



ENVIRONMENTAL HEALTH PROJECT

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Review of an NGO-Based Peri-Urban
Environmental Health Project
in Lima, Peru

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ACRONYMS

ACESAV	Asociacion Central de Salud de Ate Vitarte (Central Health Association of Ate-Vitarte)
AA.HH.	asentamiento humano (human settlement)
BID	Banco Interamericano del Desarrollo
CEPIS	Centro Panamericana de Ingenieria Sanitaria (Pan-American Center for Sanitary Engineering - Pan-American Health Organization)
CEPREN	Centro de Promocion y Educacion en Nutricion
DESCO	Centro de Estudios y Promocion del Desarrollo (Center for Studies and Promotion of Development)
DIGESA	Direccion Nacional de Salud Ambiental (Ministry of Health, National Directorate of Environmental Health)
DISABAR	Direccion Nacional de Saneamiento Basico Rural (National Directorate of Basic Rural Sanitation)
DISUR	Direccion Subregional de Salud (Subregional Directorate of Health)
EHP	Environmental Health Project
FONAVI	Fondo Nacional de la Vivienda (National Housing Fund)
FONCODES	Fondo Nacional de Compensacion Social para el Desarrollo (National Social Compensation Fund for Development)

IAF	Inter-American Foundation
IDEAS	Centro de Investigacion Documentacion Educacion Asesoría y Servicios (Center for Research, Education, and Technical Services)
INSAP	Instituto de Salud Popular
IRC	International Water and Sanitation Center
MOH	Ministry of Health
NGO	nongovernmental organization
OACA	Oficina de Asesoría y Consultoría Ambiental (Office of Environmental Advice and Consultation)
SASE	Sistemas de Analisis, Seguimiento e Evaluación (Systems for Analysis, Supervision, and Evaluation)
SEDAPAL	Servicio de Agua Potable y Alcantarillado de Lima (Potable Water and Sewage Service of Lima)
UDES	Unidad Departamental de Salud (Departmental Health Unit, Ministry of Health)
UTES	Unidad Territorial de Salud (Territorial Health Unit, Ministry of Health)
S/	Peruvian Solas (S/1 = approximately US\$ 0.30)

EXECUTIVE SUMMARY

From 1989 to 1994, a Peruvian NGO, Instituto de Salud Popular (INSAP), implemented community-based health projects in the *asentamientos humanos*, or human settlements, of the Ate-Vitarte District in Lima, Peru. The projects were supported by the Inter-American Foundation (IAF), which contributed more than \$225,000 in funding, and has been monitored by IAF's local office, Systems for Analysis, Supervision, and Evaluation (SASE). At the conclusion of the projects, IAF requested the Environmental Health Project (EHP) of the U.S. Agency for International Development to conduct a strategy review of INSAP's program and to identify key lessons learned. These findings are intended to provide a basis for future strategic planning both by INSAP and, more generally, by the IAF in Peru and elsewhere in Latin America. A two-person team conducted the review from 13 to 30 November 1994 through intensive discussions with INSAP staff, IAF's local office staff, community representatives, and public officials.

Through the IAF grant, INSAP conducted activities to expand its services of free and low-cost medical care in the *asentamientos humanos* to include a multifaceted component of general environmental sanitation. These new activities included the provision of communal latrines, improvement of water cisterns and small-scale garbage dumps, and other community activities to address such disease vectors as mosquitoes, rats, and flies. The project also included the survey and sanitation of open agricultural irrigation canals in the project area.

INSAP's approach to health and environmental sanitation was distinguished by two factors. First, INSAP's approach toward improving sanitation involved more than technology. Nontechnological solutions and the promotion of community participation were considered to be as significant in project implementation as the sanitation technology. Instrumental in achieving this balance was the manager of the environmental sanitation component, a community-oriented engineer with hands-on experience in and understanding of the social mechanics of water and sanitation projects. Second, INSAP demonstrated a commitment to collaboration with the public sector. Through its role as an intermediary, INSAP facilitated improved linkages between the Ministry of Health and communities that had previously suffered from antagonistic attitudes.

However, despite community-based activities promoting participation, INSAP was less successful in instilling responsibility for community management. The project provided little opportunity for capacity building or sustained behavior changes, issues now recognized as critical for sustainability. INSAP had limited awareness of the role it could play in changing behavior and attitudes to create demand. Activities did not extend to identifying intermediate and affordable services for which the community might be willing to pay. As a

result, technical solutions were limited.

These shortcomings became evident in the latter half of the project as INSAP encountered severe constraints to project implementation, related to the deteriorating economic and political crisis as well as to INSAP's own weak management structure. Funding and limited administrative relations with IAF and IAF's local monitor, SASE, further complicated the situation. Problems included unforeseen delays in disbursement of IAF grant funds to INSAP, which often prevented timely completion of field activities, and limited IAF oversight during key periods as a result of staff constraints at headquarters.

Identification of these problem areas raises questions concerning the role of donors such as IAF in supporting NGOs to implement similar service delivery projects. Many of the observed weaknesses in INSAP's program strategy lie in new areas of understanding regarding community participation, areas that have only recently emerged and that are, in a sense, state of the art knowledge that NGOs have not been able to obtain, much less put into practice. Like many NGOs, INSAP lacked other basic organizational skills in management and financial administration.

These findings suggest the following recommendations for both INSAP and IAF in their future strategic planning:

- O INSAP must clarify its long-term programming mission and vision regarding the implementation of environmental health projects. If INSAP decides to continue in this area, it should:
 - G Develop its professional capacity in environmental health through programs to create management and monitoring systems and to maintain technical expertise in participation.
 - G Create an enabling environment for community-based participation by integrating new methodologies and strategies presently available as state of the art knowledge.

- O IAF can enhance its role as a donor in supporting its clients' environmental health projects. The following suggestions are actions IAF might take to enhance the capacity of its grantees:
 - G Develop criteria for grant selection that consider such issues as organizational capacity, the balance of technical and behavioral aspects, strategies for community involvement, understanding of financial viability, and public sector linkages.
 - G With clients, identify organizational needs, and with SASE, develop targeted monitoring for management assistance.
 - G Develop in-house IAF awareness of state of the art knowledge and resources.

G Provide technical workshops in the promotion of community participation and management, gender, planning for hygiene education, scaling up technologies, and development of educational materials.

G Identify and review the basis for consultations with community-oriented engineers employed by INSAP and OACA.

G Develop the capacity of the local monitor for internal monitoring and evaluation systems that address community changes in knowledge, attitudes, and practices.

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INTRODUCTION

1.1 Background

From 1989 to 1994, the Inter-American Foundation (IAF) supported the work of a Peruvian NGO, Instituto de Salud Popular (INSAP), contributing more than \$225,000 to implement community-based health projects in the Ate-Vitarte district of Lima. These project activities were monitored by IAF's local office in Lima, Systems for Analysis, Supervision, and Evaluation (SASE). After a hiatus of over two years, when the program was without an IAF country representative, IAF undertook a review of its Peruvian program. The country representative at the time of this report was interested in identifying lessons learned from innovative INSAP projects. When INSAP's major project activities concluded, IAF asked the Environmental Health Project (EHP) of the U.S. Agency for International Development (USAID) to conduct a program review of INSAP's methodology and strategy. The director of INSAP, Dr. Arturo Yglesias, also expressed interest in receiving technical assistance from EHP.

1.2 Scope of Work

The objectives of this assignment were 1) to conduct a program review of INSAP's strategy and methodology for promoting community-based health and sanitation in peri-urban areas and 2) to use this review as a basis for future strategic planning both by INSAP and, more generally, by the IAF in Peru and elsewhere in Latin America.

1.3 The Review Team

This assignment was implemented through EHP, a USAID-funded program that provides developing countries with technical assistance and information services in nine environmental health areas: tropical diseases, water supply and sanitation, wastewater, solid waste, air pollution, occupational health, hazardous and toxic wastes, food hygiene, and injury. The two-person review team included Dr. Carolyn McCommon, an international consultant with background in NGO development and community participation in the

water and sanitation sector, and a local consultant, Dr. Laura Altobelli, a public health specialist who lives in Peru and has long-term experience in the Peruvian public health sector. The assignment was implemented over a two-week period, 13-30 November 1994, with the assistance of INSAP and SASE, IAF's local monitoring office.

1.4 Methodology

Ethnographic research techniques were used to collect information: in-depth interviews with key informants such as INSAP and SASE staff and health promoters; focus group and open discussions with community leaders, health promoters, volunteer social workers, local women, and the Central Health Association of Ate-Vitarte (ACESAV); structured observations through community visits; and review of primary and secondary documents, including SASE, INSAP, and IAF internal reports and

special reports prepared by INSAP and SASE. The breadth of observations ensured a wide range of viewpoints to offset bias from any one observation and to cross-check information.¹

Selection of which community sites to visit was made by INSAP using "purposive sampling" criteria proposed by the review team. This included the selection of communities based on degree of community participation. Logistics were facilitated by INSAP and SASE.

The authors submit this review with three methodological caveats: (1) Few field studies do not feel pressured by time and this was certainly no exception. Time available for conducting community discussions and follow-up, meeting with key ministries and agencies, and following up initial contacts was very brief. (2) The difficulties of the tight agenda were exacerbated by scheduling complications with INSAP staff. With the INSAP/IAF project activities concluded, almost all members of the IAF-funded project team were on temporary leave and working elsewhere, making it extremely difficult to arrange interviews with key individuals and to collect information regarding program strategies, particularly regarding educational methodologies. (3) The sample of local community leaders, health promoters, volunteer social workers, and local residents was quite small. Their views might not have been representative or may have been influenced by our introduction through INSAP.

