The Summary of Terminal Evaluation

<table>
<tr><td colspan="3">1. Outline of the Project</td></tr>
<tr><td colspan="2">Country: The Democratic Socialist Republic of Sri Lanka</td><td>Project title: Project on Health Promotion and Preventive Care Measures of Chronic-NCDs</td></tr>
<tr><td colspan="2">Issue/Sector: Health</td><td>Cooperation scheme: Technical Cooperation Project</td></tr>
<tr><td colspan="2">Division in charge: JICA Sri Lanka Office</td><td>Total cost: about 448 million Yen</td></tr>
<tr><td rowspan="2">Period of Cooperation</td><td rowspan="2">May 2008 ～March 2013</td><td>Partner Country's Implementing Organization: Ministry of Health</td></tr>
<tr><td>Supporting Organization in Japan: Global Link Management, Inc.</td></tr>
<tr><td colspan="3">Other cooperating organization: University of Kelaniya Faculty of Medicine, University of Colombo etc.</td></tr>
<tr><td colspan="3">1-1 Background of the Project
There is a gradual change in the disease pattern in Sri Lanka as the population ages. From 1980's, Non-Communicable Diseases (NCDs) become a more common cause of death than communicable diseases, and NCDs such as cardiovascular diseases and malignant neoplasm account for 4 out of the 5 major causes of death in Sri Lanka in 2007. Recognizing the needs to shift the health system to address the socio-economic, demographic, epidemiological and nutritional challenges, MoH collaborated with JICA and several stakeholders in the formulation of the "Health Master Plan 2007-2016 (HMP)". This HMP is the blueprint for strengthening the health system towards a healthier nation. From October 2005 to September 2007, the MoH and JICA conducted the "Evidence-Based Management for the Health System in Sri Lanka–JICA EBM Study". Three major focuses of this study were 5S-Total Quality Management (TQM), Cost Accounting and NCDs. Based on the outcome of this study, the Government of Sri Lanka requested the Government of Japan to assist the MoH in developing "implementation strategies for preventing and controlling of NCDs". The five year "Project on Health Promotion and Preventive Care Measures of Chronic NCDs" (hereinafter referred to as "the Project") was launched in May 2008 with the Project Purpose to develop effective and efficient implementation strategies for the prevention and control of Chronic NCDs, particularly cardiovascular diseases.

1-2 Project Overview
（1）Overall Goal
Effective and efficient implementation models to prevent and control NCDs (Diabetes Mellitus [DM], hypertension and hypercholesterolaemia) are implemented in all districts in Sri Lanka.

（2）Project purposes
Effective and efficient implementation models to prevent and control NCDs (DM, hypertension</td></tr>
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and hypercholesterolaemia) are developed.

(3) Outputs

1. Risk factors of cardiovascular diseases are identified by the Ragama Health Study based on the evidence.
2. Intervention guidelines and manuals are formulated based on available evidences and related literatures.
3. Institutional and technical feasibilities of the Consolidated Intervention Guideline are assessed for development of the NCD prevention models in pilot areas.
4. Expansion plan for Health Check-up / Guidance and Health Promotion for prevention of cardiovascular diseases is finalized for island wide implementation.

(4) Inputs (as of this terminal evaluation))

[Japanese side]

Total input: Approximately JY 448 million

Experts: Long Term Experts: 11 persons (including 2 training coordinators)

Training of counterpart personnel in Japan: 13 persons

Provision of equipment: Approximately JPY 6.2 million

Basic equipment for health check-up (Digital Blood Pressure Monitor, Glucometer, etc.), Audio equipment (DVD and its monitor etc.), 3 Vehicles (Provided by JICA Sri Lanka Office) etc.

Local Operation Expenses: Approximately JPY 64.6 million

[Sri Lankan side]

Counterpart: 6 posts (17 persons were allocated due to personnel changes)

Provision of facility and equipment: Project Office with all utilities inclusive, Operational consumables (Strips, lancets etc.)

2. Evaluation Team

	TOR	Name	Designation
Japanese side	Team Leader	Dr. Mitsuo Isono	Senior Advisor, Human Development Department, JICA
	Sub Leader	Mr. Hisakazu Hiraoka	Deputy Director, Health Division 4, Human Development Department, JICA
	Cooperation Planning	Ms. Tomoko Kashihara	Resident Representative, JICA Sri Lanka Office
	Evaluation Analysis	Mr. Fujio Deguchi	Office-D
Sri Lankan side	Dr. C. J. Aluthweera		Deputy Director, Teaching Hospital, Colombo North
	Dr. Alan Ludowyke		Deputy Director, National Institute for

		Nephrology, Dialysis and Transplantation
Period of Evaluation	August 13, 2012～August 31, 2012	Type of Evaluation: Terminal Evaluation

3. Results of Evaluation

3-1 Achievement

3-1-1 Outcome

(1) Output 1: Risk factors of cardiovascular diseases are identified by the Ragama Health Study based on the evidence.

