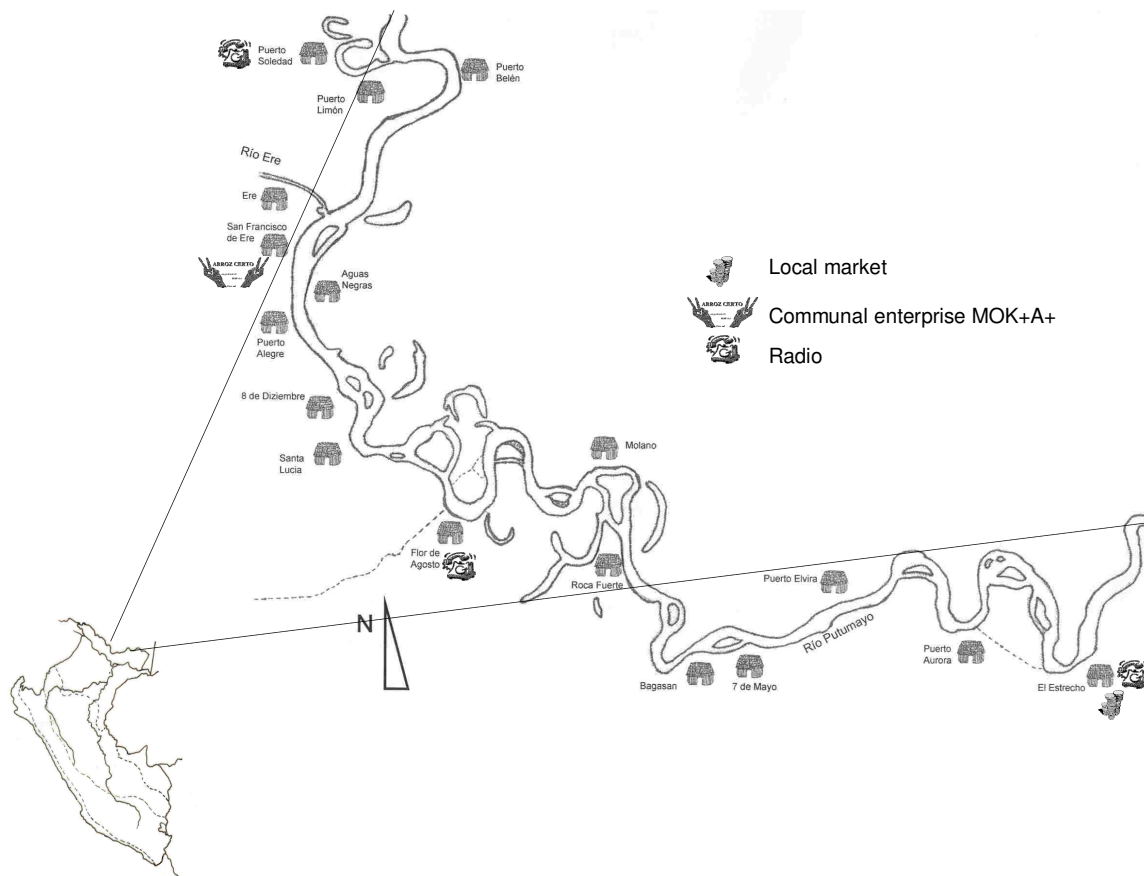
**Figure 1: The location of Peru in Latin America, its hydro-geographical situation and the location of the study area (square).**

The Putumayo river, with a total length of 1560 km, finds its origin in Colombia, crosses the point of the three borders (Ecuador, Peru and Colombia)<sup>1</sup> to subsequently form the border of Peru and

<sup>1</sup> Village of Tres fronteras

Colombia for 1380 km. Downstream, the Putumayo flows into the Colombian territory to enter Brazil afterwards, where the river is called Iça and finally flows out in the Amazon river. The Peruvian district of the Putumayo (with its 39702 km<sup>2</sup> slightly bigger than Belgium) was recently subdivided into the Putumayo district (5822 inhabitants, capital El Estrecho) and the Teniente Manuel Clavero district (2787 inhabitants, capital Soplín Vargas)<sup>2</sup>. Both districts are situated in the Maynas province, department of Loreto (with Iquitos as the capital city).

The particular study area is situated in the 15 communities -on the Peruvian as well as on the Colombian river bank- upstream of El Estrecho, where the local market is settled (see Picture 1). In the following figure, the location of the various communities (including the community Aguas Negras, which was not included in the investigation) is indicated (Figure 2). Also, the local market, communication provisions (satellite radio) and the communal enterprise are indicated.



**Figure 2: Study area with the relative location of all visited communities. The location of the communal enterprise, local market and radio provisions (3) are indicated with a symbol.**

<sup>2</sup> Foncodes (Fondo de Compensación para el Desarrollo Social), 2005

## II.2 Historical setting

### II.2.1 Colonisation

From the colonial project in Latin America, it is said that it was executed with in one hand the sword and in the other the Christian cross (De Walsche, 2006, p.2). One of the earliest expeditions was guided by Hernan Cortes; in clear words he explains what he was looking for: “*Me and my companions suffer from a hart disease that can only be cured with gold.*” The search for gold was a destructive process, whereby the indigenous communities were kept in the colonising control with the sword. The Franciscan Bernardino de Sahagun (1500-1590) stated (Agüero, 1992 in Vancraeynest, 2006, p.10): “*We did not only want the Indians to be Christians, but also Spanish. We destroyed their culture.*” In the contact with the European and mestizo society, the indigenous culture suffered from significant destruction of traditional values and socio-political organisation. The Amazon region in particular appeared to be in the eyes of the Europeans (the Spanish appropriated the control, but also Portugal, the Netherlands, England and France did more than just showing their interest in the region) the real El Dorado; the mythical empire full of precious metals was thought to be hidden in the Amazon basin, and the expeditions were organised with the unique objective to discover this empire (Ross, 1978, p.193). Remarkable is that missionaries (Jesuits, Capuchins, Franciscans and Dominicans) often went ahead in the confrontation with the indigenous tribes of the Amazon.

When the European demand for *guano*<sup>3</sup> from the Latin American coast region decreased, economical interest shifted towards the Amazon basin. The Christianised, indigenous people were used to collect products with commercial value for further exportation to Europe. The forest obtained the reputation of a department store, serving for European consumption. The consumption pattern of Europe obliged the indigenous people to change their cultural customs (Agüero, 1992, in Vancraeynest, 2006, p.11). The settlement pattern from the indigenous tribes did not concur with the idea of private property or concentration of labour, which are, however, basic needs for export-directed production. The *hacienda*-structure (Brazil: *fazenda*) and the establishment of *fundos* (big land property) drove the indigenous people into slavery.

### II.2.2 Neo-colonialism

Neo-colonialism was new in the sense that the colonising power had to deal with independent states; for most Latin American countries, the struggle for independence was history around the year 1820.

**Rubber (1880-1914**, Table 1) became a high commercial product when Charles Goodyear discovered the chemical process of vulcanisation (1839). Rubber originates from *Hevea brasiliensis*, a tree species native from the Amazon basin. The *muchachos* (companions) of non-indigenous origin, working for the ‘rubber baron’, were the first migrants settling *en masse* in the Amazon region. The

---

<sup>3</sup> *Guano* is bird excrement that can be harvested in large quantities on the small island rocks on the South American coast. These excrements are a source of nitrogen, and as such used as a resource to produce fertilizers.

missionary Espinoza (1960, in Vancraeynest, 2006, p. 11) described the situation this way: “*Yet what gave the region its dominant feature was the white businessmen’s establishment dedicated to agricultural tasks in forest plots cleared by the fundos, haciendas or entirely devoted to the extraction of the rubber. Most of the indigenous people were congregated round them. Each one was called ‘patron’ and had a group of Indian families under his command, already converted and committed to them by debts contracted; and some were in contact with savage or semi-savage tribes who, fascinated by the clothes, the cultivating tools, the hunting and fishing gear and some trifles to their taste like glass beads or small mirrors, visited their estates.*” Also Tomlinson (in Ross, 1978, p.213) wrote: “*Brazilians can see nothing but rubber... Pará is mainly rubber, and Manaus. The Amazon is rubber. The whole system of communication... would collapse but for the rubber. The passengers on the river boats are rubber men, and the cargoes are rubber. All the talk is rubber. There are no manufactures, no agriculture, no fisheries, and no sawmills.*” The establishment and initial growth of the city of Iquitos is thanks to the rubber exploitation; from the Putumayo region, it is known that rubber extraction took place with a never seen brutality (Collier, 1968, in Bergman, 1990, p. 67). When the rubber boom faded out in the initial 20<sup>th</sup> century because of the tough concurrence with the Malaysian plantations, little or nothing remained of the richness that the rubber commerce had created. Yet, the socio-economical structure in the Amazon region had undergone drastic change.

| Period                          | Chronology | Socio-historical characteristics  |
|---------------------------------|------------|---|
| Rubber                          | 1880-1914  | <ul style="list-style-type: none"> <li>■ Industrial capitalism</li> <li>■ Migration currents towards the Amazon basin</li> <li>■ Drastic change of the indigenous society</li> </ul>  |
| Economic depression             | 1914-1943  | <ul style="list-style-type: none"> <li>■ End of rubber exploitation, socio-economic crisis</li> <li>■ Border conflicts, establishment of armed forces</li> <li>■ Presence of foreign enterprises, looking for industrial resources</li> </ul>   |
| Integration in national economy | 1943-1970  | <ul style="list-style-type: none"> <li>■ Extension of transport facilities (in the air and on the ground)</li> <li>■ Different types of merchants direct the economic situation</li> <li>■ Growing population in cities like Iquitos</li> </ul> |
| Petroleum and coca              | 1970-now   | <ul style="list-style-type: none"> <li>■ Petroleum exploitation changes local agriculture, flora and fauna</li> <li>■ Establishment of a clandestine market, driven by illegal armed forces and provoking violence and insecurity</li> </ul>    |

**Table 1: Periodisation, chronology and socio-historical characteristics of the Amazon basin history (adapted from Ayarza Uyaco, 2004, p.4).**

During a period of **economic depression (1914-1943**, Table 1), border conflicts induced the necessity to establish armed forces in the Amazon region. Though foreign (predominantly North-American) enterprises were looking for new industrial resources in the region, the focus of economic activity was commercial agriculture. *Fundos* were dismantled, indigenous people dispersed again and settled with a new *patron* (business chief). These *patrones* had a feudal relation with the indigenous population.

Also less commercially directed *patrones* existed for whom activities had more a subsistence than a market directed character, though a paternalistic atmosphere was certainly present. The economic value of the Amazon region was suddenly seen in a **national rather than an international context (1943-1970, Table 1)**. In Peru, for example, the Amazon basin was thought to be free, fertile and unoccupied territory, an open door towards development. More and more migrants tried to set up their own commercial activities and beside the *patron*, a new type of mercantilist originated. The *chinganero* and *rematista* built up a local market where subsistence products from the indigenous farmers were sold beside basic products as soap, sugar and petroleum (Ayarza Uyaco, 2004, p.4). Their relation with the indigenous people was based on commercial goals and dominance. The missionary Alvarez (1913, in Vancraeynest, 2006, p. 12) described the situation as follows: “*Patrons get credit facilities from merchants and they in turn pass them on to the forest Indians, but by the time the cloths reach Indian hands they cost at least a hundred percent more. Moreover, a discount of 90% and even up to 95% made on the poor workman’s labour must be taken into account too; the result is that patrons with a rather slack conscience end up with profit 1000% by the time they add up their bills and even so nothing stops them from still being the poor Indian’s creditors.*”

Also the Peruvian government saw importance in strengthening social control over the Indigenous Amazon people. Certainly in the military and juridical aspect, the state was present in a dominant and authoritarian way in conflicts between mestizos or white people and the indigenous people. The treatment differed according to the development of the subjected man. People were categorised as ‘*civilizado*’, ‘*semi-civilizado*’ or ‘*selvaje*’. Also the construction of new indigenous settlements was controlled by the state. E.g. the Cocama tribe had permission to settle near the city of Nauta on condition that towns were built, with houses, a public place and roads; the houses had to be ‘strong and formal’, and it was prohibited to sleep on the floor or in the forest (Agüero, 1992, in Vancraeynest, 2006, p.12). The following document was signed: “*We hereby rightfully oblige ourselves, without being requested, obliged or threatened by no one, with our perons, through our own free will and goods we may have had or will have; renouncing to all the laws there are or could be in our favour; submitting to the authorities of the Republic, in particular to those in this capital city, and to our domicile should it happen we do not comply with what we have obliged ourselves and agree to, contract to contract, we be compelled with all the rigour of justice to its compliance and to this effect and for your evidence, not knowing how to write we beg the citizens Don Felix Chávez, Don José María Castro and Don Eduardo Meléndez, to sign in our name...* (Larrabure & Correa, 1905 in Vancraeynest, 2006, p.12).

### **II.2.3 The current situation**

In the early seventies, the Amazon region gained international importance with the invasion of foreign enterprises in search for the black gold: **petroleum (1970-now, Table 1)**. In 1973, 18 contracts were signed in Peru only, for the exploration and exploitation of petroleum (Agüero, 1992, in Vancraeynest,

2006, p.13). In the first place North-American, European and Japanese firms were involved. The input from foreign capital is necessary for the Amazon countries to start this industry. This has not only financial consequences; the involvement of the investing countries is aimed at generating gains that have to compensate largely the investment. The idea of maximisation of the gains is also extremely harmful for the local social and economic situation. The market context is again, like it was during the rubber boom, a global one, and the Amazon region is again a product on the world market. This new invasion has primarily influence on the territories of the indigenous people; the subtle change in the Peruvian Constitution in 1993 erased the paragraph concerning the impossibility of alienation or prescription of the land property of the (peasant and) native communities. Land that is considered by the state as being abandoned can be bought from the state (Desmet, 2004, p.10). Exploitation infrastructure has been placed in the action radius of native communities, with visible consequences as decreasing territorial surface but also less visible consequences as there are soil and water contamination<sup>4</sup>. The influence was also destructive on the social level; agriculture, the family and the traditional way of living were placed aside by the indigenous heads of the family for a wage in the petroleum industry. The prospect of consumption in a money-based society attracted the indigenous people. The low wages and insecurity of work pushed the populations from the communities to the poor suburbs of fast growing cities as Iquitos and Manaus (Agüero, 1992, in Vancraeynest, 2006, p. 13).

Also the Putumayo region was recently confronted with the *petroleros*. In March 2006, the Peruvian state signed a contract with the Brazilian firm Petrobras for the exploration and exploitation of a region that includes the territory of the Secoya and Kichua people (by boat, one day upstream from the area of study). These peoples were not consulted in this process, which is a violation of convention 169 from the International Labour Organisation. Moreover, this area partly coincides with the nature reserve of Guëppi, which provides evidence of the internal contradictions in the politics of the Peruvian state. At this moment, Secoya and Kichua organisations are opposing the start of exploration and exploitation activities on their territory (Desmet, 2006).

Isolation is probably the factor that makes the Amazon basin a favourable region for the **illegal coca cultivation (1970-now)**. It is certainly true that the coca leaf has a cultural value for indigenous people such as the highland Quecha and Aymara, various Amazon people but also for *mestizos*. However, a majority of the coca leaf production is destined for cocaine (Rospigliosi, 2005, p. 104).

The Peruvian government has taken initiatives to combat the *narcotráfico* (illegal drug traffic) in the region between Tarapoto and Pucallpa, together with the arrest of various leaders of guerrilla

---

<sup>4</sup> Leonardo, a Kichua leader: “*Despite the fact that the Amazonía is looked to as the solution, the salvation, for the nation’s problems, we indios and campesinos have never been the beneficiaries of petroleum. Twenty-five years of oil development have left only misery and a slow death. El hombre thinks he can dominate, possess, la Amazonía. But we don’t dominate or possess it. In the long struggle against the privatization of land, indios would say: ‘You know, they say that land is our pachamama. Well damn it! You don’t sell your mother!’ Now with oil, there’s a new twist: ‘you know, they say that land is our pachamama.’ Well damn it! You don’t screw your mother!’*” (Sawyer, 2002)

groupings from which '*el sendero luminoso*' (the lightening path) is the best known. The results of these operations are partly successful, though many comments can be made on the way these operations were performed.

However, in the Putumayo region, the production of coca leafs and the involved clandestine organisations (predominantly FARC<sup>5</sup>) should be seen in an international context; after all, this is a border region and the organisation of the Colombian involved groups are nowadays far better structured than the Peruvian ones. Consequently, though difficult to assess, the majority of the Peruvian production of coca leafs in the Putumayo region is destined for export to Colombia.

From 1977, the *narcotráfico* phenomena became a reality in the Putumayo region. The agricultural activity and population knew a significant increase; between 1996 and 1999, the cultivated surface of coca increased from 17 000 to 68 702 hectares (Rivera Flórez, 2003, p. 18). Though objective data were not found, the coca cultivation tendency seems to decrease at least in some areas along the Putumayo river most probably because of the repressing attitude from the Peruvian and Colombian government.

The processing path of coca constitutes of five steps: (1) cultivation, (2) production of *pasta básico*<sup>6</sup>, (3) cocaine processing, (4) exportation and (5) distribution on the market. Step (1) and (2), and eventually also step (3), take place in the Putumayo region. Two types of *cocaleros* (coca farmers) are involved; first the big producers which have between 40 and 100 hectares and second the farmers with subsistence cultures as *yuca* and banana, which additionally have a few hectares of coca. In the second case, the processing steps do not require extra labour forces, while in the first case people are contracted on a daily basis in the first place for harvesting (*raspar coca*) and eventually also for processing activities. Until today, the large-scale *cocalero* is called the *patron*, being the employer of the '*raspachines*'; as such, the historical figure of the *patron* is still existent (cf. Amazon rubber exploitation). The economical importance of coca cultivation surpasses employment only. The small villages are visibly beneficiaries of this internationally growing sector, and even in the communities, elements such as generators, outboard motors and electric devices provide evidence of a booming industry.

On the contrary, this booming industry also brought pauperization of the coca cultivator in this region. After all, these farmers are subjected to the recession events of the illegal armed forces in the region in the guise of the FARC and the anti-*narcotráfico* politics such as the airborne destruction of coca fields (sprinkling with herbicides) and juridical action. Research (Rementeria, 2001 in Rivera Flórez, 2003, p. 20) indicated that farmers participated in 0.5% of the final value of the product in 1980, and that this contribution diminished to 0.09% in 1990; this tendency is probably caused by an increased risk factor in the market sector and distribution of cocaine.

---

<sup>5</sup> Fuerzas Armadas Revolucionarias de Colombia.

<sup>6</sup> For the processing of *pasta básico*, only coca leafs, cement, ammoniac, sulphur acid and gasoline are required.

It is correct that the Putumayo region since its recent history (the eighties) carries the reputation of being an extremely violent area, due to the illegal cocaine production and the presence of the armed guerrilla FARC (Revelo & Sanchez, 2001 in Rivera Flórez, 2003). Violence resulted to be the cause of death in 51% of the cases in 1996, in the Putumayo region. Between 1991 and 1998, 3201 cases of murder occurred along the Putumayo. These values result to be far above the mean in Colombia (Rivera Flórez, 2003, p.23).

The area of study is actually relatively calm, most probably because of the presence of army posts in El Estrecho, Flor de Agosto and El Encanto (Colombian border, upstream from Puerto Limón). Downstream of El Estrecho (Puerto Arica), the Colombian ministry of internal affairs has information about the existence of 32 laboratories to process cocaine. The FARC has been localized there too. A little upstream of Puerto Limón, 15 laboratories are localized.

### **II.3 Ecological setting**

The Amazon basin is known to be a biological hotspot, with an exceptionally high degree of biodiversity. The centre of origin of different important domesticated plants as cassava (*Manihot esculenta*) and rubber (*Hevea brasiliensis*) can be found in the tropical rainforest of the Amazon basin (Prance & Nesbitt, 2005, p.23). The biodiversity of the Amazon region is also known to be fragile, as generally the abundance of species goes hand in hand with a very limited number of individuals.

The following description of environmental interaction, social organisation, economy and historical context relies on literature about the Peruvian Amazon as well as on personal observation of the local situation in the Putumayo region.