The report focuses primarily on the project's environmental sanitation activities; the

¹ Appendix A contains the consultants' agenda, Appendix B lists institutions and persons visited, and Appendix C lists documents reviewed.

*botiquines*² are discussed only to the extent they overlap or could overlap with environmental health.

1.5 National Context

1.5.1 Overview

Political, economic, and health conditions in Peru were extremely adverse for most of the project implementation period. Political violence, the worsening of the economic crisis in 1990, and the cholera epidemic all combined directly against the execution of the project. The area of Ate-Vitarte, where the project was located, was one of the centers of Shining Path guerrilla activity during this period. The inflation rate was over 8,000 percent and more than half the work force was unemployed or underemployed. In 1991, the cholera epidemic further impacted the area.

During the past two years, circumstances have changed dramatically. The election of Fujimori in 1990, the capture of the leader of the Shining Path in 1992, and the slowing of inflation to less than 20 percent in 1994 have led to a feeling that a new era has begun in Peru. However, Peruvians are still fearful to be too optimistic just yet. While political violence at the time of this report is negligible compared with the past, a car bombing in Lima only a few weeks before this assignment began is evidence that it is still a threat. Much apprehension and anticipation surrounded the elections set for April 1995. During the pre-election period, more attention was focused on peri-urban areas, with construction of new schools and promises of overall development.

1.5.2 Development of Peri-urban Areas

During the past forty years, the dramatic rate of migration from rural to urban areas has caused far-reaching changes in Peru. In 1940, Peru was predominantly agricultural, with a 70 percent rural population. Today, the situation is reversed, with 75-80 percent of Peru's population living in towns and cities, more than 25 percent of whom are estimated to live in informal or squatter settlements. While early migration primarily affected Lima, in recent years, more growth has occurred in secondary cities.

The advent of industry, jobs, and better education were initially responsible for urban growth. This changed in the early 1980s, when political violence by the Shining Path in rural areas drove residents to urban centers, especially Lima. Many of these rural refugees

² Botiquines are community-run health and sanitation services.

settled in Ate-Vitarte. Now that political tension in the outlying areas has eased, some older refugees are moving back to their native areas while their children and extended families remain in the homes they have established in Lima's peri-urban areas.

1.5.3 Public Sector Services

Public sector institutions have been in a state of flux throughout much of the period of project implementation. Most state institutions were already weak and inefficient when the political violence first escalated in the mid-1980s. The institutional capability weakened further with the deteriorating economic and political situation. Severe financial constraints resulted when Peru was cut off from the international economic community because the government refused to pay its foreign debt and because the government was unable to collect taxes. In addition, Peru suffered from the worldwide economic recession.

Within the Ministry of Health (MOH), continual changes in top leadership have resulted in frequent structural reorganizations. Each new minister pushes for his own sweeping changes in health policy. Given the high turnover rate—the average stay for a minister is six months—little gets done. Poor organization and overlapping lines of authority further complicate the management of the lower divisions, the "UDES," or Departmental Health Unit, and the "UTES," or Territorial Health Unit. The "UDES" are the administrative centers for the MOH hospitals, health centers, and health posts within a geographical region; there are four in the Lima metropolitan area. UDES directors are typically political appointees; few have public health training. The UTES are under the UDES and are mainly responsible for managing budgets and logistics for the health centers and posts under their jurisdiction. There are usually two to three UTES per UDES.³

The role of government in water and sanitation services has been very limited. There are no long-term policies, although many laws and regulations exist. During the first stage of the project, DISABAR (National Directorate of Basic Rural Sanitation), located within the MOH, was in charge of rural water supply in peri-urban communities and communities whose population was less than 2000. DISABAR was recently disbanded by Fujimori and its functions combined with another MOH unit, DIGESA (National Directorate of Environmental Health). Lima municipal services are under SEDAPAL (Service for Potable Water and Sewage of Lima). SEDAPAL works only with conventional sewage systems. Latrines and septic tanks are considered the responsibility of the community, with technical assistance from MOH or NGOs.⁴

³ During project implementation, four INSAP staff were temporarily assigned to UDES for over a year at the request of MOH.

⁴ SEDAPAL is currently undergoing a competitive bidding process for privatization, to be complete in 1995.

The election of Fujimori arrested the disintegration of state institutions, although many of the inherent problems persist. Fujimori's creation of the Ministry of the Presidency has further confounded government functions. The purpose of the ministry is to coordinate—although some critics say bypass—other ministries. Under the Ministry of the Presidency are four vice-ministries, three of which oversee peri-urban activities that overlap with other government activities: Social

Development, Regional Infrastructure, and External Cooperation. A completely separate government institution and one directly responsible to the president is the social investment fund FONCODES, created with the purpose of financing community-generated projects. FONCODES operates with funds from the public treasury and from international institutions such as BID (Inter-American Development Bank), the EEC, and the World Bank.

1.5.4 The NGO Sector

The origins of Peruvian NGOs can be traced to social action movements of the early 1970s, both within the church and within universities. Many NGOs were established as research entities by social scientists pressing for political and ideological changes. During this period, NGOs typically focused on mobilizing the poor to redress their extreme economic, social, and political inequalities through political action. Most NGOs were activist-oriented and not involved in actual project implementation. Relations with the state were relatively positive, as the reformist Velasco government pursued a community development approach to promote social and economic development.

The situation changed in the 1980s with the election of a new government that dismantled earlier reforms. With this shift, many professionals who had been trained by the previous government left to form new NGOs to defend and embrace the programs that were being abandoned. As a consequence, most NGOs shifted to a more pragmatic and less ideological stance, and with support from international donors, began implementing grassroots projects to meet local needs. Over the next 10 years, in a climate of mutual suspicion, relations between NGOs and the state deteriorated as the overall political, economic, and social situation deteriorated.

As conditions in Peru worsened in the late 1980s, Peruvian NGOs entered a precarious period. In addition to their tense relationship with the state, NGOs were viewed with mistrust by the guerrillas. Direct threats and attacks, including the killing of NGO staff and community leaders, led NGOs to cut back or even abandon their grassroots activities.

The election of Fujimori ushered in yet another phase for NGOs, which have resumed program activities previously abandoned or curtailed. In this new environment, NGOs have been challenged to meet client and donor demands, often finding their traditional roles and

program strategies no longer adequate. Competing politically based programs, escalating demands for services, and myriad funding possibilities have created a complex situation for NGOs as they attempt to consolidate institutional structures.

2 THE IAF GRANT TO INSAP

2.1 INSAP and Project Implementation

INSAP is a small professional NGO founded in 1984 by a team of doctors dedicated to health promotion in the peri-urban areas of Ate-Vitarte. Early activities focused on the provision of free and low-cost medical care and direct action programs in nutrition, immunization, and basic health of mothers and children. The IAF grant in 1989 enabled INSAP to expand this focus to include environmental sanitation. Importantly, it allowed INSAP to develop a regular program addressing the root causes of the areas's most prevalent health problems.

The grant, first approved in August 1989 and later amended four times, provided over \$225,000 in funding to develop a program that addressed three distinct but related areas: (1) strengthening local health posts by training health promoters in technical skills and in planning health care strategies; (2) improving general environmental sanitation by coordinating local elected leaders and volunteer promoters in community campaigns to improve waste and garbage disposal and basic infrastructure such as latrines, water cisterns, and small-scale garbage dumps; and (3) the surveying and sanitation of open irrigation canals in the area.

While the health post segment fell within INSAP's in-house capability, the sanitation component required recruitment of new full-time staff. For INSAP, the key to the success of this component was the recruitment of a community-oriented engineer who shared INSAP's commitment to involving local residents in their own health programs and who was willing to

look for nontechnical solutions and work closely with health professionals. INSAP succeeded in securing an engineer with significant hands-on experience in peri-urban sanitation and the social mechanics of projects. Later, as the project expanded with increased IAF funding, three additional engineers were hired and trained in the same participatory approaches. INSAP senior staff said that training the junior professionals in nontraditional approaches for providing water and sanitation services took a good deal of effort by the senior engineer.

Thus, in many ways, IAF's grant to INSAP allowed both the implementation of new community-based activities and the institutional strengthening of an NGO. INSAP developed a new capacity in environmental sanitation, broadening its overall outreach and

reinforcing its traditional delivery of health services. This diversification is all the more noteworthy considering the overall context in which the IAF project was implemented.

INSAP encountered severe constraints in project implementation because of the economic and political crisis. Security concerns considerably delayed and even stopped many activities for more than a year. At the same time, INSAP management had to balance various, and at times competing, demands for its time. For more than a year, four INSAP staff, including the director of the health post component, were temporarily assigned to MOH to participate in UTES and UDES. Many staff collaborated with MOH in its campaigns during the devastating cholera epidemic of 1991. In addition, INSAP was implementing three other donor-funded activities in Ate-Vitarte involving nutrition, women's health, and infant-child health as well as a fourth project in dissemination and communication. The director was on a two-year study leave.

