

**ENABLING CIVIL SOCIETY TO SUPPORT TRANSPORTATION POLICIES AND
PROGRAMS WHICH FAVOR LOW-INCOME PEOPLE IN UNDERDEVELOPED
COUNTRIES**



Synthesis of the research carried out in Latin America

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Background

The international concern in relation to the increase in poverty, together with the increased amount of money invested in transportation and the donations provided to improve roads and other means of terrestrial transportation in underdeveloped nations, which have not yielded a clear response that would indicate that the poorest sectors have been assisted by these changes. Due to this lack of improvement among the poorest sectors of various countries, the Civil Society Challenge Found CSCF, a program from the International Development Department of the British Government DDBG, has decided to conduct a follow up of the transportation policies and it has also decided to provide its support to the strategies needed to reduce poverty in such countries.

To achieve such an objective a series of studies were conducted of various cases in fourteen different underdeveloped countries; Senegal, DRC Congo, Burkina Faso, Tanzania, Zimbabwe, Uganda and Kenya in Africa; Bolivia, Nicaragua and Peru in Latin America; Nepal, Sri Lanka, Indonesia and Cambodia in Asia.

The research that was done of cases in Latin America by members of National Forums in each country, in Nicaragua it was carried out by FUNPROTECA, in Peru it was CICLORED and in Bolivia this task was done by CIFEMA. The Secretariat for Latin America of the International Forum for Rural Transportation and Development, IFRTD AL, acted as a coordinator and it helped with the monitoring of the investigation and research activities. The investigation and systematization phases were completed between the months of June and December, 2003, but in certain cases there were certain delays caused by further revision of the final documents.

Throughout the completion of the project an effort was made to attain the constant participation of civil society, agricultural organizations, low-scale agricultural producers, municipal and transportation leaders, their input was encouraged to identify their impressions, needs and aspirations, with the purpose of transmitting their thoughts to the various governmental organizations involved. The objectives that were pursued by the project include the following:

1. A description of the transportation policies in each country and their impact or relationship with the strategies needed to reduce poverty.
2. To make the civil society aware about the importance of having an efficient transportation service that would effectively favor all possible users and offerers of such facilities.
3. A platforms of institutions of civil society must be conformed which would function as a coordinator of the efforts made by civil society, and to propose any such efforts to various sectors of the government, it must work as an institution that would monitor general policies and transportation policies and the concordance that they must have with the specific needs of an array of key players of the transportation's system.
4. Based on the results obtained from the previous elements included herein, a plan of action must be presented which would help to improve the impact of existing transportation policies in regards to the poorest sectors of society.

The scope of these objectives has been clearly differentiated among these three countries, and in some cases such objectives have been limited by internal conflict, a clear example of that would be Bolivia, but in general great similitude among them has been clearly identified as well as certain differences, which we detail as follows:





The Transportation Policy in the Latin American Region

The experience of the cases studied indicates that there is a general norm in each country that helps to regulate the market of services and the construction/maintenance of transportation infrastructures. These policies have some characteristics in common that would help to influence in a positive or negative manner the overall reduction of poverty; this would depend of every independent case.

They possess a **Structuralized Vision** of the policies, it is considered in fact that the physical structuring of the transportation structures will lead to the general economical development of society as a whole. It does not take into consideration alternative means of transportation and intermediate forms of technology. There is actually a tendency to favor the growth of the terrestrial transportation, leaving aside the potential usage of other means of transportation, such as trains and fluvial transportation.

Regionalization and decentralization of the responsibilities, in the three cases Studied we were able to verify that the responsibility of transportation projects had been distributed among various levels of the central government, in favor of the interests of the nation, the municipal authorities who were in charge of neighboring networks and various intermediate levels included among them were affected by the political organization of the country.

A tendency towards the **privatization of the services** related to transportation, construction and maintenance of roads, toll charges, concessions and the privatization of roads and ports, etc. the State has acted a regulator of the actions taken by private parties and in regards to their overall interaction with society.

The increased **investment applied to transportation infrastructure** is the most important expense of the budgets of these three countries, which is approximately 22% in Nicaragua and around 30% in Peru and Bolivia.

The origin of the financing required for the construction of roads is mostly multilateral, and 80% is provided externally. Therefore, this is one of the leading causes for gross **financial liabilities of the countries studied**.

Within the national policies the prime needs of the **people in rural zones have not been taken into consideration**, specially their means of transportation, which may include fluvial transportation, the usage of animals, bicycles, etc. As a result of this apparent negligence towards this particular sector, such people have not been included at the moment in which projects are drafted to provide assistance and better accessibility and mobility to the internal part of these zones.

The transportation policy of the region **does not specifically mention the relationship between the Strategies to Reduce Poverty SRP**. However, in an implicit manner some of the immediate objectives include the support to the economical development of the country.

Within the guidelines applied for the relief of poverty, the governments in cooperation with various entities related with the maintenance of transportation means **have generated assistance programs and have palliated poverty as well**, by generating temporary sources of work, and they have helped to create small companies needed to provide maintenance services of great importance at a national level.

Accessibility and mobility within the guidelines transportation policies

The most important objective of the norms of the Andes' Region is **to facilitate the transportation of cargo** between the different zones of the countries. An additional benefit from the financing of new roads and additional means of transportation is the **connection with neighboring countries** and the corridors generated that ease commerce among the countries involved.

The general policy perceives transportation as a means to support the actions of other sectors; **transportation is a sector of transversal activity** which affects other areas which are socially and economically active. It has often been considered a separate matter, and additionally it has not been related to the reduction of poverty.

The accessibility that could produce the existence of roads it is not possible because of the actions of various organizations in charge of the implementation of a comprehensible strategy to reduce poverty in the ministries,



which includes public projects and transportation which are not coordinated in an adequate manner. Most transportation projects are done because they provide great national interest, but are not accompanied by actions that would favor human development of the inhabitants of the zones affected by these projects.

