

Identifying and Determining the Value of the Assets of the Rural Poor

A Pilot Research in Peru, in the context of the Puno-Cusco Corridor rural development project

Olga Lucía Molano L.¹
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Abstract

To assess the poverty of peasant populations that have significant institutional, material and cultural assets, it is important to go beyond an analysis of their shortfalls, their unsatisfied basic needs or their monetary income. This is especially true when these populations, like those in the highlands of Peru, have a high degree of organization and their own clearly distinctive characteristics.

This pilot research has focused on improving such assessments and understanding the peasants' own strategies for overcoming poverty, by analyzing the effects of a public investment program that involves some 28,000 peasant families in the area of the Sacred Valley of the Urubamba River and Lake Titicaca in what is known as Puno-Cusco Corridor.

The main resources for this research were the testimonials of peasant families and organizations, project databases, and in-depth interviews with 199 peasant men and women by 10 young local researchers who know the area, the language (Quechua and/or Aymara) and the local culture.

This article is based on the book in which the results of the pilot study² were published in November 2005.

Key words: Rural Women, Campesino, Peasant Communities, Business Plans, Business Profiles, Assets, Determining Value, Access to Markets, Southern Highlands of Peru.

¹ The author has a Master's degree in Cultural Management and Local Development from the Universidad de Barcelona, Spain.
Email: olgalucia@molanolara.com

² "Esta casa es con plata de cuyes, Identificación y valoración de Activos de los pobres rurales," Olga Lucía Molano L., Proyecto Corredor Puno Cusco, Editorial Bartolomé de las Casas, Cusco, 2005. New edition May 2006.

Introduction

Darío Pulgar

Adviser on development issues for Canadian cooperation in Ecuador

If the international community and multilateral financing agencies want to give new impetus to efforts to address the poverty in which millions of men and women live in rural Latin America, they should take note of the pioneering work done in Peru by Olga Lucia Molano and a group of local researchers. With support from the International Development Research Centre (IDRC) of Canada, these researchers have sought to identify and determine the value of the accumulation of assets of the poor in a depressed area of the Peruvian highlands. Beginning with the intervention strategy of a project sponsored by the International Fund for Agricultural Development (IFAD), the researchers took advantage of certain conditions that facilitated this initial study of an issue that, while more or less accepted, is still far from being considered a cornerstone in the fight against poverty.

This initial study of the value of the assets of the poor was productive and will broaden understanding of this approach by demonstrating that peasant men and women can identify their assets and determine their value before and after receiving financial support from a development project. The interviewees were also able to explain certain changes in their assets that were due to interventions that went beyond the direct subsidy provided by the development project.

The study's conclusions should lead to deeper reflection when it comes to designing new development projects. First, it may be necessary to give up, perhaps forever, the reiterative listing of shortfalls and needs, replacing this useless exercise with asset mapping by the "beneficiaries" themselves. Some progress has been made in this area in recent years, curiously in industrialized countries such as United States and Canada — in the former within the framework of urban poverty, and in the latter in an effort to spur development in rural areas that received little or no attention from the government. Second, it may be crucial to consider direct transfers to be the most appropriate mechanism for transferring real power to participants in development projects so they can control their own destiny. Here, too, progress has been made with the implementation of programs and projects involving conditioned cash transfers in the areas of health, education and social welfare. Third, the development of a sense of citizenship is primordial in the accumulation of assets and their subsequent protection. Without this prerequisite, it is very difficult for these people's physical and financial assets to be recorded, protected and traded. As the study shows, this intangible asset ended up being of great value to the interviewees.

This is a first effort, and the researchers acknowledge some of the inherent limitations in terms of not having used a random procedure to select the study sample and the willingness of the development project's coordinators to avoid including cases of more or less apparent failures. The inclusion of a large number of tangible and intangible assets made it impossible to do an in-depth exploration of some that would merit a more longitudinal study, such as the assistance provided through a savings program for rural women. The lack of a base line beyond the information provided in business plans and business profiles conspires against the possibility of drawing more general conclusions applicable to regions and sub-regions and the impact of the localization of the results. The researchers acknowledge that the attribution problem is greater in physical asset gain and in intangible assets, which have been measured according to the participants' perception of their well-being. They also add a methodological problem caused by the possibility of dual accounting. Many of these problems can be solved and indicators can be found for many of the working hypotheses, or it can be assumed that intangible assets can be measured by the internal and external perceptions that accompany certain actions.

It is auspicious that a study with few available resources and an imposed time limit has included examination of women's savings. This aspect, which is innovative in Latin America but which

has been widely proven in the United States through so-called Individual Development Accounts, merits future, in-depth examination by the researchers. Evaluation of this type of intervention in the United States has produced a number of instruments that, adapted, would allow completion of the study of the development of financial assets and the associated importance of training in credit and the management of financial resources for the rural poor.

This study's contribution goes far beyond data and personal testimonials, opening up a broad range of future considerations and research topics. The conclusions reinforce the need for self-identification of assets, as well as an institutional analysis of limitations on asset acquisition and policies that hinder or encourage this approach. It will also be necessary to analyze how the assets that the poor acquire or value can be protected, and design policies and interventions that ensure the rural poor that they will not lose what they have gained.

Introduction

For the past five years in the corridor extending from Cusco to Puno in southeastern Peru, the Peruvian government through the Cooperation Fund for Social Development (*Fondo de Cooperación para el Desarrollo Social*, FONCODES) and the International Fund for Agricultural Development (IFAD) have been carrying out a rural development project in which the main characteristic is the co-financing, through cash transfers, of initiatives and strategies of peasant organizations and communities to enable them to contract the technical assistance services they need. The objective of this approach is to create an environment that will help them gain access to new rights, goods and services.