To further complicate the situation, unforeseen delays in disbursement of IAF grant funds often prevented timely completion of field activities. For a large part of the project IAF support was nonexistent or sporadic, complicated further by travel restrictions during the periods of extreme violence. In the context of the dangerous local environment, SASE, as IAF's local monitor, assumed responsibility for management of IAF's portfolio.

2.2 The Community: Peri-urban Settlements of Ate-Vitarte

2.2.1 Peri-urbanization of Ate-Vitarte

The District of Ate-Vitarte is an area of 772,000 hectares stretched along a valley between two arid mountain ranges. Flowing through this valley from east to west is the Rimac River, the only continual source of water to the city of Lima, making Ate-Vitarte the most important agricultural area close to Lima. Also passing through the valley is the Central Highway, the main supply route to Lima for food and other commodities from the mountains and jungle. Due to the strategic location of Ate-Vitarte and its proliferation of shantytowns, the Shining Path sought to control the valley, causing more intensified political violence there than in other districts.

The agricultural character of the valley began to change during the 1950s when the process of industrialization began, stimulating a massive migration from the rural to urban areas, especially Lima. As industry moved into the valley, workers settled around the factories. The early 1980s saw the beginning of squatter invasions of government or private property, usually by organized groups of people who blocked off individual plots and set up simple dwellings of woven straw mats held up by four posts. The shantytowns were settled

by population overflow from Lima, as well as by families and entire communities fleeing from terrorism in the rural highlands. These are now called *asentamientos humanos*, or human settlements. There are currently 203 asentamientos humanos in Ate-Vitarte, with a total population of about 110,000, or 40 percent of the district's total population.

2.2.2 Land Tenure and Titling

The government had an implicit housing policy during the 1980s that allowed squatter settlements on arid and unused government-owned lands surrounding urban centers.⁵ As a result of this policy, poor people are likely to at least have rent-free land to live on even when they do not have a "house." When government land was no longer available for squatting, people invaded privately-owned property. This, too, was allowed by law as of 1986 if the land had been unused for a period of four years. The law has since changed so that invasions of private property are not allowed under any circumstances. No new asentamientos humanos have been settled in Ate-Vitarte since 1990.

Once a number of families have invaded the land, they begin to organize to obtain property titles. Once land rights are obtained, even before legal titles are in hand, each family begins to build its own house, using brick and cement, and to organize with other community members to obtain basic electrical and sanitation services for which, apparently, people are willing to pay. The major stumbling block to progress, therefore, is the legalization of land rights, a process that may

⁵ This policy contrasts with the policies of other major urban centers in Latin America, which implemented urban housing projects during the 1980s to meet similar demands.

take up to eight years if there is a major dispute with the previous land owner or with the government, as in the case of protected archaeological zones bordering Ate-Vitarte.

2.2.3 Local Project Setting

The IAF project began primarily in communities composed of some of the most recent immigrants and lowest income groups. Few had secured their legal titles, some are just now securing land rights, and others are still waiting. As a consequence, infrastructure in some settlements is still quite rudimentary. In one community, all houses are built of straw matting, with ramshackle construction and no sanitary facilities. Other communities have progressed to some home building with bricks and cement even though doors, roofs, and windows are frequently of temporary materials. Communal latrines installed by INSAP provide the main services.

Most of these asentamientos humanos are built on arid lands that have no natural water source, despite the presence of the Rimac River and the Atarjea water treatment plant located in the Rimac valley. The most common solution is the purchase of water—not always potable—from cistern trucks that pass daily through settlements. Water is collected in large plastic barrels or cement-lined brick cisterns built in front of homes. The cost is S/.80⁶ (approximately US\$.30) per 50 liters. It is estimated that the cost of water purchased from trucks is 25 to 100 times higher than the cost of household connection (Diaz-Albertini 1994).

The area is characterized by open agricultural irrigation ditches, many of which have been abandoned. As the asentamientos humanos have grown, many of these canals have become open air sewers and garbage dumps, often infested with mosquitoes, flies, and rats. Some canals carry toxic waste products from local industries.

These conditions, combined with a lack of social services, predictably lead to high incidence of health-related problems and contributed to the rapid spread of cholera in 1991. The cholera epidemic was significant, however, in the low case-fatality rate for the high number of cases. This was a result of an immediate, aggressive response by the MOH that included two major activities in peri-urban areas such as Ate-Vitarte: (1) a sweeping educational campaign that disseminated specific messages through all mass media outlets and (2) community distribution of chlorine tablets. These activities resulted in major attitude changes among the population toward water storage and use. In Ate-Vitarte, as part of the IAF project, INSAP collaborated with the MOH and the municipality to distribute chlorine tablets, provide health education talks in the communities, and train

⁶S=Peruvian Solas

environmental health promoters and *asistentes sociales*, or volunteer social workers.

Given the absence of formal social services, the asentamientos humanos are distinguished by the number of community-run health and nutrition services. The botiquines are community owned and staffed by MOH or NGO-trained volunteer health promoters. While the botiquines provide a nearby source of medicines, many have difficulty maintaining their stocks. Through INSAP and the parish church, most of the botiquines maintain a rotating drug fund, although constantly increasing medicine prices cut into the fund. A key problem is the rudimentary training of health promoters, who serve as quasi-physicians, diagnosing and treating illnesses.

At least one community kitchen exists in every peri-urban settlement. Establishment of these community kitchens was an important part of community response to the economic crisis, beginning in the late 1970s. Kitchens receive food supplements from one or more food assistance

programs sponsored by the government or donor-funded PVOs such as CARITAS, CARE, and the World Food Program. Other organizations found in each community include the "vaso de leche"⁷ ("glass of milk") and mothers' clubs.

In addition to these informal interest groups are the elected formal neighborhood committees, or *juntas directivas*. These committees have a basic, clear-cut organizational structure consisting of central leadership, a general assembly, and defined committees with responsibility for the resolution of land tenure and infrastructure problems. One position appointed by the junta directiva is the asistente social, the voluntary social worker who supported INSAP's promotion of sanitation education.

2.3 IAF's Role with INSAP

The INSAP project was monitored by IAF's local office, SASE, a Peruvian NGO contracted by IAF to act as its local representative with IAF grantees. Presently there are 27 active grants in IAF's Peruvian portfolio.

The presence of a local monitor was critical. Until recently, IAF was constrained in its oversight of the Peruvian program because of travel restrictions imposed by the U.S. State Department and the lack of a field representative at IAF headquarters. As a result, SASE assumed a more prominent role than it might have otherwise. The SASE monitor was able to report on project progress and advise IAF as discrepancies arose in a situation where IAF was unable to respond.

Problems arose, however, in the definition of this monitoring role. It was not clear if the SASE monitor was acting as monitor or auditor. Lack of clear guidelines from IAF left the local monitor to define his own methods of supervision and reporting. This included the monitor's regular attendance at INSAP staff meetings and semi-annual visits to project communities, which included general meetings with selected staff and local leaders. Progress reports were based on verification of physical targets and general observations. Though limited in his scope, the local monitor was conscientious, advising IAF of general progress and alerting it to arising management issues.

The reporting did not, however, provide any systematic way of measuring program performance, reviewing workplans, or involving stakeholders in the monitoring process. Thus, as the project neared completion, the monitor's observations and warning comments regarding the lack of progress appeared to INSAP as undue and poorly timed criticisms

⁷The "vaso de leche" committees are local community voluntary groups. These groups, along with other local organizations such as the mothers' clubs and Popular Kitchens, coordinate with the local municipal government and donor organizations in food distribution and community work programs.

3 given the long-standing constraints INSAP had endured and in particular considering the delays in its IAF disbursements. This created some misreading between SASE and INSAP regarding the completion of physical targets in the project's final phase. To be in compliance with these targets, INSAP essentially abandoned the time-consuming process of community involvement and terminated the contracts of the field team four months early. Salary savings were used to finance the payment of community labor to quickly complete the infrastructure targets defined in the IAF grant. For its part, SASE felt that its 'nudge' was essential to force INSAP to meet its obligations, although SASE at the same time faulted INSAP for failing to continue its participatory approach. It is not clear if the importance of complying with these targets had been openly discussed between SASE and INSAP in an earlier forum.

INSAP PROJECT FEATURES

3.1 Community Organization and Beneficiary Participation

The thrust of INSAP's methodology focuses on involving local residents in their own health programs. This approach is reflected in the overall design of the IAF project, which is based in part on the 1986 "District Health Plan for Ate-Vitarte," which lays out local health priorities as felt and articulated by the community groups of Ate-Vitarte. INSAP was involved from the beginning in the development of this plan.

At the project level, INSAP's participatory process is characterized by varying levels of intensity in information sharing, negotiation, community contributions, user education, and decision making. It is also a difficult process to elucidate, representing, on the one hand, an innovative approach to facilitating community responsibility, while on the other hand providing only limited venues for participation. Shifts in strategy have at times been dramatic, ranging from painstaking consultation to payment for labor once contributed. Because of these characteristics, it is possible to see INSAP as perhaps typical of many progressive NGOs whose well-intended promotion of participation falls short in ensuring sustainability. Nevertheless, despite the limitations of its approach, INSAP has been successful to a certain extent in promoting community-based health and sanitation programs. The INSAP approach included the following elements.

