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HOJA DE APROBACIÓN DE TESIS

Measuring poverty in a plurinational state: case studies from Amazonia.

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"Dreams do not work unless you do"
Working towards the dream. Double major in
Ecology and International Relations: accomplished!

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RESUMEN

Cada año hay más y más estadísticas que muestran el status de la pobreza en el mundo. De acuerdo con las cifras del Banco Mundial, casi la mitad de la población mundial vive con menos de 2,50 dólares por día. Estas personas son consideradas pobres. Sin embargo, ¿qué significa ser pobre? Hay un acuerdo global para luchar contra la pobreza pero no hay un acuerdo en su definición.

Esta investigación analiza las varias definiciones e indicadores de pobreza y la dificultad en generar un índice de pobreza general a través de la evaluación de tres casos de estudio en la Amazonía Ecuatoriana. En la primera sección, examino las definiciones de pobreza de las organizaciones internacionales influyentes como Naciones Unidas, Banco Mundial, y Comisión Económica para América Latina y el Caribe junto con los métodos generales para medir pobreza. En la segunda sección, evalúo la manera en la que la pobreza se mide en un estado plurinacional como Ecuador. Finalmente, en la tercera sección genero mi propio índice de pobreza basado en mi propio set de indicadores, los cuales creo apropiados para cuantificar pobreza en sectores de la Amazonía. Los resultados son sorprendentes. Una pequeña variación en el índice puede traer resultados muy diferentes, ubicando a una de las zonas más pobres del Ecuador (de acuerdo los índices gubernamentales) dentro de la categoría *no pobre*.

ABSTRACT

Every year there are more and more statistics that show poverty around the world. According to the World Bank, Nearly half the world's population —over three billion people—lives on less than \$2.50 a day. These people are considered poor. However, what does it mean to be poor? There is a global agreement to fight poverty, but there is not a global agreement on the term's definition.

This research analyzes varying definitions and indicators of poverty and the difficulty of generating a general poverty index through the evaluation of threes case studies in the Ecuadorian Amazon. In the first section, I examine definitions of poverty given by international organizations like the United Nations (UN), the World Bank (WB), and the Comisión Económica para América Latina y el Caribe (CEPAL) together with the general methods to measure poverty. In the second section, I evaluate the way poverty is measured in the plurinational state of Ecuador. Finally, in the third section I generate a poverty index based on my own set of indicators I believe appropriate to quantify poverty at the Amazon region. The results are surprising. A little variation in an index may bring totally different results, such as, labeling one of the poorest zones in Ecuador (according to the governmental indexes) in the *not-poor* category.

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DEFINING POVERTY

In the middle of a rural community, a family pleasurably lives in a house built in cane and bahareque, with a roof of straw. It is a confortable home adapted to the climate and environmental conditions of the place. However, when the social scientists arrived and made an analysis of their standard of living, they are categorized under poverty. In consequence, who is right: those who have always lived in this type of houses, or those foreigners that base their analysis on other conceptions of wealthy?

These construction systems like the one mentioned above are adapted to their environment. They do not reflect unmet needs, but the opposite: they are adequate to provide the best living conditions in a certain climate. They should therefore not indicate poverty, but creativity and sustainability. These considerations of adaptability and sustainability are nevertheless ignored in the NBI. They are the reasons that led me to adapt this index to the Amazonian reality and re-evaluate their status.

The World Bank estimates just over 1 billion poor people in developing countries live on \$1.25 a day or less (World Bank, 2013). Nearly half the world's population —over three billion people—lives on less than \$2.50 a day and over 80% of humanity lives on less than \$10 a day (Chen & Ravallion, 2008). If these statistics are not shocking enough, an Oxfam report puts it simply: the richest 1% of people will held the 50% of the world's wealth by 2016 (OXFAM, 2015). Countless people have no access to drinking water, food, education, security and health services. Infectious diseases kill millions of people worldwide: about 3 million people die because of HIV/AIDS and over 1 million due to malaria every year (United Nations Development Program, 2007). According to UNICEF, each day die approximately 22000 children due to the poor and inappropriate conditions in which they live (UNICEF, 2010).

Such statistics appear in poverty reports done by governmental and non-governmental organizations. It seems that being poor is to have a limited income, to lack from access to basic services, to die due to *third world* illnesses, or to be deprived of education. Nevertheless, the definition of poverty is more complex than that. There is a global agreement on fighting poverty and a well-established goal on reducing it at the United Nations. Yet there is still little agreement on how to define the concept of *poverty* in the first place. Finding the most accurate definition of the word has caused a lot of polemics because of its subjectivity, the variability of indicators, and the diverse forms of understanding it. Scholars as well as political/social/economic organizations have tried to develop impartial and wide-ranging (while specific) proposals to identify a common meaning to the term *poverty*.

Despite all the proposals and efforts, there is currently no globally accepted definition. As a result, methods to measure poverty have also turned subjective in concept and applicability in all international scenarios. Each can pick a different definition of poverty leading to different results, and thus calling for distinct policy measures. For instance, the establishment of a poverty line demonstrates the subjective insight of being poor. This line depends on the social context. The consumption rates, standard of living and income of your neighbors affect your perception of poverty (Ravallion, 1992). Such views vary from one city to another, and even more from one state to another. In consequence, there is no way of generating a standard poverty line applicable to every case. This means that poverty may be considered a social construct (idea that is built through cultural or social practice) whose definition in a big city of the United States would be totally different to the one in a Shuar community in the Amazonia.

Ecuador is a plurinational country; which means the co-habiting of different nations and peoples with their own ideologies, beliefs and points of view. These type of countries

are not suitable for central authorities that impose the same policy to all the territories, since every population has a different need and perception. For instance, in the Amazon, indigenous communities (especially those living in voluntary isolation) have a totally different notion of wealth than urban centers, valuing biodiversity over purchasing power. Since poverty is a social construction, the Ecuadorian government should be clear in the need of a deep examination the concept and the methods used to measure it in order to take decisions based on the reality of each community. Authorities are responsible for the creation of aid programs that support people lacking a *decent standard of living*. The challenge, in the case of a plurinational country, is to find an accurate method to measure poverty and obtain information about the living conditions of each population and the way they are perceived.

The Ecuadorian government defines poverty according to three methods used to measure it. All of them are based on a *urban perception* of wealth. In the first technique, poverty means the impossibility of a household to cover the expenses of a basic food basket. In the second method, to be poor is to lack from one of the five conditions that include education, a decent house, economic dependency, sanitation and overcrowding state. The third approach is a mixture of the other two and classifies society into four categories. The three methods manifest that the country has a high percentage of poor inhabitants; but is it that correct, or would the results change if measured was ranked based on other perceptions or visions?

This research analyzes varying definitions and indicators of poverty and the difficulty of generating a general poverty index through the evaluation of threes case studies. In the first section, I examine definitions of poverty given by international organizations like the United Nations (UN), the World Bank (WB), and the Comisión Económica para América Latina y el Caribe (CEPAL) together with the general methods to

measure poverty. In the second section, I evaluate the way poverty is measured in the plurinational state of Ecuador. Finally, in the third section I generate a poverty index based on my own set of indicators, those I believe are appropriate to quantify poverty in the Amazon region.

CHAPTER 1. POVERTY ACCORDING TO DIFFERENT PERSPECTIVES

What does it mean to be poor? This question has conventionally been answered with the response that poverty is the lack of income. Amount of revenue is equal to a person's level of wellbeing. The common economic concept in the beginning of the millennium defined poverty as the *standard of living* narrowing the concept to the material possessions (Feres & Mancero, 2001).

The term poverty has a lot of connotations in social sciences. One a study identifies eleven different interpretations: need, standard of living, lack of resources, lack of basic security, lack of tenure, multiple deprivation, exclusion, inequality, economic class, dependency and unacceptable condition (Spicker, 1999). Nevertheless, when we take a look over the interpretations, many of them are mutually exclusive, others are overlapping and others are not applicable in every social situation.

Classic approaches to poverty have been challenged by other academics and social/economic institutions. There are several initiatives that suggest the inclusion of alternative parameters to allow a deeper understanding of people's living conditions.

Moreover, there are recommendations to clarify the term. The concept of standard of living leaves the door open for much subjectivity in the variables to be measured (Feres & Mancero, 2001). Therefore, many approaches now take into account human factors. These

recognize the importance of income but claim for the inclusion of other aspects to complement the calculating process.

This section compares concepts of poverty from different influential international organizations to show the diversity of the concept and its various interpretations. It examines the definitions given by the academia. It also analyzes the principal methods used to measure poverty and the limits of mainstream indicators.

The UN's Global Multidimensional Poverty Index

The UN developed several plans and projects via different organizations to tackle poverty. The curious fact is that even inside this institution, the definition of poverty varies from one agency to another. The UN mandate characterizes it as an institution working to tackle the world's most pressing issues, such as poverty. The importance of the definition of poverty is the core of the effectiveness of all programs launched to improve the humans' standard of living.

The general definition generated by the UN's Economic and Social Council was signed by all UN agencies in 1998 defining poverty as:

a denial of choices and opportunities, a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and cloth a family, not having a school or clinic to go to, not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibility to violence, and it often implies living on marginal or fragile environments, without access to clean water or sanitation (UN Statement, 1998, United Nations Economic and Social Council, 1998).

This definition is broader than the ones usually taught because it takes into account other factors besides income and expenses such as health, violence, and education. The UN concept focuses on the welfare and opportunities of a human being inside its society rather than in the economic level. It is also a concept closely linked with human rights because it refers to violence, basic needs and dignity.

Based on pure economics there is the *income poverty*, which refers to the amount of money in a household and its failure in meeting a federally established threshold defined in every country (UNESCO, 2009). According to this view, economists classify people or households based on possessions or expenses. A poor person is the one who falls below a minimal acceptance level. Currently, the "international standard of extreme poverty is set to the possession of less than 1\$ a day" (UNESCO, 2009). This means that only human beings who live on less than one dollar per day fall into the category of extreme poverty.