Output 1 is considered as nearly achieved. Follow up survey of cohort study[2] in Ragama was conducted in 2009 and 2010 and the result of in-depth analysis on the risk factors of cardiovascular diseases was presented in the seminar "Evidence Based Planning for Prevention and Control of NCDs" on 8th June 2012. The report from "the Ragama Health Study" has been submitted to the Journal of Gastroenterology & Hepatology Foundation and is under the review process with high possibility of acceptance.

(2) Output 2: Intervention guidelines and manuals are formulated based on available evidences and related literatures

Output 2 is considered as achieved. Consolidated Intervention Guideline (for Health Check-up, Health Guidance and Health Promotion) was drafted based on the activities in the pailot area of Kurunegala and Polonnaruwa. First edition was approved by JCC in July 2012 and to be distributed nationwide. The Cost Analysis Report was presented at "Cost Analysis and Health Finance Seminar for the NCD Prevention Project" in November 2011 and handed over to 68 persons from MoH, PDHSs, RDHSs and MOHs, etc.

(3) Output 3: Institutional and technical feasibilities of the Consolidated Intervention Guideline are assessed for development of the NCD prevention models in pilot areas.

Output 3 is considered as nearly achieved. The health check-up activities have been regularly conducted in all the 13 targeted health institutions in Kurunegala and Polonnaruwa. Registries and formats of health check-up has formulated and distributed nationwide in August 2011 as attachments of the HLC guideline. "Resource Book for Facilitators" was developed and endorsed by the JCC for printing for island wide distribution in July 2012. Based on this resource book, a training module was developed. MoH has organized a task force group and aim to develop a training mechanism and increase resource pool for health promotion.

(4) Output 4: Expansion plan for Health Check-up / Guidance and Health Promotion for prevention of cardiovascular diseases is finalized for island wide implementation.

[2] Cohort study was conducted by University of Kelaniya targeting Ragama MOH area in 2007

Output 4 is considered as nearly achieved. In the circular dated 15th of August 2011, MoH announced the decision of establishing HLC in the existing medical facility throughout the island which would conduct health check-up, health guidance, basic treatment, referral for another treatment and follow up. This circular includes the list of equipment, the facility layout, essential drug list, risk prediction chart and the guideline for lifestyle modification. 309 HLC have already established in 2011, and additional 300 (total 609) is expected to be established in 2012. While training of facilitators of Health Promotion is under preparation to achieve Output 3, expansion plan for island wide implementation is mostly completed.

3-1-2 Project Purpose

（1） Effective and efficient implementation models to prevent and control NCDs (DM, hypertension and hypercholesterolaemia) are developed.

Project Purpose is considered as partially achieved. Coverage of the health check-up reaches 18% in Kurunegala and 17% in Polonnaruwa while objectively verifiable indicator is 20% of the targeted population (annual average). Considering the positive impact of establishing HLC, it is expected to achieve the target by the end of the Project. Percentage of treatment for newly identified patients reaches 78% in Kurunegala and 92% in Polonnaruwa while objectively verifiable indicator is 90%. Including the number or patient who received treatment at private clinics, actual treatment percentage is considered to be higher.

3-1-3 Overall Goal

(1) Effective and efficient implementation models to prevent and control NCDs (Diabetes Mellitus [DM], hypertension and hypercholesterolaemia) are implemented in all districts in Sri Lanka.

Evaluation of Expectation for achieving overall goal in 3-5 years after the completion of the project cannot is difficult as one of the objectively verifiable indicators not measurable. At the timing of the terminal evaluation, HLC has been established and health check-up has started in 23 districts among 25. Considering additional 300 HLCs to be established in 2012, health check-up is expected to be conducted in all the 25 districts by the end of the Project. Achievement of objectively verifiable indicator (Number of annual incidence of cardiovascular events) is not measurable at the time of terminal evaluation due to unavailability of data regarding incidence of cardiovascular event. If the health check-up is properly done and patients are guide to reduce risk factors or treat adequately, it is expected that the incidence of CVD would start to decline.

3-2 Summary of Evaluation Result

（1） Relevance : High.

The NCD related policy, surrounding environment and the needs in Sri Lanka remain unchanged. One of the remarkable progress since the mid-term review was the government

announcement of establishing HLCs at medical institutions in August 2011. The announcement is consistent with the Project direction that aims to facilitate nation-wide implementation of NCD prevention models. In addition, the Project Purpose has been consistent with the Japan's aid policy, country cooperation strategy, and health field cooperation strategy. Kurunegala District and Polonnaruwa District were selected as the pilot sites ofthe Project. Selection of these District were relevant as there are enough information through the "Development Study on Evidence-Based Management for the Health System in Sri Lanka" held by JICA during 2005–2007, and also, it will be useful to compare two different type of socio-economic situation, composition of existing health institutions, availability of human resources, and population density.,

(2) Effectiveness : Generally high

Achievement of each objectively verifiable indicator is relatively high and it is evaluated that the effective and efficient model is formulated. Output obtained from the activities in Kurunegala and Polonnaruwa contributes the formulation of guideline. The result of the cohort study wasn't fully utilized for development of the models mentioned in the Project Purpose. However, result of the baseline Study have provided some evidence and utilized as the technical evidence for some documents of the Project

(3) Efficiency : High

Most of the output is achieved or nearly achieved. It is observed the activities are contributing to the output efficiently. Equipment provided by the Project are fully utilized for the Project activities. Japanese expert and counterpart training in Japan were input efficiently to achieve the outcome.

