Guatemala

Social Investment Fund Project

Report Date: May 2003

Field Survey: October-November 2002

1. Project Profile and Japan's ODA Loan

Project location map

Water and sewage systems, Bethel, Zacapa

1.1 Background

As of the early 1990s, approximately 70% of the total population of Guatemala was living in poverty (roughly fifty percent in absolute poverty), with this tendency particularly conspicuous in rural agricultural areas inhabited by indigenous Indian peoples. The problem was especially intractable in the medical and health care, education, sanitation, and transportation sectors.

Attempting to address these issues, Guatemala's Secretariat of Planning and Programming drew up a social service development plan for the sector with the objective of eradicating poverty and expanding upon public services for the people. Policy included 1) expansion of public investment in the social service sector, 2) enhancing the capacity of related agencies to provide public services, and 3) facilitating participation of rural society in national social development investment planning through the Social Investment Fund (Fondo de Inversión Social: FIS).

The level of investment required to provide basic public services at the national level was estimated at a total of $2.5 billion dollars based on data obtained by the national census of 1992-93. Improvement of basic social services in rural areas is carried out over the long term by increasing government investment to the social service sector, and by bolstering the capability of the related government agencies responsible for planning and implementing investment in the sector. Due to the urgency of the poverty issue, however, an emergency program is also needed to meet short term needs including timely alleviation of living conditions of the poor. Working through the FIS, the ODA loan project was designed to respond to basic social service needs in rural areas by way of such infrastructure projects.

1.2 Objectives

The current ODA loan project set out to provide socioeconomic infrastructure to all parts of the country excluding the metropolitan area of Guatemala City, and to improve social services, by implementing a number of small-scale sub projects through FIS, which itself was established as an emergency program to facilitate development in rural areas. The objective was to improve basic social services for the local people and to provide an economic base for rural society.

1.3 Project Scope

The current project was designed to cover the first three years (1994-1996) of the FIS project plan (which spanned eight years in total) with costs amounting to $130.7 million. The project consisted of (1) sub projects carried out through FIS, and (2) enhancement of the organizational structure of FIS itself.

(1) Sub projects carried out by FIS

Sub projects implemented as part of the ODA loan project consisted of 38 different types, which fell into the categories outlined below.

1) Social services (medical treatment, education, food supply, and occupational training, etc.; 20 categories in total)
2) Social infrastructure (water and sewage systems, latrine facilities, schools, health centers, etc.; 10 categories in total)
3) Economic infrastructure (roads, bridges, small-scale irrigation works, farm silos; four categories in total)
4) Manufacturing sector (loans to small and medium-sized enterprises, etc.; four categories in total)

Project beneficiaries—i.e. local residents—were placed in charge of sub project formulation based on the above categories, proposals for which were subjected to approval by FIS prior to implementation.

(2) Enhancing the organizational capacity of FIS

This project component, consisting of the following, was designed to facilitate more efficient FIS operations.

1) FIS operations (expenditures including salaries, etc.)
2) Equipment, materials, and vehicle purchases
3) Technical assistance (training costs, etc. for FIS employees)
4) Consultant hiring to handle sub project formulation and management
5) Auditing

The project received funding from a number of donor agencies as well as from the government of Guatemala. As to component No. 1 above, the ODA loan assisted sub projects for categories 2) Social infrastructure and 3) Economic infrastructure, as well as part of component No. 2 Enhancement of the organizational structure of FIS.

1.4 Borrower/Executing Agency

Republic of Guatemala/Social Investment Fund (Fondo de Inversión Social: FIS)

1.5 Outline of Loan Agreement

Loan Amount Loan Disbursed Amount	3,112 million yen 2,962 million yen
Exchange of Notes Loan Agreement	December 1995 December 1995
Terms and Conditions -Interest Rate -Repayment Period (Grace Period) -Procurement	 3.0 % 30 years (10 years) General untied
Final Disbursement Date	December 2000