UNESCO makes a distinction between the two approaches employed by the UN to understand poverty. The first is considering poverty in absolute terms. This means that poverty level is proportionate to the amount of money indispensible to meet the basic needs. This concept disregards inequality or quality of life (UNESCO, 2009). This approach dehumanizes people. It perceives them in terms of the money they make. It ignores the possible cultural, social and emotional needs that might be desirable for a high quality of life and are important for individuals.

Relative poverty, in turn, defines poverty "in relation to the economic status of other members of the society" (UNESCO, 2009). This means that people's standard of living is ranked based on a given societal context. Being poor or not depends on the economic status of others around you (UNESCO, 2009). these two concepts pay attention

to statistics, to income and consumption. They overlook social roles and desires that define well-being.

After the World Summit on Social Development in Copenhagen in 1995, the UN started to characterize poverty in *absolute* and *overall* terms. Absolute poverty means, to be in "a condition characterized by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to services" (UN, 1995). The definition aims to incorporate the classic economic vision together with other basic needs generating a broader understanding of what poverty entails.

Overall poverty is a more complex concept that takes various forms. It is defined as the "lack of income and productive resources to ensure sustainable livelihoods; hunger and malnutrition; ill health; limited or lack of access to education and other basic services; homelessness and inadequate housing; unsafe environments and social discrimination and exclusion" (UN, 1995). This view of poverty highlights not only the human's basic needs but also the role they play in society. It pays attention to the participation of individuals in the community's decisions, the consequences of conflict over the quality of life and the fulfillment of other necessities.

Created in 2000, the MDG established targets to accomplish a better standard of living for peoples worldwide. They consist of eight core objectives aimed at addressing the world's most urgent issues. One of the objectives was the eradication of poverty. In order to create strategies to fulfill this aim, the UN generated three indicators: 1) portion of the population living with 1 dollar per day or bellow; 2) poverty gap ratio; 3) share of poorest quintile in national consumption. Fifteen years later, there are some satisfactory results. Approximately US\$ 150 billion were donated as assistance to the poorest countries. The

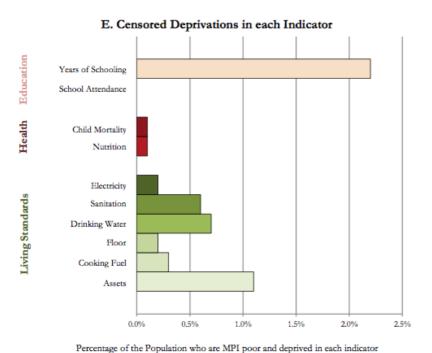
world has reduced extreme poverty by 50% (Department of Economic and Social affairs, 2014). It is nonetheless important to highlight at this point that the reduction in a significant percentage of extremely poor people does not mean that they now have a high standard of living. Now, they may be poor and live with 1,5 dollars instead of the 1 dollar they used to.

To complement this baseline to measure poverty according to consumption and income, the UN Development Program together with the Oxford Poverty and Human Development initiative (OPHI) created the Multidimensional Poverty Index (MPI) that consists on a combination of deprivations that each household faces. It is created on the basis that as well as development, poverty is multidimensional. There are lots of other factors besides the economics that overlap people's deprivation. It is useful for policymakers to find the areas where there is a failure or lack and to intervene fixing it (UNDP, 2010).

A household is categorized poor if it is deprived in at least one third of the weighted indicators. There are ten indicators concerning health (child mortality and nutrition), education (years of schooling, child school attendance) and living standard (electricity, improved sanitation, improved drinking water, flooring, cooking fuel, assets ownership) (Alkire, Conconi, & Seth, 2014).

A community is considered poor when its population has a high index of child mortality or kids lacking access to school, people whose alimentary security is in threat, houses without electricity, drinking water, nor sanitary systems, houses with floors of soil and lacking from television, telephone, radio, a bicycle, a motorcycle and whose fuel to cook is woods, coal or dung (UNDP, 2010).

In 2003, the OPHI used the World Health Survey's data about Ecuador to evaluate it according to the MPI indicators. The results showed 2.2% of people who are MPI poor. The analysis was done with 9 of the 10 indicators. Data about child school attendances was deficient. The following graph shows the percentage of the Ecuadorian population deprived in each indicator.



Percentage of the Population who are MPI poor and deprived in each indicator

Graph 1. Ecuador's evaluation in each of the MPI indicators.

Curiously, this research showed low levels of poverty. When compared with other ranking methods, there is a considerable difference between the results. From my point of view, to consider that just the 2,2% of Ecuadorians are poor is too optimistic. May be the problem is that data is old, it was not collected for the purposes of this research—it was collected for a health survey—and the size of the sample is not significant. These results are important for the analysis since they are done by an UN agency and they are recognized worldwide. However, this may be used as an example of how data collection can cause totally different and extreme outcomes.

World Bank's poverty ranking.

The World Bank (WB) is a Bretton Woods institution created in 1944 with the objective of preventing poverty in the world through financial and technical assistance to developing countries (World Bank, n.d). The organization is comprised of five different bodies managed by the member states. Therefore, it is not a bank itself but an entity fighting against poverty and supporting development (World Bank, n.d).

According to the WB, a person/household is considered poor if "his/her consumptions or levels of income are under a minimum level necessary for the satisfaction of the basic needs" (Banco Mundial, 2011). This institution uses the classical economic methods to measure poverty, which are based on incomes, expenses, and basic food basket. This minimum level is known as a base line for poverty. It has varied through time and depends on each social context. In order to make calculations, the WB experts analyze 500 household surveys covering over 100 countries (Birdsall, 2008).

Poverty line is divided into two categories: relative and absolute. Relative poverty line is defined "in relation to the overall distribution of income or consumption in a country" (World Bank, 2011). The absolute poverty lines are anchored on the amount of money that a household needs to satisfy its needs. The line is based on "estimates of the cost of basic food needs, to which a provision is added for non-food needs" (World Bank, 2011). In so-called developing countries, poverty tends to be measured in relative rather than absolute terms due to the vast percentage of people that live with limited resources.

In 2008, the WB announced a new poverty line, which is based on estimates of the Purchasing Price Parity (PPP) price levels around the world (Birdsall, 2008). The new base line reflects more accurately the reality of each country since it is taking into account the monetary value of each country and comparing it to the purchasing power.

As for Ecuador, the WB evaluated the country's status establishing a national poverty line of 49,9 in 2012. Results showed that 12% of Ecuadorians live on less than 1,25 dollars a day (ie in extreme poverty), 23% of Ecuadorians live on less than 2 dollars a day categorizing (ie in poverty). These results differ widely from the ones published by the MPI cited above.

Debates about poverty in CEPAL.

CEPAL, the Spanish acronym for the Economic Commission for Latin America and the Caribbean, is a regional commission created in 1948 under the mandate of the UN Economic and Social Council. The institution works with Latin American and Caribbean states contributing to foster regional economic and social development. It coordinates initiatives and reinforces cooperation and bonds among country members and with states worldwide. In addition the commission publishes statistics about the status of its members and makes reports and suggestions in topics such as poverty (Economic Commission for Latin America, n.d).

CEPAL experts have had several debates about the definition of poverty. Currently there is a consensus that understands the term as the "deprivation of actives and essential opportunities inherent to every human being". In this sense, they conceive poverty in many different ways that include the impossibility of human rights (first and second generation) fulfillment. This means a lack of participation in political and social affairs, absence of representation, privation of the property rights and resources and deficiency of freedom (Hopenhayn, 2003). This approach, broader than the UN and WB ones mentioned above, includes social and cultural factors that tend to be forgotten but play an important role in individual welfare.

Simultaneously, CEPAL tends to highlight the term *needs* when referring to poverty. This word is defined as the lack of material goods or services indispensable for an individual to live and form part of a society. An individual will be poor if "s/he cannot satisfy the consumption of goods and services that let them live and perform as part of his/her society" (CEPAL, 2001).

Moreover, CEPAL signed a covenant to cooperate together with the OPHI in order to promote the improvement of governmental mediation techniques to tackle poverty and the involvement of civil society in the plans. This agreement also had the target to develop a more accurate method and concept to measure multidimensional poverty in Latin America (CEPAL, 2010).

According to CEPAL, Ecuador reduced poverty from 35,2% in 20XX to 32,2% in 2013. Despite it is one of the countries with the highest poverty percentages, it presents satisfactory achievements through the years. In 2010 Ecuador reduced the poverty rate minimally from from 40,2% to 37,1% and indigence from 15,5% to 14,2% (CEPAL, 2013). These reductions of the amount of poor Ecuadorians may in part be attributed to social aid programs such as the *Bono Solidario de desarrollo humano*¹.

Academia's role in poverty debates.

Scholars have also been involved in several debates on the definition of poverty. From the economic point of view, Watts explains that poverty depends on "the external circumstances which condition a person's behavior—especially the behavior he displays in economic transactions, buying consumption items, selling productive services, securing professional advice" (Watts, 1964). Economists have tried to narrow the definition in order to generate efficient and valid methods to quantify it and with the objective of not losing

¹ Monthly amount of money (50\$) given to the head of household that meets some needs such as education for their kids and health or poor living conditions.

the *core notion of poverty*. Nolan and Whelan define poverty in terms of "the inability to participate in society" (Nolan & Whelan, 1996), this may be a wide concept but in their definition the highlight that participation in society depends on resources and wealth ownership (Nolan & Whelan, 1996). Together with Veit-Wilson, they claim that individuals' role in society are primary determined by financial resources (Nolan & Whelan, 1996, Veit-Wilson, 1998).