The corridor project³ works with associations of small farmers, microentrepreneurs and peasant communities (*comunidades campesinas*) in 141 districts in 17 provinces in the Cusco and Puno regions.⁴ It involves two components: reinforcement of markets for non-financial services (for example, technical assistance, market information, development of intellectual property, improvements in the production of goods and services, establishing links with intermediate cities, etc.) and financial services.

The first component is implemented through contests in which the peasants' best venture ideas are chosen. Once the ideas are selected and co-financing is identified, the project transfers cash resources to the peasant organization's bank account in the formal financial sector so the organization can freely contract, in the market, the technical assistance services (production, marketing, legal, etc.) it needs for its business.

The project finances only access to new know-how; it does not fund equipment or supplies. At the same time, it seeks to create an environment conducive to human and business development through small infrastructure projects, access to identity documents, co-financed "internships" that enable them to meet other producers and learn about their businesses, etc.

The second component is aimed exclusively at organized groups of women; its objective is to encourage savings through the opening of accounts in the formal financial system.⁵

As a result of the activities of the corridor project, which began in 2001, there have been significant changes in the peasants' self-esteem and organization, as well as the availability of goods, equipment and money that play a role in their own strategies for combating poverty.

The need to understand these strategies and the definition, identification and measurement of changes in their assets led to the proposal for this pilot study⁶ and the agreement for joint sponsorship by the International Fund for Agricultural Development (IFAD), the International Development Research Centre (IDRC) and the Peruvian government through the corridor project.

Assets, an approach to analyzing the anti-poverty strategies of the rural poor

In analyzing mechanisms and strategies for overcoming rural poverty, studies and research generally begin by examining the shortfalls, limitations and needs of the poor, rather than their potential and their cultural heritage and material, organizational, institutional and natural resources. In other words, these studies are based on the liabilities rather than the assets of the poor.

The concept of *assets* originated in accounting and refers to *the goods and rights that have monetary value and that are the property of an enterprise, institution or individual, and which are reflected in its accounting*. In business administration, this concept is enhanced with theories

³ <http://www.corredorpuno-cusco.org>

⁴ Eighty-two percent of the project's target group is considered *poor* or *very poor* families.

⁵ Altogether, more than 3,400 savings accounts have been opened.

⁶ Prepared by researcher Claudia Ranaboldo based on joint work with the Corridor team.

about resources and capacities that “take into account the efficiency acquired by the enterprise based on the resources and capacities that it controls.”⁷

Although there is no universally accepted definition of the term “assets,” it was in the 1960s, with the Nobel Prize in economics awarded to T. Schultze, that the term began to be used in social projects, initially as “stock of assets.” The term later came into use among certain economists⁸ and international institutions. In Peru, it was used particularly by Hernando de Soto⁹ and Javier Escobal.¹⁰

The concept used in this study took into account these conceptual advances, as well as those considered by IFAD in the design of the Assets Project in Colombia, which established that “the accumulation of assets enables the poor to facilitate productive investment by families and groups; increase their capacity for personal negotiation, social influence, political participation, self-esteem and social interrelationship; and better protect themselves from risks. ...”¹¹

In this pilot study, *assets* are defined as the material (financial, physical, natural) and immaterial (cultural, relational, knowledge, skills) resources of a person or group of people, which, when increased and combined, can improve their quality of life and their family’s welfare.

A person’s assets consist of heterogeneous tangible and intangible resources that are used by combining them in various ways. These resources come from the accumulation of goods, knowledge, skills and learnings, which can constitute competitive advantages in strategies for combating poverty.

Tangible assets, such as physical and financial resources (housing, lands, animals, machinery, income, etc.), are usually given a monetary value because they have a market price.

Intangible assets, such as human and social capital (knowledge, capacities, health, social relationships, family ties, self-esteem, cultural identity, natural resources, etc.) are usually identified, but are not quantified or given a value.

What differentiates the poor from the rich is that the assets of the rich are fungible, fractionable, transferable and protected by law. They are more profitable because they are of higher quality or because the market pays a higher price for their use. Although the poor have many assets, they are not easily sold or fractioned, and they are not legalized (they are not formalized or registered; for example: land titling, legal rights to housing, formalization of small businesses, etc.). Any compensation that can be obtained for their use is small. Projects such as the corridor project attempt to help develop markets in which the assets of the poor can be traded;¹² they do so by increasing the quantity and quality of assets and acting on the markets in which the value of those assets is determined.

Placing a value on peasants’ assets means knowing the market value of each one and/or giving it a value based on explicit assumptions. Questions such as how much is the increased self-esteem of a woman who now has a national identity document worth, given that the woman’s well-being increases as her self-esteem increases, or what is the value of the recovery of traditional textile designs that are related to the cultural identity of a family, social group or geographic territory require answers expressed in monetary value. Economic tools such as shadow prices and prices based on ordinal values were used to answer these questions.

⁷ Pilar Vargas Montoya, “Características de los Activos Intangibles,” Universidad de Rioja, 2000.

⁸ In various economics texts, the idea of public investment projects is linked to the term “durable assets” or “physical assets,” such as machinery, buildings, dams, etc.

⁹ Hernando de Soto, *The Mystery of Capital*, 2000.

¹⁰ Javier Escobal, Jaime Saavedra, Máximo Toro, Los Activos de los pobres en el Perú, Working paper No. 26, GRADE, Lima, 1998.

¹¹ FIDA, ACTIVOS Colombia Project document, *Enfoque del Proyecto*, 2005.

¹² Hernando de Soto explained this phenomenon in the global context in his book, *The Mystery of Capital*.

This exercise in defining value is by no mean an effort to reduce a person's intangible assets to merchandise, ignoring their intangible value (such as self-esteem or cultural identity, for example).

The purpose of identifying and expressing in monetary terms the variations in peasants' assets was to demonstrate their wealth and potential and understand how they develop strategies for combating poverty by combining these assets.

