

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Zambia office: October, 2011

Country	The Project for the Improvement of Expanded Programme on Immunization (Phase II)
Zambia	

I. Project Outline

Project Cost	E/N Grant Limit: 283 million yen	Contract Amount: 283 million yen																							
E/N Date	August, 2006																								
Completion Date	September, 2007																								
Implementing Agency	Ministry of Health (MOH)																								
Related Studies	Basic Design Study: March 2006																								
Contracted Agencies	Consultant(s)	Japan International Cooperation System																							
	Contractor(s)	Toyota Tsusho																							
	Supplier(s)	N/A																							
Related Projects (if any)	Japanese cooperation: The Project for the Improvement of Expanded Programme on Immunization (Phase I) (2001) (JICA Grant Aid)																								
Background	The immunization programme in Zambia has been recognized for its sustained high coverage levels, contributing to reduction in childhood morbidity and mortality rates. However, sustaining high coverage had been difficult due to shortage of human resource, and insufficient cold chain equipment (due to outdated cold chain equipment and increased population and number of newly constructed health facilities), among other issues. The Phase I project replaced more than 10-year old cold chain equipment, but the ones that were not replaced at that time have become old and obsolete. The government did not have enough financial resources to replace the old equipment; thus, the government requested Grant Aid from Japan.																								
Project Objectives	Outcome To improve the vaccine management by provision of cold chain equipment to health facilities nationwide.																								
	Outputs Japanese Side Procurement of cold chain equipment nationwide. <table border="1" data-bbox="323 1010 1096 1279"> <thead> <tr> <th></th> <th>Planned</th> <th>Actual</th> </tr> </thead> <tbody> <tr> <td>Electric refrigerator</td> <td>194</td> <td>194</td> </tr> <tr> <td>Kerosene/ electric refrigerator</td> <td>155</td> <td>154</td> </tr> <tr> <td>Gas/ electric refrigerator</td> <td>51</td> <td>49</td> </tr> <tr> <td>Solar refrigerator system^(*)</td> <td>185</td> <td>181</td> </tr> <tr> <td>Electric refrigerator/ freezer</td> <td>18</td> <td>18</td> </tr> <tr> <td>Voltage regulator</td> <td>126</td> <td>320</td> </tr> <tr> <td>Equipment for provincial health offices</td> <td>9</td> <td>9</td> </tr> </tbody> </table> *Operational training for cold chain officers was provided.			Planned	Actual	Electric refrigerator	194	194	Kerosene/ electric refrigerator	155	154	Gas/ electric refrigerator	51	49	Solar refrigerator system ^(*)	185	181	Electric refrigerator/ freezer	18	18	Voltage regulator	126	320	Equipment for provincial health offices	9
	Planned	Actual																							
Electric refrigerator	194	194																							
Kerosene/ electric refrigerator	155	154																							
Gas/ electric refrigerator	51	49																							
Solar refrigerator system ^(*)	185	181																							
Electric refrigerator/ freezer	18	18																							
Voltage regulator	126	320																							
Equipment for provincial health offices	9	9																							
	Zambia Side Installation of equipment (including monitoring and reporting to JICA)																								

II. Result of the Evaluation

Summary of the Evaluation
<p>The immunization programme in Zambia has been recognized for its sustained high coverage levels, contributing to reduction in childhood morbidity and mortality rates. However, sustaining high coverage had been difficult due to shortage of human resource, and insufficient cold chain equipment which resulted from increased population, number of newly constructed health facilities, and outdated cold chain equipment).</p> <p>This project, following the Phase I project, has largely achieved the improvement of vaccine management due to increased storage capacity and improved cold chain maintenance capacity, and contributed to the increase in immunization rate. As for sustainability, some problems have been observed in terms of structural and financial aspects due to budget limitation for staff training and allocation and consequent shortage of technicians to operate/repair the cold chain system and equipment. However, the cold chain equipment has been appropriately maintained.</p> <p>For relevance, the project has been highly relevant with Zambia's development policy and, needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, the project period exceeded the plan.</p> <p>In the light of above, this project is evaluated to be satisfactory.</p>

