Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation
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Duration of Evaluation Study
January 2010 – December 2010

I  Project Outline

Country Name The Republic of Armenia
Project Period March 2005-February 2006
Executing agency Center of Perinatology, Obstetrics and Gynecology (CPOG)
Gavar Maternal Hospital
Hrazdan Maternal Hospital
Project Cost Grant Limit: 209 million yen; Actual Grant Amount: 203 million yen
Main Contractors Sarina Corporation
Main Consultants ICONS International Cooperation Inc.
Basic Design December 2004

Project Background
The combination of the collapse of the USSR and subsequent conflict with neighboring Azerbaijan forced Armenia to cope with worsened economic conditions while undergoing drastic changes of its national system. This seriously affected the previous high level of medical health services. In light of the situation, the National Health Policy for the Republic of Armenia 2004-2015 addresses the issue of a number of reforms to the health sector. In particular, it states that a vulnerable group in the sector, women and children, should be assigned priority as per the Poverty Reduction Strategy Paper in 2003. However, holdings of equipment in three major target medical institutions become obsolete and unusable for achieving the desirable level of obstetrical service. Therefore, improvement of the service through upgrading equipment was considered urgent and given priority. Considering this situation, the Armenian government requested Japanese government grant assistance for purchase of relevant equipment for obstetrical service in the hospital.

Project Objective
To refurbish the medical equipment of CPOG, Gavar Maternal Hospital and Hrazdan Maternal Hospital, in order to improve obstetrical care in Armenia.

Output[s] (Japanese Side)
- US (Color Doppler) with Necessary Probes
- US (B/M Mode) with Necessary Probes
- Biochemical Analyzer
- Operation Table
- Anesthetic Unit
- Laparoscope Set
- Obstetrical Bed (LDR type)
- Infant Warmer
- Gynecological Examination Chair
- Patient Monitor for ICU
- Infusion Pump (syringe type)
- Infant Incubator
- Infant Ventilator
- Steam Sterilizer
- Washing Machine

II  Result of the Evaluation

Summary of the evaluation
This project conforms to social development policy and needs of Armenia and Japan’s ODA policy as well. The project has been implemented almost as planned, and the project performance procedure has been highly appreciated. Although the project outcomes are evident, due to economic difficulties that impede production of the expected effect of the equipment supplied under the project, it is hard to assign high score. In regard to sustainability, downsizing of staff and beds have been effectively covered by rationalization of management. In terms of financial aspects, though budgetary support by the government fairly covers almost all the required expenditures, some destabilizing factors are identified, namely a shortage in the supply of consumables and spare parts due to budgetary deficit; these shortages have caused some of equipment supplied under the project to be left unused (as “out-of order”). This issue may cause opportunity loss and reduce the physical sustainability of the equipment, and therefore the value of the project will decline.

In light of the above, this project is evaluated to be fairly satisfactory.

<Recommendations>
As a recommendation to JICA, the statement by the executing agency that the majority of equipment that has consumables and spare parts, which quickly go unserviceable, should be investigated in detail as it may be lack of fund to purchase expensive spare parts that has made the equipment stand idle.
### 1 Relevance

(1) Relevance with the Development Plan and Policies of the Armenia
At the time of project planning, the National Development Plan of Armenia (2003), that was drawn up with collaboration of the World Bank and IMF, positioned maternal and child health sector as a strategic field in the development process, and in the National Health Policy (2003) issued by the Ministry of Health, strengthening maternal and child health and primary health care were made specific targets. At the time of post-evaluation, The National Program, Strategy and Action Plan on Reproductive Health for 2007 – 2015 had been issued (in 2007), and programs on maternal health protection, contraception, safe abortion, genital infection prevention, etc. are currently underway. This project, in the above context, is consistent with the policy of Armenia.

(2) Relevance with the Development Needs of the Armenia
At the time of project planning, whereas countermeasures against fertility decline in the Armenia that have continued since 1992, decrease of infant mortality, maternal mortality, and perinatal mortality have continued to be serious issues in the field of medical care. And modernization of the hospital facilities has been an important countermeasure. At the time of the ex-post evaluation, it was reported that improvement of fertility rate, modernization of hospital facilities, and strengthening of the referral system are all still insufficient. Therefore, there is evident and high need for such improvements, and the project's contribution to modernization of medical facilities at three obstetrical hospitals is now helping to achieve those improvements.

