Connections between FDI, Natural Resources Access and Local Development: The case of Antamina mine, Peru Are we following the correct path?



Carlos Miguel Incháustegui Pérez

Department of Geography, University of Bergen

Spring 2010

CONNECTIONS BETWEEN FDI, NATURAL RESOURCES ACCESS AND LOCAL DEVELOPMENT: THE CASE OF ANTAMINA MINE, PERU ARE WE FOLLOWING THE CORRECT PATH?

Carlos Miguel Incháustegui Pérez Master's Programme in Resources and Human Adaptations

May, 2010

DEPARTMENT OF GEOGRAPHY UNIVERSITY OF BERGEN



Table of Contents

Acknowledgment	IV
Abstract	V
List of Abbreviations	VI
Charter 1. Into had a to Daniel In mile	
Chapter 1: Introduction to Research Inquiry 1.1. Introduction	1
1.2. Structure of the Thesis	3
Chapter 2: Theory Framework	
2.1. Introduction.	
2.2. Concepts Use in the Project	
2.2.1. Foreigner Direct Investments	
2.2.2. Natural Resources Access within Political Ecology	
2.2.3. Corporate Social Responsibility	
2.2.4. Local Conditions	13
2.3. Discourse Analysis and Narratives	14
2.3.1. Discourse Analysis and Narratives in Natural Resources Access within	l
Political Ecology	14
2.3.2. Discourse Analysis and Narratives in Development within Political	
Ecology	16
Chapter 3: Methodology 3.1. Introduction	
3.2. Qualitative and Quantitative methods	
3.3. Selection of the case study	
3.4. Data collection and data production	
3.4.1. Observation and Status 3.4.2. Surveys.	
3.4.3. Interviews	
3.5. Secondary sources.	
3.6. Challenges and problems during fieldwork	
3.7. Interpretation of data: The importance of Narratives and discourse	
3.8. Reliability	
5.6. Renability	31
Chapter 4: The Case in Context	
4.1. Introduction	32
4.2. World FDI Movements	32
4.3. FDI in Latin America	33
4.4. The raise of FDI inflows in Peru	34
4.5. The importance of mine industry in Peruvian Economy	35
4.6. Antamina Mine Company	
4.6.1 A brief history of AMC	40

4.7. Ayash River Basin Communities41
4.7.1 Physical features of Ayash River Basin
4.7.2. Social features of Ayash River Basin
Chapter 5: Results, Presenting FDI effects
5.1. Introduction
5.2. The Arrival of FDI and the Creation of New Expectations
5.3. Effects caused by FDI
5.3.1. Direct Effects: Infrastructure, Employment, Local Networks and Technology
Transfer, and Taxing49
5.3.2. Indirect Effects of FDI in ARBC and San Marcos55
5.4. Corporate Social Responsibility and social Development in AMC59
5.4.1. Relations Communities Office
5.4.2. Mine Fund61
5.4.3. Ancash Association
5.5. Effects of FDI in Natural Resources Access
5.5.1. Effects on Ayash River63
5.5.2. Effects in Crop Yields, Grasslands and Livestock
5.6. Result Summary72
Chapter 6: Discussion: Local Narratives about Natural Resources Access and
Development caused by FDI within Discourses Analysis.
6.1. Introduction
6.2. AMC Narratives about Development in National scale and in Local scale74
6.3. Local Narratives about Development in ARBC
6.4. The Role of Natural Resources Access in both Narratives81
6.5. Decisions Makers Role in both Narratives83
6.6. Discussion Summary84
Chapter 7: General Conclusions
7.1. Introduction85
7.2. Relations of FDI, Natural Resources Access and Local development in
theory85
7.3. Main conclusion from FDI effects86
7.4. The Role of Discourses and Narratives in FDI, Resource Access and Local
Development87
7.5. Final Remarks: what could be learnt from this case?

Acknowledgements

This project has been a great fruitful experience and a two years adventure. I am indebted to a lot o people for their help in the preparation of the study project, during my fieldwork and during the writing process. I would like to give thanks for help and support to:

First, to my supervisor, Arnt Fløysand for his invaluable support and guidance

Håvard Haarstad for his kind advices, help in the lenguage and support.

My informants for giving me their time

The medical Stuff from Huancayoc for their hospitality

The Mountain Institute for their hospitality in Huaraz

Pablo Dourojeanni for his friendship and support during these two years

My friends in Bergen: Brando, Signe, Nina, Camila, Teresa, Torunn, Runa, Lene, Stina for their support all this time

And to my Family for their support

Abstract

The aim of this study is to discover the connections between FDI, natural resource access and local development and it is materialises in the case of FDI into Antamina mine company, located in the province of Huari, Peru. I study this case basing in three pillars. First, I analyse the way in which the connection between FDI, natural resource access and local development have been present in theory. Here I suggest the political ecology approach for understand in a better way the consequences of the establishment of the FDI in natural resources access. Second, I examine the direct and indirect effects of FDI in Ayash River Basin Communities. My research studies the importance of national tax laws and the role of decisions makers for regulating the amount of revenues trickling back to local communities. I describe and explain the significance of concepts such as corporate social responsibility and its role in MNCs. Third, I look to both local communities development narratives as Antamina development narratives and examine how they can be uncovered through discourse analysis.

List of Abbreviations

ARBC- Ayash River Basin Communities

FDI- Foreing Direct Investment

GDP- Gross Domestic Product

MNC- Multinacional Corporations

NGO- Non Governmental Organization

WM - Water Management

Chapter One

Introduction to the Inquiry

1.1. Introduction

During my first semester at the bachelor level my economics professor told us in one of his lectures about the benefits that Peruvian economy will obtain from the discovery of the deposits in Camisea at Cuzco province and its eventually privatization; he told us the Peruvian economy will increase 2% only due this foreign investment. As a new student I felt proud and good about that increment. However, I did not realize that this macroeconomic growth might bring difficulties for the communities that will be directly affected. In this sense in this thesis I try to find out and explain to what degree Foreign Direct Investment (FDI) affect Resources Access and Local Development.

This research first had the aim to explore and study the relationship between FDI, Water Management (WM) and Local Development. However, during fieldwork I realized that there were not significantly changes over WM at my study area, Ayash River Basin Communities (ARBC). Yet I discovered a new interesting issue in the study area. There were landscape morphology changes and social changes within the consequences of the establishment of Antamina Mine Company (AMC) at the Antamina watershed. These changes are playing an important role in the intentions of ARBC to achieve local development.

Nowadays Peru is one of the richest mine countries in the world, according with the U.S. Geological Survey (USGS) Peru is the leading producer of silver and the fourth producer of copper. In the last decade the mine production in Peru has increased significantly which has increased the gross domestic income and has made its economy one of the strongest in Latin America. However, this economic growth is not always going hand in hand with local development and is leaving big scars in landscapes morphology and is changing the way of living of hundreds of peasants' communities.

In the last fifteen years Peru is experiencing a boom in mining. The mining GDP grew at an annual rate of 7% between 1990 and 1999 and by 29% between 2000 and 2006, a period when it lead to export growth. Statistics show a record of participation in mining exports: 62% in 2006 (Zegarra, 2007:15). This "new mining" extended from traditional areas to new high Andean regions, and includes projects agricultural valleys adjacent to the coast. During the 1990s, the number of hectares relating to the activity mine tripled from 10 million in 1991 to 34 million by the end of 2000; of these, only one third related to concessions force (Glave and Kuramoto, 2002 in Zegarra, 2007:17).

Therefore, this steady increase of FDI may have influenced natural resource access in the communities most marginalized and abandoned by the national state. I will address this changes based on the analysis of Narratives and discourses from the peasants and AMC representatives. Therefore the main objective of this project is:

<u>Discover the connections between FDI, Natural Resources Access</u> and Local Development

The main research question reflects the idea that FDI is not certainly favorable or unfavorable for local development, but needs to be seen according to the local conditions in which it takes place and whether there has been a change in relation with its natural resource access. My inquiry objective is very general, and with the purpose of specify my research, I have focused my project around three subordinate research questions

The first subordinate question is theoretical and aims to find out how the relationship between FDI, natural resources access and local development is portrayed in literature. I have chosen to have a subordinate question related with theory because it is important to analyze this literature in order to place the research into an appropriate theoretical framework which could permit us to link specific issues in between FDI and Political Ecology approach which is a new branch in Human Geography. Hence, my first subordinate question is:

• How are FDI, Natural Resources Access and Local Development related in theory?

The two other research questions deal with the empirical inquiry. In this sense, I think is important to outline the main effects in natural resource access in the local communities. The second subordinate question is:

• What are the direct and indirect effects of FDI in Ayash River Basin Communities?

In the literature on FDI and Political Ecology there are different points of view in relation to the effectiveness of FDI and the origins of environmental conflicts respectively. Representation of FDI and origins of environmental issues form part of a complex discourse of development. Within this discourse it is find stories on the relationship in between FDI, development and resources access. Such stories can be seen as narratives from different actors who emphasize and defend their own vision of reality in order to suggest simplified solutions to complex problems. These narratives can be understood in different scales and can be used by MNCs as a means to convey and promote general arguments on development. Yet, local communities also have narratives of development which may present a connection with more general development discourses. Thus, my third subordinate research question is:

• What local narratives exist in Ayash River Basin Communities about FDI, Development, and Natural Resources Access and how can they be uncovered through Discourse Analysis?

1.2. Structure of the Thesis

The thesis has altogether seven chapters. Here I give a brief synopsis of the different chapters following this one.

Chapter Two: Theory Framework

This chapter argues the theoretical ideas on which my research is based. It starts by the

describing of the main concepts I used for carry out the research. These concepts are: FDI,

Resources Access within Political Ecology, Corporate Social Responsibility and Local

Conditions. I will also explain their importance for my project. The chapter presents how

discourse analysis has been studied in political ecology approach focusing in the

relationship in between discourse analysis and narratives in natural resources access and

discourse analysis and narratives in development.

Chapter Three: Methodology

The chapter starts by making a distinction in between quantitative methods and qualitative

methods and explaining its vantage whereby I chose to use it in my project. It then

continues with the main part of the chapter which explains the manner in which the

empirical data in my project has been produced. It then proceeds describing the challenge

and problems that I faced during fieldwork and concludes with the interpretation and

reliability of my information.

Chapter Four: The Case in Context

This project is based in an empirical research undertaken in Ayash River Basin

Communities which are located in three districts: Huachis, San Marcos and San Pedro de

Chana which in turn form part of the province of Huari. However, FDI did not arrive into

this small area as an isolated event, but rather as a part of a wider process that changed

Peruvian economy during 1990s. In this chapter I explain the case as a consequence of a

national and international process of FDI flows. Therefore it starts by describing the world

FDI movements, FDI in Latin America, the increase of FDI inflows in Peru, the relevance

of mining in Peruvian economy and finally it concludes describing the main physical and

social features of the study area.

4

Chapter Five: Results, presenting FDI effects.

This chapter presents the results that I found in ARBC. It draws a history of the main

events since the arrival of AMC into the area. It then proceeds to analysis the direct and

indirect effect caused by the company in the area. It then describes the means used by AMC

for conducted those changes such a Corporate Social Responsibility Programs and finally it

explains the main changes in local resources access.

Chapter Six: Discussion, Local Narratives about Natural Resources Access and

Development caused by FDI within Discourse Analysis

Knowledge is an important feature for describe perception about development. This chapter

focuses on the way different actors uses their knowledge for create development narratives

about ARBC. Then it describes two narratives: AMC narrative about development and

Local narrative about development. The chapter then proceeds to evaluate the role of

Natural Resources Access in both narratives and finally it concludes evaluating the role of

Decision makers both in AMC development narrative as Local development narrative.

Chapter Seven: General Conclusions

Base on my research questions, this chapter presents a summary of the main discussions

and conclusions of my thesis. It also points out the lessons learned from the analysis and

other research issues that arise from the project.

5

Chapter Two

Theory Framework

2.1. Introduction

The theory is the abstract body by which the case research is supported. This abstract body also represents generalizations from which I need to find the threads in order to make the case study representative.

For this purpose, in this chapter I shall discuss the theory in which I based my research for understanding the changes in local development caused by the arrival of a Mult-national Corporation (MNC) in a new area. Thus this chapter will be separated in two parts which will describe my main theory basis and the relationship among them. At the first one I will describe the representations and definitions of some concepts which underline my inquiry: FDI, Resources Access (from the outlook of Political Ecology) and Local conditions. Finally, taking into account the post structural framework, the discussion will turn to the definition and the importance of the analysis of discourses and narratives within Natural Resources Access in Political Ecology and Development for elucidating different perceptions and outlooks from the study case.

2.2- Concepts used in the project

In this part I will describe the main concepts I used for carry out the investigation: FDI, Resources Access within Political Ecology, Corporate Social Responsibility and Local Conditions. Furthermore I will explain their importance for my project.

2.2.1. – Foreign Direct Investments

FDI is an investment of capital from an enterprise resident in an economy to another economy. According to the International Monetary Fund (IMF) "FDI does not necessarily imply total control of the enterprise, as only the 10 percent ownership is required to establish a direct investment relationship" (IMF paper of Foreigner Direct Investment

Trends and Statistics, 2003). MNCs are the ones who operate in the host economies through subsidiaries which have a level of autonomy with its decisions in the local area, and a level of responsibility with the headquarters which are located in the country of origin.

FDI has been used more frequently in development policies since the Washington Consensus asserted that FDI is essentially good for development and that, to extent that a country attracts more FDI it will achieve rapid development (Morán, et. al. 2005:2). Narula and Lall add to this conventional wisdom described by Moran that, it assumes all MNC activity offers similar spillovers and development benefits, thus it focus mainly on the quantity of FDI rather than its quality (2004:450). However, it has found different outcomes in countries which had increasingly adopted neo-liberal policies in their economies. These results are related with increases in FDI that come along with augments in trade which drives to high rates of increase in host economy GDP (Moran et al, 2005:13). Te Velde argue that FDI may have been beneficial for development (for instance, positive correlation among FDI and GDP, or productive or wage), however its benefits vary in relation to the policies of different countries in which they are carried out and they have in general not been successful in reducing poverty (2003).

Thus, FDI research has been moving from studying economic growth specifically (focusing on macroeconomic development, for instance, GDP growth) to study the complex array of effects in local economic and social processes. My project goals are geared to analyze the social, economic and discursive elements of FDI.

In this sense, is important to indicate the definition of FDI made by Jacobsen et al., 2005 who claim that FDI is a process fundamentally composed for three characteristics: the first is economic capital, such a infrastructure and machinery; the second is networks such a supply connection with local firms; the third is knowledge, such as new technology established by the Multinational Company which finally should be transferred to the local receivers.

Narula and Danning argue that there are four main motives for FDI: 1) seek natural resources, motive that includes FDI into the mining sector which is the subject of my

project; 2) seek new markets; 3) restructure existing foreign production; and 4) seek new strategic assets (2000). In turn, these can be circumscribed in two categories: the first one is asset-exploiting in which is found the first three motives to produce economic rent by using existing assets; the fourth motive is placed in the second category, asset-augmenting to obtain new assets that defend or improve existing assets (Lall and Narula, 2004). Often it is difficult far developing countries to attract the second category of FDI, so they usually attract the first category.

Developing economies around the world have different methods or means by which they could attract FDI from more development economies. They are aware about the benefits of externalities and hence commonly use economic resources to move the foreign investor to the optimal level of investment. According to Blalock and Gertler there are three extensive categories of "investment promotion" which is defined as expenditures generally related with host efforts to attract FDI (2005). The first category of expenditures focuses on giving information about customized investment proposals to potential investors; the second category includes the manner through which the host economy is modernly equipped (industrial parks, well-functioning infrastructure and human resources reflected in skill training labor); the last category entail foreign investor demands to provide tax breaks and direct subsidies at least alike to other host countries in the region (Blalock and Gertler, 2005). The arguments of Biglaiser and DeRouen also fit in the last category; they assert that economic reform fosters FDI interest, among these reforms is found the following policies for lure prospective investors: domestic and international capital liberalization, tax and tariff reductions and privatization (2006:55).

For attracting Natural Resources Extraction FDI, host economies do not strictly follow the first two categories due to the location of the asset in other words, the mineral or the gas is in one country and it will not go anywhere else thus these countries have to expend very low amounts of capital resources in the first category and some sums of capital in the second category; Nevertheless, Latin American policy makers have opted to give facilities in the third category giving rise to tax breaks, subsidies, privatizations and capital liberalizations to attract FDI to exploit these resources.

Created positive externalities which are defined as benefits that are not appropriated by the foreigner investor undertaking the project, nor by the workers of the projects, but rather by the suppliers of the project provided they are able to enlarge their activity further than that directly accounted for by the project (Moran et al 2005:3). Yet, to reach these positives externalities the host economy must present some local capabilities and liberal policies, since over time, FDI inflows increase where local capabilities are strengthened and new capabilities are created (Lall and Narula, 2004:449). In this sense following Lall and Naruala again, is important to point out the importance of absorptive capacity for development, this is defined as the ability of local actors to capture knowledge that exists elsewhere (2004:454). Lall and Narula also claim that least developed countries would tend to have mainly resources-seeking FDI because the MNCs do not need absorptive capacity for the extraction of the natural resources. In contrast, countries which need this absorptive ability or already have high levels of FDI tend to have market- seeking FDI (2004:451). However, although extracting resources do not need these kinds of capacities is important to taking into account that they need to create them and monitor them within communities to achieve local development.

In this sense, is also argued by Fløysand that is essential to take research on FDI further than economic measures and focus in the relation of capital, actors and knowledge (2005). This is the main argument used in the umbrella project *The Spatial Embeddedness of Foreign Direct Investment* (This project is carried out at the Dpartment of Geography of the University of Bergen) for defining FDI.

