Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Zambia Office: October, 2018

Country Name	**Project for Strengthening Community-based Child Health Promotion System in Urban Areas (SCHePS)**
The Republic of Zambia	

I. Project Outline

Background	.According to the Zambia Demographic Health Survey 2002 (ZDHS), the child mortality rate was reduced from 168 per 1,000 live births in 2002 to 119 in 2007. However, the level of the indicator was still quite high compared to the Millennium Development Goal (MDG) target of 63.5 by 2015. According to ZDHS, 22.9% of children died due to neonatal causes including pneumonia malaria, diarrhea, HIV/AIDS. Moreover, 52% of the child deaths were associated with malnutrition and 80% of the child deaths had occurred in communities. It was thus understood that many of them could have been avoided if the health system could effectively offer early detection, diagnosis, timely treatment and appropriate care within the communities.		
Objectives of the Project	Through training health staffs of province and district medical offices and local Health Centers (HCs) in the target sites , implementing child and environmental health promotion activities including GMP+* and PHAST** based on the Community- Integrated Management of Childhood Illnesses (C-IMCI) and the Integrated-Community Case Management (i-CCM), and income generating activities (IGA)***, the project aimed at strengthening community-based child health promotion systems in urban areas of the target sites, thereby contributing to the improvement of health services in urban areas of the target districts.. 1. Overall Goal: Preventive health services are delivered on an effective and sustainable basis by using existing national child and environmental health guidelines in urban areas of target districts. 2. Project Purpose: Health promotion system for preventive health services is strengthened on an effective and sustainable basis by using existing national child and environmental health guidelines in selected health center catchment areas. Note 1: GMP+ is a system of an integrated and comprehensive health care service at a community level of growth monitoring, health education, nutrition counselling, micronutrient supplement and immunization etc. delivered by community health volunteers as main persons. Note 2: PHAST is a system where community health volunteers as main players analyze current situations and challenges on environmental health of drinking water, hygiene and sanitation etc. within their communities and suggest and implement countermeasures against them. Note 3: IGA is a system to motivate community health volunteers in order to continuously implement GMP+ and PHAST with income generated by certain businesses run by community health volunteers.		
Activities of the Project	1. Project Site: Lusaka, Kabwe, Ndola, and Solwezi districts 2. Main Activities: 1) Implementing GMP+ and environmental health (EH) activities in two health centres catchment areas in Lusaka as model, 2) Verifying effects of the model activities and extending the model activities to the target districts, 3) Delivery of training of trainers and promoting sensitization,4) Meeting and seminars for sharing the achievements and lessons learned. 3. Inputs (to carry out above activities): Japanese Side 1. Experts: 8 persons 2. Trainees Received: 10 persons 3. Equipment: vehicles, equipment, and material to build the facilities for planned activities Zambia Side 1. Staff Allocated: staff of MOH and MCDMCH at the headquarters and at the provincial, district and health facility levels 2. Facilities and equipment: Land plots allocated for IGAs and gardening. Project office spaces in Kabwe, Ndola, and Solwezi in the Provincial Health Office (PHO)and District Health Office (DMO)		
Project Period	March 2011 – March 2014	Project Cost	(ex-ante) 390 million yen, (actual) 484 million yen
Implementing Agency	Ministry of Health (MOH) (The Ministry of Community Development, Mother and Child Health (MCDMCH) was integrated into MOH)		
Cooperation Agency in Japan	None		

II. Result of the Evaluation

<Special Perspectives Considered in the Ex-Post Evaluation>

[Limited causal relation between the Project Purpose and the Overall Goal as well as the verifiable indicators]

- There are logical failures between the narrative summary of the Project Purpose and the Overall Goals as well as their verifiable indicators in the PDM. While the Project Purpose aimed at enhancement of "the health promotion system" by providing preventive health service, and the Overall Goal aimed at provision of "the effective and sustainable preventive health services" in the target districts, the verifiable indicators set in the PDM were, however, the health indicators do not directly assess improvement of "the health promotion system" and "the preventive health service." Therefore, supplementary information was assessed to verify improvement of the health promotion system, as well as the preventive health services based on the health promotion activities introduced by the project.