#### **II.3.1 The natural environment**

In this region, rivers determine human activity in different ways. Along rivers, side rivers (*quebradas*) and lakes (*cochas, lagunas*), transport is possible in canoes. Moreover, rivers, side rivers and lakes are an important source of nutrition because of the presence of fish and other animals living in the proximity of water. Important is the fact that, because of the extremely high rate of flow, rivers have highly dynamic characteristics. First, the formation of beaches where the water has a low velocity and the erosion of land where water is touching the bank at a high velocity, result in the fact that rivers form meanders, cut of meanders forming lakes and as such are not a static entity in the landscape. Secondly, the water level is fluctuating daily, generally more in the small side rivers (which collect in a short time the high quantity of water after intensive precipitation) than in the larger main rivers. When the water level is low, fishing will be more successful because of a higher concentration of fish in a lower water volume. Hunting has more chance to be successful when the water level is high, because the surface of land has reduced in size, resulting in a higher concentration of animals per unit of land surface.

The river has also an influence in a horizontal dimension. The question if the pre-Colombian Amazon population lived in either the poorer ancient uplands or rather close to the more fertile river floodplains is still a point of discussion in historical circles. According to Ross (1978, p.198), the invasion of European colonists in the Amazon region in the beginning of the 17th century drove indigenous settlements upstream the Amazon or away from the river. Therefore, the difference between nomadic life in the ancient uplands versus settlements close to the river floodplains should be seen both in an ecological and a historical context. The living conditions can not be compared as the ecological situation in the ancient uplands differs severely with the river floodplains. The fragility of the biotic structure and the low density distribution of fauna, make the ancient uplands an environment to which adaptation required a high rate of mobility or an extremely low population density, unless there was access to the resources of the more productive river floodplains (Ross, 1978, p. 199). In a different way, riverside populations that cultivated the river floodplains were able to establish sedentary life; also, the population densities were significantly (up to 50 times) bigger than these from populations living in the ancient uplands. These days, most of the communities in the Amazon basin are located on or at least close to river banks. Also in the Putumayo region, farmers know the productive capacities of the river floodplains and the associated dryer uplands (*restinga baja* and *restinga alta*) (Figure 5). These lands are used for subsistence production as well as for crops that can be sold on the market. In the next paragraphs, a detailed description of the production system will be given.

Other dominating environmental characteristics are climate -which can be described as hot and humid with abundant precipitation- and the dense and high non deciduous forest vegetation. Because of the proximity of the equator, seasonality is determined by the quantity of precipitation (dry and rainy season) rather than differences in temperature, and which are locally called summer and winter (Table 2). Soils are rather poor, because of the fast breakdown of organic matter through intensive leaching and high temperatures. As such, fertility in the agricultural sense should be seen in the first place as located in the standing vegetation and small litter layer above the soil, and secondly in the periodical intrusion of Andean silt in the river floodplains during periods of high water level (Table 2). The standing vegetation has an extremely fast growing rate, thanks to temperature and availability of water with the necessary condition that surrounding vegetation is continuously providing litter for nutritional elements.

|                    | Ja     | Fe | Ma     | Ap | Ma | Jun | Jul    | Au | Se           | Oc | No     | De |
|--------------------|--------|----|--------|----|----|-----|--------|----|--------------|----|--------|----|
| <b>Season</b>      | Summer |    | Winter |    |    |     | Summer |    | Small winter |    | Summer |    |
| <b>Water level</b> | Low    |    | High   |    |    |     | Low    |    | High         |    | Low    |    |

**Table 2: Indication of seasonality and river water level as indicated by the people from the communities of the Putumayo river.**

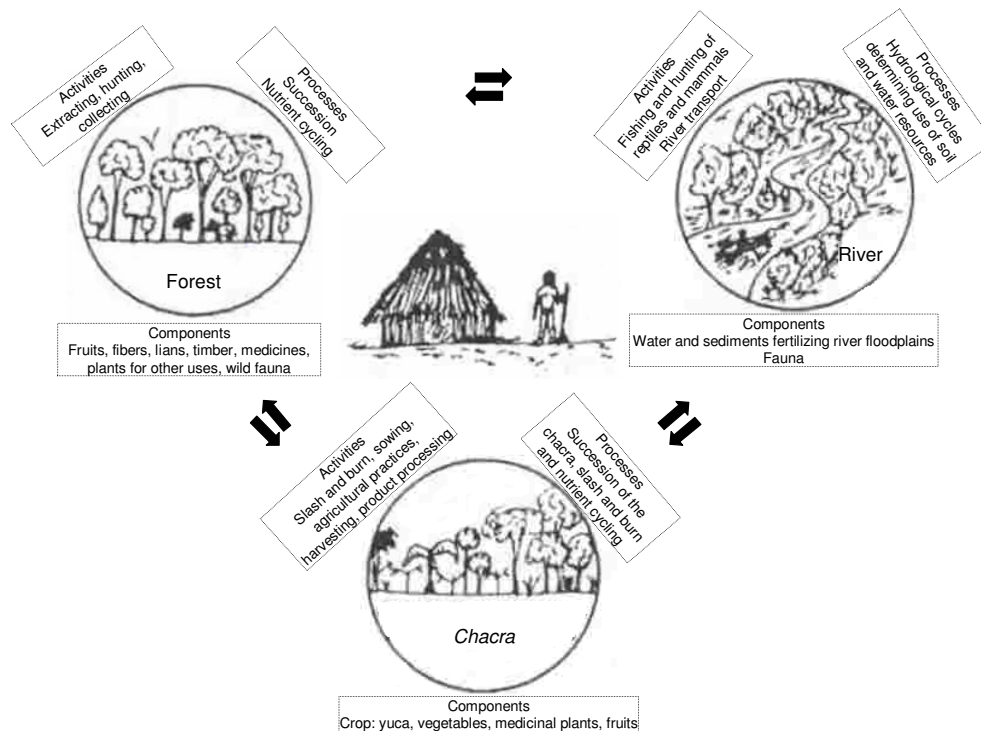
### II.3.2 The subsistence family and the production system

In the wet tropics, the absence of seasons and the nearly constant presence of leafs, roots, seeds and fruits during the year make it possible for man to complete his diet with collecting and consuming

forest products that he encounters on his way. In his diet, fruits take an important place as an energy source that provides energy directly after consumption (in contrast leaves need a significant digestion time before energy is released). Beside this, it is advantageous to look for a meat source too, as no single plant can provide the necessary amino acids that the human body requires. Also, a daily provision of fats and carbohydrates is essential for a good functioning.

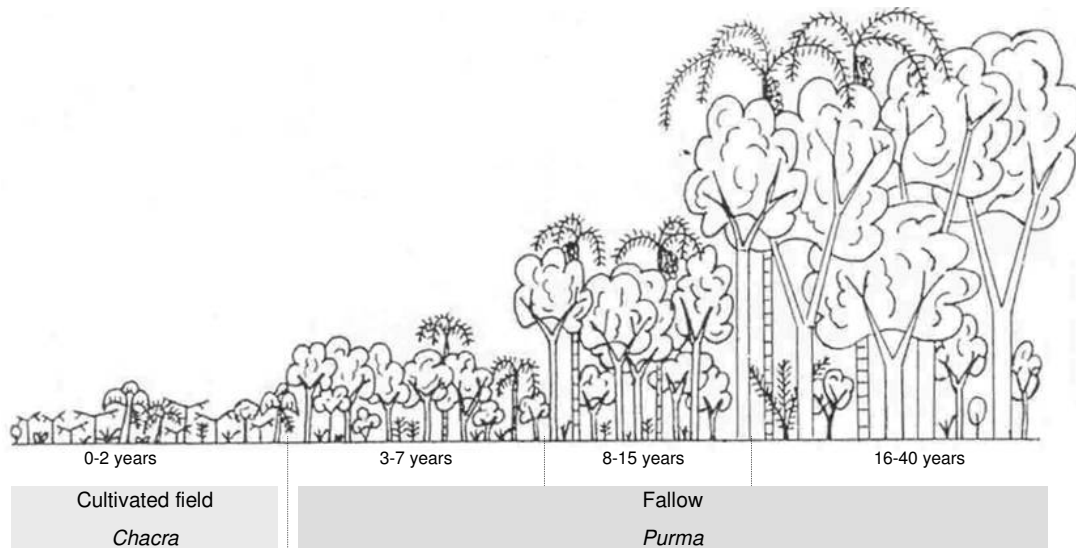
Because the closed forest canopy does not allow the penetration of light up to the soil, low vegetation is scarcely present. Hence anciently, disturbances (falling of a tree), where pioneer species with excessive fruit and/or seed production emerged, were attractive places for the hunter-gatherer. Probably, the first settlers may have constructed temporary shelters near these clearings, and through the presence of human waste and discarded plant debris, a semi-nomadic lifestyle originated with a natural interest in gaining insight in how plants propagate in these environments (Prance & Nesbitt, 2005, p.8). The actual production system still reflects these initial intentions of gathering, domestication and cultivation.

The spatial occupation of current community life in the actual Amazon region can be subdivided in activities in the cultivated field (*chacra*), ancient upland (*monte*) and along the rivers and lakes (Figure 3). These three spaces represent very different environmental constraints and provide diversified conditions to sustain human livelihood. The following figure gives a schematic overview of the different spaces, indicates which activities and processes take place and which components belong to it.



**Figure 3: The occupation, components and processes of different spaces in the Amazon production system (Adapted from Alonso Vález, 1998, p.150).**

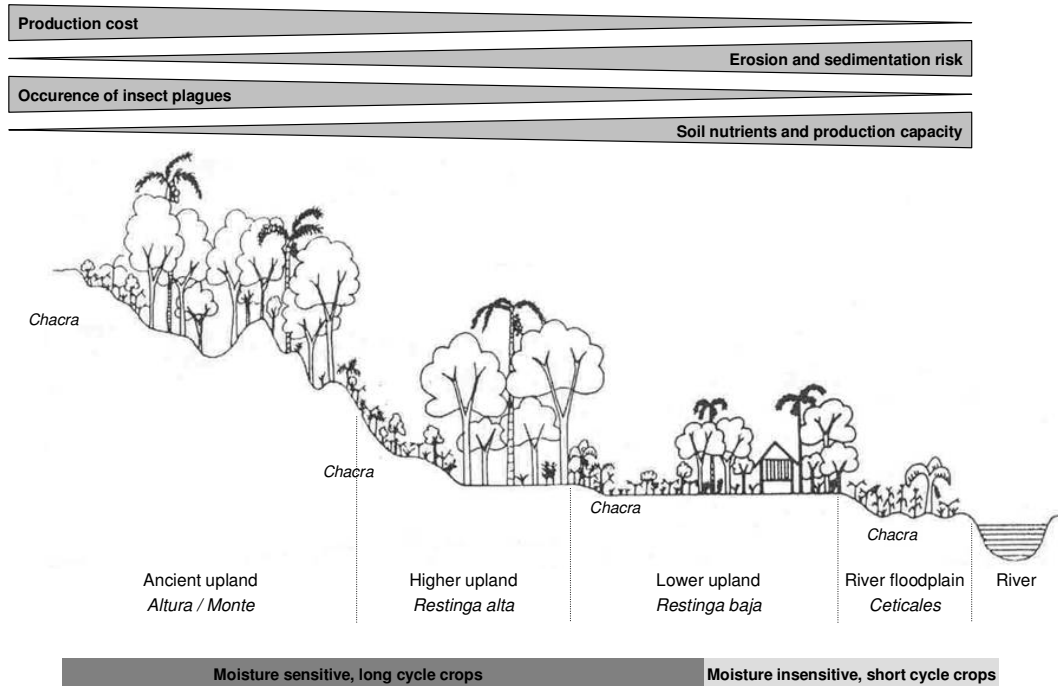
The naming of this **production system** ‘slash and burn’ or ‘shifting cultivation’ (also ‘swidden farming’) refers to the way to prepare the land or to the frequent abandonment and elsewhere reoccupation of land for cultivation respectively (Conklin, 1969 in Vancraeynest, 2006, p.6). As mentioned before, once the land has been cleared from its natural vegetation, soil fertility decreases fast. The slashed vegetation is often burned to obtain sterility (insects and weeds). Different crops will be planted in an apparently unordered way in the field. Depending on environmental factors and the cultivated crop(s), the land will have a sufficient production for 2 to 5 years. A fallow period of 15 to 40 years will follow to restore the forest vegetation and fertility (Swennen, 2005, p. 24) (Figure 4). These abandoned fields where secondary forest is restoring are locally called *purma*.



**Figure 4: Regeneration of the *chacra* -after a period of cultivation- to restored secondary forest (Adapted from Alonso Vélez, 1998, p.154).**

In case of the river floodplains, fertility is restored by the silt coming from the Andean highlands with inundation; a fallow period as such is not necessary or can be considerably shorter. However, these lands are often more humid and humidity-sensitive crops (e.g. *yuca* and banana) will possibly not produce; cultivation on these lands is also rather risky because the standing crop can be lost in case of inundation; hence *ceticales* are used for moisture insensitive and short cycle crops (Figure 5). The floodplains of the Putumayo river are definitely difficult for cultivation as water level is considerably less reliable than one would expect from a river of this size<sup>7</sup>.

<sup>7</sup> From the Putumayo river is said that it behaves like a *quebrada* (side river). *Quebradas* indeed (as they are the fine and numerous branching which receive all the water after a tropical rainstorm) can grow and shrink impressively in size in a very small time range.



**Figure 5: Terminology to indicate the position of land relative to the river. The difference in fertility, occurrence of plagues, erosion/sedimentation and production cost between regularly, rarely or never inundating land is crucial for land use (Adapted from Alonso Vález, 1998, p.157).**

The actual local production system, consequently, is adapted to these circumstances. The use of fertilizer is uncommon, as it will not result in higher production because the soil has not the capacity to maintain the nutritional elements in the reach of the crop's roots. Use of the plough is absent as it would fasten the decomposition of organic material and the process of leaching. Farmers will take advantage of the presence of decomposing vegetation for the provision of nutrients for their crops, burn the competing weeds and at the same time decrease the chance of appearance of plagues (Swennen, 2005, p.18).

### II.3.3 The subsistence livelihood

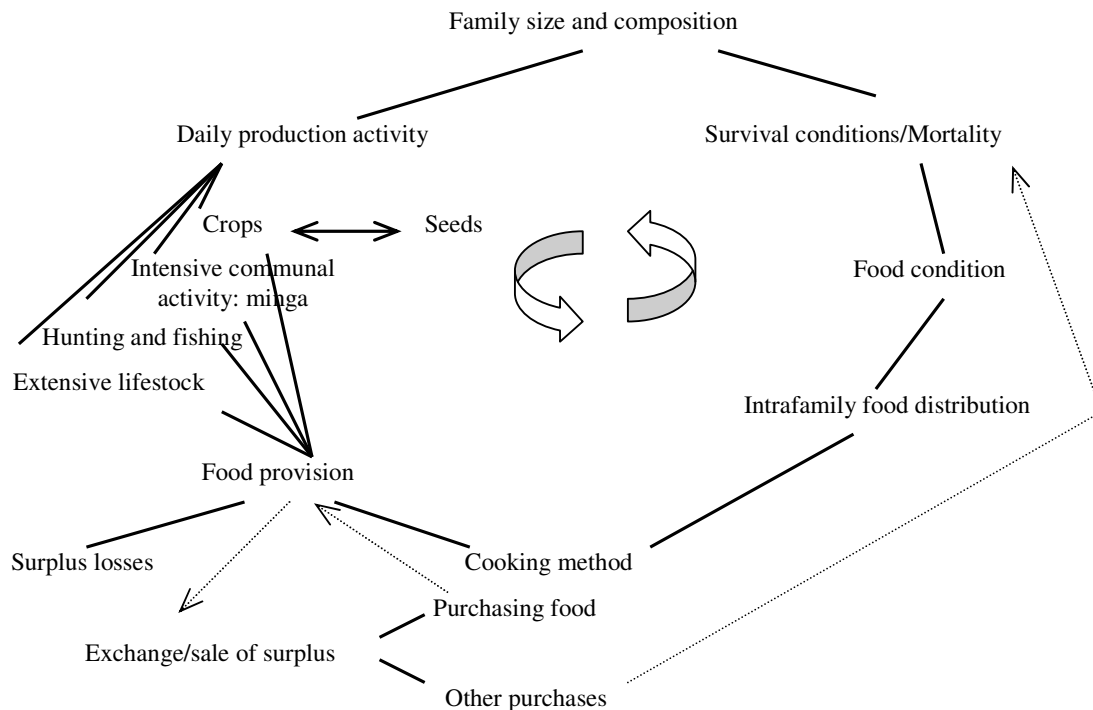
The majority of the indigenous farmers in the Amazon region are **subsistence producers**. In the economic system of indigenous peoples of the Amazon basin and of the Putumayo region in particular, the market has a marginal significance. The communal society is prepared to make food and basic provisions available out of their environment, though for a minority of products it makes use of the market.

Rather than perceiving the subsistence sphere and market sphere as one integrated and homogenous economic system, the economic situation should be seen as a multi-centric economy, whereby the subsistence sphere and the market economy exist separately and independently alongside each other (Dessein, 2006, p.79). After all, the type of transactions that occur during hunting-gathering and harvesting activities for daily consumption on one hand, and those that are common in a market sphere

on the other hand, are dissimilar predominantly because of the presence of money as leading exchange object in the market. Although the difference of these production logics does not mean that these two can not exist together in a society, it is realistic not to consider them as existing together in one integrated economic concept.

In a subsistence economy, the production is directly aimed at consumption and the market has no (or a marginal) role in (providing goods for) consumption. Living in a subsistence household is characterized by a daily recurrence of actions. After all, the livelihood requirements should be attained every day via the own production and not via the market. Hence, the subsistence production system differs in some aspects from those that are market dominated. The ecological environment is a fundamental issue to take into account when one strives for production that responds the reciprocal demand for livelihood products. Moreover, a minimal diversity in production is required to provide in the daily human nutritional needs. Also, the socio-cultural system should be built up so that it sustains the subsistence activities.

From the foregoing, one can understand that the activity in subsistence communities fit in a circular course with a frequency that is a result of different environmental and social events. The following figure illustrates the crucial elements in the subsistence circle, where the absence of a dominant position of the market is essential. Only occasionally, the market is visited where surplus from harvest, hunting or fishing can be sold or exchanged.



**Figure 6: The subsistence circle (Adapted from Poats et al., 1988 in Vancraeynest, 2006, p.5).**

Various elements described above interfere or coincide with this circular livelihood pattern. Besides the daily recurrence of activities like fishing, harvesting and cooking, the rotational system of the

*minga* (see II.3.7 Communal activity: the *minga* system) has its significance in this continuity. Moreover, during intensive cultivation periods -which bring families from one *minga* to the other- another frequency is introduced. The alternation of dry and wet season -rather an issue of high or low water level- brings again an element of recurrence and temporary change; the hunting and fishing activity must be adapted<sup>8</sup>. Also, the alternation between cultivated land and fallow pursues a circular pattern and brings the family, after a variable period (between 15 and 40 years) back to the place where they have had their field before, but where soil fertility was restored by the growing secondary forest.

### **II.3.4 Subsistence versus cash cropping**

The characteristics and cultural history of *yuca* make this plant pre-eminently a **subsistence crop**. Because of the fact that the centre of domestication of cassava or manioc, in Latin America named *yuca*<sup>9</sup> (the only highly poisonous staple crop), is situated in the Amazon basin, the cultivation, processing and consumption of *yuca* is culturally rooted in the customs of the Amazonian indigenous people. The wild, undomesticated variety of *yuca* is probably most related to *Manihot flabellifolia* which grows on the southern border of the Amazon basin. Historical remains of this species have been found in coastal Peru, but domestication more probably happened earlier in Brazil (Prance & Nesbitt, 2005, p. 68).

The cultivation of *yuca* in particular and every subsistence crop in general does neither start necessarily (in contrast with a cash crop) with sowing nor stops with harvesting. Sowing and harvesting take often place at the same time in the same place. Hence, we can definitely speak of a cultivation *cycle*, whereby the beginning of ending of the cycle is impossible to indicate. Harvesting is a daily activity, as such sowing too.

*Yuca* is easy to cultivate, can be harvested after 6 months during a time span of various months or years, is a very welcome source of starch in nutrition and has a broad range of related products that can be processed with traditional methods. However, being familiar with the processing techniques - peeling, chopping and boiling to take away the poisonous characteristics- is essential; this caused initially disastrous consequences when the French introduced cassava in East Africa and the islands near Madagascar (Prance & Nesbitt, 2005, p.68).

The high nutritional value and abundance of *yuca* and its related products lead to a form of what we would call *mass consumption*. *Masato* is processed by prolonged cooking of a large quantity of *yuca* pieces, which are squashed and mixed with a little maize and sweet potato (*camote*). During the squashing, the *yuca* is mixed with saliva (by chewing and spitting out again) to induce a fermentation process (see Picture 2). Just before serving, the substance is mixed with water to make it more liquid.

---

<sup>8</sup> A woman in Puerto Limón indicated that a high water level makes her anxious, because it makes fishing less successful.