It is asserted that these three elements within the concept of FDI are interrelated each other. *Capital* means the real economic value transferred; *Actor* refers to the individual or group of persons that are directly or indirectly involved in the capital transaction; and *Knowledge* refers to systems of meanings how they transit in networks, which can be explored through discourse analysis (Fløysand, 2005).

According with Fløysand the geographic study of FDI is aimed to shape how the capital-actor-knowledge complex is embedded in spatial scales (2005).

In my study case (which I will describe in chapter four) there were few linkages among local firms which could help taking in advantage of the economic effects of natural resource FDI. In other words, there were not a mine company before AMC arrived to the study area, hence technology transfer in this kind of resources extraction (mining) was and still being very difficult to achieve.

Thus, in my research I will focus in the relation between FDI and knowledge, in other words, the process whereby institutions (government) and actors (AMC and ARBC) are linked within the context of FDI. I will use discourse analysis to find out how the different narratives (from both parts) are creating new power relations. I am also interested in demonstrating how Natural Resources Access is related with FDI. This relationship is studied under Political Ecology approach.

As I mention before one of the methods of host economies to attract FDI into natural resource exploitation is to provide legislation which benefits MNCs through tax breaks and subsidies. This is the link among FDI and natural resource access (under the outlook of Political Ecology), because, indeed one of the branches of Political Ecology is concerned in the effects of policy makers' decision in the interplay of the environment and the society. In the next part I will explain how natural resource access is linked to FDI in theory.

2.2.2. – Natural Resources Access within Political Ecology

Humbolt asserted since his early writings that "inequality of fortunes" among white colonials and indigenous communities could only be resolved through equal access to both civil employment and fertile land (Humbolt, 1811 in Robbins, 2004). Yet the industrialization period led to the exploitation of natural resources without taking into account the participation of local communities and causing environmental damage. When researchers started to ask themselves if this was right path for equal welfare of population; Political Ecology began to climb into the development research agenda.

Thus, before explaining how Natural Resources Access is related with FDI, I will describe how Political Ecology has been adopting higher profile within the agenda of Human Geography especially in development studies.

The term, Political Ecology was first used by the Anthropologist Eric Wolf in 1972 (Martinez-Alier, 2002:71) and then it was also used by other academics at the same decade for stressing that "the environment" had become a highly politicized object. However these uses of the term were not accompanied by a set of theoretical propositions for enquiring the relationship of the political and the ecological (Neumann, 2005:32).

The geographers Piers Blaikie and Harold Brookfield gave in the 1980s a more significant definition for Political Ecology; they explained it as the approaches which study the changing associations between social (economic, political) structures and the uses of the environment taking into account not only class divisions, differences in income and power, but also the gender division of property, labor and knowledge (1987, in Martinez-Alier, 2002: 72). Furthermore they defined political ecology as an interdisciplinary field that combined "the concern of ecology and a political economy" (1987, in Neumann, 2005:33). Bryant followed the work of Blaikie and Brookfield and described Political Ecology as a new and important research agenda in what he called Third World studies. He recommended three areas of inquiry within a Third World Political Ecology framework: the first one consists of the contextual sources of environmental change, particularly state policies, interstate relations and global capitalism; the second should study the political consequences of environmental change, chiefly the inequitable distribution of the cost of degradation across socio-economic spaces; finally the third area centers on the land and resources access rights, local struggles and ecological transformations (1992:12). These three research areas described by Bryant are overlapped and embedded in my project.

Political Ecology also studies the distribution of environmental conflicts and, so doing, it has moved beyond local rural situations into the wider world (Martinez-Alier, 2002:73). And the manner, in which these conflicts are averted, bargained and solved (Barton and Fløysand, 2010).

Therefore, environmental problems were at the core of social and political problems (and not technical and managerial problems which were based in taken-for-granted scientific

claims) caused by flaws in dominant approaches that favoring to corporate, state and international authorities. Political Ecology is working to demonstrate the undesirable impacts of policies and markets conditions, mainly from the point of view of the local people, marginal groups and vulnerable population (Robbins, 2004; Neumann, 2005).

For the study and interpretation of the point of view of local people it is vital to understand the framework of discourse analysis and narratives. Given that my research is based in qualitative methods (interviews and surveys) I will use this framework as a path to reach my outcomes.

The next concept to be discussed is Corporate Social Responsibility which is of important for understanding the process through which changes in local conditions, are driven.

2.2.3. – Corporate Social Responsibility

In chapter six I will discuss the different narratives from the local inhabitants and from the AMC. However, for a complete understanding of those narratives, is important to explain the concept of Corporate Social Responsibility (CSR) and its role in social development.

In that sense I will begin locating CSR in the political conception giving by Georg and Palazzo. They refer to CSR as a post-positivist approach which started under the following statement: "in pluralistic societies a common ground of question of right and wrong, or fair and unfair can only be found through joint communicative processes between different actors" (2007:4).

CRS was born during the 1960's in industrialized countries with the purpose of redefining the entrepreneur role in society as more than just obtaining capital, to legitimize their work and thus ensure long-term investments (Gil, 2009: 253).

Likewise, CSR became more visible during globalization when the ability of nations-state to regulate business activities was diminished by neoliberal policies, and there emerged new roles for MNCs. Within the global arena these companies have the option of choosing among various legal systems, applying economic criteria to their choice of which set of labor, social and environmental regulations under which they will operate (Georg and Palazzo. 2009: 12).

The CSR literature shows an increasing awareness of the communicative character of conflict resolution (ibid, 2009: 17). According with Habermans, only under the conditions of an "ideal speech situation" is it possible to validate reasons for calculated decisions and choices of means to be discussed. These conditions include freedom in access, participation with equal rights, truthfulness of the participants and absence of coercion (1993:56, in Georg and Pallazo, 2009:20).

Thus, MNCs in resources seeking, which have experienced conflicts with the local populations, started to give a new outlook into their CSR sections.

Furthermore, a Social Responsible Enterprise integrates a concern for safety and working conditions, dealing with suppliers and costumers, relationships established with local communities, the environmental impacts of operations and business practice and marketing (Sanborn, 2008:1). Likewise the concept of Stakeholders is relevant in this context because it represents a set of actors beyond the shareholders or owners, and whose interest must be taken into account. Yet, in so doing, MNCs do face dilemmas that are located around old philanthropic schemes, and in the Peruvian case (which will be discussed in Chapter five), old models of paternalism and patron-client relations (Gil, 2009:254). Now I will discuss the last concept, Local Conditions.

2.2.4. – Local Conditions

The importance of describing the concept of Local Conditions comes from the fact that one of the aims of the project is to evaluate if the local conditions have been improved by the entry of an external actor (AMC). The understanding of the term "local" depends on the scale to which it is compared. Basically by "local conditions" I refer to a set of circumstances specific to the Ayash River Basin Communities (which will be explained in detail in Chapter 4), and which interact with processes specific to the FDI. I will also compare the improvement of ARBC local conditions with San Marcos which is the capital of the district. Over time in Peru (as in the bulk of Latin-American countries) rural areas have not been included in to the development process as much as urban areas. Therefore, MNCs which are related with mine production in rural areas find these environments

devoid of basic local conditions which should have been installed by the government. Thus in the most of the cases (as in ARBC) it seems that the companies replace the presence of the state improving these conditions. Infrastructure (roads, bridges, electricity sources, water drain) education (especially primary and secondary schools) and health care are not fully provided for the state giving rise to that the MNC seek to fill these spaces.

Hence, I will focus on how the AMC has been changing these conditions and how these changes have been affecting power relations among the peasant community, the State and the MNC. I so doing I will use the approach of discourse analysis and narratives within currently Political Ecology studies, concept that I will explain in the next section.

2.3. – Discourse Analysis and Narratives

This section consists of two parts. In the first one I will explain how discourse analysis and Narratives in Natural Resources Access within Political Ecology are connected and how these connections have been understood in theory. In the second part I will explain how Discourse analysis and Narratives are related with Local Development and Political Ecology.

2.3.1 – Discourse Analysis and Narratives in Natural Resources Access within Political Ecology

Before starting to describe the concepts of Discourses Analysis and Narratives, and their connections with Natural Resources Access in Political Ecology, it is important to explain the post structural background in which these concepts are based.

Associated with ideas of Michel Foucault, post structuralism focuses on the instability of many categories we typically take for granted, embracing truth and knowledge. For understanding the character of society it is necessary to take into account how certain taken-granted-notions of the world are shaped through discourses and how certain social systems and practices made them true (Robbins, 2004:65). Moreover, Foucault claims that people's perceptions are largely societal products and not prescripted by their biological make-up (Castree, 2005: 146).

Castree argues that Discourse Analysis conceives societies as comprising multiple discourse that are sometimes contradictory and sometimes complementary (2005: 134).

Said argue that discourses are formed by body of text that together generate both a coherent field of knowledge, as also the very reality they appear to describe (1978:94 in Neumann, 2005:93). Furthermore, Harvey claims that "discourses express human thought, fantasy and desire. They are also institutionally based, materially constrained, experimentally grounded manifestations of social and power relations" (1996: 80 in Neumann, 2005: 94).

A discourse is a structure formed by combinations of narratives, concepts and ideologies (Barnes and Duncan, 1992:8, in Neumann 2005:94) and plays close attention to the role of language in building social reality as complex system of signification (Neumann, 2005:94). In this sense, discourses are formed by a set of narratives which according to Roe have among their most important characteristic that they follow the general definition of a "story" which has a beginning, middle and end. Moreover narratives usually come into sight as a casual arguments based on "sequences of events or positions in which something happens or from which something follows" (1991; 288).

In short, discourse and narratives show how the true is culturally constructed by knowledge which could be stated as a consensus (for instance, international institutions and governments). Yet they are not the same because narratives can be considering as answers of particular problems and at the same time they are part of a bigger discourse.

After describing how discourses and narratives are related, I will explain how these concepts are connected with Natural Resources Access within Political Ecology.

Robbins states that some of the most important constructions, especially those that emphasize political control of the environment are embedded in stories of environmental change and memories of past ecologies that people still keep; "those narratives are usually rooted in collective agreements and tacit consensus reached within communities" (2004: 123).

Thus, it is common to find narratives supported by the government for legitimizing the extraction of natural resources without taking into account the voice of local communities

or even breaking their natural rights, for example; land rights, water rights or any natural resources in which depends the livelihood of local people.

Political Ecology, therefore, proposes the emergence of counter narratives that question the reliability of taken-for-grant arguments about resource access within environmental change and local development.

As I mentioned before, narratives come from groups which are in consensus, frequently they came from the same "level" of knowledge. In other words, they can come from the governments which work alongside with MNC which can be hegemonic narratives characterized by the global-economic imperative and often promoted by, and in the interest of, national elites (Fløysand et al. 2010:8); and on the other hand, counter narratives come from different researchers (working in development organizations, universities and NGOs) and community organizations, which argue that extraction of natural resources can be accomplished in a different way. Hence, is important to point out that local communities also have their own narratives which usually are marginalized during the process of exploration and exploitation of the natural resources. These narratives may change during time and space according with the normative of the MNC.

2.3.2. – Discourse Analysis and Narratives in Development within Political Ecology

The word "development" has been used with a particular meaning within national, regional and local policies. This concept is usually related with economic growth which is often measured by the Gross National Product (GDP), but nowadays it also includes the level of poverty, famine, education and health. According to Neumann, among different connotations of development, it means transformation, encompassing a new way of being and thinking and leaving the old ways behind. This transformation process also contains people who do not fit with the new, who along with the environment that sustain them, are considered obstacles to achieving development (2005: 81).

In this sense, analyzing discourses and narratives of development is essential for every study that tries to find out what are the bases of taken-for-grant knowledge that drives the most of the discussion in development research. Therefore, I will start this section

describing how this complex and challenged discourse was adopted by the former development researchers.

Escobar argues that this discourse came into view and took definitive shape between 1945 and 1955 within the postwar transformation atmosphere, altering the focus of the relations among rich and poor countries; broadly, development was "the very perception of what governments and societies were to do" (1988: 429).

Modernization theory gave the first general theoretical framework in which research and development programs were carried out. According with this theory "poor or less advanced", societies will only develop if they replace their "traditional" way of generating assets by the more modern ones. Tucker characterizes a more radical view by claiming that modernization theorists were concerned with understanding the culture of other societies so as to manipulate them and adjust them to the demands of what he called the myth of development (in Munck, 1999: 3).

Coming back to Escobar's argument over development discourse; he argues that "global poverty", "underdevelopment" and "Third world" were produced in the postwar development discourse with the aim to using these news concepts as means for the application of modern technology and managerial practice from the "First World" (in Neumann, 2005:94). Hence, he seeks to understand the "articulation established by capital between natural and social system" in this sense, and he argues that "nature" is transformed into "environment" and also into "sustainable development discourse" focused on the outlook of urban-industrial system; thereby everything that is important for the carrying out this system is part of the environment (1996:52, in Neumann, 2005:95).

On the other hand, Escobar development discourse has been critiqued by several authors, for instance, Anthony Bebbington who states that "development" interventions go beyond a merely action of cultural domination providing the reformation of local power relations and access to resources in a way that is beneficial for marginalized groups (2000, in Neumann: 97). Bebbington's critique takes shape in his work about Quechua Population of the Ecuadorian Andes (in which they were stimulated by the entrance of a external actor that supposed to bring development) that forges locally meaningful engagement with modern

institutions and practices. This peasant community did not only refuse to development but also tried to obtain access to and control over development process (in Neumann, 2005:97). Haarstad and Fløysand analyze a similar case in which a Peruvian town called Tambogrande rejects to the establishment of a multinational mine company which tried to transform a rich and thriving agriculture environment into a mine exploitation environment which would have accompanied with pollution and changes in local natural resources access. They explained how Tambogrande extended their complaints from local scales towards regional, national and even international scales (2007).

Neumann describes the role of discursive analysis in Political Ecology used in development as twofold; politics of development must not be treated as a hegemonic discourse in a fertile Political Ecology approach; and on the other hand, attention to discursive structures of development and environment have been and will remain critical in analysis of the rationale for and consequences of government and international interventions to alter local land and resources access (2005: 102).

The studies of Fairhead and Leach show as well the importance of development discourse analysis in Political Ecology, specifically in their research about how institutions concerned with environmental and development in Guinea generated a "savannisation discourse" caused by the destructive land uses traditional practices of the local inhabitants. They show that this discourse became hegemonic for more than a century, although their investigation through the use of environmental history, ethnographic and aerial photography proved the opposite process (1995: 1024-25).

Thus, discourse analysis in development is an essential part of Political Ecology agenda. By using of this tool I will identify the main development discourses of the MNC in its attempt to alter the resources access of the local inhabitants, and I also use discourses analysis for exploring the development perception from the peasant community's point of view.

<u>Chapter Three</u> <u>Methodology</u>

3.1. – Introduction

Problem questions, objectives and methods are the base for the research design. The problem I deal with is the continuous misbalance between mining industry gains and local development and in which level this industry has affected the resources access to households and how peasants understand this lack of parallel development. In this sense the evaluation of peasant's perception could give representative information about the mine behavior in relation with local development in its influence area. There are different manners of retrieving perceptions which will be selected according to my scientific background and its relevance to the case study. In this chapter I will describe the methods that I used for explaining how the presence of the mine has affected the Resources Access in ARBC and how I collect information for the analysis of the Narratives.

Prior to I describing the methodological procedure carried out in this research, is important to discuss some points about my comprehension of Methods. I understand Methods as the path to follow to reach my objectives. This path consists in the approach to represent reality. According with Alvesson and Skoldberg there are three ways of reasoning behind Methods: Inductive method is which starts from facts or cases and goes towards generalizations and theories. Deductive methods starts from theory and ended in specific cases (in Holt-Jensen, 2007). In my inquiry I have started from the theory and through observation I ended into a case conclusion.

Unlike foreign researchers that have studied the Andes, Peru is my homecountry, so I really was looking forward to come back for fieldwork. It was not the first time I visited Huaraz which was my center of operation, but it was the first time I visited Santa Cruz de Pichiú Peasant Community. Before travelling to Peru I had arranged many things; I thought about what methods to use, I made the first contact with possible informants and with persons that could help me to contact key informants for my investigation, and I prepared possible questions for interviews and surveys. As always, conflicts between peasant's communities,

MNCs and the government in mine exploiting areas are frequent and they were not absent during my fieldwork, so local riots hampered my empirical work. In this chapter I will describe and explain my choice of methodology and explain how I carried out the process of obtaining and interpreting information.

3.2. - Qualitative and Quantitative methods

In the most of the case in geography research it is required to choose how our data should be analyzed. In other words, we need to choose among using a Qualitative method, a Quantitative method or both. However, according with my research question I have to choose the most adequate manner of the analysis. Quantitative methods are all related with the identification of frequency, extent or quantity of a phenomenon, thus it try to find out regularities, patterns and distinguish features of, for instance, a population. This is often accomplished through a sample which has been selected using a random procedure (Sayer, 1992 in Hay, 2000:39). The outcomes of using Quantitative Methods are measurable and easily comparable with others outcomes and normally its analysis required the use of statistical analysis.

Qualitative Method, on the other hand, is related to meaning rather than with statistical measurement. Winchester points "qualitative research is concerned with elucidating human environments and human experience within a variety of conceptual frameworks" (in Hay, 2000: 3-4). Thus, Qualitative Methods are useful for studying social structures and individual experience. Outcomes of qualitative research can be comparable with other results even though not in the same objective way as quantitative outcomes. For instance by comparing reasons whereby local conditions of similar peasant communities are affected in the same way in different spaces by FDI.

For my research I chose to use qualitative method for analyzing my data, this is because I am trying to find out how local conditions have been changing with the entrance of an external actor (in this case AMC) from the perception and individual experience of the peasants. Therefore, as I discussed in the last paragraph, the best way for analyzing the experience of single individuals and how it express their perception about their social and environmental changes is through qualitative methods.

