

MSc in Anthropology, Environment and Development Dissertation

The influence of natural resource extraction projects on Amazonian indigenous populations:

The case of the Camisea Gas Project and Machiguenga women

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Abstract

More than 70% of the Peruvian Amazon is covered by hydrocarbon plots for exploration and exploitation. These plots overlap indigenous communities, protected natural areas, and territories reserved for isolated indigenous populations. The Camisea Gas Project (CGP), which is the largest gas exploration and exploitation project in Latin America, has been operating since 2000 in the southeast Amazon of Cusco in Peru, in territory historically occupied by Machiguenga indigenous populations.

My research project explores the impacts external gas companies have on the Machiguenga way of life, with a particular focus on women. I conducted research in the Machiguenga native community of Cashiriari, located in the lower Urubamba basin in the Amazon of Cusco. Cashiriari village is directly impacted by the CGP as one of the Camisea gas plots overlaps its territory. Combining qualitative and quantitative research tools, I was able to analyse the processes of social and economic transformation Machiguenga society undergo due to natural resource extraction projects in the area.

My results show that the gas project has generated a variety of re-adjustments in Machiguenga households. The subsistence economy has become insufficient, and making money has become a need; the traditional division of labour has shifted because of women and men's (migrant) wage labour, increasing women's household burden; diversification of livelihood activities has become a feature of Machiguenga households, in particular among women; there is a generalized perception among the community of material development but of decline in natural resources and cultural traditions.

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Table of contents

Abstract	2
Acknowledgements	3
List of figures and tables	6
List of appendices	8
1. Introduction	9
2. Literature review	12
2.1. Indigenous economies and incorporation into modernity	12
2.2. Rural women's role in the context of economic development	14
2.3. Gender relations in Amazonian indigenous societies	16
3. Aim and objectives	19
3.1. Evolution of research ideas	19
3.2. Aim and research questions	21
4. Research site	22
4.1. Historical background: Machiguenga indigenous society	22
4.2. Camisea Gas Project (CGP)	28
4.3. Cashiriari Machiguenga Native Community	31
5. Methodology	42
5.1. Desk Work	42
5.2. Assessing Cashiriari- Primary data collection	43
5.3. Limitation of methods and constraints to data collection	50

6. Results	52
6.1. Community- based projects	55
6.2. Wage labour and participation within the community	62
6.3. Household (re)arrangements and women’s search for economic independence	67
6.4. Machiguenga views about the gas project and expectations about the future	77
7. Discussion and conclusions	81
8. Bibliography	86

List of figures and tables

		Page
Figure 1	Peruvian indigenous communities and ethnic groups registered by the 2007 Census	23
Figure 2	Machiguenga Native Communities in La Convencion, Cusco- Peru	24
Figure 3	Camisea Plot 88 overlapping Cashiriari Native Community and Territorial Reserve Kugapakori, Nahua, Nanti and Others	30
Figure 4	Population Pyramid- Cashiriari Native Community	33
Figure 5	Cashiriari's communal room	34
Figure 6	Cashiriari's hostel and communal authorities' office	35
Figure 7	Cashiriari's Elementary School- 3 rd and 4 th grade classroom, one teacher	36
Figure 8	Cashiriari's Elementary School- 5 th and 6 th grade classroom, one teacher	36
Figure 9	Lower Urubamba Machiguenga Native Communities within Echarate district (La Convención- Cusco)	38
Table 1	Age and number of interviewees	47
Table 2	General information about female respondents	48
Table 3	General information about male respondents	49
Figure 10	Number of workers hired by main gas investors Pluspetrol and Repsol (Lot 88) and Petrobras (Lot 58) within the PMAC scope, October 2013- March 2013	53
Table 4	Households with members with paid occupations at Cashiriari native community and the CGP January 2013- June 2014	54
Table 5	Cashiriari's annual development plan	55
Table 6	Infrastructure projects undertaken at Cashiriari native community January 2013- June 2014	55
Table 7	Phases of contract of Housing Improvements Project	56
Figure 11	Cashiriari's sawmill- doors for equipping the new houses	57
Figure 12	Today's Machiguenga typical house	60
Figure 13	New Machiguenga houses being constructed in Cashiriari	60
Table 8	Paid occupations performed at the community January 2013- June 2014	62
Table 9	Synthesis of community projects, occupations and tasks done	63

Figure 14	Machiguenga women and children working as labourers	64
Figure 15	Machiguenga woman building a wooden stairs	65
Figure 16	People who worked at community- based projects, in relation to female respondents' kin January 2013- June 2014	65
Figure 17	People who work at CGP- based occupations, in relation to female respondents' kin January 2013- June 2014	66
Figure 18	Two different ambulatory merchants installed simultaneously in Cashiriari	70
Figure 19	People buying goods for their shops from the merchants, especially beer	70
Table 10	Products sold at shops	71
Table 11	Members of the household in charge of their shop	71
Figure 20	One of the biggest convenience stores in Cashiriari	72
Table 12	Preparation of manioc beer in the last week	72
Table 13	Reasons for not preparing manioc beer	73
Table 14	People in charge of the garden/ chacra	74
Table 15	End use of products from Machiguengas' gardens	75
Table 16	Number of households who went fishing, hunting and gathering in the last week	76
Table 17	End use of poultry	76

List of appendices

APPENDIX A Community Registration Form	94
APPENDIX B Household Survey Form	97
APPENDIX C Interview Guide	100

1. Introduction

Mining and hydrocarbon activity is critical for Peru's economic growth. Peru is the third largest copper and the sixth largest gold producer in the world (INEI, 2012). Its economy revolves around mining, hydrocarbon and manufacturing activities, which represent a third of the Gross National Product. Between 2004 and 2007 the concession of territories to multinational companies tripled in the name of national growth. Many social and environmental conflicts have arisen as people living in these territories perceive their traditional lifestyle to be under constant threat, as a result of the massive impacts generated by mining and hydrocarbon projects. Translating this into numbers, there are currently 133 social and environmental conflicts in Peru (active and latent), 71.4% of them due to mining and 13.55% due to hydrocarbon operations (Peruvian Ombudsman Office, July 2014).

More than 70% of the Peruvian Amazon is covered by hydrocarbon plots for exploration and exploitation (La Republica Newspaper, 2008). These Amazonian plots overlap indigenous communities, protected natural areas, and territories reserved for isolated indigenous populations. Investments in the Camisea Gas Project (CGP), the sizeable project in charge of exploration and exploitation of Peruvian gas, which has been operating in Peru since 2000, amount to 35.000 million PEN (8.75 million GBP, approximately), making gas one of the main drivers of the national economy. A third of the electrical energy consumed in Peru comes from gas extracted from Camisea fields; moreover, around 130 thousand cars in Peru run on natural gas. Machiguenga

indigenous populations, who live in the southeast Amazon of Peru, are directly influenced by the CGP, because the gas underlies their territories.

My research project explores the impacts external gas companies have on the Machiguenga way of life, with a particular focus on women. To this end, I explore the mechanisms and processes of change Machiguenga families undergo due to the influence of the CGP in their territory. Historically, the Machiguenga have populated the area where the Camisea project operates (on Lower Urubamba River, Cusco); they are very sensitive to changes taking place in their natural environment because of their very close relationship with the forest, which is crucial to their physical and sociocultural subsistence.

As part of this project, I undertook fieldwork in the Cashiriari Machiguenga indigenous community. I was interested in working in this location because I had been there before as part of a five-year research project (2008-2013) organised by the research centre at the Pontifical Catholic University of Peru, and had witnessed the impacts the Camisea project had on the Machiguenga population. I visited Lower Urubamba four times a year over a five year period and stayed in three Machiguenga communities (including Cashiriari) for one month at a time. Machiguenga families were taught how to systematically monitor the access and use of their natural resources through their basic subsistence activities, which include hunting, fishing and gathering.

Alongside the monitoring project, I started researching the social impacts the Camisea project has had on Machiguenga peoples. Specifically, I was interested in analysing the ideas of the Machiguenga population about progress, and whether these

ideas had changed since the CGP had started operating in the area. I decided to work solely with the male population because CGP mainly hired men (which is still the case); this means that men are the ones directly involved in the gas project, in terms of interaction and work experience within the modern sector. Machiguenga women remain in their villages¹ taking care of their home and so have not had as many opportunities to relate to western society as men. To this end, I collected male perceptions of change regarding their daily lives and expectations about the future when the project is over, on both the personal and the community level. This study contributed to my undergraduate sociology degree.

One purpose of this present dissertation is to extend my previous research by focusing on Machiguenga women, in part by exploring to what extent this external gas company has influenced their lives, socially and economically. I think these two pieces of research, my early project and this current one- from a more anthropological perspective- will complement each other in terms of the overall study, and will provide clearer insights into the ways Machiguenga indigenous society, which has always depended on the subsistence economy, handles change and negotiates processes of social transformation within an extraction- based national economy. Through the case study I will present, I hope to contribute to a better understanding of the Peruvian indigenous Amazon and to make visible the Machiguenga ethnic group as part of the National project and the Peruvian community.

¹ I will use community or village interchangeably.

2. Literature review

2.1 Indigenous economies and incorporation into modernity

Indigenous economies are usually characterised by a subsistence mode of production (Kuokkanen 2011) whose foundations are sustainability and reciprocity, and whose final end is not profit but the nourishment and well-being of individuals, families and the community (Kuokkanen 2011). These kinds of economies ensure the preservation of the traditional economical, social and cultural organization. “Indigenous economies such as household production and subsistence activities extend far beyond the economic sphere: they are at the heart of who people are culturally and socially” (Kuokkanen 2011: 217). Failure to take these economies into account risks losing the identities that constitute indigenous societies (Kuokkanen 2011).

Modernity, comprehended as a historical and cultural phenomenon developed by the West (Escobar 1995) and determined by linear ideas of material progress and economic expansion (Walsh 2010), has penetrated the imaginaries of indigenous populations and has started shaping their practices and aspirations. Today’s globalising world, characterised by its multinational development projects, carried out by oil companies and governments, has standardised a unique way of “progressing” through change or acculturation from traditional societies to more modern ones. In this context, indigenous societies affected by natural resource extraction projects are pushed to modernise and to give up cultural difference (Izquierdo 2005). Modernisation takes shape through the crystallisation of the “myth of progress”, supposedly accomplished

through education, trade, salaried occupations and migration to the city (Degregori 1986); and delegitimises indigenous or other traditional ways of life whose drivers are not economic growth.

The prevailing theories about development from the 20th century think of development as economic growth or material progress. The modernisation approach argues that development is a process which should start in Latin America, Africa, Asia and Oceania and should reproduce the conditions that characterise the richest/ more advanced nations (Acosta 2009). The accumulation of capitals is the central axe of development, made possible thanks to industrial development. Industrialisation, conversion to technical agriculture and productivity are the three main pillars of modernisation (Valcarcel 2006, Acosta 2009) which will lead to economic growth. The modernisation approach pursues to disengage from the traditional, characterized by subsistence agriculture, scarce productivity, no articulation with the market, and no increasing opportunities for upcoming generations, which it considers as obstacles to development. The modernisation approach, also known as the western hegemonic model, widened the breach between developed and underdeveloped countries, as outsourcing of the workforce, marginal neighbourhoods, poverty and inequality, emerged (Rodriguez Achung 2005, Valcarcel 2006, and Acosta 2009). The modernisation approach did not take into account colonialism or its effects in terms of domination and exploitation as factors in explaining why countries were undeveloped.

Viewed through the modernisation lens, the growth of the capitalist economy into indigenous societies is a form of progress. Indigenous societies are under constant pressure to be part of the market economy in the form of profit-driven development

projects (such as mining), causing indigenous peoples to switch from subsistence to other forms of production (Kuokkanen 2011). “Development had achieved the status of a certainty in the social imaginary” (Escobar 1995: 5).

2.2 Rural women’s role in the context of economic development

Indigenous women cooperate with survival in many vital forms (Kuokkanen 2011). In different cultures the subsistence economy has traditionally been the domain of women. They have a crucial position in guarding their families, watching over resources and providing for food and other subsistence materials (Kuokkanen 2011). Although these activities are fundamental in securing economic survival and development, indigenous women often remain invisible (Escobar 1995, Kuokkanen 2011).

Gender division of labour is a fundamental characteristic of indigenous Andean (Forstner 2012) and Amazonian societies (Espinosa 2007). While men and women perform productive domestic activities, the reproductive sphere is mainly women’s responsibility (Bourque and Warren 1981, Harris 1985, Espinosa 1993). In contexts of development intervention, gender roles and identities change. These kinds of interventions have had detrimental consequences for women’s economic positions and status, as they have reinforced gender inequalities (Escobar 1995 and Forstner 2012). Modern discourses fail to recognise the productive role of women. The status of rural women has worsened because of their exclusion from U.S. agricultural development

programmes, where men have been considered the most productive workers, and women's contribution to productive activity has not been evaluated (Escobar 1995).

It is argued that changes in economy and the exposure of Peruvian Andean and Amazonian societies to hegemonic culture has led to an unequal distribution of rights and power between men and women (Forstner 2012). Access of women to economic resources are limited because of uneven hereditary/ traditional practices and the effects of national agrarian reform and the difficulty women have in accessing loans (Radcliffe 2002). Women have been seen as passive mothers instead of active workers (Radcliffe 1993). Regarding Andean society, some arguments that try to explain gender inequalities in contemporary culture point to the sub valorisation of female work in the social and economic sphere (De la Cadena 1995). Women's authority is limited to the domestic sphere, whereas men's authority is practised within the public sphere (Canessa 1997). Whereas men's violence towards women is a way or reaffirming masculine power, femininity is linked to the notion of being controlled and subjugated by men (Harvey 1994).

Aside from the State, NGOs, religious and indigenous rights institutions and organisations have also tried to undertake interventions addressed to Andean and Amazonian women. Some of them focus on women's roles as wives and mothers and foster programs to preserve health among rural populations; other institutions focus on strengthening the economic role of women through income generation projects, or on increasing political involvement through female participation in women's organisations, and some others incorporate the gender equity notion in their work supporting the feminist discourse (Oliart 2008).

Escobar talks about a modernised patriarchy which un-pays or low-pays women's work, increasing their invisibility. He adds that women's invisibility in rural development is even more paradoxical when FAO presents its estimates and states that women produce 50% of the world's food for direct consumption and that households are increasingly being led by women in rural areas (Escobar 1995). The author adds that "in many parts of Asia, Africa and Latin America relations between women and men are gendered in ways that respond to local histories more than to modern structures (...). The fact that women in many parts of the Third World want modernization has to be taken seriously, yet the meaning of this modernization must not be taken for granted. Often it means something quite different from what it means in the West and has been constructed and reconstructed as part of the development encounter" (Escobar1995: 189).

2.3. Gender relations in Amazonian indigenous societies

The first Amazonian studies were published in the seventies by Siskind (Sharanahua- Peru), Bamberger (Kayapo- Brasil) and the Murphy couple (Mundurucu-Brasil). The main objective of these studies was to explore whether Amazonian indigenous societies had the same gender inequalities found in contemporary western society (Espinosa 2007). Espinosa argues that two positions about this have emerged. One states that there is complementarity between men and women (Perrin and Perruchon 1997) and the other affirms that there is inequality and masculine domination (Overing 1986). However, it is argued that neither of these positions is sufficient to understand gender relations in the Amazon.