Community mobilization. INSAP's activities under the IAF project built on its long-standing work in Ate-Vitarte with local communities. In some instances, this involved promotion of project activities in communities where INSAP was already working and felt a demand (both tacit and expressed) for improved services. In a few cases, INSAP extended its promotion to new communities at their request. In such cases, INSAP would conduct its

own limited assessment to identify priorities and needs.

Project promotion consisted of multiple information-sharing meetings regarding activities and community responsibilities. In these sessions, INSAP took what it considered to be a facilitative approach: sensitizing communities on basic sanitation through educative talks and helping them to prioritize activities in relation to perceived needs and available resources. Electricity, for example, was often the most frequently cited perceived need. Working through the immediate constraints of such priorities, INSAP often helped the community to identify other critical hazards that could be resolved with available resources, such as water chlorination and disposal of garbage.

Community organization and involvement. Through its long involvement in Ate-Vitarte, INSAP was well aware of the subtle differences in public and private decision-making patterns as well as the institutional complexity and social relations of peri-urban communities. To effectively target its interventions in this context, INSAP worked closely with the elected leadership of the *juntas directivas* and the *organizaciones funcionales*, or volunteer informal groups, such as mothers' clubs and community kitchens. Initial contacts were made through the *juntas directivas* for presentation of general activities and identification of *organizaciones funcionales* for sanitation campaigns and health post activities. This approach broadened INSAP's outreach, and in INSAP's view, it also ensured opportunities to work with women, since organizations typically broke down along sexual lines, with men in the *juntas directivas* and women in the *organizaciones funcionales*.

With these different groups, INSAP also responded to perceived needs in developing activities appropriate under the project's mandate. One such response was the formation of ACESAV, or the Central Health Association of Ate-Vitarte, to coordinate and support activities of the volunteer health promoters.

Levels of project support. INSAP's relationship with the community would best be described as that of a facilitating provider. While INSAP provided a good deal of the initiation and external project support, it also encouraged joint collaboration and community motivation. This dual role is reflected in the mixed results of the project. Evidence of sustainability is seen in some aspects, such as the development of ACESAV and some changed behaviors, and not in others, such as follow-through with additional communal latrines, where INSAP supplied funds for most capital costs while communities provided in-kind contributions of labor to make bricks and lay silos. There was and has been no cost recovery through cash payments for use. INSAP sharply changed its approach in the final phase of the project when, to meet project deadlines, it began to pay individuals for their labor to expedite latrine construction.

Other forms of community support varied. Initially, INSAP and the elected leadership worked together closely in the planning and coordination of communal work days for latrine

construction and sanitation campaigns, as well as in the organization and continued operation of the self-sustaining botiquines. This collaboration weakened as leadership frequently changed and especially as political violence escalated. As a result, there was often a time lag between planning and the actual implementation of initiatives. Project delays because of late disbursements in IAF funds further challenged local relationships. Leaders complained of INSAP's bad faith in creating expectations. INSAP had to rekindle interest among old and new leaders at a time when security often made it difficult to conduct regular meetings. INSAP seems to have been far more successful over the long-term with the orientation and training of the volunteer health promoters who manage the botiquines and the volunteer social workers who act as neighborhood health extensionists. Both of these volunteers are appointed by the community, and change with the election of new leaders. In general, it appears that most remain quite active, continuing to provide informal talks on sanitation education and maintaining latrines. Health promoters who work in the botiquines continue to actively participate in ACESAV.

Formation of ACESAV. The creation of ACESAV as an independent organization was one of INSAP's most important—though initially unplanned—achievements. INSAP helped ACESAV to obtain legal and formal recognition by the MOH at the level of the UDES and the central-level MOH Directorate of Medicines, Drugs, and Supplies. At the time of this review, ACESAV represented nineteen community health posts. Its functions included coordinating with MOH for health and sanitation talks and training of promoters. ACESAV has shown a great capacity to function democratically, respond to local community needs, and conceptualize and carry out program activities. With the help of INSAP, ACESAV submitted a proposal and received independent funding of \$36,000 from FONCODES to support the continued sale of medicines through the community health posts. ACESAV is also a member of the recently reconstituted District Planning Committee, sponsored by the NGO, Centro de Ideas.⁸

3.2 Institutional Relationships

A central tenet of INSAP's philosophy is the importance of collaboration between the public and private sectors in the provision of health care. Toward this end, INSAP has actively promoted the contributions of NGOs, both at the policy level and as intermediaries with local communities. INSAP's strongest relationships have been with MOH, which through UDES, UTES, and DIGESA administers or oversees health and sanitation activities in peri-urban areas. Relations with SEDAPAL and other municipal authorities have been more

⁸ The District Planning Committee builds on a similar organizational structure established by the government during the cholera campaign. The reformation of this committee is being funded by a modest \$16,000. From discussions with the president of the committee, the focus seemed overly ambitious and weak.

variable.

In developing its relationship with MOH, INSAP had to contend with the ministry's long-standing suspicion of health-related NGOs.⁹ Until the mid-1980s, the MOH's relationship with NGOs was often antagonistic, due partly to the political and leftist character of many NGOs and partly to the government's general fear of organized peri-urban communities. When changes occurred in MOH in 1985, INSAP formulated a new approach for establishing linkages with MOH and between MOH and local communities. This involved cosponsoring with MOH district meetings and workshops in Ate-Vitarte to discuss health issues. The proceedings of the first workshop, held in 1986, served as guidelines for INSAP's work in Ate-Vitarte. Two subsequent workshops were held in 1988 and 1990 (the second year of the IAF project) that looked at different health issues.

One month after Fujimori came into power in August 1990, INSAP sponsored a seminar on "Health Policy in the 1990s" for new MOH personnel and NGOs. One proposal, to place NGO personnel in charge of the UDES, was accepted by the new minister of health. This resulted in INSAP personnel taking over the UDES for the eastern cone of Lima, with four INSAP staff physicians entering the public sector. Three of the four remained on INSAP project salaries to continue implementing INSAP's local projects, including the IAF-funded activity for the establishment and support of the botiquines.

Through its public sector authority, INSAP was able to make significant improvements in health services in Ate-Vitarte, especially in strengthening the relationships between MOH health centers and posts and communities, relationships which had suffered from some antagonism. INSAP, through MOH health centers, distributed food and equipment to mothers' clubs.

INSAP was in UDES for a year and a half, leaving only when a new minister of health (the third in a little more than a year) refused to work with UDES directors. INSAP's collaboration with MOH shifted, with most of its contacts based on informal personal relationships with individuals in MOH.¹⁰ Relations between ACESAV and MOH have persisted. The MOH has subsequently taken over five of the larger botiquines supported by INSAP under the IAF project and converted them into health posts.

3.3 Technical Aspects

⁹ In the two years prior to this review, the MOH worked to establish policies regarding NGOs. Evidence of these policies: a large World Bank health project in four subregions, managed through MOH, is using a competitive bidding process among local NGOs to subcontract activities.

¹⁰ Under the leadership of INSAP's director, who has a strong interest in policy formulation, INSAP formed a consortium with SASE and the University of the Pacific as a forum for the discussion of national health policy. INSAP is sponsoring the development of a strategic proposal for national health policy with the participation of local experts.

One of the key distinguishing features of the INSAP/IAF project was the fact that it was not driven solely by technology. Nontechnological solutions and the promotion of community participation were considered as significant in project implementation as the sanitation technology. The different activities included the provision of communal latrines, the construction and improvement of water cisterns, trash management, water use, and sanitation practices. A separate activity involved the surveying and sanitation of open irrigation canals.

INSAP's approach is reflected in the orientation of the project activities implemented in the first six months: educational campaigns promoting water chlorination and purification and proper disposal of garbage and sewage. Activities to promote latrines were only gradually introduced as part of overall sanitation efforts.

During the project's first two years, INSAP embarked on an ambitious, broad-based effort to attack the underlying problems of environmental sanitation. Working in 16 communities, INSAP initiated three distinct activities involving both technical and nontechnical solutions as well as active participation by the community: (1) purification and maintenance of water supplies, with talks on cleaning and disinfection of household cisterns and community reservoirs and construction of community reservoirs; (2) garbage collection and disposal through neighborhood and community-wide campaigns, sanitation of existing garbage dumps, and location and siting of new land fills in appropriate locations; and (3) sewage disposal through installation of latrines. According to SASE reports and local comments, community participation was high and commitment strong.

INSAP could not, however, maintain these community-based approaches. Midway through project implementation, activities more or less halted as political violence escalated. Local leaders changed and community interest waned as individuals focused more on food, employment, and safety concerns. At the same time, INSAP's serious liquidity crunch forced the organization to cut back and delay scheduled activities. By the time activities picked up again in mid- to late 1992, much ground had been lost at the local level. INSAP had to renew its promotional efforts with new leaders, many of whom were skeptical of INSAP's promises since delayed disbursement of IAF funds had halted local works. Recurring problems in some communities among the elected leadership, with attempts by some to politicize and co-opt INSAP's work, further challenged INSAP's efforts to implement its various activities.

At the same time, INSAP felt pressured by IAF and SASE to complete physical targets. Consequently, to meet what INSAP perceived as IAF/SASE demands, INSAP dramatically shifted its approach, abandoning its earlier efforts to promote broad-based community participation. INSAP switched to a more directive approach in the installation of latrines and provided funds to cover most costs, including labor that had previously been

contributed in-kind. Work that had been halted on the construction of new water reservoirs was quickly restarted as well.