Winchester also holds that there are three main types of qualitative research: the oral (interview and survey based), the textual (creative, documentary and landscape) and the observational (in Hay, 2000: 7). In my investigation I used the former and the last one.

At the beginning of my research I also planned to use some quantitative methods with the use of surveys for complementing my qualitative data results, but during fieldwork I realized that it would be very difficult to take a considerable number of surveys by only one person especially taking into account some drawbacks as long distance, strikes, status confusions (I will explain all of them in the section 3.6).

3.3. – Selection of the case study

My research question aims to clarify the connection between FDI, Natural resources and Local Development. Currently in Peru, mining represents the largest investments in the country and the main export sector (Glave y Kuramoto, 2002). The mining projected investment (mostly FDI) on 2011 in exploration, exploitation and expansions will arise to \$ 14.000 million (MINEM, 2010).

Hence, from different cases of mining production I choose the case of AMC and Ayash River Basin Communities because of the following five reasons: First, this MNC is the largest mining company in Peru and therefore it could be assumed that this peasant community has experienced many changes in social, natural and human capital. Second, AMC has been established enough time for these changes to be analyzed. Third, despite its significant contribution with regard to social responsibility, there have been plenty of social conflicts related to natural resource access, environmental pollution and infrastructure implementation. Fourth, while may have chosen the capital district San Marcos in which I conducted some of my interviews, I chose ARBC because they are closer to the direct influence area of the mine and for being one of the most affected communities in access to resources. And fifth, generally in the cases of MNCs concerned with mining, the most affected are often unable to carry their voices of complain through others scales, in this sense I chose to study and learn from the powerless and voiceless peasants that can hardly do anything against an enormous MNC.

Due all these reasons and characteristics I regard this case stimulant and representative for my research approach.

3.4. - Data collection and data production

Data collections and data production are the two processes through which I obtained the information. The former refers to the first step in which the information is found (as raw material) in surveys and also the use of secondary sources; the last one refers to the result of the interaction among the researcher and the informants in interviews and also surveys; I have to be aware about the second process because it may be affected by my academic backgrounds and biases (more details in the nest subsection).

The data was retrieved in four places: Lima, Huaraz, San Marcos and ARBC. I arrived to Peru in the beginning of June 2009. I started collecting data in Lima where I went to some NGOs which had been working in the topics related with my inquiry. I visited NGO CEPES (Peruvian Social studies center) and Cooperación.

In the middle of June I travelled to Huaraz in which I established my operation center because thanks to a college from the master program I could find there a place for work at The Mountain Institute (TMI) with Internet; I also found it important to stay in Huaraz because one of the offices of AMC (where I met my first contact inside this MNC), the office of another NGO were located there and a state institutions called Servicio Nacional de Sanidad Agraria (SENASA) -National Agrarian Health Service- that had conducted studies on water and land pollution have their regional office there. I travelled to San Marcos (Capital of the district of San Marcos which with the FDI of AMC has become it in the richest district in Peru) on the 1st of July; it was a three hours trip by a non-pavement road. I visited the AMC Community Relations office in which I conducted my first interview. When I arrived to San Marcos I realized that obtain transportation to go the peasant communities will not be easy, but I searched for it. I arrived to Ayash Pichiu which is one of the town of ARBC in the middle of July due to a riot had broken the roads connections. There were not hostels in this small town, but thanks to a contact I could stay at a small medical center which gives attention to all the peasants of the community. There were space but I could not stay there for more than seven days in a row, therefore I had to

come back to Huaraz. Fortunately the second time I went to Ayash Pichiu they let me stay for two weeks. Not counting the trips I took between Huaraz and ARBC, in total I stayed seven days in San Marcos arranging interviews with the community's leaders, making informal interviews with people of the town and interviewing AMC Community Relation representatives and making observation; and 21 days at ARBC walking through trails that connected the eight towns (some of them were an hour walking) in which I conducted a survey of 50 peasants and interviewed community leaders, and also making observations.

3.4.1. – Observation and Status

According with the Oxford English Dictionary observations means "accurate watching and noting of phenomena as they occur" (in Kearns, 2000:104). In a social relation the researcher cannot divide her or himself from the subject of the research (Winchester, 2000). In observation this is particularly central because the researcher as an observed has an active role (Kearns, 2000:104). In this sense, Kearns also claims that all observation is ultimately participant because the mere presence of the investigator will potentially influence the information retrieved (Ibid.). Yet is important to take into account that the level of influences will depend on how the people who are observed categorize the researcher. Thus, the status I have in the informant's perception could affect the information I gather.

The status of any individual is a mix of numerous statuses; it is a list of rights and duties which present his or her position with relation to the total society (Aase, 2007; Linton, 1936).

Thus, my status during fieldwork was changing constantly according with the situation I was in. In front of the representatives of the MNC I had the status of a Peruvian Master Geography student in Norway, but I was not seen as an outsider because the persons I interviewed live in Lima (they work from Monday to Thursday afterward they travel to Lima for spend the weekend) and even some of them studied at my old university. On the other hand, in front of the peasants I had more than one status; at the beginning I always positioned as a University Master Student doing research, however, in more than once they thought I was working for the mine which caused some skepticism (which also caused

some problems that I will explain with more detail in a further section); when I explained to the peasants I was studying abroad some of them made a link about my studies and similar aid coming from international agencies. After noting this idea they positioned me as a helper against AMC. Nevertheless, I only suggest that my investigation could be read it by external agencies or specialists, but stressed that they will not receive any aid from an international NGO.

Hence, I noticed I had in general the status of University Master student which sometimes was misunderstood by the peasants, but there was a general aspect in the peasant's opinion about me: despite I was Peruvian, I was not born in the study area, I was wearing different clothes, I spoke with a different accent, in others words they not considered me as an insider. Dowling states that an insider is similar to their informants in many aspects, while an outsider differs considerably from their informants (in Hay 2000: 32). However, he also argues that the researcher is never simply either an outsider or an insider since we are made of a mixing of racial, socio-economic, gender and ethnic characteristic which is reflected in multiple social qualities and roles, as are our informants. So there are similarities and dissimilarities among ourselves and the informants (ibid:33). In my effort in trying to be considered as close as possible as an insider I tried to emulate their accent and I used some Quechua (Indigenous native language) words, this also helped the fact that I knew about some Andean traditions.

3.4.2. – **Surveys**

Surveys are considered an important manner to collect information in qualitative research; they entail a more standardized interaction with a number of people (Winchester, in Hay 2000: 7). Surveys are guided by a questionnaire which are more closely structured and ordered than interviews.

As I mentioned before I had planned to carry out surveys as a quantitative element for strengthen my qualitative data (usually qualitative methods are used for strengthen quantitative methods, but for answer my research question I preferred to give more importance to my qualitative data). Nevertheless it was difficult to collect enough surveys

for a measurable sample. So I used surveys as a descriptive statistic and used them in graphics that show different responses.

I conducted surveys in nine of the ten communities which belong to River Ayash Basin Communities, they are: Ayash Huaripampa, Ayash Pichiú, Vistoso, Puca Puca, Centro Pichiú, Cambio 90, Huancayoc, Whishllac and Cachapata. However I considered Ayash Huaripampa and Ayash Pichiu; and Cambio 90 and Centro Pichiu as one community because they are very close to each other. The following table shows the distribution of the surveys.

Figure 1. Distribution survey among the communities

Communities	Number of Surveys	%
Vistoso	9	18
Ayash Huaripampa - Ayash Pichiu	9	18
Puca Puca	3	6
Centro Pichiú - Cambio 90	12	24
Huancayoc	9	18
Huisllag	6	12
Cachapata	2	4

The surveys consisted of 31 questions which aimed to figure out in which way Resources Access (especially land and water) have changed after the establishment of the mine (see appendix). Yet if the participants started to extend in one or more of their answers I did not stop them and I wrote all their answer as "observations" at the same survey. This "observations" allowed me to have more information and transform in somehow my surveys in small interviews. The average time in each survey was of 20 minutes but some of them extended until one hour because of their wide (but useful and important) responses. These responses help me also to construct the Peasant Narrative which I will explain in the results chapter.

I began the survey process by being introduced, sometimes by the president of the community, and other times by the resident doctor and nurses of the community. I found this introduction very important because it would have not been very beneficial for the data collection to be introduced by AMC community relation official because the peasants might have thought that I was working for the mine. In that sense I avoided any connection with

the mine inside the community, for instance I always refused to be transported in AMC cars.

The surveys were realized in the informant context on the daily activity of the peasants such a working in the "Plan piloto"¹, washing clothes at the river, taking the animals to grassland or working the land. Despite I never asked the names of the informants more than the half of them gave me their full name, I think this is because according to the peasants there is a poor working relationship among the mine and the communities and this made it very difficult that the MNC take reprisals against them, therefore they were not afraid to tell me their names.

3.4.3. – Interviews

Dunn states that "An interview is a gathering data method on which there is a spoken exchange of information" (in Hay, 2000:51). There are three main sorts of interviews: structured interviews which follow a predetermined list of questions; unstructured interviews in which the conversation is addressed by the informant rather than a set of questions; and in the middle of these two is semi-structured interviews in which there is certain predetermined order but still have flexibility in the way issues are addressed by the participant (ibid, 2000: 52). I found the last one very useful for my research since I did want to prepare a set of questions using an interview guide, but I did not want to circumscribe the informants to those questions, thus informants feel more comfortable to share their perceptions.

In total I did eight interviews, four of them are considered as key informants, and the other four were more informal. Among my key informants are the two presidents of the peasant communities (Huaripampa and Santa Cruz de Pihiú); a geographer that is currently working in Fondo Minero (Fund created by AMC for carry out development projects at the influential area), but has worked at Community Relations Office (CRO) of AMC during two years; and the head of the CRO office of AMC. I also interviewed a forester which is working at the environmental department of the district municipality, a representative of

 $^{^{\}rm 1}$ "Plan Piloto" will be explained in Chapter 5

NGO Urpichallay, a former representative of TMI who worked in a development project in ARBC on 2006, and peasant who has a small store in Centro Pichiú. The interviews aimed to uncover the narratives of peasants and representatives of AMC, whose characteristics will be discussed at the results and discussion chapters.

I could not make direct contact with my informants from Norway, I knew that I needed to interview the presidents of the peasant communities but I did not know who they were. My first contact to them was in San Marcos in where I obtain their mobile number, and then it was less difficult to arrange a meeting. Interviews were located in different parts (Huaraz, San Marcos, Ayash and Pichiú) they were conducted in offices, stores and leaders' houses, except one made (with the president of Santa Cruz Peasant Community) outdoors. The places were chosen by the informants which made me think they felt more relaxed and comfortable to answer my questions. I made appointments with all the participants, in the case of the AMC managers I had to ask for their time one week in advance because they were always busy. The only exception was the interview with the peasant (I just entered to her store, bought something and asked her if she has time for being interviewed). In every encounter I presented myself and the topic of my research and before starting to ask questions. During the interview I tried to gain their trust by using a vocabulary and accents that make me familiar to them (this strategy was used with the president of the peasant communities and also was used in the surveys). In all interviews I used a voice recorder; of course I asked the informants if it there was any inconvenient in being recorded. I considered it important to not leave the recorder machine in front of them so afterward asking their permission I put the machine in my pocket, in that way it was likely they forget about the machine and felt calmer. I also took notes during the interviews which helped me to recognize when they point to some place (for instance a construction or a mountain) or show me a map. The interviews had duration in between 30 minutes and one hour, they were all conducted in Spanish.

3.5 – Secondary sources

The surveys and interviews are the core of information for answering my research questions. Yet, secondary sources have also been an important factor for collecting information and answer those questions. Before going to fieldwork I gathered information through NGO web pages that have been working with similar topics (Cooperacción). I also collected information from the web page of AMC (www.antamina.com) from which I could download its complete Environmental Impact Assessment report. In Peru I gathered literature about Corporate Social Responsibility. I read updates books about studies about the mine. I have also supplemented interviews in newspapers articles and articles published on the web which specifically refers to the case. I also used a video filmed by a journalist from Huaraz in which is possible to see a march against the mine; this video was given by one of the few peasants that obtained a job at the mine. I found useful information published by INEI (Instituto Nacional de Estadística e Informática, the National Institute for information and statistics of Peru) and finally I checked the laws established in the National Constitution regarding the interaction among Multinational mine company and peasants communities.

3.6. – Challenges and problems during fieldwork

The fieldwork was a very interesting and fruitful experience; however there were some drawbacks and challenges.

One of the main problems was the transportation because there was just one car that went from San Marcos to Centro Pichiú; it was the community bus which after three and a half hours of trip in an unpaved road it arrived to the community. Another problem was the short time I could stay at the place due that there was not any hostel at the place, as I mentioned before I stayed at the local health center thanks to the kindness of the doctors and nurses, but I could not stay too much time because of the lack of space, in total I stayed 21 days in Centro Pichiú. There were some problems caused by riots, for instance there was a national agrarian strike which made the peasants block all the roads with rocks and woods which made it impossible to go to the study area. I always presented myself as a master research student before every survey and interview; however, at the beginning the peasants were very skeptical about my questions because I was not the first researcher that made

such kind of questions, indeed there were other individuals posing as researchers, but actually working for the AMC, this made the peasants very incredulous and even violent, nevertheless after I show them a letter which showed that my data collection was strictly for academic purposes and that it had been read, signed and stamped by the president of the community they became more inclined to answer my questions. These problems showed that despite the conflicts in this area among the peasant community and AMC had decreased in the last years, they have not completely disappeared.

Another challenge was the language, because although I speak Spanish in the study area there was a big number of peasants that only spoke Quechua, especially women because. In Andean rural areas women are marginalized and not allowed to go to school and, in consequence, a considerable percent of them do not speak Spanish. My inquiry required that I asked questions to men and women old enough to remember how was the area before AMC started its operations (According with AMC web pages it started the mine construction in 1998), consequently the number of men surveyed is bigger than the number of women. The disadvantage of not speaking Quechua also affected my observation process, for example when I was traveling from San Marcos to Centro Pichiú in the community bus I was surrounding by peasants (kids and adults) which were speaking in Quechua, and I could not understand what they were saying, I only saw some of their gestures, I felt as a foreigner in my own country.

Despite that I have some contacts in the AMC (that I made before going to fieldwork) which supposed to make easier the interviews with CRO representatives of AMC, the lack of time of the informants reduced the quality of the interviews. The process to find the president of the community was also challenging because the mobile telephone signal was not always at the study area, thereby was difficult to find him.

During fieldwork I had the intentions to go inside the mine camp, however it was very difficult due the lack of time and money (The procedure to follow for enter to the mine was long because of the availability of the workers; AMC requires the purchase of accident

insurance to any visitor which was quite expensive taking in account that my visit was going to be only for one or two days).

3.7. – Interpretation of data: The importance of Narratives and discourse

After describing and discussing the manner in which the information has been collected and produced during my fieldwork, I will now describe some issues related to the procedure of interpreting the information.

As I mention before, I started this investigation with the purpose of analyzing the main changes in water management caused by AMC in the ARBC. However I did not find significant changes at that level, but I noticed an interesting issue in the point of view of the peasant when they referred to the mine. I could interpret this point of view as a way of complaint of mismanagement made by the mine with respect to resources access. Thereby, I took into account concepts such as narratives and discourses, which before fieldwork, I had not thought through the relevance for my project.

For this purpose is important to raise methodological implications; how can narratives be recognized from the information acquired in interviews and surveys? How can they be differentiated from each other?

Recalling the theory chapter, I mentioned that narratives are discussed as stories (with a beginning, middle and end) therefore it was difficult to recognize such a structure and my surveys and interviews because most of them were missing one part of it. On the other hand I had the work of recognizing the narratives of actors, which are essential for political ecology discourses. In so doing I began transcribing all my interviews and surveys to a document easily readable and tried to find the links for completing the structures actors' narratives.

3.8. – Reliability

Generally it is not easy to express reliability in qualitative studies due to the assumption that quantitative methods are more precise and consistent. Yet, as is discussed in the beginning of the chapter, choosing the method with which to work depends on the objective of the investigations and type of research questions. Thus, for this case I decided to work with qualitative methods. However, even using qualitative methods the reliability of the study will also depend on the manner in which it was conducted. In this sense I can identified some points from which the reliability of this inquiry could be criticized.

Firstly, the geographical location of surveys was not sampled, in other words, I did not take into account the populations of each community for realizing the surveys. Yet, I think the amount of surveys was enough for obtaining a representative outcome using qualitative methods. Another possible weakness of my fieldwork is the low number of semi-structured interviews. Yet, they were very fruitful with respect to knowing the perception of both parts (ARBC and AMC) about resources access and changes in livelihoods. Thirdly, in Political Ecology and in general development studies is taking in account important characteristics (for instance, gender and ethnicity) about the affected; the fact that the 64% of my informants in the surveys, and five of eight in the interviews were men could be interpreted by the feminist critiques that the data production may have male biases. In small communities of the Andes the equal of gender is far away from Europe, therefore all relevant positions such as president of the community are occupied by men. Fortunately this is changing in new generations.

Chapter Four

The Case in Context

4.1. Introduction

The target of this chapter is to describe the context in which I place my investigation. I will first discuss FDI in the international context, touch on the Latin American and Peruvian contexts, and finally more toward local context. In this chapter I will explain how FDI travels through this scale using political decisions which is within political ecology research agenda, and I will also describe my study area.

4.2. World FDI Movements

Showing how FDI flows have developed and increased during the last two decades and how it has been taking place especially in developing economies is relevant for understanding the breakdown of international barriers regarding globalized economies in new and smaller markets.

In this senses World Bank figures point out that flows towards developing countries elevated from US\$ 11 billion in the 1980s to more than US\$75 billion in 1993, to over US\$100 billion in 1994 and to US\$240 billion in between 1995 and 2000 (Fløysand et al. 2005: 35).