The norm does not explicitly mention that the people should have ease access to healthcare services, educational services markets, but the role of the entities that regulate all the sectors related to said activities have an implicit obligation in such regard. The mobility of the people is guaranteed by the Political Constitution of the State, but physical, economical and quite often cultural limitations prevent certain sectors of society, specially women, elder citizens, children and handicapped people to have access to such services and benefits by limiting their free transit, in a plentiful and autonomous manner within society, thus lowering their possibilities to improve their overall quality of life, and their overall economic possibilities are hindered due to their lack of means to mobilize freely.

Links between poverty and transportation

National statistics of the countries in Latin America have identified that about 50 to 70% of the population is considered to be poor and from those people about 25% to 50% of them are considered to be in extreme poverty, but this percentages are a lot higher in marginal-rural regions. The rural population in the countries of the Andes, such as Bolivia and Peru, are considered to be approximately 50% of the total population, 90% of the people in rural areas are considered to be poor and in some zones within Bolivia, about 50% of the population is considered to be extremely poor.

Poverty was analyzed through this research from the historical and structural point of view; one of the chief concerns of the investigators was the observation of the methods utilized to measure poverty, which did not measure factors that would facilitate integral-wholesome human development. The methods that have been used the most measure the quality of the housing infrastructures, the resources available and the level of income in comparison to their accessibility to all the basic services. This reflects a very limited analysis which lacks important aspects, such as accessibility to healthcare services, educational services and local markets, the possibility to freely travel to improve the opportunities of human development, the usufruct access to natural resources, the availability of technical training or other means that would help to increase the skills of any given individual and their ability to interact with the social environment.

Within the analysis of poverty, some key facts are clearly highlighted, the causes and the effects, which in rural areas are accentuated a lot more clearly. Whenever we are able to observe the needs for mobilization within rural areas, the distances seemed to be greater and the opportunities fewer. Most of the people would resort to their own physical effort to transport themselves throughout these areas. In this regard, women in farming areas seem to endure the worst part, because they carry out most of the manual labor. These structural limitations create a vicious cycle that prevents certain sectors from overcoming their extreme levels of poverty. But it seems obvious as well that there is not enough documented information about the direct relationship that transportation has in regards to poverty.

Counties studies as individual cases

THE CASE OF BOLIVIA

The policy of transportation and formulation

The Bolivian policy, in regards to transportation as a valid instrument for economical development and the reduction of poverty, has not been studied well enough. There have been some isolated efforts to study the impact that transportation has, such studies have reflected the interests of the people in support of this transversal activity in connection to a series of related activities, but it is not clear yet the benefits that it provides towards the improvement of living conditions and perhaps that is why this matter has been largely ignored.

There seems to be a gap in the information provided to create new national policies of transportation, some of the main indicators needed to generate such policies are regional requirements, express through various forms of social movement and through the financial support of international organizations, which have approved the usage of funds for the construction of highways, and have demonstrated a clear interest in the integration of the region.

Many NGO's and private-development entities have demanded to the government seems to provide greater support to large investors, from national and international companies, which often result in the decline of the aspirations and hopes the most marginalized sectors. Another objective expressed in the development policies in regards to transportation, is the objective of changing Bolivia into a centralized nation where products could be transported between all the countries that surround it, communicating Brazil and Paraguay with the Pacific Ocean and Chile and Peru with the Atlantic Ocean, a matter that has been dealt with for a long time with very little benefit to the country.

The norms that are included in the Transportation Policy do not include the explicit assistance that such support provides to reduce the current levels of poverty, but, it has been suggested that by creating better means of communication, and by maintaining a more expeditious route of communication, the **Fundamental Network of Transportation FNT**, which is needed for the constant traffic of vehicles to change Bolivia into a corridor that would provide the necessary means to transport a wide road to transport great quantities of cargo between all the surrounding countries, this could also help to generate areas of development, sources of employment and in turn it would help improve the quality of life of the people in general.

Currently, the transportation policies do not seem to be well connected with the strategies of rural-economic development, and they do not have any objectives or plans in common and the actual communications between the heads of the organizations in charge is down to a minimum. Finally, the State has relinquished this responsibility to the local-municipal governments; such institutions are currently in charge of the elaboration and implementation of economic development. The planning of the economy has been abandoned since the 90's, when new liberalization measurements were put into effect.

Regulatory-Government entities related to the sector

The entities that are in charge of the creation and application of transportation policies in Bolivia include the following: ***the Vice-Ministry of Transportation, the Superintendence of Transportation and the Armed Forces of Bolivia for all the fluvial transportation.***

The Superintendence regulates the services related to air transportation, trains and urban transportation. All urban transportation is subject to the observations of the local municipalities, mostly because of political issues and the fact that they feel their autonomy could be threatened by the State's intervention. The Superintendence is also trying to have certain laws approved by National Parliament which would help to have greater control of the services related to urban transportation and transportation between provinces; both forms of transportation are considered to be massive forms of transportation which would benefit the poorest sectors of the country. Together with the municipalities certain studies have been conducted to improve urban traffic at the capital cities of the country, in order to lower the concentration of vehicles within the commercial areas of the cities and to lower the cost of transportation in general.

The Vice-Ministry of Transportation, which functions as a part of the Ministry of Public Works, is in charge of generating national policies needed for the improvement of transportation means such policies are carried out by the National Roads Services, it is also in charge of the regulation of the services that are currently available in each department (city) of the country for the transportation of passengers, as well as the transportation of cargos and other services, which includes the cost of tolls and concessions.