Amazonian gender studies have also discussed whether the Amazonian woman is a passive object or an active subject (Belaunde 2005). An Amazonian woman as a passive object refers to a society controlled by man, in which women are subjected through marriage, as they pass from the father's domain to the husband's; whereas a woman as an active subject participates jointly with the man in the definition and reproduction of social life. Men and women share the construction of the society through complementary tasks (Espinosa 2007).

Apart from the domination or complementary approaches, other studies analyse the importance of sociability, seen as interlocution, joyfulness, friendliness (McCallum 2001), and conviviality as Amazonian sociality or collectivity (Overing and Passes 2007). It is important to understand gender relations in a more fluid and less hegemonic way. This perspective reinforces the importance of the body and the construction of the social person; these dimensions participate in the construction and the life of the person in an active manner (Espinosa 2007). The conviviality approach analyses the daily life dynamic where people interact, love, hate, feel jealousy, fight and embrace each other (Overing and Passes 2007).

Another perspective in approaching Amazonian indigenous gender relations is through women's social or political action. This focus integrates academic gender studies and the political dimension of feminism. In the case of Amazonian indigenous societies, there is a feminist movement which is also an ethnic movement. Women have a double identity: as indigenous women and as indigenous peoples (Espinosa 2007). In almost every declaration and public pronouncement indigenous women want their indigenous rights to be recognised in the first place, and then, after that, their rights as

women, as in the Beijing conference in 1995. Indigenous women question the generalisations that the urban feminist discourse has elaborated about women (Fabian 2004). Despite these limitations, NGOs, feminist organisations, and the state have contributed to a major participation of women in politics and public spaces (Fabian 2004).

It is necessary to try to understand changes happening in Amazonian societies. There is a very aggressive market insertion within Amazonian societies, mainly because of natural resource extraction projects carried out in their territories, which makes indigenous peoples become more dependent on money. Men migrate from their villages to work, and women stay in their communities with increased domestic burdens, taking care of their children, their garden and other activities. Some women also migrate and look for jobs as maids in the cities. Young people also access new roles and behaviour models through access to school, western society and media. Higher education spaces shape identities of indigenous youth (Virtanen 2010). School may interrupt traditional roles (Espinosa 2007), as well as rituals which construct children's masculine and feminine identity and incorporate them as adults in the community (Virtanen 2010). Young people who migrate face new challenges, and mothers who stay in the community run their households on their own with help from their kin.

Indigenous societies are gradually incorporating into modernity as a result of market's economy advance and pressure. Within a patriarchal context, indigenous women's contributions to society are not visibly valued, on the contrary capitalist development tends to overshadow and disempower women. An integration of the three perspectives proposed above to analyse the case study I will present, will provide some

lights of the current situation of the Machiguenga indigenous society, particularly of women, in times of extraction projects and capitalist peak. The fact that the literature on Amazonian indigenous gender relations is not broad makes it crucial to deepen its study. Exhaustive research on this topic may lead us to more equitable relations and to a better social coexistence among the Peruvian community.

3. Aims and objectives

3.1. Evolution of research ideas

Having previously worked in Cashiriari, my research site, was both beneficial and disadvantageous. Before going back to the field, my initial proposal for this dissertation was based on the impacts Machiguenga male migration to the gas fields had on household structure. I particularly wanted to explore Machiguenga women's strategies and responses given the temporary absence of their husbands from their villages due to labour migration, and to find out what those strategies and responses implied in terms of changes in household structure.

I was highly motivated by this research topic as I had seen massive labour migration from the villages and had never had the chance to work systematically on the impacts this had on households. The last time I had been in lower Urubamba, including Cashiriari, was in June 2013 when I observed that this labour dynamic was operating with the same intensity. In May 2014, when I arrived in Cashiriari after 11 months, I saw that things had changed, at least temporarily. Almost all the adult men were in the

community, so households had all their members present. Given this scenario, I realised it was not the right time to work on male migration and do time allocation studies. Therefore, in the light of the context observed, my research question had to mutate.

Cashiriari was undergoing a huge process of transformation, in terms of infrastructure and in terms of diversification of livelihood activities and sexual division of labour (even if this was ephemeral). A big project was being carried out in the community; the project was labeled “Housing improvements”. New and bigger houses were being constructed for all “*comuneros*”² in Cashiriari. This project was financed with money received from Pluspetrol Corporation, the main investor in Camisea, as compensation for exploration and exploitation in Cashiriari’s territory. The housing project involved hiring male labour not only from the community itself, but also from other villages; and had also contracted men from one of the closest towns, Sepahua, to work on more specialised tasks, such as carpentry and construction supervising. What was new for me was to see such a great quantity of women and children also working on the housing project as labourers. Although I had observed women working as labourers for the Echarate Municipality projects carried out at the community during the time I was working on the Monitoring project, it was something sporadic, and the proportion of women involved was minor in comparison to the housing project; besides, children were not being hired.

² Machiguenga adult people who live in Cashiriari and are registered in the Community Census.

For these reasons, after having observed these new dynamics in the community, I decided to direct my project towards the ways Machiguenga women experience modernity (in terms of economic growth), search for participation, challenge their traditional role and start diversifying their livelihood activities.

3.2. Aim and research questions

Explore and analyse the impacts on social and economic life of Machiguenga women in the native community of Cashiriari- Cusco, Peru, caused by hydrocarbon projects.

Three main research questions are proposed:

- a) In what ways does an external gas extraction project influence Machiguenga women's lifestyle?
- b) Is being a wage labourer providing indigenous women with greater empowerment within the household?
- c) Does having a paid occupation mean the abandonment of traditional subsistence activities?

4. Research site

4.1. Historical background: Machiguenga indigenous society

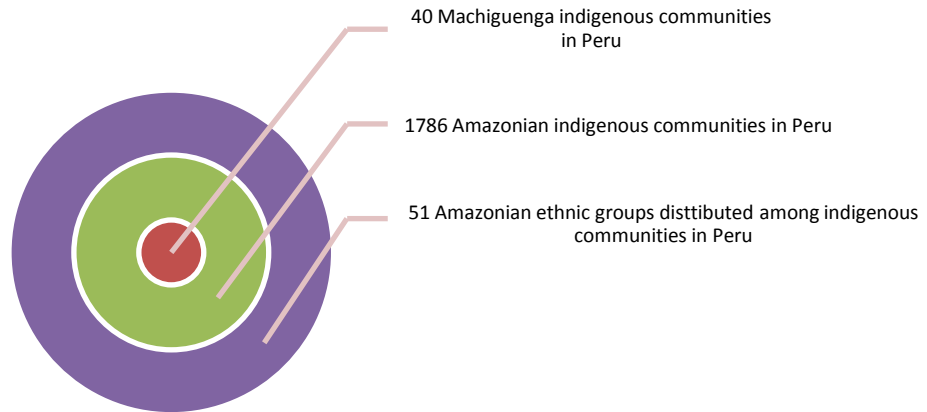
The Machiguenga indigenous population belongs to the Arawak ethno-linguistic family, which is one of the most ancestral cultures in America. Machiguenga are settled in the southeastern Amazon of Peru, along the Urubamba basin³. Most Machiguenga live in the Amazon of Cusco, a minority lives in the Apurimac region, others live in Manu and High Madre de Dios. According to the 1993 National Census, there were 8679 Machiguenga⁴ in Peru. However, as not all of them were registered, the population may have been as high as to 10000 (Rosengren 2005). The latest Peruvian Census (2007) of Amazonian Indigenous Communities does not include numbers of people per ethnic group, so there is no precise and current information about the number of Machiguenga living in Peru; what the 2007 Census has provided is the number of Machiguenga communities surveyed in Peru, which is 40. Machiguenga settled along lower and higher Urubamba River (Cusco) live in communities of 300 people in

³ According to Rosengren (2005), about 4000 Machiguenga are settled in the lower part of the Urubamba River, and about 2000, in the higher part. The author says that the Urubamba basin is divided between low and high because of its topography. The higher part is characterized by its uneven landscape, with its sinuous summits and narrow valleys; and the lower part, by its riverside flatlands and low hills. For more reference: ROSEGREN, Dan (2005). *Los Matsigenka*, Quito: Balboa: FLACSO: Smithsonian Tropical Research Institute.

⁴ The relevant question in the 2007 Peruvian National Census and its answer options, for people aged 5 and over, state: "The language or mother dialect learnt during childhood: 1) Quechua 2) Aymara 3) Ashaninka 4) Other native language 5) Spanish 6) Foreign language". The results for "4) Other native language" answer are not available. This is why I turned to the 1993 National Census. The 1993 National Census registered 22.639.443 Peruvian people, of whom 239.674 (1.06%) belong to the total population in the indigenous communities surveyed. The 2007 National Census registered 28.220.764 Peruvian inhabitants, of whom 332.975 (1.18%) belong to the total population in the indigenous communities surveyed. This suggests that the indigenous average annual growth rate is 2.3%. For further reference: <http://www.cepal.org/celade/noticias/paginas/5/37635/PERU-ArturoArias.pdf> and the National Institute of Statistics and Informatics (INEI) <http://www.inei.gob.pe/estadisticas/censos/>. Accessed on July 31, 2014.

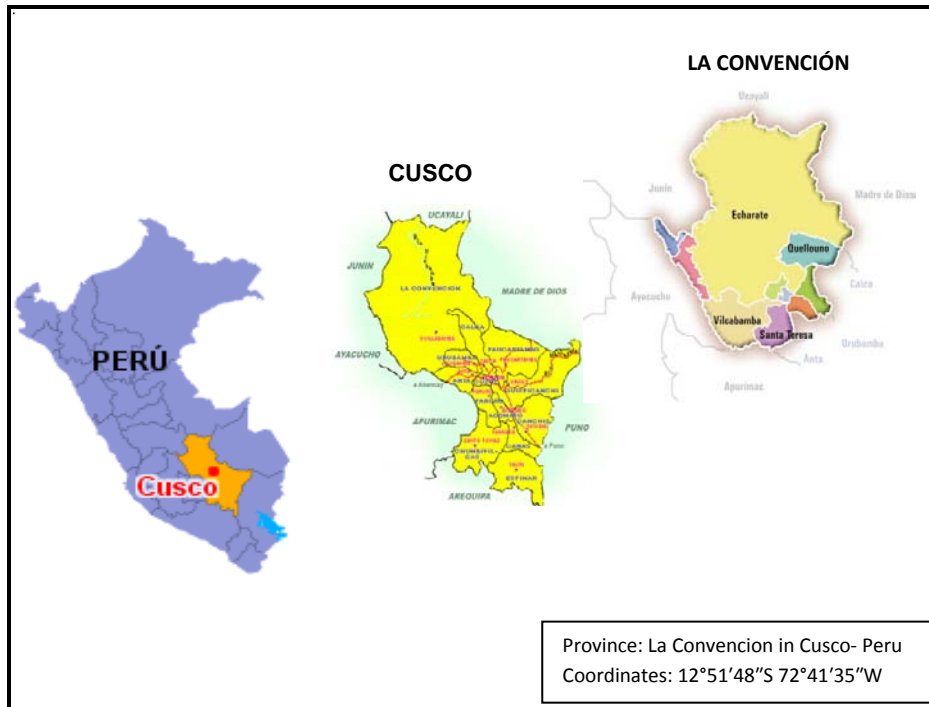
average. Machiguenga traditional livelihood activities are hunting, fishing, gathering, and horticulture for autoconsumption mainly, but some of them also grow products for petty trade, such as coffee and cocoa (Napolitano and Stephens 2003).

Figure 1: Peruvian indigenous communities and ethnic groups registered by the 2007 Census



The area where Machiguenga live is considered one of the most biologically diverse areas in the world, according to a study by the Smithsonian Institution and Conservation International in 2000 (Rosengren 2005), and as a “Global 200” ecoregion, that is, as one of the regions identified by the World Wild Foundation to be conserved because of its high biodiversity and the ecological functions it performs (Lema Tucker 2011).

Figure 2: Machiguenga Native Communities in La Convencion, Cusco- Peru



Source: **Del Castillo Tafur, MC. (2012)** *Ideas of progress of indigenous salaried workers. The case of the Machiguenga and the Camisea Gas Project.* Thesis. PUCP, Lima- Perú⁵.

The area where Machiguenga inhabit has data since 16th century when, according to Rosengren, the first missionaries arrived. The presence of these actors intensified during the XX century with the arrival of the Dominican order, which began working permanently in the territory where Machiguenga were living. In 1902 the first missionary base was constructed in the Urubamba area. In the following years, more bases were installed. The missionaries settled in the communities with the purpose of evangelising indigenous people, establishing health centres and schools; and most importantly, of reorganising the indigenous population, spatially and socially.

⁵ Available at: <http://tesis.pucp.edu.pe/repositorio/handle/123456789/4444>

At the end of the 19th and beginning of the 20th century, the rubber exploitation period began, with devastating repercussions for the Machiguenga (Rosengren 2005). The conditions of labour reached inhuman and degrading levels for the natives. Rubber extraction and forced labour affected the way Machiguenga were initially settled, as many of them, in order to escape from the *caucheros*⁶, went to remote areas where they could not be found. Many of the Machiguenga population suffered and died, not only because of the abuse by the *caucheros*, but also because of the spread of diseases. In 1920 the rubber crisis started with a decline in production (quantity and price) because of English and Dutch competition on the Asian continent, and rubber companies established in the Machiguenga area began to gradually disappear.

During the second half of the 20th century, concern about the organisation and formalisation of the Amazonian indigenous population of Peru arose. Under the military government in 1974, lands occupied by Amazonian indigenous populations were titled. The Native Communities Law was promulgated (Legislative Decree D.L. 20653)⁷, which bestowed legal capacity and territorial rights not subject to external authority nor seizure. This law was modified in 1978 (D.L. 22175)⁸ and in 1993, under Alberto Fujimori's government, it was once again altered, suppressing the "not subject to external authority" character, and favouring viable conditions for the indigenous territories to be subject to land buying and selling⁹.

⁶ Chief of workers in a rubber plantation, mostly of western origins.

⁷ More information available at the Peruvian Congress website:
<http://www.congreso.gob.pe/ntley/Imagenes/Leyes/20653.pdf>

⁸ More information available at the Peruvian Congress website:
<http://www.congreso.gob.pe/ntley/Imagenes/Leyes/22175.pdf>

⁹ More information available at www.dar.org.pe/

In 1980, the first indigenous national organisation was founded, the Peruvian Amazon Development Interethnic Association (AIDSESEP). In 1987, the Peruvian Amazonian Nationalities Confederation (CONAP) was created. Both organisations, AIDSESEP and CONAP, have federations which bring together different Amazonian indigenous communities in Peru; federations such as the Lower Urubamba Machiguenga Native Communities Central (CECONAMA), which is associated to CONAP; and the Urubamba River Machiguenga Council (COMARU), which is associated to AIDSESEP¹⁰.