These numbers are unquestionably representing a big difference in the last decade in developing countries; however, they only receive a small fraction comparing with the whole FDI flow in the world. According to United Nations Conference on Trade and Development (UNCTAD) in 2000 developing countries received 8.2% of the entire FDI flow while it had 80.5% of the world population (ibid. 2005: 36). This disparity also extends within developing countries; Asia tops list of FDI flow addressed to developing world with 86.1%, followed by South and Central America with 13.4% while Africa (having the 13% of world's inhabitants) only receives 0.4% in 2002 (ibid. 2005:37).

In the next section I will focus on how FDI has been moving in Latin America and I will explain some of the main reasons why these changes occurred during the 1990's.

4.3. FDI in Latin America

Latin America, its markets and its governments are not a uniform arena; therefore FDI has been adopted in complex and different ways throughout spaces and times. Some dictatorial military governments fought against foreign capital expansion in Latin America due to nationalist sentiments, U.S. MNCs were between 1930s and 1970s expropriated and turned into state enterprise (for instance, the Peruvian military government of Juan Velasco Alvarado expropriated in 1968 one of the oldest giant oilfield La Brea y Pariñas first discovered in 1869 and belonging in that time to International Petroleum Company from U.S.). Added to nationalizations, Latin American countries also implemented Import-Substitutions Industrializations (ISI) policies imposing high cost of foreign industrial goods in order to foster the emergence of a domestic industrial base. This had a successful beginning, however on the 1970s the incompetence of domestic industries (addressed by ISI policies) forced the consumers to buy overpriced goods (Biglaiser and DeRouen, 2006: 54). Therefore market distortions and ISI led to trade and payment deficits and capital scarcity in the 1970s (ibid, 2006:54).

The capital shortfall led the states to borrow heavily from international financial institutions and commercial banks, eventually this will cause high inflation and debt crisis during the 1980's (ibid, 2006:54). In consequence, most of Latin American countries left nationalist ISI policies and tried to raise capital through several sources including FDI (ibid, 2006:55).

Hence, an increased openness to FDI was implemented in Brazil, Argentina, Mexico and Chile during the 1980s; chiefly in a market seeking category due these countries represent larger markets (Te Velde, 2003). Other countries, such as those that are part of the Andean Community of Nations (Bolivia, Colombia, Ecuador, Peru and Venezuela), underwent economic reforms in the 1990s. The implementation of these reforms resulted in a significant increase in the course of this decade, from the annual average of US\$18 billions during 1990-1994 to a raise of US\$104 billions in 1999 (Cepal in Paus, 2004: 434).

This reflects the huge changes that FDI represented in Latin American economies. In the next section I will present how FDI affected Peruvian economy emphasizing mine industry.

4.4. The increase of FDI inflows in Peru

In the 1980s Peruvian state was characterized by hyperinflation, high governments deficit and economic turmoil. In 1990 the first government of Alberto Fujimori had as main aim to create an economic and political environment that allowed privately owned businesses to emerge and expand. In that sense, the new constitution of 1993 strongly encouraged private initiatives which promptly took over control of formerly productive fields that were handled by the state and other local entities.

Hence, thanks to these political reforms to attract FDI inflows, Peru became by 1996 one of the top ten recipients of FDI among developing countries. In 1998 FDI flows to Peru were the sixth largest in Latin America (UNCTAD, Investment review of Peru, 2000). From the annual average of US\$30 million in 1980s, FDI rose to around US\$2 billion per annum in the second half of the 1990s (ibid:3). Privatization was one of these reforms, during the 1990s encompassing the 35% of FDI inflows during this period (ibid). The analysis by sector shows that whereas in the early decades Peruvian FDI inflows were composed by mining, trade and manufacturing, during the 1990s service sector was the dominant sector, attracting investment from 29 countries (ibid:6). However, the mining sector benefited the most, receiving 43% of the total FDI inflow during the early 1990s (ibid.) and remained one of the fastest-growing sector in FDI. Peruvian mining industry received US\$ 8.8 millions in FDI inflow in 1993 and in 1999 this amount rose to US\$ 284.7 millions (Te Velde, 2003: 54). In the UNCTAD report it is mentioned that mining is expected to maintain its dominance in Peruvian FDI profile due to the development of mine projects that were in exploration, construction or in their first phase of exploitation; including the AMC in Huaraz province. In the next section I will describe and explain the importance of mining industry in Peruvian economy and the role of the Peruvian state in the growth of this industry.

4.5. – The importance of mine industry in Peruvian Economy

Mining has been always significant for Peruvian economy, the exploitations of silver and gold mines were the base of the Colonial Spanish economy. At the end of XIX century, Cerro de Pasco Copper Corporation (CPCC) was the first multinational mine company established in Peru. Then in the 1950s, a new mining code facilitated the establishment of other companies such as Southern Cooper Corporation (SCC) and the development of projects in Toquepala and Marcona with US capital. During the 1970s the military government of Juan Velasco Alvarado nationalized a number of companies giving birth of the great national mining which initially focused on social demands, augmenting services, wages and employment, which in turn led to rising production cost that eventually led the state into a debt situation (Damonte, 2007:5). This situation changed in the 1990s with economic stabilization process carried out by the state through the attraction of foreign capital to increase tax collections (Legislative Decree 662, 1991).

In this way, began a privatization process which included 22 properties causing the decrease of state control in mining production from 50% in 1990 to 15% in 1997 and to 1.5% in July of 1998 (Pasco-Font, 2000: 10). Therefore, FDI in mining enormously rose from around US\$400 million in 1990 to roughly US\$1150 million in 1995 and to US\$1700 million in 2002 (Cuanto, 2003 in Damonte, 2007: 12). Moreover, foreign exchange generated by the mining has increased significantly during the last decade; this may be due to large companies started their production during this period, for instance AMC started in 2001. This increase is portrayed in the following figure.

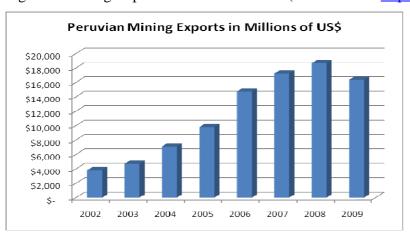


Figure 2. Mining Exports to Peru 2002-2009 (Derived from http://www.minem.gob.pe):

Mining exports had a dominant position within the total Peruvian exports, reaching 61.8% of them in 2006, and was never below of 50% during the period of 2002-2009 (http://www.minem.gob.pe). Yet is possible to notice a decrease from 2008 to 2009 due the global financial crisis.

This increase in mining exports brought along an increased of internal taxation which are illustrated in the following figure.

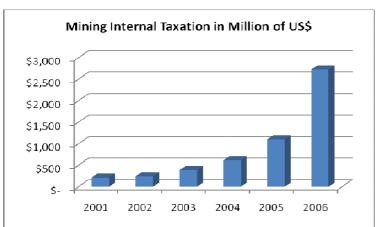


Figure 3. Mining Internal Taxation 2001-2006)(Derived from Vigilia Ciudadana in Damonte, 2007: 18)

As in the total of Peruvian exports, the internal taxation generated by the mine production has been increasing in relation of the Total Peruvian Taxation; this is illustrated in the following figure.

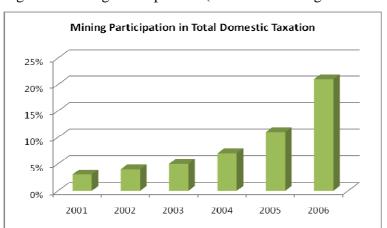


Figure 4. Mining Participation (Derived from Vigilia Ciudadana in Damonte, 2007: 18)

These figures suggest the importance of the mining industry in the Peruvian export economy, and also in national taxation which is redistributed by the Mining Royalties or "Mining Canon" law (stipulated in article 77 of the National Constitution). In Peru the Mining Royalty consists of the 50% of funds raised by the state for the concept of "income tax", *Impuesto a la Renta* in Spanish; it is given out in the following manner: 10% to the district where is located the mine operation, 25% to the province, 40% to the department and 25% to the regional government². Yet the fee collection starts after the company has recovered its initial investment. In addition it takes about eighteen months between the time when the company makes its first payment to the National Superintendence of Tax Administration (SUNAT its acronyms in Spanish) and when the fee is transferred to the corresponding location (Glave and Kuramoto, 2007: 170). In this sense, the Mining Royalty is not an instrument of compensation, but rather a mechanism for redistribution of income generated by the exploitation of natural resources (ibid, 2007: 170).

Considering that the Mining Royalty is based on the concept that natural resources are property of the nation and therefore its use should benefit all Peruvians, I will mention one of the main land tenure reforms that accompanied the privatizations. AMC used in some way or another these reforms in areas where there were problems concern with land expropriation. The Peruvian new land law or "servitude law" argued that the peasant

² The political division in Peru consists in Departments, Province and District (in size order), however in 2002 in attempt to implement a decentralization plan, the state legally labeled all the departments including (Callao and excluding Lima) as a regions which eventually will be merged between them.

communities could sell their formerly inalienable lands. Moreover, if both parts (legal land owner, usually peasant communities; and the MNC that pretends to extract the Natural resources underneath those lands) do not reach an agreement; the state has the right to expropriate the land and pay an established compensation (Damonte, 2008: 151). However in 2003 this land law underwent a modification which emphasized negotiations without to reach state expropriation that enhances social conflicts environments (Damonte, 2007: 10). Before 2003 the servitude law was barely use, it was a tool of threat through which AMC managed to accelerate sales of community lands (Gil, 2009). In this context, multinational mining companies that arrived in Peru in the last two decades have been important contributors to the Peruvian economy, however, they have provided few jobs related with the high expectative created by huge projects like these. Adding to this there is a large amount of conflicts which are generated by environmental disruption, corruption in national authorities, and complains about the uneven distribution of the gains in the areas that are directly affected by mine operations, and continuing poverty.

Narrowing down my project I will describe in the following sections both AMC and my study area Ayash River Basin Communities; and how their main features interplay in my study case.

4.5. – Antamina Mine Company

I shall begin describing AMC because it is large project which involves many areas, from the highland where the production mine is located to the coast where the harbour whereby the copper and other minerals are dispensed to different parts of world is found.

AMC is an MNC that produces copper, zinc and molybdenum concentrates and sub products of silver and lead. The mine is located in the district of San Marcos, province of Huari, and in the Ancash region about 200 km from Huaraz city (the biggest city near to the area; and the economic and politic capital of the region); and about 430 Km from Lima. The mine area has an average altitude of 4,300 meters above the sea level and in the

Cochucos valley and in between tow mountain chains: "La cordillera Blanca" and "la cordillera Huayhuash".

AMC is considered the mayor investment in Peruvian mining history with roughly US\$2.3 billions; the biggest mine in Peru and; one of the ten biggest mines around the world with regard to productions levels (www.antamina.com).

After some changes of ownership in the shares and, in some corporate mergers, since 2008 the consortium has been formed by the Anglo-Australian BHP Billinton with the 33.75% of the shares; Xtrata of Switzerland with 33.75; Canadian Teck-Cominco Limited with 22.5% and Mitsubishi Corporation of Japan with 10% (Gil, 2009:71).

I think is important to explain with some detail the magnitude of the project for understanding its influence in the whole area in which is located. The infrastructure of the mine basically consists of the open pit area (in which the Antamina lagoon that was dried for the purpose for extract minerals underneath the water was located), the concentrator, clearing dumpers, the tailing deposit, the fresh water dam and the mine camp (where 3815 employees who work in different areas of the mine are living). The installations are located in the headwaters of two rivers systems: Ayash River and Carash River. The tailing deposit is vital for my project because is located at the Ayash River basin at 4120 above the sea level, it can store 570 Mt of tailing (Golder, 2007).

The infrastructure outside the mine consists of the pipeline which is a reinforced tube that runs underground and is monitored along its 302 km of trajectory in which it transports the concentrate from the production area to the port. According to AMC this produces less environmental and social impacts than highway transportation; the port which is located one Km west of Huarmey, a town 140 Km south of Chimbote and 300 Km of Lima, it is a relative big port that includes storage tanks to receive the concentrate from the pipeline, storage building for concentrates more than 160,000 tons, water treatment plant to recover the water used at the pipelines and reused it in farming projects, a 271 meter long dock with a transport conveyer belt (www.antamina.com).

And finally the housing complex "El Pinar" located in Huaraz for families of the Antamina stuff, in this complex the Antamina office where I conducted some of my interviews is located and I did get the impression of being in another city. In the next figure is showed the location of the mine.

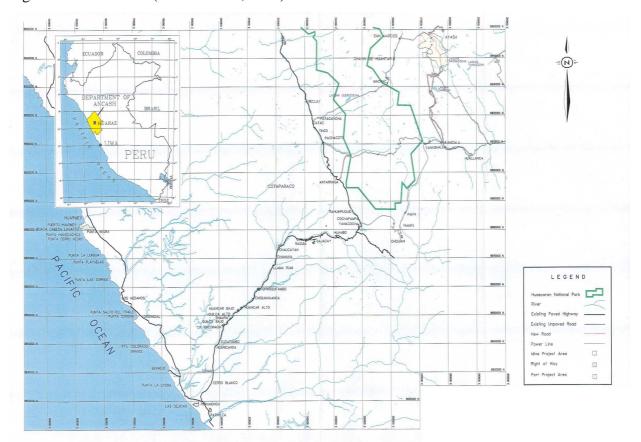


Fig 5. AMC Location (From Stantec, 2004)

4.5.1. – A brief history of AMC

Antamina's name comes from the Quechua word *anta* which means copper and the Spanish word *mina* which means mine (Yernberg 2001:327 in Gil, 2009:48). Already in the mid-sixteenth century this area is indicated as a mine area with the two small projects: Taco and Rosa as the Italian naturalist and explorer Antonio Raimondi quote in his work: *El Perú* (Gil, 2009:61). During the 1950's the CPCC has concessions and explored the area, but political instability postponed the project. In the 1970's these tenders expired, therefore, reverted to the state (ibid:61). In 1973 *Minero Peru* and a Rumanian company *Geomin*

reactived the project, yet due to financial problems it closed in 1981, consequently reverted again to *Minera del Centro del Peru* (CENTROMIN) which belonged to the state, lack of commercial development prompted the government to issue a tender in 1996 which was acquired by the consortium of to two Canadian enterprises: Rio Algom Limited and INMET Mining corporation (ibid: 61, 70). After some changes ownership, by 2008 the enterprise shares were distributed among the aforementioned companies.

The AMC project has five phases: Design, construction, operation, close and post close of the mine. Gil considers three phases prior to design stage: Exploration, land acquisition and relocation, he regards these phases very important to avoid conflicts (ibid: 75). Yet, conflicts were not absent during the phases mentioned by Gil, especially the land acquisition and relocation of the landless peasant were carried out in an inappropriate manner causing conflicts.

Gil argues other important point; the presence of small Contonga mine (which was owned by Sociedad Minera Gran Bretaña and located 5 Km to northwest of Antamina Lagoon) during the 1980's gave work and bought directly from suppliers from different areas in San Marcos. This created high expectations in the population of the way that they thought the AMC company would even give more work and buy more products, since to it was a bigger project (Gil, 2009:62). In chapters five and six I will discuss and contrast some of the expectations that I have recognized in fieldwork which proves that they were very far away from the outcome.

In November 10th of 2001 and after five years AMC obtained the tender, the company officially inaugurated their operations.

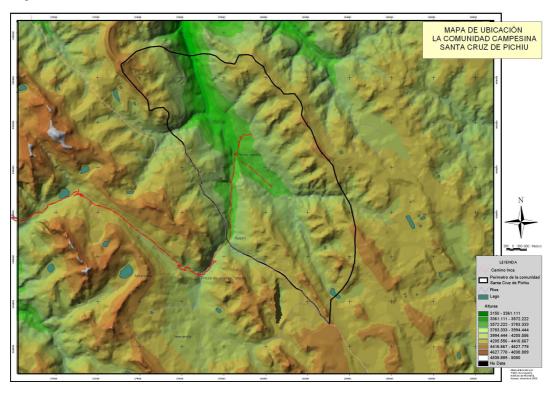
4.6. – Ayash River Basin Communities

After describing the size of AMC project it should be noted that it covers a large area, therefore in this section I will continue narrowing my research focusing in my study area. The nine aforementioned communities (Chapter 3) belong to three different districts and two Peasant Community Organizations which is illustrated in the following figure:

Figure 6. (Derived from Environmental Impact Study of AMC, 2007)

Community Sectors	Districts	Peasant Community	
Ayash Huaripampa	San Marcos	Huaripampa Peasant C.	
Vistoso			
Ayash Pichiú			
Puca Puca		Santa Cruz de Pichiú	
Centro Pichiú	San Pedro de Chana	Peasant Community	
Huancayoc			
Wishllac			
Cachapata			
Cambio 90	Huachis		

Figure 7 ARBC location (From TMI, 2006)



4.6.1. - Physical features of Ayash River Basin

The study area has altitudes in between 3,500 and 4000 meters above the sea level, in a cool temperate climate, its terrain is rugged in all its land area, moreover it is characterized

by being rocky and sloped; it presents high precipitations during summer (December-March). Further, the area location in the Andean highlands makes it also part of a very humid tropical sub-alpine eco-region (Stantec, 2004: 26-55). In this region begins the so-called "heladas" which literally means frost and consist in cold winds descending from the mountains and ruin the crops (DIACONIA, 2009:21). This phenomenon occurs in all the south Peruvian highlands and also in Bolivia.

4.6.2. – Social features of Ayash River Basin

Due to difficult conditions such as steep topography and availability of fertile soils, human population in the Andes is characterized by not being concentrated in settlements, but rather scattered over different altitudinal grounds occupied by different members of families. In this sense the lower areas are used for agriculture activities and the higher to grazing activities (Dollfus, 1981).