The responsibility of constructing and maintaining various means of transportation are divided between the National Roads Services which is in charge of RVF, the Prefecture of every department, which are in charge of secondary networks of roads, or other regional matters, and the Municipalities that are in charge of third-degree or neighboring countries; each one would also function under its own independent regulations to finance their own



activities. However, the current legislation favors private companies in most new projects, in that regard the government has simply acted as a regulator but not as a provider of any of the major changes.

The routes used for aquatic transportation are considered to be very strategic, specially within the fluvial network of the eastern portion of the country mainly in the basin of the Amazon, and at a lower percentage in the basin of the "Rio de la Plata" (Silver River) and the Titikaka Lake, which is shared with Peru. Transportation through these channels is controlled and regulated by the Bolivian Naval Force. Such an entity has various organisms, companies and programs to regulate and facilitate transportation through the rivers and lakes of the area. Those rivers that cannot be used for transportation are regulated by other government programs which are currently conducting several projects to construct dams, irrigation systems and hydro-electric generators, specially in the Bermejo and Pilcomayo rivers towards the southern end of the country, but these rivers are used for some local transportation and fishing.

Rural transportation

Rural transportation has not changed very much for the last 50 years, and most of the transportation services are almost inexistent (bus terminals, gas stations, docks or piers, mechanical assistance, police control, etc.). The technical control of vehicles is almost rhetorical, the maintenance of roads is limited and the construction of new connecting roads is minimal mostly due to the municipal restrictions of rural areas.

There are certain places in Bolivia where most children have to walk 10 km everyday to go to school, where women have to walk almost the same distance to obtain water, firewood or to take their produce to sell at local markets, something similar happens with most men who have to take their plow and seeds or their harvest production from their homes to the certain areas where the production is processed or to local markets, the situation becomes a lot tougher during rain season which limits the usage of the rivers and the fords of rivers.

At the moment there is not an entity that may be specifically in charge of controlling, regulating and improving the services of rural transportation. All the norms that are currently available are regulated in a very general manner by the Vice-Ministry of Transportation, but the actual quality of the services, the technical revisions and the safety of the transportation itself, has been assigned by default to the Transit Police which has a very scarce presence in rural areas.

The transportation sector within the economy of Bolivia

The contribution provided by the transportation sector to the economy of the country is close to 9.3% of the Gross Domestic Product. This contribution can be distinguished between the terrestrial transportation and the storage levels (79.5%), air transportation (12.1%) and fluvial transportation (0.5%).

During the last few years the level of air transportation has risen, fluvial transportation carries small amounts of cargo between certain colonized zones and a very limited percentage of commercial cargo. We must clarify that the volumes of cargo that have been reported in the national statistics' surveys are lower in comparison to the actual amount of merchandise transported illegally, specially through terrestrial means.

Transportation represents 6.97% of all the jobs currently available in Bolivia. It provides employment to 16.4% of informally-employed workers within the country; there are also independent workers that amount to 5.2%, 3.7% of workers which have constant-stable salaries and 9.2% of owners and administrators of transportation companies.

The income of transportation workers has been seriously affected by the current recession of the country, but the average income of such workers is approximately \$US 160.00, which is greater than the average Bolivian-Income of \$US 77.00. During the last few years the income of these particular group of workers has decreased, especially in rural areas which averages \$US 125.00.

The average of prices for most consumers indicates that transportation amount to 10.8% of their total budget, which is greatly influenced by public transportation that amounts to 7.52%, given the fact that most people use public transportation as their basic means of transportation. For most people, their second greatest expense, besides food, is transportation.





In regards to the investment provided to this particular sector, it averages 30% of the total investment of the country for the last few years, which totaled 160 million dollars since 1999 until now, but the most ambitious projects which entail the construction of roads that would connect both oceans would need a much greater investment, as well as the roads needed to connect the areas of greater production, etc. all of this requires more resources, and the budget for the following five years has been calculated at more than 300 million dollars.

Transportation and the Bolivian Strategy to Reduce Poverty

The **Bolivian Strategy to Reduce Poverty BSRP** which was readjusted by civil society at the summit "Dialog 2000", has recognized one of the strategic tasks the support needed to improve the infrastructure of existing networks of roads while approaching such an effort from a productive point of view, but at the same time it has been identified the fact that there is not enough funds to cover at a mid or short term the needs of roads construction and the transportation means needed to connect the various areas.

In accordance to the BSRP, to cover the expenses of the investment needed for new roads and to improve the roads that are currently available it is necessary to have an investment of approximately 1,700 million dollars for the next 5 years, such amount is currently being negotiated by the government with several members of the international cooperation (CAF, IDB, FMI, etc.) in order to secure such funds.

In order to provide greater priority to projects that would have a more significant impact in the economy of Bolivia and in order to empower such efforts, several actions have been implemented by: the National Roads Services NRS, which has elaborated a five-year plan of investments which includes the construction of roads that would help to construct roads within the five main corridors projected by the RVF. Together with the Unit of Analysis of Social and Economic Policies a Master Plan has been elaborated for Transportation per Surface.

The prefectures and municipalities have other financing means for their transportation projects (construction and maintenance of roads and other infrastructures); The Productive and Social Fund PSF, finances projects of great social interest with non-refundable moneys. In contrast the National Fund of Regional Development NFRD; provides assistance at a very low interest, said entity provides moneys for the maintenance of roads (Transportation Fund) and for the construction of additional services such as bus terminals. For the NFRD the year 2002 the projects of improvement and maintenance of the roads of access represented about 12% of the funds that were actually reimbursed.