Determining these values means multiplying the quantity of each tangible and intangible asset by its price, whether or not it is a market price. The sum of these values indicates the level of relative wealth, and the structure of the assets shows their potential.¹³

Objectives and working hypotheses

The overall objective of the pilot study was to *identify the human, social, financial, physical and natural assets of the poor in the area of the Corridor and determine the value of the changes observed, involving young local actors in the research.*¹⁴

The study did not attempt to evaluate the impacts or goals of the Corridor as a project; rather, it aimed to measure progress in the strategies of a sample of users through recent changes in their assets as a result of new activities co-financed by the project and other public and private investment in the area.¹⁵

Based on this premise, five categories of assets were identified: financial, physical, human, social and natural.

The indicators that were designed to measure changes in assets were value-based, quantifiable and/or qualitative. The value-based indicators applied to financial and physical assets. The quantifiable variables were related to all Asset categories that could be expressed in quantities, and the qualitative indicators mainly applied to human and social assets.

The chart in Appendix 1 illustrates the relationship between each asset category, its corresponding working hypothesis and the indicators for measuring variations in each asset.

Methodology

The methodology combined the use of quantitative and qualitative techniques, taking the following aspects into account:

- The planned time frame for the study (six months) in the two intervention areas of the Corridor.
- The budget allocated for the study (US\$26,000).
- It had to respond to the field characteristics; it therefore was not designed as an in-depth examination of theoretical considerations, but as a practical reflection based on the actual situation.
- A proposal had to be developed to list, quantify and determine the value of the assets of the rural poor, without attempting to turn this into a universal proposal for determining asset values.
- It had to contribute to local capacity building.

¹³ "In economic science, methods for determining the value of intangibles seek to discover the importance that each person places on the functions performed by his or her surroundings." Elsa Galarza, *Valoración económica de servicios ambientales*, Universidad del Pacífico, Lima, 2005, pp. 15-23.

¹⁴ Ranaboldo, Claudia. "Propuesta de Proyecto Piloto," September 2004.

¹⁵ This research may also be helpful to projects in following up and understanding the many strategies and means adopted by peasants in their efforts to get out of poverty.

The methodology was designed to be appropriate for the local actors. This implied the use of simple concepts and those that were strictly necessary, as well as the discussion and validation of these concepts by the Corridor team and the Project users through various workshops and field interviews.

For local capacity building, 10 people from the various project offices were trained to serve as local researchers. These people had to know the area, the peasant organizations and their businesses, and the local language (Quechua and/or Aymara).

The methodological process was as follows:

- **Unit of analysis:**

In most studies, the unit of analysis is the family. In this case, because the study was going to work with project users who are registered with organizations as individuals, rather than families, the study worked with *persons in peasant communities and associations of peasants and small farmers* who are the Corridor Project's users and target group. One advantage of working with "persons" as the unit of analysis was that it enabled the researchers to do a breakdown of assets by gender and age.

So as not to open itself up to multiple variables in these peasant communities and associations, the study focused on the variables affected by the Corridor, such as the effects attributable to the main instruments that are used: contracts with organizations (business plans) and community agreements (business profiles and organized groups of women), as well as effects on their surroundings.

- **Selection of the work area**

The study was carried out in the two areas of the Corridor Project: Puno and Cusco, specifically in seven provinces (Acomayo, Anta, Calca, Canas, Canchas, Cusco and Urubamba) and 14 districts in Cusco, and four provinces (Azángaro, Lampa, Melgar and Puno) and 12 districts in Puno.

- **Sample selection**

The Corridor team selected 13 cases from the local office in Juliaca, 13 from the Sicuani office and nine from the Urubamba office, which involved 14 communities and 37 peasant organizations that were participating in 17 Business Plans (BPs), 19 Business Profiles (BPFs), 10 Organized Groups of Women (GWs), one Business Facilitating Investment and the personal capitalization account program. The selected BPs and BPFs included various Corridor actions, such as internships, commercial promotion in markets, advisory services, access to information ("The Corridor Answers") and the contracting of technical assistance.

Of these cases, the sample size was 50 percent in organizations with up to 15 members and 25 percent in organizations of more than 15 members.

Because of the time frame and size of the pilot study, as well as the fact that the work was being done with local Project personnel who had not previously participated in research, the decision was made not to work with control groups or samples.

The cases selected by the Corridor team were biased toward those with large and medium-scale asset changes (successful); the sample did not include cases without considerable Asset changes (unsuccessful).

- **In-depth interviews**

A total of 199 people were interviewed (109 women and 90 men, with an average age of 38), of whom 156 fell into the category of “poor peasant” according to the Corridor’s criteria and 43 into the category of “small farmer.”

Of the 199 interviewees, 126 were grassroots members of their organizations (associations or peasant communities) and the other 33 held leadership positions (president, treasurer, secretary, board member and two internal auditors of organizations).

The interviews were done using a guide, which enabled the interviewers to gather information for the five asset categories using open and closed questions. The structure of the guide gave the local researchers the freedom to do relaxed, in-depth interviews.

The design of the interview guide, the work done ahead of time with the local researchers and the fact that they were part of the Corridor team were key factors that enabled the study to capture processes that were not evident and would not have come to light if the work had been done with surveys and with people from outside who were not familiar with the local culture.

- **Analysis and processing of the information**

Determining Asset Value

After listing and quantifying the variation in the sample subjects’ assets, the value of each asset was determined so as to calculate the total value. This was done by referring to market prices that emerged from the interviews and field checks. When these prices were not available, they were estimated using techniques to determine shadow prices. For cases in which a shadow price could not be estimated, prices based on ordinal values were used¹⁶ (Appendix 2).

The variation in each asset by its respective price determined the asset’s total value. This estimate enabled the researchers to determine the value of the assets of the rural poor, their structure and distribution by gender (to determine the values of the changes that were most important for women and for men), etc.