Currently, the execution of huge hydrocarbon investments and the consequent social conflicts are the great issues that involve the Amazonian indigenous population. By the end of the first decade of the 21st century, precisely in the second half of 2007, during Alan Garcia's term as President of Peru, many legislative decree projects were formulated without prior consultation with indigenous communities. These decrees were considered harmful for the development of such communities and contrary to their rights.

In 2008 and 2009, indigenous people protested because of the gradual damage to the legal security of their territories. Native communities demanded the fulfilment of the International Labour Organization ILO Convention 169, and the necessity to adjust national legislation to international standards related to the human rights of indigenous populations ¹¹. The dialogue between the State and the organisations representing

¹⁰ More information available at: BARCLAY, F., RODRIGUEZ A. M., et al. (1991) *Amazonía 1940- 1990: el extravío de una ilusión*. Roma: Terra Nuova; Lima: CISEPA- PUCP.

¹¹ Article No 19 of The United Nations Declaration on the Rights of Indigenous People of the ILO Convention 169 on Indigenous and Tribal Peoples, states the following: "*States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and*

indigenous people was not optimal. The passage of legislative decrees detrimental to indigenous rights, the lack of consultation concerning external financial interventions within indigenous territories, among other reasons,¹² triggered Amazonian mobilisation in Bagua (northeastern Peruvian Amazon) during April, May and June 2009 which culminated in fatal events (10 indigenous people and 24 police officers dead)¹³.

Given these facts, national legislation seemed to make a step ahead with the purpose of alleviating tensions and making fairer agreements. In this direction, on May 19, 2010, the Peruvian Congress approved a bill on The Right of Indigenous People to Prior Consultation, recognised in the ILO Convention 169. On August 23, 2011, the Peruvian Congress finally approved the Law on The Right of Indigenous People to Prior Consultation, which was promulgated by current Peruvian President Ollanta Humala on September 6, 2011.

Nonetheless, three years later, in 2014, tensions due to mining and hydrocarbon interventions within indigenous territories do not seem to have lessened. Prior consultation with indigenous communities is not effectively addressed, and the Peruvian government under the Ministry of Economy regulation, with the purpose of attracting more international investments and keeping a stable economy, has established different measures to simplify procedures and permissions, such as cutting back the Peruvian

informed consent before adopting and implementing legislative or administrative measures that may affect them." For further information on the document, view: <http://www.un.org/Docs/journal/asp/ws.asp?m=A/RES/61/295>. Accessed on August 1, 2014

¹² For further information on the topic, read: RODRÍGUEZ A. M., ROJAS, E., LOSSIO, F. (2011) *Derechos Territoriales y proceso de constitución de la agencia social indígena: los pueblos Secoya y Machiguenga en el Perú*. Liaison Group, Innovación Ciudadana, Universidad de Los Lagos. Santiago de Chile.

¹³ Instituto de Defensa Legal and Utero de Marita Blogsite. Available at: <http://idl-reporteros.pe/2013/06/07/retratos-de-la-muerte/> and <http://utero.pe/2014/06/05/guia-sencilla-para-entender-lo-complejo-el-baguazo-cinco-anos-despues/>

Ministry of Environment mechanisms of environmental regulation and weakening environmental audit provisions¹⁴.

This context of weakening of institutionalism opened even wider the doors to the expansion of the Camisea Gas Project within the Territorial Reserve Kugapakori, Nahua, Nanti and Others, which is overlapped by one of the plots operated by this project (Plot 88). The expansion of the Camisea Gas Project in this reserve has generated protests against the Peruvian government from different organisations and institutions supportive of indigenous rights, as the vulnerable condition of the ethnic groups living within the reserve will increase and generate serious impacts on the life and health of these populations¹⁵.

4.2. Camisea Gas Project (CGP)

Camisea is the biggest energy project in the history of Peru (Lema Tucker 2011; Bruijn and Whiteman 2010; Survival International 2014). The Camisea Gas Project has as its objective the exploration and exploitation of gas. It operates mainly in the lower Urubamba area, in territory occupied by Machiguenga indigenous communities. The gas from Camisea was discovered in Plots 56 and 88 by Shell Corporation in the 80s.

In 1988, Petroperu (the state- owned oil company) signed a contract with Shell Company to exploit Camisea. Operations in the area caused serious and irreparable damage to an isolated population (Nahua ethnic group) who were forced to have contact with the Camisea Consortium. However, operations in the area stopped as the

¹⁴ For more information on Law 30230 and the new measures established by the Peruvian Ministry of Economy, read <https://veronikamendoza.lamula.pe/2014/07/21/ley-30230-ha-debilitado-la-fiscalizacion-ambiental/veronikamendoza/> Accessed on August 3, 2014

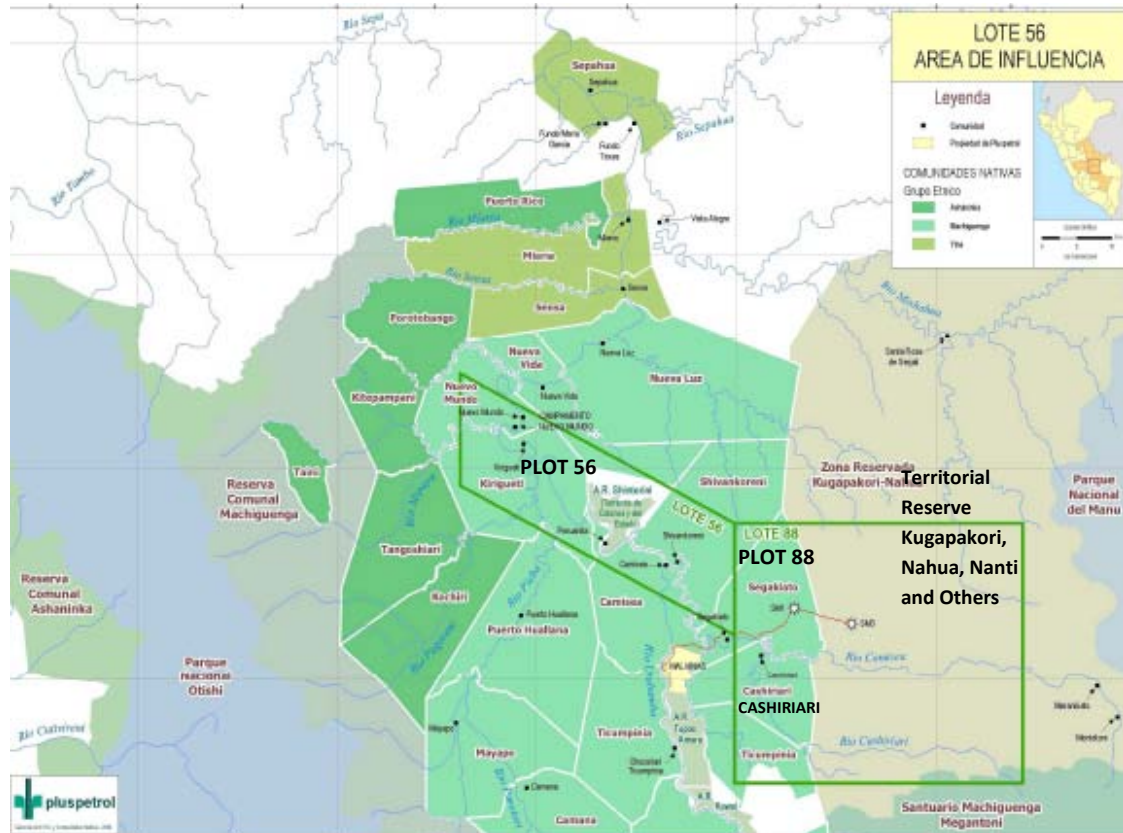
¹⁵ For further information, http://www.dar.org.pe/archivos/publicacion/105_rtknn_vf.pdf Accessed on August 3, 2014

negotiation of this contract did not end up in mutual agreement due to economic reasons (Bruijn and Whiteman 2010). In the 90s the CGP had a second period of operation. In 1994, once again, an agreement for the Evaluation and Development of the Camisea fields was signed between Petroperu and Shell; but again negotiations did not end up in consensual agreement. As a result, in 2000, the gas field from Plot 88, with an estimate of 11 trillion cubic feet of gas and 600 million of condensate barrels was given to the Pluspetrol Camisea Consortium, with a contract for 40 years of exploration, with the possibility of extending it to 100 years (Lema Tucker 2011). Later in 2004, the Peruvian government signed the Plot 56 concession agreement with Pluspetrol Camisea Consortium. Plot 56 is intended for export, and Plot 88 has been designated for the internal market until 2015¹⁶. The main current associates of the Consortium are Pluspetrol Corporation as the main stakeholder and operator (27.2%), Hunt Oil (25.2%), SK (17.6%), Techint (10%), Sonatrach (10%) and Repsol (10%)¹⁷.

¹⁶ <http://gestion.pe/noticia/333965/gas-lote-88-se-destinara-solo-al-mercado-interno-hasta-2015> Accessed on August 4, 2014

¹⁷ http://www.vigilamazonia.com/noticia/detalle_de_noticia/la-triangulacion-del-gas-de-camisea and <http://www.larepublica.pe/31-07-2013/aun-no-se-firma-adenda-para-recuperar-el-gas-del-lote-88> Accessed on August 4, 2014

Figure 3: Camisea Plot 88 overlapping Cashiriari Native Community and Territorial Reserve Kugapakori, Nahua, Nanti and Others



Source: Pluspetrol Corp., 2011. Available at: <http://www.minem.gob.pe/minem/archivos/Presentacion%20Pluspetrol%20-%20Programa%20de%20Monitoreo.pdf>

4.3.Cashiriari Machiguenga Native Community

Cashiriari is the name of the Machiguenga indigenous community where I did fieldwork. I chose to do research in Cashiriari as Plot 88 overlaps with its territory, with two different gas sites (Cashiriari and San Martin), receiving direct influence from the Camisea Gas Project, which generates not only environmental but also social impacts in a rapid pace of change. Cashiriari is the most distant Machiguenga community and the closest to the Territorial Reserve Kugapakori, Nahua, Nanti and Others, making it special as this community was once upon a time the least connected with western society.

Cashiriari Native Community is settled along the Cashiriari River; it adjoins the Camisea River, on one side, on another, the Territorial Reserve Kugapakori, Nahua, Nantis and others, and on the other side, the buffer zone of the Manu National Park. In order to reach this community from Lima, people have to travel to the capital of Cusco (which by bus takes 24 hours and by plane takes 1 hour), then go to Quillabamba city, which takes around 5 hours by bus, then go to Ivochote town, which takes another 4 hours by bus and finally go to Cashiriari downstream on the Urubamba River and upstream on the Camisea River, which takes 9 hours by motorised boat; however times can vary depending on the season and the flow of the river.

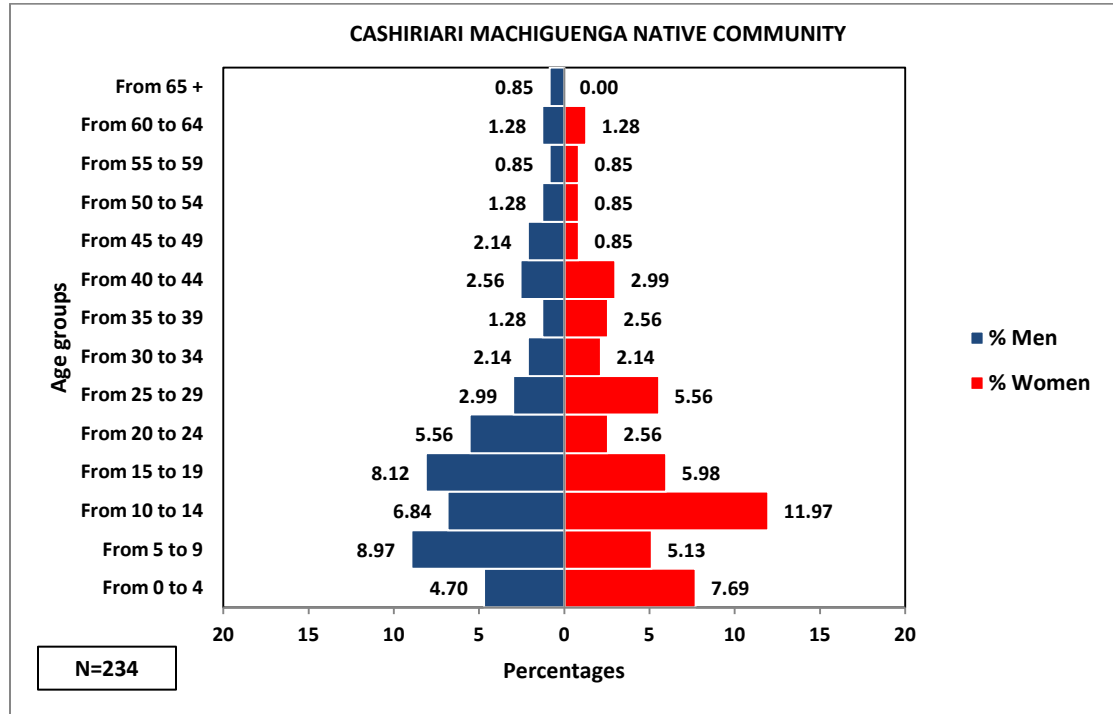
Another way of arriving in Cashiriari is via Pluspetrol daily charter flights from Lima to Malvinas Camisea Mining Camp. This route only takes an hour from Lima to Malvinas, and then around six hours from Malvinas to Cashiriari, navigating by motorised boat down Urubamba River and then up Camisea River. Only Camisea Gas

Project workers can travel via these charter flights. I arranged to travel to lower Urubamba via Malvinas, because when I was working at the 5-year project, we had an agreement with Pluspetrol Corporation and so this time they let me onto one of those flights.

Cashiriari was founded in 1973, but was officially registered in 1987. Cashiriari founders are all Machiguenga but come from different origins; some come from the Picha basin, others from High Timpia, and others from Manu in Madre de Dios. Machiguenga people used to live in a dispersed way because they were under constant threat of being seized and sold into slavery by the timber and rubber industry; later missionaries gathered them together through the foundation of schools and the establishment of settlements. There are 36 households in Cashiriari village¹⁸. Houses in Cashiriari are made of wood with a roof of corrugated iron (before Shell arrived in Cashiriari, houses used to have roofs made of palm trees). There are approximately 234 people in Cashiriari, according to the community's 2013 census. 67% of the population is under 19 years old. The largest age group is 10- 14. There are few elderly people in the community.

¹⁸ According to the 2013 Community Census.

Figure 4: Population Pyramid- Cashiriari Native Community



Source: Own elaboration. Based on 2013 Cashiriari Community Census

The village has a piped water system, with concrete sinks in each of the houses (work done by Pluspetrol at the request of the community). Water comes from a stream which has been dammed. Every household has a shower, a toilet and a washbasin, apart from the concrete sinks (work concluded in 2013 by Echarate Municipality as part of the taxation received from the CGP). Sewerage is via a septic tank. Every house in Cashiriari has solar panels (bought with the money received from the compensation from Shell); however they are not used any more, as a motor generator which is fed with fuel, has been bought. The generator is turned on every day from 6pm to 10pm. Lamp posts have also been installed throughout the community (Echarate Municipality work done with the money received as part of the gas taxation). Lights bulbs, lamp posts,

radios, televisions and refrigerators (for those households with convenience stores) work for 4 hours when the generator is on until it is turned off.