As part of the economic-development strategy of the country certain systems have been created that has gathered some of the key players of the economic reality of the country. The Bolivian System of Productivity and Competitiveness is an entity that coordinates the actions of the government with some of the key-private players of the country, to efficiently coordinate the usage of the resources that are currently available. The Bolivian System of Agricultural Technology BSAT has as its main objective the transference of technology towards the groups of farmers formed by associations, which would help to benefit chains of production, initially supported by foundations and directed later on by the BSPC. It takes into consideration the transportation as one of the limiting factors that affect the post-harvesting process, but it does not carry out any direct actions and it delegates such a responsibility to the municipalities and other organizations.

Other programs that provide assistance which are clearly directed towards the maintenance of certain roads include the following: Program of Roads Maintenance PRM which together with the program Projects With Jobs (a program that has only existed virtually) pretended to diversify the types of jobs available in rural areas by creating small businesses which would specialize in the maintenance of roads, all along the RVF. The Plan of Emergency Jobs (PEJ) is guided towards the same goal, but their form of investment is a lot more diversified. These programs are better applied in certain communities which have better means of administration of their own resources and they work at a much lower scale in small and poor communities.

In synthesis, the **BSRP** only takes into consideration the projects that provide physical means of communication as their tangible contribution towards productivity and their efforts are guided towards that end, this is clearly seen in the construction of roads, especially if such roads have any commercial expectations. The jobs that could be generated through emergency programs provide a temporary solution, which solve certain problems at a short-





term, and do not help to secure jobs on a long term basis nor do they help to generate enough wealth among the affected sector of the population.

The **BSRP** favors projects that provide adequate infrastructure to health care and educational services, projects that try to lower the mortality rate while improving the overall level of education, the mobility of the population is not taken into consideration, the people currently travel long distances, quite often climbing steep hills, carrying their sick relatives to arrive to town where there are medical centers, very often though, they do not even attempt to do any of these huge efforts because they think it is almost futile. Regardless of the improved mortality rates, relatively little progress has been achieved and it is likely that it will be impossible to reach the Millennium goals until 2015.

Civil society and its requirements

Within the civil sector we would like to emphasize that the institutions that gather some of the key players of the transportation sector include several syndicate bosses, departmental federations and **the confederation of transportation workers**, who in different ways have provided various kinds of services related to the transportation of passengers and cargo as well. During the last few years they have been divided into several groups created in regards to specific interests and the sudden appearance of **free transportation**, based on the 21060 Decree which provides the means for free-trade to all the sectors of the commercial market in Bolivia.

There are also corporative groups, which have found their way into the national chambers of transportation and private companies which are regulated by the Vice Ministry of Transportation.

Some of the main interests of this particular sector are directed towards **lowering their costs of operation**, and they have requested to regulate (slow down) the importation of more vehicles (especially used cars), as well as the reduction of taxes, insurance policies and fines related to either one of these two impositions. They have even requested the State to absolve them from their debts related to taxes and fines. At the same time they are requesting better maintenance of the main roads of the country (but they contradict themselves by requesting all tolls to be stopped or lowered, they do not seem to understand that those funds are used to maintain the roads) to extend the network of asphalted roads, the regulation of related to the law of transferring of cargo and the homologation of its norms with the laws of other neighboring countries.

Other actors, such as **transportation users** and other additional services, have not created any type of organizations that would help them improve or regulate this service. Additionally there are very communities nowadays with committees of transportation which are formed and in charge of organizing the activities of the inhabitants of any given town in order to conduct maintenance projects of neighboring roads which are contact with their own territory.

Also, the associations of producers and the community members have a direct relationship with the communities and in many cases with **NGOs** to whom they often request funds for the construction of roads. The requests of this sector are directed towards the **widening/improvement of the network of neighboring roads** and towards the regulation of tariffs to transported cargo, such tariffs are currently imposed by transportation workers, which has risen the current cost of transportation.

Within civil society, regardless of the implicit acknowledgment of the importance that transportation has and the services to which it could have access to, **there is not a clear understanding about the importance** of the development of the system, the maintenance of the roads' infrastructure and the safety of passengers and cargo.

From a corporate point of view the Chamber of Industry is taking into consideration the fact that policies should be directed towards the creation of wealth by providing support to enterprise owners, who help to generate jobs and strengthen the economy. It is considered practical to open up the various channels of communications, to regulate more adequately the activities related with transportation by enforcing the Law of Cargo Regulations, this would help to increase the consumption of the national-natural production, but it has been suggested to **change the energetic matrix** of all automobiles to natural-compressed gas NCG, specially of all the urban transportation, this would yield great economical, technical, environmental and health benefits.





Key subjects found and recommendations

There are certain gaps in the regulations related to transportation services which occasionally limit the ability of the State to control said services, and it does not consider certain forms of transportation, specially the methods of transportation used by the poorest sectors in rural areas. There is not a clearly expressed connection with the strategies needed to reduce poverty and the development policies that have already been implemented, mainly because the social groups to which they are connected with are very different from one another.

It has become necessary for the State to channel the various thesis proposed, as well as the requirements and opportunities of the actors of civil society in the systems of national transportation, in order to include them in the most effective national policies and to have a greater impact in the economic development of the country and the subsequent reduction of poverty.

The Vice-Ministry of Transportation, together with the Superintendence of Transportation, are some of the key players in this particular field, which help to dictate and issue the norms and guidelines of the national transportation's system. The municipalities and NGOs help to express and identify the needs that the population has. In accordance to the regulations, private companies must provide the services; construct the roads and infrastructure related with transportation, in accordance with the needs and the current status of the free and open market.

There have not been any national or private organizations identified as entities that are currently taking care of the mobility and the access of the people to the various means of transportation, or that have implement strategies that would help improve this matter. There is not a collective understanding either of the importance that transportation has in connection to social and economic development. At the moment it has been suggested to propose a mid-term strategy to confront the existing deficiencies, the awareness of society through educational campaigns, the socialization of objectives at every strata of the nation and studies that would provide a more in-depth understanding of the transportation system and the alternatives that are currently available to surpass some of the existing obstacles.