1 Relevance
<Consistency with the Development Policy of Zambia at the Time of Ex-Ante Evaluation and Project Completion> The project was consistent with the Zambia's development policy of "the 6th National Development Plan" (2011-2015) and "the 4th

National Health Strategic Plan" (2011-2015), which aimed at improving the health status of Zambians and reducing the mortality rate among under-5children through the provision of comprehensive health care services by organizations at multiple levels. The development policy was confirmed both at the time of ex-ante evaluation and project completion.

<Consistency with the Development Needs of Zambia at the Time of Ex-Ante Evaluation and Project Completion >

The project was consistent with Zambia's development needs of capacity building of PHO, DMO, and HCs for promoting and maintaining the quality of comprehensive health care services and providing residents training for better health status by their own preventive efforts at a community level. The development needs were confirmed both at the time of ex-ante evaluation and at the time of ex-post evaluation.

<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation>

The project was consistent with the Japan's ODA policy against Zambia to support the health sector as one of the five priority areas, confirmed by the policy dialogue between Zambia and Japan in 2002[1].

<Appropriateness of Project Design/Approach>

The approach of the project was appropriate to address the issue of health service delivery to improve child health, in particular in urban areas in Zambia where the population and the poverty are concentrated. However, as mentioned above, the verifiable indicators set in PDM were not able to directly assess improvement of the service delivery of preventive health for children. The inappropriate indicator setting made it difficult to clearly verify whether the Project Purpose and the Overall Goal aiming at enhancement of health promotion system and service delivery of preventive health for children had been achieved or not and whether the project activities had contributed to improvement of the health promotion system and the health service delivery or not.

<Evaluation Result>

In light of the above, the relevance of the project is considered high.

2 Effectiveness/Impact

<Status of Achievement for the Project Purpose at the time of Project Completion>

By the project completion, the Project Purpose was considered as partially achieved. While the health promotion systems for preventive health services were strengthened in the five target HCs in total to some extent, in comparison of the baseline data and the data at the time of project completion in 2013, one (measles incidence of infants under one year of age) out of the five indicators were improved at four target HCs. Severe malnutrition of infants under one year of age decreased at three target HCs, and so did respiratory incidence, and malaria incidence of children under five years of age at two target HCs. Diarrhea incidence of children under five years of age was improved in only 1 HC.

<Continuation Status of Project Effects at the time of Ex-post Evaluation>

Project effects have partially continued since the project completion. The measles incidence and the severe malnutrition incidence of infants have been lowered. The data for other indicators were fluctuated year by year in each target HC and it is difficult to find any tendency of improvement. Some of the HCs reported that they had been facing the following issues which equally had an effect the selected indicators and could have contributed to the fluctuations: widespread dust/air-pollution from untarred roads and mining activities for respiratory infections, inappropriate use of insecticide-treated nets for malaria, and poor hygiene and sanitation conditions for diarrhea.

Nonetheless, according to the target HCs surveyed at the ex-post evaluation, some of the preventive health services, including full immunization coverage and improvement of nutrition, have been continued. Moreover, the health promotion systems have been sustained by funding from UNICEF in Kabwe and the systems have partially continued in Ndola with support by the EU and UNICEF. In Solwezi, nonetheless, it was hardly to observe continuation of any activities which promote the systems introduced by the project.

In addition, implementations of community-based interventions in GMP+ and PHAST by community health volunteers have continued though they are at a reduced rate after the project completion. Since IGA were not completed before the project completion, the overall management, monitoring and coordination have challenges for the volunteers. The volunteers' moral and activities had reduced, but not limited to disseminate preventive measures against respiratory infection, to demonstrate appropriate use of insecticide-treated nets for malaria control as well as to operate water kiosk and clean hygiene and sanitation conditions for diarrhea prevention.

<Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

The Overall Goal has not been achieved at the time of ex-post evaluation. Out of 5 indicators, only 2 indicators of the measles incidence and severe malnutrition incidence of infants were improved in the two target districts.

The improvement in the incidence of measles and malnutrition after the project completion can be attributed to the activities of GMP+ based on HCs, such as full immunization coverage, increasing growth monitoring, cooking demonstration and availability of nutritionists at HC level but the contribution of the project to that improvement was not be clearly verified because of the limited dissemination of the preventive health services introduced by the project in the target districts. No change or the increasing incidence of respiratory in Ndola and Solwezi may be caused by dust from unpaved roads and possible polluted air from mines. The trend for reduction of the malaria incidence may have been attributed to the improved detection of malaria cases by the introduction of the Rapid Diagnosis Tests (RDTs). The fluctuations of the diarrhea incidence may have been partly occurred because of the limited interventions for sanitation and hygiene practices introduced by the project.

The target DMOs were expected to disseminate the activities introduced by the project to non-target HCs after the project, but the dissemination activities in terms of introduction of PHAST, GMP+, IGA activities, through trainings to other health volunteers, have been quite limited due to high staff turnover and poor handover. The additional number of HCs trained by each DMO is 2 out of 38 in Kabwe, 12 out of 22 in Ndola and 5 out of 24 in Solwezi. As such, although the volunteer skills and knowledge to promote preventive health services has been sustained and the tools and manuals for the child and environmental health developed by the project are being used by some health workers and other development partners to train more volunteers in other sites beyond target facilities, continuity of the project activities was not fully realized.

<Other Impacts at the time of Ex-post Evaluation>

As the positive impact in relation to gender, both male and female engaged in the community-based interventions equally through the project, this was still observed at the time of ex-post evaluation. There is no other positive and no negative impact observed at the time of this ex-post evaluation.

[1] Ministry of Foreign Affairs, "ODA Databook 2010"

<Evaluation Result>

In light of the above, there was no clear evidence to show the achievements of the Project Purpose and the Overall Goal by the improved health promotion activities introduced by the project and the project effects have been limitedly continued. Therefore, the effectiveness/impact of the project is low.

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results
(Project Purpose) Health promotion system for preventive health services is strengthened on an effective and sustainable basis by using existing national child and environmental health guidelines in selected health center catchment areas.	The following incidence decreases in the target health centre catchment areas: (1) Measles for infants, (2) Severe malnutrition under 1, (3) Respiratory infection (pneumonia) for children under 5, (4) Malaria for children under 5, (5) Diarrhea (non-bloody) for children under 5.	Status of the Achievement: Partially Achieved (Partially continued.) (Project Completion) Out of the 5 indicators, ● Measles incidence under 1: Decreased in 4 HCs and sustained at low level in 1 HC ● Severe malnutrition under 1: Decreased in 3 HCs and sustained at low level in 1 HC. ● Respiratory incidence under 5: Decreased in 2 HCs ● Malaria incidence under 5: Decreased in 2 HCs. ● Diarrhea (non-bloody) for children under 5: Decreased in 1 HC. (Ex-post Evaluation) It is hardly to find improvement or unimprovement of the indicators. However, the measles incidence and severe malnutrition incidence of infants seem to be kept low.
(Overall Goal) Preventive health services are delivered on an effective and sustainable basis by using existing national child and environmental health guidelines in urban areas of target districts.	The following incidence decrease among children in urban areas of target districts: (1) Measles, (2) Severe malnutrition, (3) Respiratory infection (pneumonia), (4) Malaria, (5) Diarrhea (non-bloody).	(Ex-post Evaluation) Not achieved ● Out of the 5 indicators, 2 indicators (measles and malnutrition) improved in 2 target districts and 3 indicators (respiratory, malaria and diarrhea) improved in 1 target district [Measles incidence of infants under 1]