Analysis of these information made it possible to draw a series of inferences about how to combat poverty by modifying not only the quantity of resources in the hands of people in rural areas, but also their prices and values, acting not only on the supply of resources, but also on the markets that value peasants’ assets.

Testimonial contest

Another instrument for gathering information was the Testimonial Contest, which was designed as a way to compensate farmers and artisans for the time they took from their businesses and daily activities to respond to the researchers’ questions, as well as a way of better understanding strategies and personal stories of change.

The contest rules and judging criteria were designed by the Corridor team, based on their four years of experience with local contests. They were publicized to the peasant communities and associations through the project’s three local offices.

¹⁶ Because the study was not meant to be a scientific model for determining Asset value using shadow prices and prices based on ordinal values, it was designed to be practical and simple so it would be comprehensible and so the proposed tools could be used by anyone working in development projects.

The contest rules in the individual categories (men, women and youth) and group categories (by community or association) were publicized at events and through a flier that was designed to be pedagogical and easily understood. The awards for the best testimonials in the two categories were presented in Cusco at the first workshop for disseminating the results of the pilot study (November 2005). The awards included cash, the publication of the testimonials and an internship that was designed in conjunction with the Corridor project.

Results

When Andean peasants are asked about the quantity and value of their assets, their testimonials reveal the impressive vitality of the changes and the combining of resources and roles. Peasants are reasonably discreet about their possessions, but in an atmosphere of trust they recount their progress and the changes they have experienced, explaining, for example, how changes in their businesses — because of access to a new market — generated monetary income and gave them new know-how, more self-confidence and pride in their knowledge, and describing variations in their tangible and intangible assets. All of the 199 interviewees reflected this dynamic of change to varying degrees.

The following is a summary of the results of the research:¹⁷

In asset variations

- Although the supply of assets varied greatly among the interviewees, there was only moderate variation in their prices. For example, the average interviewee's physical assets included a house, livestock and/or machinery, tools, land. Financial assets included an individual or group bank account (almost exclusively in the case of women, because of the project's activities), cash balances and notable increases in income, especially among those who sold livestock and handcrafts. Average human assets included low or moderate levels of formal education, but many days of training or working visits to other farmers, as well as notable linguistic assets, which, when given an appropriate value, had a significant effect on the real measurement of poverty or wealth. Natural assets were not particularly significant, and their variation was difficult to measure. This study was limited to determining the value of changes in access to and quality of water. The greatest asset in this region may be its organizational capacity. The study subjects belong to one or more organizations that help them implement their individual and family strategies, contributing to the society as a whole and helping to build capacities for management and democratic participation that have a significant effect on civic life and business enterprises. A variation in the perception of self-esteem and social and community recognition, as well as feeling of greater competency when going to markets, was noted by nearly all the interviewees and was given a monetary value.
- One of the most notable features of the interviews and testimonials was the picture that emerged of a rural society undergoing rapid change, with increasing interaction with the urban world and markets that is characteristic of a highly dynamic commercial area such as the Puno-Cusco Corridor. There has been a significant increase in the flow of people, capital, information and new services. This helps to explain the significant variation in assets that was recorded, which is partly due to the effect of government actions through projects such as the Corridor.

¹⁷ See the final report of the pilot study, pages 17 to 33, which describes in detail the results by hypothesis and Asset category. The book containing the final report can be requested from the Corridor Project <http://www.corredorpuno-cusco.org> or IDRC www.idrc.ca.

- The interviewees explained that the greatest changes and multiplier effects (involving assets associated with these changes) stem from their communities' access to roads and vehicles (access to markets, lower costs, incorporation of new products and know-how, more visits from relatives and buyers), the development of communications and information services (in towns and intermediate cities) and the empowerment that they have gained because the Corridor has facilitated access to resources that have enabled them to choose and contract services, participate in internships, go to markets, and win cash and other awards that value their Assets as a whole and co-finance their pro-development, anti-poverty strategies.
- These asset variations are significant — in some cases surprising — and occur as a sequence of gradual processes that could be defined as the result of the “social ability to combine different factors and different types of capital.”¹⁸
- The study results confirm that peasants know how to use the resources placed at their disposal by projects such as the Corridor to increase their various assets in accordance with their varied strategies and supplies of resources.
- In the case of women, the increase in income and access to the formal financial system, where they have been able to save, appear to have had a great impact on monetary balances and to have resulted in positive direct and indirect changes in human and social assets, mainly self-esteem, improved family relationships, political and community participation, and the ability to express themselves and defend their rights. These results may indicate that the project actions targeting women have generated significant changes in women's assets and helped decrease the gender inequality gap.
- The information provided by the banks where these accounts were opened shows that peasant women have a great savings capacity. Despite their low cash income, they generate “excess for saving.” The savings account balances of the women who were interviewed belie the myth that rural areas lack a “culture of saving.”
- The support provided by the Corridor through bringing people into the formal financial system, providing training to help them understand the bank's products and services (savings or checking account statements, counter services, automatic tellers, debit cards, etc.) and encouraging savings through cash incentives has resulted in accounts with balances ranging from 51 to 1,260 soles, with an average of between eight and 67 transactions (withdrawals and deposits) a year.
- According to the interviewees, the savings are used for expenses and unexpected costs associated with children's education, family health, the purchase of inputs for production, a cushion for old age,¹⁹ etc.
- It appears that one effect of the technical assistance contracted by the peasant organizations to improve their businesses (BP/BPF) was a physical assets gain through the purchase or enhancement of existing assets such as animals, infrastructure in the form of fish farm tanks, corrals, barns, wells, pigsties, troughs, reservoirs, looms, home improvements, etc.
- This physical variation may be accentuated by the increase in net income stemming from the sale of higher-quality products and access to new markets.
- Resources invested in these assets come from various sources: the business that received support from the Corridor, savings from work done in other regions, remittances sent by

¹⁸ Human Development Report, Peru 2002, *Aprovechando las potencialidades*, UNDP, Peru.

