

(Field survey: June 12-23, 2007)

## Ex-post monitoring of Completed ODA Loan Projects Report

Evaluator: Kenji Momota (IC Net Limited)

Project Name: Peru Health Service Strengthening Project (L/A No. PE-P10)

### Loan Outline

Loan Amount/Disbursement Amount : 2,240 million yen/2,221 million yen  
Loan Agreement : April 1994  
Loan Completion : July 1999  
Ex-Post Evaluation : FY2002  
Executing Agency : Ministerio de Salud (MINSa) (Ministry of Health)

### Project Objective

The project provided medical care equipment and medical supplies to healthcare facilities in the poorest regions, with the aim of improving medical care services for the low income classes, and thereby contributing to improvement of health in Peru.

Consultants: -

Contractors: Compañía Industrial Peruana Monfer S.A.(Peru), Dent Import S.A. (Peru), and others

### Overview of Results

Item	At Time of Ex-Post Evaluation	At Time of Ex-Post Monitoring
Effectiveness and Impact		<b>Expansion and qualitative improvements in medical care services are continuing, and equipment and supplies introduced by the ODA loan project are also playing a certain role as the basic infrastructure of medical care facilities in poor regions.</b>
Effectiveness		

		<p>In Peru's healthcare sector, various efforts were also implemented after the project, by donors such as the World Bank, IDB, and USAID, and the government under the healthcare sector strategic plan (2001-05) of the Peru Ministry of Health (MINSA). With a focus on improvements in mother and child healthcare services for the impoverished class, improving capabilities of the Ministry of Health, etc., the activities advanced the provision of free insurance, etc. Many of the improvements in services of medical care institutions, and improvements in health indices described below are the result of these coordinated efforts, and it is difficult to accurately measure the effects of the ODA loan project alone. But in interviews with the Ministry of Health and the person in charge of policy at that time (Vice Minister of Health), it was heard that the Program to Strengthen Health Services through the IDB and ODA loan project is ranked as important in these efforts, and is especially valued as playing a large role in developing infrastructure. Considering such positioning of this project, and the following various survey results on effectiveness, one can say that the ODA loan project played a certain role in improvement of the health sector's services and health indices.</p>
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	<p>(1) Situation of effective provision of welfare services in the poorest regions</p> <p>(i) As shown in the table below, of the 3,516 facilities (1,684 via the ODA loan) which were provided with medical care equipment, supplies, etc., about 76% (about 75%) were 2,686 health posts (1,257 health posts). These health posts are generally in rural areas with high poverty rates, so it is thought to be contributing to the effective provision of welfare services in the poorest regions.</p> <p>&lt;Table 1 Number of healthcare facilities which received</p>	<p>&lt;Table 1: Major healthcare sector projects implemented after this ODA loan project&gt;</p> <table border="1"> <thead> <tr> <th>Project Name</th> <th>Main Activities</th> <th>Main executors</th> </tr> </thead> <tbody> <tr> <td><b>Program to Strengthen Health Services (PFSS/1994~2000)</b></td> <td><b>Support to improve capabilities of healthcare facilities and the Ministry of Health</b></td> <td>IDB/<b>JBIC</b>/government</td> </tr> <tr> <td>Programa Salud Básica para Todos (1994 onwards)</td> <td>Expansion of basic healthcare services, improve capabilities of healthcare facilities</td> <td>Government</td> </tr> <tr> <td>Proyecto 2000 (1994-2002)</td> <td>Improve healthcare services for mothers and children</td> <td>USAID</td> </tr> <tr> <td>SMI/Seguro Materno Infantil (from 1999 onwards)</td> <td>Provision of healthcare insurance for mothers and children (some of it free)</td> <td>World Bank, IDB, government</td> </tr> <tr> <td>PARSALUD (2001-2006)</td> <td>Improve healthcare services for mothers and children of the poor classes, improve capabilities of the Ministry of Health</td> <td>IDB, government</td> </tr> </tbody> </table> <p>Source: Made based on MINSA responses</p> <p>(1) Situation of the effective provision of welfare services in the poorest regions</p> <p>(i) Current situation of use of the equipment supplied</p> <p>The equipment provided covered a wide range, from general office goods to centrifuges used in blood tests, and incubators for obstetrics. The table below shows the results of a sample survey of the usage situation by type of equipment.</p>	Project Name	Main Activities	Main executors	<b>Program to Strengthen Health Services (PFSS/1994~2000)</b>	<b>Support to improve capabilities of healthcare facilities and the Ministry of Health</b>	IDB/ <b>JBIC</b> /government	Programa Salud Básica para Todos (1994 onwards)	Expansion of basic healthcare services, improve capabilities of healthcare facilities	Government	Proyecto 2000 (1994-2002)	Improve healthcare services for mothers and children	USAID	SMI/Seguro Materno Infantil (from 1999 onwards)	Provision of healthcare insurance for mothers and children (some of it free)	World Bank, IDB, government	PARSALUD (2001-2006)	Improve healthcare services for mothers and children of the poor classes, improve capabilities of the Ministry of Health	IDB, government
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equipment & supplies provided through this project>