Other authors, such as Friedman (1996) define poverty as a way of "divestment that can be understood in three dimensions: socioeconomic, politic and psychological". In the socioeconomic level, the privation consists on the impossibility to access to essential resources for production for living. Political divestment means the inaccessibility in the political affairs and the absence of opinion in the agenda. Privation in the psychological level is related with the feeling of worthlessness and turning submissive to authority (Friedman, 1996).

Poverty may be linked to the lack or income and ways to satisfy basic needs such as shelter, food, water, health and education (Ijaiya & Umar, 2004). Other authors, mainly from Marxists schools, argue that poverty is social injustice, a consequence of exploitation and economic exclusion. It is the result of the weak re-distribution of wealth. Poverty is the outcome of unequal patterns of power distribution (Verstegen, 2001).

Summing up.

Wealth and welfare is a matter of perception. Depending on the cultural, social and time context, human beings have different perceptions on these two concepts. That is the reason why the concept of poverty is so wide-ranging and sometimes even ambiguous.

There are a lot of approaches that aim to cover all the factors that intervene in individuals' wellbeing. Despite the controversy and debates in defining poverty, I have found some

coincidences. In order to define poverty it is necessary to take into account income and consumption. However, it is fundamental to pay attention to other elements that are not comprised in salaries or expenses, such as personal fulfillment, respect to freedom and other rights, education and health.

Measuring poverty

It is clear that the definition of poverty is not global and general. In consequence, the methods and indicators chosen to measure it face some common challenges. The first obstacle is the space (area) in which poverty should be quantified. Space here means the different components of a human life or spheres of concerns. Poverty should only be confined to material or goods? Or should it take into account the cultural sphere, freedoms, or even politics? should it pay attention to what is actually being achieved by the individual or what will be achieved based on the resources s/he has? (Ruggeri, Stewart, & Saith, 2007). The scope of the definition and what may be taken into account is so extensive that it can become vague. There are a lot of spheres that influence in quantifying deprivation or poverty. Space has a strong link with the second problem that literature finds with measuring poverty.

This second difficulty is that the universality of the definition may create inaccuracy. In the past, indicators where constructed based on the economic reality of developed countries. In consequence, when they were incompatible when measuring poverty in developing countries (Ruggeri, Stewart, & Saith, 2007). This raises a question: should poverty indicators be made based on an *optimal or perfect society*? If that is the case, how do we define the society that will be used as a model? Methods to analyze social realities are regularly dependent on particular contexts.

The third problem is related to the extent of subjectivity of the methods to weigh poverty. Statistics are built in order to demonstrate objectivity. Nevertheless, there is an uncertainty of the extent in which the data collected is a real sample of the population. In addition, there is a high risk of partiality when the investigator judges what is poor and what is not (Ruggeri, Stewart, & Saith, 2007). There is a recommendation for scientists that states: *not to marry a hypothesis*. This means to avoid obsessing with proving a sole hypothesis because this may lead researchers to become partial and choose the method that may not be the most convenient for the research but is suitable to achieve their objectives.

The fourth obstacle when choosing indicators to quantify poverty is the demarcation of the poverty baseline. Two linked matters appear: "first, what is the justification for adopting any such line; and secondly, to what extent is the poverty line defined as relative to a given context or is intended to reflect some absolute standards of deprivation" (Ruggeri, Stewart, & Saith, 2007). Poverty baseline is fundamental in the classification of households. An incorrect baseline can produce unreal results that lead to the creation of imprecise policies or plans to fight poverty and help the most needed population.

The fifth issue is the unit of analysis in terms of who is poor and where are the poor located. Normally, poverty is weighed based on surveys made to households, yet there are other units of analysis such as the individual or the whole community (Ruggeri, Stewart, & Saith, 2007). May be an individual is not poor but his household is poor or vice versa. In that case there is a contradiction in the results and it is hard to define which one is more accurate. In regards of the geographic unit, this is used to define the society and generate the relative poverty baseline, and to understand the market reality (prices and demand). The problem rises in the topographical division of the areas to make this analysis. The way areas are divided can influence the results of the study (Ruggeri, Stewart, & Saith, 2007).

The sixth difficulty is related to dealing with multidimensionality of poverty. It is important to recognize that people's wellbeing is defined in several dimensions that cannot be reduced into monetary terms (Ruggeri, Stewart, & Saith, 2007). Some of these factors tend to be intangible or immeasurable. Some cultures may value natural invaluabls goods over consumptions goods. As a result, the weigh given to indicators in quantifying poverty may vary from person to person, across cultures and moments in time. There is not a general list of hierarchy or importance of every dimension nor fixity of poverty over time.

The seventh problem is the time frame chosen to measure poverty in a community or territory. The period in which a study should evaluate the standard of living is debatable (Ravallion, 1992). May be one month will not be enough in cyclical societies that have increases of their economy in certain seasons. Or may be a month will be enough if the society is stable. Yet, how do you define stable? The definition of the time frame is difficult because there is not an exact period of time that should be enough to define a household, society or individual poor.

Finally, the eighth obstacle is the extent to which this poverty inquiries are casual. Some of the tactics are "built on causal analysis, while others aim only at providing a description" (Ruggeri, Stewart, & Saith, 2007). This refers to those definitions that have been given without much research or details due to the causality and temporal need of scientists to give the term a meaning just to continue inquiring in other topics related. This should be clear when publishing the study's outcomes since they are used to build public policy.

Methodologies to rank poverty.

As in many social sciences researches, surveys are the most common method to collect data for poverty analysis. Household surveys are the most important sources to

compare neediness rates. According to Ravallion, they are the "only data source, which can tell us directly about the distribution of living standards in a society, such as how many households do not attain some consumption level" (1992, 9). Household, as a source of analysis is classified in three dimensions. First is the unit of analysis, which can be the ménage itself or the members living in it. Second, there is the number of observations during the period of the research. And finally, there are the living standard indicators (which are very subjective) that are going to be collected. The most common indicators collected in household interviews or surveys are expenditures and incomes (Ravallion, 1992).

There is another approach that pays attention to the capabilities. It is known as the Amartya Sen's Capability Approach (CA). It is used to understand poverty, inequality and human development. It is an alternative approach based on the critics to welfare economics that tend to consider only income, commodities and utilities. The CA approach suggests incorporating happiness, fulfillment and success as indicators in quantifying poverty. It explains that the individual standard of living is "determined by its capabilities not by the goods s/he possesses nor the utility s/he gains" (Sen, 1977). Capabilities may be defined as the faculty of performing actions that establish a standard of living, not the objects, utility nor material characteristics of an individual (Sen, 1977). Sen suggests that in order to measure poverty, it is fundamental to identify the poor and create an index with information about them. This approach may be linked to the CEPAL's definition of poverty in terms of opportunities.

Another method is divides poverty into the absolute approach and the relative one. The absolute approach is based on the thought that needs are independent from other's wealth and not satisfying them reveals a condition of poorness in any context (Ravallion, 1992). The relative approach explains that needs rise when there is a comparison with

others. Therefore the condition of poverty depends on the level of wealth of a society (Ravallion, 1992).

Method DIM (Distance, Intensity and Magnitude)

This method is based on the definition of an "ideal unit" and in the "proximity criteria or differentiation" of one of the observed unites in relation to this unit. According to this method when more different is the observed unit in relation to the ideal unit, higher is the degree of poverty. The units that are proximate to the ideal unit are considered not poor. The proximity or remoteness of the criteria corresponds to the mathematical concept of distance. This method combines the use of distance with the objective to measure the magnitude of poverty and its intensity (INEC-CEPAL, 1998).

The difficult task of choosing indicators.

Indicators are the cores of any poverty analysis since they are the elements that should be evaluated and are responsible of the validity of the research's outcome and of the design of public policies. Some academic centers that study poverty argue that despite the definition chosen, it should be clear that poverty refers to the "lack of something" (Centre d'étude, 2009). This gives the possibility of considering poverty as a multidimensional matter. Still, the economic dimension is unavoidable. The selection process of indicators to measure poverty should be done based on this concept of multidimensionality. The choice of the indicators should be done over solid bases so the criteria can be justified later.

One of the prevailing critiques of the MPI is the lack of solid basis to justify the choice of indicators by the UN when constructing this index. The problem is that weighing or hierarchizing indicators is almost impossible. There is no right value to assign to the priorities and factors that comprise the humans' needs. Therefore, what the OPIH did was

to find the common requests and translate them into indicators. This is an example not only of the subjectivity of the indicators choosing process, but of the difficulty of the procedure.

In order to reduce mistakes in poverty quantification, institutions have established their own ways of choosing indicators and guaranteeing the data reliability. The European Union, for instance, claims that indicators should measure the economic standard of living (income, expenses, wealth), enable comparisons in space and time, pay attention to the sociodemographic and socioeconomic characteristics of human groups and be statistically reliable and valid (Atkinson, Marlier, & Nolan, 2002).

The EU Social Protection Committee recognizes the need of developing a wide variety of indicators to assess multidimensionality. In consequence they divide indicators into primary, which are certain indicators covering the most important elements of poverty; and secondary that consider the other dimensions of poverty usually ignored (Atkinson, Marlier, & Nolan, 2002). When observing the principles used by the EU to rank poverty it is evident that there has been an important change towards the empowerment of other non-economic factors in the people's welfare.

The UN Expert Group Meeting on Youth Development Indicators suggests that in order to measure poverty it is fundamental to consider the lack (or not) of eight basic human needs. They propose food, safe drinking water, sanitation facilities, health, shelter, education, information, and access to services as indicators to quantify poorness in a community (Gordon, 2005). This approach is considering only the material elements that the body needs to survive. Nonetheless, it ignores the quality of the environment the individuals live in, their opportunities, their income and expenses, among others.

There is the proposal of dividing indicators into quantitative and qualitative but they have been confused between objectivity and subjectivity (Makoka & Kaplan, 2005).

The increasing need of finding impartial indicators is caused by the desire of achieving valid data. The methodology argues that surveys and questionnaires are generally the best methods to avoid subjectivity (Lok-Dessallien, 2000). However this approach forgets that the interviewees may have different perceptions and understand in a variety of ways the survey's questions adding partiality to the results.