<sup>9</sup> Huitoto: *maika* and Kichua: *rumo*

The alcoholic strength depends on the period of fermentation, but obtains its maximum after approximately three days (sugar can be added to make the *masato* stronger). *Masato* -as an energy source- is essential for working in the field and is distributed abundantly to all workers by the woman who prepared it.

Cassava flour, in the indigenous communities called *fariña* from the Brazilian *farinha*, is the best known marketed form of cassava. Cassava therefore, is first peeled and chopped to be conserved during three days in water. Hereafter, the water is pressed out of the cassava peaces, most commonly with a long mat woven with palm leaves (*matafrio*<sup>10</sup> present in every household). The cassava is now reduced to small particles and fried in a large iron tub. It can be baked in a large round flat pancake form too; this type of cassava bread is called *casave*. In this form, it can be conserved for a very long time. *Harina de yuca* or *almidon* and the further processed *tapioca* have a slightly different preparation as *fariña* but have a higher market value. Other products are *anduche*<sup>11</sup>, *venillo*<sup>12</sup> or *ají negro*<sup>13</sup>.

**Rice** is in the communities of the Amazon basin a secondary culture, and rather a **cash crop** than a typical subsistence crop; in the subsistence family, it is neither cultivated nor consumed on a regular basis. However, rice is appreciated as nutrition because of the good taste and the excellent opportunities to use it in the *minga* system (see II.3.7). As the skin of the rice grains can not be digested by the human system, rice should be peeled. Peeling rice by hand, however, is heavy work<sup>14</sup> and does often result in poor quality, broken grains.

Most of the rice that can be found in El Estrecho comes from the market in Iquitos. Before arrival in El Estrecho, transportation by boat on the Amazon river takes more or less (depending on the amount of water in the river) 21 days. The boats arrive in El Estrecho on an irregular basis, every two months and take a variety of market products; however, the boat does not enter when the water level of the river is too low. More industrial processed rice that can be found in El Estrecho comes from Colombia or Brazil and is of better or at least more regular quality than the rice coming from Iquitos.

Rice prices are fluctuating intensively, as are prices of every other product on the market of El Estrecho, because of the irregularity of the offer and occurrence of periods of extreme scarcity or abundance (see II.3.5). Minimum prices per kg bought in small quantities, is 1.80 *nuevo soles*<sup>15</sup> for the rice of Iquitos and 3 *nuevo soles*<sup>16</sup> for the industrial Colombian or Brazilian rice.

Rice is cultivated in dry -not irrigated- conditions. It can be cultivated on primary forest soils, but is preferably sown on the river floodplains, the so-called *ceticales* or *playas*, as in this way most weeds are eliminated with inundation and soil fertility is renewed. After sowing, however, inundation also

---

<sup>10</sup> Huitoto: *inaraco* and Kichua: *tipiti*

<sup>11</sup> Type of *masato* prepared with a more complicated technique.

<sup>12</sup> Processed from *anduche*, with a high alcohol content.

<sup>13</sup> Type of gelatine, used to make marmalade of *ají* (chilli pepper).

<sup>14</sup> A *pilón* is used: a wooden round barrel with a big wooden post. It can take up to 3 hours to peel 5 kg of rice.

<sup>15</sup> 1.80 soles is € 0.45.

<sup>16</sup> 3 soles is € 0.75.

destroys the growing rice plants, because of the high velocity of the water current and/or the temporary anaerobe conditions for the rice plants.

### **II.3.5 The local market**

The local market of El Estrecho is a very dynamic one, which is caused by its particular location. Because of the fact that the production capacity is not adequate for the (still growing) population, a majority of products originates from other markets as for example the market of Iquitos. Transport has a double influence on the price. First of all, prices are considerably higher than on other regular markets. And secondly, considerable price fluctuations are a daily reality because of the unpredictability of transport. People with a good purchasing power and clear vision on the market can make profit of this situation by influencing their prices. An example will clarify what this means in practice.

Gasoline takes a key position in the daily economy of El Estrecho. Without gasoline, transport becomes difficult; also the generation of electricity requires gasoline. The most economic price of gasoline that can be found in El Estrecho is 12 soles/gallon. In Iquitos, the price of gasoline is considerably lower, fluctuating between 8 and 10 soles/gallon. In times of relative shortage, the gasoline price in El Estrecho becomes more expensive and reaches its price of 14 or 15 soles/gallon (which is the most common situation). Of course, people that had the possibility to buy a large quantity of gasoline when prices were low can make profit now by consuming their own cheaper gasoline, or by selling it two or three soles above the price they have bought it. But in the dry season, the low water level of the Putumayo river sometimes inhibits the passage of the merchandising boats that bring the gasoline, and severe shortage occurs which is still more extreme when the local merchants with an elevated purchasing power have bought the available gasoline stock. Prices easily reach 20 soles/gallon by then.

Though it is an extreme example because of its key position in the local economy, also other products are subjected to this type of price and stock instabilities. This is the case for consumer goods as cigarettes, alcohol, soft drinks, sugar, cooking oil and also rice. Consequently, the producer or consumer who depends on the market of El Estrecho needs alertness, accurate and up to date price and stock information and an exceptionally flexible attitude.

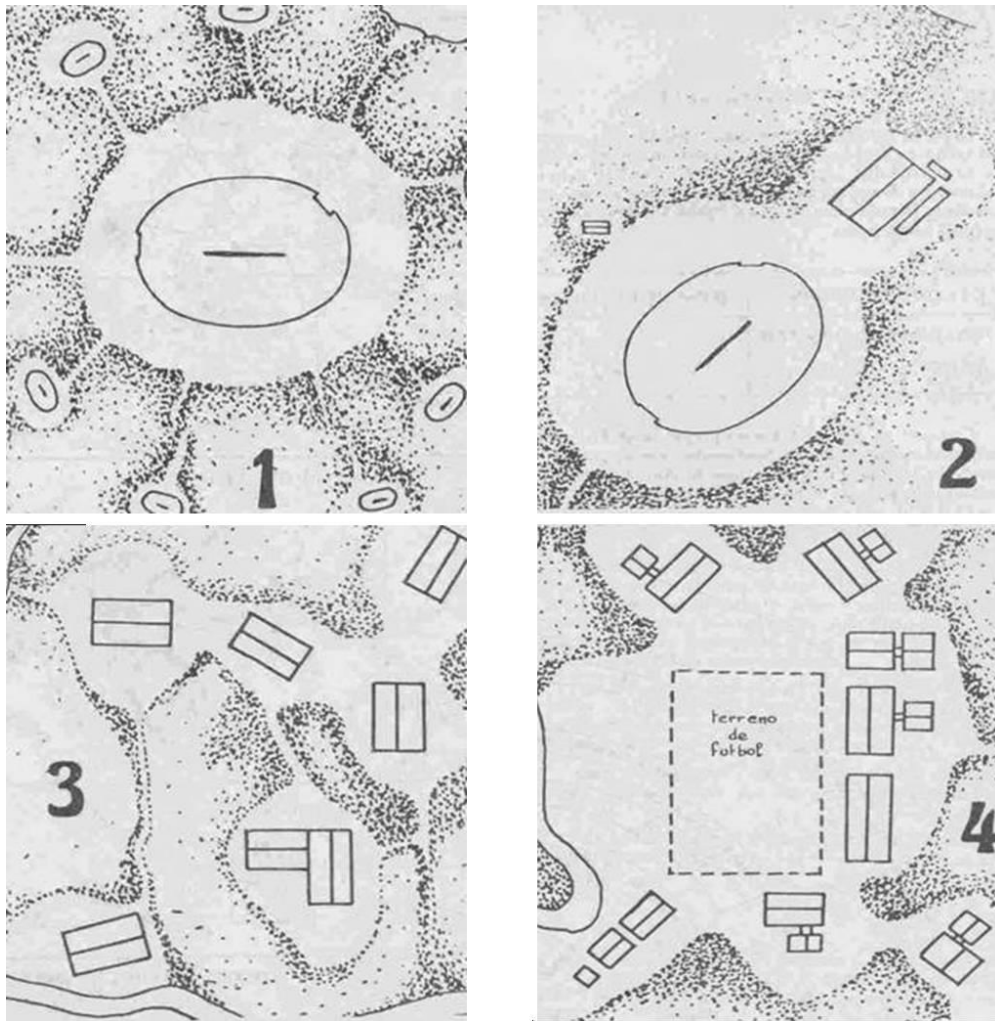
The local market of El Estrecho only has a marginal significance for the subsistence families. The majority of food is produced by the family in their *chacra*, gathered from the forest or fished in the river. Certain things, however, can not be found in their direct environment and are essential in the actual indigenous livelihood. Chaumeil (1986, p.127-128) listed the most important tools of recent acquisition in the daily life of the Yagua (these indigenous people also live in the *bajo*-Putumayo, the outflow of the Putumayo river in the Amazon river). It concerns in almost all the cases tools made of metal or synthetic material (Table 3).

| Livelihood products of recent introduction | Use                           | Instruments of recent introduction | Traditional techniques   |
|--|-------------------------------|------------------------------------|--|
| Salt                                       | Conservation of meat and fish | Iron axe and machete               | Collective slashing, with use of fire (?), sharp bones, piraña teeth |
| Sugar                                      | Alimentation                  | Kerosene lamp and matches          | Collective lightening, rubbing                                       |
| Rice                                       | Alimentation                  | Money                              | Exchange   |
| Alcohol                                    | Consumption                   | Rifle and cartridge                | Collective hunting with blowpipe and poison                          |
| Soap                                       | Washing                       | Harpoon (metal) and fishing net    | Collective fishing, poison   |
| Clothes                                    | Clothing                      | Mosquito net                       | Hammock  |

**Table 3: Overview of recent introduced livelihood products (left column) and instruments (right column) (Adapted from Chaumeil, 1986, p.127-128).**

### II.3.6 The community structure

To become what it is today, the **community structure**, underwent substantial transformation because of intercultural contacts (Chaumeil, 1986, p.66-67). Initially, the community was not strictly sedentary; the collective house was the basic unit of the community, and smaller houses to spend the night were spread around the collective house (Figure 7, 1). With the arrival of the missionaries, the community hosted fewer families because of ideological division. Life became semi-sedentary; the collective house was used to spend the night and annex houses served as collective kitchen (Figure 7, 2). After longer external influence, the collective house disappeared, and houses obtained a neo-colonial character. Moreover, communities were built closer to rivers, hence were more vulnerable for floods and therefore houses became pile dwellings (Figure 7, 3). Finally, with the arrival of mestizo influence (building of schools, presence of a teacher), the community became strictly sedentary and a copy of the typical mestizo village, with the football pitch as the central element. Houses were closed now, and had the kitchen stand apart but connected with the living place (Figure 7, 4) (see Picture 3).



**Figure 7: Evolution of the community structure due to various intercultural influences and processes (Chaumeil, 1986, p66-67). The communal house was the central unit of the community (1). With the arrival of the missionaries, colonial constructions (square houses) were introduced, but the traditional communal house remained the basic unit (2). Colonial construction became later the norm (3), and also football pitches were introduced when mestizo teachers settled in the communities (4).**

The houses are built on pillars to protect against flooding and animals; they typically exist of two or three chambers, from which one serves as a meeting room for guests, another for normal activity (eating, repairing fishing nets, cooking, etc.) and the last one, if present, for sleeping. Sleeping is often done on the floor, without a mattress, but always with a mosquito net. Besides the rooms, every house typically has an open terrace (no roof) as an annex to the living room, where food is prepared (cutting yucca, preparing fish or meat after hunting, peeling bananas, washing the dishes...) or clothes are dried. Organic waste consequently falls down on the ground, where the animals (chickens, pigs and ducks) can eat it.

The most important authorities of the community are the *cacique* and the *mujer líder*. The *cacique* coordinates the activities which are of communal importance, manages the community in a harmonic way, intervenes in conflicts between inhabitants of the community and represents the community

towards public and private institutions (Desmet, 2004, p.43-44). Elections for *cacique* should take place every two years and candidates are men. In reality, *caciques* rule longer than two years because candidates are often absent in small populations, especially when the community positively judges his work. Most of the communities also have a *vice-cacique*, who takes over the tasks of the *cacique* in case of absence. The *mujer líder* is the feminine representative of the community, whose task it is to develop the community, in coordination with the *cacique* (Desmet, 2004, p.45).

The majority of the communities are in the possession of a primary school and as such host a teacher. The teacher's tasks reach further than only education for the children; the teacher is expected to intervene in cases where the community seems to go wrong. Teachers are often but not necessarily originating from the region (as such have the particular know-how for fishing, hunting and cultivating land), but obtained their degree at the university of Iquitos. The teacher is often the only person in the community having a wage, paid by the government. The presence of teachers - often with mestizo roots- had a strong influence on various elements of the life in the indigenous community. Chaumeil (1986, p66) mentions for example the presence of football pitches, often central in the community, as a foreign element introduced by mestizo teachers.

The livelihood of the indigenous families is strongly connected with the land they live on. Desmet (2006, p.7) states that for indigenous peoples, the land does not just provide them with their means of subsistence - in the tropical forests traditionally through a combination of hunting, fishing, gathering and shifting agriculture. The territory has a deep spiritual significance. It constitutes the source of an enormous wealth of orally transmitted knowledge concerning the fauna and flora, the healing powers of medicinal plants and the maintenance of the ecological balance. Moreover, the territory forms the basis of the political organisation and socio-cultural interactions of indigenous peoples.

The indigenous leaders (Chirif, García and Smith in Desmet, 2006, p.7) define the indigenous territory as *"the mountains, valleys, rivers and lagoons that are identified with the existence of an indigenous people and that have provided it with its means of subsistence; the richness inherited from their ancestors and the legacy they are obliged to transmit to their descendants; a space where every little part, every manifestation of life, every expression of nature is sacred in the memory and in the collective experience of that people and which is shared in intimate interrelation with the rest of living beings, respecting its natural evolution as a unique guarantee of mutual development; the environment of freedom on which that people exercises control, permitting it to develop its essential national elements and for the defence of which every member of the people is prepared to shed his blood, rather than supporting the shame of having to look in the eyes of his dispossessed people."*

It is clear that the indigenous perceptions of land and territory conflict with the western concepts of property and ownership. Private property is also an existing concept in the indigenous society, but it is seldom used in relation to land. Land, is, in contrast to the western vision, inalienable and unseizable (Desmet, 2006, p.8). The legal subject of the community was created to reflect the

collective relationship towards indigenous land. However, neither the indigenous territory nor private property seems to be described adequately by the legal subject of the community.

Most of the communities in the research area are legally registered; others (e.g. Puerto Alegre, Bagazan) are not. Unregistered territories therefore do not have the legal permission to make use of the environmental resources they need for their subsistence. The Forestal and Wild Fauna Law of 1975 declares that 'all the resources of the forest and wild fauna are of the public domain and there are no acquired rights over them' (article 1) (Decreto Ley 21147, Ley Forestal y de Fauna Silvestre, May 13, 1975, in Desmet, 2006, p.9). Considering the international interest in the natural resources, this situation may in the near future be problematic for certain communities along the Putumayo river.

### **II.3.7 Communal activity: the *minga* system**

The *minga* system (also named *minka*) is a tradition which has its roots in pre-Colombian Latin America. This system is well known in the Peruvian Amazon region and in the Andes region of Ecuador, Peru, Bolivia and Chile. This system is a type of **communal or collective labour** with social purposes (Agüero, 1992 in Vancraeynest, 2006, p.9). This significance still resists today in both market directed societies as subsistence economies. The specific way of organising this system in the subsistence communities however, has deeper social consequences (Desmet, 2004, p.90).

Two kinds of *minga* can be distinguished. A first type of *minga* is organised upon invitation of a family that has to perform a hard labour task in the field. This is the case for land clearing (the trees are slashed down and vegetation is burned) and weeding (rarely for harvesting, because this is a daily activity in subsistence agriculture; also, because of the fact that the harvesting person becomes owner of the product, this activity stays within the family). The head of the inviting family (*mingero*) provides food for those who contribute. Therefore, the family has to be able to serve fish or meat, *yuca*, banana and *masato* (see II.3.4). Because families on the day of a *minga* are not able to supply their own subsistence, the fact of food provision is a crucial element. The *mingero* coordinates the work and assembles the people at the end of the day for a small evaluation. He also gives the opportunity to everyone to take the word and give his or her opinion. Often, new invitations for *mingas* arise in these small reunions. Invitations also count for people of other communities. As such, the *minga* should be seen as a form of social activity. Temporary singles or families that are restricted for one or another reason in harvesting or hunting can offer their services in the form of labour on a *minga* in order to assure their continuity in food security. It is therefore essential that the inviting family appreciates the productivity of one's efforts, because the invitation for a future *minga* may fail to occur. Moreover, it is very probable that other participating families will organise a *minga* in the future, and therefore will need good labour forces. In this way, every *minga* has a communal importance, both for the inviting family as for the contributing families.

Second, a *minga* is also organised when work has to be done in favour of the whole community. Examples here are the reparation of the college or the maintenance of the football pitch. The *cacique*

will take the initiative, and all families, men and women, will contribute to the work. Every woman prepares her *masato* to distribute it among everyone working in the *minga*. Often, communities have one day in the week reserved for such communal work, which has to be respected by every community member.

The atmosphere in a *minga* always is elated. After all, it is a family activity, mostly also an activity with participation of the whole community and often of certain families of other communities too (see Picture 4). Though the work is often heavy, time is made for conversation or joking. The exuberant mood is also thanks to the *masato*, from which the alcohol percentage augments hour by hour because of the ongoing fermentation process. Tiredness, satisfaction and drunkenness indicate that sufficient work has been done, and indicates the final stage of the *minga* at the end of the day.

### **II.3.8 Population and provisions**

The following tables represent respectively population data and presence or absence of certain basic provisions in the different Peruvian communities that were visited during this research. The data come from the Peruvian *Instituto Nacional de Estadística y Informática (INEI)*<sup>17</sup>, *Municipalidad Distrital del Putumayo*<sup>18</sup>, *Consejo Transitorio de Administración Regional*<sup>19</sup>, *Instituto Nacional de Desarrollo*<sup>20</sup> (INADE) and *Fondo de Compensación para el Desarrollo Social*<sup>21</sup> (FONCODES). The data are actualised (2005 or 2006) and give a good view on the local living conditions. Some specific basic provisions such as latrines, secondary education, churches/temples and sewer system are not taken up because they are absent in all communities except for El Estrecho.