There is a communal room where assemblies are held. This was also built with compensation received from Shell and was later refurbished by Pluspetrol. The communal room has a 32 inch plasma TV, a DVD player, a stereo and wood benches and tables. There are satellite aerials which access channels from different countries. Next to the communal room, there is a small office with the radio station, which works as the main medium of communication between communities that do not have landline or mobile signal (only two communities out of 24 in lower Urubamba have mobile signal). In the same office there is a loudspeaker which is used to make communal announcements.

Figure 5: Cashiriari's communal room



Some meters away from the communal room, there is a building made of wood that serves as a hostel and as the community board office. It was built in 2012 with compensation funds from Pluspetrol. There is a medical centre owned by the community, which has been refurbished by Echarate Municipality. Two nurse technicians work at the centre.

Figure 6: Cashiriari's hostel and communal authorities' office



The community has an elementary school with three teachers (two are Machiguenga, one is Yine¹⁹). The school was founded on September 7, 1973, which also is Cashiriari's anniversary date. The school has 72 students from 1st grade to 6th grade. There are three classrooms. Two grades are allocated per classroom (1st and 2nd grade are together in one classroom, 3rd and 4th grade in another one, and 5th and 6th grade in another classroom). The school is built of concrete and was refurbished in 2006 with compensation funds from Pluspetrol.

¹⁹ Amazonian ethnic group

There is a kindergarten school with one Machiguenga teacher and 14 pupils from 3 to 5 years old. The kindergarten was founded on April 1, 1998. It is made of concrete and was refurbished in 2006 with compensation funds from Pluspetrol.

Figure 7: Cashiriari's Elementary School- 3rd and 4th grade classroom, one teacher



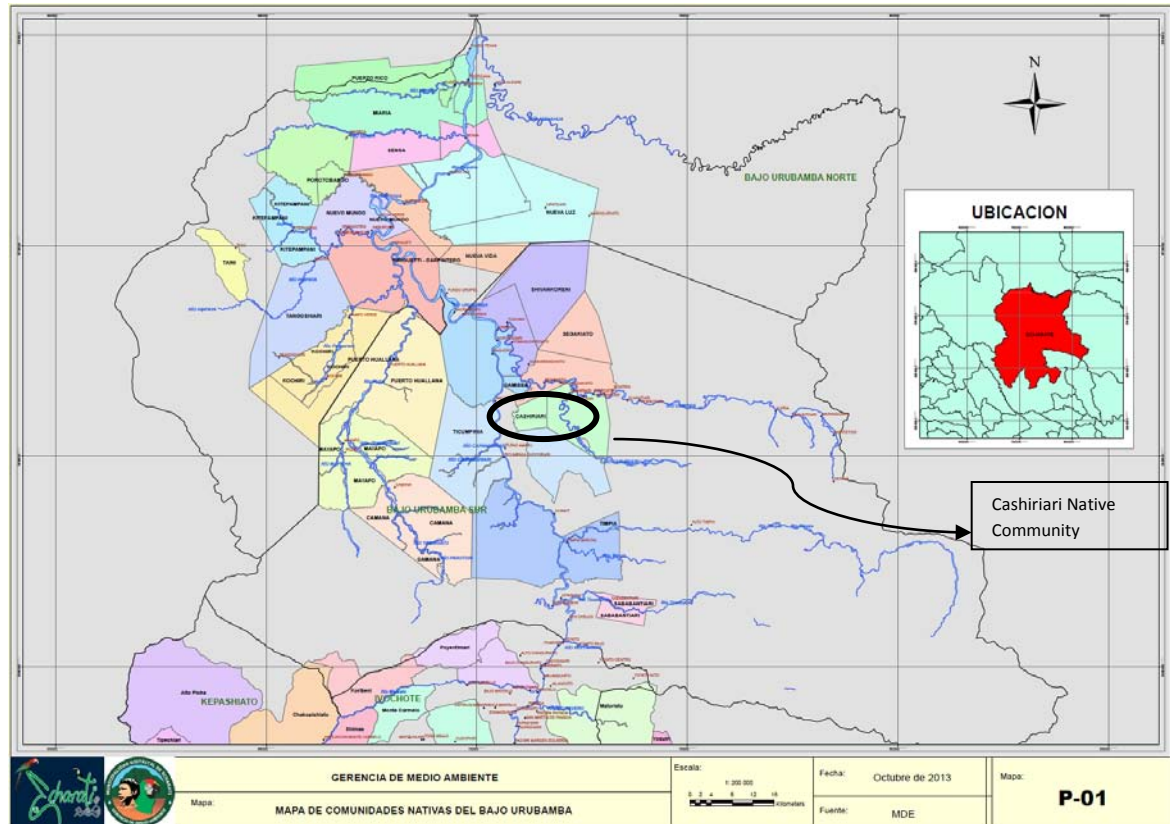
Figure 8: Cashiriari's Elementary School- 5th and 6th grade classroom, one teacher



Regarding Cashiriari's political organisation, there is a community board led by the President of the community, the Vice President, the Secretary, the Treasurer and two vocals²⁰. The board is elected by the community every two years in a general assembly. The community has a statute which regulates norms within the community. Cashiriari also has a Mother's Club and a Sports Club. The Mother's Club and Sports Club board is also elected in general assembly by vote. Cashiriari is affiliated to COMARU and this latter is affiliated to AIDSESEP. Cashiriari has a community sheriff in charge of security and compliance of norms within the community; the first community sheriff was elected by the community in May, this year.

²⁰ Vocals are in charge of assisting the President, Vice-president, Secretary or Treasurer in the functions they are assigned to do.

Figure 9: Lower Urubamba Machiguenga Native Communities within Echarate district (La Convención-Cusco)



Source: Echarati Municipality. Local Environmental Information Systems. <http://intranet.muniecharati.gob.pe:8080/sialecharati/public/docs/1014.png>. Accessed on August 31, 2014

- **The Machiguenga household**

With the purpose of collecting data for the basic unit of economic organisation and solidarity in the community, I explored the Machiguenga terms which would enable me to approach this. I looked for the translation of the word household (*hogar* in Spanish) in the Small Machiguenga Dictionary (Summer Institute of Linguistics, 1998). The word used to translate household is *tsitsipoki*, which literally means “place where the fire is set”. I presume this would be the hearth, the place where cooking takes place and

where people sit around when having a meal in traditional Machiguenga societies. To confirm this, I asked my Machiguenga friend to define *tsitsipoki*, she said “fire”, and added that *tsitsipoki* could mean household/ *hogar* only if there were people sitting around the fire. She also added that other Machiguenga words could also be used to refer to household, such as *pankotsi*, which in English would mean “house”, or *novanko*, which would mean “my house”, or *notimira* which literally means “where I live/ come from/ was born”.

Social and economic research has straightforward definitions, when requiring data on the basic units of economic organisation. The word assigned for this kind of unit is the household. Officially, household is defined by the National Institute of Statistics and Informatics of Peru (INEI), as "the person or group of people, related or not, occupying in whole or in part, a collective domestic dwelling, sharing meals and/or taking care of basic needs, under a common budget"²¹. The question would be how meaningful is this definition for the Machiguenga and the way most families are organised, and whether the household is an appropriate unit in Machiguenga society.

Machiguenga are a “family- level” society, which lives in nuclear family residences/ hamlets, which once used to be scattered (A. Johnson, 2003). Sociocultural integration among Machiguenga happens within the family scope. Each family unit is capable of supporting themselves economically with little help from outside, because members of a Machiguenga family unit potentially have the necessary skills to satisfy their basic needs

²¹ Institute of Statistics and Information (INEI) of Peru. Appendix 4 Definitions and Basic Census Concepts. Web Page: <http://proyectos.inei.gob.pe/web/biblioineipub/bancopub/Est/Lib0862/anexo04.pdf> Accessed on August 11, 2014

(A. Johnson, 2003). Machiguenga peoples from lower Urubamba are larger settled groups living in villages with a constant flow of external agents, mainly because of the CGP, whose subsistence and family organisation has persisted over time (Izquierdo, 2009). Settlements normally have an uxorilocal base, with female generational continuity.

Johnson defines a Machiguenga household as “essentially a monogamous nuclear family living together under one roof” (Johnson 2003: 84). Even though there is no accurate word that translates household into Machiguenga, the way these populations are domestically organised can fit into the Peruvian official definition of household, as their pattern of settlement is characterised by villages occupied by nuclear or extended families, who live each in independent dwellings, whose members take care of food provision (those 6 years old and above contribute to food provision through fishing and gathering)²², share meals and attend to their basic living needs. Although there is no term for head of household²³ in Machiguenga, and when asked about this people in the village seemed rather confused, a Machiguenga family living under the same roof normally has one or two adult members who are in charge, which could be the husband-wife/ father- mother of dependent children; they both organise and make arrangements within the family scope allowing their daily life to flow naturally. Because of the form

²² Rodríguez Achung, M. (2014) *Acceso y uso de recursos naturales por las comunidades nativas del Bajo Urubamba*. At: Metodologías para el monitoreo de la biodiversidad en la Amazonía. Experiencias en el Programa de Monitoreo de la Biodiversidad en el área del Proyecto Camisea. Available at: <http://www.pmbcamisea.com/wp-content/uploads/2014/05/Metodologias-final-web.pdf> Accessed on September 4, 2014

²³ The Household Focalization System (SISFOH) from the Peruvian Ministry of Economy and Finance describes “head of household” (June 2010) as the person who is recognised as such by the other members of the household. The head of household can define the other members of the household according to the relationship they have with him/ her, which can be by blood (mother, son, brother, etc.), by politics (husband, wife, brother in law, father in law, mother in law, etc.), by affection (god father, god daughter, etc.) or by any other relation. Available at: http://www.sisfoh.gob.pe/img_upload/5c2c13e8e6a6e1292e22682e5c3f7259/manual_empad_rural.pdf. Accessed on September 8, 2014.

of Machiguenga residential and economic organisation, I used the official definition of household provided by the INEI, as this concept maps quite well onto Machiguenga social organisation and the way their domestic units are structured.

- **Division of labour**

Marriage in Machiguenga society is a partnership. Traditionally, division of labour is based on interdependence, and each member of the partnership has a separate domain (Johnson and Johnson 1975, Rosengren 2005). The house is the woman's domain. Women dominate the food preparation, cloth manufacture, childcare, house cleaning, clothes and pots (and now dishes) washing. Men are in charge of hunting, house building, wood and net bags manufacturing (Johnson 2003). Both women and men provide food for their families through fishing, gathering or agriculture. It is said that the garden is the man's domain (Johnson 2003). Probably that is still the case in Machiguenga societies with little contact with external agents as the CGP. From what I have observed, agriculture currently is both a man's and a woman's domain. Male labour migration because of the CGP leaves women in charge of the garden/ *chacra*. When going to work to the gas fields, in some cases men pay some comunero to slash and burn their new chacras, but the ones who take care of them permanently are women and the other members of household who are at home and are old and skilled enough. Men, besides food production, do the slash and burn, which is the most tiring and demanding part of the gardening; but when they have to leave the village, the well-being of their chacras is women's solely responsibility.

5. Methodology

The methodological approach for this dissertation took into account the following:

- Quantitative and qualitative methods for answering the research questions and triangulation
- A gender-based approach because of the ultimate research aims and the disadvantaged position of indigenous women in Peruvian society

5.1. Desk Work

- **Review of Secondary Information**

The review of secondary information helped me to approach my research. Prior to the fieldwork I conducted a search on Machiguenga- based ethnographies and read several articles based on Machiguenga case studies. I also did a literature review on the incorporation of modernity into indigenous societies, the roles of indigenous Andean and Amazonian women in contexts of social change and economic growth and a review of gender studies in Amazonian indigenous societies. This gave me a broader idea of major impacts caused by mining or hydrocarbon projects in the Amazon on social, economic and modification of cultural practices aspects and contributed to the literature review above.

I reviewed statistical information from the latest national census (2007) undertaken by the Peruvian National Institute of Statistics and Informatics (INEI)²⁴. However data on disaggregated Amazonian communities were not available; what I found instead was general information on Peruvian ethnic groups from the Amazon. I did use information from the 2007 Census in order to have a general perspective on the demographic situation of the Machiguenga ethnic group; and I used information from the Cashiriari 2013 Census to obtain more precise data on the field site. Data related to population, infrastructure, economic activities, among other community characteristics were collected thanks to the information provided by communal authorities of Cashiriari while in the field.

While in Lima I was able to access the Pontifical Catholic University of Peru and the San Marcos Major National University libraries, which helped me to broaden the bibliography, as well as to talk to Peruvian academics with expertise in Amazonian studies.

5.2. Assessing Cashiriari- Primary data collection

Field work research was conducted from May 17th to June 28th, 2014. I selected as key informant and research assistant a very proactive Machiguenga young woman, who spoke fluent Spanish as well as her native language, who had experience working for different organisations which had arrived in the community, and who owned the biggest convenience store in the community. I requested her to work with me on my

²⁴ II National Census of Indigenous Communities from the Peruvian Amazon (2007)

project since I had known her for five years, as she also worked as research assistant at the Monitoring project I worked at, and knew she had a good relationship with most of the comuneros and also was well- recognised. Besides, she also provided me with breakfast, lunch and dinner. The place where I ate was right next to her convenience store, so this setting was very enriching for the purpose of my study, since I was able to observe on a daily basis, the attendance of customers during certain hours, the products they bought and the methods of payment.

The quantitative and qualitative tools applied were:

- a) Community Registration Form* (See Appendix A): With the purpose of collecting general information about Cashiriari, I designed a form that would allow me to gather information about local infrastructure, health, education, main sources of water and energy, access roads, among other data. Information was collected with the participation of local authorities.

- b) Household Surveys* (See Appendix B): Quantitative data were collected through a household survey. The findings were cross-referenced with qualitative data from interviews, informal conversations and participant observation. Given the size of the community (36 households), I tried to apply the survey to all households. However only 30 households could be surveyed; in the ones missing, the respondents, who were female, were not in the community.

Since I already had a male perspective from my former research, in order to develop a more gendered approach I focused the present study on Machiguenga women. Local women were interviewed in the household survey. In all cases, the women surveyed were adults; most of them were married and had children. Interviews were conducted in Machiguenga or Spanish, depending on the language the respondent felt more comfortable with. I had the support of my research assistant. The questionnaire was structured in four sections:

- ***Members of the household:*** Name, relationship, sex, number of members in the household and if there was a head of household in the house and who it was.
- ***Salaried activities:*** Questions in this section were designed to obtain data on livelihood activities within the Machiguenga household. Questions were divided into: *a)* work at the company related to the CGP, or *b)* work at projects from the community itself. If any member of the household had worked at the company between 2013 until the moment of the survey or at any community project between 2013 until the moment of the survey, which member did work, their sex, occupation, name of the company/ project.
- ***Garden- chacra:*** This section sought to collect data about the maintenance of Machiguenga household's lands and the products they grow on it. If the household had a piece of land or *chacra*, why/ why not, how many *chacras*, who worked at the *chacra*, what was the use given to it (autoconsumption, trade, barter).

