#### Summary Sheet for Result of Evaluation Study After the Project

1. Outline of the	Project			
Country: Zambi	a	Project title: Lusaka District Primary Health Care		
		Project (Phase II)		
Issue/Sector: Health/Medical Care		Cooperation scheme: Technical cooperation project		
Division in char	rge: Human Development	Total cost (actual value): 761 million yen		
Department		(Including the cost of long-term survey and ex-ante evaluation. The value is a sum of the costs for the period between FY 2001 – 07. The expense of the termination evaluation is exclusive.)		
Period of Cooperation (R/D): July 15, 2002 – July 14, 2007		Partner Country's Implementing Organization: Ministry of Health, Lusaka District Health Management Team (LDHMT)  Supporting Organization in Japan: Association of		
		Medical Doctors of Asia (AMDA), International University of Health and Welfare, Niigata University		

# Related Cooperation:

Grant aid: The Water Supply Project in Satellite Area of Lusaka

Development Study: The Living Environment Improvement Project for Unplanned Urban Settlements in Lusaka

### 1-1 Background of the Project

Zambia is a country located in Southern Africa with a population of 11.5 million (World Bank, 2004) in its area of 752,600 km². It is one of the most urbanized countries in Africa, the urban population accounting for 34.8% of the total (United Nations Population Division, 2000). The capital city, Lusaka, attracts a considerably large number of migrants from rural areas and has a population of approximately 1.7 million, some 15% of the total population. On the outskirts of the capital are located the peri-urban areas with a high density of poverty. These unplanned settlements were faced with challenges unique to urban areas such as poor environmental sanitation due to lagged development of basic services (such as water supply and sanitary arrangements), resultant incidences of infectious diseases, and unstable and fragile community ties. Above all, health problems of children residing in these marginalized peri-urban areas were pressing.

In such circumstances, this Project was implemented by way of taking over a model established in the previous project "Lusaka District Primary Health Care Project: Phase I" and focused its activities on the Growth Monitoring Program Plus (GMP+) and Participatory Hygiene and Sanitation Transformation (PHAST). GMP+ is an integrated program to promote children's growth and give importance to weighing of children on a regular basis. PHAST is an approach designed to promote hygiene behavior, sanitation improvements and community management of sanitary facilities. The Project aimed to realize health improvement of children under five years of age by encouraging chiefly community volunteers to commit themselves to these two mainstay activities. The number of target unplanned settlements was increased from one in Phase I to six in the Project, and an attempt was made to build and put into practice a more versatile model than the model adopted in Phase I. In addition, the Project supported Lusaka District Health Management Team (LDHMT) and Health Centers in the settlements to strengthen their administrative capabilities and, at the same time, the communities to strengthen their organizing abilities.

This simultaneous support resulted in their enhanced aspirations for community-based self-supported development.

# 1-2 Project Overview (based on PDM introduced in this evaluation study)

#### (1) Overall Goal

The health status of children under 5 in Lusaka is improved through effective and sustainable community-based health activities.

# (2) Project Purpose

The health status of children under 5 in the selected Health Center catchment areas is improved through effective and sustainable community-based health activities.

### (3) Outputs

- 1) Community-based child growth promotion is enhanced.
- 2) Community-based environmental health activities are improved.
- 3) Capacity of case identification and community referral for children is developed.
- 4) Planning and financing capacity of LDHMT and health centers in support for community-based health activities is strengthened.
- 5) Management capacity of community based organizations (CBOs) to ensure sustainability of community-based health activities is strengthened.

### (4) Inputs (actual values)

### 1) Japanese side:

Long-term Experts: a total of 9, with a total of 244.7 person-months Short-term Experts: a total of 21, with a total of 55.4 person-months

Trainees received: a total of 25 Equipment: 26.71 million yen Local Cost: 155.947 million yen

# 2) Zambian side:

Counterparts: a total of 80 Land and Facilities: N/A

Equipment: N/A Local Cost: N/A

# II. Evaluation Team

Members of	(Specialized field: name, title)
Evaluation Team	Leader: Yojiro ISHI, Group Director, Group III, Human Development Department,
	JICA
	Primary Health Care: Takusei UMETANI, Professor, Graduate School, International
	University of Health and Welfare
	NGO Collaboration: Shigeru SUGANAMI, Managing Director, Association of
	Medical Doctors of Asia (AMDA)
	Evaluation Planning: Ikuo TAKIZAWA, Chief, Health Administration Team, Human
	Development Department, JICA