---

<sup>17</sup> National institute for statistics and informatics

<sup>18</sup> District municipality of the Putumayo

<sup>19</sup> Transitional council for regional administration

<sup>20</sup> National institute for development

<sup>21</sup> Compensational fund for social development

| <b>Population data of the communities between El Estrecho and Puerto Limón</b> |                               |                                |                               |                                      |                         |                         |
|--|-------------------------------|--------------------------------|-------------------------------|--------------------------------------|-------------------------|-------------------------|
| <b>Community</b>   | <b>Population 1993 (INEI)</b> | <b>Population 1995 (INADE)</b> | <b>Population 2005 (INEI)</b> | <b>Population growth (1993-2005)</b> | <b>Primary activity</b> | <b>Indigenous group</b> |
| Puerto Soledad   | 46                            | 50                             | 50                            | 9%                                   | Agriculture/Fishing     | Huitoto                 |
| Puerto Limón   | 46                            | 50                             | 42                            | -9%                                  | Agriculture/Fishing     | Huitoto/Kichua          |
| Ere  | 94                            | 102                            | 20                            | -79%                                 | Agriculture/Fishing     | Huitoto/Murui           |
| San Francisco de Ere   | 0                             | 84                             | 30                            |                                      | Agriculture/Fishing     | Huitoto                 |
| Puerto Alegre  | 22                            | 28                             | 20                            | -9%                                  | Agriculture/Fishing     | Huitoto                 |
| Ocho de Diciembre  | 50                            | 54                             | 48                            | -4%                                  | Agriculture/Fishing     | Huitoto                 |
| Santa Lucia  | 41                            | 44                             | 33                            | -20%                                 | Agriculture/Fishing     | Yaguas                  |
| Flor de Agosto   | 0                             | 162                            | 86                            |                                      | Agriculture/Fishing     | Huitoto                 |
| Roca Fuerte (Piedra cocha)   | 41                            | 44                             | 82                            | 100%                                 | Agriculture/Fishing     | Kichua                  |
| Bagazan  | 19                            | 21                             | 34                            | 79%                                  | Agriculture/Fishing     | Huitoto                 |
| Siete de Mayo  | 40                            | 43                             | 41                            | 3%                                   | Agriculture/Fishing     | Huitoto                 |
| Puerto Elvira  | 0                             | No data                        | 29                            |                                      | Agriculture/Fishing     | Huitoto                 |
| Puerto Aurora  | 72                            | No data                        | 87                            | 21%                                  | Agriculture/Fishing     | Kichua                  |
| El Estrecho  | 1849                          | No data                        | 2940                          | 59%                                  | Agriculture/Commerce    | Mestizo                 |
| <b>Total - El Estrecho</b>   | 516                           | No data                        | 646                           | 25%                                  |                         |                         |
| <b>Total + El Estrecho</b>   | 2365                          | No data                        | 3586                          | 52%                                  |                         |                         |

Table 4: Population data of the visited Peruvian communities (unpublished source, 2006 &amp; INADE, 1995)

| <b>Basic provisions of the communities between El Estrecho and Puerto Limón</b> |                     |                                 |              |                             |                        |                    |                  |                           |
|---|---------------------|---------------------------------|--------------|-----------------------------|------------------------|--------------------|------------------|---------------------------|
| <b>Community</b>  | <b>Medical post</b> | <b>Primary education center</b> |              | <b>Electrical provision</b> | <b>Satellite radio</b> | <b>Peque-Peque</b> | <b>Motor-saw</b> | <b>Local authority</b>    |
|   | <b>State.</b>       | <b>°</b>                        | <b>State</b> | <b>State</b>                | <b>State</b>           | <b>State</b>       | <b>State</b>     |                           |
| Puerto Soledad  |                     | 1993                            | Bad          |                             | Good                   |                    |                  | Humberto Sosa Tamani      |
| Puerto Limón  |                     | 1993                            | Bad          |                             |                        | Good               |                  | Antonio Sosa Perez        |
| Ere   |                     | 1995                            | Bad          |                             |                        |                    | Good             | Pedro Sosa Gamarra        |
| San Francisco de Ere  | Good                | 2006                            | Good         |                             |                        |                    |                  | Damancio Farecade Lia     |
| Puerto Alegre   |                     |                                 |              |                             |                        |                    |                  | /                         |
| Ocho de Diciembre   |                     | 2002                            | Regular      |                             |                        | Good               |                  | Alejandro Buinagima Rojas |
| Santa Lucia   |                     | 1994                            | Bad          |                             |                        | Good               |                  | Rolando Barilla Contreras |
| Flor de Agosto  | Good                | 1995                            | Regular      | Bad                         | Good                   |                    |                  | Manuel Tamani Manihuari   |
| Roca Fuerte (Piedra cocha)  |                     |                                 |              |                             |                        |                    | Good             | /                         |
| Bagazan   |                     | 2000                            | Bad          |                             |                        |                    |                  | Laurencio Saita Imunda    |
| Siete de Mayo   |                     | 1995                            | Bad          |                             |                        |                    | Good             | Efrain Imunda Mera        |
| Puerto Elvira   |                     |                                 |              |                             |                        |                    |                  | Carlos Vásquez Pinedo     |
| Puerto Aurora   |                     | 1993                            | Bad          |                             |                        |                    |                  | /                         |
| El Estrecho   | Good                |                                 | Good         | Regular                     | Good                   | Private            | Private          | Bernardo Alvarez Moreno   |

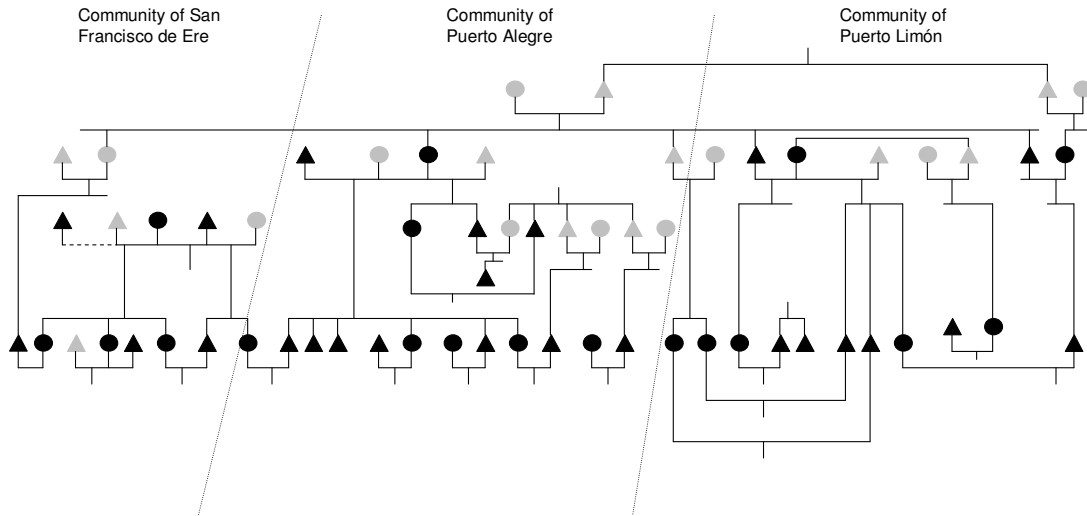
Table 5: Basic provisions of the visited Peruvian communities (FONCODES, 2005)

These data indicate the dynamic situation of community population, and confirm a growing population in the indigenous communities as well as in the mestizo village of El Estrecho. Also, the majority of the communities are populated by Huitoto and Kichua people; also Yagua and Murui (which are strongly related to Huitoto people) are present. The basic provisions are poor; the majority of the communities have a secondary school, but medical posts are in most cases absent. Provisions like electricity and communal property like a motorised saw, satellite radio or *peque-peque* -often gifts in times of elections- are only in a few cases present.

### **II.3.9 Family organisation**

The basic unit of the actual indigenous community is the nuclear family. Only a few families may already form a distinct community. Within the nuclear family, there exists a labour division between man and wife. Women dedicate themselves to the work on the *chacra*, especially those for the cultivation of nutritional crops, they prepare the food and look after the children and the house. It is very unusual that men contribute in the preparation of *masato*; it is the pride of every woman to prepare a tasteful -strong or sweet- *masato* and to share it personally and abundantly with visitors or in the *minga*. Women have more knowledge about cultivated plants and management of the *chacra*. Men are busy with hunting and fishing and take the activities of land preparation (slashing the vegetation and burning) as their responsibility. Specific cultures like coca and tobacco are also a men's job (Alonso Vélez, 1998).

Alliances were investigated in the three communities where intensive research was done. It seemed to be a rather complex issue, and the reason for this is probably the particular research context. The alliances do not converge with community structure, while the research methodology was adapted and restricted to this specific community context. Therefore, this study should be completed with data collected from other communities in the region (probably not only from the Putumayo region, but also from the Napo and Amazon region) to detect lineages and the marriage rules of clans and lineage systems. The following figure only presents the alliances present in the communities San Francisco de Ere, Puerto Alegre and Puerto Limón.



**Figure 8: Alliances between the members of the communities of San Francisco de Ere, Puerto Alegre and Puerto Limón. Women are symbolised by ● while men are symbolised by ▲. Only adults are taken up in the figure. The persons represented in grey are not living in the community or died.**

Although there is a strong link between family and community (the younger adult family members are very often living in the community of their parents), it seems that the community divided the alliances of the oldest generation in the figure. Also, various people undertook migration in order to live and start a family in the community they live now.

It is difficult to understand the exact role of the community and the discordance with family alliances, because only three communities are presented here. Incorporation of the community of Ere for example would provide more detailed information and this would be the case with every community added. It is, however, important to know that the actual community is a rather artificial concept which is partly concordant with the extended family, but in an important extent discordant with it.

## II.4 Conclusion

The foregoing paragraphs provided an overview of the geographic, historical and ecological context of the Amazon region in general and the study area in particular. The geographic context is important to understand the geopolitical context, while the historical background is essential to be able to understand the actual socio-economic situation. The ecological context is offered in the form of a descriptive outline and is an essential basis to understand the ecological analysis that is described further in this research document. Also, the overall objective and operational research questions must be situated in this framework. In relation to the social aspects of the Amazon region, the next chapter presents the content behind a concept that too often misses its correct understanding: indigenous peoples. Hence, this information will be important to understand the social aspects of intercultural contact in relation to this study.

## Chapter III Indigenous peoples

The people living in the communities along the Putumayo river identify themselves as being indigenous or mestizo, but what is the exact meaning of this categorization? What is the meaning of origin these days? What does it mean to be a mestizo? The following paragraphs are looking for an answer on the question how and if the concept of indigenous should or can be defined, and subsequently which elements have made the concept to what it is today.

### III.1 Defining “indigenous”

It has certain logic that, if we speak of a concept, the concept is clearly defined to assure that everyone is talking about the same clearly demarcated topic. The motivation to define the concept of indigenusness of peoples is clearly a practical one in juridical and political spheres. It started in 1957, with the International Labour Organisation and its Convention n°107 concerning indigenous and tribal populations in independent countries. A crucial term in this convention is ‘populations’ instead of ‘peoples’, which indicates a focus on subordination to the state and absence of the right on self determination. The ILO Convention n°169 (1989) was a revision of Convention n°107. Here, the term ‘peoples’ is used instead of ‘populations’, but the convention also mentions that *the use of the term peoples in this Convention shall not be construed as having any implications as regards the rights which may attach to the term under international law* (article 1 (3)) (Desmet, 2006, p.4). In 1993, the UN draft Declaration on the rights of indigenous peoples recognises the right on self determination of indigenous peoples (not populations) as a crucial element.

But which peoples can claim these rights, and which peoples can not? Firstly, indigenous people should logically identify themselves as belonging to an indigenous group. Further, intuitively one can consider that indigenous peoples are different from the non-indigenous peoples in their origin, their cultural identity and eventually their native bond with the territories where they are settled. In most cases, indigenous peoples are a non-dominant group in their nation, with a decentralised and small scale organisation and a distinct world vision (Trio, 1992, p.6).

José Martínez Cobo (in Mills, 2002, p.53) established a widely acknowledged (though grafted onto the Latin American situation) framework with the following definition: *Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing in those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal systems.*

From western point of view this definition is a successful exercise in objectivity and as an instrument in legal issues. The problems arise however together with its strength; defining the concept of “indigenous” will -despite its objectivity- lead to over-inclusion or under-inclusion of certain groups. Moreover, this definition recognises neither the reality of natural evolution of cultural identity, nor the reality of intercultural contact.

Therefore, it is useful to focus on the logic behind this discourse of conceptualisation of indigenous cultural identity. Two trends in the vision on indigenous peoples will be argued to fall into essentialism whereby the recognition of development and evolution in indigenous cultural identity is absent.

### **III.2 *Indigenismo and mestizaje***

Both *indigenismo* and *mestizaje* represent an attitude towards indigenous peoples and have their roots in the specific Latin American situation (therefore the Spanish terms are used). After all, the Latin American context of colonisation has its particularity which can be illustrated by the fact that, when the western community wanted to organise the celebration of “500 years discovery of the Americas”<sup>22</sup>, the indigenous community of Latin America organised a countermovement to remind the “500 years of oppression by the colonising powers” (Mills, 2002, p.50). In what follows, the reader will notice that both *indigenismo* and *mestizaje* are the underlying logic in this western hegemonic lack of timidity.

*Indigenismo* (De Munter, 2004, p.137) can be seen as a strategy to cope with intercultural contact and results in essentialism; the indigenous person is approached in an exotic way, not because of his particular cultural identity but rather because of the fact that, being indigenous, this person must belong to an oppressed minority. Intercultural contact is reduced to an opportunity for reconciliation with the exploited ‘Indian’. The indigenous cultural identity is consolidated in the indigenous-minded mind, leading to cultural conservatism. Though described here in a rather caricatured way, this attitude is probably a matter of course in every initial intercultural encounter.

*Mestizaje* (De Munter, 2004, p.134) celebrates the success of the Hispanic colonization, whereby the fusion of the Spanish and indigenous culture resulted in what is called nowadays the “mestizo culture” (some recognise the existence of a “Latin American identity”). In the logic of *mestizaje*, assimilation rather than antagonism is the author of the happy-ending success story of the colonization of Latin America. The mixed culture that is now prevalent in Latin America finds its cultural tradition in the colonisation story and should not be seen to be rooted in the indigenous tradition, which ended abruptly with the arrival of the Spanish. The indigenous identity was seen as an obstacle in the western modernisation process, but was successfully defeated by the actual Latin American identity. Also the huge indigenous migration movement from the communities to the capital cities (Mexico

---

<sup>22</sup> 1992

city, Lima, Chimbote, El Alto & La Paz,...) and the adaptation to mercantile and individualistic concepts of labour should be seen as an effect of this assimilation process that resulted in a *mestizaje cultural* as well as a *mestizaje económico*.

Indigenismo and mestizaje seem to represent opposing views on the current status of indigenous peoples in Latin America. Where in the *indigenismo* approach of indigenous identity, essentialism is quite obvious, it is more difficult to detect in the *mestizaje* approach. The essentialism in the logic of *mestizaje* can be found in the fact that within the assimilation of the indigenous with the colonising culture, the role of the indigenous culture in contemporary social dynamics as modernisation or evolution is neglected. De Munter (2004, p.142) summarized this idea as: “the right to change is denied to other cultures”. From a different point of view, it seems that indigenous peoples have, during the colonial encounter, obtained a more critical and mature experience from the intercultural dynamics than the dominant sectors (De Munter, 2006, p.26).

### **III.3 Indigenous peoples in the Putumayo region**

The society of the area of study in particular (but also the Putumayo region in general) is a multi-ethnic one, as Huitoto, Kichua, Yagua, and mestizo people are living together, often in the same communities. The mestizos migrated to the Putumayo region in the time of the rubber exploitation, and did not go back when the rubber exploitation stopped abruptly. As such, they still populate various communities along the Putumayo region, and often live together with the indigenous people. Also certain indigenous groups, e.g. the Kichua have a history of migration. The Kichua of the Putumayo river name themselves *Ingano* or *Runa*<sup>23</sup>. From the Kichua people, it is known that they only recently (in the seventies) migrated from the Napo river towards the Putumayo river (Casanova Velásquez, 2002, p.10). The reason for this migration is that the presence of resources was much more favourable along the Putumayo river in comparison with the Napo river.

Besides the presence of different indigenous peoples and mestizos, there is also an international aspect: the Putumayo river is the frontier of Peru and Colombia, and finds connection with Ecuador in the north and Brazil in the south. Merchants navigate by boat from the upper north (Puerto Asís) until the Amazon river (Leticia) to sell their goods in the monetary unit of Colombia, Peru or Brazil. The indigenous people come on a daily basis in contact with mestizos from their own country, but also from Colombia, Brazil and Ecuador.

It is therefore in reality rather an intercultural than a multi-ethnic society, where intercultural processes are a daily reality. Although the indigenous languages are still widely spoken, Spanish is widespread in a majority of the communities.

---

<sup>23</sup> Runa means ‘people’ in the Kichua language.

### **III.4 Conclusion**

It is essential that the significance that different entities appoint to the concept of indigenous people is nuanced and placed in its correct context. An exact definition results to be inappropriate for use in the field, as it is impossible to incorporate the specific local situation and transitional aspect in a rigid description. Also, in the Latin American situation, our vision will be influenced by important social views that ultimately come down to essentialism and as such represent a limited view which again will conflict with reality. Ultimately, the Putumayo region hosts a large diversity of indigenous people and mestizos with different nationalities. The following chapter focuses on how the project 'rice as an alternative for coca' is embedded in the intercultural contact between an indigenous organisation and a western one.

## Chapter IV The project ‘rice as an alternative for coca’

### IV.1 Introduction

The project “rice as an alternative for coca” is a project of VZW Putumayo. VZW Putumayo is a typical ‘*vierde pijler*’<sup>24</sup> organisation in the Belgian development cooperation arena (Develtere, 2005, p.208). *Vierde pijler* organisations are a recent phenomena (from the past 10 to 15 years); in fact, these organisations originate in small groups of people who are not professionally involved in development cooperation (and not expected to be involved), but are motivated -often because of a specific experience and confrontation with a problematic development situation- to support the sector by starting their own small development organisation. Because of the increasing occurrence of such *vierde pijler* organisations in the Flemish development cooperation sector, research takes place to enhance the integration of such organisations with the other pillars<sup>25</sup> of development cooperation.

In the case of VZW Putumayo, the initiative started after a visit of two law students in a congress of FECONAFROPU (*Federación de las Comunidades Nativas Fronterizas del Putumayo*) in the framework of a research paper concerning the rights of indigenous peoples in the Amazon region (2002). Frequent communication and regular visits to the region made it possible to start various projects which should enhance the possibilities for economic, social and cultural development of the involved indigenous communities. The project ‘rice as an alternative for coca’ is one of the projects of VZW Putumayo; it is basically an agricultural project, but is also mend to result in -beside economic progress through agricultural activity- better social and cultural conditions for the participating communities.

Generally, according to the *vision* of VZW Putumayo, indigenous people have the right on self determination. In the framework of this right, they determine in freedom their priorities for economic, social and cultural development.

The *mission* of VZW Putumayo is strengthening the capacity and organisation of the indigenous people of the Putumayo region, in order to form their community life in an independent way and according to their own vision. Therefore, the Belgian organisation supports propositions and initiatives from the indigenous people, since they often lack financial, technical, organisational or institutional means in order to reach their own objectives. Therefore, close partnership with the Peruvian sister organisation Putumayo Perú (located in Iquitos) is an essential aspect.

The project analysed here is in conformity with the vision and mission of VZW Putumayo; this basically agricultural project should lead to a strengthening of the capacity and organisation of the indigenous communities of the Putumayo region. The main goal of this project is generating better

---

<sup>24</sup> Fourth pillar

<sup>25</sup> First pillar: official or bilateral development cooperation; Second pillar: multilateral development cooperation (international organisations); third pillar: NGOs and specific services of universities.

living conditions, starting from initiatives that originate within the indigenous communities, but that are difficult to be successful because of a lack of financial, technical, organisational or institutional resources.

#### **IV.2 Why *should* the cultivation of rice be an alternative for the cultivation of coca?**

The original importance of the coca cultivation should be sought in the cultural value of the coca leaf. Originally and still today, coca is an essential component of the cultural identity<sup>26</sup> of the farmer; thanks to the chewing of coca leaves, people are able to work longer, not being exhausted by hunger or tiredness. Also, coca is used as a medicine and as a spiritual source gives people more insight in what the future will bring. The chewing of coca leaves is still today a social activity, by which the whole community comes together in the night in the *maloca*, to discuss and talk about the important things that happened that day, or should happen tomorrow<sup>27</sup>.

Besides the cultural value, the crop obtained since the early seventies an economical value. When the chemical process to transform coca leaves in cocaine was known and cocaine became an illegal drug, clandestine organisations took advantage of the exaggerated price and large gains of this drug for which there was a big demand in the western world. The small indigenous farmers of the Amazon basin started to cultivate the coca leaf *en masse*, because suddenly a market -which had been absent for a long time- came literally to their house to buy their crop. The cultivation of the coca leaf soon became an important economic activity which provided the subsistence family the opportunity to participate in the monetary economy. Market products such as soap, lamp oil, sugar, etc. which were at that time difficult to obtain, became again an integrated part of life of the subsistence family. After all, the historical alternation of economic interest and depression in the Amazon region made it possible for the subsistence family to participate temporarily in the market economy and to oblige them subsequently to rely entirely on subsistence activities when the economic interest declined again. The unreasonably high gains that mafia organisations received with the commercialisation made it possible to form the market in a way that the subsistence farmer could easily participate. After all, the monoculture production in large fields is a very cost intensive culture, as many plagues are present in the region; moreover, the subsistence farmers are often lacking means of transport to commercialize their product over large distances. The cocaine merchants provided transport (the farmers could sell their product in their port) and pesticides to give the farmers the ability to produce the quantity of leaves they needed.

Because of the fact that the production and commercialisation of the coca leaf is illegal, for some families it became an activity with a high degree of risk. As such, the commercialisation of coca

---

<sup>26</sup> Certainly so for Huitoto, less important for Kichua

<sup>27</sup> A *maloca* is a traditional communal house (oval shape), used for reunions and ceremonies. From the visited communities, only Puerto Belén, on the Colombian bank, has a *maloca*. The other communities also have a communal house, but the typical oval shape and construction is absent and the specific, traditional use has decreased in importance.

induced a severe social distortion in the region. Moreover, today, the newest technologies are applied to detect the coca fields located in one of the most remote regions of the world. Governments of the most important countries of coca production (Bolivia, Peru, Colombia and Venezuela) are financially supported by certain western nations to combat the production of coca (Atkins, 1996, p.13). In practice, farmers see their yield being lost and family or community members brought to prison.

The situation nowadays differs from region to region. Some families persist in the cultivation of coca leafs for commercialisation, because the risks are rather low or do not counterbalance the opportunities. Other families are looking for an alternative marketable crop to maintain their livelihood conditions at a basic level.