This feature described by Dollfus is not absent in Ayash River Basin, the sectors aforementioned are big areas where I found dispersed family houses that possessed not only agriculture lower lands but also pastoralist higher lands for their cattle.

The study area has approximately 1760 inhabitants distributed in 408 families, Huancayoc is the biggest with 128 homes and Cambio 90 is the smallest with 12 (Golder, 2007). The gender index is 49% female and 51% male; 97.3% of the community has Quechua as their mother tongue, however, 92.3% of the populations are bilingual, and they speak Quechua and Spanish (DIACONIA, 2009: 26)³.

Since, my study area is located in a Peasant Community, I think it is important to define its social organization. The Andes rural territory is basically governed by Peasant Communities, they are the main production organization which manage not only the land for agriculture and cattle and the maintenance of the community infrastructure, but also portrays history, traditions and peasant identity. Moreover they are responsible for

.

³ This study was made within Santa Cruz Peasant Community in which is located in 8 of 9 villages where I conducted my fieldwork.

economic and social development, of protecting public safety and promoting the participation of peasants in decisions that affect them.

Furthermore, the Peruvian Constitution in its article 89 claims:

"Peasant Communities have legal existence. They are autonomous in their organization, communal work, and in the use and free disposal of their lands, as well as economic and administrative, within the framework established by the law. The property of their lands is infeasible except in the case of abandonment. The state respects the cultural identity of the Peasant Communities" (in Alayza, 2007 own translation).

In this sense, community peasants are not only articulation spaces of individuals that shares common resources, but also a space of political representation (Bebbington and Hinojoza, 2007:298).

With respect to the economic and use of land resources, it is important to point out that 70% is comprised by steep slopes, there are some flat areas, but they are not enough for upholding a high level of agriculture. There is only 14% of agriculture land, 70% of grazing, and 0.4% of forest (Golder, 2007). The type of agriculture that dominates the area is rain fed. Cultivating season is during November and December and harvest season is during the months of May, June and July.

There are other works that complement the agriculture and livestock activities such as craft production. However, only few people carry out this work.

With regard to educational levels, the 16% have complete secondary school and to lesser extent primary school (14%). Both levels of technical educations (2%) and university education (0.4%) are extremely low. In the community the level of illiteracy is 13%, with a greater emphasis in the female group with 21% and in men with 5% (ibid, 2009: 24-6). This is because (as I mention before) years ago (now in less extent) of women were marginalized by prohibiting them to school to stay doing housework, fortunately this situations is changing and young women have equal opportunities to be educated. With

regard to educational and health infrastructure, there are five primary schools, two kindergartens and one secondary school in Huancayoc; in health infrastructure there is one health center located in Huancayoc and other in Ayash Pichiu According with Golder, the peasants can also find health attention in Carhuayoc, San Marcos and in the clinic of AMC. However, more than 40% of the peasants prefer to heal themselves and do not go to the health centers (2007)⁴.

_

⁴ This information will be discussed in Chapter 5.

Chapter Five

Results: Presenting FDI effects

5.1. Introduction

In Chapter two, I explained how FDI, natural resources access and local development are connected in theory. Now I will present the results found during fieldwork with the aim to respond to my second research question, namely, what are the direct and indirect effects of FDI in Ayash River Basin Communities? I also will compare the peasant perspective with the perspective of the people which live at San Marcos, the district capital. I will first recount how FDI has been established in the area and how the launching of the project created new expectations. Secondly, I will discuss the extent to which extend the direct and indirect effects of FDI are related with local development. Thirdly, I will discuss the role of Corporate Social Responsibility in social development and how this policy has been carried out in AMC. Finally I will explain how FDI has affected Natural Resources Access. These four steps are analyzed using the data I collected during fieldwork and by using secondary sources.

5.2. The arrival of FDI and the creation of new expectations

As I mentioned in Chapter four AMC is the biggest investment concerning mining in Peruvian economy. It has been built on an area where there were only grassland for livestock and the cultivation practice of some tubers and cereals by rain fed. Villages within and around this area did not have the basic services such electricity and water, and had a limited health and education service; in other words, the state (like in many rural areas in Peru) had excluded them from its development plans. In this sense, the arrival of such a enormous enterprise created expectations among the local peasants because of their former experience with Contonga mine. This mine operated between 1981 and 1991, and reopened in the middle of the 2000s. It gave work at the mine operation and created a small production chain between the mine workers and the peasants whom supplied them with

their products. They used to sell: milk, meet, cheese, tubers, cereals, and textiles (Gil, 2009: 121).

Through one of my informants I had access to a documentary produced in 1999 by a journalist from Huaraz who walked over all the communities in the Ancash province for more than two months, collecting the peasants complaints and requests to the government and in this case also to AMC. From this source it is possible to understand the framework in which was ARBC was during the early years when AMC was entering into the area. In the two hours long documentary he began his first speech to the representatives from the community as follows:

"Do not think that I work for AMC, I am a journalist, if you have any complain or grievance with the national authorities or some institution, please tell me because this will be reported at the media in Huaraz and Lima"

It is interesting how he emphasized that he was not an AMC worker, this suggests that relations between the mine and the communities were undermined from the very beginning. He interviewed and filmed 20 persons (peasants, teachers and community leaders) who highlight two main complaints: the lack of a road and the future contamination of Ayash River. At the first complaint peasants refer both to the state to AMC; they claimed that the road had been requested from the state since 1978, but nothing happened. They also claimed the mine will close their only connection between these communities and San Marcos, which was path that connected both areas in an eight hours walk (indeed, few months later AMC closed the path because it was in the middle of the exploitation zone. This forced the peasants to take another route that extended the travel time to around 15 hours). Their second main complaint was supported by images that show the murky water of the river (this will be discussed further in section 5.5).

In the documentary it can be recognized how since the beginning big expectations were gradually become in illusions, a peasant pointed out:

"They (AMC engineers) said to us: if we came to work here you are also going to work for us (at the mine), all of you and you will sell your products to us"

One of my informants claimed that from all the communities there were no more than 20 people currently working at the mine. A remarkable point drawn from the video is the big difference among the infrastructure eleven years ago and what I saw last year. In 1999 the health center in Centro Pichiú and the primary school in Vistoso were in poor conditions and of course the road was not built. The two hour documentary ends with a grievance march from Centro Pichiú to AMC, around 50 peasants walked requesting justice for the free transit through the path that they had been used for decades; and for the pollution at the Ayas River.

Figure 8. Grievance March in 1999 (from Angel Durand Report, 1999)



In the Figure # is possible to read in their makeshift banner: Justice for free transit and not river pollution Santa Cruz de Pichiu Community.

Figure 9. Peasant in protest march (from Angel Durand Report, 1999)



The expectations were not only fed by job promises made by representatives of AMC, but also by the wide coverage given by media to the immensity of the mining project.

In sum, previous experience with mine environments and high expectations reflected in two context times (in 1999 and 2009) deepened local narratives which will be explained in the following chapter. Now I will continue with the analysis of the direct and indirect effects of FDI in the study area.

5.3. – Effects caused by FDI

After discussing the arrival of FDI into the area I shall now move on to explain direct and indirect effects caused by AMC at ARBC. During this section I will also mention some of the effects caused at the regional scale, more precisely in San Marcos and Huaraz. The effects on Resources Access will be discussed at section 5.5.

5.3.1. – Direct Effects: Infrastructure, Employment, Local Networks and Technology Transfer, and Taxing

The first direct effect is in infrastructure; the surveyed claimed that 100% have drinking water access and 66% have latrines. But only 48% of them attributed those works to AMC, the rest indicated NGOs such as Care Peru or Caritas and the municipality of San Marcos as the source of these works. However these NGO were hired by AMC for conducted those works and the municipality used funds from the mine fund for the same purpose. According with the head of the Community Relation Office, this reflects either the disinformation among the peasants or the unwillingness to recognize the works made by AMC. On the other hand, they recognize the work done by the MNC in the building of the unpaved road which replaced the aforementioned path that in first instance was blocked of free transit and then closed for the constructions of the operation mine area. They also recognize the improvement of the health center in Centro Pichiu which now counts on an ambulance, and the construction of another one in Ayash Pichiu. The president of the Santa Cruz peasant community stated that the secondary school in Huancayoc was built by AMC. And a primary school in Vistoso was built by the municipality after the arrival of the mine, which suggests that it was built using Canon mine funds. There were others infrastructure works such a soup kitchen, a community center in Centro Pichiu, a toy library in Ayash Pichiu and the expansion and improvement of the electrical system, all directly funded by social programs of AMC.





Figure 11. Community center built by AMC (photo taken by the author)



Figure 12. Ambulance donated by AMC (photo taken by the author)



The second element is employment: currently AMC employs 1850 workers directly and 3350 in indirect jobs (www.antamina.com). According to my informants there are only between 15 and 20 persons from ARBC working at the mine, which is also confirmed by Golder in the AMC Environmental Impact Study in which they stated that only 3% of inhabitants works in the mine (2007: E3-39). Thus, the promises of AMC concerning employment were not realized. This is primarily because of two reasons: first, technology used by AMC requires a high level of training for the workers, which led to the arrival of skilled labor from others parts of Peru (especially from Lima and Arequipa which are the

biggest cities) The local peasants had no chances to compete with these more skilled laborers. Second, the hinterland area was not only the zone that surround the mine production area but also the areas that surround the pipe and the port in Huarmey. An exagent of the Relations Community office put it like this:

"We do not need 10 thousand employees, that is the reason we cannot hire all the people from the influence area, and when the skill tests was conducted, the residents of Ayash River basin were among the last places compared with other locations"

Employment situation discussed above confirms Te Velde's postulation: FDI in Natural Resources seeking sector usually does not require big amounts of labor. This is also reflected in what has been happening at the national scale: although the increased of mining exports duplicated (103.5%) in between 1990 (US\$ 1,462 millions) and 1999 (US\$ 2,977 millions) the employment only increased 18% (from 50,684 to 59,813) (Glave and Kuramoto, 2001:11, 16).

AMC is an attempt to improve the level of skills and competences of the peasants in ARBC. They hired the National Service Training in Industrial Work (SENATI in its Spanish acronym) for teaching without charge computer and information science and electrical and mechanical maintenance. However according to two of my informants in AMC Community Relations Office, the peasants started with good attendance to the free classes, but after some weeks they stopped attending. My two informants attributed this behavior to laziness and disinterest. But there may were several reasons why the peasants stopped going to the classes, for example: not considering it worthwhile to walk such a long distance for those classes, time that likely they prefer to invest in their farm and home tasks.

Despite there was not employment, AMC hired the peasant labor as a temporal job for the construction of the infrastructure mentioned above. This used a relatively big amount of labor which helped to diminishing conflicts caused by the broken promises of employment. Also, during the first years of 2000s, the multinational catering company Sodexho was in

charge of providing food at the mine camp. AMC, in one of their community development projects (which will be discussed later in this chapter), stimulated the creation of microenterprises based in ARBC to sell their potatoes to Sodexo. Yet, after few months the French catering company asserted that their potatoes did not meet their quality standards, so they stopped buying more potatoes and stopped what could have become an upgrade of a local production chain.

Another case that finished with better results had its origins in the construction of the mine operation area which destroyed the aforementioned path used by the peasants for transporting their products to San Marcos. In addition to building the unpaved road AMC bought in compensation, two buses for the community with which they formed a small transportation enterprise called "Santa Cruz de Pichiu" which charges eight Peruvian Soles (around US\$3) for a three hours trip from San Marcos until Vistoso (I also travelled in these buses). It is worth noting that this small company does not employ many workers. And while it aids the transportation to San Marcos, not everyone can afford eight Soles. This may cause more social disintegration in communities.

After discussing the employment system that has resulted from the arrival of FDI, it is evident that there was not a strong local network among the actors. In other words, FDI has not caused the creation of a chain of suppliers of a provider network in local communities, and even less technology transfer from the MNC to the local economy.

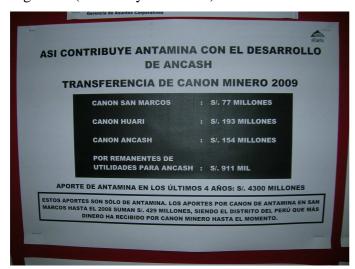
The third direct effect of the FDI I will discuss is tax revenue. The Peruvian taxation revenue is very centralized; in other words, all the decisions about taxing are made by the central government and have to pass by Lima where all the politics and economic guidelines come from. Hence, there is a feeling of distrustful towards the state and national authorities in general (this will be exemplified in the study area in the next section). Recalling the previous chapter that according to the law, the district in which the operation mine is located receives 10% of the total distribution of the Mining Royalty, therefore the district of San Marcos was originally calculated to receive roughly US\$5.31 million (Grade 1999:96 in Gil, 2009:259). But taking into account both that the tax paid by multinational

companies related to mining varies with their revenue. (which also vary according to the price of minerals) and the fact that the fee collection starts after the company has recovered its initial investment, the district of San Marcos received on April 19th of 2006 the astronomic sum of US\$14 millions. This was an amount that the small district has never seen before, almost triple the initial forecast (ibid, 2009:260). With the following year's taxes, San Marcos became in the richest district in Peru.

In Figure # is a statement showed at the front door of the Communities Relations Office in San Marcos. It can be observed that until the date (the photo was taken in July, 2009) AMC contributions to the district of San Marcos through mining Canon was 77 millions of soles (roughly US\$ 27 millions). The total contribution from AMC to the Ancash province until 2008 is 4300 million soles (roughly US\$ 1513 million) and to San Marcos until the same year it is 429 million soles (roughly US\$ 151 millions). However, the most important fact to highlight from this figure is the vision of development that AMC seeks to convey to the population showing this amounts of money in a statement located in the street. When I asked to the head of CRO why these types of ads are put on the front door of the office? He put it like this:

"People perception is that the money from the mining Canon is given by the state and in consequence AMC has to give its part, in this sense AMC created the Mine Fund which is responsible for carrying out development projects (it will be discussed later in this chapter) and these kind of ads are also to inform the people that AMC are giving money for San Marcos development"

Figure 13 (Picture by the author)



Although is difficult to find accurate information on tax collection it is easy to recognize that this money is not distributed in equal proportions within the district and not even within the directly affected areas as ARBC. For example, during my stay in San Marcos I could see how the entire municipal building was being rebuilt, how the wages of construction employees (including engineers and workers) are higher than those received in Huaraz whereas Centro Pichiu is still without a irrigation system.

Therefore, the government should take some initiatives for an equitable distribution and even more so if the copper price continues to rise.

5.3.2. – Indirect Effects of FDI in ARBC and San Marcos

Unlike other cases in which FDI brings employment or commercial linkage among the local communities and the MNC, in my project area those results were not achieved. However, there were attempts to reach them, for instance, during the construction of the mine. One of my informants in San Marcos put like this:

"There were more people than usual (temporal construction workers), new restaurants opened and some people put up their homes to receive the new workers, but later the workers left and the restaurants were closed. Now no one from Antamina comes to town"

Indeed AMC workers do not even pass by San Marcos for going to or coming from Huaraz or Lima because they use the new paved road constructed by the company. Even a well know transportation bus company (Cruz Del Sur) transports the workers directly from the mine to Lima without passing by Huaraz. Another sign of economic regional centralization is the aforementioned AMC employees' residence "El Pinar" which is located in Huaraz. One of my informants would have preferred the huge amount of houses near to San Marcos, but is easily to understand why AMC have a preference for the touristic and urban Huaraz. Therefore, indirect effects are also related with expectations described in the last section.

Besides the direct effect caused by the mine in Resources Access which will be discussed in the next section, there are indirect effects that have undermined work habits and power relations in my study area. I identified three particular indirect effects: Corruption in local authorities, huge difference in the wage of the mine workers and the so-called "Plan Piloto".

The first effect is indirectly caused by the policy of Corporate Social Responsibility of AMC. There were attempts to create entrepreneurs in the peasants communities, this meant a big injection of capital into areas where there has never been such amounts of money. An ex functionary of CRO put like this:

"From 2000 until 2006 Ayash and Santa Cruz de Pichiu peasants communities were those who received more money among all the communities located within the area of influence, but the big injections of money caused an increased in corruption because the gains went to the pockets of five people who were those who had created the local company funded by AMC or were communal past presidents. The mismanagement of the investment were reflected when community leaders moved to accommodate residential areas in Lima"

Unfortunately corruption is one of the biggest problems in Latin America. It happens in all scales from the highest state officials⁵ to peasant community leaders. Therefore such a large insertion of money should be guided by the MNC, otherwise it can cause either the loss of the investment or the creation of corruption.

The second particular indirect effect identified is the great difference in the wages of mine workers, which creates a feeling of envy and feeds the high expectations and intentions to get a job this in turn undermines social relations between the others inhabitants. Miners have economic possibilities which are unattainable for a regular peasant, such a new car and having more than one house (in Huaraz and his or her⁶ own land in his native town). It seems this gap in wages was also used to calm or hush community leaders which were dissidents during the first years of exploitation. For example, I recognized one of my informants that is working for the mine for the last 5 years in the aforementioned video filmed in 1999 then he was one of the communities leaders and one of the most enthusiastic in protest against AMC. Unfortunately while the video was being transforming from VHS to DVD, the former community leader went to his labor turn in the mine, and since I received the video almost at the end of my fieldwork I could not ask him the specific reasons about his change.

The last particular indirect effect that I identified is the "Plan Piloto" or Pilot Plan in English. This plan has been prepared by the District Municipality of San Marcos since 2008 and it has been extended in the last four months in the other communities which are not part of the San Marcos district but are within the ARBC. The plan is funded through the Mining Canon and other voluntary contributions given by AMC. It consist of including the peasants within the road maintenance plan give them work on road building, small construction job on the community's building and of course road maintenance. It is basically transporting rocks and sediments from one place to another, trenching and using adobe and thatch for constructions. It employs all the men and women who want to

_

⁵ During the government of Alberto Fujimori (1999-2000) acts of corruption caused the disappearance of US\$6 billion from the state coffers, there have been recovered only US\$184 million (http://elcomercio.pe/noticia/458481/balance-gobierno-fujimori-desaparecieron-mil-millones-dolares-arcasestado).