	Gender Analysis: Rie KOMAHASHI, Gender Equality Team, Planning and							
	Coordination Department, JICA							
	Evaluation Analysis: Minako NAKATANI, Researcher, Global Link Management,							
	Inc.							
Period of	January 14, 2007 – February 1, 2007 Type of Evaluation: Terminal							
Evaluation								

### III. Results of Evaluation

#### 3-1 Confirmation of Results

# <Project Purpose>

The project purpose is highly likely to be achieved. Among the health indicators for children under 5, the incidences of bloody diarrhea<sup>1</sup> and the malnutrition fell successfully below the target values. The values of the other two indicators - the incidences of non-bloody diarrhea and measles - also steadily fell.

Indicators for Project Purpose (incidences = cases per 1,000 children under 5)	2002	2004	2006	Rate of change: 02-06	Target
(1) Incidences of diarrhea (non-bloody) fall from 682.2 to 218.2.	682.2	349.9	267.6	61%	218.2
(2) Incidences of bloody diarrhea fall from 25.9 to 9.5.	25.9	14.1	5.8	78%	9.5
(3) Incidences of measles fall from 18.2 to 0.6.	18.2	$1.2^{2}$	1.3	93%	0.6
(4) Incidences of malnutrition fall from 72.4 to 24.0.	72.4	$32.9^{3}$	21.6	70%	24.0

<sup>&</sup>lt;sup>c</sup> Created based on data submitted by the Health Centers (Health Management Information System: HMIS).

#### <Achievement of Project>

(1) Output 1: Community-based child growth promotion is enhanced.

Community-based child growth promotion has been enhanced in all the six Health Center catchment areas targeted by the Project through the introduction of GMP+4. The values of all the indicators for Output 1 have improved compared to those obtained in the baseline survey in 2002. The predetermined targets were achieved in two indicators regarding "coverage of fully immunized 12-23 month children" (Indicator 2-a) and "percent of caretakers who have adequate knowledge on prevention from diarrhea" (Indicator 4).

<sup>&</sup>lt;sup>1</sup> Bloody diarrhea is a condition in which there is blood mixed in with loose (dysentery, etc.).

The value was recalculated since consistency was not secured in the data collection methods at the time of the interim evaluation (See "6-2-1" of the main text).

The value was recalculated since consistency was not secured in the data collection methods at the time of the interim evaluation (See "6-2-1" of the main text).

GMP+ stands for the Growth Monitoring Programme Plus. The program includes weighing of children as an entry point to health education, nutrition counseling, soya beans promotion, community referral, immunization, family planning, micronutrients supplementation and deworming. Chiefly health volunteers perform these GMP+ activities to supply additionally and comprehensively these basic health care services in the communities. The Growth Monitoring and Promotion (GMP) is normally introduced to projects like this one, but the parties concerned with the Project has introduced GMP+, as well as the Global Monitoring Programme.

Indicators for Output 1	2002	2004	2006	Target
(1) Percent of children under 5 who are below the lower growth line improves from 15% to 9.3%.	14.8%	12.5% <sup>5</sup>	10.0%	9.3%
(2) Improvement of the full immunization: a) Coverage of fully immunized 12-23 month children becomes 71% to 79%.	71.2%	63.8%	74.0% <sup>6</sup>	79.0%
b) Percent of children who complete full vaccination before 1 year old increases from 59% to 79%.	58.9%	56.0%	65.3%	79.2%
(3) Frequency of weighing children aged between 0-24 months increases from 14.6 times to 19.2 times.	14.6 times	15.6 times	15.9 times	19.2 times
(4) Percent of mothers who introduce other food except breastfeeding after 6 months becomes 50% to 67%.	49.9% <sup>7</sup>	56.6%	55.9%	67.4%
(5) Percent of caretakers who have adequate knowledge on prevention from malnutrition increased from 32% to 54%.	32.4%	42.1%	44.0%	53.6%
(6) Percent of caretakers who have adequate knowledge on prevention from diarrhea increases from 46% to 52%.	46.2%	34.8%	61.1%	51.6%

<sup>\*</sup> All the figures from the baseline survey in 2002, the interim survey in 2004 and the project termination survey in 2006 are based on sample surveys conducted by the Project addressed to households with children under 5 in the Health Center catchment areas (randomly sampled 500 households in each area). However, data concerning households with children under 5 who are below the lower growth line are based on reports from the Health Centers (HMIS).