The last method identified in this research is the *well-being indicators*. This is a proposal comprises the comparison of diverse standards of living in order to define who is poor and who is not. The researcher should define just one quantitative variable that relates to people welfare and s/he should compare it in the different levels. The selection of the variable depends on the definition of poverty chosen for the report (Feres & Mancero, 2001).

Approaches to measure wellbeing vary from the interpretation of the researcher of the judges of the individuals when evaluating their own situation. These methods also differ from the materialist view that analyses standard of living to the nontangible view that considers success or rights (Ravallion, 1992). The welfarist approaches, according to Sen (1979) is based on a comparison of people's wellbeing in terms of utility, while the nonwelfarist approach pays a little attention to utility because it considers more factors.

Different methods produce different outcomes, which lead to altered implications in public policy making and the target to be addressed. Indicators, methods and the results should have internal and external validity and a high confidence interval. It is important to bear in mind that the world is a complex, changing scenario where several cultures and societies have their own sets of beliefs and ideologies in different historical contexts. The concept of poverty is not the only one that attempts to become universal. There are many

other topics such as rights, political systems, market structures that aim to be compatible with every community.

CHAPTER 2. MEASURING POVERTY IN A PLURINATIONAL SOCIETY: ECUADOR

Plurinationalism is defined by the "existence of multiple political communities rather than a single, unitary demos" (Keating, 2002, 10). According to Ecuarunari, one of the biggest and most influential indigenous organization in Ecuador claims that plurinationality "does not mean to form a state inside another state. It strengthens the new state consolidating unity and destroying racism and regionalism. Plurinationality is a requirement for social, political, judicial, and economic equality" (ECUARUNARI, 2008). Plurinationality is to grand autonomy of government and control over the territory of the nationalities in equal conditions of the other sectors of the society.

Scotland, Bolivia, Canada and Ecuador are examples of states where inhabit different social groups with political structures, yet only Bolivia and Ecuador recognize plurinationality in their Constitution. In the case of Ecuador, pluriantionalism is to admit, in words of President Rafael Correa, that "several different nationalities coexist within the larger Ecuadorean state, which is obvious in this country and need not scare anyone" (Lucas, 2008). This implies the existence of equal rights, opportunities and recognition from the Ecuadorian government to all the nationalities and peoples.

A plurinational state is a territory inherently diverse in cultures, traditions, points of view, perceptions, language and history. Various societies have different characteristics.

According to Pachacutik, in Ecuador live 12 indigenous nationalities such as: Quichuas in the Andes, Awa in the north coast, Chachi in the noroccidental coast, Epera in the central

coast, Tsáchila in the central-east coast, Manta-Huancavilca in the coast, Shuar-Achuar in the Amazonia, Siona-Secoya in the north Amazonia, Huaorani in central Amazonia and Cofán in the north Amazonia.

In fact, Ecuador is one of the countries with a substantial presence of indigenous people in its territory. The heterogeneity of points of view from the different social groups is a challenge for the central authorities when defining public policy and evaluating the social needs. The dissimilar ways of living of the Ecuadorian nationalities play an important role in their perceptions and understanding of terms such as poverty and the need of mixing indicators in order to get a real vision of the social status of the country. Moreover, state's adaptation to indigenous concepts increases the legitimacy to particular policy decisions. When Rafael Correa declared Ecuador as a plurinational and multicultural state he won a lot of societal support (Becker, 2011).

Ecuador is a poor country according to several international indexes. Although it has reduced the poverty rate lately, the percentage of deprived habitants is high. From 1995 to 1999 poverty increased 12% (39,3% to 52,5%), then it decreased to 38% in 2006, and in 2010 poverty in urban areas decreased from 25,9% to 22,5%, and in rural areas from 60,6% al 52,9% (INEC, 2010).

Various studies show that indigenous peoples are most vulnerable to be victims of poverty and inequality throughout Latin America. In the continent, 10% of the population is indigenous. Despite the efforts to fight poverty in Latin America, economic deprivation is severe and deep among the indigenous societies (Hall & Patrinos, 2004). Indigenous peoples have increased their political influence, for example creating a political party of their own in Ecuador like Pachakutik (1996) and electing President Evo Morales in Bolivia (2005). Yet they have not progressed significantly in economic and social terms over the

last decade. They are still suffering the highest poverty rates with propensity to diseases and discrimination and lack of access to health and education services (Hall & Patrinos, 2004).

Diverse visions of wealth

It is evident that indigenous societies face a lot of difficulties including low incomes and poor standards of living. Nevertheless, it is important to consider how indigenous were characterized as poor. The concept often utilized comes from the *western perception* where a high standard of living composed is equal to material goods (a big house of cement blocks, a car, a tv, a radio, etc.), services (technology, transportation, media) and high incomes measured in currency. In many indigenous communities, especially in those isolated (or semi-isolated) there is another conception of wealth. They do not have a capitalist structure to begin with. The problem arises when there is the clash of both visions: the western and the indigenous. Since the western is more influential, its the perception of wealth is imposed and indigenous people's fall under the category of poverty (even extreme poverty)—when in their own value system they have a great quality of life for have forests and clean water.

These western parameters, mostly quantitative, pay attention only to those elements that can be measured in the daily life of indigenous peoples. Therefore, there is a recognition of the limits that the approaches have in relation to the capacity of reflecting in totality the needs and values of the indigenous communities (Hall & Patrinos, 2004). One WB study evaluated the outcomes of the UN decade of indigenous people. This investigation (Hall & Patrinos, 2004) shows that there are few advances in poverty reduction (measured by incomes) among indigenous. This social group has a slow recovering ability after an economic crisis. The gap of poverty among indigenous is big

and it reduces passively. To be indigenous raises the possibilities of being poor and to have less access to basic services (Hall & Patrinos, 2004).

It is interesting to analyze these results because they show a pessimistic view of the indigenous status in the society. On the one hand, this vision is correct. From the urbanized or western point of view, the conditions under which indigenous people live are not enough for their survival. On the other hand, there is the idea of the indigenous person that finds out that s/he is poor only when the western culture enters into contact. Perhaps this person had grown up in a safe environment, satisfying his/her needs and living happy in the social structure of the community, but when a foreigner with an urban mind observes the situation in the society and does not understand their perception, the stranger characterize them as deprived.

Those indigenous inhabits that have had contact with people from other cultures have to adapt to the capitalist system of financial accumulation and economic growth (since it is more influential than their own) where they find themselves poor and deprived. This is proved when analyzing the academic western view that explains the strong link between indigenous people and poverty with the discrimination and relegation that indigenous have suffered and their decoupling in the control of their lands (Martinez Cobo, 1986). The right to self-determination has been systematically violated in processes of land redistribution. One of the reasons of the failure of the state's programs that fight poverty in this ambit is the lack of recognition and the concrete levels of indigenous self-determination (Cimadamore, Eversole, & McNeish, 2006). In Ecuador, the right of self-determination is guaranteed in the Constitution, yet is not respected by the state, or the companies, or dominant society.

When indigenous people are forced to join the western urbanized society, they face a lot of shocks and difficulties. The main one is discrimination. They do not have the same opportunities of employment, or access to public services or the protection of healthcare systems, culture and religion, nor the administration of justice. These communities do not have enough tools to participate in the political life and in decision-making process (Martinez Cobo, 1986). In consequence, they are isolated after being forced to accept a western economic model where they find themselves in the lasts levels of richness.

Isolation goes beyond the domestic. The international plans and conditions that can contribute to poverty reduction in the society in general not necessarily benefit indigenous populations. A proof is the lack of success of the UN indigenous decade where education levels remained low, there was a deficiency in nutrition and healthcare, discrimination remained and the link between ethnicity and poverty continued. The Joseph Rowntree Foundation in 2014 published a report highlighting the link between poverty and ethnic minorities. It shows three main factors that may be cause of this relation: racism and discrimination that limit the opportunities of ethnic minority groups, local and national government and the lack of services to these groups, and low wage traps (Barnard, 2014).

Social scientists and academics have forgotten indigenous population and their perceptions when creating indexes to measure poverty or human development. In most of the cases, key indicators that may show the status and welfare of the indigenous communities such as health, conflict, maternal mortality and land tenure are left behind (Cimadamore, Eversole, & McNeish, 2006).

It is necessary to improve the methods of recovering data in plurinational states since there is a vast variety of beliefs, opinions and styles of living. The indicators used in these states should have a bigger focus and consider many other factors that usually are

forgotten or considered unnecessary. Moreover, in plurinational states the respect to self-determination should prevail in public policy. Since indigenous communities have a long history that built a specific social and economic structure, the state and other actors interacting with them should respect this value system rather than imposing theirs. Regretfully, this does not happen.

Measuring poverty in plurinational states

It is internationally known that the methodological focus of poverty should be multidimensional, yet there are some researches and places in the world when the onedimensional approach prevails.

When measuring poverty in plurinational states, the challenge is higher and the considerations that should be taken for the generation of indexes that reflect the true realities. There are some suggestions to quantify in a more specific and thorough way the standard of living in the indigenous communities. The common problem in Latin America is that despite the indigenous large populations that inhabit some states, few of them include questions or indicators to evaluate their situations.

There is one method that suggests identifying who is indigenous through ethnolinguistic characteristics, self-perception and geographic concentration/language and then study their needs and define indicators (Psacharopoulos & Patrinos, 1994). In addition, it is primordial to understand that indigenous peoples do not face the same financial stress as the rest of the population. The lack of education, health services, income (material poverty) does not affect in the same extent as cultural invasion, racism, oppression, sexual diseases, alcoholism and homelessness (Choo, 1990). They have alternative ways of economic activities that often involve non-market transactions and substitutes for financial needs imposed by the rest of the population (Hunter, 2012).