¹⁹ “I became convinced that saving will help me in my old age. I'll be able to have a little money to use in an emergency.” Ms. Petronila Miranda Viza, *Las Nieves Association of Handcraft Producers*.

relatives who have emigrated, loans from relatives and in-kind donations from other public and private entities.

- Capitalization of physical assets is one of the most common savings methods in rural areas. Because people have little access to formal financial services, including credit, savings are invested in goods that enhance production activities or can be sold in case of emergency, such as livestock.
- Human and social assets are extremely valuable intangibles because they are unique and difficult for others to imitate; they are acquired over time, through experience and learning. The various strategies used by the Corridor, along with recognition of and investment in building local institutions such as peasant communities and various forms of peasant organization, appear to have a significant direct or indirect impact on asset gain, such as greater know-how through training; better health through improved family nutrition; reinforcement of opportunities for using the local language; social inclusion through recognition of an individual by his or her family, community or organization; the exercising of citizenship through the acquisition of identity documents and legal status; and increased self-esteem that enables people to speak in public, defend their rights and keep their culture alive through such elements as clothing and language.

Determining asset values

- The results of the study show that the 199 users in the sample, who were considered “poor peasants and small-scale farmers,” generated variations in 28 Financial, Human, Social, Physical and Natural Assets for a value of US\$476,876 (see Appendix 1). This occurred over a heterogeneous period, depending on the person and the amount of time he or she had benefited from government investment through the Corridor project, but at the time of the interview most referred to the period covered by the business plan (annual).²⁰
- These asset variations are the result of the human capacities of the interviewees and their families and organizations and their ability to take advantage of externalities and the direct assistance offered by government projects such as the Corridor and other public and private projects in the region, as well as increasing access to and development of local markets.
- US\$476,000 in asset variation for the users interviewed is equivalent to an average of US\$2,396 per person, a figure far higher than the US\$114 per user that the Corridor invests (in the selected sample). Although this has certainly been positively influenced by other investments²¹ in the area, these data show that well-targeted public investment leverages the profitability of private Assets, clearly contributing to poverty reduction.
- This final average figure (US\$2,396 per person) indicates that peasants remain poor (the total value calculated is less than US\$200 per person per month), but significantly less so than if their income were measured exclusively by traditional methods.
- If asset changes (mainly variations in net income from sales and physical assets) are measured using only market prices, the total accrual value in the hands of the peasants is US\$386,000 (US\$1,941 per person per year).

When the value of other assets — such as intangible human and social assets — are included, using shadow prices to calculate them, the aggregate value increases by more than US\$27,000.

²⁰ In more precise terms, the variation in certain assets could have required two years or more. Others, such as obtaining identity documents, were one-time affairs.

²¹ In the latter, investment by relatives and migrants appears to play a notable role, although this does not appear clearly because of the reserve and discretion of our interviewees.

- A project's investment option to value one particular asset or another has different impact implications depending on the user's gender. For example, the Corridor Project's option to reserve subsidies and benefits from access to savings accounts exclusively for women allowed a significant transfer of resources to them, creating new capacities. Without this strategy, the total Asset variations might have resulted in women gaining less than men, increasing the gender gap (see Appendix 2).

Conclusions

- Looking at the peasant world from the standpoint of the assets held by people and their organizations, and not just the standpoint of their poverty, leads to a better understanding of underlying strategies and the real role played in these by activities such as agriculture. This study found agricultural activities to be marginal among the subjects' interests, because of the scarcity of resources and the low value of peasant crops in markets. Agriculture appears mainly as a way of providing food for the family, while businesses related to livestock stimulate new investment, such as sheds, financed from outside the farm. The same is true of handcrafts or small businesses related to tourism. The assets approach is especially useful in a context in which people may have a highly varied supply of resources (for example, many natural assets and few human assets, or vice versa). Intervention strategies, therefore, should be adapted accordingly.
- This study showed that it is possible to identify and record changes in assets, organize them by category, quantify them, obtain reliable and verifiable information about them and do a breakdown by gender so as to perceive productive, social and business strategies, as well as strategies for valuing the residential and migratory space of rural men and women.
- The results of the study showed that financial and physical assets (income from sales of goods and services and savings accounts, as well as residential assets, equipment, livestock and other resources) are the most important in the overall value structure of their goods. But they also showed that intangible assets (that do not have formal values) are very sensitive to price fluctuations and that strongly valuing these assets has an effect on the families' overall wealth or poverty²².
- In other words, an increase in intangibles such as self-esteem, citizenship, etc., can modify the situation of poverty and lead to significant changes in businesses and the acquisition of physical assets; one example is the valuing of cultural assets to generate new activities such as experiential tourism.
- This suggests that investments such as those of the Corridor are economically and socially profitable (see changes in social and human assets), and that this particular methodology for co-financing people's initiatives, empowering them through resources generated by the users themselves, creates a generally positive asset change among the rural poor.
- One noteworthy factor is the quantity and variety of assets and their wise distribution so as to minimize risks or maximize opportunities. This means that decisions about investment and public policies must focus on externalities conducive to the development of several assets and their markets (identity documents, small infrastructure projects, access to information and communication media, etc.), rather than on a single good or service.

²² Determining the value of intangibles increases the stock of assets, not only by adding value that was not previously considered, but because these assets result in profits (flows) that translate into greater possibilities for development.