It is worth noting that during this period of limited participation, problems with poor site selection for both new latrines and water reservoirs arose. Although the initial design had involved community input, the lapse of time between planning and execution coincided with much growth and many changes in the different communities, including in some instances the granting of land rights to individuals. Therefore, it is possible that many of the belated improvements were no longer appropriate by the time they were finally executed.

INSAP was involved in a third activity, the surveying and mapping of 83 km of open agricultural irrigation canals running through the district of Ate-Vitarte. This ambitious effort involved the identification of 86 "critical points" of contamination and their sources, the current use of canals, and the canals' ownership. The surveying was completed primarily by the INSAP team. INSAP's goal was to use the survey as the basis for a strategic plan to help communities in high health risk areas to resolve their problems. Campaigns to fill in localized areas of the canals have already been undertaken in three communities where residents had long complained about rats, infestation, and clogged, overflowing drains. One joint campaign between two villages involved filling in 2.3 km of the canal; the other entailed relining another 127 meters with concrete.

3.4 Educational Aspects

INSAP approached user education from two levels: (1) community training and promotion by sanitation team members and (2) informal follow-up provided by community-resident environmental health promoters and social workers.¹¹ Education in specific topics such as latrines, water use, water chlorination, and garbage disposal was given to promoters and to members of the communities. The talks fell short, however, of directing educational messages to specific desired behavioral changes, a focus now recognized as important in achieving long-term behavioral changes.

The sanitation team played a critical role in the level of success realized. As an organization, INSAP follows a participatory approach, using the types of dialogical interventions advocated by Paulo Freire (see *Cultural Action for Freedom*, Hammondsworth, Penguin Books, 1975). This strategy was reinforced under the dedicated leadership of the community-oriented engineer heading this component. He strongly pursued a participative approach in his own outreach and, through hands-on training of his field staff, ensured the

¹¹ Staff constraints made it difficult to clarify INSAP's educational approach. For this reason, the team relied on limited observations of current practices, insights from the different discussions, and the limited documents to make the following observations.

adoption of such techniques in extension activities.

What stands out is the role of the environmental health promoters and the *asistente sociales*, or volunteer social workers. At least in some communities, they appear to have filled an important function in supporting the promotion of sanitation education. These individuals, usually women, are appointed by the *juntas directivas* to serve as volunteer social or welfare workers. Thus, they are part of the community and representative of the existing leadership. These volunteers assumed a paramount role in INSAP's educational efforts after initial attempts to select and train INSAP project-specific promoters were rejected by the community. Because they are women, the volunteers have easier access to other women and more opportunities to educate them in hygiene behaviors.

Through INSAP training, these volunteer promoters and social workers educated fellow community members in water chlorination, water handling, and waste disposal. They coordinated neighborhood-level health and fumigation campaigns and assumed the primary role in maintaining latrines, monitoring cleanliness and organizing funds when repairs were needed. With the end of the project, some individuals have continued in this role. The environmental health promoters responsible for the *botiquines* remain very active through ACESAV, although they were not involved in sanitation education.

4 LESSONS LEARNED

4.1 Program Strategies

INSAP's multifaceted, participatory approach enabled it to overcome constraints that might otherwise have affected project implementation. Overall, activities clearly contributed to the increase of beneficiary knowledge, skills, and experience and provided for improvements in basic sanitation. These successes point to key features of INSAP's strategy that should be considered in promoting similar community-based health programs. These features include the following.

O Community-oriented engineers. INSAP's engineers had experience and regard for the social mechanics of projects, such as the importance of mobilizing communities and involving future users. The senior engineer had hands-on experience in peri-urban sanitation, and, importantly, was willing to consider alternative and nontechnical solutions to the sanitation constraints. For example, the first activities undertaken by the project engineers involved promotional talks using group dynamic techniques to introduce topics regarding water handling practices.

O Creating awareness through perceived needs. INSAP often responded to perceived health needs as a first step in building local credibility. This approach has included such activities as the establishment of health posts, the creation of ACESAV, and fumigation campaigns. Responding to these perceived needs often enabled INSAP to embark on projects in areas of lower priority, such as basic sanitation. A large part of INSAP's sensitivity to these perceived needs derived from its long-standing work in Ate-Vitarte: through this long history of interactions with local communities, INSAP gained in-depth knowledge of historical constraints, needs, and priorities. In some newer communities, INSAP did conduct simple community assessments; however, there were no broad-based participative community assessments.

O Promoting broad-based community involvement. INSAP recognized the tenuous, diverse, and complex societal status of the communities in which it was working. For this reason, INSAP targeted its interventions through both formal and informal leadership. This included elected authorities such as the juntas directivas; informal leaders such as neighborhood and interest groups, mothers' clubs and community kitchens; and appointed representatives such as the asistente sociales. By broadening its outreach this way, INSAP

believes it has reduced some of the disruption in project activities that occurs as a result of changes in elected leadership or volunteer promoters.

O Working through established community volunteer social workers. Early in project implementation, INSAP abandoned its efforts to create project-specific environmental health promoters and instead shifted its outreach through the already established community volunteer social workers under the junta directiva. The impetus for the change, which was made at the suggestion of local communities, was to avoid unnecessary imposition of another external (and volunteer) health promoter. The effect was to strengthen the delivery of sanitation-related messages through a volunteer social worker, not a sanitation extensionist, as is often typical for such projects.

O Roles as intermediaries. INSAP's experience with MOH illustrates the intermediary role to be played by NGOs in developing and coordinating the provision of services between the public sector and communities. The MOH is a constantly shifting institution with a high turnover rate and political appointees in nearly all high-level posts, including UDES and UTES directors. Therefore, an NGO such as INSAP can provide constancy and continuation and can serve as the memory for communities whose relationships with the public sector lack such elements. At the same time, to serve as an effective intermediary, an NGO has to invest time and energy to continually reestablish links and new agreements with each different public sector institution as personnel change. INSAP fell short of sustaining these contacts toward the end of the project.

However, the project provided little opportunity for capacity building or sustained behavior changes, issues now recognized as critical for sustainability. INSAP followed a traditional concept of participation in information-sharing, community mobilization and organization, and involvement of the community in construction, operation, and maintenance. Given the local context and timing, this approach was notable. However, new understandings of participation suggest the need for broader strategies of participation that emphasize capacity building, facilitation, and empowerment to ensure effective involvement and long-term sustainability.¹²

These learnings point to unintended weaknesses in INSAP's approach. They provide a basis for identifying other key issues regarding the implementation of community-based health and sanitation in peri-urban areas by NGOs such as INSAP. These issues should be considered by IAF when it monitors any NGO program involving community participation. The issues include the following areas:

¹² An overview of these new learnings is provided in the WASH publication *Lessons Learned in Water, Sanitation, and Health*, which summarizes thirteen years of experience in developing countries.

O Capacity building. Field experience has shown that the sustainability of improved community services depends on full community involvement, which requires systematic, targeted interventions to build the capacity for community management and behavioral change. Creation of such community capacity emphasizes organizational capability, collective problem-solving skills, and mobilization of resources. It is not confined to subject-matter training; true capacity building requires that community-based organizations develop the capability to generalize the learning acquired in one area to other areas as well.

Evidence that this approach was weak or missing in the INSAP approach can be seen in the lack of follow-through in basic sanitation after INSAP's external support was withdrawn, particularly following the first phase of aggressive and seemingly successful project outreach. For example, in one instance, residents discarded latrine components INSAP left behind when the project concluded and declined to build any additional ones. Another example concerns volunteer social workers who were unclear how to resolve problems of declining support from the juntas directivas.

O Provision for intermediate solutions. Peri-urban communities are complex, with evolving needs and priorities. Strategies to resolve deficiencies in services should incorporate provisions for intermediate and alternative nontechnical approaches to addressing peri-urban sanitation. In the asentamientos humanos where INSAP works, there are great differences in housing status from one community to the next and within each community. This is especially true in those communities where families have secured land rights and have begun to progressively improve their structures.

O Capacity to evaluate community willingness to pay. The evolving needs, priorities, and changing legal status of community members influence the types of sanitation improvements that are acceptable and affordable to a community. The importance of this capacity to evaluate is seen in another NGO project implemented in Lurin, a rural province in the southern part of the Lima Region. In that project, people were willing to pay \$150 for an underground conventional sewage system rather than \$50 for a latrine in each house. High willingness to pay instills a sense of ownership that engenders more effective cost recovery.

O Changing behaviors and attitudes to create demand. The priority perceived need of communities is the provision of medical care by a qualified physician, followed by preventive health care and health education. However, health needs fall far below the perceived priorities of electrification, water and sewage services, and educational facilities. The community botiquine with a trained promoter and the provision of latrines are stop-gap

measures. True changes in sanitation behaviors can occur only with effective communication strategies. Educational messages need to be specially designed and directed to desired behavior changes, based on current beliefs and practices, with pretesting or validation of messages. This type of educational plan was not programmed into the INSAP environmental sanitation project.