# (2) Output 2: Community-based environmental health activities are improved.

Through Participatory Hygiene and Sanitation Transformation (PHAST) <sup>8</sup> and various community-based activities for hygiene education, there have been significant improvements in community-based environmental health activities in all of the six Health Center catchment areas targeted by the Project. The values of all the indicators for Output 2 have improved compared to those obtained in the baseline survey in 2002. The Project achieved its predetermined targets in 4 out of the 6 indicators regarding access to safe water (Indicator 1-a), appropriate disposal of garbage (Indicator 2), hand-washing (Indicator 3) and use of latrines (Indicator 4).

Indicators for Output 2	2002	2004	2006	Target
(1) Usage of safe water:	85.7%	86.2%	94.4%	90.9%
a) Percent of households that have access to safe water increases from 86% to 91%.				
b) Percent of households which make drinking water safe through boiling or chlorination increases from 72% to 84.	72.3%	83.8%	89.2%	84.0%
c) Percent of households which keep water in a proper way for avoiding contamination increases from 47% to 65%.	47.3%	53.8%	49.2%	64.8%
(2) Percent of households which dispose of garbage property using rubbish pit or midden box increases from 63% to 73%.	63.1%	64.3%	73.5%	72.8%
(3) Percent of households washing hands in a recommended method (using soap and running water) increases from 14% to 41%.	13.6%	28.7%	46.0%	40.8%
(4) Percent of households using latrines increases from 87% to 92%.	86.7%	88.2%	91.7%	91.6%

<sup>\*</sup> All the figures from the baseline survey in 2002, the interim survey in 2004 and the project termination survey in 2006 are based on sample surveys conducted by the Project addressed to households with children under 5 in the Health Center catchment areas (randomly sampled 500 households in each area).

<sup>5</sup> The value was recalculated since consistency was not secured in data collection methods at the time of the interim evaluation (See "4-1" of the main text).

<sup>6</sup> The value was corrected in the Japanese edition since an incorrect figure was entered in the Joint Evaluation Report (See "4-1" of the main text).

<sup>7</sup> The value was corrected in the Japanese edition since an incorrect figure was entered in the Joint Evaluation Report (See "4-1" of the main text).

<sup>8</sup> PHAST is an approach designed to promote sustainable hygiene behavior, examine possible measures leading to sanitation improvements by using specifically developed visual tools and other participatory techniques and recognizing and understanding environmental sanitation issues in the communities to which the participants belong.

(3) Output 3: Capacity of case identification and community referral for children is developed.

In all the six Health Center catchment areas, liaison between the Health Centers and community volunteers has been enhanced and the community referral service has been developed through promotion of health education<sup>9</sup>. The ratio of caretakers who take children to the health facilities immediately after detecting their danger signs increased compared to the ratio in 2002, and it was reported that caretakers in such situations took children to the health facilities much earlier than before.

Indicator for Output 3	2002	2004	2006	Target
Percentage of caretakers who take children to health facilities	35.3%	44.4%	47.0%	64.0%
immediately after detecting their danger signs increases from 35%				
to 64%.				

<sup>\*</sup> All the figures from the baseline survey in 2002, the interim survey in 2004 and the project termination survey in 2006 are based on sample surveys conducted by the Project addressed to households with children under 5 in the Health Center catchment areas (randomly sampled 500 households in each area).

(4) Output 4: Planning and financing capacity of LDHMT and Health Centers in support for community-based health activities is strengthened.

Planning capacity of the LDHMT and Health Centers in support for community-based health activities has been strengthened. The Health Centers in the project target areas had drawn up their Prioritized Action Plans (PAPs) for three consecutive years since fiscal 2005, and some other Health Centers also continued the PAP exercise for two years since fiscal 2006, incorporating the GMP+ and PHAST activities in their plans. As for financial capacity, on the other hand, it is hardly possible to conclude that it has been enhanced. This was attributable partly to external factors such as a decrease in the value of aid money in U.S. dollars (community basket fund) due to a sharp appreciation of the Zambian currency, which widened the gap between the central government's budget allocation and funds necessary to implement the planned activities (Indicators (2)-a and -b).