Relative prices and expenses have a distinct effect on Indigenous societies. These large differences in the relative price of daily necessities in indigenous communities, difficulties the comparison of the levels of poverty between groups (Sen 1992: 115). Indigenous families are not composed the same way *nuclear* families are where it is assumed that income is shared. In indigenous societies income and wealth is commonly distributed. Therefore, quantifying poverty centered on the traditional methods may show incorrect results (Ross & Whiteford, 1992). Finally, economic status should be analyzed based on the fact that to be indigenous represents an extra cost generated by the disadvantages that these people face (Psacharopoulos & Patrinos, 1994).

UNICEF proposed a methodological strategy to measure poverty among indigenous infants, from a human rights perspective. They argue that poverty in terms of human rights is the breach of some fundamental freedoms that affect humans' dignity and welfare. They created the Bristol method, which consists in characterizing the essential content of each right to later identify the threshold that fixes the moment where there is a fulfillment of the right or there is a violation (CEPAL-UNICEF, 2012).

Bristol method presents a set of indicators divided in seven dimensions. First, there is the severe deprivation of food, which includes people under tree standard deviations from the middle point of the reference population. Second, there is the deprivation to drinking water and people are forced to use surface waters for their daily activities. Third, there is the lack of sanitary services such as a toilet or bathroom. Fourth the limited access to health increases the mortality rate and the amount of kids cannot get a diagnosis to their illness. Fifth there is the severe deprivation of shelter. Indigenous people tend to live in severe overcrowding in houses with a floor of soil and more than five persons per room. Sixth there is the difficult access to education. Kids have to walk for hours to get to the nearest school. This is one of the reasons they chose to quit studying. Finally, seventh there

is the severe deficiency of access to information such as television, radio or Internet (Minujin, Delamónica, & Davidziuk, 2006). UNICEF and CEPAL adapted the Bristol method in the "Pobreza infantil, desigualdad y ciudadanía" project that adequate indicators to the Latin American reality (CEPAL-UNICEF, 2012). This adaptation consisted in readjusting the reality of Latin America according to the predominant life conditions of the region and the information availability. According to the research, six of ten indigenous kids live in rural zones and seven of ten African-descended live in urban zones. Kids living in rural zones have a more critic condition because of the lack of basic services such as primary education, limited information access, lack of drinking water, insanitary conditions (CEPAL-UNICEF, 2012).

Poverty according to the Ecuadorian government

In 2008 in Ecuador's new Constitution the term *sumak kawsay* (living well in Kichwa language) is introduced as a basis of operation of social justice. Sumak kawsay is an Indigenous concept common across the Americas that refers to the right to drinking water and nutritious food, to living in a healthy environment, to accessing to technologies, information and communication, to building a cultural identity, to accessing to free education, to a stable, decent and secure housing and to work and social security (Mideros, 2012). This term has been the root of the actual government and its strategies and plans. The authorities see the living well as the primary goal of their administration. Sumak kawsay aims to critique the traditional strategies for development that are rooted on exploitation of resources rather than coexisting with the nature and highlighting dependency links. This practice and concept "integrates (and unites) peoples and communities with the *Pachamama* (Mother Earth)" (Casas, 2013).

In Ecuador, the definition of poverty is focused on rights because the development framework of the Ecuadorian government puts the *sumak kawsay* as the main pillar. Therefore, the violation of any of the rights part of the living well is enough to consider a person poor (Mideros, 2012). This approach requires a multidimensional analysis because rights cannot be understood in a global dimension. The application of a multidimensional approach considers broader elements that affect people's welfare such as the intangible value humans tend to give to certain things, the fact that material wealth does not entirely reflect wellbeing, political options depend on the person's priorities and that different dimensions of poverty overlap themselves (White & Levy, 2002). In countries like Ecuador, this multidimensional method should be used as a basis to understand poverty in the different nationalities and ethnic groups. Each one has a different way of giving value to material goods.

When evaluating the *sumak kawsay*, there are several variables taken into account, such ass: access to basic needs (electricity, drinking water, telephone, sewerage system), education level, social security, and job position, among others. The variables that show the major levels of deprivation in Ecuador are job, social security and healthcare (Mideros, 2012). Measuring standard of living via *sumak kawsay* is a method that tries to integrate the people's rights given in the constitution. Yet, it keeps considering the common evaluation of economic status that measures material wealth.

Besides the *sumak kawsay* concept, the Ecuadorian government has two different methods to measure poverty: indirect and direct. The general definition of poverty based on the living well turns more specific depending on the method used.

Indirect method.

According to the indirect method of the poverty line to measure poverty, a household is considered poor when its income or consumption is inferior to the cost of the basic food basket and the costs of the basic needs (housing, education health, clothing and food). These costs are the poverty baseline. Currently the food basket price is \$ 653,21 per month. This is an indirect method because it emphasizes the deprivation in terms of low income, understanding them as an instrument of satisfying needs not as an end itself (Guzmán, 2002). This method is the mostly used by the Instituto Nacional de Estadística y Censos (INEC) to make statistics about the economic status of the Ecuadorian households.

Direct method—NBI.

The Ecuadorian government also considers poor those individuals that are members of a household that "has persistent shortcomings in meeting their basic needs including housing, health, education and employment" (Villamarín, n.d.). The government via the "Sistema Integrado de Indicadores Sociales" adapted the CEPAL's method to rank poverty. This technique is the *Method of Unmet Basic Needs* (Necesidades Básicas Insatisfechas (NBI)) or method of the social indicators that is not limited to income (like the direct method), it takes into account other factors. The limitation of this approach is the high costs that are involved in the process. The government has to do census surveys regularly because chronic privations change time to time and the monitoring should be constant (Sistema Integrado de Indicadores Sociales del Ecuador).

The method suggests the use of indicators that reflect the existence (or absence) of some conditions in each household. These conditions are: electric service, drinking water, sewage system, overcrowding, analphabetism, low education, insufficient enrollment, limited healthcare and low labor participation. If a household presents one of more deficiencies in these indicators is considered a home with unsatisfied basic needs (Sistema

Integrado de Indicadores Sociales del Ecuador). This method classifies households into three categories depending on the compliance with five conditions that collect the previously mentioned indicators. The classifications are: non-poor, poor and extremely poor (Sistema Integrado de Indicadores Sociales del Ecuador). This method takes into account more indicators that may reflect a more real portrait of the economic status of the Ecuadorian families. Still, they do not take into account other factors such as environmental security, discrimination, opportunities, nor perceptions based on culture.

Katzman typology.

The unification of both, indirect and direct methods, result in a third approach to quantify poverty that is known as the *integral analysis of poverty*. The Katzman typology is a method that classifies poverty into four categories: chronic poverty, recent poverty, inertial poverty, and non-poor households.

The first category refers to those households that, on the one hand present a consumption per individual below to the poverty line and on the other hand not comply with one or more conditions related to the unsatisfied basic needs. These types of ménages are considered to be under extended conditions of deprivation (Guzmán, 2002). The second group involves those households that are poor according to the poverty line method but fulfill the five conditions of the direct method. These people reflect a recent decrease in their economic capabilities but it is not permanent or long enough to affect the satisfaction of basic needs (Guzmán, 2002). The third category comprises families whose basic needs are unsatisfied but their consumptions are over the poverty baseline. This situation suggests a process of increase of the economic status of the members (Guzmán, 2002). The non-poor households whose consumptions are over the poverty line and all their basic needs have been satisfied form the fourth class (Guzmán, 2002).

This method is useful to analyze the roots of poverty, the situations that lead families to a low standard of living. According to the results in 2002 of this method, Ecuador was one of the poorest countries in Latin America. Poverty measured by unsatisfied needs affected more than half of the population and the recent and chronic poverty were increasing (Guzmán, 2002). A study made four years later showed that the 31% of Ecuadorians where under chronic poverty and 14,4% under recent poverty (INEC, 2006).

Tipología de Katzman (2005 - 2006)		Necesidades Básicas		
		No pobre	Pobre	
Linea de Pobreza	No pobre	Integrados Socialmente 47,2% (6'229.820 habitantes)	Pobreza Inercial 14,6% (1'925.502 habitantes)	
	Pobre	Pobreza Reciente 7% (926.628 habitantes)	Pobreza Crónica 31,3% (4'131,915 habitantes)	

Graph 2. Katzman typology matrix applied to the Ecuadorian case.

CHAPTER 3.BRINGING THEORY INTO PRACTICE: AN ALTERNATIVE TO MEASURING POVERTY IN THE AMAZONIA

As previously stated, indigenous societies have different perceptions of wealth and economic structures that were established decades ago. The different way they perceive money and welfare is based on their ancestral production activities, the environment and resources, the culture and the social relations. They face different challenges and they understand life in a different way. However, most Indigenous peoples in Ecuador are not isolated, but are embedded with the dominant society who has a totally different understanding of economic systems and value. The *standard* vision of welfare as synonym of high incomes and consumption predominates among the majority of the societies.

Therefore, when the indigenous vision encounters with the *other* vision, the later takes over.

During this research, I have had the opportunity to talk to several members of indigenous communities especially in the Amazon. My ethnography methods consisted in interviews to people that live in indigenous communities in the rural areas in Sucumbios and Orellana. Moreover, I quoted for the price of construction materials in different hardware stores in Shushufindi and Lago Agrio.

This region and its inhabitants, due to the high amount of oil, have been exposed to the colonization of petroleum companies (national and international). People from those communities explain how the clash of both visions affects them. The oil company builds big cement constructions with air conditioner and other comforts for their personnel. They use cars to transport from one place to another, bring televisions, satellite dishes, computers, among other things that call the attention of the indigenous people who have a different way of living.

When indigenous inhabitants compare their ways of living with the one inside the oil company, they find out that there are a lot of elements, that may be they never thought about until that moment, missing in their household. In consequence, they perceive themselves poor and they want to get more luxuries (car, tv, radio, computer) despite vast amount of land that they have, their role in the community and other factors that, until that moment had given him/her a decent life.