2. Results and Evaluation

2.1. Relevance

A total of 75% of the country's population was living in poverty by the time the country's civil war came to an end in the early 1990s, yet the Ministry of Health and the Ministry of Education were lacking in the ability for project planning and implementation required for poverty-stricken rural areas. In their place, an alternative mechanism was needed that would respond to the urgent social service and socioeconomic infrastructure needs of rural areas in an efficient and timely manner. The FIS also aimed to promote decentralization and rural community empowerment within the project implementation period by putting communities in charge of investment project formulation and implementation. In light of the degree of poverty in Guatemala at the time, as well the urgency of the situation and lacking capability on the part of related government ministries and agencies, need for the project was great, and it was considered relevant. Poverty in Guatemala remained serious following project implementation and continuing into the present, particularly in rural areas; according to a survey of households carried out in 1998-1999[1], the population living in poverty totaled 56.7%, with 27.8% (2.8 million) classified as living in absolute poverty. The gap between urban and rural areas, as well as between indigenous and non-indigenous peoples, remained significant, indicating that the project continued to retain its relevancy.

At the initial stages, the project entailed a scheme designed to incorporate local resident participation and encourage community leadership in the development of socioeconomic infrastructure and social services. Sub projects were to be designed by local residents, which would then be selected by FIS based on a certain set of criteria in fair distribution by region. The contract was to be signed by three parties: FIS, which supervised the project, representatives of the local residents, who were in charge of implementation, and contractors. In reality, however, the project was not carried out in the manner originally intended, instead employing a top-down structure. As noted in section "2.3.2 Development of Community-led Initiative" below, specific measures designed to empower the community—a basic requirement for the realization of community-led development, were not incorporated in the project plan. From this perspective, it can be concluded that project planning was not appropriately relevant in some aspects.

2.2 Efficiency

2.2.1 Project Scope

The 38 types of sub projects carried out under the main project were broken down into the following four categories: 1) social services (medical care, education, food supply, occupational training, etc.); 2) social infrastructure (water and sewage systems, basic latrines, schools, health centers, etc.); 3) economic infrastructure (roads, bridges, small-scale irrigation works, farm silos, etc.); and 4) the manufacturing sector (loans to small and medium-sized enterprises). The project was jointly financed by the World Bank, KfW, and others, with the ODA loan project scope encompassing components 2) (social service infrastructure), and 3) (economic infrastructure), with particular emphasis on water and sewage as well as on basic latrine facility sub projects. Because the project was implemented based on the demands of local residents, which meant that the sub projects in the different categories varied in terms of number, cost, and scale, the number of sub projects in

[1] La Encuesta Nacional de Ingresos y Gastos Familiares (ENIGFAM) 1998/1999

each category was not estimated at the time of appraisal. For this reason, no comparison could be made between the number of planned and actual sub projects. Performance of the ODA loan portion of the project is as follows (see Table 1).

Table 1: No. of ODA loan-assisted sub-projects/funds invested

Category	Investment amount (Unit: $U.S. million)		No. of sub projects
	Plan at the time of appraisal	Actual	
Social Services (Health care., education, food supply, occupational training)	—	—	—
Social infrastructure (Water and sewage, basic latrines, schools, health centers, etc.)	17.0	12.5	622
Economic infrastructure (Access roads, bridges, small-scale irrigation facilities, silos, farm commodity processing facilities, etc.)	13.0	11.7	318
Manufacturing sector (Loans to small and medium-sized enterprises)	—	—	—
Enhancement of FIS structure	1.5	0.16	N/A
Total	**31.5**	**24.4**	**940**

Source: FIS Interview research

2.2.2 Implementation Schedule

At the time of appraisal, it was initially estimated that it would be implemented over the three-year period of 1996-1998, but in actuality was extended to a five-year period of 1996-2000. According to the PCR (Project Completion Report) and interview research held with FIS, the main reasons for the delay were as follows: 1) since the mechanism employed by the FIS had few precedents, considerable time was required to establish integrated operational guidelines for procedures spanning the appraisal of projects designated for assistance to the disbursement stage, 2) FIS personnel were not familiar with JBIC procurement regulations, 3) the low ceiling on negotiated contracts stipulated in JBIC procurement rules hindered timely procurement[2], and 4) because the loan terms stipulated a reimbursement system, FIS experienced problems with capital shortages during the implementation period.

In order to avoid delays in disbursement, JBIC dispatched a research group to Guatemala in 1998 to standardize administrative procedures between JBIC and FIS as well as to create electronic versions of procurement-related materials, resulting in tremendous improvements in coordination between JBIC and FIS. The upper limit on negotiated contracts was also raised from $30,000 to $300,000, which facilitated smoother procurement operations[3].

