



Human Development Report 2006

Human Development Report Office
OCCASIONAL PAPER

Peru SANBASUR Rural Sanitation Financing Mechanisms

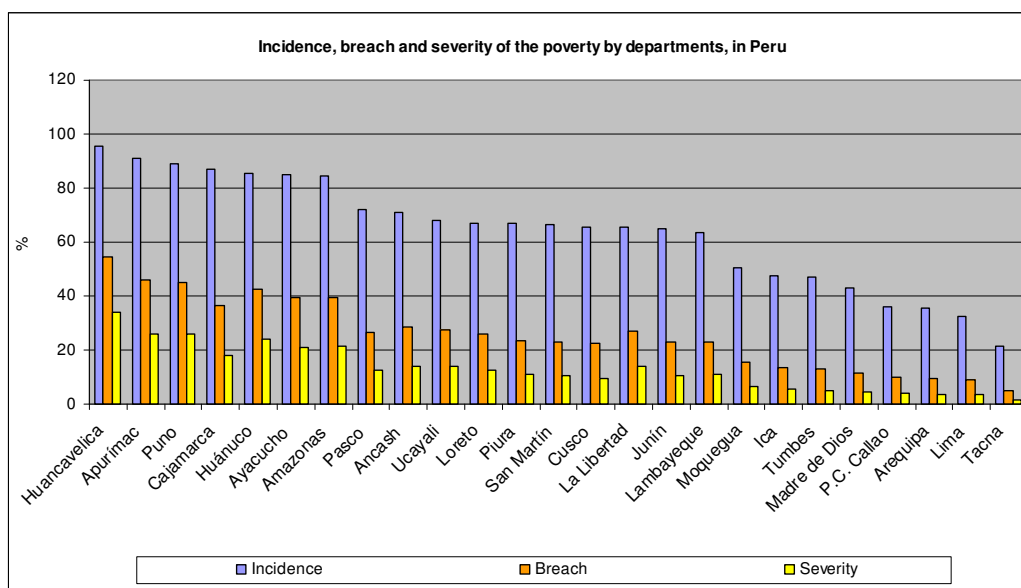
Practical Action Consulting

Summary

Executive summary: Building sustainable involvement strategies for the promotion of Basic Sanitation in the Southern Highlands of Peru; experience of the SANBASUR Project.

During several decades of attempts to deal with the ever-increasing basic sanitation problem in rural areas of Peru, many different strategies¹ have been applied with limited apparent effectiveness. Although the access of rural families to water increased to 50.6% and access to sanitation to 39.5% between 1988 and 1998, there are still large gaps in the coverage of basic sanitation services, particularly as far as latrines are concerned.² These gaps are even greater if the quality and use of these services is considered, since it was estimated in 2001 that 60.3% of the latrines were in a terrible state or of no use.³

Cusco ranks 14th among the 24 departments of Peru with the highest abject poverty rates (65.6% of the population). There is an average 22.3% gap between poor people's income and the abject poverty line and a critical 9.5% inequality rate⁴ among the poor, who are concentrated in the rural sector where, of every 1000 children ever born, 71 die before they are one year old; of every 100 children under five years of age, 53 suffer from chronic malnutrition; 42% of the women and 17% of the men are illiterate, having only completed the first 4 years of school and 35.4% of the children and adolescents (ages 5 – 19) do not attend school.⁵



In this context, the SANBASUR project has been applying and validating its overall involvement strategy for the promotion of basic rural sanitation and improving access to basic sanitation services⁶ for poor rural families. To this end, it encouraged the development of essential skills in the community in managing basic sanitation services,⁷ focusing on demand and demonstrating technical, social and financial sustainability, thus permitting the direct and indirect replication of the project and allowing the local population to gain more access to their social, technical and political rights.

1. General aspects of the SANBASUR project

The Basic Sanitation in the Southern Highlands project, SANBASUR, is a bilateral co-operation project between the governments of the Swiss Confederation and Peru. Its mission is to promote the improvement of basic rural sanitation conditions, with the active participation of the organised population, local and regional institutions and the sanitation sector, placing priority on the poor people of the Cusco department.

Its vision is to ensure that the organised population in the project area⁸ have access to basic sanitation services of a good quality. To this end, it developed self-management skills, improved hygienic habits and practices and relied on the technical and financial support of local institutions.

The project responds to the lack of basic sanitation, which further aggravates the problems of ill-health and infirmity associated with socio-economic and political factors related to the low levels of organization and management in the organizations involved in local development (community, district and provincial governments) and their agents (families, leaders, authorities etc). The lack of technical, personal, financial and organizational skills, amongst others, prevents an efficient management of resources and hence:

Within families, inadequate management of health issues:

- Lack of knowledge about the use of water for hygiene purposes and the disposal of excreta and waste.

Within local (community, district and provincial) governments and their action units:

- Lack of risk prevention where vulnerable health and environment conditions are determining factors that impede sustainable local development.
- The lack of a territorial organization with political influence in charge of monitoring basic local sanitation
- Limited and weak technical presence⁹ and the restricted participation of public institutions in the management of technologies focusing on the environment and environmental security.

In terms of social capital, there is a shortage of a conscious and positive social participation in basic sanitation issues.