From the urban point of view and of most economic indexes, indigenous peoples are poor whether they live in the Amazon, in the coast, or in the highlands. This economic status comes together with consequences such as propensity to conflict, risk of diseases, less opportunities for education, work, and even loans.

My literature review indicates that the methods used to measure poverty by the Ecuadorian government may try to be more inclusive and reflect the truth, but in fact keep ignoring the different experiences of indigenous societies. For instance, in the direct method (Method of the Unsatisfied Basic Needs (NBI)), the variables are defined on the urban concept. This means that, for instance, in the first condition, which is a housing with adequate physical characteristics, the NBI considers inadequate those houses with walls made of caña or bahareque (a mixture of caña and adobe) poor or with inappropriate conditions. However, in the coast or in the Amazon, this type of construction is more convenient than using wood or cement. Besides the sustainability and equilibrium with nature, the ventilation is necessary for health concerns (due to the humidity in houses made of cement there is the high risk of fungi growth that may cause diseases). These construction systems are adapted to their environment. They do not reflect unmet needs, but the opposite: they are adequate to provide the best living conditions in a certain climate. They should therefore not indicate poverty, but creativity and sustainability. These considerations of adaptability and sustainability are nevertheless ignored in the NBI. They are the reasons that led me to adapt this index to the Amazonian reality and re-evaluate their status.

Amazon reality: description of the study area

In 2012, the NEBE project did the Poll of Socioeconomic Baseline in Amazon Parishes to 600 families. NEBE project's objective is to analyze the status of the investigations and activities done on behalf of the Amazon inhabitants. This survey analyses several indicators including education level, land tenure, violence, poverty, migration and conflict. The objective of the poll was to generate a database that clarifies the social realities in three Amazonian areas that are affected by extractive industries, these are Sucumbios, Orellana and Zamora Chinchipe.

This investigation focuses on the complex relation between indigenous communities and oil/mining companies in the three above-mentioned provinces. In Sucumbios, I analyzed the socioeconomic status of Cuyabeno where there is the block #12, which is being negotiated with Petroamazonas and block #62 where Andes Petroleum is operating currently. In Orelllana the area of study is Dayuma where the blocks #14 and 17 exploited by PetroOriental are located together with block #16, which is under Repsol YPF management. In Zamora Chinchipe, the area analyzed is El Pangui located near to the area where project Condor Mirador will be developed and considered, according to the INEC one of the poorest places in the country with a poverty index of 63%.

Sucumbios and Orellana are the part of the Amazon jungle and present the highest rates of biodiversity reporting 473 species of trees per hectare. In the last years, due to the new bridge that connects Ecuador with Colombia, and the oil industry, both provinces faced rapid urbanization. As the cities grew and industrialized, the conflicts in the rural communities increased as well.

Ecuador's northern Amazon region developed quickly after the *oil boom*. Many highways were built in order to access oil blocks. The offer of sources of employment attracted the population. However, the oil activities, despite of their importance for the country's economy, have not signified any importance source of employment for the local population (Rodríguez, 1998). Before 1980, the vast amount of settlers that built houses along the highways led to the creation of two important cities: El Coca and Shushufindi. Since that moment deforestation increased and the employment process with contract signing was chaotic and messy. It can be said that the Amazon has had to époques: before and after the first oil extraction in 1964.

Ecuador has depended on the oil's barrel price for years. In fact, the governmental budget is planned around the estimate gains from oil selling. As a consequence of the

government's need to extract more and more oil, the petroleum companies operate without environmental policies, nor social responsibility (Rodríguez, 1998). The indigenous territories where there the blocks are located have been expropriated and the communities receive a few of the benefits of the activity and a lot of negative consequences.

El Pangui is located in the south of Ecuador's Amazon. The municipality was formed by an Indigenous Shuar community who has long lived in the area. This place reports high indexes of biodiversity and several endemic species. According to International Conservancy, this is the area with the major biodiversity in the whole Andes mountain range. Moreover, is the habitat of the condor, an endangered specie. According to the inhabitants, that area has been historically ignored by governments until a few years ago, in 2008, when a Canadian company discovered a big copper lode mining. Zamora Chinchipe's principal activities are agriculture, animal breeding and small-scale mining.

Currently, the oil barrel's prices are dropping in the past years it was valuated in 90-100 dollars and now the price has almost decreased to half. The government's budget was planned based on high petroleum prices therefore it is facing a dangerous deficit. This is the reason why the authorities are pressuring for the development of other activities such as mining. They have signed a contract with the Chinese company ECSA to drill Zamora Chinchipe's soil for copper extraction. As a result, several environmental conflicts have risen.

Natives reject mining public policies and they are fighting against this project. On the one hand, the government assures that the local communities will benefit from the extractive industry. On the other hand, local populations feel threatened due to some mysterious deaths of the opposition leaders and are loosing land that has been theirs or their communities' for centuries.

A new alternative to poverty index: paying attention to the Amazon context

Although I agree with the arguments that claim that indigenous economic status should be measured with other indicators, I believe that when it comes to situations where indigenous meet big industries, the most accurate method to rank poverty is the common one where high standard of living is measured on education, health, income and house characteristics but to modify and adapt it to the social context. Compensations and negotiations between government-company-community are based on the *urban-industrialized* view of wealth. In consequence, I propose a poverty index based on the Direct—NBI method but adapting it to the social reality in the Amazon societies.

According to the NBI, to be considered poor, a household should have one of the five shortcomings stated, to be considered extremely poor, it should meet two or more deficiencies. These are:

- The house has inadequate physical characteristics for human accommodation:
 exterior walls of tin, fabric, cardboard, mat or cane, plastic and other waste
 materials. It also has floor of soil. In this category are included mobile homes and
 natural refugees such as bridges.
- 2. The house has inappropriate basic services: no connection to aqueducts or tubing, or without connection to sewer or septic tank.
- 3. In the household there is a strong economic dependency. This is applied to families that have more than 3 family members per working person, in which the head of household does not have more than two years of primary education.
- 4. In the household there are kids who are not going to school. This is applied to those homes that have, at least, one kid of six to twelve years that does not receive education.

5. The house is in an overcrowding state. This means that the place has more than three people per room used to sleep (Villamarín, n.d.).

The indicators measured in this NBI method are similar to the survey done by NEBE project. Therefore, I adapted them to determine the poverty status in the three Amazonian areas: Cuyabeno, Dayuma and El Pangui.

Index of unsatisfied needs contextualized in the Amazon reality

In this section I will explain the way I adapted the NBI conditions to the results of some of the questions of the Poll of Socioeconomic Baseline in Amazon Parishes. All the definitions of whether a certain characteristic belongs to the non-poor or to the poor category was based on market rates (of the material and the transportation), environmental requirements, and interviews to Sucumbios' habitants.

There were several modifications done especially in the characteristics of an appropriate house. Based on the results of my ethnographic work I could understand that there are some reasons to built houses of cane or bahareque besides maintaining equilibrium with the nature surrounding the area. Cement or brick are materials more prone to fungi growth due to the humidity. These fungi are harmful for the health causing respiratory diseases. Moreover, in areas with high temperature, walls of cane provide a better ventilation system. According to the literature, cement and concrete are materials that react in a negative way to high temperatures and humidity, the material cracks and the lifetime reduces. In consequence, in these areas having a house of bahareque or cane is not a synonym of poverty. Another modification done was regarding the sanitary systems. Since these populations are located in rural areas, to construct sewage system would affect the nature. Therefore, a septic tank would be more appropriate.

NBI Method: 1. The household has inadequate physical characteristics for human accommodation: exterior walls of tin, fabric, cardboard, mat or cane, plastic and other waste materials. It also has floor of soil. In this category are included mobile homes and natural refugees such as bridges.

Adaptation:

Poll question B 2.2 Predominant material of the ceiling is:

1. Slab/Tile → Non-poor

2. Asbestos/fibrolit → Poor

3. Zinc / Eternit → Non-poor

4. Straw → Poor

Poll question B 2.3 The predominant material of the walls of the house is:

1. Concrete / block / brick → Non-poor

2. Asbestos/fibrolit → Poor

3. Wood \rightarrow Non-poor

4. Bahareque → Non-poor

5. Cane → Non-poor

Poll question: B 2.4 The predominant material of the floor of the house is:

1. Duela/parquet/tabloncillo/

plank treated / floating floor → Non-poor

2. Ceramic / tile / vinyl → Non-poor

3. Cement / brick → Non-poor

4. Table wood / plank untreated → Poor

5. Cane → Poor

6. Soil \rightarrow Poor

NBI method: 2. The house has inappropriate services: no connection to aqueducts or tubing, or without connection to sewer or septic tank.

^{*} In is important to highlight that in an interview made to a person who is currently building a convention center in Shushufindi, this person said that the construction of a building in these cities might cost 1000 dollars per square meter (considering architect, engineer, labor, loans, materials and excluding the land).

Adaptation:

Poll question B 2.10 The type of hygienic service that this house has is:

1. Toilet and sewage → Non-poor

2. Toilet and septic tank → Non-poor

3. Latrine \rightarrow Poor

4. Absence \rightarrow Poor

Poll question B 2.12 Where does the water for the house comes from:

1. Public service → Non-poor

2. Pool or faucet → Non-poor

3. Other source that comes from

water pipe → Non-poor

4. Water tanker or tricycle → Non-poor

5. Well \rightarrow Poor

6. River/ vertiente de acequia → Poor

Poll question B 2.13 The water supply is located:

1. Inside the house \rightarrow Non-poor

2. Outside the house but inside the property → Non-poor

3. Outside the house, outside the property \rightarrow Poor

Poll question B 2.15 The lightning type available to the household mainly is:

1. Public electric company → Non-poor

2. Private electric generator → Non-poor

3. Solar panels → Non-poor

4. Canddle / candil / mechero / gas? → Poor

5. None \rightarrow Poor

NBI method: 3. In the household there is a strong economic dependency. This is applied to families that have more than 3 family members per working person, in which the head of household does not have more than two years of primary education.