(3) Relevance with Japan’s ODA Policy
Japan’s ODA White Paper for 2004, under the essential philosophy of “human security” concept, stated that maternal and child health, public health and healthcare are of crucial importance for realization of MDGs. The same white paper advocates Japan’s aid policy for the countries in Central Asia and the Caucasus region to be focused on healthcare together with other fields such as economic management, communication, and transport infrastructure. In the Country-wise Data Book of the Ministry of Foreign Affairs for 2005, as basic policy of ODA for Armenia, in order to address the problems of aging economic infrastructure and deterioration of the environment, healthcare is emphasized as one of five important fields in the social sector to be supported. This project, therefore, is consistent with the Japanese government’s ODA policy.

This project has been highly relevant with Armenia’s development plan, development needs, as well as Japan’s ODA policy, therefore its relevance is high.

### 2 Efficiency

(1) Project Outputs
Despite slight changes, outputs by the Japanese side have been attained essentially as planned.

(2) Project Period (Project Inputs)
The project implementation period of 11 months was slightly longer than the planned period of 10 months (109.7%). The reason for the delay has not been confirmed.

(3) Project Cost (Project Inputs)
The actual project cost of 203 million yen was lower than the planned budget of 209 million yen (97.1%).

Although the project period was slightly longer than planned, the project cost was lower than planned, and therefore efficiency of the project is fair.

### 3 Effectiveness / Impact

(1) Quantitative Effects
In the time of planning, evaluation of quantitative effects of the project were expected to be felt three years after completion of delivery of equipment, and no numerical targeted outcomes were indicated; objectives were expressed only in terms of “increase” or “decrease”. The performance record in the three hospitals (CPOG, Gavar and Hrazdan) in terms of the number of parturient outpatients, parturients registered and neonatal deaths in 2004 and 2009 are as shown in the attached Table-1. According to the data, both parturient outpatients and parturients registered increased and neonatal deaths decreased. However, these outcomes are attributable not only to equipment supplied under the project, but to combined effects of other contributions such as educational campaigns aimed at parturient, improvement in the hygienic environment, nation-wide improvement in healthcare technology, etc. As per responses by the executing agency, the contribution to these outcomes by the project is evaluated as at the moderate level. However, modernization of the facilities of targeted hospitals under the project might have contributed to the achieved outcomes and to improvement of reproductive health in the country. However, to our request of a 4-grade evaluation of the contribution level for three outcome items, results were referral system strengthening = 3/4, infant mortality = 2/4 and perinatal mortality = 3/4, and they were not always highly marked.

(2) Impacts (Impacts on the Natural Environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)
According to responses from the executing agency, an indirect impact by the project has been identified as an abundant benefit to CPOG's educational program and synergy effect to its Evidence Based Medicine Project. Reportedly, however, some of equipment supplied under the project has become broken, and left unused. Due to existence of such idle equipment, the expected outcomes are deemed likely to be impeded, and unexpected opportunity losses emerge. Nevertheless, it is difficult to clarify the actual fact only by desk research. No negative impacts due to destruction of nature, land expropriation, relocation of inhabitants, etc. have been reported.

This project has somewhat achieved its objectives, therefore its effectiveness is fair.

### 4 Sustainability

This project is fair.
(1) Structural Aspects of Operation Maintenance

Comparison of organizational structure by kind of staff in the three hospitals in 2004 and 2009 is shown in the attached Table-2. Changes in the number of staff show 4% increase for doctors, 7% decrease for nurse and 73% decrease for technicians in average, and the overall stuff reduction is 6%. The reason of the decrease has been explained as a result of “renovation in inpatients medical service”. No relevant policies or supporting data have been provided, but according to the executing agency, they address downsizing policy of number of inpatients, beds and staff of the hospital. Number and status of indirect staff have not responded. Further, present status of operations supposedly affected by decrease of medical engineers is unknown, but since no particular response is reported it is considered to be no particular problems in organizational concern as a whole.

(2) Technical Aspects of Operation Maintenance

Since most of the equipment newly employed has been for replacement of old models, technical training on operation and maintenance has been accomplished satisfactorily. According to the report from the executing agency, however, mechanical troubles have occurred at most once a month due to breakdown of consumable parts. No information has been provided about preparation of manuals and technical training.