There should also be a real and more continued compromise of the State, together with the constant fight against corruption, it is vital to have a plan of actions that need to be taken in this regard, together with the participation in programs which would support rural and productive development, but there have not been any guidelines detected within national policies that would aid the implementation of said plans at a short or mid-term.

THE CASE OF NICARAGUA

The initiative for the follow up of transportation policies by Civil Society

Our research has proven that this initiative is innovative, mostly because there is usually an analysis of transportation from the point of view that it is a part of other economic, productive or social sectors, which has been inserted into one of them, and it not often analyzed as an independent subject with its own characteristics, factors and effects. Nor is it ever seen from the point of view which may consider the importance of transportation to other productive sectors, and focused as a mechanism that would help to relieve poverty. The research project has the added value of supporting the strengthening of civil society and other sectors to improve thee existing transportation policies at a national level.

Characteristics of the norms of transportation in Nicaragua

The transportation norms in Nicaragua is not integral and it does not obey in integral-global policy it simply provides an answer to certain punctual aspects which need to be regulated, but for the last five years certain efforts have been made to have certain laws approved to regulate over this matter. The main legal problem is the lack of approval of the National Law of Transportation, and the approval of such law continues to be under discussion.





The proposal of institutional changes for the Ministry of Transportation and Infrastructure MTI considers the redefinition of the role of the Ministry itself in regards to the concession of contracts to private companies for the construction, maintenance and repair of roads, based on the standards of quality, the creation of a Special Fund of Transportation Routes Maintenance and in accordance to a National Plan of Transportation NPT, therefore the creation of departmental sections for the maintenance of roads has been taken into consideration.

The MTI is the regulating entity which oversees transportation tariffs, based on the proposal of the transportation workers themselves, such proposal has been presented before the MTI and it is subject to approval, transportation is a specific economical activity which has all of its tariffs regulated by the central government.

The transportation policies at a national level do not include the internal needs of transportation of rural communities and the lack whereof, the non-existence of such services often means an increase in the amount of work done by people in rural areas, and it specially affects women.

The concern for safety has increased in the last few years given the fact that the accidents rate has tripled between 1990 and 2002, which has motivated the judicial branch to issue a new traffic law, which would hopefully reduce this alarming problem.

Economical contribution that transportation provides to the country

The contribution that transportation provides to the National Gross Domestic Product in accordance to the data provided by the Central Bank of Nicaragua CBN is 5%, but it has been determined that such percentage is well-below because it does not take into consideration the contribution provided by the private sector in connection with this service. In regards to the investment provided by the government between 2001 and 2002, 16% and 15% correspond to the area of transportation respectively, which is well above the investment provided to other sectors in which the central government invests its funds. During both years the investment of transportation was close to 70% in communities afflicted with extreme, high and intermediate poverty, and 30% in areas where the levels of poverty are low.

The scope of the transportation sector could be seen in the 540 million passengers who are transported over 15,660 trips and in the 131 million kilometers that are covered every year, this activity is covered by 91 cooperative associations, 16 companies and over 450 independent workers. The total percentage of people who work in transportation amounts to 3.6%, but such quantity in this particular sector is under-estimated.

In accordance to the range of consumer prices, the terrestrial transportation rates have suffered an important change, the average budget of expenses for a family in Managua between June 98 and 99, has had transportation at a 16% and 15% respectively.

The tax exemptions issued in favor of the transportation industry has provided the opportunity to business owners of various transportation companies, during the past decade and now, to save millions of dollars; almost 2,500 transportation impresarios in Nicaragua have been benefited with tax exemptions, the remainder of the transportation sector does not have this benefit.

Transportation infrastructure in Nicaragua

Transportation by highway

The national network of roads in Nicaragua grew between 1950 and 1974, at that time it increased 30 times its size, between 1979 and 2002, it has only grown by 5%, and the current network is about the same size that it was in 1974. The road network itself is formed by 18,333 Km, about 7,490.20 Km, (38.74%) within the network form part of the National Transportation Plan NTP and are considered to be part of the national interest's network.

The NTP has planned to invest funds for the construction of 5,051.6 Km (26.13%) of the network of national interest; even though 49% of the existing network is considered to be under critical conditions and in desperate need of repair and only 13% of the roads are in good shape. 74% of the transportation network is under the responsibility of local municipalities.





The total number of legally registered vehicles in 2002 were 255,655 this includes all kinds of means of transportation, but such a number does not include the most massively used form of transportation, *bicycles*. In accordance to the transportation office of the National Police there are approximately 450,000 bicycles at a national level.

Transportation means through fluvial routes

Aquatic transportation in Nicaragua is highly important mostly because it has access to two oceans, the Pacific and the Atlantic, there are also two major lakes that occupy 30% of the national territory and an enormous number of navigable rivers throughout the country. The total number of ports of importance within the country amount to 25, all of which are proportionately distributed among 21 municipalities afflicted with severe, high, intermediate and low levels of poverty.

In the 25 ports of Nicaragua there is a great deal of importations and exportations, and the transferring of national cargo as well. The investments made within this particular sector have been low; the national ports have been maintained by the existing demand for this particular service. The NTP suggests that the international ports are transferred through concession or franchising contracts, while national ports (of lakes and rivers) are transferred to the National Ports Enterprise, such entity has planned to have investments at such ports to ease the concessionary process. The National Development Plan has decided to review this proposal with the aid of national and international experts.

In regards to Cargo, "Puerto Corinto" (Corinto Port) currently handles the largest percentage of exported goods, and "Puerto Sandino" (Sandino Port) manages the importations. The local-maritime transportation transfers the coastal or national trading of cargo, which are mostly basic-needs articles destined for the communities located near rivers and lakes. Aquatic transportation also provides its services to passengers and the post office.