- **Poultry:** This section sought to collect data on the breeding of birds and the purpose of this activity. If the household owned poultry, what birds they owned and the use given to them.
- **Petty trade:** This section sought to collect data on other sources of income, such as convenience stores. If the household owned a convenience store, who was in charge of the shop, what products were mostly sold and the final destination of the income received.
- **Other activities:** This section sought to find out if members of household still kept on doing certain traditional activities. If manioc beer (*mazato*) had been prepared in the last week and if any member of the household had gone hunting, fishing or gathering during the last week.

After I concluded fieldwork, I entered the data in CSPRO and exported them to SPSS. Quantitative analyses were used to crosscheck and support qualitative data obtained through interviews and participant observation.

- c) **Interviews** (See Appendix C): I conducted semi structured interviews with 15 Machiguenga women who lived in Cashiriari Native Community (except one) and 2 Machiguenga men. I identified potential participants during the conduction of the household survey. My research assistant helped me when interviews were conducted in Machiguenga.

Table 1: Age and number of interviewees

Age group of interviewees	Number of female interviewees	Number of male interviewees
18- 29	5	-
30- 44	8	1
45 +	2	1
Total	15	2

The topics of the interviews were related to women’s experiences in urban environments (education, work), experiences of paid work outside or within the community, domestic changes in the household due to husband’s migration to the gas field, changes in the household due to monetary income, social changes in the community due to entrance of money (e.g. alcohol consumption, domestic violence), existence or not of a head of household at home, diversification of livelihood activities, life expectations 30 years from now when the CGP is over, penalties for trespassing against community norms. The following charts show general information about Machiguenga female and male respondents:

Table 2: General information about female respondents

Machiguenga female respondents									
Respondent code	Sex	Age	Place of birth (Native Community)	Place of residence (Native Community)	Marital status	Education level	Work experience outside the community	Work experience inside the community	Age group
Respondent 1	Female	18	Cashiriari	Cashiriari	Partnership	Higher (incomplete)	Yes	Yes	18- 29
Respondent 2	Female	19	Cashiriari	Cashiriari	Single	Higher (incomplete)	No	Yes	
Respondent 3	Female	26	Cashiriari	Cashiriari	Partnership	Elementary	No	Yes	
Respondent 4	Female	29	Cashiriari	Cashiriari	Partnership	High school	Yes	Yes	
Respondent 5	Female	29	Cashiriari	Cashiriari	Partnership	High school	Yes	Yes	
Respondent 6	Female	30	Cashiriari	Cashiriari	Partnership	High school	Yes	Yes	30- 44
Respondent 7	Female	31	Cashiriari	Cashiriari	Partnership	Elementary	No	Yes	
Respondent 8	Female	31	Camisea	Cashiriari	Partnership	Higher	Yes	Yes	
Respondent 9	Female	33	Cashiriari	Cashiriari	Partnership	Elementary	No	Yes	
Respondent 10	Female	35	Chokoriari	Cashiriari	Partnership	Higher	Yes	Yes	
Respondent 11	Female	40	Kutaparage	Chokoriari	Partnership	Higher	Yes	Yes	
Respondent 12	Female	40	Timpía	Cashiriari	Partnership	Elementary	Yes	Yes	
Respondent 13	Female	43	Cashiriari	Cashiriari	Widow	Elementary	No	Yes	
Respondent 14	Female	56	Poyentimari	Cashiriari	Partnership	Elementary (incomplete)	No	Yes	45 +
Respondent 15	Female	70	Timpía	Cashiriari	Widow	None	No	No	

Table 3: General information about male respondents

Machiguenga male respondents									
Respondent code	Sex	Age	Place of birth (Native Community)	Plase of residence (Native Community)	Marital status	Education level	Work experience outside the community	Work experience inside the community	Age group
Respondent 16	Male	30	Cashiriari	Cashiriari	Partnership	Higher	No	Yes	30- 44
Respondent 17	Male	60	Cashiriari	Cashiriari	Partnership	None	Yes	Yes	45 +

d) Interviews with other stakeholders: During my stay in the field I was able to have informal interviews with other important stakeholders for my research. Staff from Petrobras Company who arrived in Cashiriari community to do a workshop with the comuneros from Cashiriari stayed at the community for three nights due to bad weather, so I spoke to people from the Communities Relations Area from the company, and to local leaders from an indigenous organization, (COMARU), who were there to attend the workshop, as well. When I visited another community (Shivankoreni), I had informal chats with people involved in projects from NGOs working in the area.

e) Participant observation: I used participant observation to complement my previous tools and triangulate my data collection. I used this method to register occurrences (and the issues they raised) in Cashiriari, such as daily routines, classes at elementary school, pay day at the community, fishing day with a Machiguenga family, Catholic mass, food preparation habits and meals, among others. I had a notebook to document regular events and everything I was able to identify through participant observation.

5.3. Limitations of methods and constraints to data collection

Even though I had accumulated certain knowledge about Machiguenga society because of my previous experience, I think it would have been useful to work with more men at this stage. Social groups are constantly changing through time, and having

formally interviewed more men would have helped me to obtain more updated male views on the influence of this external gas company and on their perceptions regarding women's active participation within this context of economic growth. Nevertheless, the data I accumulated in my previous research in 2012 still helps me and provides me with information I have used to complement my current study.

With regard to the household survey, I think it would have been useful to collect the ages of all members of households who have worked at the CGP or at a community-based project, and not only the ages of the Machiguenga women who were the respondents in the survey. However, I do have age information from all members of households based on the latest community census (2013).

It was really difficult to talk to communal authorities and interview them. The President of the community was out of Cashiriari most of the time I was there. He was constantly traveling and dealing with administrative matters regarding the community territory and the gas project. The Vice-president was the one in charge while the President was absent and he was all the time attending community matters, especially the ones involved in the "Housing improvement" project. The secretary and treasurer, both women, were more accessible.

Alcohol consumption was a problem in the community. Once I needed to talk the vice-president, but I was not able to do a proper interview with him because he was actually drinking. This was just once, though. Nevertheless, as my interviews were mostly conducted with women, I did not have the "alcohol" problem as an everyday issue, as women do not drink as much as men do.

6. Results

For a clearer understanding of the impacts generated by the presence of external agents as the Camisea project on Machiguenga indigenous settings, I have organised my results in four sections: 1) community- based projects, 2) wage labour and participation within the community, 3) household (re) arrangements and women’s search for economic independence, and 4) Machiguenga views about the gas project and expectations about the future. These sections will provide the basis for answering the proposed research questions and for presenting my final reflections.

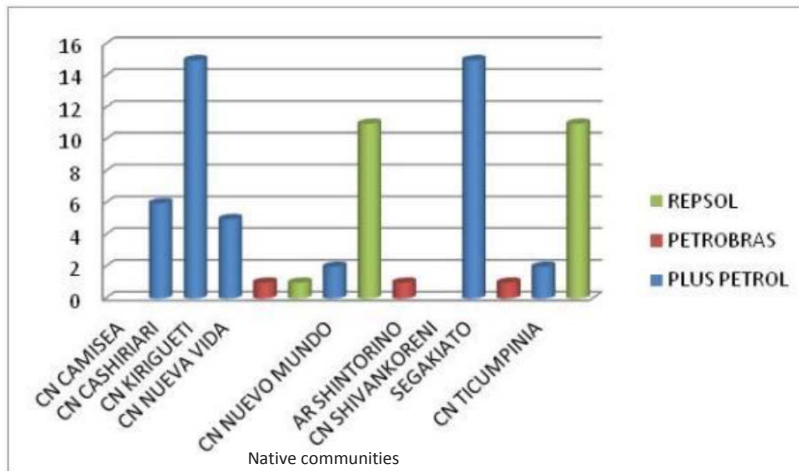
Camisea Gas Project investors have provided Cashiriari with millions of dollars as compensation for the environmental impacts in their territory due to the exploration of gas in Plot 88. In 2011, in community assembly, it was announced that Cashiriari had received 16 million dollars as compensation funds²⁵.

Besides community money from compensation, the CGP also hires many Machiguenga adult men to work mainly as labourers in their operations. The CGP indigenous labour policy was designed to provide work to Machiguenga men in the gas fields. Investors from Camisea have an agreement with the Peruvian State which involves hiring a certain percentage of local labour to work in their operations. The CGP took into account two perspectives: 1) strengthening “local social capital” by training Machiguenga people in work within the modern sector and 2) building up good relationships with local people in order to avoid social/ environmental conflicts and

²⁵ Information provided through informal conversation with *comunero* and respondent 6.

maintain peace in the area of operation over the 40 years of duration of the gas project (Rodriguez Achung 2007). Men from different communities, after undertaking the necessary procedures (medical examination and inductions), voluntarily go to work to different locations related to the CGP. Men can go to work for 14, 21, 28, 60 days without returning to the community until completion. There is more demand for male labour when seismic exploration is in process. As a result, Machiguenga men have started earning a salary on a regular basis, which has gradually been shaping money acquisition as a male domain, and has emphasised men's roles as providers and breadwinners.

Figure 10: Number of workers hired by main gas investors Pluspetrol and Repsol (Lot 88) and Petrobras (Lot 58) within the PMAC* scope, October 2013- March 2013



Source: *Community Environmental Monitoring Program- PMAC, 2013. Available at: www.pmac-bu.org

This time, when arriving in Cashiriari, I found out there was not much work migration; on the contrary most adult men were at the community. One of the reasons for this, according to my respondents, was that the new seismic exploration had not started yet, and so most men were at home. Furthermore, several internal projects were being implemented within the community, most of them related to infrastructure improvements paid for with money received from compensation. These projects involved hiring

outsiders as well as *comuneros* from Cashiriari. Under the new scheme not only men were invited to work as labourers, but also local women and children.

This inclusive approach to community-based projects has enhanced the participation of all local people, with money as the main incentive. Thirty out of thirty six households have had a paid occupation either at a community- based project or at the CGP. More than half of the households surveyed (60%) have participated in a community project over the last year and a half; around a third of households have worked at both a community- based project and the CGP, and just one household has participated solely in work at the CGP. The involvement of the Machiguenga in paid jobs suggests that they have needs to be covered or satisfied which can only be achieved with money (or that this money has created new needs).

Table 4: Households with members with paid occupations at Cashiriari native community and the CGP January 2013- June 2014

	Frequency of households	%
Households with member(s) with a paid occupation at a community- based project	18	60.0
Households with member(s) with a paid occupation at the CGP	1	3.3
Households with member(s) with a paid occupation at both, a community project and at the CGP	11	36.7
Total	30	100.0

6.1. Community- based projects

Cashiriari’s official development plan, which is decided by the communal authorities, states that from January 2013 until the end of 2014, ten community projects should be run with money from CGP compensation:

Table 5: Cashiriari’s annual development plan

Community Development Plan 2013 - 2014	
<ol style="list-style-type: none"> 1. Housing improvements 2. Bridge over Potogoshiato stream 3. Water installation in upper neighborhood (Potogoshiato stream) 4. Implementation of solar panels, batteries, light bulbs in upper neighborhood 5. Construction of communal kitchen 6. Funding for high school students in Lima 7. Communal lot division 8. Construction of storage in Lucas Mil camp 9. Coffee and cocoa plantations 10. Implementation of school, communal room, accommodation for teachers, football court 	
BCP (Credit Bank of Peru): 1 000 000.00 PEN*	

Source: Information provided by communal authorities
 *250000.00 GBP approximately

When talking with comuneros and conducting interviews, six community projects carried out from January 2013 until June 2014 were mentioned. Two of them were executed by Echarate Municipality and the other four were led by the community.

Table 6: Infrastructure projects undertaken at Cashiriari native community January 2013- June 2014

Projects by Municipality	Status	Projects by the community	Status
Health centre	Concluded	Extension of school	Concluded
Water and sewerage	Concluded	Concrete football court	Concluded
		Accommodation for outsider school teachers	In progress
		Housing improvements	In progress

Projects led by Echarate Municipality hired people from Andean/ Amazonian towns such as Quillabamba or Echarate and also hired Machiguenga labour. Projects led by the community hired local people, and outsiders from Sepahua, one of the largest and closest Amazonian towns to Lower Urubamba River and where Machiguenga frequently travel to stock their convenience stores.

- ***Housing Improvements Project***

During my stay in Cashiriari, the Housing Improvements project was being carried out. This was the biggest community project I had ever seen, in terms of money invested, flow of resources (carpentry and construction material), labour required and length. When talking to the President of the community he said that the objective of the project was to provide not only life quality, but also paid work to men, women and children from the community. He added that before this project people did not have money of their own but that now they do. The housing project started in May 2013 and is programmed to conclude in September 2014, which is Cashiriari’s anniversary month. The project consists of four types of contracts:

Table 7: Phases of contract of Housing Improvements Project

Housing Improvements Project		
Phases of contract	Outsiders hired	Locals hired
a) Construction of concrete bases	12 male	-
b) Structural survey	18 male	2 male
c) Installation of slats, doors, etc.	8 male	2 male
d) Transportation of construction material	-	All welcome

The first three contracts require staff specialised in carpentry and construction, so constructors from Sepahua are hired. Outsiders work in the community's sawmill mainly.

Figure 11: Cashiriari's sawmill- doors for equipping the new houses



The novelty comes in the fourth contract, which has been designed exclusively for local people. Comuneros from both sexes and under 45 years old can be hired as wage labourers. They work at the project carrying material needed for construction; it can be rubble, pebbles, stones, slats, timber and land; and in the minority of the cases they do qualified tasks (machinery operation, driving boats, and project supervision). Material needed for construction is transported from the construction plants (one in the community and the other 15 minutes by boat away from the community) to each of the houses in Cashiriari. Local labourers are paid 40.00 PEN (10.00 GBP) daily for transporting material, 45.00 PEN (11.25 GBP) per day if they do more specialised tasks such as driving motorised boats, 60.00 PEN (15.00 GBP) daily if they operate machinery, 80.00 PEN (20.00 GBP) per day if they are in charge of coordination.

Contracts last 21 days; after completion workers decide if they want to renew their contract or to “rest”, as the President of the community puts it. Work starts at 7am sharp and ends at 4pm, from Monday to Saturday. There is a one hour break for lunch at noon. Comuneros have a fixed schedule and are paid at the end of the month. Children work under a similar regime when on holidays (full- time) or after school classes (part-time). According to respondents children around 9 years old and above work at the project. They are also paid 40.00 PEN (10.00 GBP). At first, the President said they used to pay children directly, but two kids got food poisoning because of the quantity of sweets they bought with the money earned, so the communal authorities realized it was better to pay children’s parents after they had concluded their labour.