- The most significant changes for women were in financial²³ and social assets, such as income generation and the possibility of having a savings account in the formal financial system, self-esteem, being recognized by the community and the family, their ability to express themselves and defend their rights, access to positions of power, and the ability to offer their know-how and skills in the technical assistance market.
- Analysis of the results by sub-regions shows no significant differences among the three areas of the Corridor, although handcrafts or livestock raising may be more predominant in some than in others. The peasants are generally poor, but the quantity, structure and value of their assets seem to take them rapidly out of poverty, with changes in the quantity or prices of the assets²⁴.
- It appears — although this will have to be verified in a few years — that in this region, the countryside (where people still speak Quechua and communities are remote) is becoming more and more similar to the rest of society (urban or peripheral urban), especially with regard to the increasing value of housing and willingness to invest in housing, as well as the diversification of activities and the increase in the sale of services (fewer and fewer primary agricultural products).
- If the status of poverty depends on the quantity and quality of assets that the “poor” have and their market price, this research appears to show that public investment products, such as the Corridor, can help change this status through i) new approaches based on people’s capacities and potential — their assets rather than their needs; ii) strategies that generate positive variations in the material and immaterial equity of the poor (money for contracting technical assistance, externalized information for access to markets, etc.) and determine the value and prices of these assets in their respective markets .

Final reflections

A detailed investigation of asset variations among peasants in the Andean highlands requires a support structure and long time frames that are not always available to researchers. Doing this with a sample of 199 people belonging to more than 37 different organizations and territories required institutional field support. For this study, this was made possible by support from the Peruvian government and its Corridor Project. The price paid for this was a bias toward successful cases, as it was difficult for the project staff to include in the sample cases of failures or irrelevant Asset variations.

As a result, the study and its results are biased toward fairly successful cases.²⁵ Nevertheless, in many cases the results can be seen in various families in the area, and it does not seem an exaggeration to say that the majority of the more than 28,000 families assisted by public investment in the past five years have experienced Asset gains.

Another defect of the study was the difficulty of determining how many of these effects can be directly attributed to the Corridor Project. The effects vary greatly by Asset type; for example, this would be 100 percent in the case of access to passbook savings (financial asset), which covered 3,500 women as of May 2006. But the percentage cannot be determined in cases of

²³ Access to savings accounts exclusively for women, as a financial asset, is a net contribution of the Corridor project and constitutes a new asset that did not previously exist. The variation in savings balances and especially the variation in business income are mainly due to these women’s efforts.

²⁴ The changes in prices of the peasants’ assets involve at least two mechanisms: i) improvement in product quality (an area in which projects have an influence), and ii) markets that begin to accept and value some of the peasants’ products and services (native potatoes, homemade cheese, clothing and designs valued by increasing tourism, etc.).

²⁵ The research began with 37 cases, two of which were withdrawn because they introduced an excessive bias in certain positive results.

variations in assets such as self-esteem or access to new markets (social assets), because these areas are affected by actors other than the project, such as urban relatives, local governments, etc. In short, the project's impact is somewhat difficult to trace²⁶.

Another possible shortcoming in this analysis is the possibility of double accounting in recording Asset variations; for example, access to a new market (social asset) and the sales resulting from it (financial asset) could be registered as one asset. This may occur directly or indirectly, but it appears to have little effect on the final asset variation values, in which physical and financial assets alone counted for 80 percent. In any case, more refined calculations could improve the estimates and eliminate possible cases of double accounting, taking care to maintain assets such as self-esteem and enhanced organizational capacity beyond their possible double accounting effects on a specific business.

The criticisms and contributions that emerged during public discussion of the pilot study suggest that the analysis of rural poverty in terms of asset variation opens up a new research area that is relevant to the development of public policies. This study particularly shows that even given the limited ability to attribute the impact directly to the project, a small investment such as that of the Corridor has notable effects on peasants' assets, showing that public investment can be highly profitable²⁷.

One area that merits further study is the sequence of asset variation and the ways in which some affect others, enabling people to optimize the total variation and move out of poverty.

This study only suggests that when an organization becomes formally established, there is access to new know-how, businesses bear their first fruits and people gain access to new resources (financial and physical capital). The surprising thing is that many of these resources seem to come from relatives outside the community.

Finally, the study raises the question of whether it makes sense to continue implementing rural anti-poverty projects designed by components, when the goal is to achieve a variation in assets. In future designs, it may be more useful to increase the quantity, quality and values of the peasants' series of assets rather than propose a certain type of thematic and/or product development.

Policies and projects aimed at overcoming poverty should complement the strategies that project users are already implementing and enable them to expand these strategies and make them more profitable, rather than replacing them with other strategies that may appear more profitable or effective when viewed from outside, but which generally fail because we do not understand how these imposed strategies interact with processes that these people are already implementing.²⁸

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²⁶ To see variations and discuss which processes led to the asset gains, it would be necessary to gather complementary information about processes that have affected the individuals' strategies, homes or surroundings. For example, there may have been exogenous processes (a new road) or shocks (someone in the family became ill or a relative started sending remittances). An even more laborious task in future research will be to establish sequentialities in asset variations.

²⁷ These studies also show the usefulness of this type of instrument for project follow-up and impact evaluation. This, however, requires good evaluation design that includes base lines, control groups, etc.

²⁸ One way of looking at the issue is to ask to what degree a new proposal or project increases the aggregate value of what the poor are already doing to get out of poverty.

²⁹ Translation was done by Barbara Fraiser

resulting from the discussion of the study results at a meeting³⁰ with academics, policy makers, people involved in development projects and international cooperation agencies, and representatives of non-governmental organizations, non-profit foundations and private enterprises. These comments and contributions have been included in the text of this article.

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³⁰ This meeting was held in the IEP office in Lima on March 28, 2006, with representatives of the central, local and regional governments, universities, research centers, NGOs and foundations, private enterprise, international cooperation agencies and rural development projects.

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APPENDIX 1

Relationships of Assets, hypotheses and Asset variation indicators

General hypothesis:

Users of the Corridor have taken advantage of externalities and direct assistance offered by the Corridor, and the results will be reflected in Asset gains.