The project has been in implementation since 1996 in four stages; during the first three stages, technical, social, political and institutional strategies, conditions and spheres of competence were developed at a micro level among the agents involved, within the framework of the overall involvement strategy¹⁰: the Sanitation Services Managing Committees (JASS¹¹), the users, community leaders, local (community, district and provincial) authorities and diversified units of the Ministry of Education and the Ministry of Health.¹²

The overall involvement strategy was developed within the framework of the approaches based on participation, demand, gender equity (providing equal opportunities for participation in the project's activities and the chance to become self-sufficient in roles linked to the cultural

patterns and poverty conditions of men and women) and sustainable human development, with the promotion of basic rural sanitation as the driving force.

Likewise, the services component provided physical, technical and operational support in the short term, whereas sanitary education became the social component that gave the project the cognitive, mind-setting and legal support required. This led to increased empowerment, attitude change, participation, joint management, joint financing, natural representation (the legitimacy that the community gives the organization when it is accepted and valued) and legal representation in the JASS, and sustainability in the medium term.

The objective of the present stage IV is to achieve institutional sustainability of the project, to which end institutions have been persuaded to participate at regional (Regional Government, Ministry, Diresa, DREG), provincial and district (municipality) levels, thus exercising influence on the implementation of policies, standards and strategies required to make the sector more sustainable.

In strategic terms, alliances were also established with public and private institutions involved in basic sanitation in the region, with SANBASUR playing the role of promoter, motivator, advisor, supervisor, co-ordinator and controller of the application and validation of the approach. Through this work an institutional network was set up comprised of community organizations (JASS), district and provincial entities (municipality and health establishments) and regional organisations (Regional Basic Sanitation Council, CORSAB).

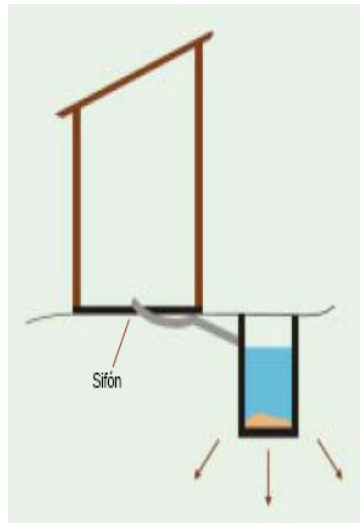
SANBASUR also prepared, applied and validated operating instruments, such as training materials, modules, contents and the application methodology.¹³

The development of the different local agents' capabilities resulted in a better appreciation of family health and an efficient management of basic community sanitation, promoting a sensible use of tangible (water, the water supply system and latrines) and intangible resources (technical management of the system, organization and administration). It also fostered the development of local social capital, comprised of male and female leaders and directors of local organizations (JASS, health workers) who will be in charge of the environmental sanitation monitoring and maintenance system for the project's post-intervention stage. This resulted in a change of attitude and a better appreciation of:

- Health security among families, particularly children.
- Family and community health, with evident changes in personal, family and domestic hygiene habits.
- Safety of the local and community environment.
- Political influence in local governments, with the implementation of the Basic Rural Sanitation Offices (OMSABARs¹⁴) and their acknowledgement as line and/or support units with municipal resolutions¹⁵, or the improvement and consolidation of existing sanitation divisions or departments within the functional and operating structure of local governments. The participatory municipal management workshops marked the beginning of the lobbying process.

2. Level of acceptance of Water-flush Latrines in rural Peru during the SANBASUR involvement

Within the overall involvement context of the SANBASUR project, one of the most important components is the promotion of water-flush latrines, which have a siphon that acts as a hydraulic stopper that prevents insects and unpleasant odours from the septic tank entering the hut. About 2 to 4 litres of water are needed for flushing. The septic tank and the latrine are connected by a pipe ranging from 3 to 5 meters and the toilet is installed on the ground inside the hut, which can either be built inside the house or in the yard.



This alternative is very well accepted technically because it is a simple and easy to build, use and maintain. It is well accepted socially because it is a private domestic service accessible to all family members, of a much better quality than other technical alternatives. It is also financially acceptable because it implies an investment managed and financed jointly and transparently by the user family, the municipality and SANBASUR, with contributions that are accessible to community families.

This share-investment strategy has a positive influence in the empowering of families to access sanitation services and the empowering of community organizations, encouraging the committed participation of all agents around the community sanitation system.

2.1. Involvement of SANBASUR in rural sanitation – Methodology and involvement strategy within the framework of the demand approach

In its search for sustainable basic rural sanitation alternatives, the project applied and validated the community joint management and joint financing model, with the participation of local governments and the organised community. The characteristic of this model is that it focuses on demand, community participation and concerted actions between SANBASUR and the ministries of the health¹⁶ and education¹⁷. With this approach, the work takes place with communities who have expressed and acknowledged their requirements, priorities, commitments and participation in the joint implementation and joint financing process, assuming joint responsibility for the construction, operation, maintenance and use of the family and community sanitation systems.

The following procedures took place within the framework of this approach:

- Selection of the communities and municipalities demanding the service that most adequately met the technical, social and financial conditions for the implementation of the project.
- Surveys conducted at district and community levels.¹⁸
- Preparation and evaluation of technical files.
- Implementation and supervision of construction works and development of the social component as a promotion strategy with emphasis on sanitary education that accompanied the implementation of the infrastructure, considering promotion, training and sanitary education actions on three occasions: **before**, **during** and **after** the implementation of the works, encouraging the constant participation of families, promoting a better attitude and a change in hygiene habits and healthy practices.
- Surveillance and Monitoring of hygiene education in target communities implementing the Sanitation System in Houses (SIH) during the post-involvement stage. Training and the monitoring of this intra-domestic system is supervised by the municipal staff in charge of environmental sanitation on a permanent basis and directly applied by members of the JASS. These staff work regularly in shifts, sampling and using standard record cards to check hygiene habits in terms of water, personal hygiene, latrines, housing, waste disposal and the presence of acute diarrheic diseases and skin diseases in the family, particularly in children under 5 years of age.