The question heading this paragraph can be read with a different emphasis: why should *rice* be the alternative for coca? VZW Putumayo would probably answer that this question should be responded by the indigenous communities. After all, the initiative to start with a 'rice project' (a suggestion formulated after intensive discussion in the communities of San Francisco de Ere, Ere and Puerto Limón), rather than 'a rice project as an alternative for coca' (VZW Putumayo saw the opportunity to elaborate the project as an economic stable alternative for the insecure coca economy) came from the indigenous communities themselves. However, a question that should be put to all parties is if rice *can* be an alternative for coca.

### **IV.3 Why *can* the cultivation of rice be an alternative for the cultivation of coca?**

In good production conditions the gross gains of one hectare of rice are similar to those of one hectare of coca. One hectare -in ideal circumstances- produces 2400 kg coca leafs (price per kg € 0.25) and 1000 kg peeled rice (price per kg € 0.6). Thus, given the current prices, both make an average gain of € 600 per hectare. An important difference lies in the fact that ideal circumstances in coca fields are obtained through intensive use of expensive pesticides, while rice fields require intensive labour activity; the economic value of labour, as well as the quantity and type of pesticides used in the field, are difficult to quantify in a production system which is basically aimed at subsistence. If we consider the monetary input for labour as non existent (because of the subsistence situation and *minga* system), the net value of one hectare of coca will be significantly lower than the value of one hectare of rice. On the other hand, coca leafs can be harvested ideally six to nine times a year, while rice only twice. Another important factor is the fact that the market situation for rice (and consequently the type of risk the farmer can be confronted with) strongly differs from the clandestine market situation of coca. The degree of influence of this will probably, as mentioned in the previous paragraph, be region-dependent.

As such, the question if rice can -economically- be an alternative for coca can not be answered simply by making basic calculations. It is clear that other qualitative factors will have a strong influence and that the answer on this question can only be found afterwards, in the reaction of the farmers when the

alternative is offered in an appropriate and attractive way. With this, the challenge but also the responsibility of VZW Putumayo with respect to this project has come to the surface. Moreover, this fact justifies the necessity -at this stage- of an analysis of the project and suggestions for new incentives.

#### **IV.4 Project history**

The first contacts (2002) between the indigenous organisation FECONAFROPU (*Federación de las Comunidades Nativas Fronterizas del Putumayo*<sup>28</sup>) and a Belgian delegation of two law students resulted in an engagement to start a small Belgian association; the mission of this association was to contribute to the further development of indigenous organisations of the Putumayo region. Initially, organisations as FECONAFROPU, OISPE (*Organización Indígena Secoya Perú*<sup>29</sup>), MOK+A+ and OIKAPIR (*Organización Indígena Kichua del Alto Putumayo Inti Runa*<sup>30</sup>) were supported in mobility and organisation of congresses, but soon there came an interest from both the indigenous organisations and the Belgian association to set up concrete projects in the areas of education, agriculture and medicine, which would strengthen both the indigenous organisations and the indigenous families of the communities. The project 'rice as an alternative for coca' should be situated in the context of this mission; it is a cooperation between the indigenous organisation MOK+A+ and VZW Putumayo (see Picture 5). MOK+A+ is an organisation of four Kichua and Huitoto communities. The name MOK+A+ refers to the name in the Huitoto language of an ant species (*Sitarakui*) which symbolizes the large group of people working together.

The first suggestions concerning a rice project came from the organisation MOK+A+ in August 2004. At that moment, the communities Ere, San Francisco de Ere and Puerto Limón were involved. In January 2005, plans were made concrete; from that moment, an agricultural engineer from Iquitos was engaged to investigate the local market, elaborate the structural context of the rice project and support the farmers in the practice of rice cultivation. When the communities agreed together with the agricultural engineer that the rice peeling machine would be installed in the community of San Francisco de Ere because of its central location among the participating communities and its easy accessibility for other people, and not in the community of Ere, the community of Ere disagreed with this decision and was not willing to further collaborate in the project. Afterwards, the community of Puerto Alegre was interested in collaboration and got involved in the month of May. Through significant participation in the activities to build the communal enterprise (participation in reunions as well as participation in communal works), a number of 23 individuals, 15 men and 8 women, of the three communities became shareholders. As it is based on the individual choice, it does not entail the

---

<sup>28</sup> Federation of the native frontier communities of the Putumayo

<sup>29</sup> Indigenous Organisation Secoya Peru

<sup>30</sup> Indigenous Kichua Organisation of the Alto Putumayo, people of the sun (later changed in FIKAPIR, *Federación Indígena Kichua del Alto Putumayo Inti Runa*)

whole community, so at least a theoretical distinction is created within the community between shareholders (*socios*) and 'others' (*non-socios*). The communal enterprise provides equal services at an equal cost for both *socios* and *non-socios*. However, *socios* are shareholders of the enterprise, and as such are responsible for the wellbeing of the enterprise (they have the right to vote concerning important decisions, while *non-socios* can only let hear their voice), and will profit in case the enterprise is growing.

The legalisation of the statutes of the communal enterprise MOK+A+ took place on the 30<sup>th</sup> of June 2005. These statutes constitute the legal base of the communal enterprise and contain the names of its directors and shareholders. In July 2005, the rice peeling machine arrived in the community of San Francisco de Ere (see Picture 6). After the installation, a group of six persons was instructed to manage the machine by a technical expert. The elaboration of the communal enterprise structure, which includes a leasing contract of the technical machinery, together with the building of the shed were finalized in August 2005.

#### **IV.5 Management and recent evolution of the communal enterprise MOK+A+**

This communal enterprise is the first enterprise that exists in this region. The enterprise is registered conform the Peruvian legal system. The indigenous families are the owners of the communal enterprise and should have the entire management in their own hands, although a transition period is calculated. The building of the enterprise environment counts on a collective consciousness among the involved communities and families; the communal enterprise relies on the active participation -in a collective or individual way- of all of the individual owners for the interest and wellbeing of the enterprise.

The board of directors (which is not contracted but sworn) consists of a president, a secretary of economy, a secretary of deeds, a 'controller' (*fiscal*) and a communicator (*vocal*). Two contracted persons work for the communal enterprise, namely the mechanic and the general manager (the latter may not be a shareholder). The contracted persons are the only persons who receive a salary constituting of a percentage (7% and 10% respectively) of the communal enterprise's income.

From August 2005 (the start of the activity) until March 2006, the management of the enterprise was guided by a Peruvian agricultural engineer. His task was primarily an organisational and administrative one, and focussed on the production system, the communal enterprise environment and the market. From April until June 2006, neither a general manager nor a mechanic was contracted because of insufficient coordination and disagreement in the board of directors; these tasks were executed by respectively the secretary of economy and a volunteer. From July until now (November), a general manager and a mechanic have been recruited. The following table gives an overview of the services provided by the communal enterprise since its origin (Table 6).

PART II: BACKGROUND

| Name                  | Date       | Community           | Production (kg) |
|-----------------------|------------|---------------------|-----------------|
| Arsénio Ajón          | 20-09-2005 | Puerto Alegre       | 500             |
| Edgar Chimbo          | 21-09-2005 | Puerto Limón        | 120             |
| Etério Gutierrez      | 22-09-2005 | Ere                 | 60              |
| Ronaldo Papa          | 26-09-2005 | N. Porvenir         | 985             |
| Galindo Sosa          | 02-10-2005 | Ere                 | 321             |
| Etério Gutierrez      | 02-10-2005 | Ere                 | 110             |
| José Monge            | 15-10-2005 | Flor de Agosto      | 460             |
| Reynaldo              | 19-10-2005 | Flor de Agosto      | 619             |
| Francisco Garcia      | 27-10-2005 | Puerto Arica        | 1380            |
| Comunidad Limón       | 04-12-2005 | Puerto Limón        | 564             |
| Julia Paredes         | 04-12-2005 | Puerto Limón        | 103             |
| Reynaldo              | 07-12-2005 | Flor de Agosto      | 600             |
| Victor Alvarez        | 10-12-2005 | S. Francisco de Ere | 161             |
| Ananias               | 17-12-2005 | Santa Lucía         | 263             |
| Orlando Vega          | 24-12-2005 | S. Francisco de Ere | 45              |
| Victor Alvarez        | 26-12-2005 | S. Francisco de Ere | 20              |
| Meraldo Aspejo        | 07-01-2006 | Ere                 | 317             |
| Micaela Gutierrez     | 11-01-2006 | Ere                 | 140             |
| Orlando Vega          | 09-02-2006 | S. Francisco de Ere | 94              |
| Meraldo Aspejo        | 16-02-2006 | Ere                 | 88              |
| Teodoro Gutierrez     | 17-02-2006 | Ere                 | 73              |
| Jesús Rios            | 19-02-2006 | San Miguel          | 50              |
| Cesar Ajon            | 20-02-2006 | Puerto Alegre       | 120             |
| Teodoro Gutierrez     | 22-02-2006 | Ere                 | 333             |
| Temístocles Sosa      | 01-04-2006 | Ere                 | 151             |
| Galindo Sosa          | 01-04-2006 | Ere                 | 345             |
| Juan Carlos Juarecade | 02-04-2006 | S. Francisco de Ere | 349             |
| Teodoro Gutierrez     | 02-04-2006 | Ere                 | 224             |
| Froilán Sosa          | 17-04-2006 | Puerto Limón        | 664             |
| Rocío Gutierrez       | 27-04-2006 | S. Francisco de Ere | 52              |
| Gabriela Sosa         | 01-05-2006 | Puerto Limón        | 111             |
| Rusbel Chimbo         | 12-05-2006 | Puerto Limón        | 344             |
| Etério Gutierrez      | 18-06-2006 | Ere                 | 241             |
| Froilán Sosa          | 24-06-2006 | Puerto Limón        | 407             |
| Lida Sosa             | 01-07-2006 | S. Francisco de Ere | 43              |
| Orlando Vega          | 15-07-2006 | S. Francisco de Ere | 349             |
| Etério Gutierrez      | 17-07-2006 | Ere                 | 402             |
| Segundo Hernandez     | 12-08-2006 | Puerto Alegre       | 67              |
| António Sosa          | 29-08-2006 | Puerto Limón        | 703             |
| Felix Machoa          | 29-08-2006 | Puerto Limón        | 150             |
| Arsénio Ajón          | 10-09-2006 | Puerto Alegre       | 724             |
| <b>TOTAL</b>          |            |                     | <b>12852</b>    |

**Table 6: Chronological overview of the farmers from different communities which have visited the communal enterprise to make use of the peeling services. The quantity of peeled rice they produced is indicated in the right column.**

These data are an overview of exactly one year of activity of the communal enterprise. The foregoing table is very useful information in the sense that it gives an idea of the range or regional significance of the project. Almost 13 tons of peeled rice were produced and locally consumed, mostly in El Estrecho and in the productive communities. A total of 29 families belonging to 9 communities made at least one time use of the services of the communal enterprise. It is remarkable, that the community of Ere, which in the first instance decided not to cooperate further in the project, has the highest production of rice. Also, two communities located downstream of El Estrecho (San Miguel and Nuevo Porvenir, out of the study area) were occasional visitors of the communal enterprise. The communities hosting the shareholders of the enterprise (Puerto Limón, San Francisco de Ere and Puerto Alegre) are not necessarily the most productive communities.

## PART III: METHODOLOGY

### Chapter V On field research and data collection

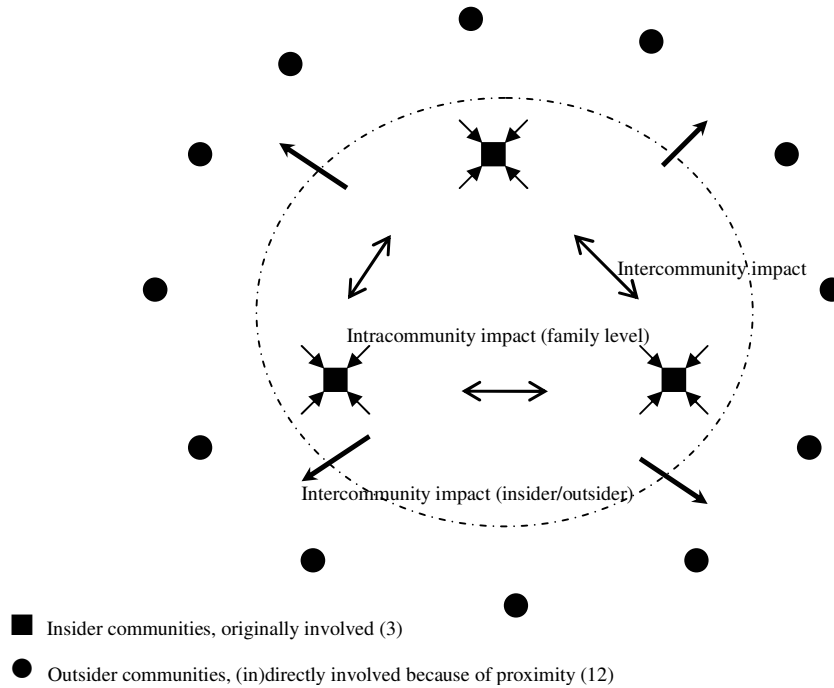
In the following paragraphs, the methodology will be described. This methodology was chosen because it resulted to be an appropriate way of assessing the aspects of the ecological analysis as stated in the objective and operational research questions of this study.

#### V.1 General levels of study

**Intensive research** was done in the communities Puerto Limón, San Francisco de Ere and Puerto Alegre. These communities are directly and originally involved in the project and constitute the core of the MOK+A+ communal enterprise. During this research, information was collected about the production system in general and rice cultivation in particular, the community organisation and the communal enterprise environment.

It was decided to collect the information on three levels. First, data were collected on the intercommunity level. Therefore, specific questions were answered in the general assembly of the communal enterprise, where all the shareholders -and also other interested persons- were present. Consequently, every family of these three communities was interviewed in their house or (if possible) in the field. Finally, a similar assessment was made in a communal reunion (Figure 9).

An **exploring investigation** was executed in the other (12) communities which are not originally but (in)directly involved because they are situated in the proximity of both the seat of the enterprise (San Francisco de Ere) and the market of El Estrecho. It concerns the communities of (in upstream direction) Puerto Aurora, Puerto Elvira, Siete de Mayo, Bagazan, Roca Fuerte (Piedras), Molano, Flor de Agosto, Santa Lucia, Ocho de Diciembre, Ere, Puerto Belén and Puerto Soledad. The investigation in these communities was limited to a first acquaintance in the form of a communal meeting for which all members of the community were invited (Figure 9). Here, information was limited to a subjective assessment of the organisational status of the community and of the motivation to be involved in the project. Also, these visits were intended to inform the communities about the possibilities and services the project can offer to them (campaign). Ultimately, the role of the Belgian-Peruvian organisation VZW Putumayo was clarified, as well as its vision and mission in this particular project.



**Figure 9: Schematic representation of the different levels of study in the insider/originally involved communities and the outsider/(in)directly involved communities.**

## V.2 Participatory observation

The research method can be described as ‘participatory observation’ (Dessein, 2006, p.32). This means that participating is the way through which situations occur where analysing activities such as listening, observing and thinking result in a better return. Participation should be seen in this context as joining daily life activities in the form of contributing to hunting-gathering, helping in the field and taking initiatives where the local people often do not expect it (preparing food, navigating the canoe, etc.). Through participatory observation, it is possible to both experience details and situate these in the larger, holistic context.

The social and institutional context was an important factor of respect. When arriving in a community, the *cacique* and *mujer líder* were respected as the authorities of the community. The reason for the visit and if necessary some organisational issues were communicated first to these authorities. Also within the structure of the communal enterprise, functions and tasks of the management team were respected when certain issues were discussed or changes proposed. As such, during the campaign, the president and general manager of the communal enterprise accompanied the Belgian delegation, as they are the principal representatives of the project.

The Belgian delegation consisted of three bio-engineers, of which two were visiting the project for the first time<sup>31</sup>. Within the Belgian delegation, the rules as formulated in the ‘code of conduct’ of the organisation were respected at every moment. This code of conduct states some basic and often

<sup>31</sup> I had the opportunity in august 2005 to get to know the project during one week.

evident rules concerning intercultural contact and consumption behaviour (non-organic litter and alcohol).

### **V.3 Collection of data**

The information was collected through reunions and interviews. Reunions on the intercommunal level were chaired by the president and general manager of the communal enterprise. Reunions on the communal level were directed by the *cacique* and the Belgian delegation. The interviews always were of an informal nature, in order to be able to adjust and specify the questions when necessary. An informal approach proved to be appropriate, because very often, a question had to be repeated various times because the way of answering indicated that the question was not understood as it was intended. Also, because of the complexity and connectedness of various factors within the analysis and the particularity of each family and community, a high degree of flexibility in the interview turned out to be a good choice. The objective of the interview was gaining information concerning family issues as well as about the community. To analyse the situation on the communal level, information was used from the communal reunion as well as from the personal interviews. The information was noted down immediately during the interview.

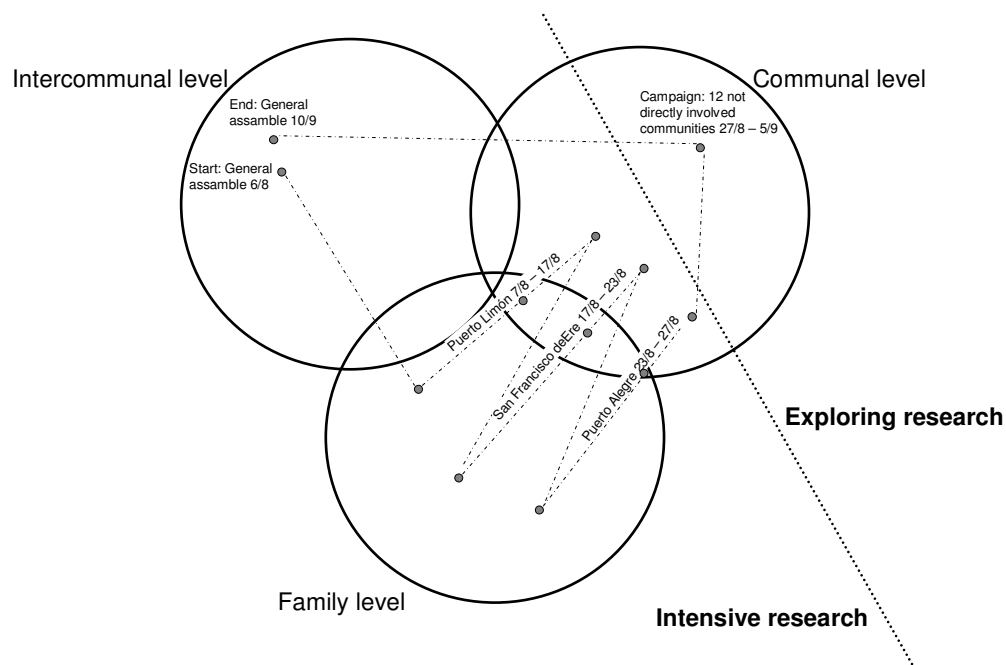
The initial questions were searching for problems as experienced by the members of the communities. Problem detection, as such, was the main focus to subsequently come to an analysis of the project. Although mostly overlapping, sometimes different types of problems or different aspects of specific problems were mentioned when the interview was done in the general assembly of the enterprise, in a communal reunion or in the presence of only one family; this indicates that it was useful to focus on all of the three levels. Hence, none of them apart provides a complete understanding of the impact of the project.

### **V.4 Time scheme**

Most of the time was spent in the three MOK+A+ communities (see time table in annex 1). The idea was to start at the intercommunal level of the three originally involved communities, with a general assembly to have an overview and explain our working plans to the people. As San Francisco de Ere is located between Puerto Alegre and Puerto Limón, the intercommunity activity (general assemblies) was organised there. Afterwards, the research on communal level took place simultaneously with the research on family level; therefore, the communities of Puerto Limón, San Francisco de Ere and Puerto Alegre were visited intensively. The intensive investigation took more time in Puerto Limón, because it was the first community that was analysed; moreover, this community was at that moment more intensively involved in the rice cultivation activity than the communities San Francisco de Ere and Puerto Alegre.

Afterwards, the exploring research started with the visiting of all (12) not originally involved communities. Here, only a few hours were spent per community. As soon as a representative number of people was brought together, a small reunion was started, which generally took between one hour and a half and two hours and a half. Because most of the people are out fishing, hunting or working in their field from 8 a.m. until 5 p.m., the reunions always took place in the early morning or in the evening. In case we arrived during the day, the time we had to wait was used for a first informal assessment of the interest and activities of the community, together with the people that were present at the moment.