2.2.3 Project Cost

Project costs were estimated at $31.5 million (a limit of 3,112 million yen), but in actuality

[2] Due to a lack of road and communications systems in Guatemala in the mid-1990s, communications between Guatemala City and rural areas were extremely difficult. In light of this situation, procurement by negotiated contact and/or bidding by short-listed companies enabled the needs of the rural poor to be met quicker than by bidding for public offering.

[3] Three of the project's joint donors indicated in interviews that fund distribution and sub project selection were utilized, in some cases, for political reasons including presidential elections. They also reported irregularities with regard to changes in assisted sub projects and procurement as well as unclear decision-making and fund management processes.

amounted to only $24.4 million (2,962 million yen), or $7.1 million (150 million yen) less than the original target (please see Tables 2 and 3). The reason why the project was completed under budget is attributed to delays in implementation, which led to a situation where the whole of the funds allotted could not be used within the loan period

Table 2: Guatemala FIS Project Phase I: Project Costs (Unit: Quetzales)

		Government of Guatemala	JBIC	World Bank	KfW	OPEC
1	Social Services	3,040,000	0	69,866,568	4,328,226	1,179,819
2	Social Infrastructure	9,879,806	102,838,415	43,637,381	114,545,079	37,520,099
3	Economic Infrastructure	2,159,207	110,395,868	3,142,823	1,279,083	0
4	Manufacturing Sector	4,931,427	0	2,706,189	0	0
	Subtotal	20,011,039	213,234,283	119,352,961	120,152,388	38,699,918
	Enhancement of FIS structure	64,794,759	1,391,357	217,086,138	422,266	0
	Total	**84,805,799**	**214,625,649**	**336,439,099**	**120,574,654**	**38,699,918**

Source: FIS answers to ex-post evaluation surveys

Table 3: Trends in investment levels for the ODA loan portion of the project/breakdown of sub project totals

		1995	1996	1997	1998	1999	2000	**Total**
Investment level (Unit: $U.S.)	Planned	1,973,684	8,526,112	7,683,803	7,329,566	0	0	**25,513,167**
	Actual	—	317,059	1,979,133	8,591,548	10,697,062	2,841,723	**24,426,527**
No. of sub projects	Planned	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Actual	—	80	309	588	18	31	**1,026**[4]

Source: FIS answers to ex-post evaluation surveys

2.2.4 Community-Led Sub Project Operations

According to FIS, requested sub projects that met certain requirements[5] and that fell within budgetary limits determined by the level of poverty were all appraised, with FIS giving priority to proposals submitted by the communities. In formulating sub projects, the community determined its own needs, reached a consensus, and made decisions on land and other resources that it was to provide. On average, this process took approximately 2-3 months, though in some cases a number of years were required to obtain approval on the eligibility of certain projects due to problems with land and/or changes in issues considered to take priority, etc.

The World Bank used the following performance indicators to measure the timeliness of project formulation. Table 4 shows the number of days that were required at the various stages. [6]In some instances a number of years were required to complete the stages spanning from sub project formulation through completion, indicating that the FIS project operation cycle was not necessarily equipped to accommodate the needs of local people in a timely manner.

[4] Because the number of sub projects shown here also includes the number of cases where feasibility studies were undertaken, it does not correspond with the figure in Table 1.

[5] To qualify for the construction of health posts and schools, the nearest health post/school must be some distance away from the proposed site. Further, in order to qualify for socioeconomic infrastructure provided by FIS, operation and maintenance must be guaranteed by the Guatemalan central government, and/or regional governments.

[6] Figures shown do not include the number of days required for the community to formulate sub projects. Needs assessment, gathering of community consensus, and the processing of required documents were carried out before the phase indicated in the table as “ascertaining eligibility through appraisal.”

Table 4: Performance Indicators: No. of Days Required at the Various Stages (Actual)

	Social Services	Social Infrastructure	Economic Infrastructure	Manufacturing Sector
Ascertaining eligibility ~ appraisal	68	101	78	49
Appraisal ~ technical committee approval	11	15	33	9
Technical committee approval ~ contract (procurement procedures)	240	145	107	184
Contract ~ implementation	46	68	56	62
Implementation ~ conclusion	211	207	177	1282
Conclusion ~ transfer	61	63	34	16

Source: FIS Information Division
Note: Includes all sub projects assisted by the government of Guatemala, JBIC, the World Bank, KfW, and OPEC.