Air transportation

Air transportation is an option that has developed in accordance to the economic demands of the population, and it has experienced the creation and disappearance of various airlines throughout the years, at one time there were about 26 international airline and 8 national airlines. This form of service is important at a national level to have access to the Atlantic Coast. This form of transportation, as well as the terrestrial and aquatic transportation, has had an enormous increase between 1990 and 2002.

Within the air transportation industry, some improvements have been made to the International Airport of Managua, such adjustments would permit provide an adequate service for the next 10 or 20 years, the National Plan of Development includes the investments needed to change the airports of Bluefields and Puerto Cabezas into international airports.

Commercial transportation of cargo though air transportation is important because it permits to have better transportation with the rest of the central-American region, this sort of transportation has to be surveyed carefully because it is at center of drug trafficking and the proliferation of HIV – AIDS.

Rural transportation from the gender point of view

There is an abundance of information which may be available at the moment in regards to infrastructure and the forms of transportation that the MTI considers as part of the national system of transportation. But it is easy to see that there is very little information about rural transportation, and regarding transportation from a communal point of view, information which is not often shown.

In the case of women, the lack of transportation is increased a lot more, 100% of the needs of internal transportation within every community is done by the women, in that regard, every woman in the country side is her own form of transportation, specially when they have to go to the local markets to either sell or buy food supplies, or to take their children to school, or to search for water and firewood, or for their social and family activities, etc. It is obvious that women are the leading protagonists in the demand for better means of





transportation, for that reason it is one of the social sectors that has been affected the most due to the lack of adequate transportation. Women should also be the prime sources of information in this regard.

It is important to point out the actual numbers omitted within the national statistics, which include the number of bicycles and the total number of horses as well (16,524 in accordance to the last animal husbandry survey) these two forms of transportation are largely used for the transportation of families in rural areas, this is clear proof of the misguided efforts of motorized transportation within a country which is mostly rural, such as the case of Nicaragua.

Initiative of the National Forum of Transportation of Nicaragua

This particular document proposes 18 initiatives which could be used as the basis for the work that the National Forum of Transportation could do, such proposals include the following: a follow up of the investment provided by the government for transportation, participation in which civil society is summoned to make the necessary consultations to carry out certain policies related to this sector, to defend the synergy between all the related sectors to lower costs and to improve the handling of the sector, and to assist local communities in the administration of the roads, to change national policies so that they would include intermediate forms of transportation.

Key topics identified

The transportation system in Nicaragua has a series of flaws which have been linked to the prolonged process of conflicts and the dramatic gaps which cause an inefficient service, together with an inadequate political handling which has only caused a delay in the solutions that are extremely urgent, there have only been occasional patches to solve some of the problems related to these services.

The program wants to apply certain structural adjustments in order to have a more adequate reorganization and efficient functioning of the system, as result of this there could be a significant reduction of poverty, the strategies proposed by NTP are guided towards the following: 1) a search for investors which would help to improve the transportation services. 2) strengthening through the application of combined forms of investment between the State and the various offices of the Local Governments and with the aid of private investors, which would induce economic growth that would effectively reduce poverty.

The fact that transportation between communities has been considered socially to be a problem that solely affects families in the country side who should find solutions by themselves, has left these families condemned to a lack of mobility and subsequent poverty. National policies continue to ignore rural transportation despite the enormous need to improve the existing conditions of this sector of society confronted with enormous distances and an extreme lack of means to mobilize easily.

There is the need to press in favor legal measurements that would favor the services related with communal and rural transportation, a matter that has to be made clear not only before the State, but before society as well. The overall opinion of the population is that terrestrial transportation is expensive and it does not have the quality expected, but they are forced to use it because there is not another alternative.

THE CASE OF PERU

Communications between the peoples of the Andes

The model to administrate the territory of the Andes through the application of ecologic terraces, based on agricultural production of certain pre-Hispanic cultures, included the construction of the transportation infrastructures which was often used only by the political and military elite of the Incan empire, but at the same time they has certain roads which provided access to all the communities to the centers of production and of great consumption.





With the invasion of European colonizers, this model of communication was taken apart and replaced by a different system which provided more importance to maritime transportation.

The geographical division inherited from the time of the colony and the regionalization instated later on was not based on the criterion of a better economic articulation nor did it respect the complex relationship between human beings and nature, all of which limited a more adequate integration.

Poverty in Peru.

In Peru, according to official data, 50% of the population lives in conditions of poverty, at the same time 25% of the population lives in extreme poverty. A common characteristic of people that live in extreme poverty is the lack of means of production within their immediate surroundings, and also the limited or non-existing access to certain benefits, services, social contacts and the overall geographic isolation mostly because their habitat is amid an extremely remote area. As a consequence the inhabitants of such areas have to travel considerable distances to go to markets and other areas of importance, this fact is combined with other limitations which prevent the integral development and improvement of their production.

In this regard, transportation has always been considered an intricate part of their own development, but it has not been perceived as the sole obstacle of their condition. As it has been mentioned before, the improvement provided through the access to better means of transportation and communication would in turn help to develop better opportunities towards the development of production.

Transportation also requires a series of elements needed for investment that would create better infrastructure and services. In contrast with other forms of production investments, which could be utilized for the reduction of costs of the supplies needed for production, the overall improvement of production, greater access to new markets, among others.

Support provided to the transportation policies in Peru

The investment provided for transportation is classified as either **direct**, when it refers to the actual growth of the sector, or **indirect**, through civil projects that help to generate jobs.