Institution	Total for this project	ODA loan
Hospital	117	62
Health center	713	365
Health post	2,686	1,257
Total	3,516	1,684

Source: Peru Ministry of Health (MINSA)

<Table 2: Usage situation of equipment provided>

Type of facility	Status of equipment	Medical care equipment (Precision machinery)	General machinery (Communi-cations & transport)	Other infra-structure, fixtures, etc.
Hospitals	In use	<b>38.7%</b>	<b>72.6%</b>	<b>73.5%</b>
	Broken* or damaged	55.5%	27.4%	24.0%
	Lost or cannot confirm	5.8%	0.0%	2.5%
Health centers	In use	<b>45.8%</b>	<b>72.5%</b>	<b>80.0%</b>
	Broken* or damaged	50.8%	27.5%	19.2%
	Lost or cannot confirm	2.5%	0.0%	0.8%
Health posts	In use	<b>45.8%</b>	<b>57.5%</b>	<b>81.7%</b>
	Broken* or damaged	53.7%	42.5%	16.7%
	Lost or cannot confirm	1.7%	0.0%	1.7%
Average	In use	<b>43.4%</b>	<b>67.5%</b>	<b>78.4%</b>
	Broken* or damaged	53.3%	32.5%	19.9%
	Lost or cannot confirm	3.3%	0.0%	1.7%

Source: Site questionnaire surveys. (They were implemented in the three provinces of Ica, Junin, and Lambayeque. They were implemented at 10 hospitals, 10 health centers, and 30 health posts)

\* Some partially broken items which could be operated but for which 100%

	<p>(ii) Welfare services of health posts in rural regions in poverty  Many health posts are in rural regions with high poverty</p>	<p>of functions could not be used were included in “Broken.”</p> <p>Looking at results from the sample survey, a wide range of 40% to 80% is seen in usage rates for equipment. There is still effective utilization (70% to 80%) of simple medical care devices (i.e. medical care utensils such as mirrors, forceps, and tooth extraction forceps), communications and transport equipment (i.e. fax machines, vehicles, etc.), and basic infrastructure for large hospitals such as generators and boilers. On the other hand, precision machinery such as centrifuges for blood tests have a usage rate falling to about 40%. In interview surveys at each facility, the following were given as the background for the declining usage rates.</p> <ul style="list-style-type: none"> <li>• Exceeded the useful life of the equipment</li> <li>• Lack of budget for proper maintenance</li> <li>• Due to progress in decentralization of the health administration, technical support from the center (MINSA) ended, and regional disparities increased</li> </ul> <p>Due to regional decentralization policy since the year 2000, the carrying out of repairs and support for equipment, which MINSA had been in charge of until then, was transferred to regional governments. This affected each region’s operation and maintenance situation of equipment. Disparities are arising between regions, as regions with relatively strong economies such as Ica Province have maintained up to 60% to 70% usage of precision equipment, etc.</p> <p>(ii) Welfare services of health posts in poor rural regions  The number of medical care facilities increased slightly from</p>
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rates, and as shown in the table below, MINSA has increased the total number of healthcare facilities under its control.