2.3 Effectiveness

2.3.1 Socioeconomic Infrastructure

The objective of the project was to carry out through the FIS—itself established as an emergency program for rural social development—community-led small-scale sub projects aimed at improving socioeconomic infrastructure and social services in all rural areas, and thereby to realize improved basic social services and an economic base for the local people. The project involved such a number of various and sundry small-scale sub projects that detailed data on implementation was unavailable even from the executing agency. For this reason, excluding data obtained by way of individual social surveys, only data indicating the status of the project as a whole was available. As a result, performance analysis of the ODA loan assisted portion could only be analyzed in light of financial contribution. The following (Table 5)[7] shows the performance of social and economic infrastructure projects carried out by the FIS from the time it was established through 2000, including projects implemented with the assistance of other donors. It is now believed that it would have been beneficial to set indices for monitoring and evaluating effectiveness and impact at the time of appraisal, and to include the appropriate personnel resources and funding in the project scope in order to enable FIS, the executing agency, to regularly collect data on said indices.

[7] Similar information was not available for projects in the social services and manufacturing sectors.

Table 5: FIS Output for 1994-2000

Sector	Achievements
Social Infrastructure (Education, health, water and sewage systems, basic latrine facilities, etc.)	• 6,204 classrooms in 2,705 rural schools were constructed, comprising 66% of the total number of classrooms built with public funds over the period of 1994-2000. • Desks were provided in 3,879 schools, comprising over 50% of the total number of desks provided by the public sector. • 248,160 students each year were provided with an environment suitable for study. • 249 health posts were constructed in rural areas, comprising 57.7% of health posts built with public sector funds during the same period. • 32, 644 households were newly provided with water supply systems. According to the UNDP, 213,654 households were provided with water facilities at that time, 15.3% of which were built by FIS. • 29,704 households were newly equipped with sewage services. According to the UNDP, among 331,984 households provided sewage systems at that time, those serviced by FIS comprised 8.9%. • 31,210 basic latrine facilities were built, representing more than 50% of such facilities built by the public sector during the same period.
Economic infrastructure (Access roads, small-scale irrigation works, farming silos, etc.).	• 4,208 km^2 of cultivated land was equipped with irrigation works. According to the UNDP, a total of 34,043 km^2 of such land was similarly equipped, with FIS's portion comprising 12.4% of the total. • 40 farm silos were constructed and equipped, comprising 56.8% of such projects carried out by the public sector during the same period. • 100 rural communities which previously could not be accessed by passenger car were equipped with 146 access roads (a total of 1,076 km), consisting of 22.8% of the total built by the public sector during this same period.

Source: FIS responses to ex-post evaluation surveys, including analysis of MULTIPSA ex-post evaluation report results.

2.3.2 Development of Community-Led Initiative

Surveys on social issues (case studies) were carried out on the beneficiaries, E-FIS (Empresas FIS, a local committee established to assist with the sub projects) FIS personnel, community leaders, and so on. A total of 10 sub projects and 313 samples were chosen at random from amongst JBIC-assisted sub projects including water and sewage systems, access roads, bridges, small-scale irrigation works, and so on. Respondents were questioned on 1) effectiveness, 2) impact, and 3) degree of local resident participation with regard to planning/implementation/operation & maintenance.

According to the results of the survey, while 33% of community leaders stated that the community as a whole was engaged in planning, a significant number of respondents in the other groups surveyed answered that the sub projects were formulated largely by community leaders and/or by FIS facilitators (see Table 6).

Table 6: Parties engaged in sub project planning (multiple answers provided)

Perspective	Community as a whole	Community men	Mainly FIS facilitators	Mainly community leaders
Beneficiaries	23%		13%	59%
E-FIS	27%	17%	34%	90%
FIS			75%	75%
Community leaders	33%		19%	3%

Source: Results of case study survey

The benefits of the sub projects were not, however, limited to certain groups, as illustrated by the fact that 61.0% of respondents stated that community needs were served by the projects (see Table 7). Including the 27% that reported that the project reflected community needs "to some extent," 88% of respondents agreed that the project did meet community needs. Regarding the issue of implementation process, 83% of respondents reported that they were very happy with the results, while 13% stated that they were satisfied. Only 4% reported that they were unhappy with the implementation process.