⁶ Unlike other mine company in Peru AMC also employs women as a mine workers

participate, including teenagers. The only requirement for working in the plan was to be a citizen of San Marcos or ARBC. However I spoke with a teenager in Centro Pichiu who told me that she lives in Lima, but her relatives suggested her to come to work in "Plan Piloto" during her school vacations instead of doing nothing in Lima, she was born there but then she immigrated with her parents to the capital. The work is from 8:00 to 16:00 with a break for lunch, and every worker received 42 soles (approximately US\$14) per day which is more than quadruple what they earned for working their land (10 soles or US\$ 3.5).

Thus, the "Plan Piloto" has been changing work habits in a traditional agricultural and livestock culture. The head of the RCO put like this:

"The Plan Piloto is the main reason for the decline in agriculture and livestock at the mine influence area due the difference among the wages and the logical choice for farmers to work in the "Plan Piloto"... the people are disabled by not even being taught a trade, but rather to move stones. When the Plan runs out (which one day it will end) peasants are going to end without knowing to graze or cultivate. And the people are asking to the mayor to increase the wage to 80 soles (US\$ 27) per day".

Therefore, there is a deconstruction of traditional cultures encourage by the populist policies that are going to satisfied the citizens in a short period or are going to help the mayor to be reelected in the next district elections but are not going to help ARBC to reach local development. Thus, functionaries of RCO blame the "Plan Piloto" as the main impediment for carry out long-term development plans.

On the other hand, I think the same functionaries use this assumption to avoid or give less importance to the decline of the yields reported by the peasants as a result of environmental pollution.

As I described above, AMC has a long-term development plan which has been implemented in differences communities within the mine influence area. However it has not been easy to conduct it in ARBC. In this context Community Relations Office and other

entities are together in one concept: Corporate Social Responsibility, it will be discuss in the next section.

5.4. Corporate Social Responsibility and social Development in AMC

In chapter two I discussed the general concept of CSR; in this section I will explain its implications in my project. However I also find important to explain first how CSR has been introduced in the Peruvian company's environment.

The first enterprise to adopt CSR was those related with large scale FDI, such mining, bank, electrification and telecommunications (Benavides y Gastelumendi 2001:55). Among these sectors mining and petroleum MNC's are particularly important (Caravedo, 2003:10), due to the demands of their international investors such as the World Bank.

It is worth mentioning that in the mining sector the evaluation of impacts caused by paternalistic policies has been weak. For instance, annual company reports tends to just describe results (how many children has been attended, how many people has been capacitated) and not to assess the generated impact (Sanborn, 2008). Furthermore National Society of Mining, Petroleum and Energy (SNMPE its Spanish acronym) has achieved that the mine companies directly manage the funds for conduct development programs instead of paying more taxes over their earnings, on the grounds of their greater experience in social investment (ibid, 2008: 6).

Since 2003 Peruvian legislation requires the commitment of the mining companies in six aims, connected to harmonious relations with local inhabitants, environmental care and the improvement of social welfare. Likewise, the Mine and Energy Ministry requires them to present annual affidavits with respect to the activities undertaken to implement these commitments. However the current legal framework does not require transparency and there is no public dissemination of the information provided (ibid, 2008).

Returning now to my project, is interesting to analyze the internal perspective of CSR that posses AMC has: Its CRS code emphasizes respect for the individuals, their costumes and their culture; integrates company aims with local, regional and national aims; recognize local communities as interlocutors for a continued communication; and commits to the

socio economical development for the local areas through time (www.antamina.com). Furthermore the vice president of Corporative Issues of AMC put like this:

"AMC believes in promoting the development of sustainable communities through a CSR, taking into account the socio cultural environment. We therefore do believe that CSR evaluation is primarily a social role of the company, because it assumes notions of responsibility with the milieu, both inside and outside of the organization. It is, therefore a concept that implies a philosophy of commitment to sustainable development" (Cantuarias, 2004: 2).

Therefore, I think AMC is aware of the greater ease with which socially responsible companies avoid conflicts, or at least, convey a harmonious image to the populations and organizations outside the affected area and even outside Peru.

AMC has three entities or areas which are concerned with CSR: Community Relations Office, The Mine Fund and Ancash Association. Now I will briefly describe each.

5.4.1. – Communities Relations Office

The Community Relations Office (CRO) was established with the main aim to promote community development through a process of consultation and constant communication with those affected. Development programs are carried out specifically within the mine influence area. The birth of the office dates back to 1997 when AMC hired a person to take charge of the social dimensions of the project. Some months later, the initial conflicts around the land acquisition for the operation created the need in November of 1998 to form the CRO in San Marcos. Its initial aim was the relocation of rural families who lived around Antamina Lagoon. There are also CRO in the mine operation area, Huarmey and Huallanca.

A functionary of AMC referred to five main objectives of CRO: Improve education, improve health care, avoid environment pollution, establish development projects and create or enhance communal enterprises. The other entity related with CSR is the Mind Fund.

5.4.2. The AMC Mine Fund

The AMC Mine Fund is an initiative of the company in response to the call of by the Peruvian State named the "Mining Program of solidarity with the People", with the aim of improving the life of the directly affected. The Fund intervention area consists of the entire Ancash region; Llata district in Huanuco region and towns located in the district of Paramonga, in the province of Barranca.

On December of 2006, the state and the mining industry agreed on general program for voluntary contributions. Thus the companies agreed to give between 1% and 3.75% of its profits after taxes or to create other independent partnerships created with this purpose. These contributions are managed by each company independently. According with AMC web page, it was the first to sign an individual agreement with the Peruvian government, pledging to contribute 3.75% of its profits after tax (www.antamina.com).

The AMC Mine Fund was established in 2007 and has a lifecycle of five years if prices stay above the reference value stipulated in the contract with the state. The following table illustrates the contributions of the Mine Fund from 2007 to 2010.

Table 13. (derived from http://www.fondomineroantamina.org/contenido/fma/1)

AMC Mining Fund Contributions		
2007	US\$64.3 million	
2008	US\$60.2 million	
2009	US\$39.4 million	
2010	US\$43.9 million	
Total	US\$207.9 million	

By March 31st, 2010 from the total amount collected by the Fund, has been used US\$ 135.6 million which is 82.7% of the total (ibid). According with the Functionaries I interviewed and the AMC Mine Fund webpage, this sum has been chiefly addressed to five programs which will be illustrated in the following table along with some of the projects that have been, and will be, carried out in ARBC.

Table 14 (derived from http://www.fondomineroantamina.org/contenido/programa_presentacion)

Programs	Projects in ARBC	Status
Health and Nutrition	Free Lunch for secondary students in Huancayoc School	
	Diminishing chronic malnutrition rate for children under 3 years old	Finished
	Technical training for young by SENATI (section 5.3.1)	Finished
Education	Improving Educational Infrastructure (schools, computer rooms)	Running
	Capacitating and transporting for teachers	Running
	Development of a competitive guinea pig breeding and link it with	Running
Productive	the local market	
Development	Installing Micro reservoirs in Ayash Basin: Inventory	To carry
	and Planning Study of Water Resources of Ayash Watershed	out
Institutional	Strengthening of capacities to District Municipality	Finished
Strengthening	and Communities	
Infrastructure (Roads,	Expansion and Improvement of electrification system in Ayash	
irrigation canals, rural	Huaripampa and Aysh Pichiu	Running
electrification)		

The last entity to be discussed is the Ancash Association.

5.4.3. Ancash Association

The Ancash Association has been constituted by AMC in order to comply with f compliance its CSR policy and with the aim of supporting the development among populations living in the Ancash Region. Unlike the CRO which focuses on improving the dialogue between the company and the communities' peasants through development projects; and the AMC Mining Fund which concentrates in spending money for driving development projects, the Ancash Association seeks to generate a coordinate management among the stakeholders and the mine and to promote initiatives in tourism, culture, and evaluation of Natural Resources Management.

5.5. Effects of FDI in Natural Resources Access

The explanation of direct and indirect effects caused by ACM in ARBC paved the road to answering the second research question: How has FDI affected access to Natural Resources (Water and Land) in River Ayash Basin Communities? I think there have been significantly changes in Natural Resources Access, hence I consider it appropriate for my project to explain them separately from the other effects.

Before the arrival of AMC, as in many Andean areas, the access to land and grassland were established by a local social structure which was defined by kinship networks and exchanges (Gil, 2009:156).

The fight for usage of Natural Resources as important as land and water has been and still being the point of explosion for social conflicts in between extracting companies (generally financed by FDI) and peasants communities. Only in March of 2010 the Peruvian National Ombudsman Office registered 255 social conflicts of which 165 (49%) were social-environmental conflicts (http://www.defensoria.gob.pe/). In my study case the use of and access to Natural Resources has been at stake since the very beginning (As I mention in the section 5.2). I identify two main effects of FDI on Natural Resources Access: Access to Ayash River and decreased in crops yields and livestock.

5.5.1. Effects on Ayash River

The effects on Ayash River are related with two factors: quantity and quality of the water. Quantity of the water is linked with the pipeline which uses water for transporting the mineral concentrates towards the coast through a hydraulic system driven by gravity. The peasants surveyed stated (84%) that the water flow has decreased after the establishment of AMC, only 10% stated that the water flow remains at the same level. Likewise AMC recognizes that there is an impact in the water flow, but company considers it insignificant in relation of its usage in the area (mainly for livestock and to a lesser extends fishing and not for agriculture) (Golder, 2007: E433).

The second factor is related to the construction of the dam tailing, which is, the main cause of peasants' complains.

As mentioned before, the operation area of AMC is located at the head of two main fluvial systems (Ayash River and Carash River) which are part of the Amazon River watershed.

The tailing deposit is located at the Ayash River basin at 4120 above the sea level (the highest in the world) and it collects about 65 thousand tons of waste per day. During its 23 years of life it will store 570 Mt of tailing (CMA, 2003:14). The dam is constructed with an entrenched graduate with filters and curves of concrete in the upstream face. The configuration is provided to prevent the tailings from entering through the dam. The concrete curves facilitate placement and prevent erosion of the filter (Golder, 2007: E1-8). This seems like the description of a fortress, however one of my informants an engineer in forestation who is working in a municipally project in greenhouses, pointed out:

"AMC took all the inhabitants of Ayash Pichiu and Huaripampa to the mining camp, they told the peasants that there was going to be a alluvium and for their security they should stay for one day in the mining camp, after one day there were not alluvium but rather tailing discharges into the Ayash river, I think the mine did not want the people watched that"

Indeed AMC started to make tailing discharges on May of 2001. According to a study conducted by the Canadian Environmental Consultant EcoMetrix (hired by the AMC) discharges only occur during the rainy season (2005:3.5). In surveys I found that 100% of the respondents stated that the quality of the water in the river has deteriorated sharply. They elaborated that the tailing discharges changed the colour and the smell of the water, some of them reported that discharges occur every 15 days during the dry season and twice per week during the rainy season, they are all done by night; the river came with stinking green foam and its smell causes them nausea.

Complaints became even more serious during the dry season (From May to October) because of the lack of water in springs and affordable sources, the local people to go to the Ayash River to wash their clothes. This causes them rashes and hives, they reported.

One of my informants, an employee of the medical Post of Santa Cruz de Pichiu (located between Huancayoc and Centro Pichiu), who has been working there for nine years stated:

"When the mine started with discharges, eight years ago, we had a large number of patients which were treating of skin problems and lost hair; they blamed the mine for having contaminated the river, now the people are afraid to use the water of the river, also the animals get sick when they drink that water"

I place importance on the testimony of the medical technical, because he has been at the area before the construction of the dam and has treated many patients and has in turn heard their testimonies. The river was also a source of trout which according to my informants used to be numerous and of big size, now they claim there are very fewer and that they are tasteless. A peasant put it like this:

"The river no longer serves its purpose either for us or for crops or for irrigation or for animal. Now only the "puquiales" which are even far away because they are hiding because of the blasting. AMC made some water drinking water system, but no irritation canals. Before we bathed, washed clothes in the river, now the mine has made its tailings discharges. Before there were trout, now they have died to discharges of tailings. AMC says they do not die, they deceive us"

All these changes in water quality and access perceived by local people created public grievances which ended in a criminal complaint against AMC for "environmental contamination" in July of 2001. AMC also received a letter from the Energy and Mine Ministry about the same issue. Three days later, at an assembly in Ayash it was agreed the AMC would fund the implementation of the "Comedor de Club de Madres", the construction of a fish farm as a bio-indicator of water quality and the extension of the drinking water system (Gil, 2009: 304). Therefore, AMC started to adopt a paternalistic position in order to compensate the great amount of environmental grievances.

Claims caused by the changes in patterns of water drove the MNC to carry out a joint exercise of monitoring water quality with representatives of the communities, AMC and the government (CMA, 2001: 53). In January of 2002 it made changes in the system of the

.

⁷ Puquial is an andean word which means spring

tailing dam with purpose of reducing the foam and the odor (CMA, 2002: 51). Furthermore, in 2005 the NGO Urpichallay was hired for conducting a training program for environmental monitors in ARBC which included not only community representatives but also community members in order to allow the villagers to understand AMC environmental management and performance (CMA, 2005: 69). This program had the aim of measuring water quality parameters (temperature, Ph, Conductivity and total dissolved solids) in water used in agriculture and livestock. The trainees were selected by the communities themselves. One of my informants who was part of the training team and still working in Urpichallay put like this:

"Besides trained them for collecting the samples along the Ayash River, they were given some measurement equipment. But I do not know if they are still using them, this case was a special order from AMC. The results denoted irrelevant changes within the parameters. However other exams are required for finding abnormal presences of bio-communicators and heavy metals."

In this sense, is not possible to determine exactly if these results imply that the water is total free of a pollution. All the results were paid by the company because according with the national mine laws they are the obligated to pay it.

In respect with the trout issue a study conducted by Ecometrix in 2005 states that:

"with the exception of metals levels in worm tissue and the higher levels of some metals noted in fish livers, the water quality, benthic invertebrate and fish data all suggested that the AMC operation has not had a significant effect on the environmental conditions in Ayash River basin since 1999. Although some metal levels in invertebrates and fish liver appeared to be showing a mine-related trend there have been no negative effects on the health of the benthic macro invertebrate and fish communities to date" (2005: E18).

Despite what was argued by Ecometrix at the beginning of 2002, AMC was accused by the Santa Cruz Peasant Community for causing the death of a horse which was compensated by

a payment made by an AMC functionary. One of my informants, the president of SCPC put like this:

"There have been deaths of horses, cows and AMC knows about it. They took the liver and other organs but they never came back with the results. Besides we know that AMC pay for those results. In some cases, peasants aggrieved were compensated with money in order to keep them quiet."

Indeed, AMC made a autopsy of the dead animal; the organs were taken to a laboratory in Lima and the results determined the animal death by pneumonia (CMA, 2002: 51). This reflects two issues that I consider important for understanding why there are two narratives from the same situation (the narrative of the president of the peasant community and the narrative of AMC which will be discussed in the next chapter); the fact that AMC give money in compensation to the aggrieved is assumed by the peasants to be recognition of guilty for the river pollution. The second issue is related to the distrust caused by the autopsy results; peasants know about the economic power of AMC as an MNC. So the peasant assumed it to be logical, within the context of a country where corruption and bribery is common in the groups with political and economic power, that the AMC could have altered the results (as the water results) because they paid for them. It is worth mentioning that the results for these tests are an unattainable cost for a rural community in Peru.

Now I shall discuss the second effect caused by the MNC in Natural Resources Access in ARBC.

5.5.2. Decrease in Crop Yields, Grasslands and Livestock

I shall begin by describing the decrease in crops yields. As I mentioned before, ARBC has a territory composed by 70% of steep slopes, so only 14% of the land is used for agriculture while the 70% is used for grazing.

However, the small area of agriculture land is the main source for the area household economy.

Land tenancy is generally small and fragmented; in SCPC only 40% have an extension of over 1 Ha. Weather and the lack of land are the primary restriction for agriculture production, which is primarily composed of potatoes and other tubers (Golder, 2007: E3-39).

When I asked to my informants whether there has been a reduction of agriculture land in the area, they responded that the area remains the same but their yields have gradually decreased since the establishing of AMC. All of the surveyed agreed with that point. Respondents also pointed out that before the mine arrived they produced a much more amount of products; dozens of donkeys daily transported their products to the San Marcos market to be sold; now they barely produce for their own consumption and when there is not enough production they must go to San Marcos to buy more products.

Therefore, why has there a decrease of the crops yields in the area? This question may be answered through changes in the type of fertilizers. When AMC arrived they gave them artificial and chemical fertilizers for increasing their production this happened during the early years, but production started to falling after that and they think those new fertilizers poisoned the land. One of my informants put like this:

"When AMC came they began to give fertilizers. Until that time people did not know what insecticide or pesticide was, nothing, everything was natural ... the potatoes were bigger, nice, but now they are sick, it is not the same, it does not matter if there is more control. Worms attack the crops anyway, when you sow in natural way you produce few, but it is resistant in time"

Other informants state they were given these artificial fertilizers without being taught how to use them and this involved a disproportional and inappropriate use which also ruined agricultural land.

