MINISTRY OF HEALTH
Greater Mekong Sub-region, Second Regional CDC Project
ADB Grant No.0231-CAM (SF)

MODEL HEALTHY VILLAGE

VILLAGE DEMOGRAPHIC ASSESSEMENT REPORT

YEAR 2013

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I. BACKGROUND:

The Greater Mekong Subregion (GMS) Second Regional Communicable Diseases Control Project (CDC2) was approved on 11 November 2010 for 5 years. The project continues to support regional communicable diseases control in the GMS drawing on the achievements and lessons learned from the first GMS Regional Communicable Diseases Control Project (CDC1). GMS-CDC2 aims to improve the health of the GMS population through the timely and adequate control of communicable diseases. CDC2 supports three outputs (i) strengthened regional CDC systems, (ii) improved CDC along borders and economic corridors, and (iii) integrated project management.

Among these, sub-output 2.1 targets support to 180 poor villages to improve Community-Based CDC (CB-CDC) in 18 border operational districts of 10 project provinces bordering with The Lao PDR and Vietnam applying Model Healthy Village (MHV) approach.

The Community Health (CH) focuses on promoting health in populations and communities that bear the greatest burden of death, disability, and chronic disease. CDC2 project engage the community in prevention efforts that focus on a number of issues, including maternal and child health and nutrition as well as improving hygiene and sanitation practice.

Four key areas require concerted focus and actions in order to improve family and community health in rural communities and to sustain efforts to improve CDC. These four key areas including 2 key areas of direct MOH expertise in:

(i)   Disease surveillance, outbreak reporting and response, Zoonosis (AI, etc.), Dengue, Emerging Diseases (HFMD, etc.), Neglected Diseases (Helminthes, parasite etc.),
(ii)   Mother, newborn, child health, family planning and nutrition practice.

The MOH advocates with local authorities for their collaboration, with other government sectors for technical effort in this key area and with non-government organizations.

However, the MOH recognizes that improved sanitation is a necessary and needed step in order to improve community-based CDC, and to sustain benefits in the target villages.

Under the CB-CDC model healthy village, the MOH offers modest support to eligible households in target villages *(refer to eligible criteria below)*. Thereby, each participating family demonstrates to other families in the village their understanding, values and commitment to use improved sanitation for family and community health.

II. COMMUNES AND VILLAGES SELECTION

The MOH applies the below criteria to short list candidate communities to participate in the initiative to improve community based CDC as called the Model Healthy Village; (1) Poor and remote village with permanent location, (2) Village located along the border; (3) Limited HHs access to safe water and sanitation, (4) Low immunization coverage rate and (5) Willingness to participate in CB-CDC/MHV approach[1].

In the first stage selection and validation process, secondary data sets were compiled of each of the 18 GMS-CDC2 selected ODs, and analyzed to shortlist communes based on: (i) geographic location - communes located approximately 15 km or less from a border with either The Lao PDR, or with Viet Nam, (ii) relative poverty levels, and (iii) presence of indigenous people living in the commune. The criteria applied

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[1] MHV Guideline 5 Feb 2013

and the shortlisting derived was validated with local authorities – Commune Councils – with OD and PHD management and by central MOH.

In the 2nd stage selection and validation process, villages in selected communes were also shortlisted against the above criteria. Candidate villages are located 15kms or less from a border, have higher levels of household poverty compared with other commune villages and higher proportions of indigenous people. This last criteria applies mostly to villages in communes of the target provinces of Kratie, Stung Treng, Rattanakiri and Monduklkiri. Additionally, the nearest Health Centre or health Centre used by shortlisted villages was identified by PHD teams and included in the commune and village profiles being developed[2].

VILLAGE GEO-DEMOGRAPHICAL PROFILE

The Model Healthy village applies at 180 villages in 56 poor border communes are selected for implementing the Model Healthy Villages. Those are from overall 10 provinces in CDC2 project.

The selection process is taken through providing in advance the orientation and consultative meeting with PHDs, ODs, Local authorities, Health Center Management Group, and village chiefs in those border communes.