Table 7: Opinion on degree to which projects met community needs

Projects reflected community needs:	No. of answers	%
Extremely well	191	61%
To some extent	84	27%
Not particularly	23	7%
Not at all	13	4%
Others	2	1%
Total	313	100%

Source: Results of case study survey

In interviews conducted during this field survey, respondents including other donors pointed out that this particular project failed to properly incorporate community empowerment through development of leadership by the community as a whole. According to the survey, reasons for this can be attributed to lack of education, which itself was due to the fact the areas concerned were poverty-stricken, combined with a lack of previous experience with project operations at the community level related to the country's drawn-out civil war. These factors meant that local residents had little understanding of the concepts of cause-effect analysis or project formulation/operation & maintenance. However, as noted above, the project beneficiaries themselves felt that the sub projects reflected community needs, which indicates that they can be viewed as having been appropriate to local beneficiary circumstances. As observed in the section on "Impact" below, the project represents an important attempt at creating the basis for the development of the leadership role of the community.

2.3.3 Economic Internal Rate of Return (EIRR)

EIRRs were calculated at the time of appraisal for a bridge construction sub project (village of Viejo, San Sebastian, Huehuetenango Department) and a water supply project (village of Toro Seco, Bachalum, Quiche Department) which stood at 63% and 8.3% respectively.

EIRRs were also calculated, though for different projects than at appraisal, based on case study data collected at the time the project was evaluated, on a waterworks project (Bethel, Gualán, Zacapa Department) and on a small-scale irrigation works project (village of Chichicana, San Sebastian, Huehuetenango), which came to 11.9% and 63.2% respectively. The following shows the basis for how these figures were obtained.

Waterworks project in Village of Bethel

Project conditions: Daily wage: Q25.00 (eight-hour/day)
Cost of operation/maintenance (O&M) of water services/household: Q120.00/year
No. of sub project beneficiary households: 75
Project benefit: 1.5 hours/day saved in time spent to draw water
Cost: Investment/O&M costs
Project lifespan: 20 years

Small-scale irrigation works project in Village of Chichicana:

Project benefit: Profits gained in the sale of agricultural commodities
Costs: Investment/O&M costs

Project lifespan: 20 years

2.4 Impact

Though it is difficult to ascertain the extent of the impact of the ODA loan portion of the project by macro-level social and economic indices, the case study sub projects described above appeared to have had the following types of impact.

2.4.1 Improved Living Standards for Local Residents

A number of instances of positive impact of sub projects were noted, including improvements in living environment, sanitary conditions, nutrition, and health. The small-scale irrigation works of Pueblo Viejo, San Sebastian, Huehuetenango Dept.—a case study project—for instance, is an undisputed example of a sub project that raised the standard of living of local residents.

Case study 1: Prior to the implementation of the small-scale irrigation works project at Pueblo Viejo, St. Sebastian, Huehuetenango Department, commercial cultivation was impossible due to lack of access to water. Because they had no source of income, residents left their homes to work for a number of months each year in nearby coffee fields. In 1999, with the assistance of FIS, a small-scale irrigation project was built linking the fields with a water source eight kilometers away. As a result, the village men were able to cultivate foodstuffs closer to their homes, which they sold at market for cash income. According to the case study survey, income rose by more than $40 per month for nearly every household. The local residents are extremely happy with and proud of the irrigation project. Now provided with a source of income, improvements have been noted in the areas of living environment, sanitary conditions, and health & nutrition. Family relations have also improved due to the fact that the men no longer need to leave home to find work.

Other examples include the waterworks project of the village of Bethel, Gualán, Zacapa Department, which significantly shortened the time villagers spent drawing water.

2.4.2 Bolstering Economic Activity

According to interview research conducted on beneficiaries of two case studies—road access and bridge sub projects—35% of respondents reported shorter transportation time required to access nearby markets and cities, while another 45% reported improvements in transportation, also indicating that the small-scale construction of access roads and bridges led to greater economic activity. According to case study research, project beneficiary income rose by approximately 487 Quezales ($61) per month thanks to the greater economic opportunity offered. In addition, access to social services improved due to better transportation facilities.