2.2. Effects and impacts of the adoption of Water-flush Latrines in rural communities.

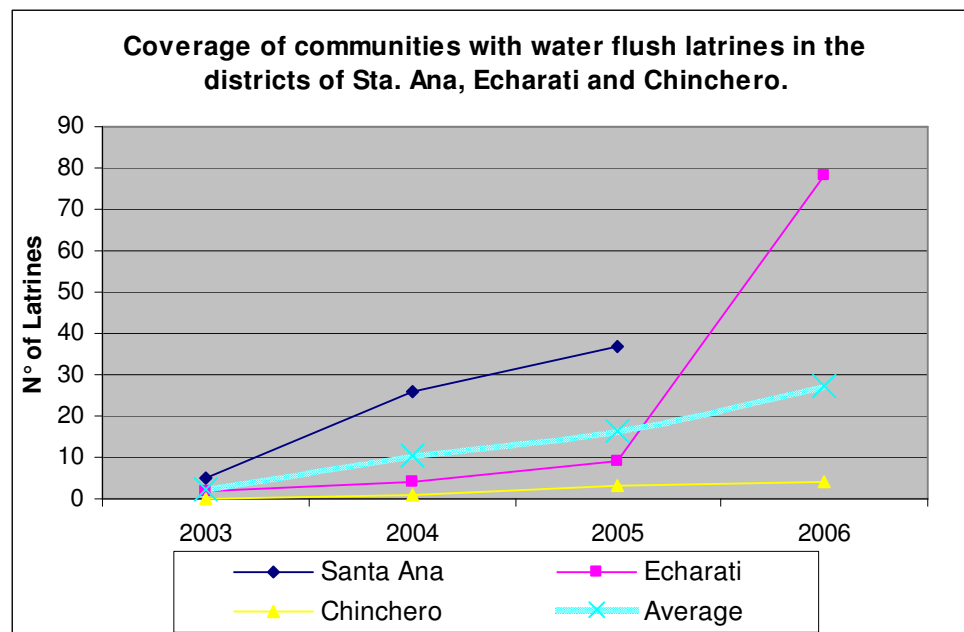
- a. Personal and family skills were developed and users are more informed and aware of the changes in attitude and hygiene habits among families and young children. Discipline improved and activities implying the maintenance of the system and payment of the service were assumed responsibly.
- b. Technical skills were developed among users (8,230 families¹⁹) and members of the JASS, who have become adept at installing, operating and maintaining the system and water-flush latrines.
- c. The organization skills of the community were developed, encouraging an awareness of the legal and regulatory framework of the JASS and strengthening and formally establishing the community organization and its local representation.
- d. In 133 communities, each of the JASS managing the water and sanitation system transferred to the community were acknowledged, organised and strengthened (controlling the good use and maintenance of the latrines).
- e. Local coverage indicators at 2005:

19.33%²⁰ of the peasant communities, native communities and rural population (territorial and ethnic units officially recognised in Peru) in project areas have water-flush latrines; where at least 95% of the families in the community/sector have access to the use of this system; no more than 5% were self-excluded due to their paternalistic views or lack of interest.²¹

8,230 rural families in the Cusco region (41,150 people) have access to and make use of water-flush latrines, enjoying the comparative advantages over other systems.

Furthermore, the coverage of basic sanitation services (safe water supply systems and excreta disposal services, sanitary modules) has also increased in the schools of the communities involved. These were jointly financed by the Municipality, SANBASUR and the Region and the parents provided unskilled manpower. The relevant units within the schools took charge of their administration, use and maintenance. In some cases, the JASS control and supervise the services and, in many cases, they exonerate the schools from paying for the water service to ensure an adequate maintenance of the latrines.

In the local governments of La Convencion, who have been jointly managing basic rural sanitation since 2002, there has been a positive evolution of the yearly average coverage equivalent to 1.5%²² of communities/sectors over the number of communities/sectors in which this system was initially implemented under the first agreement, which indicates the annual replication rate or the multiplying effect of the experience in nearby communities.



Source: Interviews with OMSABAR promoters and local authorities, February 2006

- f. The majority of the water-flush systems built between 2000 and 2005 are in good working order and in good condition.²³ Several families, particularly those situated in La Convencion, had to change the cover of their septic tanks because they had been ruined by dampness. This refers to the effective use and operation of the latrines and family habits in using and maintaining them in the medium term.
- g. Quality indicators
Most of the families consider the water-flush latrine system to be of good quality.²⁴ This indicator refers to the positive opinions of the families regarding the advantages of water flush latrines compared to pit latrines.²⁵ Families' opinions regarding the quality of the latrines are positively related to their effective use and maintenance.

The better the quality, the greater the likelihood of them being properly used and maintained.

2.3. Effects on the local context. Ongoing projects influenced by SANBASUR in other areas.

The Project's influence on Local Governments; coverage, tendencies, approval of the management and joint financing model.