Indicators for Output 4	2002	2004	2006	Target
(1) Prioritized Action Plan with budget for GMP+ and PHAST is annually	N/A	N/A	1	-
produced by LDHMT from 2005.				
(2) LDHMT-funded GMP+ and PHAST activities of Health Centers:	N/A	31.0%	16.7%	38.8%
a) Percent of LDHMT-funded GMP+ and PHAST activities funded by				
LDHMT by end of relevant fiscal year against the number of GMP+ and				
PHAST activities planned by Health Centers increases from 31.0% to				
38.8%.				
b) Percent of the fund disbursed by LDHMT by end of relevant fiscal year	N/A	27.1%	3.0%	32.5%
against the budget on GMP+ and PHAST activities planned by Health				
Centers increases from 27.1% to 32.5%.				
(3) Percent of GMP+ and PHAST activities implemented by end of relevant	N/A	74.1%	60.0%	80.8%
fiscal year against those planned by Health Centers increases from 74.1%				
to 80.8%.				

<sup>\*</sup> Compilation of information from the Annual Action Plans, the Prioritized Action Plans, financial reports and documents of LDHMT and Health Centers. See Annex 2 for details of the values.

(5) Output 5: Management capacity of CBOs to ensure sustainability of community-based health activities is strengthened.

Management capacity of CBOs to ensure sustainability of community-based health activities has been strengthened to a limited degree. It will take a while to strengthen the capacity to a full extent.

<sup>&</sup>lt;sup>9</sup> The community referral service is a mechanism whereby patients (particularly children) who need to be cared by professionals at a health facility are introduced appropriately and swiftly to a health facility. A referral is made by a community volunteer or by the caretaker.

Management capacity of CBOs to ensure activities to raise fund in support for community-based volunteering activities which is a mainstay in pursuit of Output 5 has been strengthened to a reasonable degree. However, only two income generating ventures operated and managed by CBOs managed to raise enough profit to be able to distribute incentives to their community volunteers at the time of this evaluation<sup>10</sup>. The indicator shows no particular improvement in the dropout rate of community volunteers but it is necessary to consider the reasons of limited availability of data (the calculation method of the dropout rate) and unavoidable dropouts (due to, for example, death and moving elsewhere).

Indicators for Output 5	2002	2004	2006	Target
(1) Percent of dropout of CHWs and NPs reduces from 37.7%	37.5% <sup>11</sup>	24.0%	42.3% 12	19.2%
(Phase I) to 19.2%				
(2) Number of income generating activities that are supervised by	0	N/A	6	12
the Community Basket Fund Committee and making profit				
increases from 0 to 12.				

<sup>\*</sup> Compiled in accordance with the relevant documents created by LDHMT, Health Centers and the Community Basket Fund Committees. See Annex 2 for details of the values.

### 3-2 Summary of Evaluation Results

#### (1) Relevance

The Project's relevance is very high in light of the following findings.

- Consistency with the needs of beneficiaries in the project target areas (A congested living environment and deteriorating environmental sanitation were conducive to the high incidence of fatal diarrhea and other infectious diseases and malnutrition of children. Thus, it was effective to aim simultaneously at health promotion and an improvement in environmental sanitation.)
- Consistency with Zambia's national health policies (The project was in line with priority issues in the National Health Strategic Plan. The Project's objectives, in particular, directly served to enhance the areas of "integrated child health and nutrition", "epidemics control" and "environmental sanitation", all of which were listed as Zambia's public health priorities in the Plan.)
- Consistency with the Japanese Government's priority areas for cooperation (The Project's objectives were consistent with the priority areas for assistance set by the Government of Japan, in particular, cost-effective public health and medical services.)
- Appropriateness of the Project's approaches to the child health issues (The Project adopted approaches to the issue appropriately in the senses that it combined GMP+ for health promotion activities and PHAST for environmental sanitation improvement activities; that it worked on both the communities and regional/national health administrative bodies to ensure community participation and self-supported development; and that it proved effective in that it selected the most deprived areas with the highest needs for improvement as pilot areas.)

#### (2) Effectiveness

The Project's effectiveness is high in light of the following findings.