Adaptation:

Poll question B 3.7 Level of education:

^{*} Rivers are considered an indicator of poverty because of the pollution they may carry.

To quantify the economic dependency of each household the information provided in question 3.7 was related with the number of family members. With this relation each result was classified in a category based on what is stated in NBI condition 3.

NBI method: 4. In the household there are kids who are not going to school. This is applied to those homes that have, at least, one kid of six to twelve years that does not receive education.

Adaptation:

Poll question C 3.8 Do you go to any educational institution? (for minors)

- 1. Yes
- 2. No

NBI method: 5. The house is in an overcrowding state. This means that the place has more than three people per room used to sleep.

Adaptation:

Poll question 2.7 From these rooms, how many are used exclusively to sleep?

None = 00

Number of rooms:.....

Depending on the amount of questions with a value of cero, the categories "non-poor",

"poor", and "extremely poor" were assigned.

Non-poor received the value 0 (absence)

Poor received the value 1 (presence)

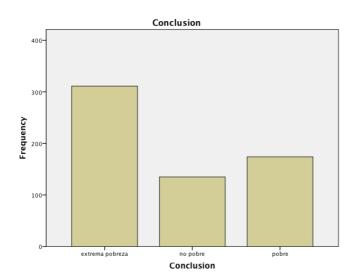
Results

General Poverty (mode analysis).

Table 1. Results of the poverty index of the three villages combined (Cuyabeno, Dayuma, El Panqui).

	Frequency	Percent	Cumulative Percent
Extreme Poverty	311	50.2	50.2

Not poor	135	21.8	71.9
Poverty	174	28.1	100.0
Total	620	100.0	



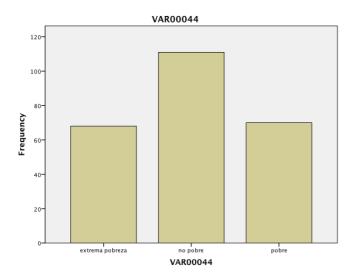
Graph 3. Frequency of the households in each category: extreme poverty, poverty and not poverty.

The frequency bars reveal that the 50.2% of the households interviewed are in extreme poverty conditions (which means that they meet two or more conditions), the 28.1 % of the households is under poverty conditions (which means that they meet one condition), and the 21.8% is considered not poor.

Poverty in El Pangui (mode analysis).

Table 2. Results of the poverty index in El Panqui.

	Frequency		Cumulative Percent
Extreme poverty	68	27.3	27.3
Not poor	111	44.6	71.9
Poverty	70	28.1	100.0
Total	249	100.0	



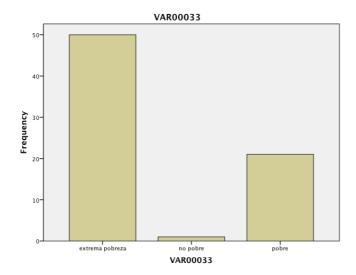
Graph 4. Frequency of the households at El Pangui in each category: extreme poverty, poverty and not poverty.

The frequency bars reveal that the 27.3 % of the households interviewed are in extreme poverty conditions (which means that they meet two or more conditions),, the 28.1 % of the households is under poverty conditions (which means that they meet one condition), and the 44.6 % is considered not poor.

$Poverty\ in\ Cuyabeno\ (mode\ analysis).$

Table 3. Results of the poverty index in Cuyabeno

	Frequency		Cumulative Percent
Extreme poverty	50	69.4	69.4
Not poor	1	1.4	70.8
Poor	21	29.2	100.0
Total	72	100.0	



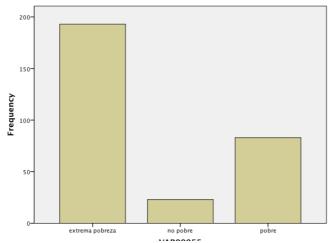
Graph 5. Frequency of the households at Cuyabeno in each category: extreme poverty, poverty and not poverty.

The frequency bars reveal that the 69.4 % of the households interviewed are in extreme poverty conditions (which means that they meet two or more conditions), the 29.2 % of the households is under poverty conditions (which means that they meet one condition), and the 1.4 % is considered not poor.

Poverty in Dayuma (mode analysis).

Table 4. Results of the poverty index in Cuyabeno

	Frequency		Cumulative
			Percent
Extreme poverty	193	64.5	64.5
Not poor	23	7.7	72.2
Poverty	83	27.8	100.0
Total	299	100.0	



Graph 6 Frequency of the households at Cuyabeno in each category: extreme poverty, poverty and not poverty.

The frequency bars reveal that the 64.5 % of the households interviewed are in extreme poverty conditions (which means that they meet two or more conditions), the 27.8% of the households is under poverty conditions (which means that they meet one condition) and the 7.7 % is considered not poor.

Mode analysis on the Index conditions.

Table 5. Condition 1: Inadequate physical characteristics of the house. (1= presence; 0=absence)

Condition 1	N
0	203
1	417
Total	620

Table 5 shows that the majority of the houses in the poll have inadequate physical characteristics for human living.

Table 6. Condition 2: inappropriate basic services in the house. (1= presence; 0=absence)

Condition 2	N
0	373
1	247
Total	620

Table 6 shows that the majority of the houses in the poll do have appropriate basic services for human living.

Table 7. Condition 3: Economic dependency of the household. (1= presence; 0=absence)

Condition 3	N
	1
0	577
1	42
Total	620

Table 7 shows that the majority of the households have less than 3 family members per working person, or that the head of the family has more than two years of primary education.

Table 8. Condition 5: Overcrowding. (1= presence; 0=absence)

Condition 5	N
0	429
1	191
Total	620

Table 8 shows that the majority of the houses are not overcrowded. This means that the place has less than three people per room used to sleep.

Analysis

General overview.

In a general overview of the economic status of the three areas' households, it is clear the predominance of the 'extreme poverty' condition. According to the index 50.2 % (311 households) are under extreme poverty, 28.1 % (174 households) are under poverty—which means that 78.3% is under unsatisfied conditions. And the 21.8 % (135 households) are considered not poor.

The index results are not consistent with the general Ecuador NBI's ones, however when observing specific cases the results do match. According to the 2010 report, the country reports that 56.15 % of the Ecuadorian households present unsatisfied needs.

According to INEC, 78.8% of Sucumbios' population was poor in 2010 based on the NBI method (this percentage included poverty and extreme poverty) (INEC, 2010). The same report explains that the 83,3% of Orellana's population was poor and 60.5% of Zamora Chinchipe's population was poor based on the NBI method (INEC, 2010). These statistics show an alarmingly deprived economic status for the region's inhabitants. Overall deficiencies in the country are education, health, land tenure and inequality. In this segment I will analyze the specific cases of the three populations studied.

Cases analysis.

El Pangui.

When analyzing the economic situation in El Pangui, my index reveals that almost the majority of households 44.6% (111 of 239 families interviewed) are not considered poor. While the 27.3% is categorized as poor and the 28.1% is recognized as extremely poor. In total, there are 55.4% households with unmet needs. This is a very interesting finding since it challenges governmental calculations.

According to the Ecuadorian NBI results the 68.5% of the canton's households show unsatisfied needs thus belonging to the categories poor or extremely poor (Cornejo, Zorrilla, & Estacio, 2012). Moreover the statistical incidence of NBI poverty is 73.3% and the incidence of NBI extreme poverty is 28.59% (Cornejo, Zorrilla, & Estacio, 2012). El Pangui's major unsatisfied needs are health, education, urban and rural roads, houses, electricity and security. According to a report made by UNDP and the Secretaría Nacional de Gestión de Riesgos, the majority of houses are made of zinc or tile roof and bricks or

cement walls and a 36.5% has access to drinking water (Cornejo, Zorrilla, & Estacio, 2012).

The differences between my results and the NBI's are vast. From 55.4% to 68.5% there are almost 14 points, which are statistically significant. What I can infer from this disparity is that a small variation on the NBI index can reveal unusual results. When I built my index while I used the NBI as a guide, but I tried to define my parameters in the real context of the Amazon region. The "real context" should be understood as living styles dependent on the environmental conditions, prices, culture, and health concerns.

There were two main highlights in my NBI index. The first refers to water. My index's second condition evaluates houses' basic services such as aqueducts and sewage system. In my index, wells and rivers/lakes as source of drinking water and irrigation water are considered a poverty indicator due to the high pollution that most of these water sources have. Water has been polluted by the big extractivist industries whose processes are unsustainable and irresponsible with the environment. Also, sewage system from the big cities converges in rivers filling them with bacteria and garbage. In general terms, independently of status of the water source (polluted or not), if water does not come from a piping system is considered a condition typical of poverty.

This fact opens a new discussion. While getting water from a non-piping system is considered a matter of the poor people, there is this constantly increasing argument that claims that in the future water will be a synonym of richness. Water scarcity will lead to conflicts and dangerous conditions for humans. Being this said, a contradiction in the index and in the general perception of wealth is found: how can a resource that is estimated to be very valued in the future can be considered of the poor ones in the present?

The second highlight of my index is the modifications done in the first condition: the adequate physical circumstances of the house. After interviewing some people that live in or near Cuyabeno I found that houses built in cane or bahareque are not necessarily a synonym of poverty. Rather, they are adapted to the local climate and provide healthier living conditions with less environmental impact. Humid weather and high temperatures affect severely the cement quality by accelerating the evaporation of cement, generating fissures and difficulting the settlement process. Moreover, in wood, bricks or cement walls, there is a high risk of fungi growth. Fungi spores may cause respiratory diseases. As stated, there is a set of reasons why other types of materials are more convenient than the ones, the western view conceives as suitable.