Table 2  
Number of healthcare facilities under MINSA control

Year	1990	1992	1996	2001 (October)
Hospitals	-	455	136	132
Health centers	-	1,083	1,028	1,169
Health posts	-	3,079	4,762	5,316
Total	3,731	4,617	5,926	6,617

Source: MINSA

(2) Increased number of medical examinations at MINSA facilities

The number of medical examinations (number of visits to medical care institutions?) at MINSA's healthcare facilities increased. Especially since 1994 when the project began, the number has significantly increased. One can conjecture that the equipment provided by the ODA loan has improved the capability of health centers and health posts under MINSA to provide services to more people.

- Hospitals : About 5 million (1994) → About 8 million (1999)
- Health centers : About 8.5 million (1994) → About 19 million (1999)
- Health posts : About 3 million (1994) → About 19 million (1999)

the time of ex-post evaluation, and the level at the time of ex-post evaluation is being maintained.

Table 3  
Number of Healthcare facilities under MINSA control

Year	1996	2001 (October)	2006
Hospitals	136	132	146
Health centers	1,028	1,169	1,203
Health posts	4,762	5,316	5,472
Total	5,926	6,617	6,821

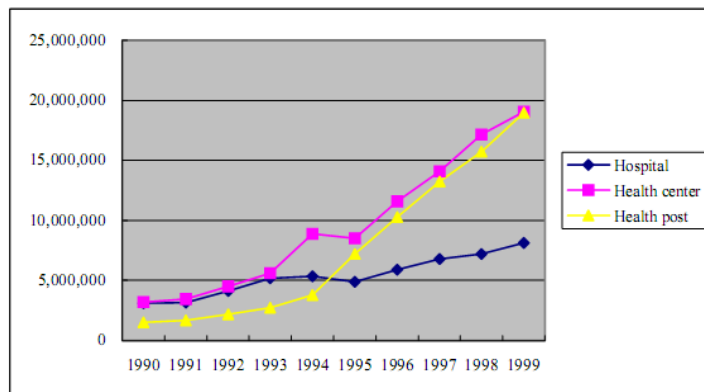
Source: MINSA

(2) Increased number of medical examinations at MINSA facilities:

The number of medical examinations at MINSA's healthcare facilities increased from the time of the ex-post evaluation (about a 25% to 35% increase), showing that expansion of healthcare services is progressing.

As shown in Table 2 above, the absolute number of medical care institutions themselves is not increasing much, but it is thought that due to efficient provision of medical care services, the number of medical examinations and number of patients examined per facility are increasing. The efforts by the government and donors towards strengthening of healthcare services since the second half of the 1990s that were mentioned above are seen to be in the background of this.

Chart 1  
Number of medical examinations at MINSA's health facilities



Source: MINSA, Office of Statistics (Oficina de Estadísticas)

(3) Medical examinations at MINSA's healthcare facilities as a percentage of examinations at all medical care facilities: 39% (1994) → 52.8% (2000)

	1997	2000
1. Percentage of people who received medical examinations of total population	54.7%	55.9%
2. Percentage of people who received medical examinations at MINSA's medical care institutions	25.0%	29.5%
3. Of people who received medical examinations, the percentage of people who received examinations at	45.7%	52.8%

- Hospitals : About 8 million (1999) → About 10 million (2006)
- Health centers : About 19 million (1999) → About 25.6 million (2006)
- Health posts : About 19 million (1999) → About 24.3 million (2006)

<Table 4: Number of patients examined and number of medical examinations provided at MINSA's healthcare facilities>  
(unit: millions)