Case study 2: A case study bridge sub project conducted in San Jose del Golfo, Guatemala Department linked the village with a hospital in Guatemala City. Though just 20 kilometers away, the route prior to bridge construction required villagers to traverse mountain roads; the journey was so difficult that ill individuals sometimes died on the way. Following construction of the bridge, the Guatemala City hospital can now be reached by passenger car within 30 minutes, a development that represents a great improvement in access to hospitals for local residents.

2.4.3 Greater Governing Capacity for Local Residents

Among sub project sites surveyed as case studies, it was observed that the success of a single sub project could result in greater interest in self-governance on the part of the community. The survey indicated that a number of communities expressed a strong desire to draw up new projects utilizing

Case Study 3: Local residents benefiting from the small-scale irrigation project of Pueblo Viejo, St. Sebastian, Huehuetenango were observed to be extremely aware of project ownership and achievement issues, which resulted in a revitalization of the community. Reasons for this development include the following factors: the project utilized relatively simple technology, not requiring specialist design technology; O&M processes needed minimal specialist knowledge, which enabled the local residents to carry it out themselves; and it required no assistance from the regional or central governments.

the FIS system.

2.4.4 Impact on the Environment

Concerned that certain sub projects including water and sewage systems, access roads, and small-scale irrigation facilities posed a burden on the environment to some degree, FIS has taken some measures to alleviate negative impact. The effectiveness of such measures depends on the ability of FIS to assess observance of environmental protection, as well as the issue of to what extent regional governments and communities can invest personnel resources and funding into such efforts. In cases where investment of resources is inadequate, negative impact on the environment can occur, as in case study 4. To resolve the situation, additional systems are required to supplement the efforts of the executing agency and/or local governments on the issue of the environment.

Case Study 4: The case study sub project located in Santa Cruz Balanya, Chimaltenango Department, consisted of a sewage system project and basic sewage treatment facilities. Problems occurred when sewage accumulated in pre-existing facilities provided by the local government was linked to the new treatment facilities, compounded by several days of perpetual downpour. As a result, facility processing capacity was overloaded, leading to malfunction and the present situation where untreated waste water is dumped into nearby river waters. Though the local government is currently considering constructing new treatment facilities, the problem has so far been neglected due to budget constraints. Meanwhile, problems also arose at the waterworks project located in Sayaxche, Peten Department, due to the fact that sewage systems and sewage treatment systems were not provided together with the water supply systems. There, untreated wastewater is dumped into the nearby Pasion River, causing a decline in water quality.

The issue of land acquisition has been resolved as far as reaching consensus at the community level. According to interviews with the related agencies and project beneficiaries, there appears to be no social impact resulting from relocation of local residents.

2.5 Sustainability

According to interview data provided by FIS, the question of who is responsible for O&M of infrastructure built through sub projects differs depending on the sector. In general, it is a precondition for approval of sub projects that the central government agencies and/or local governments concerned guarantee that they will be responsible for O&M, and prospects for the required O&M must be somewhat promising in order to qualify for assistance. In reality, however, as described in the analysis below, there have been many cases where O&M systems have been inadequate.

According to an FIS ex-post evaluation report, funds required to carry out O&M are not to be derived from usage fees paid by project recipients, but are instead supposed to be covered by

agencies responsible for O&M. In reality, however, since sub project committees and community committees have no source of income, it cannot be expected that O&M costs will be covered by the related parties. It is believed that costs are therefore covered by local governments as well as the central government. According to project coordinators at the World Bank, there are cases where sufficient O&M budget is not properly secured, or the budget is not properly utilized, due to the fact that related agencies and/or local governments are not involved in the project formulation and implementation processes.

According to the same report issued by FIS, approximately 53% of sub projects visited by specialists were deemed to be serviced with appropriate levels of O&M (see Table 8). However, 0% of the basic latrine facilities, compared to 95% of small-scale irrigation works, enjoyed sufficient O&M, indicating a great degree of variation between sectors.