• The Project Purpose has been more or less fully achieved. (The Project achieved the initially set targets in two indicators concerning bloody diarrhea and malnutrition, and succeeded in falling

<sup>&</sup>lt;sup>10</sup> At the time the Project ended, the ventures in four Health Center catchment areas (all but Kanyama and Chipata catchment areas) raised profit and distributed incentives to their volunteers.

<sup>&</sup>lt;sup>11</sup> The value was corrected in the Japanese edition since an incorrect figure was entered in the Joint Evaluation Report (See "4-5" of the main text).

<sup>&</sup>lt;sup>12</sup> The value was corrected in the Japanese edition since an incorrect figure was entered in the Joint Evaluation Report (See "4-5" of the main text).

steadily the incidences of non-bloody diarrhea and measles.) Achievement of these initially set targets was attributable to GMP+, referral of malnourished children to health facilities, and dissemination and establishment of PHAST.

 It should be noted, however, that some external factors also contributed to the achievement of the Project Purpose. Such external factors included a national campaign on vaccination against measles implemented in 2003 and other similar support programs implemented by several other external partners (such as Care International, Valid International, AMDA Zambia and CIRDZ). The Project was carried out in appropriate liaison with these bodies conducting the similar activities in Lusaka.

Indicators for Project Purpose (incidences = cases per 1,000 children under 5)	2002	2004	2006	Rate of change: 02-06	Target
(1) Incidences of diarrhea (non-bloody) fall from 682.2 to 218.2.	682.2	349.9	267.6	61%	218.2
(2) Incidences of bloody diarrhea fall from 25.9 to 9.5.	25.9	14.1	5.8	78%	9.5
(3) Incidences of measles fall from 18.2 to 0.6.	18.2	1.2 <sup>13</sup>	1.3	93%	0.6
(4) Incidences of malnutrition fall from 72.4 to 24.0.	72.4	$32.9^{14}$	21.6	70%	24.0

<sup>\*</sup> Created based on data submitted by the Health Centers (Health Management Information System: HMIS).

### (3) Efficiency

Overall, the level of efficiency of the Project is relatively high in light of the following findings.

- The quantity and the timing of the inputs (dispatch of experts, acceptance of trainees, provision of equipment and supplies, and operational expenses) were appropriate as planned.
- Outputs 1, 2 and 3 have been well achieved. As for Output 4, results were attained in part of the activities for an improvement in planning capacity of LDHMT and Health Centers yet influences from the external factors (such as a loss in the value of aid money in foreign currency due to a sharp appreciation of the local currency, and resultant insufficient and unstable budget allocation from the central government) undermined the achievement levels of, in particular, an improvement in their financing capacity. Output 5 has been achieved to a reasonable degree, but more efforts are required from the Zambian side to attain a further degree of its objectives.

### (4) Impact

The impact of the Project (the prospect of the achievement of the Overall Goal, etc.) is relatively high in light of the following findings.

- The Project developed manuals and guidelines to make it easier to apply to other non-Project target areas.
- Part of the activities in the Project (such as PHAST training of trainers, creation of prioritized action plans and enhancement of NHC) involves Health Centers outside the project target areas in Lusaka and are serving to build their capacities as well.
- Part of the activities in the Project (such as nutritional promoters' training, a PHAST workshop and door-to-door health education program on cholera prevention) are already being replicated in Health Centers outside the project target areas in Lusaka under the initiative of LDHMT and the Lusaka City Council.

<sup>&</sup>lt;sup>13</sup> The value was recalculated since consistency was not secured in the data collection methods at the time of the interim evaluation (See "6-2-1" of the main text).

The value was recalculated since consistency was not secured in the data collection methods at the time of the interim evaluation (See "6-2-1" of the main text).

- LDHMT incorporated various Project-related interventions (GMP+ and PHAST) as part of its fundamental strategy in its Action Plan of 2007 2009.
- PHAST was incorporated in a draft of the National Health Strategic Plan of 2006 2011. UNICEF has already conducted training targeting 18 districts in five other provinces using the training manual produced by the Project.
- The Project's model for income generating ventures in support of community volunteers was adopted in the National Plan for HIV/AIDS and Anti-retroviral Therapy Services of 2006 2008.
- In the project target areas, community members are placing their reliance on health volunteers and the conditions for community members to cooperate with each other for improvements in health and environmental sanitation (community value for health) is being developed.