Fiscal year	Number of patients examined (million people)			Number of medical examinations (million times)		
	Hospitals	Centers	Posts	Hospitals	Centers	Posts
2002	3.44	7.26	6.68	8.67	21.53	21.26
2003	3.58	7.51	7.13	8.86	22.92	23.28
2004	3.91	8.21	6.77	9.53	24.47	21.93
2005	3.87	8.52	7.13	9.61	24.98	23.04
2006	4.05	8.28	7.00	10.12	25.63	24.31

Source: MINSA

(3) Medical examinations at MINSA's medical care facilities as a percentage of examinations at all medical care facilities

<Table 5: Percentage of medical examinations at MINSA's medical care facilities>

	2000	2004
1. Percentage of people who received medical examinations of total population <sup>*1</sup>	55.9%	N.A
2. Percentage of people who received medical examinations at MINSA's medical care institutions	29.5%	24.6%
3. Of the people who received medical examinations, the percentage of people	52.8%	N.A

	<p>MINSA's healthcare facilities (2/1)</p> <p>Source: ENNIV (National Standard of Living Survey)</p> <p>(4) Situation of improvement in quality of health services: Due to equipment and supplies provided by this project, it became possible to provide health services which were not possible to provide before. As such, this project made great contributions to improvements in quality. Also, according to an evaluation report of the MINSA, health centers referred 40% to 50% of patients to other facilities in 1994 due to lack of capabilities, but this has now decreased to 12%.</p>	<p>who received examinations at MINSA's healthcare facilities (2/1)</p> <p>Source: MINSA</p> <p>*1: There are no statistics for private medical care facilities, so this could not be confirmed.</p> <p>According to MINSA, the number of people examined and number of medical examinations by MINSA medical care institutions are increasing, but the percentage of such numbers of the total examinations at both public and private medical care facilities is decreasing since the time of ex-post evaluation. MINSA believes that this is mainly due to increases in the number of private medical care facilities and EsSalud and other public medical care institutions, which resulted in a relatively low ratio at MINSA.</p> <p>(4) Situation of improvement in quality of healthcare services (i) Questionnaire survey of medical care facilities Regarding the situation of medical care services compared to before project implementation, the following viewpoints and opinions were heard often in interviews at medical care institutions in each region. From the responses, it is understood that the overall capabilities of medical care facilities are improving, such as the number of medical examinations per facility, variety of medical care services, and level of the medical care staff. On the other hand, factors which inhibit the manifestation of project effect were also seen, such as the falling functions of some equipment due to a lack of maintenance.</p> <p>Through the effects of training for medical care employees which was implemented as part of joint financing, and through</p>
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the use of equipment which was introduced through an ODA loan, medical care technology and efficiency (reduced waiting time, selection of proper medical treatment methods, etc.) improved. MINSA believes that these are major reasons for the improvements.

<Table 6: Outline of results of interviews with medical care institutions>

Facility	Points which improved compared to before project implementation
Hospital 1	<p><b>Quantitative data</b></p> <ul style="list-style-type: none"> <li>• Number of medical examinations per day: Increased from an average of 100-130 before project implementation, to 400.</li> </ul> <p><b>Qualitative opinions</b></p> <ul style="list-style-type: none"> <li>• Reduced surgery times, and ability to handle a greater variety of medical care services</li> <li>• Improved techniques and expertise of medical care staff, etc.</li> </ul> <p><b>Issue</b></p> <ul style="list-style-type: none"> <li>• Lack of operation and maintenance budgets, especially for preventative maintenance.</li> </ul>
Center	<p><b>Quantitative data</b></p> <ul style="list-style-type: none"> <li>• Number of medical examinations per day: Approximately doubled compared to before project implementation</li> </ul> <p><b>Qualitative opinions</b></p> <ul style="list-style-type: none"> <li>• Reduced surgery times and ability to handle a greater variety of medical care services</li> <li>• Improved techniques and expertise of medical care staff, etc.</li> </ul> <p><b>Issues</b></p> <ul style="list-style-type: none"> <li>• Lack of operation and maintenance budgets, especially for preventative maintenance.</li> </ul> <p>(Voices were heard that precision equipment for blood tests cannot be operated 100% in some facilities, so some test aspects cannot be done)</p>

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