To make the circle complete, we finished as we started with a general assembly on the intercommunal level, with the three originally involved communities. The following figure (Figure 10) gives an overview with time indications of the research path.



**Figure 10: Schematic summary and chronology of the research path (06.08.2006-10.09.2006), including the three levels of study, the distinction between intensive research and exploring research and chronological indications.**

## V.5 Conclusion

Various levels of study were considered during this ecological analysis. Furthermore, the originally involved communities were intensively investigated, while the not originally and (in)directly involved communities were visited for an exploring research. Information was gathered through formal reunions on the intercommunal and communal level and informal interviews on the family level, if possible on the field. The research path has a circular form, and passes through stages of intensive research on the intercommunal, family and communal level respectively, subsequently an exploring

research on the communal level, to end (equally as it started) with an assessment of intensive research on the intercommunal level.

## **PART IV: ECOLOGICAL ANALYSIS**

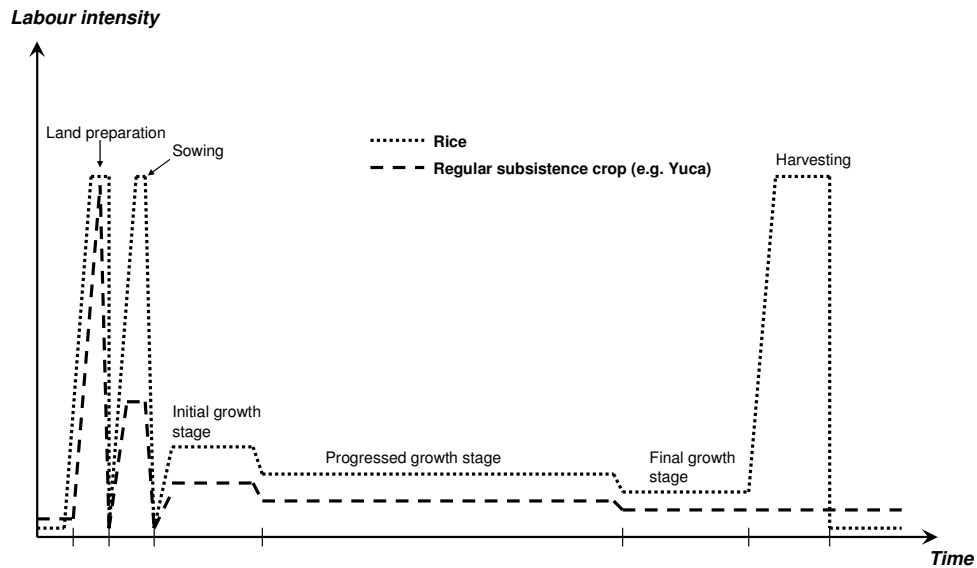
### **Chapter VI Actors of change and ecological analysis**

In this analysis, discrepancies and similarities are sought between the local logic (as described in chapters II and III on ecological setting and indigenous peoples respectively) and the process of change induced by the project. This chapter therefore will first give a description of the most important “actors of change” induced by this specific project context. This will be the basis for a subsequent analysis of the reaction of the ecological system. Again, the objective and operational research questions are the building blocks of this chapter.

#### **VI.1 Actors of change**

##### **VI.1.1 The production system**

A first and important element of change in the production system is the fact that the cultivation of rice with market directed intentions deals with more and higher **peak moments** than subsistence production; rice cultivation is as such a labour intensive activity. Besides the peak moment of land preparation, sowing, weeding and harvesting are other labour intensive activities that need to be done within a very limited time range. During the growing period, a constant awareness for prevention and detection of plagues results in a continued moderate labour intensity. The following figure illustrates the labour intensity in function of time progression (one cycle) of rice cultivation; in the graph, a comparison is made also with the cultivation of a subsistence crop.



**Figure 11: Labour intensity and peak moments during various stages of the cultivation period of rice. A rudimentary comparison<sup>32</sup> is made with the cultivation of a subsistence crop.**

Also, **more fields** have to be prepared for cultivation. Even if we suppose that rice cultivation is replacing the earlier coca fields, the frequency of preparation of rice fields and the intensity of work that is needed for this is higher than for the capital intensive (use of extremely toxic but effective herbicides and other pesticides) coca fields. People as such will spend more time in the forest preparing fields for cultivation than before.

Thirdly, although rice finds relatively good to excellent natural growing conditions<sup>33</sup> in these tropical soils, intensive leaching makes it difficult to maintain the **fertility** for an extended time period. On soils in uplands (*altura*) that never inundate, two harvests of rice are possible; this can eventually be followed by extensive cultivation of banana or *yuca* for three years. On the soils of the river floodplains (*ceticales*), also two harvests per year are possible; this can be done for an undetermined (though certainly limited) number of years. Also, the occurrence of **plagues** will be determining in the choice of the location of the fields.

Ultimately, the rice production system allows for the establishment of **communal fields**, aimed at significant income generation destined for communal issues (medicines, educational material, agricultural equipment, etc). Besides this, communal fields create the opportunity for experience sharing and discussing as all farmers of the community are involved in the decision making.

<sup>32</sup> The graph of labour intensity in time of the cultivation of a subsistence crop lacks important nuances as labour is not only spread in time, but also in space.

<sup>33</sup> With good to excellent natural growing conditions is meant that moisture conditions are appropriate as well as the nutritional conditions on recently cleared land. These conditions are in more artificial conditions (irrigation farming, use of fertilizer), off course, far better.

### **VI.1.2 The market and the communal enterprise environment**

Cash cropping, in contrast with subsistence cultivation, implies that the production is sold on the market. As a consequence, the **physical distance** to the market should be bridged in one or another way. Up to date price and stock information from the market can be strategically important. They will experience that the quality of their production will have a significant influence on the market value of their harvest.

Also, the farmer profits from marketing skills for the selling of his product. Undoubtedly, certain maybe unexplored markets will have better conditions than others. The farmers will have to take into account that the market will be destabilized and consequently react with the supply of cheap and locally produced rice. Thus, access to the market, through **know-how and market skills**, will be important for the farmer's success and motivation for rice cultivation.

An important element in the enterprise environment as an actor of change is the fact that the indigenous families are the owners of the communal enterprise. The responsibility to **manage** an enterprise and the necessity for a **collective consciousness** are certainly elements that have an influence on the livelihood of every participating family.

### **VI.1.3 Intercultural contact**

The intervention of the Belgian organisation towards supporting the local initiatives for achieving better living conditions is temporary and has its own limits. Since local ownership of every initiative of VZW Putumayo in the region is the ultimate goal, the contribution is limited in time. The duration of the engagement of the Belgian organisation is however not defined, because sustainability of the projects should be assured before the support is stopped. Also, VZW Putumayo, as a non-profit organisation, cannot count on regular financial support from the Belgian government. The financial and human capacity is as such limited, and logically limits the opportunities in the field.

Intercultural contact exists between the Belgian organisation and the indigenous communities, between or within the indigenous communities (Huitoto, Kichua and mestizo people), between the Belgian organisation and its sister organisation in Iquitos (Putumayo Perú) and between Putumayo Perú and the indigenous communities. Within the intercultural contacts, an attempt is made to interpret intercultural contact as respecting differences on the one hand and recognising human elements which are universal on the other. Interculturality in this context of a development initiative is seen as exchanging ideas and methodologies, an opportunity for reaching goals and increased sustainability of this project.

## **VI.2 Ecological analysis**

The most important and drastic actors of change will be analysed here as to the reaction they cause in the ecological environment. In the former paragraphs, various aspects were detected, appearing in

three actors of change: (1) the production system, (2) the legal market and communal enterprise environment and (3) intercultural contact. The following paragraphs will analyse the local ecological reaction to these (actors of) changes.

### VI.2.1 The production system

An important observation is that, if all initiatives from the farmers trying out small adaptive techniques in the production system are taken together, farmers seem to be extremely inventive and successful in coping with the elements of change that occur in the production system. Every encountered problem presented in the following analysis has a local solution, brought up by at least one of the farmers. As such, every farmer is inventive in certain aspects of rice cultivation, and is consequently a source of important information for his colleagues. However, successful adaptations tried out by individual farmers do not seem to diffuse to the community or intercommunal level.

The *minga* seems to be a very flexible system to cope with an increase in labour intensive activities and **peak moments**, in the first place the clearing of forest for the preparation of fields. On community level, adaptations of the *minga* system may be desirable because of the increased frequency of organisation of *mingas*. The community of Puerto Limón has agreed that the *mingero* should neither provide in food nor *masato* for his *minga* if it concerns a *minga* on a field destined for rice cultivation. The participating families eat in their house in the morning before the *minga* starts and take their own *masato* to the fields. The *masato* is still an element of exchange during the *minga*, but now in a direct reciprocal way (between all participating families). The communities of Puerto Alegre and San Francisco de Ere have not yet felt the need for adapting the *minga* system, probably because production commitments were not realised.

Where the *minga* is effective for clearing activities, this is not always the case in other peak moments like sowing (to a lesser extent) or harvesting. Sowing rice and above all harvesting should be done in a very conscientious way if maximal gains want to be achieved. However, the confidence that other families have the same intentions is not always present and farmers are in some cases looking for own solutions for the labour intensive sowing and harvesting.

One of the solutions that farmers adopted to smoothen the labour peak moments is spreading in time. Two farmers (one in Puerto Limón, the other in Puerto Alegre) are experimenting successfully with the spreading of the sowing (and consequently harvesting) period. The field is divided in two parts and sowing of the second part takes place 45 to 60 days after sowing the first part. In this way, the number of labour peaks is multiplied by two, but the labour intensity of each peak is strongly reduced. A positive side effect is that the surface of the crop in a certain growing stage is smaller and thus less vulnerable or easier to control in relation to plagues.

The majority of the farmers seem to realise that a good harvest starts with a good **choice of location and size of the field**. For rice cultivation, most farmers prefer the river floodplains or regularly inundating land (*ceticales*). These fields can be used year after year, so that land clearing is not as

time consuming as in the ancient uplands (*altura*). Also, the proximity of the river makes it easier to transport the rice after harvesting. Moreover, insect plagues are rare. However, the plagues on the river banks occur in the form of birds and mammals (*ronsoco*), and are not easy to combat (see further). Only Puerto Limón is free of *ronsocos* as this community is located at lake (*cocha*), relatively far from the river.

For various reasons, a minority of farmers prefers the uplands (*altura*) for their rice fields, although land clearing is significantly harder work there than in the *ceticales*. The surface of *ceticales* in the community of San Francisco de Ere is rather scarce<sup>34</sup>. Also, the abundance of *ronsoco* in *ceticales* motivates people to seek out productive land in a higher and dryer environment (Puerto Alegre and San Francisco de Ere). In all communities, people profit from the fact that subsistence banana and *yuca* fields (which are crops that grow better on the higher and dryer soils) should be renewed on a regular basis too; the hard work of preparing land results in a higher return if rice can be cultivated for two years before banana and *yuca* are sown. When soil fertility visibly decreases to a level which is insufficient for rice cultivation, banana and *yuca* are sown gradually; harvesting of the first *yuca* or banana bunch can take place shortly after harvesting the rice. The traditional customs of field rotation (cultivation for a limited time period, afterwards a significantly longer fallow period) also seem to be applied to fields under rice cultivation.

Most of the farmers seem to strive to a field surface of one hectare, though the majority of farmers overestimate their field size, or have a wrong idea about what a hectare is. They see a hectare as a one-dimensional unit, not as a surface unit. If a field has a length of 100m, farmers indicate that the field is one hectare in its length. Farmers are aware of the fact that one hectare of clearing does not imply one hectare of harvest; after all, the standing forest inhibits the growing of rice at the borders of the field. This is not problematic *in se*, but problems may arise when farmers overestimate their harvest because of a wrong calculation of their cultivated surface.

Various types of rice seeds (Tres mesinos, Raixora, Capirona) are present in the communities of Puerto Limón, Ere, San Francisco de Ere and Puerto Alegre. A growing consciousness is present concerning the specificity of each seed type. Tres Mesinos, e.g. is used in the floodplains because it has a shorter production cycle (three months) than the highly productive Capirona variety. Exchange of seeds and propagation does not pose any problems; everybody can obtain seeds of the variety he wants.

**Plagues** cause some difficulties for the farmers. A distinction can be made between insect plagues (more prevalent in *restinga* or *altura*) and plagues caused by other animals (more common in *ceticales*). The former are caused by the *babosa* and *chinchí*. The development of leaves is inhibited when the plague attacks in the plant's initial growth stage; when the plague attacks just before

---

<sup>34</sup> The families of San Francisco de Ere therefore go cultivating the *ceticales* on the Colombian side of the river, in the territory of Puerto Belén. This has not posed any problem until now, but it can be problematic in the future.

flowering, the rice grains are partly black and not appropriate for consumption. The latter are caused predominantly by birds and the *ronsoco*. The *ronsoco* is a rodent with the size of a small pig and the look of a rat; the meat is proper for consumption, though only hunted when encountered by coincidence.

There are different possibilities to combat these plagues. Some farmers agree that a scarecrow can be effective but only for a limited time. Other farmers mention the use of chemical pesticides like *Furadan* (active element carbofuran). These products are intensively used for combating the plagues in coca plantations, and can be found on the Colombian market. The toxicity in the case of *Furadan* is extremely high, and these products are as such not suited for cultivation of food crops. Both insect plagues and birds or *ronsoco* can be combated by *Furadan*, but ecological consequences should be questioned. Moreover, this is a very expensive product and farmers feel uncomfortable because of the association with coca cultivation.

As is common in subsistence farming and slash and burn production systems, different crops are planted together in one field in an apparently random pattern. Also rice fields are seldom only producing rice. The fact that rice fields have to be regularly visited to control whether or not plagues are attacking makes it favourable for the subsistence cultivator that he/she can harvest some crops to provide nutrition for the family that day. Also, soil use is more economic because of reciprocal interaction between crop roots of different species. Table 7 gives an overview of other crops that were identified on a rice field in Puerto Limón (see Picture 7).

| Local name | Scientific name             |
|------------|-----------------------------|
| Ají dulce  | <i>Capsicum sp.</i>         |
| Cahua      | ?                           |
| Camote     | <i>Ipomea batatas</i>       |
| Cocona     | <i>Solanum tojiro</i>       |
| Frijol     | <i>Vicia sp.</i>            |
| Humarí     | ?                           |
| Maní       | <i>Arachis hypogaea</i>     |
| Palta      | <i>Persea sp.</i>           |
| Papaya     | <i>Carica papaya</i>        |
| Pepino     | <i>Solanum muricatum</i>    |
| Platano    | <i>Musa sp.</i>             |
| Sandía     | <i>Citrullus lanatus</i>    |
| Tomato     | <i>Solanum lycopersicum</i> |
| Yuca       | <i>Manihot esculenta</i>    |

**Table 7: Crop diversity in rice fields, observed in Puerto Limón.**

Many of the crops of table 7 have a good market value on the market of El Estrecho. Farmers can spread the risk by maintaining a high diversity of crops on their fields, and subsequently sell these products on the market.

Though coordination exists within the extended family concerning rice cultivation, **communal rice fields** are a difficult issue. Puerto Limón had a communal field last year, but will not repeat this because problems rose with community members' participation. Puerto Alegre will prepare a communal field but the *cacique* is a strong motivating force in this. Ocho de Diciembre had a communal field last year and was guided in this by the engineer of the project; when plagues attacked, nobody felt responsible and the production was lost entirely. However, they believe that communal fields are possible in the future. All other communities responded negatively if they were asked if they would be motivated to establish communal rice fields. Here, the community structure appears to be discordant again with family bounds and organisation.

### VI.2.2 The legal market and communal enterprise environment

The **physical connection** with the market, predominantly the one in El Estrecho, is sometimes problematic. Transport is certainly a difficult issue in the region, and the communal enterprise in particular can be a victim of this. After all, transport facilities should be assured to make it possible that a farmer brings his unpeeled rice to San Francisco de Ere. From there, the farmer should be able to bring his rice to the market<sup>35</sup>. Therefore, a boat is needed that is able to carry a heavy load (see Picture 8). Most communities do possess a canoe with sufficient capacities; in the other case, individual families are normally willing to loan their big canoe for a few days. If the farmer does not possess a motor or *peque-peque*, difficulties may arise. Borrowing a motor is not always easy -though not impossible- because of the high costs of reparation in case the motor is damaged. The *peque-peque* from the communal enterprise can be used under contract by every farmer, but other logistic problems (lack of gasoline or difficulties to go to San Francisco de Ere to pick up the *peque-peque*) make this in the majority of cases impossible. To take advantage of the downstream conditions to go to the market without using a motor is theoretically possible, but can take up to three days of time.

Certain elements indicate that families encounter problems with the modes of exchange of the legal market (**know-how and market skills**). Because of the large distance to the market, farmers prefer to sell large quantities at once. As such, income peaks, rather than a regular and small wage are a consequence. At this moment, it is difficult to assess wherefore this income is used. Certain elements indicate however, that farmers are willing to invest in logistic and technical equipment as a *peque-peque*<sup>36</sup> or motorised saw. This equipment can be bought via contact persons in El Estrecho, but

---

<sup>35</sup> With a heavy load, 6 hours are needed to go downstream from the communal enterprise in San Francisco de Ere to the market in El Estrecho.

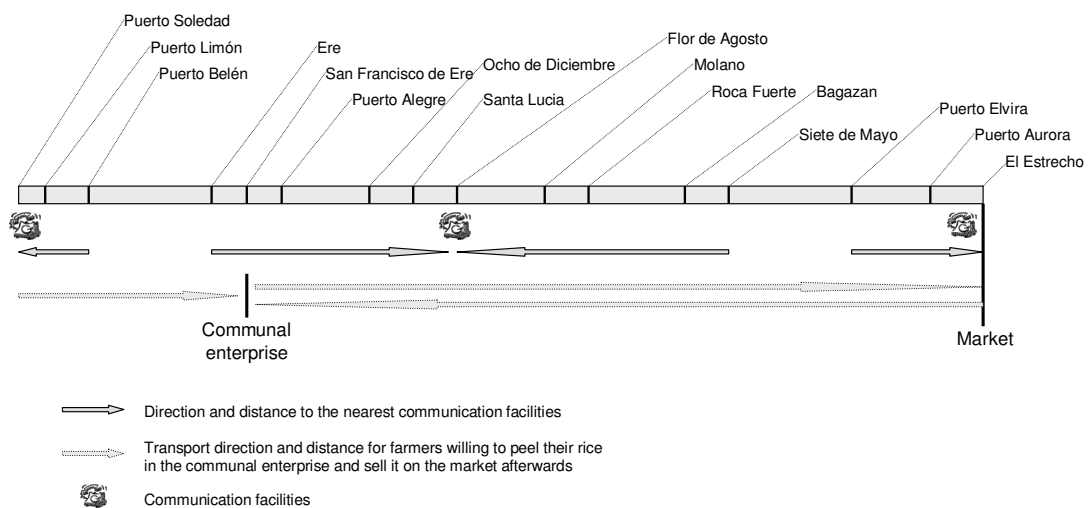
<sup>36</sup> A *peque-peque* is a small and economic motor that can be used on a canoe for transport. With the production of 1,5 ha of rice, in good circumstances and sold for a normal market price, a farmer is able to buy a *peque-peque* (± 1500 nuevo soles).

originates from the market of Iquitos. Yet the access of farmers to this market is problematic, as certain farmers have already asked if the communal enterprise can not provide these services to them. The reason for this is probably the fact that farmers do not feel comfortable in the contact with this market and the exchange of large amounts of money. For the former, the necessity to communicate and negotiate without seeing the exchange product can be a difficult element. For the latter, the connection between the farmer's production and the product he is willing to invest in is probably blurred through the large amount of money. Concretely, they propose that the enterprise receives a negotiated quantity of rice in exchange of e.g. a *peque-peque*. This way, farmers are neither confronted with the foreign market nor with the exchange of large amounts of money.

Until now, no problems were noted where rice could not be sold on the market. A close follow-up, however, is needed, because the market will certainly react when the supply of rice becomes more regular and the producers of other regions adapt their prices to the new market conditions.

Closely connected with the problems of transport are limited communication provisions. Although a satellite radio is present in El Estrecho (various, but services are not for free), Flor de Agosto and Puerto Soledad, these provisions are lacking in the shed of the communal enterprise. There exists a strong organisational need to establish a satellite connection in the communal enterprise, because farmers can be far better informed about the actual presence of facilities and as such will not make any unnecessary transport costs (Figure 12). Also, communication would then be possible from Iquitos, which would be faster than leaving messages in El Estrecho, that may get lost there or be only delivered weeks after they are sent.