A one-month Cashiriari payroll corresponding to the housing project accounted for 23860.00 PEN (5957.50 GBP) to pay children’s and adults’ wages. Seventeen adults worked between one and twenty-one days. 24.67% of Cashiriari’s population aged between 10 and 19, transported rubble and worked between eight and twenty-one days. 53.89% of money assigned for payroll covered children’s wages. The rest was assigned to pay adult wages.

The most common job at the project was construction labour. People from Cashiriari are thus following a factory-like salaried job dynamic. It was striking to see Machiguenga people work under such a rigid dynamic, typical of capitalist settings. On one side people seemed to be quite disciplined and successfully accomplishing everyday tasks. But on the other, while watching this dynamic every single day during my stay in

the community, I could perceive a feeling of fatigue and automation. It was as if the work regime at the Camisea Gas Plant had been moved to the community. Working at the housing project was not mandatory, each comunero decided if they wanted to work or not. Local people chose to work because of the money they made, especially women (and children), who had never had the chance of earning cash on a regular basis.

Another striking aspect of this project was more related to the disruption of Cashiriari's landscapes. Traditionally, Machiguenga houses used to have palm-leaf roofs, now most have corrugated iron roofs; houses have uneven wall slats, a shady side where manufacturing and food processing takes place and where mats are laid, a hearth which is next to the house and has a roof and wall slats, a clearing (or patio) which extends around ten to 15 meters around the house, a garden beyond the clearing and beyond the garden, latrines. With the housing project, traditional Machiguenga houses in Cashiriari are about to be overshadowed. New houses being built have two floors, windows, two doors (front and lateral), internal divisions for bedrooms, and a balcony on the first floor. There isn't an open shady, wall-free space as part of the house anymore. The clearing and garden have been kept. New houses are a reproduction of urban house design, but with the difference that these houses are made of wood and the roof of corrugated iron. Inside, they are similar. Latrines are no longer used, as Echarate Municipality just finished installing showers and lavatories ten meters away from each of the houses. In some cases families will keep their hearth, and in others, they will convert their older house into their new kitchen. Some people also said they would move to their new house and convert the older ones into businesses, such as convenience stores,

restaurants or accommodation for foreigners. When the houses are built, all of them will be painted green.

Figure 12: Today's Machiguenga typical house



Figure 13: New Machiguenga houses being constructed in Cashiriari



- ***Other projects: infrastructure and non-infrastructure***

In parallel to the housing project, other community plans, related to infrastructure, have also been implemented. The construction of the new health centre, the extension of the school, the football court, the accommodation for foreign school teachers and the water and sewerage project, had all been concluded between 2013 and May 2014. These projects required local labour but in smaller numbers, as the projects were smaller in

terms of magnitude, duration, mobilisation of resources and money invested, except for the water and sewerage project which lasted around a year until completion.

Money from compensation has basically been used for construction. However, there is an amount of money which has been used to provide funding to Machiguenga youngsters who have been good students during elementary/ high school and would like to pursue further studies in Lima, the capital of Peru. During my fieldwork I was informed that there were three Machiguenga in their early twenties who were about to conclude their studies (teaching and nursing) in Lima and to return to the community soon, two women and one man.

External organisations also run projects in communities impacted by the CGP. For instance, the feminist NGO Flora Tristan carries out a handicraft project in different Machiguenga communities in lower Urubamba. This project is addressed to Machiguenga women and the aim is empowerment and mitigation of domestic violence. Also Sedes Sapientiae Catholic University works in lower Urubamba communities on agricultural projects, but comuneros in Cashiriari did not give precise information on whether they were paid for getting involved in such project. Prisma NGO, Pontifical Catholic University of Peru, Cayetano Heredia University, among others, had also worked at lower Urubamba Machiguenga communities.

6.2. Wage labour and participation within the community

Twenty nine out of the thirty households surveyed responded that one or more of their members had worked at a community- based project between January 2013 and June 2014. Sixty people from the households surveyed had worked at a project in the community: 27 men or 23.27% of the total male population, and 33 women or 27.96% of the total female population in the village - around a quarter of the population in each of the cases. Furthermore, in relation to the population aged 5 to 44 years old, 30% of the male population in that age range worked at a project in the community; and 36.26% of female population in that same age range also did. Such percentages suggest two facts:

- Around a quarter of the population in Cashiriari have had a paid occupation as part of a community project
- Participation of local women is greater than that of local men

Community project paid occupations performed during 2013 and 2014 are the following:

Table 8: Paid occupations performed at the community January 2013- June 2014

Occupation	Frequency of men*	Frequency of women*	Total frequency men+women
Handicraft	0	2	2
Carpentry	6	1	7
Cookery	2	0	2
Supervision of community projects	0	2	2
Supervision of reforestation centre	0	1	1
Motorised boat driving	4	1	5
Construction labour	19	27	46
Cleaning and maintenance	0	2	2
Motorised boat driver's assistance	2	0	2
Reforestation	0	10	10
Total frequency of men/ women	33	46	79
Total number of men/ women who worked at a community project	27	33	60

*men and women could have performed more than one occupation between 2013 and 2014

The occupation most Machiguenga are hired to do is labour construction, followed by reforestation in the case of women, and by carpentry in the case of men. The number of women working as labourers is larger than men. The occupations performed involved the following tasks:

Table 9: Synthesis of community projects, occupations and tasks done

Community project/ institution	Occupation	Task/ specificity
Cashiriari Native Community	Cookery	Cook for outsiders who visit/ work in the community
	Cleaning and maintenance	Clean Cashiriari's lodge
Handicrafts project- Flora Tristan Feminist NGO	Handicraft	Make handicrafts and sell them in Lima through the NGO
	Supervision of community projects	Supervise and coordinate the handicraft project with the NGO
Teacher's accommodation project	Construction labour	Carry rubble
		Carry slats
		Carry boards
Football court project	Construction labour	Carry rubble
Housing improvements project	Carpentry	Saw wood at the community sawmill
		Saw wood at Lucas Mil sawmill (15 min from Cashiriari)
		Place, install the slats and timbers in the house
	Cookery	Cook for outsider workers
	Motorised boat driving	Transport rubble, slats, timber and personnel
	Construction labour	Carry rubble
		Carry timber
		Carry slats
Carry boards		
Motorised boat driver's assistance	Assist the boat's driver	
Water and sewerage Project- Echarate Municipality	Construction labour	Carry boards
		Carry rubble
		Open path in the forest for catchment system
		Carry concrete and rubble to catchment system zone
Health centre- Echarate Municipality	Construction labour	Carry boards
Nursery centre project	Supervision of reforestation centre	Supervise, count saplings and plants sowed
	Motorised boat driving	Transport saplings and reforestation personnel
	Reforestation	Reforest wood trees that have been used for housing project

Figure 14: Machiguenga women and children working as labourers



Women labourers work full or part-time; they organise their work hours to their convenience. Local women take advantage of the sources of income presented to them and start diversifying their livelihood activities. During my stay in Cashiriari, I even saw an 18-year old single woman making her own kitchen space. Some male comuneros helped her with the roof, but then she put the slats together to enclose her kitchen. I also saw an older married woman, in her mid- thirties, building wooden stairs for her dad. When I asked her why her brother was not doing it, she replied he was supervising the wood extraction camp, so he was not at the community most of the time, as this camp was not in the community. Then while watching her do the task, I asked her if women had always used hammer, hand saw and nails; she laughed loudly and said no. I asked her how she learnt. She answered “*woman looks and learns*”. I asked her if her husband had taught her, she said no. So it was not only women working as labourers, it was deeper than that. Women were also applying these new forms of knowledge and applying what they have been observing in their surroundings due to the construction boom in the community, in their daily lives. This told me about how certain spaces which traditionally have been acknowledged as male have become flexible, and symbolically represent an opportunity for Machiguenga women to raise their visibility, and their open will and capacity for diversification.

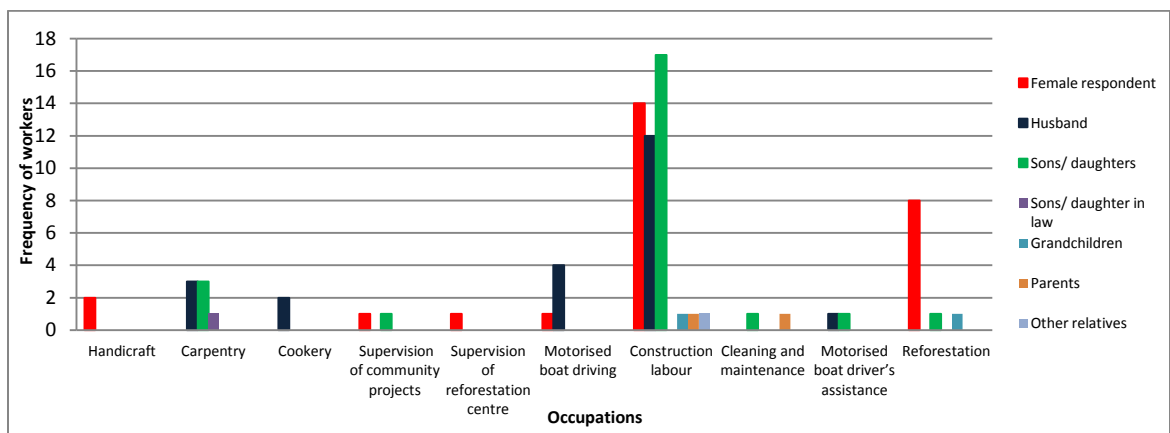
Figure 15: Machiguenga woman building a wooden stairs



- *Work at the community vs. work at the CGP*

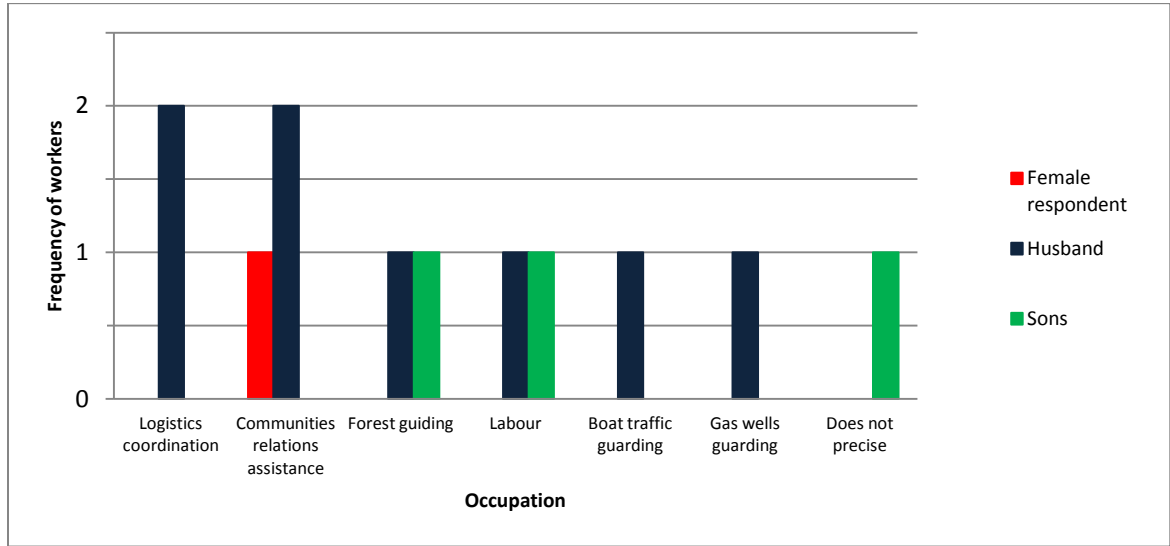
There were 179 people in the 30 households surveyed. 33.51% of the 179 members of households had worked at a community- based project, i.e. 60 people. Out of those 60 community workers, 20 were the female respondents, 17 their husbands and 19 their children; which means that work at the community has been centralised among the basic members of the nuclear family composition. One person could have had more than one occupation throughout 2013 and 2014.

Figure 16: People who worked at community- based projects, in relation to female respondents' kin January 2013- June 2014



Only twelve people, out of the 179 members who were part of the households surveyed, had worked at a CGP-related activity (outside the community). One of these was a female respondent, eight were husbands and three were sons.

Figure 17: People who work at CGP- based occupations, in relation to female respondents' kin January 2013- June 2014



The sex distinction and the difference in number of workers are clear when comparing work at the community with work at the CGP. Even though work at the community may not be long- term, the depth of involvement of women generates further questions related to their motivations and the drivers that lead them to work, to their future expectations when community projects - and also the CGP - are over, and to the ways in which they (re)organise domestic life and household production when working full or part time.

6.3. Household (re)arrangements and women’s search for economic independence

Johnson (2003) and Rosengren (2005) noted in their ethnographies that Machiguenga men and women controlled certain spaces separately, and that the concession of such spheres was not something familiar or frequent. However, as stated above, when the CGO started hiring local men, male- domain spaces such as the garden became women’s responsibility. Women stayed in the community in charge of the chacra while men were working at the gas fields. Re-organisation of division of labour was necessary to maintain one of the most important sources of Machiguenga subsistence, which is the garden. Men were the ones who earned a regular salary and brought cash incomes into the household, and in return women stayed fully in charge of household production, with the support of their kin. Relying on the Machiguenga family is necessary to obtain support when Machiguenga men have out migrated. Respondent 3 stated:

“When my husband went to work to the company (CGP), he called me, and my mom helped me gardening so I could have manioc. My family gave me fish. If my mom goes fishing and brings a lot, then she gives me some”.

Now that community- based projects have started operating with a sort of ‘woman- friendly’ approach, other gender-oriented domains have started to become flexible, and money earning has become a dimension experienced jointly by men and women. Local women participate in community- based projects to provide for their families, as, in their view, their husbands seem not to be taking enough responsibilities within the household. When asking women why they worked, the consensus answer was

because their husbands did not give them any money; men wasted all the money earned at the CGO buying beer and getting drunk, and did not share. Women were upset and felt they had to start working to cover needs their husbands were not providing, such as clothing and education. Respondent 4 noted:

“Women work because their husbands do not share the money they have earned at the company and instead go to drink. When there is a community project women think “I am going to work, save money and support my family”. When there is project women go to work. Then she buys copybooks, clothes. When men are working at the gas fields, they return to the community and buy expensive things and rapidly run out of money. When women ask their husbands for money, they yell at their wives and say “I work and make my own money”. Men who don’t know about money, waste it all”.

Men justify their selfishness about money sharing, saying that they suffer and put in a lot of effort when working in the gas fields, and that they deserve all the money for themselves. Respondent 17 (male) said:

“Money is all for me because I have suffered. You suffer a lot, you work every day under the sun, there is no shadow, and you have to dig. Around 150 people digging all day long. You work from 5am until 4pm, you have breakfast and lunch. I was paid 800 PEN (200 GBP). I went to Sepahua and if I had some money left I would buy clothes, sweets, soda”.

Participant Observation note:

It was the end of the month (31-05-14) and was pay day. I listened to the supervisor of the housing improvements project naming on the speaker in a very organised way the people who had worked that month in the housing project. As the supervisor starts calling people, I see many of them approaching to the communal authorities office to receive their wage; men, women, children. Two women were in charge of paying (the supervisor of the project and the treasurer). As people approached, I asked them what they were going to do with their money when they received it. A few women said, go buy clothes; go buy beer, soda and sweets for my shop. But most of them were discreet and just smiled. On the other hand, after men had just received their wage, I heard them laughing loudly as if they wanted to be heard, and saying "this is for my booze", "this is for my rum", "this is for my beer".