(3) Financial Aspects of Operation Maintenance

Reportedly, the financial status of the institutions has been consistently sound, and no specific problems have been identified. However, despite of staff reduction, increases in the average salary exceed the growth rate of government disbursement to each hospital (see attached Table-3). It may become a financial burden hampering operation and management in the long run. Further, the proportion of personnel expenses in each hospital accounts for 10.5% (CPOG), 4.1% (Gavar) and 3.0% (Hrazdan) of the total expenses of the hospital respectively, and it is evident that operation policy of the hospitals in the country relies on the financial support by the government.

(4) Current Status of Operation Maintenance

It is reported that some equipment has been out of order, and some equipment has been not repaired, and these pieces of equipment have been left unused. According to responses by the implementation organization, these pieces of equipment are easily breakable, and their replacement parts are expensive, and that is the likely reason for them not to use the equipment. According to response by the executing agency, the result of their 5-grade evaluation on the supplied equipment by ten suppliers consisting 8 from Japan and 2 from Germany shows 5/5 for the two suppliers from Germany, 2/5 for seven suppliers and 1/5 for one supplier from Japan, where Japanese suppliers have been rated as very low. In the free comment column in the questionnaire sheet, they have stated as “Unfortunately, the majority of equipment has consumables and spare parts, which quickly go unserviceable (out of order), such as lamps, filters, sensors, electrodes, etc., this hospital does not have enough funds to procure spare parts, therefore the equipment stands idle.”

However, on the claim of “fragile”, there may be possibly another reason due to technical insufficiency in repair and maintenance technology, and on the claim of “expensive”, this may be possibly explained by financial constraints. This issue, therefore, is difficult to clarify on a desk research basis only.

Some problems have been observed in terms of technical or financial aspects, therefore sustainability of the project effects is fair.

<table>
<thead>
<tr>
<th>Table-1 Performance of Targeted Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Hospital</td>
</tr>
<tr>
<td>----------------------------------------</td>
</tr>
<tr>
<td>OPCG</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Gavar Maternal Hospital</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Harazdan Maternal Hospital</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Note: Index is based on 2004=100
### Table-2 Change in Number of Enrollment in Each Hospital

<table>
<thead>
<tr>
<th>Name of Hospital</th>
<th>Year</th>
<th>Medical Doctor Enrollment</th>
<th>Incr./Decr. Rate</th>
<th>Nurse Enrollement</th>
<th>Incr./Decr. Rate</th>
<th>Medical Engineer Enrollment</th>
<th>Incr./Decr. Rate</th>
<th>Total Enrollment</th>
<th>Incr./Decr. Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
<td>66</td>
<td>108%</td>
<td>125</td>
<td>98%</td>
<td>5</td>
<td>20%</td>
<td>196</td>
<td>99%</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>71</td>
<td></td>
<td>123</td>
<td></td>
<td>1</td>
<td></td>
<td>195</td>
<td></td>
</tr>
<tr>
<td>Gavar Maternal Hospital</td>
<td>2004</td>
<td>14</td>
<td>86%</td>
<td>42</td>
<td>71%</td>
<td>3</td>
<td>33%</td>
<td>59</td>
<td>73%</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>12</td>
<td></td>
<td>30</td>
<td></td>
<td>1</td>
<td></td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Harazdan Maternal Hospital</td>
<td>2004</td>
<td>16</td>
<td>106%</td>
<td>49</td>
<td>98%</td>
<td>3</td>
<td>33%</td>
<td>68</td>
<td>97%</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>17</td>
<td></td>
<td>48</td>
<td></td>
<td>1</td>
<td></td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2004</td>
<td>96</td>
<td>104%</td>
<td>216</td>
<td>93%</td>
<td>11</td>
<td>27%</td>
<td>323</td>
<td>94%</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>100</td>
<td></td>
<td>201</td>
<td></td>
<td>3</td>
<td></td>
<td>304</td>
<td></td>
</tr>
</tbody>
</table>

Note: Index is based on 2004=100

### Table-3 Substance of Financial Status

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2007</th>
<th>2009</th>
<th>Average Annual Incr./Decr. Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Disbursement</td>
<td>346,789</td>
<td>416,730</td>
<td>599,774</td>
<td>1,046,598</td>
<td>24.72%</td>
</tr>
<tr>
<td>Personnel Expenses</td>
<td>163,771</td>
<td>249,594</td>
<td>317,576</td>
<td>731,051</td>
<td>34.88%</td>
</tr>
<tr>
<td>Number of Enrollment</td>
<td>326</td>
<td>-</td>
<td>-</td>
<td>307</td>
<td>-1.19%</td>
</tr>
</tbody>
</table>