# (5) Sustainability

Prospect of the sustainability of the Project effects remains uncertain in light of the following findings.

- From the policy and institutional point of view, the sustainability of the community-based health activities promoted by the Project appears to be high. (development of manuals and guidelines and incorporation of the project achievements in national policies and regional health strategic plans)
- LDHMT has some issues to solve with respect to the human and financial resources (insufficient commitment to community-based activities due to the shortage of nurses and midwives at Health Centers, absence of officers responsible for promoting and coordinating community-based activities, and insufficient and unstable budget allocation from the central government and high expenditure on personnel emoluments).
- To secure the sustainability of the project effects at the community level, LDHMT needs to provide the communities with appropriate and continuous support (strengthening of income generation ventures, and provision of continuous opportunities of re-training and technical support to community volunteers).

### (6) Gender Analysis

The Evaluation Team has experimentally evaluated the project activities from the gender perspective. The findings are outlined as follows.

- Caretakers did not discriminate between boys and girls when they paid attention to children's health conditions or when they detected danger signs and decided whether to take their children to health facilities. The analysis also found no particular gender difference in terms of health level other than biological differences.
- The gender balance was taken into account to some extent when selecting community volunteers. A gender course was included in the curriculum of training sessions for community volunteers.
- In the GMP+ sessions, the Project made a special arrangement for male caretakers who were much fewer than female caretakers. For examples, door-to-door health education programs were conducted on weekends as much as possible to maximize the health education for fathers who do not usually participate in GMP+.
- If the Project had been more aware of male caretakers when it was designed, it could have had a greater impact on promotion of male caretakers' participation and their stance to the project activities.

# 3-3 Factors that Promoted Realization of Effects

# (1) Factors Concerning Planning

As stated in "3-5: Conclusions", the adoption of an approach based on "human security" has enhanced

the Project effects.

- The Project targeted, as its beneficiaries, the urban poor who were vulnerable to external changes such
  as the deterioration of environmental sanitation and epidemics of HIV and other infectious diseases.
  This could make the cooperation useful for people who were in a socially weak position and whose
  existence and human dignity were at risk.
- The Project facilitated to create a framework for community volunteers selected from community
  people to assume leadership for the community-based health activities (GMP+) and PHAST activities.
  In other words, the Project was successful in focusing on the empowerment (capacity development) of
  the people involved by regarding them as a key player for development rather than people simply
  receiving assistance.
- The Project supported the capacity development of both the health administrations (LDHMT and the relevant divisions of the Ministry of Health) which backed up the volunteer-led community activities and the communities themselves (community-based organizations, etc.). Through the simultaneous support, the Project contributed to enhancing the sustainability of the communities.
- The Project combined GMP+ and PHAST to meet accurately the needs of the urban poor who could be seriously affected by the environmental sanitation issues such as congested living environments, inappropriate disposal of garbage and fecal substances, and use of contaminated drinking water resources. The Project demonstrated its effects to improve the sanitation, in particular in some target areas (George and Ng'ombe), where the effects were enhanced by Japan's grant aid cooperation to develop water supply facilities. The Project also focused on the issue challenged by the community people, analyzed the mechanism causing the issues, and put into practice a multi-sector approach to combine specialized knowledge and experiences of various fields for solutions to the issues.

#### (2) Factors Concerning the Implementation Process

As stated in "3-5: Conclusions", the adoption of an "empirical and gradual approach" and "an approach encouraging community participation" has enhanced the Project effects.

- The Project integrated the twin interventions, GMP+ and PHAST, which were proved to be effective for community-based activities in Phase I.
- The Project emphasized scientific verifications of the cooperation achievements and effects. Setting a set of indicators to monitor strictly the performance, the Project collected and combined data from the Health Management Information System (HMIS) of the Zambian Government and those from sample household surveys conducted by the Project, and examined the combined data to monitor the trends in the indicators at three measuring points commencement of the Project, interim evaluation, and termination evaluation.
- The 5-year project term was divided into four phases for strategic management. The four phases were for development of the foundation (creation of guidelines and manuals, and other physical preparations), expansion of activities (development of human resources, such as specialists and volunteers), stable operation of the activities (strengthening of physical and human resources through practices), and completion of the activities (fund raising for sustainability).
- The Project thoroughly stuck to a participatory approach and involved stakeholders at all the levels, including the Ministry of Health of the central government, regional health administrations, Health Centers and communities. The attitudes of Japanese experts to commit themselves to the activities in the same manner as community people were highly appreciated and resulted in a firm relationship of trust with community people.