4.2 Management Issues

Management capability and technical competence were key factors underlying effectiveness in program implementation. INSAP, like many NGOs, has suffered from an inefficient organizational structure and poor management systems. This resulted partly from INSAP's evolution as an NGO: it has not been easy to make the transition from a group of committed doctors donating their services to an organization implementing large contracts and based on standard management systems. Many of INSAP's strengths, such as commitment, flexibility, close contacts with local communities, and innovation, have left it without a clear organizational direction. Problems in this area included unclear roles and responsibilities for staff members and weak administrative procedures.¹³ The following are offered as selected observations:

O Strategic planning. The lack of strategic or institutional planning is perhaps one of the most visible problems facing INSAP. One reason involves limited and uncertain funding, which makes strategic planning difficult and often leads to opportunistic operational planning to capture financing and/or support. A second visible problem is the lack of a clear vision of INSAP's long-term purpose and strategy.

These inconsistencies affect program coherence and strategic competence. INSAP initially struggled to provide services under the new environmental sanitation component funded by IAF, a component for which INSAP's capacity was un- or underdeveloped. Subsequently, additional IAF funding was sought to support the recruitment of additional staff. Overall, the project provided an excellent opportunity for INSAP to broaden its outreach from providing free and low-cost medical care with immunization campaigns addressing the various aspects of environmental health. With the addition of new staff and through the IAF project, INSAP enhanced its capacity and community-based health programs.

However, with the end of the IAF project, this expertise may well be lost. No funding has been secured to continue this program area; the majority of project staff have left. None remained as permanent members of core professional staff. Little of the project's experience

¹³ IAF, through SASE, commissioned a review of IAF clients that included INSAP. This review, by K. Weinberger, considers INSAP management in more depth.

was documented for future operational guidelines. The main hope for continuity rests on the prospects of financing for continued work on the canal study, although this has not been rigorously pursued. Instead, INSAP has pursued program areas more closely related to the core interests of INSAP's director as well as to those of another founding member. As funding has become even more limited, there is a sense that INSAP may accept any project irrespective of whether the project falls within the organization's priorities.

O Management structures, systems, and procedures. INSAP's fundamentally weak management structure compromised its technical competence and service delivery. Problems in this area can be seen in the poor administration system, limited monitoring, weak financial controls, and lack of accountability to an independent board. For example, throughout project implementation, INSAP was frequently constrained by late disbursements in IAF funding. These cash flow shortages forced curtailment and postponement of community projects, creating credibility gaps at the local level and often jeopardizing local relationships. While some of these delays were created by IAF, INSAP also shared the blame because of its poor accounting systems.

O Management of growth and change. INSAP, like many NGOs, suffers from a "founder's trap" in that the organization is centered around a charismatic individual who has led the organization from its inception. INSAP needs to make the transition to a more open, participatory organization based on standard management systems.

4.3 IAF's Role as Donor

It is important to realize in assessing the strengths and weaknesses of the INSAP strategy that some of the observed weaknesses in INSAP's program strategy lie in new areas. The promotion of capacity building or the issue of willingness to pay are concepts or methodologies that have only recently emerged in environmental health. They are in some sense part of the state of the art knowledge. INSAP also experienced managerial weaknesses. This raises questions concerning the role of donors such as IAF in financing and supporting NGOs to work in sectors such as environmental health. It also provides the opportunity to draw selected learnings regarding the nature of that role.

O Targeted technical support. NGOs often are not proficient or have little access to state of the art technologies related to their technical subsector. This was clearly a weakness of INSAP during project implementation. To address such issues in selecting grantees, IAF's preliminary project and proposal discussions should identify a minimum but sufficient mix of technical skills and management capabilities. Such assessments can in turn guide IAF and SASE in developing learning activities for grantees and assisting them to access targeted

technical support to develop this capacity.

O Costs of participation. Bringing about community involvement, building local capacity, and facilitating behavioral changes require a great deal of work and time that is often not budgeted. NGOs working in community-based health projects frequently place more emphasis on technical considerations to provide increased coverage than on social aspects. Balancing the two may require input and informed advice from a donor such as IAF, particularly if delays occur as they did here, in order to avoid tradeoffs between community involvement and technical coverage.

O External monitoring role. The INSAP experience clearly demonstrates the critical importance of in-place monitoring systems that

look at effective performance.¹⁴ The effectiveness of external monitors such as SASE depends on systematic, routine examination that considers not only essential physical targets and expected outcomes but also provides input on technical, methodological, and management issues. Success in providing this input requires a facilitative—not a directive—stance from SASE monitors if sustainable institutional development of grantees is to be realized.

O Shared responsibility. IAF shares responsibility for some of the constraints encountered during project implementation. IAF, as the funder for these projects, acts as a facilitator in advising and supporting NGOs in their project development. The weaknesses perceived in INSAP's program implementation must therefore be viewed not only in relation to INSAP's internal difficulties but also within the context of overall IAF support: for a large portion of the project, IAF support was limited or nonexistent. IAF was constrained by the political crisis and travel restrictions in providing hands-on support. With more oversight, midpoint adjustments in project indicators might have been identified to compensate for the unforeseen complications that frustrated many project activities. This raises two issues. One concerns the need for informed policies on IAF program support in crisis situations: in such instances should project funding be suspended? How much more authority could (or should) be devolved to SASE? The second concerns IAF expertise in overseeing such development initiatives: as a generalist organization, how and where does IAF cultivate its own resources to establish benchmarks and provide support for local monitors?

¹⁴ This is an area that is already under review by IAF.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

An intermediary NGO such as INSAP possesses the potential to be an important linkage in developing and coordinating the provision of services between the public sector and communities. This role is especially important when addressing environmental sanitation in peri-urban areas, where strained relations and suspicion often exist between the public sector and communities. NGOs can provide an important linkage in bridging the inherent differences in interests between communities and the public sector.

INSAP possesses two key advantages in creating linkages that are relevant for other NGO-implemented projects in community-based environmental sanitation. The first is INSAP's demonstrated interest and understanding of environment and health, as reflected in its community-based approach in seeking technical and nontechnical solutions to the problems caused by environmental hazards. The second is INSAP's national focus and agenda in advocating collaboration between the public and private sectors in providing health care.

At the same time, INSAP's approach constrained its capacity for effective outreach. INSAP was well-intentioned in responding to perceived needs, but in so doing it abdicated its responsibility to create demand for desired behaviors. INSAP's lack of experience in creating enabling environments hampered the development of community-based management, which in turn limited INSAP's opportunities to work with communities in identifying needs and priorities and acceptable and affordable improvements. This issue bears directly on local willingness to pay and has important implications for cost recovery—a serious issue that must be addressed by NGOs such as INSAP in their own strategies of self-sufficiency.

When considering the role of donors such as IAF, it is important to remember that many of the issues that constrained INSAP's otherwise reasonable approach are new issues in the understanding of the relationship of improved health and environmental sanitation. Technical expertise is closely linked with managerial competence. IAF can make available information on the "cutting-edge" technologies needed to strengthen NGOs such as INSAP in their implementation and management of environmental health projects. This will require innovative partnerships at various levels to explore and consider new approaches.

5.2 Recommendations: Strategies for Program Development in Environmental Health

5.2.1 Recommendations for INSAP

INSAP must clarify its long-term programming mission and vision regarding the implementation of environmental health projects. If INSAP decides to continue in this area, the following provides a basis for further development of a vigorous environmental health program:

Develop INSAP's professional capacity in environmental health by creating management and monitoring systems and maintaining technical expertise in participation. Suggested strategies include:

- Institutionalize the IAF/Ate-Vitarte experience through systematic review and development of a program for environmental health.
- Disseminate experience through seminars with other NGOs and public agencies.
- Include community-oriented engineer as permanent member of core staff. In the absence of project-based funding, this position might be funded in part by selling consulting services to other NGOs.
- Upgrade community participation activities through staff training in the transfer of technical and leadership skills to community representatives.
- Incorporate evaluation and performance monitoring in the design and execution of all participation activities. In relation to specific impact indicators, consider selected recommendations provided in the report prepared by Dr. Eliana Chavez (see Appendix C) as part of an overall plan for project monitoring that considers relevant qualitative and quantitative aspects.

Create enabling environment for community-based participation by integrating new methodologies and strategies currently available as state of the art knowledge.

Suggested strategies include:

- Implement baseline studies to identify existing behavioral attitudes, knowledge, and behaviors.
- Through hygiene education integrate behavioral elements into the development and provision of technologies. The planning and evaluation of this education needs to be included in the budget and promoters need to be trained in the delivery of messages.
- Include in project design specific activities aimed at developing community awareness of the advantages, disadvantages, and maintenance requirements of various technology service

options.

- Integrate methodologies for assessing willingness and ability to pay.
- Identify and develop appropriate, alternative interim and intermediate solutions for the provision of basic services.
- Develop methods to incorporate the needs and requirements of the primary users and managers of domestic water—typically women—in technology choice, design, and management.

Assist botiquines in strategic planning and program development. Suggested activities include:

- Expand linkage with environmental health campaigns.
- Identify new income-generating and cost-recovery schemes.
- Develop health management systems, using disease indicators to identify environmental hazards.

Create communication channels between local government and communities.

Strategies include:

- Establish sustained working relationships with the municipal government, SEDAPAL, and MOH.
- Facilitate effective connections between communities and public agencies such as SEDAPAL, the municipal government, and MOH regarding information on available public sector assistance and resources.

5.2.2 Recommendations for IAF

IAF can enhance its role as a donor in supporting its clients' environmental health projects. Following are suggested actions IAF might take in enhancing the capacity of its grantees.