I Relevance
<p>The project has been highly relevant with Zambia's development plan (strengthening of the Expanded Program for Immunisation (EPI) in all districts as set in various national health development plans/strategies such as National Health Strategic Plan 2006-2010), development needs (proper management of vaccines), as well as Japan's ODA policy (Country Assistance Policy for Zambia in 2002), at the time of planning and ex-post evaluation. Therefore, its relevance is high.</p>

2 Efficiency

Project cost was as planned. However, project period was longer than planned (ratio against the plan: 127%) due to the delay of the training sessions conducted by the manufactures (they could not arrange the sessions as planned because MOH did not timely secure the necessary budget of day allowances and travel expenses for the Zambian trainees). Therefore, efficiency of the project was fair.

3 Effectiveness/Impact

The Project has largely achieved its objectives of the improvement of vaccine management.

The percentage of health facilities with functional cold chain equipment and immunization coverage have remarkably increased by the time of ex-post evaluation, though the level of achievement is slightly below the national target due to identified needs for replacement of equipment at some facilities whose equipment was not replaced by this project and newly constructed facilities. Some of the old but functional cold chain equipment (not from this project), have been maintained by cold chain officers trained by the project and using project tool kits, but they needed replacement at the time of ex-post evaluation.

Based on WHO studies and; interviews with officials of MOH Child Health Unit, District Medical Offices (DMOs) and, health facilities, management of vaccines and immunization is considered to have been improved after the project.

Therefore, effectiveness/impact of this project is high.

Quantitative Effects

Indicator(unit)	baseline value	target value	actual value (2010/2011)
Disposal rate of vaccines (%)	n.a	n.a	Average: n.a.
% of Health facilities with functional cold chain equipment *	45% as of 2005	100% by 2008***	85% as of 2011 (due to replacement needs and newly constructed facilities).
Immunization coverage based on UNICEF and WHO criteria):** • Measles: • DPT3:	As of 2008: Measles: 89% DPT3: 95%	90% by 2015***	Measles as of July 2010: 97% DPT3 as of July 2010: 84%.

Sources: * Child Health Unit (CHU), MOH

Notes: * Not mentioned in the ex-ante evaluation, but used as an alternative indicator to disposal rate of vaccines; ; ** ditto; *** national target, not the one specifically set for this project.



Gas/electric refrigerator (at a missionary hospital in Chongwe)



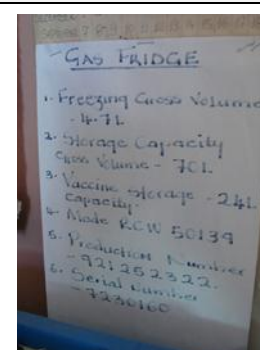
Well-organized and maintained solar refrigerator (at a health center in Chongwe)



Solar panel for solar refrigerator

4 Sustainability

The project has some problems in structural and financial aspects due to limitation of budget to recruit and train technicians to maintain (operate/repair) the cold chain system in place of those who left, and consequent shortage of technicians in some provinces/districts. However, no problem has been observed in technical aspect in terms of the high technical level of the remaining technicians. Also, operation and maintenance aspect of the implementing agency does not have serious problem either: maintenance of cold chain system is being prioritized at all levels to ensure its sustainability, and for provinces/districts where technicians are not currently assigned, provincial and central-level technicians respond when need arises. Therefore, sustainability of the project is fair.



Instruction for gas/electric refrigerator

III. Recommendations & Lessons Learned

Recommendations for the Implementing agency:

There is need to support new supply of cold chain equipment to new facilities and replacement of old ones in old facilities; there is need to sustain refresher courses on management of cold chain equipment in view of advancement of new technology and high staff turnover in the ministry especially at health centre/post level.