Target District	2014	2015	2016
Kabwe	15	3	0
Ndola	1	0	0
Solwezi	21	14	19

[Severe malnutrition incidence of infants under 1]

Target District	2014	2015	2016
Kabwe	27	21	37
Ndola	83	120	39
Solwezi	73	64	48

[Respiratory incidence of children under 5]

Target District	2014	2015	2016
Kabwe	3,736	3,669	2,945
Ndola	90,293	90,748	89,999
Solwezi	87,363	82,594	95,505

[Malaria incidence of children under 5]

Target District	2014	2015	2016
Kabwe	8,107	4,122	5,991
Ndola	25,578	21,760	20,397
Solwezi	150,020	112,069	121,421

[Diarrhea (non-bloody) for children under 5]

Target District	2014	2015	2016
Kabwe	22,522	22,158	23,562
Ndola	31,447	44,339	25,843
Solwezi	32,120	24,705	31,752

Source: Ex-post evaluation questionnaire response by DMO interviews with target HCs

3 Efficiency

Although the project period was within the plan (ratio against the plan: 100%), the project cost exceeded the plan (ratio against the plan: 124%). Therefore, the efficiency of the project is fair.

4 Sustainability

<Policy Aspect>

MOH has attempted to promote CH and EH by shaping development policies including "the National Health Strategic Plan (NHSP) 2017-2021" for primary and preventive health care, "Maternal, Infant and Young Child Nutrition Operational Framework 2014-2018" for focusing on the 1st 1,000 most critical days of children's life and "the IMCI Strategic Plan 2013-2017" for incorporating autonomy of all HCs, C-IMCI and I-CCM.

<Institutional Aspect>

There had been significant institutional changes in MOH after the project completion. In March 2013 during the project implementation, the Mother, Child Health, and Nutrition Unit was separated from MOH and transferred to MCDMCH as a part of the reorganization of the central bureaucracy. However, in March 2016, the Mother, Child Health, and Nutrition Unit was again incorporated into MOH under the Directorate of Public Health. The restructuring is still being continued. This impacted to the project sustainability positively and negatively. On the positive side, institutional movement back to MOH has improved planning and implementation of CH, EH and nutrition activities including primary health care promotion under one ministry, while negative side, the changes and transferring of the officers at MOH, PMO, and DMO could have brought about the lack of continuity and ownership of the project activities after

project completion.

In the movement of the national strategy to prioritize the primary health care in new NHSP 2017-2021, the Public Health Specialists are assigned in PMOs and each DMO has 3 staff members for CH (1 public health specialist, 1 nutritionist and 1 maternal and neonatal child health nursing officer) and 3 staff members for EH (1 public health specialist, 1 senior environmental health technologist or environmental health officer and 1 surveillance officer). Many of these positions have been filled though funding for staffing depends on the Treasury Authority and the budget comes from the Ministry of Finance. HCs are in charge of implementing the activities of the preventive health services cooperating with community health volunteers as well as managing and training the volunteers. Each HC has two staffs in charge of the preventive health services. MOH has recruited more than 15,000 health workers since 2017 as a part of implementation of NHSP 2017-2021 aiming at recruiting 30,000 health workers during the target period..

<Technical Aspect>

All the key government staff belonging to MOH, PHOs, DMOs, and HCs have sustained their skills and knowledge of CH and EH to properly deliver the preventive health services even after the project completion because they have been oriented towards their areas of job specifications. MOH holds internal training related to CH for its staffs. PHOs, DMOs, and HCs implement only certain internal training related to CH and EH for their staffs, such as C-IMCI, GMP+, PHAST and malaria prevention. However, although MOH allocates certain budget for trainings, availability of funds from donors affects training opportunities for PHOs, DMOs and HCs.. In terms of the knowledge and skills of IGA, it is unclear whether the key government staffs still have the knowledge and skills, and they have not monitored the IGA activities after the project because persons for the mandate were not clarified at the point of project handover. Training of IGA have not been conducted after the project.