Two forms of policies have been created to confront poverty, the first have been classified as **macroeconomic-general policies or sector policies** which have a direct and structural impact over poverty because they help to generate more jobs, while improving the capacity to produce of the people, second they are classified as **social policies**, which are intended to reduce poverty, but they have a public assistance nature which often results in greater impoverishment and drives the people affected by poverty further away from adequate survival.

The transportation policy works within certain given sectors and it is part of general policies, that is why **it has a more direct impact against poverty**, despite the fact that some programs and projects that the sector has developed based on social policies, such as the case of the **program of rural roads**, which is known as **PROVIAS rural**, which provides coverage to the neighboring network and it generates employment opportunities in cooperation smaller-local businesses, while it provides support to the maintenance of the roads.

The intervention strategy in the fight against poverty is based on:

- a) The **impulse provided by integral development programs** and not only through the execution of specific projects.
- b) In **planned and coordinated interventions between the related sectors** by understanding that poverty is caused by a phenomenon of various dimensions and factors, for that reason the intervention of a single sector may not lead to the root of the problem. Within this context the matters related to transportation must be directly linked to the development of strategies between the different sectors involved to truly fight against poverty.

In an evaluation that of the State's role in the fight against poverty during the 1990's, it was determined that regardless of the tax increases (between 1995 and 2001, there was an increase from 178 to 400 million dollars) in



several of the projects created to alleviate poverty, but despite of all of this effort, the levels of poverty continue to be about the same or in some cases they have even worsen: Additionally, the financing of most of the expenses has been done with the resources of the national treasure.

None of the State's strategies have mentioned transportation, it is also important to mention that there is not an adequate articulation between the strategies of the fight against poverty and the plans and programs of the Ministry of Transportation, Communications, Housing and Construction (MTC).

Given the fact that 71% of the investment provided by the State Dado is actually funded through the foreign debt, the overall financial sustainability is not guaranteed, this situation is complicated a lot further when it can be identified that the State financing is based on the collection of tolls, which do not cover the total cost of maintenance of the transportation network.

During the 1990's, another important tendency was detected within the state policies regarding transportation, which is the development of the strategy to privatize the transportation market, the transportation network and its services. One of the main tools of privatization of the transportation sector includes transportation concessions, which are understood as a mechanism needed to widen the scope of the infrastructure and the services of participation of the private sector for the financing, constructing and managing of the infrastructures themselves, by assigning to the State a more regulating role in regards to the process of transference and execution of contracts of concessions.

There is a hope that this program would have a significant impact in the development of sectarian transportation policies, which would drastically reduce public expenses within the existing transportation projects.

Public expenditure is currently oriented towards the construction of highways almost ignoring other alternative mans of transportation such as aquatic routs of transportation and train railroads, such projects have been abandoned almost completely, despite the fact that most of the population of low income largely depend on other forms of transportation (for example the rivers of the Amazon and the train railroads between Huancayo - Huancavelica).

Energy for transportation

Another matter of great importance regarding transportation is the problems related to energy supply and the sustainability of the environment. In a study done in 1998 this particular sector represented 52.8% of the total consumption of hydrocarbons. The transportation done through highways consumes most of this resource (85.9%).

Part of the solution of this unbalanced problem is the actual consumption of the energetic resources and the patterns of consumption are represented by the gas project of Camisea, regardless of the increase in the sources of energy it is important to improve the efficiency of the transportation sector and the subsequent need to exploit alternative sources of energy.

Main drivers of the transportation policies in Peru

An important institutional weakness of this sector, (diagnosis done by the **Ministry of Transportation and Communications MTC**), is centralistic nature of the system mostly because the Regional Institutions of transportation largely depend on the functions and administrative ability of the MTC, which leads to the malfunctioning of the planning and administration of the service itself. On the other hand the regulating entity that oversees these matters is considered to be rather weak.

Within this context the institutional redesign has included a **gradual process that would transfer the competency and resources of the service as a whole** to the regions from the central government to the regional and local governments; this transference process includes the ranking of the various means of transportation.



At an operative level the transportation network will continue to be under the control of “Provias Nacional” (National Roads) from the MTC, within the local networks “Provias Departamental” (Departmental Roads) from the MTC would be in charge, both of these entities would provide support and coordination to the regional governments.

Another aspect of great importance that needs which needs to be described a bit further is “**lower-scale transportation**” (which includes an array of methods of transportation such as mopeds, motorcycles, etc.), such a sector has been affected by the lack of regulations within urban areas, for that reason it has increased in size, partially because of the constant growth of the cities as well, the additional lack of accessible prices in rural areas and the enormous percentage of unemployed people, most of whom have very limited resources and could not invest into better forms of transportation.

Based on the description of the main programs used to diversify transportation and the interpretation of certain official documents, it could be said that the main elements of the transportation policies include the following:

1. The **administration of the transportation assets**, specially assets related to constructed highways; which also includes the rehabilitation and maintenance of roads and highways, as well as the constant and on-growing integration of rural roads which need to be connected to local markets and the subsequent creation of regional networks through the connection of the primary network to lower-rank roads.
2. The **development and consolidation of access to certain rural areas**, especially through rural roads projects. This axel is the only one focused on greater investment towards critically impoverished zones, based on the reasoning the better access may be the best way to surpass poverty.
3. The **improvement of urban transportation**, especially in Lima, through the project that is based on the creation of a massive system of transportation in Lima.
4. The development of an approach that would **regulate the activities of the private sector**. Through a regulating body that would help to provide assistance to the transportation concessions and services.

Strategies to improve the transportation policies

Some of the elements that require further attention include:

It includes the definition of stable mechanisms of **participation of civil society** within the formulation and follow-up of certain sectarian policies. Currently there are not any formal mechanisms specifically designed to work with the transportation sector that would allow at the same time to have a more extensive participation of the civil society, this would in turn help to have greater discussion and development about the currently applicable policies.