Selection of NGOs. When selecting NGOs for environmental health projects, IAF should consider the lessons learned regarding technical and management issues found in Chapter 4. The following are suggested as first steps in developing selection criteria:

- *Level of interaction in building linkages between government institutions and informal settlements.* By serving as bridges between formal institutions and informal settlements, NGOs can help draw attention to the needs of peri-urban communities. Does program planning include coordination with formal institutions? Do NGOs have an exit mechanism for their own involvement?

- *Organizational capacity for project implementation.* What staff are identified and available? To what degree are field teams multidisciplinary in composition? Does the NGO have access to community-oriented engineers with grassroots experience? What experience or interest do staff have in process and training skills?
- *Integration of technical and behavioral aspects.* How much consideration is given to existing knowledge and hygiene practices in project design? Do project goals include behavioral changes as well as physical targets?
- *Identification of existing social and political structures.* How and to what extent have community assessments been implemented? What community organizations exist? What support and involvement is given to the project? Has the role of women been identified? How are women involved?
- *Strategies for community participation and management.* What approach is taken to facilitating community participation? How is community participation defined? What and how much emphasis is given to capacity building?
- *Understanding of financial viability.* Strategies for cost recovery and determining willingness to pay provide a basis to extend and sustain project interventions. Does the NGO provide a forum for effective local involvement in decision making on the level of services? Is emphasis placed on cost recovery rather than grants or subsidies?
- *Provision for intermediate solutions.* Does planning consider intermediate and alternative nontechnical approaches?
- *Identification of other donor and NGO programs.* What other development projects are ongoing? What has been the history of development projects? What other NGOs or public institutions are involved in the community? What level of cooperation is identified in complementary projects?

Program support to grantees. To reinforce IAF's current review of program support to grantees, IAF should provide specific technical assistance to NGOs in the following areas:

- Thematic workshops under the auspices of SASE on the promotion of community participation and management, gender, planning for hygiene education, scaling up technologies, and educational material development.
- In line with current discussions with EHP, IAF should incorporate state of the art methodologies regarding environmental health into their technical support to NGOs. IAF should also identify appropriate ways of disseminating these methodologies to NGOs working in environmental health.
- Identify and review the basis for consultations with community-oriented engineers

employed by INSAP and OACA.

- Include internal monitoring and evaluation systems addressing changes in knowledge, attitudes, and practices.

- Implement through SASE a brief review of IAF grantees and their non-IAF basic sanitation projects to identify other key issues that might be addressed with IAF grantees in environmental health projects.

Monitoring systems. In relation to changes in SASE's monitoring role, the following might be considered by IAF in structuring a monitoring system:

- Given the myriad roles to be played by SASE project monitors, IAF might consider targeted training for monitors in conflict resolution, participatory monitoring skills, and training and mentoring skills. This would enable monitors to pass on technical and group process skills to NGOs and would enable NGOs in turn to transfer these skills to community representatives. Development of any monitoring system structure should incorporate a learning process approach in providing a basis for project design and implementation. This would require identification and agreement with IAF on areas in which project objectives and indicators could be modified in project implementation if refinements are needed and at what level of prior approval from IAF.

- The president of SASE has extensive experience in NGO development and in the NGO community. He would be an excellent resource for identifying and implementing an appropriate basis for effective communication with NGO senior executives. His input should be maximized in securing their commitment to effective monitoring systems and establishing open dialogue at that level.

- Monitors should work with NGO management in implementing institutional needs assessment to identify priorities, needs, and organizational capacity. Design of any monitoring system should follow participatory, experiential techniques to develop a realistic and mutually acceptable format, levels of indicators, and standardization of reporting procedures. NGOs should provide verbal and written commitment that they will adhere to the monitoring system agreed on.

- IAF can draw on the experience of EHP staff in developing guidelines for quantitative and qualitative indicators that SASE monitors can use to facilitate NGO staff in the implementation of baseline assessments to identify attitudes, knowledge, priorities, and goals.

- SASE project monitoring should focus on: (1) organizational monitoring and (2) community monitoring. The first involves at least quarterly meetings with key project staff at both the management and technical levels to discuss project progress, review attainment

of objectives, and identify problems, priorities, and lessons learned. Portions of these organizational visits should also include site visits with project staff to observe directly service delivery approaches.

The second should include a regular schedule of at least quarterly visits to each project site. Such visits should be made without the NGO and include informant interviews with key leaders of the juntas directivas and organizaciones funcionales, random informal interviews with individual household members, general observations, and, at least semi-annually, small focus groups.

○ SASE's resumption of regular internal staff meetings should be adhered to and a process established to provide feedback to IAF.

○ IAF and SASE should establish a procedure for periodic, major reviews of project monitoring to discuss achievements to date and problems encountered.

Future directions for INSAP. IAF could consider funding INSAP for a short period to complete an analysis of the IAF project and enable INSAP to develop a solid foundation of institutional memory to capture key lessons learned.

5.2.3 Recommendations for EHP

Given the local context, Peru is perhaps a good test site for the implementation of a pilot project in community-based environmental management. In adapting this model for Peru, the following factors should be taken into account:

- INSAP's orientation is compatible with EHP. However, INSAP is constrained by current institutional weakness and the fact that the sanitation team has been laid off.
- INSAP is not the only possible partner NGO. Other NGOs are also involved in environmental sanitation in Ate-Vitarte: Centro de Ideas is a broad-based NGO which focuses on promotion and contracts engineers from the government or private sector; it has small IRC support for a limited water supply project. OACA is an NGO composed of engineers and scientists; it is currently involved in a project to provide credit to design systems and another loan for intermediate works. Alternativa, a very large multisectoral NGO, is working in the northern cone of Lima on sanitation projects. Alternativa and Centro de Ideas operate other IAF-funded projects.
- Under the initiative of Centro de Ideas, the Ate-Vitarte *Comite de Gestion* (Action Committee) has recently been re-formed to develop district-level plans. However, this venture is modestly underfunded, overly ambitious, and not well-thought through.
- SASE, IAF's local monitoring office, has interest and experience in facilitating such technical workshops.
- There is a lack of coordination and much competition among district mayors and with the mayor's office of Metropolitan Lima.

Technical assistance could be provided to INSAP for the review and/or implementation of the canal study. Factors to be kept in mind:

- The project has no committed funding for implementing.
- The canal goes across two districts, Santa Clara and Ate-Vitarte.

If EHP assists IAF in developing local capacity in environmental health, EHP should consider training as local resource persons individuals such as INSAP's Luis Tafaur or engineers employed by OACA. Such individuals could then provide their services to NGOs on a broader basis.

APPENDIX A

Consultancy Agenda

- Nov. 9 Meeting - INSAP: Dr. Arturo Yglesias, Director (local consultant)
- Nov. 11 Meeting - INSAP: Dr. Arturo Yglesias, Director; Ing. Luis Tafur, Sanitation Engineer, head of environmental sanitation component of IAF project with INSAP; Carmen Luisa Nunez, Administrator (local consultant)
- Nov. 13 Arrival, international consultant in Lima
- Nov. 14 Briefing - USAID: Paul Cohn, Chief, Office of Health, Population, and Nutrition (HPN)
- Briefing - INSAP: Ing. Luis Tafur, Carmen Luisa Nunez
- Visit to AA.HH. Tupac Amaru - group discussion with health promoters
- Nov. 15 Briefing - SASE: Baltazar Caravedo, President; Eudosio Sifuentes, Monitor.
- Visit to AA.HH. Cesar Vallejo: Meeting with Junta Directiva
- Visit to AA.HH. San Antonio: Interview of health promoters from San Antonio and '25 de Julio'
- Nov. 16 Meeting - SASE: Eudosio Sifuentes, Monitor
- Meeting - INSAP: Luis Tafur, Carmen Luisa Nunez, and Filomeno Blacido, IAF project sanitation assistant engineer
- Visit to District of Ate Vitarte: Orientation to INSAP study of irrigation canals
- Visit to AA.HH. Chinchos: Group discussion with members of Junta Directiva and selected women residents
- Nov. 17 Meeting - OACA: Qco. Gerardo Llanos and Ing. Marcos Alegre
- Visit to AA.HH. Tupac Amaru: Tour of INSAP works with Luis Tafur
- Meeting - SASE: Eudosio Sifuentes
- Nov. 18 Visit to AA.HH. Amauta: Tour of INSAP works with Luis Tafur
- Meeting - Ate-Vitarte: Dr. Jose Gonzalez, Program Coordinator, Territorial Health Unit (UTES) of Ate-Vitarte, Ministry of Health

Meeting - Ate Vitarte: Dr. Edwin Garcia, Pediatrician, Health Center of Vitarte,
Ministry of Health