In addition, these houses built of cane or bahareque or with alternative materials (in the walls and roofs) tend to be designed keeping an equilibrium with nature and based on the community's/cultural conception on how a construction should be done. In this sense, maybe being rich does not mean to have a big house of cement and marble, it means to have a house adequate for the environment and the territory and according to the cultural standards.

Poverty definitions depend on cultural perceptions, as argued above. On the one hand, when we observe a wealthy person and his architect designing an environmentally friendly house, we perceive them as activists concerned about the environment with enough money to pay for a house with those characteristics. On the other hand, when we see a farmer or an indigenous constructing a house with woods, cane or related materials, we perceive them as poor and lacking of enough sources to live well.

The concept of development, especially sustainable development, refers to these efforts of maintain a peaceful relation with nature. The problem is that the concept

development means to ameliorate the quality of life based on the western vision of wealth and resources. Indigenous perspectives, although much more sustainable, are rarely taken into account as valid alternatives. Instead, Indigenous ways of living that permit ecological sustainability are dismissed as poor. For indigenous peoples, "sustainability is upheld by honoring longstanding, reciprocal relationships with the natural world, as well as by transmitting knowledge and everyday cultural practices to future generations" (Corntassel & Bryce, 2012, 152). For indigenous people, sustainability goes beyond to the UN's definition that understands it as the expansion of freedoms while doing the daily activities considering the future generations.

With this argument of development, the state intervenes in the territories of those who have a different way of living that does not fit in the concept of development. In the case of Ecuador, despite the fact that the Constitution of 2008 emphasizes the individual as the main social unit, political practices have been limited to those who are part of the system. In consequence, people from the periphery have had to adapt to the game of power to access to social institutions and participate in decision-making (Casas, 2013). There is an anthropological approach that explains the *inevitable extinction* of indigenous peoples due to the colonialism, not only European but of the state. This extinction may not be physical, but it is cultural and ideological (Casas, 2013).

Moreover, based on these results, the integration of an indicator that takes into account cosmovisions or traditional practices and the social/environmental context will generate results closer to the reality. Maybe when using this kind of indicators rural and indigenous communities may not result in poverty, instead, they would be rich. However, these efforts of ranking poverty using alternative indicators should be a careful choice. Indigenous communities (the majority) are not isolated; they are in constant contact with the rest of the society, the government and the industries. These three parties have the

western perception of a good standard of living. Negotiations and compensations are made based on this insight because it is institutionalized and powerful.

Consequently, there is no need to create brand new indexes that measure economic status in indigenous societies from their perspective but at the end of the day do not work when the companies or the government impose their vision. Instead, the already existent indexes should be modified taking into account cosmovision and context. Indexes should be more specific and personalized. Simultaneously, the *foreign* parties that interact with these rural inhabitants should also acknowledge the validity of these results and the difference of perceptions.

The clear difference between the rest of the Ecuadorian society and the indigenous and peripheral societies is not neutral, is negative. There is a study done in 1980 that explains how mestizos view them selves as nationals and consider the ethnic groups as *others*. Mestizos believed that "progress consisted in transforming the peripheries (indigenous peoples and Afro-Ecuadorians) of the nation through education and development to change the landscape and its peoples in ways that conform to the ideology and the projects of North American industrial growth" (Whitten, 1993)(Whitten, 1993,14). Mestizos still believe that. In fact, the current government, which is composed in its majority by mestizos, may reject the North American industry but also operates under a definition where development means urbanization. In 1980 and today in 2015, indigenous people, afro-ecuadorians and a big percentage of rural inhabitants are considered as the *others* who are *outside* the nation culturally, socially and geographically (Casas, 2013).

So, recognizing pluriantionality means to acknowledge poverty? This is what I can analyze from the governmental discourse. The Constitution recognizes a plurinational state where every nation has the same rights and responsibilities. Nevertheless, particulars such

as the method or the concepts used to measure and interpret social indicators still ignore alternative visions with equal validity under the plurinational discourse.

From my point of view, the state feels the *responsibility* of protecting its citizens and giving them the same opportunities which means to standardize everything, to homogenize education (same study program for everyone), same social programs, uniform public policies and judging every condition through the same lens leaving aside ancestral ideologies and cultures.

Dayuma and Cuyabeno.

The frequency bars reveal that the 98.6 % of the households interviewed in Cuyabeno are whether in extreme poverty or poverty conditions, and just the 1.4 % is considered not poor. Simultaneously, the frequency bars reveal that the 92.3 % of the households interviewed in Dayuma are whether in extreme poverty or poverty conditions, and the 7.7 % is considered not poor.

When comparing with the results of El Pangui where the majority of people is not considered poor, there are some discussions that arise. Cuyabeno and Dayuma are communities that have suffered a rapid growth and *colonization* process since 1970. They have also been in contact and under the influence of big industries that tend to be North Americans. Based on this fact, I have reached into two contrasted considerations.

The first one is related to the incompatibility between the social and economical situations in these communities and the *western view*. Since people in Cuyabeno and Dayuma have been under industrial and governmental influence for more than 40 years, the new generations are changing the way they perceive themselves towards a more *urbanalized* thought. Today, they may feel poor in contrast to the oil company's camps because that is their new vision imposed by the big industries.

The second one is related to the possibility that people in Dayuma and Cuyabeno are poor (from their own indigenous/rural perceptive and from the western view) due to the impact that oil companies have had in those territories. Pollution, oil leaks, land conflicts and low-income jobs are a result of the petroleum industry that has had a negative role in the Amazon region. Maybe El Pangui is still not poor because extractivist companies are recently entering to their territories. The impacts will be perceived in the future.

CONCLUSION

This investigation explores the ambiguity of the definition of *poverty* and, through cases study, shows the volatility in the results that come out when analyzing the economic status of a society depending on the indicators used. The research first explored what is poverty and how to measure it, then looked at the challenges of measuring poverty in plurinational countries like Ecuador, and finally proposed an index adapted to Amazonian contexts.

In the first part I explore the insights of what it means to be poor and under what conditions is a person classified under this category. The general and classic economical vision views poverty as the lack or low income and the inability to satisfy basic needs. The concept has been, through time, narrowed to economic indicators. However, currently there are other proposals to understand—in consequence, to measure—poverty including not economic factors and even those that tend not to be ranked.

I compared the concepts of poverty among different institutions and the academia. Although they all have a similar core, which is the *western/urbanized* way of living, they vary in many senses. The United Nations due to the amount of filial institutions presents different concepts of poverty that vary from salaries and consumption to human rights and opportunities. One of them, the most used and new is the Multidimensional Poverty Index,

which brings together ten indicators that include health, housing and education. The World Bank bases its definition of poverty merely on economic statistics. CEPAL understands it in terms of privation of opportunities. Finally, the academia has generated several proposals with financial models and philosophical approaches.

When choosing indicators there are several complications that need to be taken into account like the area of the sample, the time/s to take the data, the risk of subjectivity, reliability of the data, and the unity of analysis. It is not possible to cover all the fronts. In consequence, the results cannot be taken as general or definitive because there is always a possibility that they change if another consideration is acquired.

The second part refers to the study of poverty in a plurinational state. It is defined as a country with the existence of numerous political communities rather that a only, unitary state. Ecuador is a plurinational territory and recognizes that fact in its

Constitution. The presence of multiple nationalities reflect the diverse perceptions and understandings of terms such as poverty and the need of the central government to mix indicators in order to get a real vision of the social status of the country. In this sense, it is primordial to understand that indigenous peoples do not face the same financial stress as the rest of the population. There are some factors that are not even taken into account but affect them in a bigger extent than income, consumption or lack of education.

Ecuador has four definitions of poverty that derive in four methods to measure it.

The first one is the *sumak kawsay* that aims to integrate communities with nature. It refers to the rights that people have in order to achieve a *well living*. In consequence, the violation of one of these rights is enough to consider a person poor. The second definition is based on an indirect method to measure poverty that categorizes a person under poverty if his household's income or consumption is below the poverty baseline that is set on \$

653,21/per month. The third governmental definition is based on a direct method of measuring poverty that characterizes poor households as those with persistent deprivations in meeting their basic needs. This method takes into account more indicators to have a broader and accurate view of the real economic status of the Ecuadorian families. Still, they do not take into account other factors such as environmental security, discrimination, opportunities, nor the different perceptions based on culture. The fourth definition is the Katzman's that classifies households in a more detailed way: chronic poverty, recent poverty, inertial poverty, and non-poor households. The classes are a result of the combination of direct and indirect methods in a matrix.

As an exercise to prove the functionality of the direct method used by the Ecuadorian government to measure poverty, I generated my own index. This index was adapted to the context of the Amazon populations and it re-evaluated their status. The indicators were defined based on interviews and budgets made on Amazon big cities. It evaluated the economic status of 600 families in three populations: Cuyabeno (in Sucmbios), Dayuma (in Orellana), and El Pangui (in Zamora Chinchipe).

The findings were surprising. A little variation in an index, in the case of mine in the physical characteristics of houses, can produce totally different outcomes. El Pangui is considered one of the poorest zones in Ecuador. Nonetheless, the findings in my research show that almost the majority of households are under the category of non-poor. This may be due to the fact that houses built in cane or bahareque (categorized in the official direct method as poor) are not necessarily a synonym of poverty. They are well conditioned and adapted to the environment and their reason to be is the prevention of diseases and the convenience of these materials over the ones that the *western* view conceives as suitable.

The research shows that definitions, measurements and indicators are not always suitable for every condition and that the descriptions they reflect may not be the real ones. Poverty cannot be a general concept and there is not a global method to rank it. It is fundamental to consider the subjectivity and the vast perceptions of welfare in different cultures and nationalities. Governments, especially those in plurinational states should always respect and pay attention to the several perceptions of their societies. This is the only way of including everyone in a *democratic state* that refers to the equal right of every individual to choose and to have an opinion over the government's plans.

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