Women interviewed said that the main reason for working was to provide for their children and themselves. As can be seen in the quotes above, money acquisition did not seem to be a flexible dimension where concession or sharing took place; each of the partners worked on their own to be paid, and looked for what they considered their own benefit independently from one another.

Women (and men also) considered it was important to invest money earned and buy products that had a longlife, such as canoes, motors for their boats, corrugated iron for their roofs. They also think investing in shops is a good way of making profit. They say the products that are mostly sold in the community is beer and gasoline. Ironically, beer is mainly bought by local men. As soon as women receive their pay from working at the community projects, apart from buying modern clothes and school stationery, they buy beer, soda, sweets and/ or groceries for their shops. People get these provisions from the ambulatory merchants who travel between communities and stay 3 to 5 days to sell their products at the villages.

Figure 18: Two different ambulatory merchants installed simultaneously in Cashiriari



Figure 19: People buying goods for their shops from the merchants, especially beer



- **Shops**

According to the survey data, eleven out of the thirty households had convenience stores. The four main products sold in local shops were soda, beer, sweets and groceries. The owner of one of the biggest convenience stores in Cashiriari stated that the profit was made mostly from the sale of beer. He added that it would be possible to sell 3600 bottles of beer in one month (for a population of 234 inhabitants plus 38 outsiders who have been hired to work at the housing project and temporarily live in the village). The consumption of alcohol in the community is massive; these figures suggest that 13 bottles of beer (620 ml each) per inhabitant were consumed over a month on average in

Cashiriari. The same shop owner said that he had sold 840 bottles of beer within two days (on the pay day and the day after). He added that after pay day, the average quantity of beer sold is 12 bottles per day. He stated that there is no man who does not drink beer in the village. He added that soda is also in demand and that he can make 1000.00 PEN (250.00 GBP) in two days out of selling soda. Shop owners give credit to people and on pay day and the following days debtors approach the shops to pay what they owe and buy more beer (and other goods, in some cases). The products mostly offered by shops are soda, followed by beer, sweets and finally, groceries.

Table 10: Products sold at shops

	Frequency of households with shops
Beer, soda, sweets and groceries	5
Beer, soda and sweets	2
Beer and soda	1
Soda and sweets	1
Only Soda	1
Only Beer	1
Number of households who own shops	11

Members of household in charge of the shop were mainly women:

Table 11: Members of the household in charge of their shop

	Frequency of households with shops
Respondent (female)	9
Respondent (female) and her husband	1
Respondent's grandchild	1
Number of households who own shops	11

Figure 20: One of the biggest convenience stores in Cashiriari (the bottled beer stored in the red boxes belongs to the same shop)



- **Manioc beer**

Findings with regard to frequency of beer sale may respond to the decrease of frequency in preparation of manioc beer/ *mazato*. Results from the questionnaire show that 40% of all households had not prepared manioc beer during the last week, which is a considerable percentage as *mazato* plays a relevant role in the diet of the Machiguenga, and its consumption has a social and cultural function when consumed on a daily basis or on festive occasions (Bruijn and Whiteman 2010). Preparation of this beverage is also an essential part of household production, and women (used to) spend a significant time preparing it (Johnson 2003).

Table 12: Preparation of manioc beer in the last week

	Frequency of households	%
Households which prepared mazato	18	60.0
Households which did not prepare mazato	12	40.0
Total of households	30	100.0

The reasons for not having prepared manioc beer were the following:

Table 13: Reasons for not preparing manioc beer

	Frequency of households
Does not want to or feel like preparing it	4
Does not have manioc in her garden	3
Sickness	2
Peccary ate the manioc in the garden	1
Does not know how to prepare	1
Does not precise	1
Total of households with no manioc beer during the last week	12

Women interviewed said that manioc beer preparation and consumption had diminished because adult people preferred to drink bottled/ canned beer and so women did not need to prepare the traditional beverage, and besides they felt lazy about it.

Respondent 15 said:

“Before women made manioc beer. They would make it today, yesterday, the day after tomorrow. Now there isn’t any manioc beer, because there are shops and people drink bottled or canned beer. People don’t drink manioc beer; they drink (industrialised) beer”.

Women seemed upset about their husbands drinking too much alcohol, wasting money and not worrying about household responsibilities.

Respondent 8 argued:

“Bottled/ canned beer is sold the most. Manioc beer is consumed very little. Most of shops sell beer. And the money men earn, they use it to drink. They don’t even care about their children. Children just buy sweets”.

Preparation of manioc beer has always been women’s domain. Women control the level of alcohol when they prepare manioc beer. As long as there is cash flow in the village, comuneros will buy bottled/ canned beer. Since manioc beer consumption seems to be diminishing, this female’s domain may be vanishing as well, and taking with it women’s power and control over this household production activity.

- **Garden/ chacra**

The performance of new paid activities, such as shopkeeper and labourer, among others, does not imply the abandonment of traditional occupations. Female respondents diversify their livelihood activities and combine subsistence with market economies. Twenty seven households out of thirty had a garden. Women are in charge of their gardens along with the rest of household members, followed by solely men in second place.

Table 14: People in charge of the garden/ chacra

	Frequency of households with garden
All members of household	17
Respondent’s husband	6
Respondent (female) and children	1
Respondent’s husband and children	1
Respondent’s husband and grandchildren	1
Parents	1
Number of households with gardens	27

In most cases, all members of the household are involved in gardening. Women say that when men are working at the company, women with the help of other members of household or kin take care of the garden. Women complain that their husbands do not have enough time for attending to their gardens because of work at the gas project. They claim that gardens should be properly maintained so the family never lacks food and money can be made out of selling marketable products. Almost half of the Machiguenga

women interviewed argue it is important to maintain their gardens, and sow coffee and cocoa so that when the gas project finishes, both products could be sold to Andean merchants and they can make some money out of it (in my previous research- del Castillo Tafur 2012- local men argued the same concern). Other interviewees, however, complain that villagers are not taking care of their chacras anymore and are pessimistic about the future of the community. Respondent 2 said:

“People don’t sow cocoa in their gardens anymore. People don’t take care of the chacras as they did before. People receive money now, which is why they don’t grow cocoa anymore. When the gas company leaves, there won’t be any improvements in the community”.

The products Machiguenga households grow at their chacras are manioc, sweet potato, corn, bananas, papaya, among others. The end use of the products from their gardens is:

Table 15: End use of products from Machiguengas’ gardens

	Frequency	%
Autoconsumption	16	59.3
Autoconsumption and sale	9	33.3
Autoconsumption and barter	1	3.7
Autoconsumption, barter and sale	1	3.7
Number of households with gardens	27	100.0

- **Fishing, gathering and hunting**

With regard to subsistence activities such as hunting, fishing and gathering, 22 households performed such activities. Most of them went fishing. The smallest number went gathering, but this was because it was not the season most suitable for such activity, as fruits and other products were not ripe. Respondents said all members participated in these activities.

Table 16: Number of households who went fishing, hunting and gathering in the last week

	Frequency of households	%
Fishing	16	72.7
Fishing and hunting	4	18.2
Fishing and gathering	2	9.1
Number of households who performed subsistence activities	22	100.0

- **Poultry**

Regarding poultry, twenty-nine households out of thirty had chickens and/or ducks. The end use was autoconsumption and sale. Selling poultry was another source of income. Outsiders from the construction project or from other projects being carried out at the community often bought chicken (and in some cases ducks), killed them and ate them. The average price of a chicken was 20.00 PEN (5.00 GBP) and of a duck was 26.00 PEN (6.50 GBP). In the same way as in the case of gardening, fishing and gathering, all members of household were in charge of taking care of poultry.

Table 17: End use of poultry

	Frequency	%
Autoconsumption	10	34.5
Autoconsumption and sale	19	65.5
Number of households with poultry	29	100.0

Based on the findings presented above, it is clear that traditional activities such as gardening, fishing, gathering and poultry (the latter introduced by outsiders) are performed in parallel with the modern and earning- driven ones, such as wage labour and shop- selling. Women perform both types of activities as part of their household production responsibilities. Though all members of household co- operate, women are the ones in charge of the supervision and proper development of such activities specially if the husband is not at the community or is habitually drinking. Manioc beer seems to be the only traditional element whose preparation and consumption may be weakening.

6.4.Machiguenga views about the gas project and expectations about the future

Women and men’s opinions about the gas project and expectations about their future are generally divided. On one side, local people value the material improvements at the community and the knowledge and empowering tools that contact with the modern sector provides; on the other, they also express uncertainty and pessimism about the future.

Electricity, sewerage, construction of bigger houses and more paths, migration of young people to the city to pursue higher education, purchase of western clothes, electrical appliances and boat motors, are seen as community and personal achievements that have been reached because of the money the village has received from compensation, and which male workers have earned, individually, when working at the gas fields. There is a generalised perception that before the Camisea project started, they had "nothing", and that now little by little the community and the people themselves have been able to buy things and “progress” (respondents 2, 5, 8, 10).

Male views regarding the gas project are positive, on one side. They appreciate not only having a regular salary when being hired by the company, but also being trained to perform different kinds of jobs. Men argue that this provides them with accumulated technical knowledge to apply for better and more challenging job vacancies related or not to the Camisea Gas Project, and in this way enables them to earn more money (del Castillo Tafur 2012). Local men consider the experience of working at the gas project as beneficial not only because of the monetary income received, but also because of the learning space configured. The socialisation space between Machiguenga workers - who are non-qualified workers - and “white” people - who are professional workers- , shaped at the gas project is highly appreciated by native men, as they consider that they have a lot to learn from western people, who have higher education, speak accurate Spanish, live in the city and know about the value of money and the importance of saving and investing (del Castillo Tafur 2012). Machiguenga men think that the experience of working in the modern sector has taught them how to “defend themselves” and become less vulnerable to outsider influence (del Castillo Tafur 2012).

Women appreciate having the opportunity of wage labour at the community- based projects. They argue that “before” they only worked at home and in the garden, and did not know how to make money, but that now they can buy what they need. Local women also value the fact that different outsider organisations and institutions have started working in the community with them. They consider that thanks to these organisations they have learnt not to fear when saying their word, and to “defend themselves” from outsiders. With respect to outsider institutions in the community, Machiguenga men did not have a clear view, because work done by institutions has been mainly addressed to

local women and children. Furthermore, there is a view expressed by both men and women that when the gas project finishes, they will have nothing, but their sons and daughters will be able to support them and make the community develop because of the higher education younger generations will have received (respondent 9, 3).

Despite these positive views about the gas project and all it has brought, Machiguenga men and women felt discouraged about their future. They thought that the material improvements have been ephemeral and that when the gas company leaves, everything is going to stay the same as “before”, i.e., previous to the Camisea operations. People considered that gardening is crucial for subsistence and for making some money. They were constantly warning themselves that if people did not maintain their gardens then nothing was going to be left when the gas project leaves. There was also a consensus that resources from the forest and the river were scarce. They said that before the gas project, people would catch fish or game rapidly, but now they have to stay for hours in the river or the forest to be able to obtain something to eat. Respondent 14 (male) claimed:

“Before, my grandchildren went fishing and caught something instantly. Now you have to be sat for 2 or three hours until you can catch some fish. Before the gas company came, you would catch a damselfish very quickly. Now we have to go far away, to the upper river or further in the forest where there are more animals than here. The company pollutes and scares animals away”.

Local people also referred to the increase in robberies in the community, something that did not happen before money became accessible. Adults said that now

that children have started earning money with the housing project, they have started to like it, and when they do not have cash, they rob. A couple of adults have also been caught robbing gasoline from the community shop. Community authorities have sanctioned people who have robbed by making them open paths in the forest and clean the community garden.

According to women, domestic violence has also increased because of the expanding alcohol consumption. Men become aggressive when they drink beer and hit their wives. Women say that men when drunk start showing off and saying that they have been outside the community, know what work and making good money is, and following that, then comes the aggression to their partners. Women also state that outsider men who work at the community (as constructors for example) are always trying to make women have sex with them, sometimes abuse them and make them pregnant and after that they leave the community and so young women stay as single mothers with no support from the father of their children. Respondent 10 argued:

“I want the community to progress, to have electric light. But I don’t want robberies. Children must be educated; I have to educate my children. There must be rules and an authority in the community to punish people who rob and hit their family, and also people from outside who abuse women have to be punished”.

7. Discussion and conclusions: Swinging from traditional to modern- based lifestyles and economies

A complex and rapid process of socio-cultural change was found in Cashiriari indigenous community. The influence of the gas project at first glance seems to have created an identity paradox among the Machiguenga (Bruijn and Whiteman 2010); but Machiguenga people may be seeking to reconcile, not without tensions, their traditional and modern lifestyles rather than split them.

The external gas project operating in the lower Urubamba area has influenced Machiguenga peoples to a considerable degree. Today's men and women participate more intensively in the market economy. This massive participation has generated two main issues that I have attempted to problematise: re- organisation of the Machiguenga household, and reproduction of modern/ western modes of life. In terms of the gender division of labour, it may not only have shifted with regard to gardening; women's participation in construction, traditionally a male space, is also considerable. Machiguenga women have become even more involved than men when it comes to labour assistance in community based-projects. Women's assistance consists only of carrying wood and other materials (task which do not require any previous "technical" training), but still this kind of involvement in a male domain tells us much about a reconfiguration of traditional division of labour and daily life dynamics, having gardening as a precedent.

The explicit movement of women into areas that were previously male domains tells us about Machiguenga women's will to diversify and empower within the household. Community-based projects started hiring women workers because women asked for this in community assemblies. For women working is a way of becoming rich not only materially but also symbolically (Ruiz- Bravo 2004). Having money is valued as a symbol of empowerment and independence among Machiguenga women. Women combine work at home and at their gardens with work in wage employment and in their shops. "Diversity is the watchword" (Scoones 2009: 172).

The scope of women within household production is key to survival (Kuokkanen 2011). Symbolically, the notions of permanence, control, restraint and containment are associated with women (Ruiz- Bravo 2004). Today, Machiguenga women feel the responsibility of the household relies mostly on them, as their husbands are not being proper providers. The idea of women as providers and managers is not visible within the village. However, the fact that the treasurer of the community and the paymaster of the housing improvements project were both women, may be suggesting the gradual legitimacy of indigenous women as guardians and managers of (material and natural) resources. Taking this dimension seriously, not only in the public but also- and especially- in the private sphere, and incorporating it in indigenous social organisation models, would (should) reverse the tendency to exclude women from socio-political and economic participation (Kuokkanen 2011), and promote more egalitarian and democratic relationships among members of the community. Through their active involvement in different spaces, Machiguenga women from Cashiriari have taken the first steps ahead towards visibility and empowerment.