Asset	Specific Hypothesis	Measurement Parameter	Indicator	Detailed Indicator
Financial	<ul style="list-style-type: none"> ▪ Access to information and resources from the Corridor to contract technical assistance results in an increase in sales and income. 	Cash	1. Increase in income	1.1. \$ increase in sales (current sales / past sales) of BP/BPF ³¹ 1.2. \$ increase in net income (current income / past income) of BP/BPF 1.3. Number of direct beneficiaries who have increased their income 1.4. Number of indirect beneficiaries who have increased their income 1.5. Income from sale of specialized services
	<ul style="list-style-type: none"> ▪ Incentives mechanisms are useful for encouraging personal savings. ▪ Peasant women have the capacity for monetary savings. This capacity was not visible because they lacked access to savings accounts. ▪ With savings accounts, women feel prouder and have more self-confidence. In some cases this contributes to a better relationship with their husbands and facilitates their entry into new businesses. 	Bank account	2. Bank accounts	2.1. Access to financial services <u>Women's savings group</u> 2.2. Number of women with savings accounts 2.3. Annual deposit balance in savings accounts per person, as of December 31, 2004. Total contribution by saver Total Project contribution 2.4. Number of annual savings account transactions per person
Human and Social	<ul style="list-style-type: none"> ▪ The environment created by the Corridor and its instruments have a significant impact on Asset gain in areas such as know-how, self-esteem, creativity, participation in political and community life, and changes in forms of production. ▪ By focusing its efforts on the peasants' 	Education	3. Training	3.1. Number of days/person of training in internships 3.2. Number of days/person and topics of traditional training (workshops on opening accounts, money management, etc.)
		Health	4. Nutrition (health)	4.1. Number of people who have improved their diet.

³¹ Business Plan (BP), Business Profile (BPF).

	<p>legitimate, democratic institutions (e.g., their communities) through formal contracts and direct cash transfers, the Corridor is building social capital and local institutional foundations.</p> <ul style="list-style-type: none"> Women have access to new information, institutions and financial and non-financial services. 	<p>Knowledge</p> <p>Institutional foundation (political organization) and capacity for negotiation and relating to third parties.</p>	<p>5. Languages</p> <p>6. Increase in intra-family negotiating capacity</p> <p>7. Participation in political and community life</p>	<p>5. Number of languages spoken</p> <p><u>Gender indicators</u></p> <p>6.1. Access to opportunities</p> <p>6.2. Change in relationship roles</p> <p>7.1. Legal recognition of organization</p> <p>7.2. Number of community leadership positions held by women</p> <p>7.3. Increase in ability to express themselves and defend their rights</p> <p>7.4. Number and type of links with other enterprises</p>
		<p>Local knowledge</p>	<p>8. Valuing knowledge and local information</p>	<p>8.1. Number and type of external assistance contracted (men and women)</p> <p>8.2. Number of producers/artisans who sell technical assistance services</p>
		<p>Democracy</p>	<p>9. Citizenship</p>	<p>9.1. Number of people who lacked identity documents before the Corridor Project and who now have them</p> <p>9.2. Access to information</p>
		<p>Intangible equity</p>	<p>10. Self-esteem</p>	<p>10. Increase in self-esteem</p>
		<p>Creativity</p>	<p>11. Creativity</p>	<p>11.1. Number and type of new products created</p> <p>11.2. Number and type of new services created</p>
		<p>Public goods</p>	<p>12. Improved access to markets (business facilitation investments)</p>	<p>12.1. Decrease in travel time</p> <p>12.2. Number of new markets available</p> <p>12.3. Number of days/year of visits from relatives living in cities or outside country</p>
Physical	<ul style="list-style-type: none"> Rural poor assets can be increased substantially through better access to markets in intermediate and large cities. Incentives offered by the Corridor (cash for contracting technical assistance, externalized information for access to markets, etc.) mobilize private investment resources (from the peasants, their families and other sources) for acquiring assets for production. 	<p>Tangible equity</p>	<p>13. Increase in equity</p>	<p>13.1. Estimated amount and type of investment in physical assets related to the enterprise</p> <p>13.2. Number of improved homes</p> <p>13.2. Number of improved stoves</p> <p>13.4. Estimated cost of home improvement</p> <p>13.5. Estimated cost of improving stove</p>
Natural	<ul style="list-style-type: none"> Internships and the contracting of experts have led to significant changes in the management of natural resources such as water, land, the use of flora and fauna, giving value to these 	<p>Natural resources and landscape</p>	<p>14. Improvement in natural resources</p>	<p>14.1. Hectares of improved pasture</p> <p>14.2. Estimated increase in field value</p> <p>14.3. Water quality</p>

	resources and increasing the market value of family farm plots.			
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APPENDIX 2

Value of assets with market, shadow prices and prices based on ordinal values³²

The following table shows the variation in the assets of the peasants interviewed, by asset category:

³² The units of measure, quantities and market prices were obtained from interview results.