There is also an extensive discussion about the **requirements of the transportation institutions** and their relationship with other sectors. It is clear that there are certain problems related with financial, social and environmental sustainability, in connection with the transportation sector, in that regard it is necessary to develop mid-term and long-term strategies to confront such problems and to develop certain institutional guidelines.

The **development of an integral strategy based on transportation safety**. The topic of transportation safety has been analyzed from a traditional point of view and it has been considered an undesired sub-product of the transportation industry, but it is necessary to reinforce the institutionalism of the industry to limit this risk, the objective should be to lower the negative aspect that it poses against the physical safety of people, a problem that has spread a lot and it has affected the country socially and economically.

It is also necessary the **establishing of priorities** regarding state investments and the definition of guidelines to promote the private sector. These topics are linked to the financial sustainability of the sector. The excessive dependency with the foreign debt to acquire investments funds, the limitations regarding immediate profiting in connection to the investments made by the state, as well as the need for greater participation from the private sector all of these topics seem to be at the center of the problem.





There is also the need for greater **definition of mechanisms to internalize the costs** of the terrestrial transportation system, especially in connection to the poorest sections of the country. Even though there seems to be a general consensus about the need that the system has to cover its own expenses (social, environmental and financial responsibilities), this topic is particularly different because of social equity and because of the existence of various degrees of formality within the sector. It is also necessary to define better policies which would help to confront these problems in a frank a direct manner and the establishing of priorities at short, mid and long term.

Additionally, there is also the need for greater **definition of the role that aquatic transportation and railroads have**, which includes defining the autonomy of such resources as internal systems based on various modes of transportation.

Finally, there is also the need for greater **promotion** of the role that **vehicles of human traction and other non-motorized vehicles may have**; especially in small towns and in rural areas. The development of a strategy that would provide **institutional strengthening** which would include at the same time the matters related to transportation and intermediate-technology services within regional governments and municipalities, with the complete participation of Provincial-Transportation Services and the regional governments themselves.

Summary and conclusions

The three cases researched have demonstrated that there is a great deal of interest expressed by the key players of the transportation system, most of whom acknowledge that the support to transportation would help to reduce poverty, the lack of information in this regard has made it difficult to provide more specific information which was unable within the amount of time utilized for this particular research.

The entities that have tried to propose these transportation policies are directed by the internal initiatives to unite and to open up the existing markets, but it is clear that there are very few initiatives that would help to connect some of the most remote parts of the country, while working in accordance to the commercial parameters of those that are affected the most and the exploitation of the natural resources all of these matters continue to be some of the main indicators that could be applied when the actual implementation of more infrastructure is started. The decentralization of responsibilities and the privatization of services are based on the support provided by the current transportation norms. The State therefore has become a regulating entity (an observer).

It has been assumed the accessibility and mobility of the population is guaranteed by private initiatives, and when it comes to the rural area it is fact considered that the needs of the transportation sector are actually satisfied in a sufficient manner by the families themselves. There have not been any studies made about the changes that have occurred in the last few years, which includes that some of the traditional methods of transportation have been changed completely in the rural area, where most of the transportation in such areas depended on beast of burden, there are now more vehicles available which now arrive to more places, all of which ahs also created new needs and opportunities, and the subsequent negative and positives aspects whereof.

Poverty in Latin American counties is being reduced in a more slowly manner than expected and limits the possibilities of achieving the goals of the millennium. Some of the main causes for this may be the low levels of investments provided to projects and actions that would help benefit some of the most isolated sectors. In general terms the strategies applied towards the Reduction of Poverty have proposed economic growth based on the support of those who have a certain chase for development, that is to say those who may have access to some sort of resource, with the hope that this may affect groups that are currently curt off from society.

It has also been determined that the aquatic methods and the railroads have been significantly abandoned by the national policies of investment, given the fact that these forms of transportation are widely used by the inhabitants of rural areas within the researched countries.

There are not any formal channels of the governments of these countries that would gather information and opinions of those who are affected the most by the lack of transportation means. It has become necessary to create spaces to enforce the necessary policies and to create an adequate response that would solve the needs of the people.



Guidelines to monitor the transportation policies and the effect that they may have in the strategies needed to reduce poverty

1. The policies and strategies of the transportation sector must explicitly establish the principles and the general approach in the fight against poverty, in accordance with the Strategies for the Reduction of Poverty in each country.
2. The policies and strategies of the transportation sector must be coordinated and planned together with the other sectors of the government.
3. The policies of the transportation sector must promote an approach that would facilitate greater access and connection with the key players of the Transportation's system (holders, providers, and regulating entities) to generate greater synergy towards the objectives that the various parties have in common and it would also facilitate the dialogue between the members of the sector.
4. The policy of the transportation sector must provide greater importance to the means of transportation used by some of the poorest people, while promoting the usage of methods and forms of technology appropriate enough for these fragmented parts of society.
5. The transportation policy must include the principal the accessibility provided to the population is an important function to improve the opportunities of the people in general, and it must be in connection with the guidelines and regulations of development.
6. The policy of the transportation sector must provide a regulatory structure which would protect the interests of the impoverished while reducing certain external factors which may cause their condition.
7. Among the transportation services, the development of additional infrastructure must be clearly defined, within urban and rural areas.
8. There must also be a long-term plan for investments made in rural and urban infrastructures, with a description of their sources for funding and for the sustainable maintenance thereof.
9. The norms must also take into consideration the various needs of the different groups of society, specially the needs of women, the elderly and handicapped people; this includes a plan that would help strengthen them as well.
10. Intermediate transportation systems must also be implemented within urban areas and their surroundings, this includes an adequate investigation of new forms of technology, while assessing a renewed value towards the customs, technical possibilities and needs of the people affected the most by extreme levels of poverty.