The MOK+A+ communication and transport network



**Figure 12: The communication and transport network in the location of study. Communication facilities are present on strategic points, although a strong need is present to establish a satellite radio in the communal enterprise too.**

Certainly, the dependency on **collective consciousness** and active participation to build the enterprise environment is a point of vulnerability of the enterprise. The absence of a collective consciousness or problems to take initiatives towards 'active participation' may be the reason for this, but it is probably a mix of both.

The collective consciousness like it appears in the *minga* differs from the one the communal enterprise counts on. After all, reciprocity is a short term event in the *minga*, and often a long-term event in the communal enterprise structure. Hence, people probably have difficulties with the long-term and linear focus of the enterprise structure. Therefore, in our perception of lacking collective consciousness, the word 'individualism' is often used. Because of this reason, the term individualism is used to blame people for something they do not identify with, namely a way of thinking or structure they have never known in their history and as such is difficult to feel familiar with today.

Refusing to accept that the failure of active participation is due to individualism, one can argue that active participation *in se* is not a problem; however, taking initiatives for it is seldom or never done. It is clear that the people feel far more comfortable with a situation where an external or guiding person directs them and tells them what to do. As such, they wait for a *patron* to take the initiatives for participation in the communal enterprise structure. Also, people would not accept it when one of them would propose an initiative; he would be reproached to behave like their *patron*, while he is 'one of them'. However, the enterprise statutes are not organised around a *patron*-personality, and this is probably not what the people expect. The process of ownership is certainly not yet finalized, but at most just initiated.

On the other hand, if we still believe that at least a part of the reason of the absence of a collective consciousness and active participation is due to individualism, it can be explained by the environmental conditions. After all, families are obliged to engage in subsistence activities every day, in an environment where hard working is necessary, illness is often disastrous and unexpected circumstances have severe consequences. Social security<sup>37</sup> is certainly present for emergency circumstances, but individualism is just as much a rational reaction when it comes to participation in something new and unknown like the communal enterprise environment. Also, again the somewhat artificial social entity of the community is probably the reason why social strength can not be found where we expect it to occur.

The **management** of the communal enterprise is a critical point in the process of the project. The intentions of the Belgian organisation to create an enterprise from which the local people are not only the owners but also the managers have not yet found stable grounds. Until now, the communal enterprise has failed in its management for different reasons. Firstly, understanding the processes of income/expenses and at the same time administrating these, requires capacities and skills. Hence not everyone is able to manage these processes; people with these abilities and at the same time

---

<sup>37</sup> It is not clear if this is limited to family bonds, and what the exact role of the community is.

motivation are few, but certainly can be found in the communities. Secondly, responsibility is very important for evident practical reasons; the general manager also supervises the capital of the enterprise. Alcoholism<sup>38</sup> is the prime factor why money from an entity like the communal enterprise is not safe when it is in the hands of any male representative. Therefore, the communal enterprise was not able to build up its capital like it was expected to do. As such, the general manager should be a responsible person, but also someone in whom other people trust. Women are probably better placed for this function, but can not easily be convinced to accept this public task.

To conclude the analysis of the market and the communal enterprise environment as actor of change, it is necessary to say that especially the coca industry is able to involve the majority of the indigenous farmers. It is true that the indigenous farmers became involved in the coca cultivation because of a necessity; after all, the *narcotráfico* environment is an extremely violent one and if it were economically viable, the families would not hesitate to change to an alternative. However, what we can learn from the coca industry is the fact that it is extremely efficient in providing an integrated coca production environment to the subsistence farmer.

How were the coca *patrons* able to engage the subsistence farmer to cultivate a capital intensive crop with a low market price? First of all, the *patrons* make use of the subsistence producer as a very cheap labour force. If nutritional needs are answered in subsistence economies, the extra income is welcome -the more the better of course- but its value is not standardized as it would be in the capitalist market economy. Secondly, the problem of transport does not exist because of the fact that the coca merchants take this as their responsibility. The merchants pay the farmer for the product in the port in front of the farmer's house, and the mobility of the merchants makes it possible to bring whatever a farmer needs for his production (herbicides, insecticides and products for the chemical processing); again, these are elements that make it possible for the merchant to keep farmers' wages low.

### **VI.2.3 Intercultural contact**

*Pela-cara* is the local term in Spanish to determine the bad intentions of foreign people in the region. Literally, it means 'face-peelers', and impressive stories exist about people -children, women and men- that have disappeared and later found on the bottom of the river. Their faces were stolen; others say that also the organs were taken away. It is really a factor of fear in the communities along the Putumayo river, and everyone knows the stories or has an experience with the *pela-caras*. Even in El Estrecho, the legend of the *pela-caras* is common, and the term has become a nickname for the few strangers arriving there. Only the children do not fear to shout it in the street, adults are more modest and probably sincerely afraid.

---

<sup>38</sup> Alcoholism is maybe a too strong word. Men are rarely addicted, because alcohol is often not available or men do not have the money to buy it. However, when alcohol is available, consumption is always uncontrolled... Women are not used to drink alcohol, and therefore seem to be more responsible in relation to money.

It is not only the fact of being a foreigner that makes one a *pela-cara*; it also incorporates fear for the unknown person involved with certain activities of which the objectives are not clear. It was also experienced that people that were informed via other communities about the activities of the Belgian organisation felt discriminated and in order to give the organisation a bad name, spread around that its members are *pela-caras*<sup>39</sup>. However, the stigma of the myth of the *pela-caras* disappears when a first contact has been possible. It is crucial that every community knows why a Belgian organisation is present in certain communities and what the objectives and perspectives are. Therefore, the exploring investigation in the not directly involved communities of the project was useful to create the necessary clearness in order to loose the stigma of being *pela-caras*.

The Belgian organisation had surely a constructive influence when it comes to technical and administrative assistance. Also, they have tried to create a structure that incorporates the possibility for the local people to function independently in the future. On the other hand, expectations have been sometimes too idealistic; after all, the communal enterprise structure seems to contain certain basic discrepancies with the local logic which are rather difficult to overcome (collective consciousness and active participation). Concerning this, the long-term and linear approach of the cash economy (where the communal enterprise belongs to) and the absence of the personality of the *patron* are the source of various problems that made the development of the enterprise more difficult than expected.

Ownership is a long-term process which needs long-term support and close coordination. Although the initiatives of VZW Putumayo were in the majority of cases taking into account the fact of ownership, support and coordination has been too fragmentary and little controlled. The remote location, the few communication possibilities and the failure now and then of the local network of informants are certainly important causes of this. On the other hand, the 'trial and error' methodology that was sometimes applied because of missing experience and coordination has certainly induced alertness by the involved people in the communities.

Very often, the expectations of in the first place mestizo villages and to a lesser extent the indigenous communities towards the Belgian organisation are unrealistic. From a foreign organisation, they expect *apoyo* (support), but they do not expect this in the form of a locally owned, sustainable project. They do not seem to take in count that the personal *apoyo* they ask towards the Belgian organisation conflicts with its vision and mission, and therefore would only create social distortion in the region. Again, patiently explaining the vision of VZW Putumayo does take away this misunderstanding.

The same misunderstanding seems to exist in Putumayo Perú, and even more difficult to eradicate than in the indigenous communities. The cooperation between VZW Putumayo and Putumayo Perú is based on a relation of confidence, because of the fact that there is no continued presence of a Belgian delegation in the region. Though problems in Iquitos did not exist because of the secure work of the treasurer, problems in the field were detected. The Belgian organisation was not able to control the

---

<sup>39</sup> This was the case in Puerto Soledad.

activities of the Putumayo Perú members in the Putumayo region, and misuse was the consequence of this. This resulted in tensions between the two sister organisations, but also between the indigenous communities (that were aware of the irregularities) and Putumayo Perú.

#### **VI.2.4 Conclusion**

Creating an economically viable alternative for coca goes further than finding a product that can be cultivated for a better price. Economic means in this context ‘understanding the local logic’, whereby the subsistence environment is an essential aspect; accepting this wider context of the economic environment and viewing it as an ‘integrated production environment’ is an essential element in the elaboration of a viable alternative.

## PART V: NEW INCENTIVES AND GENERAL CONCLUSION

### Chapter VII New incentives

From the foregoing ecological analysis, interesting conclusions can be drawn concerning the production system, the local market and communal enterprise environment as well as the intercultural contact between the indigenous communities and the Belgian organisation. It is likely that this information is used to innovate in the future development of the project 'rice as an alternative for coca'. Therefore, this chapter aims at formulating new incentives which should overcome the actual problems the project experiences.

#### VII.1 Integrated cooperative production environment

From the ecological analysis, we learned that the incorporation of rice cultivation in the production system is *in se* not problematic. Assembling the local knowledge concerning the preparation of effective biological pesticides and effective methods for preventing plagues and decreasing the peaks of intensive labour may be useful to fasten this process of getting experienced in rice cultivation. These initiatives should be taken in the short term, as farmers are now in the crucial phase of decision making. The choice between using chemicals or biological pesticides will be taken now, and farmers having good experiences with biological pesticides will most probably continue using them. Others will maybe, because of lacking information, being forced to use chemicals.

In practice the indigenous families experience problems with accepting this entity in their daily life and understanding the linear and long-term logic of the communal enterprise. Transforming the communal enterprise in a **cooperative** would neither mean a drastic change nor a step backwards in the development pathway of this project; however, it would require more organisational skills and coordination for the involved entities.

A cooperative has been defined in the International Co-operative Alliance (ICA) Statement on the Co-operative Identity as *an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise. Cooperatives are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity. In the tradition of their founders, co-operative members believe in the ethical values of honesty, openness, social responsibility and caring for others.* It is necessary to be critical about this, and ask ourselves if a cooperative structure can be integrated in the local logic. An interesting investigation would be an intensive research for alliances in the other communities that eventually would get involved; hence, the factor of collective consciousness, which

is formulated here as 'social responsibility', can probably be enhanced with a view that goes beyond the artificial community structure.

The cooperative concept does not differ strongly with the communal enterprise concept as elaborated in this project. Hence, the communal enterprise in its actual state is 'jointly-owned', democratically controlled and able to provide certain important services for the farmers. However, the communal enterprise is not able to allocate these services in an efficient way. The lacking of logistic capacity (transport and communication) is responsible for a certain feeling of insecurity among the farmers; they neither have guarantees that their yield will find its way to the communal enterprise for processing nor that it will subsequently reach the market. The communal enterprise would secure the production -on which the enterprise itself depends for its progressive development- if it would take the responsibility for transport and communication facilities. Hence, the communal enterprise depends too much on individual logistic capacities which are per definition difficult to obtain in the Putumayo region.

Logistic coordination and organisation is only one of the aspects the communal enterprise should take the responsibility for. With an integrated cooperative production environment is meant that the production facilities are the responsibility of the communal enterprise, and production is the only aspect the farmer should be concerned about. In practice, this means that the communal enterprise is capable to coordinate the whole process of peeling rice, transport it to the market and sell it on the market. Inclusively, the farmers should experience support in every aspect of the cultivation cycle (seed provision, information concerning biological pesticides, material to work in the *chacra*, etc.). Evidently, farmers are free to choose for which aspects they rely on the services of the communal enterprise.

The Belgian organisation is still responsible for coordination and assurance of resources for further constructive initiatives. VZW Putumayo should therefore stay in contact and also strengthen its contacts with its local network of reliable informants, and also invest in attracting new forces in Iquitos and El Estrecho. Direct communication between Iquitos and the communal enterprise would also here be very useful. Further, short visits (two weeks) of a Belgian delegation to the communal enterprise on a regular basis would be favourable for adequate monitoring and to be able to keep on coordinating the project intensively but from a distance. The following paragraph focuses on practical innovations that should be able to elaborate an integrated cooperative production environment.

## **VII.2 Innovations**

An agricultural engineer may be the facilitator to create a context where diffusion of local knowledge about the production system is made possible. Some quotes of an agricultural engineer working for INRENA<sup>40</sup> describe crucial aspects to be taken into account (Rengifo Hidalgo, 2006<sup>41</sup>).

---

<sup>40</sup> Instituto Nacional de Recursos Naturales

- Concerning crop diversification: “Yes, you have to see, and start to diversify: what more is the market asking for? If you sow only rice, you will satisfy the market. And you have to see exactly where you can sow rice and where you can sow something else, in such a way that your risk will be minimal. Because you can have a failure of rice production, while not in another culture.”
- Concerning plagues and existing local knowledge: “They know how to control [plagues]; you have to strengthen what they already know. Because if you want to introduce new knowledge, it will be a lot more difficult. It is far easier to strengthen what they already have. This is the way to go, the thing is not to change the whole production system.”
- Concerning the social aspect of the community: “Some things sometimes do not work on communal level. They may have a good beginning, but they have a bad ending, because of what you already mentioned: not everyone works equally, there is sometimes revenge between families, sometimes because of personal reasons the planning is broken entirely. And sometimes, this is not evaluated; it is not considered when propositions are elaborated.”

More important than transport capacities (which after all are modestly present) are **communicational provisions**. Essential information concerning prices, rice stock and production can be communicated in this way and become an important base for decision making for farmers, the communal enterprise and merchants. Practically, communication equipment is present on strategic places (in Puerto Soledad, the community most upstream of the communal enterprise; in Flor de Agosto, between the communal enterprise and the market; in the market of El Estrecho) but provisions are lacking in the communal enterprise itself. It is clear that these facilities are necessary in this junction of activity (Figure 13). The communication equipment (the most practical is a satellite radio) should be accessible for everyone and for a broad spectrum of purposes (not only commercial interest, but also e.g. medical emergency).

Concerning **transport**, the equipment is not the basic problem. As stated before, modest transport material (*peque-peque* 5hp) is present, and a boat can easily be found. Hence material innovations should be the construction of a boat for the communal enterprise which is equipped for storing a certain quantity (up to two tons) of rice so that it can not get wet. Problematic will be the question who will execute the transport task. After all, transport is a very time consuming activity, and therefore a difficult issue for subsistence families. It could be a merchant for El Estrecho who can find profit in this activity by commercializing the rice afterwards on the market. This person should be motivated to keep in touch with the general manager of the communal enterprise and also have confidence in the production and management of the communal enterprise.

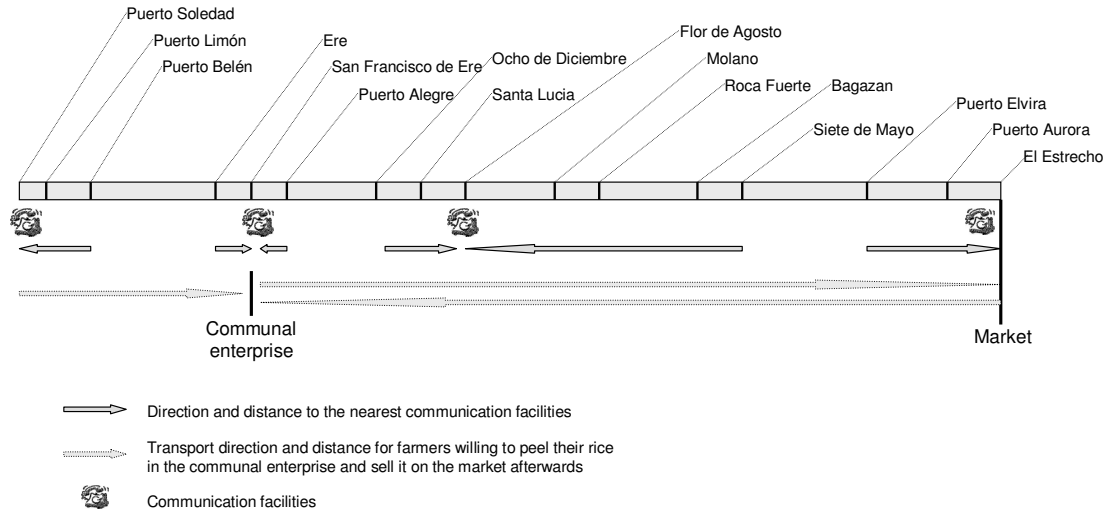
Another aspect of transport is the availability of gasoline in the communal enterprise. Farmers going to the communal enterprise should be confident that gasoline is present and can be purchased there -at

---

<sup>41</sup> The complete interview -in Spanish- can be found in annex 2

a fixed price, also by exchange- for their further transport to the market or back to their community (Figure 13).

### The MOK+A+ communication and transport network



**Figure 13: The practical communication and transport network in case satellite radio would be present in the communal enterprise.**

The communal enterprise should invest in the extension of its **purchasing capacity**. Farmers having only time for the production process should be able to sell their yield to the communal enterprise, which subsequently -with the available communication equipment, know-how and transport facilities- commercializes the rice on the market. Also, other products of rice (such as *maní*, *ají*, *fruits*, etc.) should be bought from the farmers in order to bring them to the market. As such farmers, but also the communal enterprise can spread their risks, which is always favourable in unpredictable situations. The farmers should be confident in the price mechanism that the communal enterprise -as a cooperative- handles. Fixed prices and good communication are important here. Also, the communal enterprise should have prices for every activity expressed in a certain quantity of rice. Rice, as such, should become an exchange element for specific services that the communal enterprise can offer.

It is crucial that the communal enterprise is consequently concerned about the sustainability of all decisions. As mentioned before, consciousness by price setting is critical if the communal enterprise wants to be able to continue and eventually grow in its capacities for service provision.

A continued presence of a Belgian representative in the city of Iquitos is necessary to follow up the initiatives and to be able to react in time on unexpected changes or needs. There, the Belgian representative should be able to count on the expertise of the local Peruvian sister organisation Putumayo Perú. Regular communication with the project and informants in El Estrecho, and short visits of the project on the Putumayo river should be possible too.

## Chapter VIII      General conclusion

The objective of this research was mapping the ecological situation of the small scale project 'rice as an alternative for coca' in the Peruvian-Colombian Putumayo region.

In the background part, relevant information was presented in order to understand the geographical, historical and ecological situation. Many elements, such as the frontier situation, tropical rainforest environment, historical facts and figures (such as the rubber boom, the person of the *patron* and the *narcotráfico*) and ecological situation (the natural environment, the role of rivers, forest and *chacra*, the subsistence livelihood, the local market, the community structure, population and activity (*minga*)) proved to be necessary to be able to understand in the later analysis. Also a deep focus on the concept of indigenusness of peoples and a thorough description of the project 'rice as an alternative for coca' were necessary background elements.

The methodology focussed on the on-field research and data collection. The used research methodology in the three directly involved communities (intensive research) differed from the way of working in the twelve not directly involved communities (exploring research). In order to obtain a complete view on the situation, research took place on various levels, going from the intercommunity level over community level to intracommunity level. Generally, the used method can be called participatory observation.

The most important part is the ecological analysis, which tries to answer the operational research questions. First, the three actors of change (the production system, the market and the communal enterprise environment and intercultural contact) induced by the ecological process of the project were identified and securely described. This was necessary to be able to analyse the reaction of the involved families, communities, institutions and organisations.

The most important conclusions here are, first, that the settling of the production system in the local situation seems to be initiated in an appropriate way. The encountered problems find solutions in the traditional techniques and knowledge, the *minga* system is a nice example of this. However, the diffusion of information to the various families and the sharing of experiences are likely to be enhanced to obtain better results in the short term, also to avoid that harmful or unsustainable solutions are used.

Secondly, the embededness of the market and communal enterprise environment seems to be more problematic, and indications that solutions are brought up in the local communities are rare. Hence, the services that the communal enterprise provides are important but few, as certain critical elements are lacking. Further investments from which the installation of communication equipment, better transport provisions and augmenting the purchasing power of the communal enterprise in order to be able to assist the farmers in the production cycle as well as in the access to the market, should make from this communal enterprise an integrated cooperative production environment. Also, the

management of the enterprise, and the exigent expectations of the collective consciousness and active participation have not yet found stable grounds. Also here, VZW Putumayo has a responsibility to fulfil in the nearby future.

Third and ultimately, this project has been a thorough exercise in intercultural contact. In the region, various misunderstandings arose in the indigenous communities and certainly in the mestizo village of El Estrecho during the short action period of the Belgian organisation. However, during this research period, it proved to be very useful to communicate and explain the vision, mission, capacities and restrictions of VZW Putumayo. It is clear that these misunderstandings will continue to arise, but at least a strategy has proven to be successful and can be used in the future. Also, there is a strong need to search for additional forces in the sister organisation Putumayo Perú, for the activities in Iquitos as well as for coordination in the field.

It is clear that the research period was limited in time; hence this analysis has certainly not detected every aspect of the ongoing ecological process. Also, this research paper focused on the most important issues and was not able to report every single detail of the research. However, the processing of data and selection of information had the objective to come to a neutral and reliable analysis with constructive conclusions for the project 'rice as an alternative for coca'. Hence, this research paper hopes to provide founded incentives towards better living conditions in the Peruvian-Colombian Putumayo region.