Whilst environmental sanitation works were being implemented within the framework of signed agreements, the majority²⁶ of the local governments have been implementing other works as a result of the demand in nearby communities/sectors. The families or community leaders find out about the effectiveness of the intra-domestic latrines implemented in neighbouring communities either directly (visits) or indirectly (comments). They inquire about the necessary method, strategies and requirements and approach their municipality to request their implementation, thus generating a multiplying effect, increasing the demand for latrines in the area and the number of people who have latrines.

All the allied local governments²⁷ involved in the overall involvement process are providing feedback and applying and adjusting the overall involvement strategy, materials, methodologies and thematic contents (social, technical, organisational, legal, management, joint financing etc).

All the allied local governments have been empowered by the approach to promote basic sanitation in their communities, with the prospect of implementing these systems in 100% of their communities and sectors and maintaining the OMSABAR or similar organisation to control, monitor and cultivate adequate family health and basic community sanitation practices.

2.4. Levels of acceptance of water-flush latrine systems in target communities²⁸

The water-flush latrine system has become one of the technological options that is most demanded by rural families given its various advantages vis-à-vis other technological options which have already been implemented and tried in the project's intervention areas. These advantages, or favourable aspects, have been confirmed by the indicators obtained from the research study that was carried out among family users of water-flush latrines and dry wells, with the following results.

Technical acceptance level

96% of the families who use water-flush latrines accept the service, influenced by the significant reduction of health hazards in children, because this system has a technical design where the hole in the bowl is smaller than that of dry pit latrines which facilitate use and maintenance among family members. The dry pit latrine has an acceptance of 52% between the users of that model.

Based on how long the latrines have been used, a large majority of families (86% of the families who use water-flush latrines) are satisfied with the model whereas only 35% of the users of dry pit latrines are satisfied with that model.

Based on the geographical location of users, a larger proportion of families in tropical areas (56%) and 42% of the families in high Andean areas revealed a marked preference for water-flush latrines.

This model is also accepted by the majority of women; of the 55% female informants with water-flush latrines, 54% considered the service acceptable.

Social acceptance level

Water-flush latrines reduce the risk of contamination in the family and the community because they prevent unpleasant odours and flies, hence the increasing use of these latrines among both adults (46.94%) and children (34.35%).

As 82% of water-flush latrines give users more privacy, 81% of the families make use of this service.

96% of families with water-flush latrines reported that the service works well.

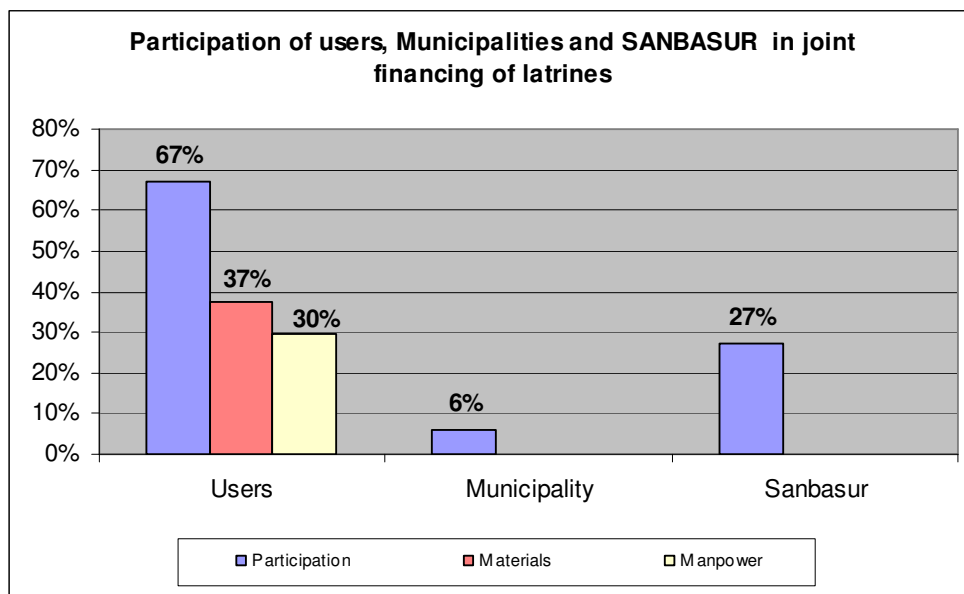
78% of the families with water-flush latrines use these services because they have an adequate capacity.

3. Financing policies and strategies used for the implementation of Water-flush Latrines.

3.1. Description of joint financing policies

The implementation of the basic rural sanitation project, including water-flush latrines, involves joint financing of the investment, with contributions from three parties: users, the municipality and SANBASUR.

A water-flush latrine requires an investment of \$85, the cost of which was initially distributed as follows: users pay 67% (37% in local materials from the area and 30% manpower), SANSABUR 27% and the Municipality²⁹ 6%.



Source: "Experiencia de SANBASUR en la instalación de servicios de saneamiento", 2006

The amounts of the contributions were negotiated in accordance with the finances available and with flexibility, based on the maximum amounts available to SANBASUR.

It is evident that local governments and families have assumed a more positive attitude towards honouring their financial commitments, as they feel empowered by the project. In most cases, Municipalities have improved their willingness to cover the investment which they are directly responsible for so that in the medium term, their contributions have shown a growing trend towards covering the proportion of the contribution that is gradually withdrawn by SANBASUR.