Table 8: Sub project O&M

Sector	Is the infrastructure benefiting from adequate O&M?		
	Yes	No	In part
Social infrastructure			
Health centers	25%	62%	13%
Schools	56%	32%	12%
Occupational training centers	50%	25%	25%
Upgraded heating stoves	55%	33%	12%
Public laundry facilities	0%	100%	0%
Water facilities	68%	22%	10%
Sewage facilities	36%	64%	0%
Basic latrine facilities	0%	83%	17%
Economic infrastructure			
Access roads	39%	50%	11%
Bridges	36%	64%	0%
Small-scale irrigation facilities	95%	5%	0%
Farm products processing center	20%	80%	0%
Percent of facilities visited	53%	37%	10%

Source : Evaluación Ex-Post de los proyectos financiados por el FIS con recursos de préstamos BIRF, KfW y OECF Informe Final Segunda Parte Pg. 119

The report further noted that specialist visits to sub project sites, part of the same survey, indicated that only 39% had received any O&M training. Training was provided for the small-scale irrigation works, farm product processing centers, and basic latrine facilities at the high rates of 65%, 60%, and 58%. However, it was reported that for the farm products processing centers and basic latrine facilities, there was a strong possibility that residents were not carrying out sub project O&M in any significant capacity. FIS analyses indicate that 90% of communities in which infrastructure such as schools, water and sewage systems, basic latrine facilities, and access roads were built lacked the technical capacity to carry out O&M.

The results of the case study research carried out under the current survey proved similar to data obtained in the ex-post evaluation report mentioned above, a finding that points to problems with regard to sub project O&M. 54% of project beneficiaries indicated that they participated in O&M activity. Participation rates, however, varied greatly depending on the type of sub project, as illustrated by a rate of 20% for sewage projects compared to 100% for small-scale irrigation works. Local resident participation in O&M activity appears to depend on whether the people have been properly trained, as well as on the technical level of the project in question. The training component was particularly lacking, having been carried out for only approximately slightly more or less than 10% of projects, with the exception of small-scale irrigation sub projects. Further, since O&M

cannot be carried out by local residents alone for sub projects such as water & sewage systems, access roads, bridges, and the like, the issue of whether adequate O&M budget is provided by the local and central governments is also an important factor.

Local residents report a current rate of 85% operation for social and economic infrastructure constructed under the project, yet in light of the above factors, sustainability of project results and effectiveness remain in doubt. In order to improve O&M and bolster sustainability for future sub projects, means must be devised to determine who will bear costs, as well as to step up community and beneficiary ownership of facilities.

3. Feedback

3.1 Lessons Learned

For social investment fund projects, appeals should be made to the executing agency and recipient country government to incorporate into the project plan means of ensuring O&M in order to enable sustainability of facilities built by the project. Such means include investing of personnel resources and funds, strategies to bolster community and project recipient ownership of facilities, and so on.

To ensure that facilities built under the auspices of the project remain sustainable, proper O&M is a requirement. Social investment fund project planning should therefore incorporate means of ensuring that O&M—including the provision of sufficient personnel recourses and funding for local offices as well as promoting community and beneficiary ownership—is adequately carried out. Inclusion of such measures in the project plan should be made a condition of the ODA loan contract in negotiations with the executing agency and recipient country.

For projects consisting of multiple sub projects, systems for monitoring and evaluating the project as a whole should be incorporated into the project plan.

Where a single project is comprised of a number of sub projects, indices for monitoring and evaluating the effectiveness and impact of the entire project should be determined at appraisal, and a monitoring & evaluation system incorporated into the project plan to enable the executing agency to regularly collect data on the indices.

For jointly financed projects, it should be clearly spelled out what is expected of the ODA loan portion, and indices predetermined for evaluation purposes.

In cases where projects are jointly financed, expected use of ODA loan funds and expected results of the ODA loan portion of the project should be clarified, based upon which indices for monitoring and evaluation purposes should be set beginning with the appraisal stage.