**REFERENCES**

- Agüero, O.A. (1992). *The millenium among the Tupí-Cocama: a case of religious ethno-dynamism in the Peruvian Amazon*. Uppsala: Uppsala Research Reports in Cultural Anthropology.
- Alonso Vélez, G. (1998). La chagra: patrimonio colectivo de las comunidades indígenas Amazónicas. In M. Flórez (Red.), *Diversidad biológica y cultural; retos y propuestas desde América Latina*. Bogota: Instituto Latinoamericano de Servicios Legales Alternativos.
- Atkins, A. (1996). *De economische en politieke impact van drugshandel en drugsbestrijding in Bolivia*. Antwerpen: Bolviacentrum Antwerpen. 24p.
- Ayarza Uyaco, A. (2004). La literatura en la amazonía Peruana: reflexiones y una propuesta de periodización 1880-2000. Revista regional Kanatari N° 1050. Iquitos, Peru.
- Belgische Technische Coöperatie. *Algemene informatiecyclus oktober 2006*. Brussel: Belgische Technische Coöperatie, 2006, unpublished.
- Bergman, R. (1990). Economía Amazónica. Centro Amazónico de Antropología y Aplicación Práctica (CAAAP). Lima, Peru. 209p.
- Casanova Velásquez, J. (2002). Poblaciones indígenas y mestizas del alto Putumayo (Amazonía peruana). *Investigaciones Sociales* 6(10). Lima: Universidad Nacional Mayor de San Marcos, Lima, pp. 23-45.
- Chaumeil, J.P. (1986). *Ñihamwo; los Yagua del nor-oriente Peruano*. Lima: Centro Amazónico de Antropología y Aplicación Práctica (CAAAP).
- Conklin, H.C. (1969). Environment and cultural behaviour: an ethnoecological approach to shifting agriculture. In: A.P. Vayda (Ed.), *Ecological studies in cultural anthropology* (pp. 221-233). Austin: University of Texas Press.
- De Munter, K. (2004). *Five centuries of compelling interculturality: The Indian in Latin American consciousness*. New York: Culture and politics, pp. 130-168
- De Munter, K. (2006). Cultuur en ontwikkeling, antropologisch: inheemse perspectieven uit de Andes. In *Werken aan een wereld in verandering; culturele verschillen als inspiratiebron voor ondernemen en ontwikkelen*. Leuven: Corporate Funding Programme.
- De Walsche, A. *Latijns Amerika: machten en tegenbewegingen*. Mechelen: CIMIC Latijns-Amerika, unpublished, 2006, 28p.

- Desmet, E. *Peoples or communities? Territories or land? An analysis of the indigenous rights in the Peruvian constitutions*. Leuven: Research Unit Study of the Foundations of Law, KULeuven. Unpublished, 2006, 18p.
- Desmet, E. (2004). *Ontwikkeling en organisatie van de inheemse volkeren in het Putumayo-district in Peru*. [Masterthesis] Leuven: KULeuven.
- Dessein, J. (2006). *De geheimen van de markt. Een monografie over landbouw en markten in noordwest Ghana*. Leuven: Universitaire pers Leuven.
- Develtere, P. (2005). *De Belgische ontwikkelingssamenwerking*. Leuven: Davidsfonds, Leuven.
- INADE. (1995). *Zonificación ambiental del ámbito de influencia del proyecto especial binacional desarrollo integral de la cuenca del río Putumayo*. Lima: Instituto Nacional de Desarrollo.
- International Co-operative Alliance (13.11.2006). *Cooperating out of poverty*. [06.12.2006, <http://www.ica.coop>].
- Mills, J.A. (2002). Legal constructions of cultural identity in Latin America: An argument against defining indigenous peoples. *Texas Hispanic Journal of Law & Policy*, 10(8): pp. 49-77.
- Poats, S.V., Schmink, M., Spring, A. (1988). Linking Farming Systems Research and Extension and Gender: an introduction. In: S.V. Poats, M. Schmink, & A. Spring (Eds.), *Gender Issues in Farming Systems Research and Extension*. (pp. 1-18). Colorado: Westview Press, Boulder.
- Prance, G. & Nesbitt, M. (2005). *The cultural history of plants*. New York – London: Routledge.
- Rengifo Hidalgo, G. (Iquitos, 30.08.2006). *INRENA engineer and rice cultivation*. [interview E. Desmet].
- Rivera Flórez, G. (2003). *Cultivos de coca, conflicto y deslegitimación del estado en el Putumayo*. Foro Social Mundial Temático, documentos preparatorios, Colombia, 71p.
- Rospigliosi, F. (2005). Coca legal e ilegal en el Perú. *Debate Agrario: Análisis y alternativas* 39, pp. 81-107.
- Ross, E.B. (1978). The evolution of the Amazon peasantry. *Journal of Latin American studies*, 10 (2), pp.193-218.
- Swinnen, G. *Problemen van de ontwikkelingslanden: lecture notes*. Leuven: KULeuven. Unpublished, 2004, 32p.
- Trio, W. (1992). Inheemse volkeren, hun rechten en problemen: een overzicht. *Noord-Zuid Cahier, Wereldwijd*, 17(4), pp. 15-34.

Vancraeynest, K. *Subsistentie en ontwikkeling in het Amazonebekken: Economische, Sociale en Ecologische inzichten*. Leuven: Economic Anthropology KULeuven. Unpublished, 2006, 17p.

## PICTURES



## ANNEXES

**Annex 1: Time scheme of the research period and transport information.**

| <b>Location</b>       | <b>Date of arrival</b> | <b>Duration of stay</b> | <b>Primary activity</b>            | <b>Mobilization to next location</b> | <b>Travel time to next location</b> |
|-----------------------|------------------------|-------------------------|------------------------------------|--------------------------------------|-------------------------------------|
| Iquitos               | 20/7                   | 10 days                 | Coordinating with local partner    | Airplane                             | 45 min                              |
| El Estrecho           | 1/8                    | 2 days                  | Logistics                          | Canoe                                | 9 h                                 |
| Puerto Alegre         | 3/8                    | 3 days                  | Preparation of general assembly    | Canoe                                | 25 min                              |
| San Francisco         | 6/8                    | 1 day                   | General assembly                   | Canoe                                | 2 h 30 min                          |
| Puerto Limón          | 7/8                    | 10 days                 | Intensive research                 | Canoe                                | 1 h 40 min                          |
| San Francisco         | 17/8                   | 5 days                  | Intensive research                 | Canoe                                | 20 min                              |
| Puerto Alegre         | 23/8                   | 5 days                  | Intensive research                 | Canoe                                | 35 min                              |
| Ere                   | 27/8                   | 3 hours                 | Campaign                           | Canoe                                | 2 h                                 |
| Puerto Belén          | 27/8                   | 2 hours                 | Campaign                           | Canoe                                | 30 min                              |
| Puerto Soledad        | 28/8                   | 3 hours                 | Campaign                           | Canoe                                | 1 h 50 min                          |
| Puerto Alegre         | 29/8                   | 1 day                   | Preparation of football tournament | Canoe                                | 25 min                              |
| San Francisco         | 30/8                   | 1 day                   | Football tournament                | Canoe                                | 20 min                              |
| Puerto Alegre         | 31/8                   | 1 day                   | Preparation of campaign            | Canoe                                | 40 min                              |
| Ocho de Diciembre     | 1/9                    | 3 hours                 | Campaign                           | Canoe                                | 15 min                              |
| Santa Lucia           | 1/9                    | 2 hours                 | Campaign                           | Canoe                                | 30 min                              |
| Flor de Agosto        | 1/9                    | 5 hours                 | Campaign                           | Canoe                                | 30 min                              |
| Molano                | 2/9                    | 1 night                 | Campaign                           | Canoe                                | 30 min                              |
| Roca Fuerte (Piedras) | 2/9                    | 2 hours                 | Campaign                           | Canoe                                | 1 h 30 min                          |
| Bagazan               | 2/9                    | 5 hours                 | Campaign                           | Canoe                                | 20 min                              |
| Siete de Mayo         | 3/9                    | 1 night                 | Campaign                           | Canoe                                | 1 h                                 |
| Puerto Elvira         | 3/9                    | 5 hours                 | Campaign                           | Canoe                                | 2 h                                 |
| El Estrecho           | 4/9                    | 2 days                  | Logistics and communication        | Canoe                                | 1 h 30 min                          |
| Puerto Aurora         | 5/9                    | 3 hours                 | Campaign                           | Canoe                                | 9 h                                 |
| MOK+A+ communities    | 6/9                    | 5 days                  | Collecting missing data            | Canoe                                | /                                   |
| San Francisco         | 11/9                   | 1 day                   | General assembly                   | Canoe                                | 7 h 20 min                          |
| El Estrecho           | 12/9                   | 6 hours                 | Logistics                          | Airplane                             | 45 min                              |
| Iquitos               | 12/9                   | 7 days                  | Coordinating with local partner    |                                      |                                     |

**Annex 2: Gustavo Rengifo Hidalgo, 30/08/2006 in Iquitos, interviewed by Ellen Desmet**

G = Gustavo Rengifo Hidalgo: agricultural engineer working for INRENA in the PIMA project (Alto Putumayo)

E = Ellen Desmet: lawyer, ex-CADES student and doctoral student

G : La situación es que arroz, se puede trabajar solo en **monocultivo**, y el rendimiento no es como en otros sitios, no es como en San Martín, o no es como cuando se trabaja de forma mecanizada. Me imagino que allá ni siquiera estarán llegando a las 3 toneladas por hectárea.

E : 2 toneladas por hectárea...

G : Ves, es poquísimos, tu crees con 2 toneladas cada 3 meses, poniendo 4 meses, va poder vivir una familia? si se dedica especialmente a este? no han visto otras alternativas, otros sistemas de producción?

E : También hemos trabajado con ingenieros agrónomos de acá, ellos han propuesto este.

G : Yo tengo referencia que han trabajado con un señor, un flaco... cual es su nombre?

E: Manuel Vargas

G: Si, y yo respeto, pero el tiene otra visión.

E: Cual es su visión?

G : Tiene una visión muy de la costa, de trabajar mucho en monocultivo, y en la Amazona no va rendir el monocultivo, no va responder; existe mucha diferencia cuanto a soluciones, la parte de la Amazona, con la sierra y la costa.

E : Pero el ha trabajado mucho también en la selva... le conoces bien?

G : De visto lo conozco.

E : Nosotros hemos trabajado con el los últimos 2 años, pero no estamos muy contentos ahora de su trabajo, la gente de las comunidades se han quejado ahora un poco...

G : Hay que ser realista, cultivando arroz no va sacar adelante las comunidades. Hay otros sitios donde el rendimiento de arroz llega a 8, 10 toneladas por hectárea, allí se puede (...). Pero bajo las condiciones en la Amazona, acá en el trópico...

E : Y ahora, ya hay una piladora de arroz allá? hay solución?

G : Si bien es cierto que hay que aprovechar los barreales que quedan en el Putumayo, pero no es muy rentable. A donde van a **comercializar** su arroz?

E : Estrecho, Santa Mercedes, El Encanto... Pero El Encanto, se tiene que ir con una cantidad. Pero en Estrecho están pidiéndolo, porque el arroz esta a 3,4 soles por kg ; pues así si es rentable : el gasto de producir arroz es como 80 céntimos/kg, y ellos pueden vender a 1,5 a 2 soles /kg, lo que todavía es mas bajo porque el precio normal es 3 soles.

G : Si, es mas (...) rentable que (...). Pero solamente se dedican al cultivo de arroz? O han diversificado algo?

E : Hay la idea de después utilizar el polvillo del arroz para criar gallinas, pero en las chacras ahora solamente hay arroz.

G : Todas las chacras son en altura, son en barreales, en restingas altas?

E : La idea es que lo iban hacer en **ceticales**.

G : Si, restingas, barreales.

E : Pero algunos ahora han perdido, que el Putumayo lo ha llevado, pues ahora la gente lo hacen un poco mas alto porque tienen miedo de perder...

G : Ahora, cuanto mas arriba vas, hay mas riesgo de plagas, los suelos no van ser tan buenos como los suelos de los barreales. Los barreales son buenos, pero tienes ese riesgo que se inundan muy rápidamente. Hay que sembrar muy oportunamente allí, porque sino, le quita el agua.

E : Una pregunta... Usted, después de diciembre, estaría interesado para hacer, por un corto periodo, una evaluación?

G : Me gustaría. Porque voy a tener mi contrato hasta diciembre no mas, me gustaría, porque para mi es una experiencia mas.

E : Y hay maneras para solucionar? Si es monocultivo, no puedes diversificar en la chacra misma, o si?

G : Si, habría que ver, y empezar a **diversificar** : que mas pide el mercado? Porque si siembras puro arroz, vas a saturar el mercado. Y ver exactamente donde se puede sembrar arroz, y donde se puede

sembrar otra cosa, de tal manera que tu riesgo sea mínimo. Porque puede haber fracaso en el arroz, pero con otro cultivo no.

E : De esta saturación del mercado, también teníamos miedo. Y ahora al Yubineto y arriba, todos quieren una piladora también...

G : Ellos piden... hay un tiempo atrás, en la época de la **Casa Campesino**, Juan Pajaro Cantor (?), que estuvo... ellos apoyaron con no sé cuantas piladoras de arroz a las comunidades; y en este tiempo también había muy bien precio, estaba subsidiado el arroz, o sea el estado pagaba una parte, el estado compraba todo el arroz, y recién vendía a la población; el estado compraba a un alto precio, pero vendía a un precio subvencionado; allí había ganancia; pero en este caso no, es muy diferente la experiencia. Y sin embargo, a pesar de que estaba subsidiado, una vez que el estado ha dejado de subsidiar, todo ha caído... todo ha caído... Entonces hay una muy mal experiencia en este. Y siempre se trabajaba en barreales, en barreales...

E : Usted tiene experiencia con el cultivo de arroz en la selva?

G : Ya he visto muchos cultivos, en verdad, mi experiencia es mas en cultivos tropicales, he hecho una practica en el cultivo de arroz; sé mucho de las malas experiencias que había de los monocultivos, y nuestra realidad es que acá no podemos hacer monocultivo; tenemos que diversificar. Podemos aprovechar los áreas que dejan los barreales, pero son muy riesgosos, como tu mismo estas viendo. Por eso no podemos entrar toda nuestra atención en estos áreas; hay otros áreas donde si podemos aprovecharlo muy bien, con mayor (...).

G : Las comunidades donde están ustedes apoyando con arroz, cuando ustedes han ido, a qué se dedicaban?

E : Sus chacras de yuca, plátano...

G : En altura, no?

E : Si... para autoconsumo...

G : Además de este me imagino que por allí habrá habido algunos **frutales**; porque siempre los campesinos, los nativos tienen este costumbre, tienen sus frutales, que ellos consumen. Pero no han sembrado... no han visto que pide el mercado de frutas? En trabajar en altura es más seguro.

E : Pero también depredan mas el bosque?

G : Pero tienen purmas, y en estas purmas... en caso del proyecto PIMA estamos trabajando en purmas.

E : No en ningun selva brava?

G : No estamos tumbando monte alto, o monte bravo como dicen ellos, todo es en purma.

E : Después de tanto tiempo las purmas tampoco no sirven, no?

G : Si...

E : Yo soy abogada, tenemos ingenieros agrónomos belgas y peruanos, no soy tan enterado de estos aspectos... quizás si el ingeniero estaría acá, el podría decir: 'por eso', 'por eso'...

G : Si, seria bueno conversar. Yo lo conozco... El antes ha trabajado en FONCODES, pero siempre su orientación ha sido con monocultivo, siempre. Parece que su capacitación ha sido hecha en Lima, en la costa...

E : El ha estudiado a la universidad de Ica, pero siempre después ha trabajado en la Amazona... pues se supone...

G : Pero ha querido trasladar todo que ha aprendido acá, y no va lograr... acá es otra realidad.

E : Es una cosa difícil, para la asociación belga, llegas acá hace 3 anos, y no conoces nadie, y tienes que confiar en alguien que dice que tiene experiencia...

G : Siempre ha trabajado con monocultivo, ahorita ya ese acá en la Amazona se esta (...) mucho bosque (...). He egresado de acá de la universidad de la Amazona Peruana, he tenido también una capacitación... a veces nos capacitan en monocultivo, pero cuando vas al campo, encuentras otra realidad.

E : También ha tratado de trabajar con **biopesticidas**, biofertilizantes, como Manuel tenia una formula para biopesticidas, pero la gente dijo que era demasiado complicado, pues utilizan sus propias cosas de nuevo...

G : Ellos conocen como controlan, se debe reforzar lo que ellos ya conocen. Porque si vas a querer entrar nuevos conocimientos, va ser mucho mas difícil. Es mucho más fácil reforzar lo que ellos ya tienen. Por allí va la cosa, no cambiar todo su sistema de producción.

E : Era como una mezcla con tabaco, y barbasco... no sé si vamos a tener fondos para pagarle mucho tiempo, en cuanto tiempo puedes hacer una evaluación y recomendaciones?

G : Cuantas comunidades son?

E : La piladora esta en San Francisco de Ere, pero la gente que trabaja mas el arroz son en Puerto Limón y Puerto Alegre. Allá hay los **socios** del proyecto. Pero también en Ere algunos tienen sus chacras, la gente alrededor también. Ahora van hacer una campaña para decir a las comunidades entre Estrecho y San Francisco que ellos también pueden hacer sus chacras, para venir a pilar ; pero los socios del proyecto son en 3 comunidades; hay como 20 socios. A veces la gente que ha optado para no ser socio, de cuidado, producen mas, y cada uno puede ir a pilar su arroz, no hay diferencia entre socios y non-socios, la diferencia es después, a la fin del año, que los socios van a compartir mas en los beneficios, porque cada uno que va pilar su arroz tiene que dejar un pilado de arroz. A veces los non-socios son mas activos en haciendo sus chacras que los socios. Eso también es un problema, que ahora tenemos que ver : que los socios no producen etc.

G : Es muy holística la cosa no...

E : También hay cositas personales...

G : Por eso es, en este caso del proyecto PIMA, cuando hablaban de organizar a las comunidades, que se trabajó a nivel comunal ; pero **a nivel comunal** a veces las cosas no funcionan. Pueden tener un buen principio pero tienen un mal final, por esas cositas que me estas diciendo: no todos trabajan iguales, hay revancha a veces entre familias, por cuestiones a veces personales se rompe todo un esquema. Y eso a veces no se evalúa, no se toma en cuenta para elaborar las propuestas.

E : Por eso también, cada persona -cada hombre, mujer- estaba libre para decidir de ser socio o no. Y al principio eran 4 comunidades, con Ere también, y por cosas históricas, de temas familiares, ellos lo han dejado... pero ahora si están haciendo sus chacras. También por cosas de mal manejo de dinero...

G : Allí mas difícil todavía...

E : Eso falta también capacitación en este... ahora hay un gerente que parece trabajar honrado, porque antes el secretario de economía...

G : De verdad que es difícil...

E : Hay 3 comunidades: 2 comunidades donde hay mas arroz, y la comunidad donde hay la piladora; tienen lo menos arroz, pero es lo mas accesible, pero allá no están trabajando tan bueno, esta comunidad tampoco es muy unido. Pues son 3 comunidades para visitar, pero no son grandes...

G : Si las comunidades son de 9 familias, 15 familias? Interesante, me gustaría ver.

E : También sería muy interesante si podrías conversar con los ingenieros belgas de frente... Uno de ellos también esta haciendo su tesis del proyecto de arroz...

G : Si me gustaría, para saber los antecedentes un poco. Te doy mi correo...

(...)

E : Pues se tendría que diversificar? El arroz, puede ser de una manera viable, o no es viable de ninguna manera? Ahora estamos calculando 2 toneladas por 1 hectárea de arroz. Y para una familia cultivar 2 hectáreas ya es mucho, algunos estaban estresados ya del trabajo...

G : Exacto, porque ellos normalmente trabajan un pedacito, un cuarto de hectárea no mas, a veces. Y por el resto se dedican de repente a la pesca, a la caza, a la recolección. A veces salen en la noche, y regresan y están todo en el día en la hamaca, eso es su forma de vida no... Cambiar este... una forma de vida que ha tenido más de mil años, cambiar en un año va ser muy difícil.

E : Por eso, lo que tampoco queremos, es que el proyecto va faltar de acompañamiento. Tenemos el ventaja de ser una asociación pequeña y que no dependemos de un proyecto que tiene que ser hecho hasta el fin de diciembre; nos quedamos allá el tiempo que sea necesario, tenemos alguien que puede irse cada mes para ver.

(...)