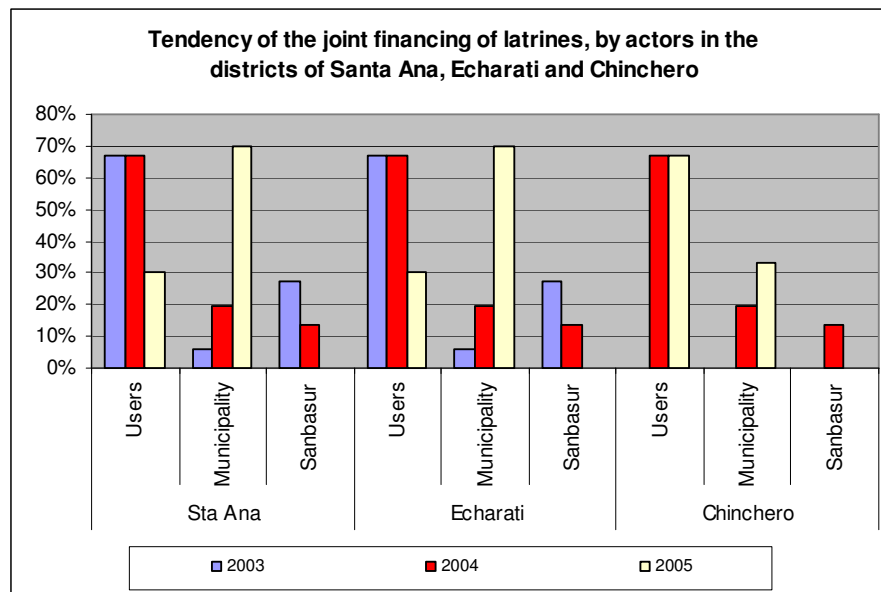
In addition, the joint disbursement and joint financing made by local governments according to the commitments established in the agreement increased their participation so that a number of other works could be implemented at the same time, in response to the demand of nearby communities. This implied an investment of between 100% and 500% of the combined annual amount initially disbursed by municipalities and SANBASUR.³⁰

During the period of involvement, the municipality's share of the investment in the technical and social components varied positively, permitting the transfer of the overall involvement strategy to the municipality.

The joint financing and joint management model was validated by SANBASUR and replicated and adopted by other stakeholders (NGOs during stage one and local governments during stage two), for the implementation of other activities as well. Based on this experience, the community is proposing new joint financing ventures to their municipality, for the installation of electricity, the implementation of improved kitchen stoves (Echarati), training in productive projects (Chinchero) etc.

3.2. Development of financing mechanisms

The starting point implied the willingness of the agents involved – users, the Municipality and SANBASUR – to participate in joint financing. The contributions of both the community and the municipality have increased progressively and they had covered between 73% and 100% of the cost of the works. Upon the signature of the agreement for the first intervention, the community contributed 67% and the municipality 6%. When new agreements were signed, the community continued contributing 67% in the worst of cases, whereas the municipality gradually covered 33% in the worst of cases (6% municipality + 27% SANBASUR). In some cases, their contributions exceeded these proportions, as occurred in the Santa Ana and Echarati districts. Consequently, in due course, the latrines are being entirely financed jointly by the community and the municipality.



Source: Interviews with OMSABAR outreach workers and local authorities, February 2006

Strategies to reduce the costs of the latrines were developed to make an alternative technology accessible, in financial terms, to the rural economy; a basic investment was therefore established, from which each family could reinvest progressively in extending the construction, incorporating a shower, adding finishing touches etc.

3.3. Contribution of agents involved in the financing system: participation and tendencies

Users' contributions. The participation of users depended on the model adopted and their contribution included unskilled manpower (community work in laying the main and secondary supply networks, digging the cesspit, making adobe bricks and building the hut) local materials (aggregates, earth, straw for the roof, timber for making doors, sticks for covering the pit) and even cash to pay for skilled manpower for making the door and the cover.

The payment arrears rate varies between 3% and 20%. These rates do not endanger the operation of the community's basic water and sanitation system.

The continuity of the water and sanitation service depends on the community's capacity to organise the prompt payment of their contributions, to manage these funds efficiently and to maintain the system.

It is evident that users are willing to increase their investment providing the quality, accessibility and safety of the alternative service is guaranteed. Families therefore increased their investments from \$42 to \$57, which is equivalent to a 35.7% increase over the cost of the cheaper dry pit latrine. They are willing to make this sacrifice in order to have a more technically and socially acceptable system.

The contribution of Municipalities usually stems from the Social Compensation Fund, FONCOMUN,³¹ royalties, and international technical co-operation agencies such as the World Bank and others. This covers aggregate costs, the transport of materials and the payment of fees to the staff who monitor the OMSABAR and promote the basic sanitation system in the community. The teams involved in the process vary in number, between one outreach worker (in the majority of municipalities) and 23 outreach workers (in the case of the municipality of Echarati, in response to its large sphere of competence which includes 35 communities). Several of them have also invested in the implementation of the OMSABAR, providing equipment and furniture.

The proportion of funds allocated by the municipalities for the implementation of integrated systems and/or complementary water flush latrines varied between 5% and 25% of their available funds (the Chinchero municipality allocated 5% of the FONCOMUN and Echarati allocated 25%³²).