Indeed, during 2002 and 2003 AMC implemented a program for improving productivity and quality of traditional crops, giving new inputs for cultivation of potatoes, lima beans

and barley (CMA, 2002: 30). According to AMC in 2003 this program increased potatoes production by 31.8%, lima beans by 3.8% and barley by 74.5% (2003: 85). The programme also included the fact that part of potatoes surplus were sold to Sodexho and in 2005 they intended to introduce new species aimed to improved food quality (CMA, 2005: 137). In 2006 AMC again confirmed the existence of the program arguing that it was continuing technical advice and provided inputs to farmers undertaking to pay in products (CMA, 2006: 37). However, in 2007 Sodexho stopped buying ARBC products alleging that they did not any longer comply anymore with their quality standards. Sales from these products amounted to approximately five tonnes per month which contributed to improve household incomes (DIACONIA, 2009:68).

My second question regarding land access changes was whether if they perceive a change in the amount of grasslands and livestock. Before answering it is important to note that grasslands could be also located in lands quite far away from their homes which are generally at higher altitudes (for instance Verdecocha Lagoon which is 5 km from Huancayoc) because lower lands are used for agriculture. Therefore, 96% and 98% of the surveyed indicated that there has been a significant reduction in grasslands and livestock Furthermore they pointed to pollution as the primary factor whereby grassland yields had declined. Specifically, they referred to dust blasting as the main reason for damage of grasslands because it comes from the mine and cover the higher grassland impeding a normal growth. As peasants also pointed out the decline of grassland and clean water has also caused the reduction of livestock. A peasant put like this:

"Without doubt grasslands have been gradually diminishing since the arrival of the mine. Before the grass up until 50 cm, now it barely reaches 5 cm. As a consequence we can not have as much livestock as we used to have in those times when we sold them or their products such as meat, milk and cheese".

AMC functionaries had a different perspective on the main reasons why crop yields, grasslands and livestock have changed.

The first main reason is related to the natural growth of on the population which has been causing pressure on the subsistence resources and forcing the families to considering alternatives economic activities. Added to this is the fact the natural resources are being depredated by the peoples' "incapacity" for applying adequate practices of management in agriculture and livestock and grassland (Golder, 2007: E4-54). I think instead of "incapacity" peasants are not being properly understood, this claim will be discussed in Chapter six.

However, the following table shows that in two of the three districts of the ARBC the total population has increased significantly, but in rural areas (main characteristic of AYBC) the population has only grown in San Marcos.

Table 15. (from www.inei.gob.pe)

	Total District Population							
Year	San Marcos	Huachis	San Pedro de Chana					
1993	11660	4343	2472					
2007	13607	3758	2668					
Percent change	14.3%	-13 %	7.9%					
	Rural District Population							
Voor								
Year	San Marcos	Huachis	San Pedro de Chana					
1993	San Marcos 8876	Huachis 3582	San Pedro de Chana 1901					

One of the reasons for population decline in rural areas is the migration to urban environments in which there is more employment and education opportunities.

In this sense, rural population decline in two districts implied that "natural" growth might not be one of the causes of decreases in crops yield, grasslands and livestock.

Another reason pointed out by the boss of CRO which has already been mentioned is the fact that peasants prefer to work in the "Plant Piloto" instead of working in their lands.

An ex-functionary of CRO that now is working at Mine Fund pointed out another reason:

"Those lands in ARBC were and are of low fertility, moreover before the intervention of AMC potato plots in the area produced nine tonnes of potatoes, and then there was a increased to 12 tonnes"

Indeed, in 2004 AMC contracted the Canadian consultant Stantec to elaborate a monitoring report for soil and vegetation. This report consists primary in comparing the state which soils and vegetation were before the arrival of the mine (based in a report conducted by B and R in 1999) with the state in which they collected the information in 2004.

According with this report, the soils in the pre-construction phase presented limited capacities for agriculture due to its poor quality and high erosion potential (Stantec, 2004: 22-55). Furthermore, from the perspective of soil fertility, it is considered that exchangeable nutrients (Ca, Mg, K, and Na) are under the required range to support the production of crops and probably require the use of fertilizer supplements (Ibid).

Stantec identified two possible impacts caused by the mine, the first of them are related with crops yields: "The Antamina crop area could be adversely affected in theory as a result of exposure to the phototoxic elements caused by mining activity. The routes of exposure could include crop irrigation using water obtained from streams located at downstream from the effluent exhaust points of mine (concentrator effluent, effluent from tailings, mine dewatering)" (Stantec, 2004: 52-55). They emphasized that there were only two plots with irrigation system during the sample. In this sense, prevalence in the use of rain fed irrigation and thus the lack of contact of the water related with the tailing effluent (more specifically, Ayash river water) indicated that the crops yields suffered insignificants impacts (Ibid: 53-55). Nevertheless, this conclusion suggests that in the case there is some contact among the water and the crops, they might suffer an impact in their yields.

The second possible impact is related with livestock production, the report pointed out:

"The potential exposure route is not covered in soil and vegetation data. Gathered here is the exposure of animals to toxic elements in drinking water leaks potentially influenced by mine. It is possible that the levels of these elements are acceptable in the food and yet are above acceptable levels in drinking water. In order to focus the entire end of the production and use of farm animals it is necessary to consider from what sources the animals is drinking water" (Ibid: 53-55).

Since this report is not assessing water quality measures, it took data from the report conducted by the same consultant in 2003: Monitoring program of environmental aquatic effects.

5.6. Results Summery

Since the arrival of the mine ARBC has undergone different effects. Is possible to recognize that there have not been positives direct effects in employment or creation of commerce and supply chains. However, there has been an exploitation of works made by the Corporate Social Responsibility program of AMC. In between the indirect effects is notable the creation of corruption among public authorities and the implementation of populist polices such "Plan Piloto" in order to obtain more votes in the next municipally elections. Effects in natural Resources access are more visible. Despite the numerous tests taken by the MNC prove that there is not pollution in the river and the lands. This is certainly not accepted by the ARBC because they do not trust in those results since they were paid by the mine.

Chapter Six

Discussion: Local Narratives about Natural Resources Access and Development caused by FDI within Discourses Analysis

6.1. – Introduction

In this Chapter I shall discuss the relation between the results described in chapter five, and in order to respond my third research question which deals with local narratives about FDI, Development, and Natural Resources Access. I will discuss this issue within discourse analysis.

Since its arrival into the Andes, AMC has become an important part in local discourses in different manners. It is not only a generator of capital through economic development to the whole Ancash region, but it has also been the new point of attention due the size of the operation and to a less extent socio-environmental conflicts that lifted this unknown area to the eyes of the national and international media.

AMC is regarded as the major investment in Peruvian mining history and currently plays a central role in the national economy. Furthermore, the dialogue between the MNC and the local communities gives to this study case particular features which are not found in other cases in national context. Taking into account the effects described in chapter five it is easy to perceive the great influence of the mine in ARBC. There are constructions everywhere that have the logo of the mine. This influence is also noticed in San Marcos, where in the stores, cars, hotels the AMC logo is found as well. Moreover the mine built a multiuse hall which also has a big logo of the enterprise. Further evidence that the mine is present in the mind of local inhabitants is the fact that during my fieldwork the people thought more than once I had some employment relationship with the mining company, that I was an engineer, a CRO worker, or a journalist.

From the interviews and surveys that I conducted, I have systematized the opinions in two groups: The peasant opinions and the AMC functionary opinions. From these I will try to highlight narratives about development through Natural Resources Access and its relation with FDI. While most of the opinions from the peasant referred to the mine in a general way, they nevertheless associated the foreigner ownership with a major capital power, than it would have been owned by a national enterprise.

Natural Resources Access is present in both narratives and moreover it is the driver through which they gain shape. I also will try to extend those narratives within the international development discourse which is related with the local development discourse I identified in ARBC.

In this sense, I shall start the discussion with the AMC narrative which is in turn the dominant narrative within development discourse.

6.2. AMC Narratives about Development in National scale and in Local scale.

The development process in ARBC is not only formed by local actors but also by the perspective of development from the four multinational companies: Teck, BHP Billinton, Xstrata and Mitsubichi, therefore I will first present the role of this perspective in the production of knowledge in local development.

With the exception of Mitsubishi, the MNCs are entirely dedicated to the resource extracting business, and according to their web pages they are aware of environmental damage and are leaders in sustainable development. I found a similar message conveyed by numerous charters and policy reports, which claim that sustainability in those companies are focused on safety, health, environmental management and the engaging with their stakeholders (mostly rural communities). This vision of sustainable development is transmitted to AMC through their different projects conducted by their Corporate Social Responsibility entities which I have mentioned in chapter five.

Returning to AMC's narrative on development at national scale, it is important to note that chapter four I explained the importance of neoliberal policies in Peru during the 1990s and

especially in the mining sector. The urgent attraction of FDI for reviving an economy battered by the massive inflation and all the bad outcomes of a disastrous government of Alan Garcia, mixed with the dominant narrative of a prosperous mine industry related to effects are expressed through depictions on material changes and quantitative indicators which in part were also indicated in chapter four. In a TV interview in June of 2001 the former ministry of Energy and Mining expressed the compliance of the state with the great mining, which is mostly driven by FDI.

"I would divide the mine sector in three groups: The old fashion mines which started in the past and finished also in the past, they left environmental damage that is necessary to repair; small mining which is a social problem where miners work for subsistence and cause a tremendous damage into the environment and themselves; and finally, the medium and great mining which counts with Environmental Impact Studies, I call it successful mining. The funny thing is that even though the medium and large mining is that it causes less environmental damage, it is the one that receives more environmental protest" (Former minister Carlos Herrera Descalzi, TV program La Hora N, June, 2001 in Gil, 2009: 341)

Moreover, the presence of the then-president Alejandro Toledo during the inauguration of the mine operation on 2001 reflected the dominance of this narrative and the correlation of the decision makers with this development vision.

Allegedly this narrative should have been implied a parallel development of macro economic growth and local development. However this did not happen within local communities during the first years, for instance in the video filmed in 1999 and explained in chapter five a teacher claimed:

"We are the AMC closest neighbours and the most forgotten as well"

With this quote I will now explain the AMC Narrative at the local scale. As the teacher pointed out in 1999 ARBC were forgotten by their rich neighbour, and the expectation of employment, economic welfare and the beginning of a commercial productive chain were

frustrated with the passing of the time. This led to a series of protests by the peasants blaming AMC for reneging its promises of local development.

In response AMC applied by more strengthening their politics of Corporate Social Responsibility through which it tried to "Extinguish Fire", an expression common in Peru for referring to the seeking solutions to social conflicts (Gil, 2009: 129).

Therefore, the mine multiplied its professionals within its entities related with CSR (Communities Relations Office, Mine Found and Ancash Association) for start a paternalistic policy which implied the construction of an array of works (roads, schools, community centres, bridges); the implementation of social programs such as guinea pigs breeding and veterinary care for livestock; the implementation and improvement of drinking water and electricity systems; strengthening of local institutions for the formation of community enterprises.

However, these paternalistic policies were not very beneficial for local communities, one of my informants who is the head of CRO put like this:

"The great problem today in CRO is related with paternalistic policies we carried out during the first six years, from 2000-2006. We really made a big mistake"

Thereby, interestingly AMC now recognized their own mistakes and there are trying to solve them with new strategies of development. According to my CRO informants they are intending to change their paternalistic function by stop with welfare policies and stimulating competitions among communities through; for instance, tissue contest, knowledge school contest. Instead of just giving things they are now rewarding the most competitive communities.

However, there is a currently topic I would like to refer to. This could change a little bit the perspective about AMC, but it might also explain why the company has been financially generous in concerned with CSR and permitted the communities to receive many awards⁹.

.

⁹ For instance: Award for Social Responsibility and Environment in enterprises beyond the crisis 2009; Award for Sustainable Development, 2008 (http://www.antamina.com/04_social/premios.html)

In September of 2009 AMC announced that their reserves had augmented in more than 70% and they had plans to expand production capacity by 40%, the expansion would cost US\$ 920 millions which would be good for Peruvian tax revenue. However, AMC asked to benefit from the investment program under earnings¹⁰ (Compodónico, 2009). This means that from the US\$920 millions investment, the enterprise will no longer pay taxes in the amount of US\$ 276 millions which could help the regional state to improve education, health and others basic services (this will be discuss in section 6.5).

Furthermore, the company is making a great business in Peru. In 2000 AMC planned to recoup its initial investment of US\$2.3 billion within 10 and 15 years, however due high prices of cooper and zinc, the investment was recovered in the first three years. The following table shows AMC profits compared with other mine companies in Peru in within the period 2005-2009.

Table # Principals Large Mine Companies profits in Peru 2005-2009 (derived from http://e.larepublica.pe/image/2009/noviembre/23/REEC231109_14GR.jpg)

Large Mining: Net Profit 2005-2009 in Million of US\$								
Mine Company	2005	2006	2007	2008	2009 (p)	Total		
Cerro Verde	235	445	805	718	617	2819		
Barrick	189	420	490	659	627	2385		
Southern	910	1274	1415	1092	609	5301		
Yanacocha	535	568	244	463	661	2472		
AMC	862	1628	1620	1200	1010	6320		
Tintaya	78	136	208	200	ND	622		
Total	2810	4470	4782	4332	3525	19918		

(p) Projection

Therefore, the company has sufficient financial capacity to undertake such investments, and will carry out, anyway because it means profit. As postulated above it can be inferred that despite the great interest for sustainable development of AMC, they remain an MNC that only seeks to increase profits.

_

¹⁰ This program was approved in 1992 when the country went out of hyperinflation and then was repealed in September 2000 because, first, the economic and social conditions has changed and, second because it meant a mayor loss tax revenue; nevertheless the program is to govern for those with tax stability contracts signed as a strategy for attract FDI during neoliberal 1990s.

AMC's narrative about development at the national and local scale interplay with each other because at the national scale they intend to stress (having the government as a ally) the benefits of FDI through macro economic growth, and at local scale it stresses the benefits of FDI through the use of CSR programs. In the next section I will discuss local narratives about Development in ARBC.

6.3. Local Narratives about Development in ARBC

Before entering the concrete analysis of the local narratives about development among the array of opinions collected during fieldwork, and through the analysis of secondary sources; is important to note that ARBC are communities in which is not really possible to feel the presence of the state, in other words, they are another example of the limited scope of state of the state's supply basic services (drinking water, electrification, health and education) to citizens in rural areas.

Likewise I think is also important to highlight the visions of development from the communities collected by other agencies as the NGO The Mountain Institute (TMI), international agency that has one office such in Lima and another other in Huaraz.

TMI conducted a strategic program in the Ayash micro river basin in 2006 which attempted to materialize the vision of development of the peasants into and mock-up built by themselves with the coordination of TMI and the Environmental Conservation Commission of San Marcos (ECCSM)¹¹ or Comisión Pro-Conservación del Medio Ambiente se San Marcos in Spanish. In this sense, the project aimed to create an own development vision of the peasants in a period between 2006 and 2016; and thus giving them the chance of expressing strengths, weakness, opportunities and threats to achieve what they consider development (TMI, 2006). One of my informants who worked for TMI and was one of the directors of this project said:

¹¹ Organization formed by the initiative of San Marcos citizens in relations of the presence of AMC and the fear of its environmental and social impacts. It began to be funded by the mine, but its dissident attitudes against the company caused the stop of these funding. In somehow, TMI transformed into its the new financial entity due to the joint participation of both organization in development projects, eventually TMI stopped funding them because of the lack of capital.

"TMI and ECCSM worked in Ayash basin for three years driving conservations projects gearing to polylepis tree, springs, bio-gardens and the Inca trail. We thought the visions of development obtained in the project were going to point in that direction, however, the peasants asked for roads, health, schools, university, irrigation channels, even police station; in other words, visions of development that any citizen would like to have"

It is worth mentioning that during the process of this project TMI and the ECCSM did not suggest any potential producers of such works that were asked by peasants.

Therefore, in 2006 visions of development of the peasants were similar in relation with the AMC intentions of development in the local arena. Nevertheless, peasant perspective of development will change in the local narrative that I will present below.

If we for a moment return to the theory chapter, we are reminded that narratives are basically elements of discourses. In other words, they are simplified explanations focused in the causal chains of relations. Narratives follow the structure of a story with a beginning, middle and an end. From the information obtained in AYBC I will firstly try to discern some general narratives about development.

Among my informants there was a spectrum of opinions that at the end converged in only one position as concerns the performance of AMC: Dissatisfaction with the presence of AMC. The president of the Santa Cruz community peasant put like this:

"Although AMC has generated some jobs and supported economically to some of us, it will never compensate the environmental and social damage caused in our river, lands, air, grasslands, yield of corps, extension of our roads between the community and San Marcos. Therefore if I would put the mine performance in percent I would say 30% of positive actions against 70% of negative actions"

This informant was the only one who gave some positive percent in AMC performance; the others surveyed agreed in alleging that the presence of the mine has brought insignificant development to the rural area.

In this sense, within the opinions of dissatisfaction between the mining enterprise and development I have identified a narrative which I have chosen to call "development equal contamination". In general, the people I talked to in ARBC through surveys and interviews referred to the mine as hindrance of development and dissatisfaction due to the environmental and social damage caused by their lack of natural resources access which is, in turn the core of their livelihood. However, after 2006 the mine intensified its Corporate Social Responsibility programs by for adjusting its vision of development (mentioned in previous section) to the demands of the local inhabitants and in turn calm down the conflict generated by those demands. These programs eventually transformed into paternalistic policies which were identified in two levels: communal level and individual level. Whereas the former one is reflected in capital provided for the emergence of communal enterprise, the second one is identified in individual payments for the dead of cattle attributed to the river pollution or even to payments of US\$200 for the death of a dog. Thereby these policies allowed the peasant to use environmental damage as an element of negotiation in order to obtain economic compensations.

"Development equals contamination" is an argument of development that follows the structure of a story, with a beginning (contamination) a middle (compensation) and an end (development). In this sense, AMC has produced relations of power involved in its vision of development and in its new role as generator of capital, which has shaped the knowledge of the peasants.