DMO and HC (Chipulukusu) reported that they have used GMP+ manual including “Community IYCF Facilitators’ Guide” and “Infant and Young Child Feeding” in the training funded by USAID. Other training manuals for CHW, PHAST, and IGA developed by the project have not been utilized due to limited resources for training and extension of preventive health systems.

<Financial Aspect>

There is no available data for the community-based health promotion budgets of MOH and PHOs. According to staffs of MOH surveyed for the ex-post evaluation, the government of Zambia has more will to allocate additional budget for specific activities in the health promotion services in the future. According to the staffs of the target HCs, although they have had other competing priorities, they have attempted to secure 10% of their budgets on the health promotion system. However, it is sometimes not possible to secure the 10% and even if they secure the 10% for the health promotion system, the budget is not sufficient to cover costs for the system.

[The target DMOs]

Kabwe had the budget of 72,000 ZMK in 2014, and the budget increased to 108,000 ZMK in 2015 and sustained at the same level until 2017. The budget of 271,572 ZMK was allocated to Ndola in 2015, and then the budget surged to 677, 286 ZMK in 2016 and 518,000 ZMK in 2017. The budget of Solwezi was 1,029,490 ZMK in 2015 and to 925,167 ZMK in 2016, but considerably reduced to 223,872 ZMK in 2017 since some of the HCs under the management of Solwezi has allocated to newly created districts. According to staffs of DMO, the budget allocated from MOH and PHO to DMO have been very limited to provide the health promotion services.

[The target HCs]

There is no available data for a budget of Chipulukusu. The budget for Katondo and Makululu in 2014 was 2,400 ZMK. In 2015, the budget became 3,600 ZMK and has sustained until 2017. Kimasala had the budget of 44,480 ZMK in 2016, and it decreased to 29,664 ZMK in 2017. The budget of Solwezi was 60,212 ZMK in 2016, and it dropped to 53,500 ZMK in 2017.

<Evaluation Result>

In light of the above, serious problems have been observed in financial aspects of the implementing agency. And there are some issues in the institutional and technical aspects. Therefore, the sustainability of the effectiveness through the project is low.

5 Summary of the Evaluation

The project partially achieved the Project Purpose and not achieved the Overall Goal through delivering preventive health services on the effective and sustainable basis in urban areas of the target districts. As for sustainability, DMOs and HCs do not have the sufficient number of their staffs for the preventive health services and IGA for staffs at any organizations has been limited. Also, internal training of CH and EH are limitedly implemented. The budget for the preventive health services has not reached to the minimum level of the organizations. As for the efficiency, the project cost exceeded the plan.

Considering all of the above points, this project is evaluated to be unsatisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

- With MOH strategic direction focusing on Primary Health Care and Health Promotions for Prevention, it is recommended that MOH should print all needed tools/manuals and provide them to DMO for staffs of the HCs and community health volunteers to use them by the beginning of the next planning and budgeting cycle.
- PHAST includes various sanitation and environmental aspect and was implemented by the project. However, while very few training was undertaken to new health facilities, the indicator for diarrhea (non-bloody) had shown upward trends. Therefore, it is recommended that MOH should include refresher training in its planning and budgeting as part of the public health prevention strategies.
- MOH should take immediate actions through DMOs to revamp the IGAs in Kabwe, Ndola, and Solwezi that were established by the project and ensure that the benefits accrued are equally shared for volunteer activities in order to prevent waste of investment.

Lessons Learned for JICA

- The project attempted to simultaneously implement a number of activities related to CH, EH and IGA across target HCs in each target district. This made the project scope very large for implementation and requiring more resources and close monitoring. The project reports indicated project activities had been completed when in fact not as noted during the ex-post. At project inception, there is a need to critically ensure the scope is within manageable limits and budgets to avoid spreading resources too thinly and obtaining unsatisfying results.