The contribution of SANBASUR was initially equivalent to up to 27% of the cost of the latrine. The amount has been decreasing in accordance with the transfer of funds to the local government. SANBASUR assumes the technical role and is also responsible for advisory actions concerning the activities of social promotion, training, and education on hygiene.

3.4. Social and economic effects and impacts

Users positively value their investment capacity, creating a joint financing culture and the habit of paying for services rendered.

Local governments positively value the joint finance experience and the fact that their investment is multiplied to contribute to safer family health and community sanitation.

Positive and practical appraisal applied by Municipalities and users regarding the transparency of the financial management.

The co-financing mechanism allows participants to drive the approach and their participation in the processes of supervision, control, and follow-up both in the stages of intervention and post-intervention.

4. The SANBASUR Case and the Usefulness of Other Financing Mechanisms.

4.1. The rural micro economy, the community contribution, and the public subsidy developed to intensify rural sanitation.

Farmers' economy is basically determined by the availability and accessibility to agricultural resources (land, water, seeds, livestock, capital) and technology, and therefore farmers' purchasing power, as well as their investment and re-investment capacities depend basically on how efficiently they manage their tangible and intangible resources, which determines the levels of production and agricultural productivity, as well as the available production surpluses for the market.

67% of the financing of the basic sanitation system is covered by rural families' own sources. Their capacity to invest and co-finance these services is basically due to the option they have to be able to value their contribution through the use of local materials, their labour, the application of culturally accepted social practices, such as the *ayni*, and to their own efforts to generate cash to purchase materials (e.g. corrugated iron) and to pay the carpenter for making the door.

The co-financing mechanism provided by the Municipality and SANBASUR is an important source of subsidy for the rural family which facilitates its access to the system of basic services without having to resort to conventional financial sources to which rural families have no access given their lack of real guarantees.

The co-financing mechanism implemented by SANBASUR is justified as a public policy strategy to ensure better opportunities of access to basic services for higher risk users and to support their incorporation to the system.

4.2. Lessons learnt on financing rural sanitation in the Southern Sierra of Peru

The demand-side approach implies the need for promoting mechanisms geared towards community self-financing of services, which also contribute to users' empowerment in the process.

Families in the rural sector are willing to pay to improve their basic sanitation systems when they have a clear perception of the associated health problems and of their consequences.

Having access to technologies that imply comparatively lower cost in the long run which do not imply recurrent reinvestments, as well as those technologies that allow using local materials and prevent that money be spent to purchase foreign products³³ facilitates family self-financing processes. Users contribute US\$57, of which 55.85% (US\$31.81) covers the cost of the door, roof and septic tank cover, which can be easily made with materials found in the area to prevent spending cash.

An important matter to be taken into account is the political influence that has to be generated on local governments so that available resources are allocated to co-manage and co-finance basic sanitation services for communities.

The institutionalization of the OMSABARs in the organic and operational structure of local governments will enable the allocation of financial resources that may be invested to

generate individual, technical, and organizational skills in the communities in order to achieve important improvements in the health of community members and in basic sanitation conditions.

It is important to promote community spaces³⁴ of reflection in order to learn about families' capacity and willingness to pay, as well as to design joint co-financing strategies to cover the costs of technologies, construction of works, and the development of the social components.

Besides providing information on this financial option, adequate information should simultaneously be provided on conventional financial sources for community members who can afford the financial cost of these sources.

Misleading institutional signs, such as writing off or reprogramming debts, lead to non-payment behaviors and should be avoided to prevent in-arrears payments.

5. The SANBASUR Case and the Difference Between the Demand-Side and the Supply-Side Financing of Sanitation Services.

5.1. Demand-side financing

The sustainability of the SANBASUR approach implies the joint financing of the overall involvement model, which requires a greater and more diversified investment aimed at complementing the development of the physical component (infrastructure), the technical cognitive component (operation and maintenance) and the social cognitive component (attitude-changing sanitary education).

This model implies the participation of the different agents involved in environmental sanitation in the joint financing of the project, at both micro and macro levels, so that users contribute as donors and develop a joint financing culture.

Water and rural basic sanitation become boosting elements to raise financial and local economic resources.

Municipalities tend to contribute more financial resources as they become familiar with the overall involvement approach and gain empowerment.

5.2. Supply-side financing

Supply side financing by contrast is where services are provided on the basis of State's supply or in response to an initial request by communities and with the State subsidizing all project costs.

Investment priority is given to infrastructure and no social services investments are generated that promote the individual or organizational skills which provide the approach with the conditions for sustainability or transferability.

5.3. SANBASUR's role in the implementation of sanitation projects: stimulating the demand and the supply of products among rural families.

In the framework of a demand-side approach for basic sanitation services in rural areas, SANBASUR has stimulated the demand for latrines that are directly provided by local providers and/or producers, thus allowing them to lower their costs and directly benefiting the economy of user families while at the same time ensuring a market for the producers of flagstones, which generates not only local incomes but also employment.

These producers are located in the district of Chinchero, Cusco. There are five micro entrepreneurial units that have been legally established and are organised at the community level. They use family labour and use the raw material that is available in the community (aggregate quarry).

The municipality of Chinchero has contributed to train some producers in order to improve the quality of the flagstones and the variety of finish alternatives, as well as to ensure that adequate products be delivered.