Table 1.1: Number of MHVs by province				
PROVINCE	OD	COM	Vil.	PERCENT
KAMPOT	1	2	5	0%
TAKEO	2	3	5	0%
KANDAL	2	2	8	8%
PREY VENG	4	7	33	3%
SVAY RIENG	3	7	26	0%
KAMPONG CHAM	2	7	10	8%
KRATIE	1	2	13	42%
STUNG TRENG	1	5	25	28%
RATANAK KIRI	1	10	26	82%
MONDUL KIRI	1	11	29	83%
Grand Total	18	56	180	33%

93 villages among 180 which corresponds to 52% are chosen from four northeast provinces of Kratie, Stung Treng, Ratanak Kiri and Mondul Kiri, the provinces where the Indigenous population resided the most.
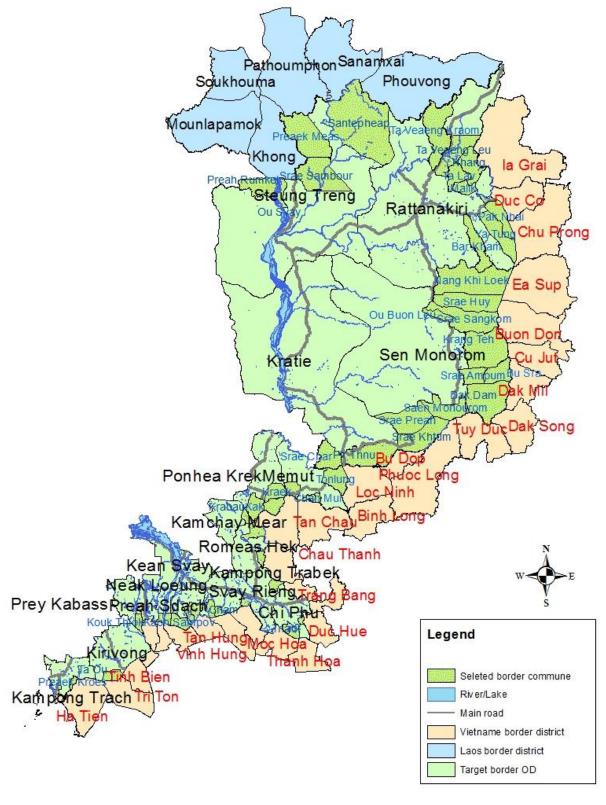
All villages are situated in the communes that shares border with Lao PDR or Vietnam provinces; in which 65% is within distance less than 10 Km as shown in Table 1.2. The selected villages in northeast provinces are mostly situated along border; the distance looks even though far as they are in mountain areas.

The indigenous groups like Phnorng, Kroeung, Kareng, Kuoy… are populous in the northeast provinces occupying the most of households in the villages in Ratanak Kiri and Mondul Kiri when Lao minority families in Stung Treng resides around 40%.

The selection of communes is based on secondary data using the poverty rate released by the Ministry of Planning (Identification of Poor Households).

Table 1.2: Number of villages by distance to country border		
DISTANCE	NUMBER	PERCENT
< 5Kms	62	34%
5 to 9Kms	55	31%
10 to 14Kms	44	24%
15 to 19Kms	12	7%
20Kms and >	7	4%
Total	180	100%

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[2] Design and development Output 2.0, 22 July 2012

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**56 Selected Border Communes Comprising 180 Villages
For Community Based CDC (GMS-CDC2 Project)**

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VILLAGE AND HOUSEHOLD POVERTY

The Model Healthy Village applies at the very remote communities along border; most of villages are situated in the mountain area especially those of Northeast provinces.

The household poverty is identified based on list of ID Poor in the commune councils. The village poverty rate is grouped and summarized in table 1.3 according to how many households in the village listed to be poor in the commune registration combining P1 and P2.

The poverty rate is high at most of the selected villages; Three-fourth among 180 MHVs contains highly poor households which shares in the village by 20% or more. The poverty rate is found to be low (P<20%) at 45 villages corresponding to 25% out of member MHV villages.

Table 1.3: Number of Villages in Range of Village's Poverty rate				
PROVINCE	P<20%	P:20%-49%	P>=50%	Total
KAMPOT	2	2	1	5
TAKEO	0	4	1	5
KANDAL	5	3	0	8
PREY VENG	6	26	1	33
SVAY RIENG	4	21	1	26
KAMPONG CHAM	2	7	1	10
KRATIE	6	7	0	13
STUNG TRENG	2	17	6	25
RATANAK KIRI	13	12	1	26
MONDUL KIRI	5	22	2	29
TOTAL	45	121	14	180
PERCENT	25%	67%	8%	100%

III.   VILLAGE DEMOGRAPHIC ASSESSMENT

The village demographic assessment is conducted in quarter 1, 2013 in 90 villages of first batch; the rest 90 of second batch will be done the same approach in 2014. The information related to behavioral practices of health, immunization, hygiene and sanitation and others are taken through verbal report by villagers, direct observation as well as supposing them to recall back within one year from the date of the assessment according to variables. The commune data and health center registration are also used to support the requirement.