Machiguenga people are under constant pressure to modernise because of the huge profit-driven development projects operating in their territories. Economic growth may be on the way to becoming mandatory for Machiguenga societies. However modern work must be combined with subsistence activities. The performance of modern occupations does not mean the abandonment of traditional activities, at least in the Machiguenga discourse. Wage employment outside and inside the community is highly appreciated, but the garden/ chacra must be kept and be an everlasting means of subsistence and income generation, according to local men and women. The modernisation approach also coincides with Machiguenga views, as the latter consider education as fundamental for progress. Parents want their children to be educated in the city, but they want them to return to the community and work for its improvement (in infrastructure, education, health, and organisation). Traditional modes of subsistence aim to be combined with modern ones, according to Machiguenga views of development. A wish for detachment from traditional modes of life is not visible among Machiguenga adult women (neither among Machiguenga adult men interviewed in my previous research- del Castillo Tafur 2012).

- **Conclusions**

The entrance of cash into a subsistence culture has generated social changes in terms of re-adjustments in the household organisation, and new practices and consumptions. Interviews with women indicate that the employment of Machiguenga men at the gas fields has placed more burden on Machiguenga women, whose household production relies solely on them.

During the period of my fieldwork there was not much out-migration and most men were at the village. A significant amount of people were participating in the housing project. Women participated in wage employment more than men. Local women sought not to be economically dependent on their husbands, and to be able to provide for their children and themselves. There was a consensus among women in terms of complaint about their husbands not sharing their money and not providing sufficiently for their families. Employment which had been men's domain was starting to be shared with women (at least in the village). Women also sought to establish businesses (shops) in the community. The irony came when women complained about their husbands drinking too much bottled/ canned beer, when they were actually the ones who sold it. Also it is interesting to point out that through the circulation of goods, especially beer, women were accessing men's earnings.

Machiguenga people in Cashiriari display certain level of Western acculturation (purchase of modern household goods and non-traditional clothes, for instance) and, simultaneously women raise concern over other cultural transformations such as the increase of alcohol consumption, and express fear for the gradual abandonment of subsistence activities, such as gardening. Despite voluntary employment at the Camisea Gas Project, local people were worried about the decrease of their natural resources in the forest and river, which, in their views, the hydrocarbon project was generating. For the Machiguenga, their material world was better than before the gas project started running, but their evaluation and expectations about their future were discouraging.

The male-centred conception of wage labour (Kuokkanen 2011) makes it difficult for women to legitimise their contribution to the household as providers. However, the diversifying capacity of women, their openness to working in conventionally/traditionally alien spaces, and their internalised roles as household managers may be leading to higher visibility for the more gender-specific economic contribution, and with that to more empowered and equitable positions within the household and the Machiguenga community. Continuous and further research needs to be done; the accelerated processes of social, cultural and economic change Machiguenga peoples undergo need to be progressively studied in order to give accurate and updated accounts of the implications these transformations have on Machiguenga way of life and on the Peruvian Amazonian indigenous society.

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APPENDIX A Community Registration Form

Date

CASHIRIARI NATIVE COMMUNITY REGISTRATION FORM

MAIN INFORMATION ABOUT THE COMMUNITY

P1. River: _____

P2. Type of Settlement:
 a. Nuclear b. Disperse c. Both

P3. Margin: _____

P4. Number of:
 a. Houses:
 b. Households with latrines:
 c. Households with own water:

P5. Predominant type of:
 a. Roof: _____
 b. Wall: _____
 c. Floor: _____

P6. Number of households:

P7. Number of:
 Habitants _____ Women (≥15) _____ Women (<15) _____
 Men (≥15) _____ Men (<15) _____

P8. Date when community was officially recognized: __ / __ / __

P9. Main source of:
 a. Water: _____
 b. Sewerage: _____
 c. Energy: _____

P10. Number of:
 a. Football courts:
 b. Playgrounds:
 c. Communal TV's:
 d. Motorised community boats:
 e. Other motors:
 f. Communal shops:

P11. Main articles sold:
 a. _____
 b. _____
 c. _____
 d. _____
 e. _____

HEALTH SERVICES

P12. Health Infrastructure:

N°	Type of Health Centre	Date of installation	Number of staff	Type of property	Main diseases
1					
2					
3					
4					
5					
6					

P13. Educative Infrastructure:

P13A: KINDERGARTEN:

- a. Kindergarten #:
- b. Number of students (3 to 5 years):
- c. Number of teachers:
- d. Number of local teachers:
- e. Number of foreign teachers:
- f. Date of installation: ___ / ___ / ___
- g. Current situation of building: _____

P13B: ELEMENTARY SCHOOL:

- a. Elementary school #:
- b. Number of students:
- c. Number of teachers:
- d. Number of local teachers:
- e. Number of foreign teachers:
- f. Date of installation: ___ / ___ / ___
- g. Current situation of building: _____

COMMUNAL ROOM

P14. Resources that allowed its construction:

- a. _____
- b. _____
- c. _____

P15. Date of construction: ___ / ___ / ___

COMPENSATION

P16. Has the community received compensations?

- 1. Yes
- 2. No

N°	What kind?	Who gave them?	How much?	When?	How was it used?
1					
2					
3					
4					
5					
6					

LOCAL ORGANIZATION AND PARTICIPATION

P17. Organization and participation

N°	Organization	Yes / No		# of members	Frequency of meeting	Does it have establishment?
1	Communal Assembly	1	2			
2	Mother's Association	1	2			
3	Vaso de Leche	1	2			
4	Sports	1	2			
5	Parents organizations (APAFA)	1	2			
6	Church	1	2			

Yes = 1, No = 2.

EXTERNAL ORGANIZATION WHICH SUPPORT THE COMMUNITY

P18. Is there an external organization which supports the community?

- 1. Yes
- 2. No

P18A. Name: _____

P18B. What does it do?

- a. _____
- b. _____
- c. _____

COMMUNAL GARDEN/ CHACRA

P19. Is there a communal chacra?

- 1. Yes
- 2. No

P19A. Since when: ___ / ___ / ___

P19B. What products are grown?

- a. _____
- b. _____
- c. _____
- d. _____

COMMUNAL WORK/ FAENAS

P20. Is there a communal work?

1. Yes 2. No

P20A. How often: _____

P20B. What activities are done?

- a. _____
- b. _____
- c. _____
- d. _____

ASSOCIATION TO CONFEDERATION

P21. Which one?

- a. _____
- b. _____
- c. _____

COMMUNITY PROJECTS

P22. What community projects are being excuted?

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____
- g. _____
- h. _____
- i. _____
- j. _____

ANNIVERSARY

P23. Date of anniversary: ____ / ____ / ____

CURRENT COMMUNAL AUTHORITIES

P24. Authorities:

N°	Position	Date election
1	President	From ____ to ____
2	Vice-President	From ____ to ____
3	Treasurer	From ____ to ____
4	Secretary	From ____ to ____
5	Vocals	From ____ to ____

P25. Is there a communal sheriff/ *teniente gobernador*?

1. Yes 2. No

P25A. Date: from _____ to _____

APPENDIX B Household Survey Form

No of questionnaire

QUESTIONNAIRE

MEMBERS OF THE HOUSEHOLD

Q1. Name of the respondent: _____

Q2. Kinship of the respondent:

- | | |
|---|---|
| a. Head of Household <input type="checkbox"/> | f. Parent <input type="checkbox"/> |
| b. Wife <input type="checkbox"/> | g. Mother in law <input type="checkbox"/> |
| c. Daughter <input type="checkbox"/> | h. Other kin <input type="checkbox"/> |
| d. Daughter in law <input type="checkbox"/> | i. Not kin <input type="checkbox"/> |
| e. Granddaughter <input type="checkbox"/> | |

Q3. Sex of respondent:
 1. Male 2. Female

Q4. N° of members within the household:

- | | |
|---|---|
| a. Husband <input type="checkbox"/> | f. Parents <input type="checkbox"/> |
| b. Wife <input type="checkbox"/> | g. Father/ mother in law <input type="checkbox"/> |
| c. Children <input type="checkbox"/> | h. Other kin <input type="checkbox"/> |
| d. Son/daughter in law <input type="checkbox"/> | i. Not kin <input type="checkbox"/> |
| e. Grandchildren <input type="checkbox"/> | |

Q4A. Is there a head of household in your home?
 1. Yes 2. No

Q4B. Who is it?: _____

SALARIED ACTIVITIES

Q5. Did any member of the household work in any company related to the Camisea Gas Project between 2013 until now?
 1. Yes 2. No (Go to P6)

Q5. Activities done at the company

N	Q5A	Q5B	Q5C	Q5D	Q5E	Q5F
	Who?	Sex	N° Occupation	Occupation	Activity	Name of the company
1						
2						
3						
4						

Q5A: 1. RESPONDENT, 2. HUSBAND/ WIFE, 3. SON/ DAUGHTER, 4. SON/ DAUGHTER IN LAW, 5. GRANDCHILDREN, 6. PARENTS, 7. FATHER/ MOTHER IN LAW, 8. OTHER KIN, 9. NO KIN.
 PSB: 1. MALE, 2. FEMALE.

Q6. Did any member of the household work at any community project between 2013 until now?
 1. Yes 2. No (Go to Q7)

Q6. Activities done at the community

N	Q6A	Q6B	Q6C	Q6D	Q6E	Q6F
	Who?	Sex	N° Occupation	Occupation	Activity	Name of the project/ organisation
1						
2						
3						
4						
5						
6						
7						
8						

Q6A: RESPONDENT, 2. HUSBAND/ WIFE, 3. SON/ DAUGHTER, 4. SON/ DAUGHTER IN LAW, 5. GRANDCHILDREN, 6. PARENTS, 7. FATHER/ MOTHER IN LAW, 8. OTHER KIN, 9. NO KIN.
 Q6B: 1. MALE, 2. FEMALE.

GARDEN- CHACRA

Q7. Do you own a *chacra*?

1. Yes 2. No

→ Why?: _____
(Go to Q11)

Q8. How many *chacras* do you own?

Q9. Who works at your *chacra*?

- | | |
|--|---|
| 1. Everyone <input type="checkbox"/> | 6. Grandchildren <input type="checkbox"/> |
| 2. Respondent <input type="checkbox"/> | 7. Parents <input type="checkbox"/> |
| 3. Husband <input type="checkbox"/> | 8. Father/ mother in law <input type="checkbox"/> |
| 4. Children <input type="checkbox"/> | 9. Other kin <input type="checkbox"/> |
| 5. Son/ daughter in law <input type="checkbox"/> | 10. No kin <input type="checkbox"/> |

Q10. What is the use you give to the products of your *chacra*?

1. Autoconsumption
2. Barter
3. Sale

POULTRY

Q11. Do you own poultry?

1. Yes 2. No (Go to Q16)

N	Q12	Q13_1	Q13_2	Q13_3	Q14
	Name of animal	Use 1	Use 2	Use 3	Price per animal (S/.)
1					
2					
3					
4					
5					
6					
7					
8					
9					

Q12: 1. CHICKEN, 2. DUCK, 3. OTHER
Q13_1, Q13_2 y Q13_3: 1. AUTOCONSUMPTION, 2. BARTER, 3. SALE

Q15. Who did you sell to?

- a. _____
b. _____
c. _____

PETTY TRADE

Q16. Do you own a shop/ convenience store in your house?

1. Yes 2. No (Go to 20)

Q17. Who is in charge of the shop?

- | | |
|--|---|
| 1. Everyone <input type="checkbox"/> | 6. Grandchildren <input type="checkbox"/> |
| 2. Respondent <input type="checkbox"/> | 7. Parents <input type="checkbox"/> |
| 3. Husband <input type="checkbox"/> | 8. Father/ mother in law <input type="checkbox"/> |
| 4. Children <input type="checkbox"/> | 9. Other kin <input type="checkbox"/> |
| 5. Son/ daughter in law <input type="checkbox"/> | 10. No kin <input type="checkbox"/> |

Q18. Products you sell at your shop

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Q19. What is the final use of the income you receive from your shop?

- a. _____
b. _____
c. _____

OTHER ACTIVITIES

Q20. Have you prepared manioc beer in the last week?

1. Yes 2. No

↳ Why?: _____

Q21. Did you or any member of the household go hunting, fishing and/ or gathering in the last week?

1. Yes 2. No

↳ Why?: _____
(Go to DATE)

Q22. You went:

- | | | |
|--------------|---------------------------------|--------------------------------|
| a. Hunting | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |
| b. Fishing | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |
| c. Gathering | 1. Yes <input type="checkbox"/> | 2. No <input type="checkbox"/> |

DATE: / / 2014

APPENDIX C Interview Guide

INTERVIEW GUIDE

-Used as reference only-

Name of community	Cashiriari
Place interview is held	
Date	
Name of interviewee	
Gender	Female (mainly)
Age	
Language of interview	
Translator	
Interviewer	Mary Cynthia del Castillo Tafur

Background

1. Where were you born?
2. When were you born?
3. How long have you lived in Cashiriari? (explore if there has been migration from one community to another)
4. Have you ever been to the city? For how long? Where? What did you do?
5. Did you like living/ visiting the city?
6. How did you get to know your husband? (place, date, search for particular situations as if the husband is Machiguenga or not, if he has studied in the city)
7. Do you have children? How many?

Division of labour and diversification of livelihood activities

8. Who do you live with? explore the concept of household in Machiguenga culture, ask if they share the same kitchen and share the food they get/ buy, if they live under the same roof
9. What is the work division at home? explore a) responsibilities, rights, decision making and b) cash income in family relations, household wealth and women’s status
10. Has your husband worked for the CGP? If no, why? / If yes, what did he do? For how long? Was he happy with his job?
11. Have you worked for the CGP? If no, why? / If yes, what did you do? For how long? Did you like it?
12. Do you work for the Housing improvements project or any other community- based project? If no, why not? / If yes, what made you work? Have you had a paid occupation before? How do you feel having a paid occupation? What do you do with the money earned? How do you organise household chores when working at the projects?

13. Have there been any changes in your household now that you work or have worked at such community projects?
14. What does your husband think about you having a paid occupation?
15. Do your children (if any) work at community projects? If yes, why do they work? What makes them want to work? What do they do with the money earned?

Changes in household and community

16. Have you noticed any changes now that women, children and men work and receive a regular income?
17. What do you do with the money you earn?
18. What does your husband do with the money he earns?
19. What about men who work at the CGP? Do you notice any changes when they return to the community after their period out?
20. When your husband comes back to the community, do roles remain the same way as when he is away working at the CGP?
21. Has your community changed since the CGP started operating? Explore traditional activities, if they are still being done (fishing, gathering, hunting, preparing manioc beer, gardening, etc.)

Expectation about the future

22. How do you see yourself 30 years from now, after the Camisea Gas Project has finished exploiting gas from this region?
23. How do you picture yourself and your family?
24. Do you want your children to stay in the community?

SUBMISSION FORM

University of London

DEPARTMENT OF ANTHROPOLOGY

Name of Student: MARY CYNTHIA DEL CASTILLO TAFUR

Degree: MSc ANTHROPOLOGY, ENVIRONMENT AND DEVELOPMENT

Exact Title of Dissertation (in full): The influence of natural resource extraction projects on Amazonian indigenous populations: The case of the Camisea Gas Project and Machiguenga women

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