- Nov. 19 Meeting - INSAP: Dr. Luis Castaneda, responsible for IAF project for INSAP;
Carmen Luisa Nunez
Visit to Ate-Vitarte: group meeting with community representatives to ACESAV
- Nov. 21 Meeting - Centro IDEAS: Russela Zapata Zapata, Director, Urban Program;
Juan Fernandez, Sub-Director, Urban Program
Meeting - SASE: Eudosio Sifuentes, Baltazar Caravedo
- Nov. 22 Meeting - INSAP: Dr. Arturo Yglesias; Carmen Luis Nunez; Dr. Enrique
Castaneda, former director of UDES Lima Este for the Ministry
of Health
- Nov. 23 Meeting - Ate Vitarte: Santa Cruz Parish Office - Martha Salvatierra Ponce,
Social Worker, President of the Comite de Gestion de Ate-
Vitarte/Control de Comedores de Ate-Vitarte, Cirila Calla Calla
Debriefing - USAID: Paul Cohn, Chief of HPN
Meeting - DESCO: Gustavo Riofrio, Director, Urban Program
- Nov. 24 Meeting - INSAP: Dr. Arturo Yglesias
- Nov. 25 Team meeting
Debriefing - SASE: Balthazar Caravedo and Eudosio Sifuentes
Debriefing - INSAP: Dr. Arturo Yglesias
- Nov. 26 Team meeting
- Nov. 27 Departure, International consultant

APPENDIX B

INSTITUTIONS AND PERSONS VISITED

AA.HH. Amauta I

AA.HH. Cesar Vallejo

Junta Directiva

AA.HH. Chinchos

Junta Directiva

Selected mothers

AA.HH. San Antonio

Health promoter

AA.HH. Tupac Amaru

Asistentes sociales

ACESAV

19 health promoters/asistentes sociales

Centro de Salud de Vitarte

Dr. Edwin Garcia, Pediatrician

Centro IDEAS

Russela Zapata Zapata, Director, Urban Program

Juan Fernandez, Sub-Director, Urban Program

Comite de Gestion de Ate-Vitarte

Cirila Calla Calla, President of the "Comite de Gestion" (Action Committee) of Ate-Vitarte, and President of Central Committee of Community Kitchens of Ate-Vitarte

DESCO

Gustavo Riofrio, Director, Urban Program

INSAP

Ing. Filomeno Blasido, Sanitation Engineer

Dr. Enrique Castaneda, former Director UDES Lima Este

Dr. Luis Castaneda, responsible for IAF project

Dr. Miguel Gutierrez, Board of Directors member

Carmen Luis Nunez, Administrator

Ing. Luis Tafur, Sanitation Engineer, responsible for
environmental sanitation component of IAF project

Dr. Arturo Yglesias, Director

OACA

Qco. Gerardo Llanos, Director

Ing. Marcos Alegre

Parroquia 'Santa Cruz'

Martha Salvatierra Ponce, Social Worker

SASE

Baltazar Caravedo, President

Eudosio Sifuentes, Monitor

SEDAPAL

Ing. Elizabeth Vargas

USAID/PERU

Paul Cohn, Chief, Office of Health, Population, and
Nutrition

Jennifer Vernooy, SHIP-North Project Coordinator

UTES - Ate-Vitarte

Dr. Jose Gonzalez, Program Coordinator

APPENDIX C

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APPENDIX D

DEBRIEFING PAPER FOR INSAP

Observaciones Preliminares: Evaluación y Revisión de Estrategia Programática de Proyecto de Salud con Base en ONGD

Desde hace cinco años, INSAP viene promoviendo actividades de salud y saneamiento orientadas hacia la comunidad, a través de proyectos locales en 19 asentamientos humanos de Ate-Vitarte. En este trabajo, INSAP ha experimentado significativos retos en la implementación de su programa, enfrentando problemas tales como una epidemia de cólera, el colapso del sistema peruano de salud, violencia política, cambio en el liderazgo comunitario, así como restricciones en administración interna y desembolso de fondos.

No cabe duda que las actividades de INSAP en Ate-Vitarte contribuyeron a incrementar el conocimiento, habilidades y aptitudes de los beneficiarios. La mayoría de estos incrementos fueron de índole técnica, con ciertos cambios necesarios de conducta. Sin embargo, la consolidación de la capacidad no estaba programada como componente del proyecto, lo cual afecta sus perspectivas de sustentabilidad.

Aspectos Técnicos

- * existencia de ingenieros con orientación comunitaria
- * enfoque particular de facetas múltiples, que se concentra no solamente en la dotación de agua y saneamiento, sino en otras intervenciones tales como la eliminación de desechos y otros vectores ambientales
- * ventaja comparativa en el enfoque integral de salud y saneamiento

PERO:

- * no se ha institucionalizado la experiencia
- * no se han tomado las medidas necesarias para el "scaling up" y difusión de tecnología

Participación y Manejo Comunitarios

- * proceso consultivo que comprende la información compartida, educación comunitaria, y toma de decisiones
- * respuesta a necesidades sentidas de la comunidad en salud ambiental

- * creación de ACESAV como un organismo independiente manejado localmente, capaz de generar sus propios recursos

PERO:

- * limitada coordinación entre fechas de iniciativas y mano de obra
- * la participación limitada no ha permitido que las comunidades se hagan cargo del diseño y manejo de sus propios servicios
- * limitada consolidación de capacidad, ya sea con asistentes sociales o ACESAV

Aspectos Educativos

- * papel central desempeñado por Asistente Social
- * integración entre salud y saneamiento ambiental

PERO:

- * falta de seguimiento o monitoreo
- * desarrollo limitado en aptitudes de educación en salud
- * falta de materiales educativos
- * disminución de apoyo para Asistentes Sociales al irse consolidando los asentamientos humanos

LECCIONES APRENDIDAS

- * las comunidades peri-urbanas son entidades complejas con necesidades y prioridades cada vez mayores. Las estrategias que se implanten para resolver las deficiencias en

servicios deben incorporar dispositivos que permitan el "scaling up" de tecnologías, y deben estar basadas en evaluaciones participativas.

- * La participación comunitaria no conduce automáticamente al manejo comunitario.
 - * La falta de sistemas internos de evaluación y monitoreo del rendimiento impidieron un adecuado manejo del proyecto. La efectividad en el monitoreo y evaluación del rendimiento facilitan la explicación, mejoramiento y replicación del proyecto.
 - * La efectividad de los monitoreos externos, tales como el SASE, exige un análisis sistemático y rutinario que tome en cuenta no sólo los parámetros esenciales de implementación, sino que proporcione información sobre cuestiones técnicas, metodológicas, y administrativas.
 - * Las ONGDs desempeñan un papel importante en el desarrollo y coordinación de la dotación de servicios entre el sector público y las comunidades.
- * Las ONGDs deben desempeñar un papel importante en la ayuda que se preste a las comunidades para obtener crédito de fuentes privadas para el mejoramiento de servicios.

ESTRATEGIAS PARA EL MEJORAMIENTO DEL PROGRAMA DE SANEAMIENTO AMBIENTAL

Como primer paso, INSAP debe revisar y esclarecer su misión y punto de vista en lo que concierne a saneamiento ambiental. Si INSAP decide continuar con el saneamiento ambiental, lo que señalamos a continuación serviría de base para el mayor desarrollo de un fuerte programa de saneamiento ambiental:

Profesionalizar la capacidad de INSAP en saneamiento ambiental

- * Institucionalizar la experiencia de IAF/Ate-Vitarte mediante la revisión y desarrollo sistemáticos de un programa de saneamiento ambiental.
- * Diseminar la experiencia para su replicación en otras áreas mediante seminarios con ONGs y entidades públicas.
- * Incluir a un ingeniero de orientación comunitaria como miembro permanente del personal de núcleo. En caso de no contar con fondos del proyecto mismo, esta posición podría financiarse en parte mediante la venta de servicios de consultoría a otras ONGs y otras agencias.

- * Integrar en el diseño del proyecto, metodologías que permitan evaluar la capacidad y buena disposición a pagar.
- * Incluir en el diseño del proyecto, actividades específicas con miras a desarrollar la percepción comunitaria en cuanto a las ventajas, desventajas y requerimientos de mantenimiento de diversas opciones de servicios de tecnología.
- * Identificar y desarrollar soluciones apropiadas interinas e intermedias para la dotación de servicios básicos.
- * Desarrollar métodos para incorporar las necesidades y requerimientos de los administradores y usuarios primarios de agua doméstica - en su mayoría mujeres - en la selección, diseño y manejo de la tecnología.

Crear un ambiente que facilite la participación de base comunitaria

- * Mejorar las actividades de participación comunitaria mediante capacitación de personal en la transferencia de aptitudes técnicas y de liderazgo a los representantes comunitarios.
- * Implementar estudios básicos para identificar las actitudes, conocimientos, y conductas existentes.
- * Integrar los elementos de conducta en el desarrollo y dotación de tecnologías, mediante educación en higiene.
- * Incorporar evaluación y monitoreo de rendimiento en el diseño y ejecución de todas las actividades participativas. En cuanto a indicadores de impacto específicos, considerar algunas recomendaciones seleccionadas del informe preparado por la Dra. Eliana Chávez como parte de un plan general para el monitoreo del proyecto, que tomen en cuenta los aspectos cualitativos y cuantitativos pertinentes.
- * Ampliar los vínculos entre el componente de botiquines y de salud ambiental para garantizar la viabilidad financiera de los botiquines e integrar los mensajes de salud ambiental en otros programas.
- * Consolidar la capacidad local y evitar dependencia, coordinando esta estrategia con otras ONGDs.

Crear canales de comunicación entre gobierno local y comunidades

- * INSAP debe buscar relaciones continuas de trabajo con el municipio, SEDAPAL, y el

Ministerio de Salud.

- * INSAP debe facilitar una conexión efectiva entre las comunidades y entidades públicas como SEDAPAL, el municipio, y el Ministerio de Salud, en relación a información sobre asistencia y recursos del sector público.