- The project had parallel data collection tools and conducted a cohort survey. The tools were not used after project completion and the cohort survey could not be continued. Data collection methods for a project evaluation should be incorporated in or aligned with the implementing agency's national standards for continued collection and sustainability in terms of use.
- Indicators set for the Project Purpose and the Overall Goal should be specific, measurable, attainable/achievable, relevant/realistic and time-bound. The project indicators set could not directly be attributed to the project outcomes. For instance, in the case of this project, community health volunteers made report books showing the people in specific catchment areas whom the project reached. Thus, instead of the indicators set in the PDM of the project, the contents of the report books should be referred to verify the Project Purpose and the Overall Goal.
- As IGA component was unique and new to the health sector, more time should have been allocated to the project for the full construction of the infrastructure for the IGA, which was not fully completed, as this resulted to some of the major challenges faced. There was need to have completed the IGA's infrastructure and monitored their achievement of incomes for incentives and how the incomes were to be shared, including the anticipated benefit to accrue to each volunteer so that if there was an increase in the beneficiaries, another group would be formulated to start another IGA which would improve on management efficiencies, clear lines of staff involvement and community based participatory selection of the IGA as part of full project implementation. This project showed the difficulties of IGAs as a part of community group activities. Ownership by volunteers and adequate monitoring and supervision by the staff might be a key element for success.

Meeting with health volunteers during ex-post evaluation


IGA (piggery) not in operation

(Indicators for the Project Purpose)

Indicators	Target HCs	2010 Baseline	2013 Project Completion	Remarks	2016 Ex-post Evaluation	Remarks
Measles incidence of infants under one year of age	Katondo	1	1	Sustained	0	Sustained
	Makululu	15	1	▼	0	Sustained
	Chipulukusu*	31	1	▼	0	Sustained
	Kimasala	16	0	▼	0	Sustained
	Solwezi Urban	54	0	▼	0	Sustained
Severe malnutrition incidence of infants under one year of age	Katondo	13	2	▼	5	Sustained
	Makululu	5	1	▼	1	Sustained -
	Chipulukusu*	19	12	▼	1	▼
	Kimasala	1	2	Sustained	1	Sustained—
	Solwezi Urban	16	35	▲	3	▼
Respiratory incidence for children under five years of age	Katondo	565	316	▼	180	▼
	Makululu	907	316	▼	77	▼
	Chipulukusu*	105	7460	▲	8,395	▲
	Kimasala	55	3126	▲	5,612	▲
	Solwezi Urban	901	5311	▲	10,192	▲
Malaria incidence of children under five years of age	Katondo	1,395	214	▼	420	Unclear
	Makululu	221	534	▲	209	Unclear
	Chipulukusu*	7,545	8226	▲	2,365	▼
	Kimasala	2,810	2919	Sustained	6,616	▲

	Solwezi Urban	6,608	3021	▼	7,335	Unclear
Diarrhea (non-bloody) incidence of children under five years of age	Katondo	1,441	1783	▲	1,503	Sustained
	Makululu	1,444	NA	-	5,240	▲
	Chipulukusu*	414	4161	▲	-	-
	Kimasala	819	1249	▲	1,309	▲
	Solwezi Urban	4,626	2829	▼	4,710	Unclear

(Source) Project Completion Report and data provided by MOH for the ex-post evaluation
(Note 1) * The data for Chipulukusu are based on the dataset in the DHIS 2.

List of Abbreviations

CH	Child Health
CIYCF	the Community-Infant and Young Child Feeding
C-IMCI	the Community-Integrated Management of Childhood Illnesses
DMO	District Medical Office
EH	Environmental Health
GMP+	the Growth Monitoring and Promotion Plus
HC	Health Center
IGA	Income Generating Activity
i-CCM	the Integrated-Community Case Management
MCDMCH	the Ministry of Community Development, Mother, and Child Health
MDGs	the Millennium Development Goals
MOH	the Ministry of Health
PHAST	Participatory Hygiene and Sanitation Transformation
PHO	Provincial Health Office
UNICEF	United Nations Children's Fund
ZDHS	Zambia Demographic and Health Survey