Based on the knowledge acquired, trained producers are developing skills that enable them to diversify their products (they are making two other kinds of latrines, two kinds of coloured basins etc.), improve their quality (presentation and finishing) and gain more acceptance in the market, thus increasing their production and consequently their income.

Producers estimate that during the 2001-2005 period, their production rate increased to about 56% more than in 2000. Whereas each producer made about 4 or 5 latrines a week, now they are producing between 12 and 13. The demand for their products continues throughout the year, particularly between April and November. Cusco is their market and they believe that the municipalities are converting environmental sanitation into an interesting captive market.³⁵

6. Conclusions.

The experience obtained in managing the SANBASUR project for the provision of water and sanitation services in rural areas has validated approaches of a holistic intervention and implementation of services on the basis of a demand from communities for these services, on a tripartite co-financing scheme, which includes the community's contribution of cash, voluntary labour and materials, and carrying out the works with skilled local labour.

Decision-making concerning the implementation of the project approach is carried out in a democratic manner and in the community, with the participation of the users that are organized in the *Sanitation Services Managing Committees (JASS)* or through the local municipality, thus promoting the empowerment of families and communities with respect to community water and basic sanitation services.

Applying the co-management model had effects on the results since the organizational framework promotes the commitment of the parties with certain policies and procedures that have been validated throughout the process.

The municipality, community, and project's co-management in the implementation of water and sanitation services has strengthened the practice of having a transparent flow of information at all levels and has played a role in the process of developing this experience. The participation of users and municipalities added a contribution estimated between 70% and 100% of the required investment.

The readjustment of the financial policy in terms of the proportions required to co-finance the works required a progressively greater contribution of the municipalities. This was possible as a result of the process of empowering local governments through a holistic intervention approach which contributed to their positively valuing the security of health and basic sanitation in rural communities, and to their showing a marked and increasing commitment to carrying out joint investments in the field of water and sanitation.

The challenges to the development of this holistic approach for the implementation of basic sanitation services in the communities have been associated with the following deficiencies: the quality of the technical dossiers, the capacity available to supervise the works, the resistance of OMSABAR's staff and the technical staff of the local governments to work as a multidisciplinary team in order to jointly carry out the activities concerning the project's technical and social components, which expressed a bias towards infrastructure-related aspects, and delays resulting from various causes including road blockages produced by rain, religious festivities, agricultural tasks etc.

The implementation of water and basic sanitation services in rural communities has been facilitated by the tripartite co-financing strategy (users, municipalities, and SANBASUR) within the framework of a demand-side approach involving community participation. The Project estimated an initial contribution of 5% of the required investment by the municipalities. However, this percentage increased in most cases in the course of the project's implementation as the local governments became empowered in terms of the project, and finally ended by covering SANBASUR's share.

The project contributed to the strengthening and consolidation of the community and local organizational structures in terms of promoting basic sanitation services in rural areas through the organization, strengthening, and institutionalization of the JASSs in charge of the administration, operation and maintenance of sanitation services at a community level, and the OMSABARs which provide technical and social assistance before, during and after the implementation of the basic sanitation works at a local government (district or provincial) level, in collaboration with the JASS. This promoted the participation of communities in all intervention processes, including those of monitoring and control and supervision of the works, and reinforcing the communities' sense of ownership of the community sanitation systems. Additionally it promoted a political advocacy in terms of the OMSABAR (or equivalents) operation, thus allowing greater transparency in the project's co-management and co-financing, both of which contributed to the sustainability and transferability of the project approach.

The JASSs and OMSABARs have become surveillance organizations responsible for permanently overseeing the security of health and sanitation services at the community, intra-community and local levels.

Several strategic alliances were established with governmental and non-governmental organizations involved in basic sanitation in rural areas throughout the implementation of the approach.

Bibliography / References

Saneamiento básico rural en Cusco, Letrina con arrastre hidráulico, con opción sostenible, field notes, WSP, SANBASUR, COSUDE, Cuzco, Peru. June 2004.

Compartiendo experiencias, participación comunitaria y nivel de servicios, COSUDE, MINISTERIO DE SALUD, SANBASUR, Cuzco, Peru. March 2002.

Factores de influyen en la aceptación, uso y mantenimiento de letrinas sanitarias según tipos y zonas en comunidades rurales intervenidas por el proyecto SANBASUR, Dissertation paper by B.Sc. Rosi Peña Laureano and Renán Vera Frisancho, UNSAAC. Cuzco, Peru. 2004.

Evaluación de letrinas sanitarias, Roger Alvarez Huamaní, Cuzco, Peru, July 2002.

¹ The majority of these were concentrated in the implementation of infrastructure, responding to the supply approach.

² Estimates obtained from the PAHO "Global evaluation of water supply and sanitation services", 2000.

³ Estimate obtained from the source of information of the field report "Water flush latrines, a sustainable alternative" SANBASUR, June 2004.

⁴ This shows the dissimilarity between the income levels of the poor. The higher the percentage, the greater the dissimilarity.

⁵ Importance of the rural sector and peasant communities in Peruvian development, Jennifer Bonilla, Social Studies Centre, CEPES.

⁶ (Water system, latrines, organic and inorganic solid waste pits)

⁷ Personal (changes in family attitudes regarding personal, family and domestic hygiene), technical (construction and maintenance of the system) and organisational (organisation, joint financing, joint management and administration of the system).

⁸ The provinces of Acomayo, Anta, Calca, Canas, Canchis, Chumbivilcas, Espinar, La Convención, Paruro, Paucartambo, Quispicanchi and Urubamba.