Area	Indicators	Unit of measure	Quantity	Price (S/.)	Total Value (S/.)
Financial Assets					
1. Increase in Income	1.2. \$ increase in net income				223,519
	1.5. Increase in income from sale of specialized services				21,129
2. Bank Accounts	2.1. Access to financial services As a result of the Corridor, access to Financial services:				
	a) Has improved	Persons	46	201	9,246
	b) Has changed little	Persons	22	66	1452
	Women's savings group				
	2.2. Number of women with savings account	Persons	25	100	2500
	2.3. Annual deposit balance in savings accounts, per person, as of Dec. 31, 2004				9,600
	Subtotal Financial Assets				267,446
Human Assets					
3. Training	3.1.No. of days/person of training/internships	Days/ person	371	50	18,550
	As a result of the internships/training you have received, do you feel that your skills and knowledge:				
	a) Have changed greatly	Persons	50	75	3,750
	b) Have changed little	Persons	96	25	2,400
	3.2. No. of days/person and transverse training topics	Days / person	340	30	10,200
	As a result of the transverse training that you have received, do you feel that your skills and knowledge:				
	a) Have changed greatly	Persons	32	21	672
	b) Have changed little	Persons	94	7	658
4. Nutrition	4. Number of people who have improved their diet Since you began participating in the BP/BPF, your family's diet has been:				
	a) Much better than before	Persons	45	425	19,125
	b) Slightly better than before	Persons	142	140	19,880
5. Languages	5. Number of languages spoken				
	a) Quechua	Persons	186	50	9,300
	b) Aymara	Persons	12	50	600
	c) Other	Persons	7	50	350
	Subtotal Human Assets				85,485
Social Assets					
6. Increase in capacity for intra-family negotiation	<u>Gender indicators for women</u> : 6.1. Access to opportunities As a result of the savings group, BP/BPF, do you feel that our life is:				
	a) Much better	Persons	27	100	2,700
	b) Slightly better	Persons	74	30	2,220
	6.2. Change in relationship roles As a result of the savings group, BP/BPF, do you:				
	a) Feel more support from your family in household tasks	Persons	92	100	9,200
	b) feel less support from the family	Persons	4	-100	-400
	c) participate more in family decision making	Persons	81	100	8,100

7. <i>Participation in political and community life</i>	7.1. Legal recognition of the organization Does your association have legal status, by-laws and Rules and is it registered in Public Records?				
	Yes	Persons	112	11	1,232
	7.2. Number of community and association leadership positions held by women	Community & Leadership posts	89	100	8,900
	7.3. Increase in ability to express self and defend rights As a result of the BP/BPF/savings group, do you feel:				
	a) Much more confident in expressing your opinions and defending your rights	Persons	46	100	4,600
	b) Slightly more confident in expressing your opinions and defending your rights	Persons	131	30	3,930
8. <i>Valuing general and local knowledge</i>	8.1. Organizational data Amt. of external technical Assistance contracted (men and women)	Technical Assistants	73	250.76	18,306
9. <i>Citizenship</i>	9.1. Organizational data Number of persons who have DNI now and did not before the Corridor	Persons	27	52	1,404
	9.2. Access to information:				
	Now has: a) more business information	Persons	162	50	8,100
10. <i>Self-esteem</i>	10. Increase in self-esteem				
	a) Your organization and work are recognized by the community	Persons	183	100	18,300
	b) With BP/BPF have won awards in public competitions (markets)	Persons	87	100	8,700
	c) When you go to market do you feel:				
	c.1. More competent	Persons	177	100	17,700
	c.2. Less competent	Persons	1	-100	-100
	d) Wears traditional dress when going to market	Persons	66	100	6,600
	e) Wears community dress to festivals	Persons	98	100	9,800
	f) When you go to market, you speak/do business in:				
	f.1. Quechua	Persons	72	100	7,200
	f.2. Aymara	Persons	8	100	800
	f.3. Quechua-Spanish/Aymara- Spanish	Persons	93	100	9,300
	g) What language do you speak to your children?				
g.1. Quechua	Persons	78	100	7,800	
g.2. Aymara	Persons	11	100	1,100	
g.3. Quechua- Spanish / Aymara- Spanish	Persons	50	100	5,000	
11. <i>Creativity</i>	11.1. Number of new products created	Products	90	100	9,000
	11.2. Number of new services created	Services	15	100	1,500
12. <i>Improvement in access to markets</i>	12.2. Number of new markets attended	Markets	41	100	4,100
	12.3 Number of links with other enterprises/organizations	Links with others	63	100	6,300
	Subtotal Social Assets				181,392

Physical Assets					
13. Increase in equity	13.1. Estimated amount and type of investment in Business-related physical assets				
	Individual amount				382,344
	Group amount (organization)				358,213
	13.2. Number and cost of improved houses	Houses	82	2153.8	176,612
	13.3. Number and cost of improved kitchens	Stoves	33	60.75	2,005
Subtotal Physical Assets					919,173
Natural Assets					
14. Improvement in Natural resources	14.1. Estimated increase in value of field	Persons	77		86,012
	14.2. Water quality				
	The water you consume is:				
	a) better than before BP/BPF	Persons	93	100	9300
	b) worse than before BP/BPF	Persons	1	-100	-100
	Irrigation water is:				
	a) better than before BP/BPF	Persons	46	100	4600
	b) worse than before BP/BPF	Persons	9	-100	-900
	14.3. Increase or decrease in firewood consumption	Arrobas*	733	-10	-7330
Subtotal Natural Assets					91,582
TOTAL					1,545,078

* Weight equivalent to 25 pounds

Total by Asset Category	Value (S/.)
Financial Assets	267,446
Human Assets	85,485
Social Assets	181,392
Physical Assets	919,173
Natural Assets	91,582
Total Value of Assets (S/.)	1,545,078
Total Value of Assets (US\$/.)	476,876

APPENDIX 3

Total values of asset variations by gender

TYPE OF ASSET	Total value of assets			Total value of assets (men)			Total value of assets (women)		
	Total	Percentage	Ranking de participación	Total	Percentage	Ranking of participación	Total	Percentage	Ranking of participación
Financial Assets	267,446	17.3%	2	149,467	62.0%	1	117,979	48.9%	1
Human Assets	85,485	5.5%	5	42,437	17.6%	3	43,048	17.9%	3
Social Assets	181,392	11.7%	3	49,298	20.4%	2	79,994	33.2%	2
Physical Assets	919,173	59.5%	1				0.0%		
Natural Assets	91,582	5.9%	4				0.0%		
Total Value of Assets (S/.)	1,545,078	100%		241,202	100%		241,021	100%	
Total Value of Assets (US\$/.)³³	476,876	100%		74,445	100%		74,389	100%	

³³ Based on an exchange rate of 3.24 soles to the dollar.