Comparison of Original and Actual Scope

Category	Planned	Actual
1. Project Scope	1) Social services (medical, educational, food supply, occupational training, etc.) 2) Social infrastructure (water and sewage systems, basic latrines, schools, and health facilities) 3) Economic infrastructure (roads, bridges, small-scale irrigation works, farm silos, etc.) 4) Manufacturing sector (loans to small and medium-sized corporations) Amongst the above, the ODA loan was to cover 2) and 3).	As left
2. Implementation Schedule	December 1995-December 1998	December 1995-December 2000
3. Project Cost Foreign Currency (ODA loan portion)	$31.5 million (3,112 million yen)	$24.4 million (2,962 million yen)
Local currency (government portion)	$15.61 million	$12.8 million
Total (including funds provided by other donors)	$130.7 million	$120.4 million
Exchange rate	$1 = 98.79 yen = 5.9 Quezales (as of December 1995)	$1 = 116 yen = 6.6 Quezales (Weighted average for December 1995-December 2000)

Third Party Evaluator's Opinion on
Social Investment Fund Project

Carolina Roca
Director
Inversiones, Desarrollo, Centro América

Relevance

1. ***Objectives:*** The projects' specific objectives were to improve sanitary services and establish economic infrastructure in rural areas of Guatemala continue to be consistent with both the needs of Guatemalan citizens as well as the government's short and long term development initiatives. Moreover, the Peace Accords signed in 1996 by the government and the URNG (ex-guerrilla movement) included these two areas as key investments for the agreed development with equity strategy. Addressing the health and education needs of rural Guatemala remains the top priority for the government and social investment agencies.
2. ***Overall Goals:*** The projects' overall goals were to improve basic social services for the local people and to provide an economic base for rural society. National level indicators show improvements in access to drinking water and rural roads during the execution of the JBIC financed project. The poverty conditions in rural Guatemala and the unsatisfactory provision of basic social necessities continue to demand significant social investment that is primarily achieved through the Social Investment Fund and the Solidarity Fund for Community Development.
3. ***Project Scope:*** FIS employs sophisticated tools to ensure that its investments target the neediest segments of the population. The effectiveness of this process is evidenced by the fact that over 58% of JBIC's 1006 sub-projects aided communities were classified in the two most severe poverty categories. 19% of the sub-projects were in communities from the third most severe poverty category, 17% from the fourth most severe category and only 6% in the least severe category.
4. ***Conclusion:*** JBIC's social investment project continues to be relevant to the needs of the population and the policies of the government. The project's relevance was enhanced by its effective targeting of Guatemala's neediest citizens and poorest ethnic groups. The project could have achieved even greater relevance if it had encompassed the health and education inadequacies that remain the top national priorities in social investment.

Impact

1. ***National Trends:*** Between 1995 and 2000 the infant mortality rate declined 22% and the illiteracy rate declined 12%. Between 1994 and 2000 the access to drinking water increased only 2% and the number of unpaved roads increased by 7%. Coverage indices for electricity, water and sanitation increased by approximately 15% between 1997 and 2000, and 10% between 1993 and 1996. Moreover, disparities in coverage were reduced, with new connections disproportionately provided to traditionally disadvantaged groups. While these trends are generally positive, none of them can be directly attributed to the JBIC financed projects, thus highlighting the need for a comprehensive monitoring and evaluation system.
2. ***Development and Decentralization of Rural Socio-Economic Activities:*** The Social Investment Fund is specifically designed to empower rural communities and encourage local participation in nationally funded projects. However, the majority of respondents in a survey conducted for project evaluation purposes said that only community leaders and FIS facilitators were involved in project implementation. A more demand-driven project design with greater flexibility in its investment strategy as well as more attention to cultural and idiomatic hurdles could yield a greater impact in this regard.
3. ***Project Indicators:*** Existing project data provides good evidence as to the total impact of the JBIC financed initiatives. Most notably, 1,180,515 rural Guatemalan's (11% of the population) directly or indirectly benefited from JBIC financed projects. That local communities contributed approximately $28.7 million (11% of total project

budget) to this cause is an indication that local support was engendered from a financial perspective. Taking into account these indicators, one can conclude that the positive impact of these projects was significant and appropriately directed.

4. ***Environmental Impact:*** The projects' operators undertook extensive measures to mitigate any potential environmental impacts. These measures included but were not limited to project site studies, construction timing adjustments, erosion prevention and deliberate selection of environmentally sensitive equipment and technology.

5. ***Conclusion:*** JBIC's social investment project positively impacted over 10% of Guatemala's population. While the project's impact could have been enhanced if it had engendered broader community participation, it did generate considerable financial support at the local level. Moreover, the project was engineered in an environmentally sensitive manner.