⁹ This refers to the limited number of institutions in the project area that offer technological proposals for basic rural sanitation.

¹⁰ Applying, providing feedback and making technical, social and financial adjustments to the overall involvement strategy.

¹¹ A community organisation responsible for the administration, operation and maintenance of the sanitation services.

¹² Importance of the rural sector and peasant communities in Peruvian development, Jennifer Bonilla, Social Studies Centre, CEPES.

¹³ Training and capacity-building model that responds to the requirements of the population, community organisations and local entities in order to make the project sustainable.

¹⁴ The OMSABARs were created by district and provincial municipalities to respond to the growing demand for basic sanitation services in the communities, thus putting into practice the attributions assigned to them as part of the State reform in 1994, in accordance with the Sanitation Services Law (26338). The OMSABARs are in charge of implementing rural sanitation projects, applying and improving the overall involvement strategy validated with SANBASUR.

¹⁵ In 100% of the cases the allied local governments involved in promoting basic rural, have implemented the Basic Rural Sanitation Offices, OMSABAR or have improved/consolidated the divisions/departments in charge of promoting basic sanitation locally.

¹⁶ DISA, the Regional Health Office, channels the funds transferred by DIGESA, the General Environmental Sanitation Office of the Ministry of Health (MINSA) and supervises the project through DESA, the Environmental Sanitation Office, and through its diversified units; the health centres and health posts participate in monitoring, promotion and sanitary education actions.

¹⁷ The Cusco Regional Education Office (DREG) is carrying out a mass implementation of the Regional Sanitary and Environmental Education Curriculum in nursery schools and primary schools, through its diversified units, the Local Educational Management Units, UGLs.

¹⁸ This process involves surveys of the basic sanitation situation in the province and then in the community. In both cases, information is obtained concerning basic sanitation problems and their causes and consequences. This information provides the baseline required prior to the involvement. The information is obtained by the OMSABAR outreach worker and leaders of the community and/or the JASS.

¹⁹ Male and female heads of household were trained to build their water flush latrines and to use and maintain them properly. Some of them in areas more distant from the towns, built other latrines at their own initiative.

²⁰ 133 communities (according to 2000-2005 SANBASUR Works records) of the 688 in the Cusco department (the number of registered communities according to the Rural Institute of Peru, IRP, 1997, III CENAGRO) had the latrine service implemented as part of the overall involvement and complementary strategy of SANBASUR.

²¹ Families with no access to the system are families who have not accepted the working method (the organization, participation and integrated work strategy) implemented by SANBASUR; they are usually merchants (with no family burden) who spend most of their time outside the community or families with a paternalistic attitude who expect the State to pay for digging the pits, building the hut, etc., as a result of the working method implemented by the Social Development Co-operation (FONCODES).

²² For all the jointly financed Works in the communities of the Echarati and La Convencion districts, the demand was covered with municipal funds.

²³ 100% of the families (25 families polled in February 2006) in the Sta. Ana and Echarati districts who have had latrines since 2001, have kept them in good working order and in good condition. Several of them have incorporated a shower and this general tendency was confirmed by at least one JASS member and the OMSABAR technician.

²⁴ At least 90% of the families interviewed stated that the quality of latrines was very good. The remaining 10% qualified them as good because the covers of the septic tanks did not last long and had to be replaced every 2 years.

²⁵ These families have opted for the technology because of its comparative advantages in terms of quality, safety and versatile use and maintenance, preventing unpleasant odours and flies. They are easily incorporated with a basin, making it more comfortable for families to wash their hands. Waiting time is avoided because they are a private domestic service similar to urban services with sewage network connections, therefore they improve people's self-esteem and raise their social status. They are adaptable to dispersed and concentrated communities and to any topographic condition or altitude, implying a single investment in the construction of the hut, with the opportunity to make improvements such as installing showers and adding other finishing touches.

²⁶ It is estimated that more than 90% of the municipalities involved follow this pattern.

²⁷ District and provincial municipalities jointly implementing and jointly financing works with SANBASUR within the framework of the overall involvement strategy.

²⁸ Results of the research study "Factors that influenced the acceptance, use and maintenance of sanitary latrines by types and areas in the rural communities covered by the SANBASUR project"; thesis written by Bachelor students Rosi Peña Laureano and Renan Vera Frizanco, 2004.

²⁹ Costs updated at February 2006

³⁰ In the local governments in which a monitoring process was implemented, such as Echarati, Santa Ana and Chinchero (to a lesser extent), a favourable response to the demand was observed in the communities, which implied making double or even five times the investment corresponding to the municipality and SANBASUR, estimated at US\$28.00

³¹ The Municipal Compensation funds, FONCOMUN, are direct transfers the government makes to the Municipalities and Regional Governments in an effort to compensate the insufficient generation of their own funds. In 2006, the 1828 local governments should receive 975 million Soles, which is equivalent to 8% of the national budget (194 provincial municipalities and 1,634 district municipalities).

³² Interviews with OMSABAR outreach workers in Chinchero, Santa Ana and the Echarati Environmental Sanitation Department.

³³ Materials obtained outside the community: galvanized iron sheets, wooden doors made in urban markets, etc.

³⁴ Information and familiarization meetings at a community level, with much transparency and democratic treatment.

³⁵ Interviews with producers, February 2006