In the 1980s the large mining was considered as the most polluting economic activity (Glave y Kuramoto, 2002: 529), but employed more local labour and it did not cause as many protests in recent years. For instance, is the aforementioned case in Contonga mine which caused serious environmental damage such as tailing left exposed in the lagoon Pajoshccocha. Gil collected data in which the peasants were not worry about those damages; moreover they described them as harmless and minimum whereas emphasized the employment given by the mine (2009, 62). When a peasant was asked whether Contonga mine was polluting the environment, she responded:

"Almost nothing, there were trout in the river. They (Contonga mine) did not pollute. They were smaller than AMC. They gave jobs, the people worked, we lived happy. So we thought that AMC was going to be even better" (Gil, 2009:62)

Another example was given by one of my informants from an NGO whom have been working in this area and others areas within the AMC influence zone, he put it:

"Those who are not working in AMC will always questioning its work, and those who are working (despite they are aware about the bad environmental damage of the mine) will always support it. I have seen this in other companies, for instance in Tupac (a limestone and coal mine) the peasants are very violence if you even ask about the mine; in Huancaya more exactly in Santa Luisa area, the defense committee chairman was an employee of the mine, each time they made assemblies to discuss environmental issues, this guy was responsible for boycott them, the prize was to keep his job."

Thus, it is striking that the local economic growth caused by Contonga mine (and other mines) through the hiring of local labour and the creation of supply chains were enough for make people forget about the environmental pollution which did not cause any important protest. In the other hand, AMCs' paternalistic policies encouraged even more the creation of this local narrative, since it is the one of the few ways whereby peasants can obtain short-term economic benefits. Moreover they think is the least that the company can do to alleviate the environmental damage caused in the last years.

AMC and ARBC Narratives about development are interwoven with Natural Resource Access. I will explain this relationship below.

6.4. – The Role of Natural Resource Access in both Narratives

In the Theory chapter I mentioned that one of the fields of political ecology focuses on resources access rights, local struggles and ecological transformations. Therefore, I will apply this political ecology approach for analyze both development narratives

Natural Resource Access plays a fundamental role in both development narratives due to the extensive use natural resources such as water and land by current mining. These resources are often owned or used by nearby communities. In order to explain this role I will first describe how the entering of a mine company change the definition of space in the area affected. Bebbington argues that a multinational mine company could redefine rural spaces in three manners: natural space resources, since they are shared by the local communities and MNC; institutional structure, which is formed by the vertical and horizontal limitations both for the property as the right of resource access and; social relationships (2007:300).

Another important dimension of the redefinition of rural space is that the changes (and resistance generated by those changes, such as social movements) are not only a result of the implementation of a mining development strategy that impacts local communities. But also the results of how local actors conceive of their territory and the visions of non locals and international actors have on how it should be the development of such territory (Damonte, 2007 and Bebbington et al, 2007).

Thus, the perception of space and natural resource access are different for ACM and for the local communities. Whereas for AMC it means an object in, or around which is located the product they need for increasing their profits; for ARBC it means the space around which their entire livelihood depends. On my opinion the Local development narrative becomes stronger with this argument. In the other hand AMC is aware that policies carried out in concerned with land acquisition in the territory where the operation area, did not consider the territorial perception of the peasants. They consider that this action was a mistake that will take long time to be remedied, and it is also another reason whereby they improved their Corporate Social Relations policies.

Hence, the main origin of environmental conflicts among rural communities and these industries is the lack of appropriate agreements related with use of Natural Resources (Alayza, 2007: 15). In the most of the cases, these agreements have their origins in bad

decisions taken by the state. Therefore, in the next section I will discuss the decision maker's role in both narratives.

6.5. – Decision makers role in both Development Narratives

Another field of political ecology focuses on the contextual sources of environmental change, particularly state policies. In this sense, decision makers role is important for understanding both development narratives.

Stressing again, while ARBC were the most neglected communities by the state, the new mine expansion during the 1990s seemed to indicate that the state wanted to erase through FDI the boundaries that marginalized these communities. However, they did want to do it very quickly and sometimes using politic forces (Bebbington, 2007). The observation of AMC refusal to pay taxes having the economic capacity to do so, suggests that they are not too interested in erase the aforementioned boundaries in between marginalized communities and its development.

Thus, decision makers focused in accelerated the arrival of FDI giving taxing facilities and without asking correctly the compliance of the Environmental Study Impact which should be worked together with local communities, in fact in 1994 the Peruvian Government signed the ILO convention 169 which is basically an international right which requiring the state to consult and obtain an agreement with local communities when in the case that state decisions affect community lands (Alayza, 2007: 25).

States have diminished economic and political intervention in favor of global market dominance and corporate governance. They have also constrained their social scope and public intervention in favor of private initiatives (Damonte, 2008: 320). Thereby, the state not only welcomed MNCs with low taxes and flexible contracts that protect them from future changes in tax laws (as it has seen above) or state instability, but also leaves its work to serve their citizens creating a vacuum which is eventually filled up by MNCs.

This is also the case of ARBC, which through its development narrative, uses environmental damage as the means to ask for the implementation of basic services. Consequently AMC through its corporate social responsibility programs is taking the place of the state.

This changing of role of the state and the AMC is not favourable for the future of the community peasant, because it disables the state integrating marginalized communities to a national development plan.

6.6. Discussion summary

In this chapter I have looked at the statements from a narrative approach. I have identified the AMC development narrative which is located at the national scale and the local scale. Then I continued in identifying the local development narrative which was drawn from the totality of the peasants surveyed. The local narrative emphasize the creation of a new power relation in the local community to ask for compensation every time they felt that their natural resources (especially water and land) were altered in quantity and quality. I also explained the difference in the understanding of natural resource understanding, which is important before, during and after every mine exploitation plan. The role of decision makers is of vital importance in including local communities in national plans of development with a complete understanding of their notions of development. Their role is also important for avoiding an uneven distribution of assets and for avoiding environmental conflicts.

Chapter seven

Conclusions

7.1. – Introduction

In this chapter I will review the main conclusions reached in my study. My primary investigation objective was to analyse the connection between foreign direct investment, natural resource access and local development. In this sense I will summarise the results of my study by going through my research questions.

- How are FDI, Natural Resources Access and Local Development related in theory?
- What are the effects of FDI in River Ayash Basin Communities?
- What local narratives exist in Ayash River Basin Communities about FDI, Development, and Natural Resources Access and how can they be uncovered through Discourse Analysis?

7.2. Relations of FDI, Natural Resources Access and Local development in theory

In answering my first research question I found that there is a relation in between these three elements. FDI literature stresses the appropriate local conditions needed by the MNCs for providing positive effects in the host economies. However, FDI has been changing its traditional concept of merely a transnational capital transfers in between MNCs and host economies. Moreover, there is an increasing interest in the research agenda for discovering what are the main social changes caused by the entrance of on MNC into a new arena. These efforts are relevant for achieve new ways of understand FDI beyond a driver of developing country GDP and rather as complex phenomenon which could provide more elements to reduce poverty. Particularly I find important to take into account the idea that FDI can be thought as a mixture of capital actors and knowledge.

In the literature it is claimed that least developed countries would tend to have mainly resource-seeking FDI and that the MNCs do not necessarily need absorptive capacity in host communities for the extraction of the natural resources. Consequently FDI in natural resources sector has limited spill-over effects for the host economy (Te Velde, 2003, Lall and Narula, 2004, Jakobsen, et al., 2005). In this sense, resources-seeking FDI and natural resource access is an important factor that MNCs should deal with. Moreover, methods of host economies to attract FDI into Natural Resources exploitation provides legislation which benefits MNCs through tax breaks and subsidies. This is the link between FDI and natural resource access since the same laws given for easy entry of FDI are not just given by the same decisions maker, but also are affecting the access to resources and the local development of the people whom depend on them.

The literature on FDI and political ecology has also reflected an augmenting concern with the importance of local conditions as actor who interact with others actors such MNCs and the state. I have illustrated the role of Corporate Social Responsibility as a mean off convey and joint communicative processes between different actors (Georg and Palazzo, 2007). Thus, I have presented through my project that knowledge and actors are part of the dimension of FDI, and one of the means whereby they interact is in the use of capital forp CSR. The following to section will refer more specifically how my case study has been informed by the theory on FDI, natural resource access and local conditions.

7.3. Main conclusion from FDI effects

My second research question deal with the different effects caused by FDI as a capital and its relations with local conditions in ARBC. I have illustrated the how Antamina Mine Company has affected the local conditions of the communities since its arrival. Former experience with small and medium mines created big expectations in the arrival of the company, which was fed by the promises of employment given by the AMC engineers when they visit the communities. I have demonstrated that FDI in AMC characterize by huge injection of physical capital requiring specialized technology and few labor. The education possibilities in ARBC are very low which implied that it is not qualify enough to fill the high technical skill positions at the mine. However the company has conducted a

concrete plan of CSR through which there have built a big array of works all described in chapter five. I have pointed to the decisions makers in tax revenue. Currently San Marcos is the richest district in Peru due to the contributions tax of the mine. Yet I have illustrated the uneven distribution of taxing since there are still many lacking of basic services in ARBC.

My project has illustrated that FDI in AMC concerned the interaction of diverse actors with different aims that are interwoven in a socioeconomic relationship. These actors include not only the MNC and local actors, but also district, regional and national authorities.

In this sense, I have demonstrated the high level of mistrust between inhabitants and their authorities due to the great amount of corruption which has been stimulated by high flows of money. Likewise I found negatives impacts in the creation of populist plans as the "plan piloto" which drove to change agriculture habits.

In relation with the changes in natural resource access, I have illustrated through the analysis of numerous tests conducted by AMC on soils, water and air of ARBC. According to the company natural resources has not experienced significant changes since the arrival of the mine, however the perception of the local inhabitants is not the same as the engineers of the mine. Peruvian laws require the extracting company to pay for the environmental tests which generates a mistrust climate. The local communities simply do not believe to the company because they are paying for the tests and it could lead to an interchange of the results. In my opinion it is understandable whether we take in to account the corruption environment that surrounds Latin America.

7.4. The Role of Discourses and Narratives in FDI, Resource Access and Local Development

My last research question involves the knowledge collected through narratives from the local inhabitants and AMC. From the interviews and surveys I identified development narratives in both actors related with FDI.

AMC development Narrative at the local scale started as a respond of the continuous protest of the local inhabitants. The lack of basic services (roads, water and electricity) was

a huge contrast with the arrival of a 2.3 billion machine such as AMC. Moreover, whether this company change natural resources access reflected in the quality and quantity of the river and cut the only traditional bridle path in between San Marcos and ARBC. Thus, the mine started a massive CSR intervention which eventually transformed into a paternalistic situation. In this context, peasants identified this situation as an opportunity for development. Consequently I have identified the development narrative which I have called "development equals contamination". Peasants are not powerless anymore, they uses this narratives in order to obtain economic compensation because is the only way they could obtained it either through individual compensation as the purchase of a dead horse (supposedly killed by drinking water from the river) or through compensation to the community such as the building of communal dinning. Likewise, local communities stopped asking to the government for basic services that they deserve as any Peruvian citizen due to the arrival of the mine company. Hence, the mine started to fill the empty space leave by the state. The communities felt that the compensation given by mine was not enough for the degree of environmental pollution, in consequence adopted this new development narrative,

Thus, changes in the relations of power in actors caused by new knowledge about development which is in turn cause by the injection of capital proves that indeed discourse can shape reality and thereby introduce new narratives of local development.

7.5. Final Remarks: what could be learnt from this case?

My experience in one of the myriad Andean communities which are abandoned by states policies, make me think that how important is take correct decisions in the up level state authorities. Local communities must be informed before and during explorations plans of multinational mine companies because it will affect their way of life. I this sense, for understand local communities is important to understand their own views of development and discourse analysis and narratives are a useful tool for doing so. It is a mean through which we can understand and learn new ways of development.

Bibliography

Alayza, A. (2007) No, pero Sí: Comunidades y Minería, Consulta y consentimiento previo, libre e informado en el Perú. CooperAcción, Lima

Barton J. and Fløysand A (2010) 'The Political Ecology of Chilean Salmon Aquaculture, 1990-2010: a trajectory from economic development to global sustainability' Accepted manuscript in Global Environmental Change

Bebbington, A. (ed) (2007) Minería, movimientos socials y respuestas campesinas: una Ecología Política de transformaciones territoriales. IEP, Lima

Blalock, G. and Gertler, P. (2005) Foreign Direct Investments and Externalities: The case for Public Intervantions in Moran, Graham and Blomstrom (2005) Does Foreign Direct Investment Promote Development?, pp. 73-106

Bryant, R. (1992) "Political Ecology: an emerging research agenda in Third World studies". Political Geography II

Castree, N. (2005) Nature, Routledge

CMA (Compañí Minera Antamina S.A.)

(2001) Reporte de sostenibilidad 2000

(2002) Reporte de sostenibilidad 2001

(2003) Reporte de sostenibilidad 2002

(2005) Reporte de sostenibilidad 2004

(2006) Reporte de sostenibilidad 2005

Damonte, G. (2007) Industrias Extractivas, Agricultura y Uso de Recursos Naturales: El caso de la gran minería en el Perú, SEPIA XII

Damonte, G. (2008) The Constitution of Political Actors, VDM Verlag Dr. Mueller e.K.

Dollfus, O. 1981. El reto del espacio andino. IEP (Instituto de Estudios Peruanos).

Dunn, K. (2000) Interviewing, in Hay (2000) (ed.) Qualitative Research Methods in Human Geography, pp. 50-82.

EcoMetrix Inc. (2005) Resumen del Programa de Monitoreos de Efectos de Antamina para el emplazamiento de la mina, 1998-2005. Informe preparado para CMA, Brampton, Ontario: EcoMetriz S.A.

Escobar, A. (1988) Power and Visibility: Development and Invention and Management of the Third World in Cultural Antropology, Vol. 3, No 4, pp 428-443
Golder AssociatesPeru S.A. (2007) Estudio de Impacto Ambiental Proyecto de Expansión del Tajo Abierto y Optimización del Procesamiento

Fairhead, J. and M. Leach (1995): False Forest History, Complicit Social Analysis: Rethinking Some West African Environmental Narratives. *World Development* **23** (6): 1023 - 1035

Fløysand, A (2005) The Spatial Embeddedness of Foreign Direct Investment Investigating the complex dynamics of FDI for power, regional development and poverty, Department of Geography, University of Bergen available at:

http://org.uib.no/fdi/content/files/Spatial%20Embeddedness%20FDINFR2005.pdf

Fløysand, A, Haarstad, H and Barton, J.R. (2010) 'Global-economic imperatives, crisis generation and spaces of engagement in the Chilean aquaculture industry' Accepted manuscript in Norwegian Geographical Journal.

Georg, A. Palazzo, G. (2007) Toward a Political Conception of Corporate Responsibility - Business and Society Seen from a Habermasian Perspective Academy of Management Review, Vol. 32, pp. 1096-1120

Gil, V. (2009) Aterrizaje Minero: Cultura, conflicto, negociaciones y elecciones para el desarrollo desde la minería en Ancash, Peru , IEP

Glave, M. y Kuramoto, J. (2002) La Minería Peruana: Lo que sabemos y lo que aún nos falta por saber, GRADE, documento de trabajo.

Jakobsen, S, Rusten, G. and Flùysand, A. (2005) How Green Is the Valley? Foreign Direct Investment in two Norwegian Industrial Towns, in The Canadian Geographer 49,no 3 (2005), pp. 244-259.

Kearns, R. (2000) Being there: research through observing and participating, in Hay (2000) (ed.) Qualitative Research Methods in Human Geography, pp. 103-121

Haarstad, H. and Fløysand, A. (2007), Globalization and the Power of rescaled narratives: A case of opposition to mining in Tambogrande, Peru. In Political Geography 26, pp. 289-308

Holt-Jensen, A. (2007) Geography, History and Concepts, Sage

Lall, S. and Narula, R. (2004) Foreign Direct Investment and its Role in Economic Development: Do We Need a New Agenda? In The European Journal of Development Research, Vol 6, No 3, pp. 447-464

Martinez-Alier, J. (2002) "The Environment of the poor". Edwar Elgar, Northampton MA, USA

Moran, T., Graham, E., and Blomstrom, M. (2005) Introduction and Overview, in

Moran, Graham and Blomstrom (2005) Does Foreign Direct Investment Promote Development?, pp. 1-19.

Moran, T., Graham, E., and Blomstrom, M. (2005) Conclusions and Implications for FDI Policy in Developing Countries, New Methods of Research, and a Future Research Agenda, in Moran, Graham and Blomstrom (2005) Does Foreign Direct Investment Promote Development?, pp. 375-395

Neumann, R.P. (2005) "Making Political Ecology". New York: Hodder Arnold Paus, E. (2004) Productivity Growth in Latin America: The Limits of Neo-Liberal Reforms in World Development Vol 32, No 3, pp. 427-445

Robbins, P. (2004) Political Ecology a Critical Introduction, Blackwell

Roe, Emery (1991) Development Narratives, Or Making the Best of Blueprint Development, in World Development Vol. 19, No. 4, pp. 287-300

Stantec Consulting, Ltd (2004) Informe de Monitoreo de Suelo y Vegetación, Mina Antamina

Te Velde, D. (2003) Foreign Direct Investment and Income Inequality in Latin America, Overseas Development Institute, available at: http://www.odi.org.uk/iedg/Meetings/FDI feb2003/fdi la dwtv.pdf

Tucker, V. (1999) The Myth of Development: A critique of Eurocentric Discourse, in Munck (1999) (ed.) Critical Development Theory, pp. 1-28

Winchester, H. (2000) Qualitative research and its place in human geography, in Hay (2000) (ed.) Qualitative Research Methods in Human Geography, pp. 1-22

Zegarra, E., (2007) "Minería y economía de los lugares en la sierra peruana: Impactos y espacios de conflictos". Grupo de Análisis para el Desarrollo, Lima, Perú