# 3-4 Factors that Impeded Realization of Effects

# (1) Factors Concerning Planning

• The Project was reasonably well designed in consideration of achievement of the Project Purpose and prospects to achieve the Overall Goal. However, if it had involved educational institutes (University of Zambia, Chinama College, etc.) in systemization of the project achievements, it could have been much easier to establish a sustainable human resource development scheme and for the Government of Zambia to disseminate the achievements to other areas in the similar setting in the country. In planning similar projects in future, the parties concerned need to have a longer-term perspective and seek for a possibility of collaboration with the existing human resource development system at the time when they design projects.

### (2) Factors Concerning the Implementation Process

- Some external factors (the shortage of nurses and other health personnel, insufficient and unstable budget allocation from the central government chiefly caused by a loss in the value of aid money in foreign currency due to a sharp appreciation of the local currency, high population growth and further deterioration of the environmental sanitation) might prevent the cooperation from producing some positive effects. Personnel allocation and aid money (in particular, financial support funds) are vulnerable to changes in the policy environment and have a considerable impact on project activities. It is necessary to collect and analyze best available information at all times even if a project is confined to a particular area or a particular issue.
- The Project arranged to launch the income generating activities on the initiative of the Community Basket Fund Committees. However, it took time to acquire the land-use rights, secure the electricity and water supply and make other clerical procedures and negotiations, resulting in a delay in the activities. These preparations are a process necessary to strengthen the capacity of community-based organizations that would considerably affect the degree of the sustainability of the cooperation achievements, so that it is necessary to ensure sufficient time for these arrangements.

### 3-5 Conclusions

- The Project is a noteworthy and successful for the following reasons: it was intended for the urban poor in the particularly severe living conditions in Zambia which is on the list of least developed countries; presented a practical model of the primary health care with full participation of the communities; and proved effective in improving indicators for specific health problems affecting children such as the incidences of diarrhea and malnutrition. The Project tackled the primary health care issues based on the human security, took an empirical and gradual approach and encouraged community participation. All of these elements enhanced the efficiency of the Project.
- The Project was successful in presenting a model to effectively address the priority issues included in
  the National Health Strategy Plan (2006 2011) of the Zambian government, augmenting limited
  human and financial resources of the health administration with full participation from the community.
  The experiences and the lessons learned from the Project are highly relevant to the other urban areas
  with similar conditions in Zambia and in other countries.
- The Project was successful in fostering a sense of ownership and confidence among the community people who participated actively in the project activities. It also fostered partnership and collaborative relationship among them which was not seen before. Such changes can be regarded as a foundation for "mutual support ("chigwilizano" in Nyanja, a language spoken in Zambia)" in the future based on "community value for health" which was promoted by the Project.

- The Project adopted GMP/IMCI<sup>15</sup> and PHAST which had been already available. However, to meet the realities in the target communities, it improved the former and rebuilt GMP+ incorporating other medical services with particular reference to the weighing of children on a regular basis for more comprehensive health improvement activities of children at the community-level. It also organized PHAST activities using an originally developed training manual. All this helped the Project successfully produce a new approach to serve not as a noble idea but as a practical and solid device for the primary health care.
- The approach not only has a considerable impact on health improvements but also is expected to foster "community value for health" among the urban poor who normally lack a sense of community. It can be an initial step leading to an effective community-level solution to address comprehensively many development issues such as human security, population growth and environmental issues.
- However, it must be noted at the same time that the technical and financial support from local authorities is needed for smooth promotion of community activities. The leadership and guidance by LDHMT and the Health Centers were essential in this Project, too. There is a concern that the current human resource problems in the health sector in Zambia as a whole that is, the absence of LDHMT officers who can coordinate the community activities as a whole and a considerable shortage of specialist personnel is negatively affecting the community activities.

# 3-6 Recommendations (Specific Measures, Suggestions and Advice Related to the Project)

- (1) Recommendation to the Government of Japan
  - 1) It is recommended that the Japanese government consider supporting the Zambian government in its effort to disseminate and expand the Project's achievements to other urban areas in the country.