(4) Impact : Generally high

As health check, health guidance and health promotion at HLC has already started at the time of terminal evaluation, overall goal is considered to be achievable. Smooth introduction of HLC was made with the contribution of the Project.

Ministry starts recognizing more importance of study to implement its strategy, which is also the positive impact of the Project.

(5) Sustainability : Generally high

The Government policy to implement NCD control is described in the Health Master Plan (2007–2016) and reflected in strategies issues by the MoH. The High-level Meeting of the General Assembly on the Prevention and Control of NCD was held in September 2011 and the Political Declaration adopted clearly states the responsibility of Governments for the prevention and control of NCD. The MoH has developed functional organization within the Ministry for prevention and control of NCD. MoH has established 309 HLCs and plans to

establish another 300 HLCs nationwide. The MoH has already acquired almost all the technical matters for sustainable implementation of the Project activities except health promotion, which is the relatively new concept and activities. 300 million SLRs is to be allocated every year for NCD prevention and Primary Healthcare activities in 2011-2013. Additionally, at least 45 million SLRs will be allocated every year only for NCD activities. 50 million SLRs (2013) and 70 million (2014) has been already in the budget allocation plan only for NCD.

(6) Conclusion

It is expected that project could achieve the project purpose and even the overall goal as expected.

3-3 Recommendations

(1) 2nd objectively verifiable indicator for the project purpose

The 2nd indicator for the Project purpose (coverage of follow up guidance for high risk people) has not been measured because the criteria for high-risk group had not been fully defined until May 2012. Thus, it is recommended to collect data for this indicator as much as possible in the remaining period.

(2) Cohort study

University of Kelaniya is recommended to analyze the following points as well.

- ✓ Relevance of the target population to represent the average of general population in the country.
- ✓ To analyze the relationship between risk factors and outcome of participants (incidence of CVD etc).

University of Klaniya should continue this study to reach more useful outcome of the study as evidence. The Ministry of Health has realized the importance of surveys to obtain evidence–based information to implement strategies for NCD prevention and already initiated certain important measures in this regard. Thus, the MoH is recommended to enhance activities to conduct significant surveys based on its strategic directions.

(3) Treatment of the cases

There are missing cases who should receive proper treatment. It is crucial for the preventive strategy of NCD to treat all cases who are found to have diseases by health check-up. MoH is recommended to develop mechanism to reduce missing cases. MoH should be reminded of the importance of the treatment quality for the patient as well.

(5) Detailed plan for HLC

For island–wide expansion of NCD prevention measures by utilizing HLC, it is crucial to

develop the sustainable structure for developing human resources. Thus, the MoH is recommended to define the detailed plan on budget, medical distribution system, TOR of the staff of HLC, securing of the staff, long-term development of human resource, monitoring system, etc.

(6) For health promotion activities, MoH is recommended to carefully design the long-term strategy to enhance health promotion activities nationwide with considering ownership of communities. The Project is recommended to provide technical assistance in the remaining period.

3-4 Lessons learned

(1) Ragama study

It was meaningful that intervention based on the evidence was made available by conducting cohort study in the Project. However, it is noted that evidence from the study was limited, as it is difficult to acquire the outcome within this short period of the Project term.

(2) Health check-up system

It is noted that not all the countries are suitable with this system for NCD prevention. International trend of NCD prevention by UN or NCD alliance doesn't include mass screening. In this context, we need to carefully select the appropriate approach. Following is considered as the necessary condition for health check up system.

1) NCD prevention intervention is effective to be conducted at the primary health care facilities. Thus, it is important that primary health care system is established.

2) NCD patients identified from the mass screening should be treated properly. In this context, certain quality of the medical service should be secured.

3) As additional cost is required to introduce the mass screening and treatment, enough budget have to be secured to introduce the system.

4) Detailed measure for NCD Prevention should be selected based on the analysis of actual situation. In this context, understanding of the necessity of the evidenced based approach and availability of the survey and surveillance system is important.

(3) Objective verifiable Indicator

Second indicator for overall goal (Number of annual incidence of cardiovascular diseases) could not be objectively evaluated due to unavailability of the data on incidence of cardiovascular diseases. In this sense, it is necessary to confirm the availability of the data in advance to set objective verifiable indicator, and review the indicator if data is found to be unavailable at early stage.