#### (2) Recommendation to the Government of Zambia

- 1) LDHMT had no clear responsibility-taking system and failed to allocate personnel to coordinate the overall GMP+ activities. It is recommended that it create a post in charge of the activities.
- 2) It is recommended that the Ministry of Health continue to make efforts to allocate sufficient funds to the GMP+ activities "by reviewing the project achievements and narrowing down the range of inputs and activities as a "minimum package".
- 3) It is recommended that the Zambian government adopt the Project's community-based approach to address the child health issues and initiate to promote and scale it up to other urban unplanned settlements in Lusaka as well as in other major cities in the county. It is also advisable that the Ministry of Health take the initiative in imparting the information about this approach to the neighboring countries that are challenged by the common issues.

# (3) Recommendation to the Project

1) The Project should continue to review the "minimum package" of interventions and to streamline as much as possible to match the human resource, financial and implementation capacities of LDHMT<sup>16</sup>.

<sup>16</sup> With respect to this recommendation, the Project prepared in June 2007 Guidelines for Integrated Community-based Child Health Package.

<sup>&</sup>lt;sup>15</sup> Integrated Management of Childhood Illness is a systematic approach to children's health. The strategy provides clinical guidelines so that even less trained health professionals (physician assistants, nurses, assistant nurses, etc.) can give accurate diagnoses or medical treatments for children suffering from common and most crucial diseases (malnutrition, dehydration brought on by diarrhea, acute respiratory tract infection, febrile illness such as malaria, etc.) by referring to the chart in the guidelines.

- 2) It is recommended that the Project should take an active role with close coordination with the Ministry of Health to facilitate dissemination of the Project' achievements to external parties who may be concerned with the common issues<sup>17</sup>.
- 3-7 Lessons Learned (Cases from this project that may be a reference for the discovery, formulation, implementation, and operation for other similar projects)
- (1) Integration of the GMP+ and PHAST activities was found to be an effective approach for improvements (drops in incidences of diarrhea and malnutrition) in the health conditions of children under 5 in unplanned and congested settlements in urban areas. Support in the form of a program combining development of the water supply infrastructure through grant aid cooperation and the health and sanitation education through technical cooperation was also found to be effective.
- (2) In consideration of the potential of communities in promoting their own health and at the same time its limitation, it is crucial to have health care professionals who can provide technical guidance and other forms of support. In view of the seriousness in health human resource constraints currently experienced by Zambia and other countries, it is necessary to develop health human resources and to prevent brain drain of the resources once developed.
- (3) The Project created structures such as task forces, working groups and committees in order to involve various health administrative bodies in the community-based activities. Establishment of such implementing and monitoring structures was important in ensuring results of the community initiatives to be appreciated and reflected in the national and local health policies.
- (4) Establishment of firm relationship of trust among community people and frontline health workers is essential for the implementation of the GMP+ activities.
- (5) The 5-year project term was divided into four phrases, each of which was strategically managed in accordance with quantitative and highly reliable indicators. This approach facilitated monitoring of the Project progress at the outcome level and contributed to the achievement of the Project Purpose. Furthermore, the Project provided an exit strategy ahead of its commencement, which contributed to securing of the sustainability.
- (6) There was an appreciation from the community volunteers of the Project about JICA experts since they actually went into the community, worked together and thus built a cooperation relationship with them. Such provision of technical support is effective in creating an impact at the community level.
- (7) Elements of the Project "an approach based on the human security", "an empirical and gradual approach" and "an approach encouraging community participation" are effective to build a community-based health system. The collection and analysis of the information related to changes in the policy framework is crucial for appropriate adaptation to changes in external factors.
- (8) When an attempt is made to systemize the achievements in a pilot project (to verify its effectiveness), it may be possible to secure a sustainable human resource development structure and promote dissemination of the cooperation achievements on the self-support initiatives of the

<sup>&</sup>lt;sup>17</sup> With respect to this recommendation, the Project held in May 2007 Sub-regional Conference on Community-based Child Health Interventions.

- government of the target country if local educational and research institutes (universities, technical colleges, etc.) can be involved in the project.
- (9) It takes a while to complete various procedures necessary for the operation of a community-based project (acquisition of the land-use rights, securing of the electricity and water supply, etc.). It is necessary to take into account the time required to strengthen the capacity of community-based organizations and to secure sufficient time for other arrangements.