A. Overall Objectives

The main objective is (1) to establish a mechanism to improve community based-CDC for surveillance and response to priority diseases and (2) Promoting community participation to improve family and community health status.

B. Specific Objectives

Through participatory approach, the village demographic assessment is conducted involving team of village management group (VMG) aims to:

- Collect data and information related to the community capacity and vulnerability in the selected villages;

- Identify behavioral practice on health among households in the selected villages and factors associated to limited access to proper heath facilities.

C. Methodology

The participatory approach is used for this assessment, involving trained Village Management Groups (VMGs) and facilitated by the provincial and district health teams. The questionnaire is designed to measure qualitatively the village infrastructure (soft and hard), health care service, immunization and people's practice for health, sanitation as well as community's demands for future intervention.

The assessment tools is designed to measure the below mentioned subject topics:

- Geographical and demographical characteristic
- Health Status (Hygiene, Environment Sanitation, and diseases) in the village
- Women and children health situation
- Defecation and Household sanitation
- Health seeking behavior
- Development partners and Community-based organization

Team of assessment used the trained Village Management Groups supervised by PHD, OD and HCs.

D. ASSESSMENT FINDING

1. HEALTH SEEKING BEHAVIOR

Health seeking behavior is key measurement to reflect people's knowledge and practice of health. Understanding human behavior is prerequisite to change behavior and improve health practices.

The information on health seeking behavior is obtained through the focus group discussion (FGDs) organized separately in each selected villages of the project provinces. The question measures the percentage of households where/which facility they have ever used for health purposes within 12 months prior the assessment.

Table 2.1: Percentage of Household said which facility they have ever used for treatment within one year prior the assessment						
PROVINCE	Number of Vill	RH (%)	HC/HP (%)	Private Provider (%)	Traditional (%)	Cross-border (%)
1. KAMPOT	3	7%	72%	33%	0%	3%
2. TAKEO	3	8%	71%	51%	0%	7%
3. KANDAL	5	2%	68%	16%	0%	22%
4. PREY VENG	16	9%	61%	34%	0%	15%
5. SVAY RIENG	14	7%	56%	32%	0%	5%
6. KAMPONG CHAM	4	4%	90%	13%	0%	1%
7. KRATIE	7	20%	30%	42%	5%	4%
8. STUNG TRENG	11	3%	57%	45%	13%	0%
9. RATTANAKIRI	13	11%	60%	30%	8%	1%
10. MONDULKIRI	14	13%	59%	12%	7%	3%
Grand Total	90	9%	59%	30%	4%	6%

Table 2.1 shows that Public Health Facilities (RH and HC) are mainly used by most of households and people in targeted villages according to their answers in the focus group discussion. The proportion of respondents said having ever used Referral hospitals or Health centers when they or their household members got sick is high by 68% when private provider follows after (30%). The use of cross-border service either private or public is low at most of villages even though they are closed or shared border with other province of Lao PDR or Vietnam. The population in Kandal and Prey Veng province is likely satisfied to use health services in Vietnam up to 22% and 15% respectively when the rest provinces are low. The reason is probably due to road condition leading from the selected villages towards Vietnam provinces as well as economic exchange between two sides.

2. MATERNAL AND CHILD HEALTH

Assistance and Place of Delivery

The leading causes of maternal mortality in Cambodia are post-partum hemorrhage, eclampsia and unsafe abortion. Death results from complications during or shortly after delivery, or unsafe abortions. They are difficult to predict and require rapid and appropriate health care to prevent death. While treatment strategies for the most common maternal health problems are well-known, correct and timely diagnosis and treatment in Cambodia remains a problem.

High percentage of women still delivers in their homes. Women and newborns need the assistance of skilled health care providers during delivery, and those providers must be able to identify and respond quickly and effectively to complications[3].

Table 2.2: Percentage of delivery shared by health facilities in MHV, 2012					
Province	# of Village	Total delivery	At HC	At home by THP	By TBA
1. KAMPOT	3	40	83%	18%	0%
2. TAKEO	3	34	82%	18%	0%
3. KANDAL	5	159	82%	14%	0%
4. PREY VENG	16	445	39%	58%	3%
5. SVAY RIENG	14	201	85%	6%	9%
6. KAMPONG CHAM	4	91	78%	22%	0%
7. KRATIE	7	186	78%	3%	19%
8. STUNG TRENG	11	97	66%	20%	14%
9. RATTANAKIRI	13	105	18%	1%	82%
10. MONDULKIRI	14	318	68%	4%	28%
Grand Total	**90**	**1676**	**63%**	**22%**	**15%**

In total, 1676 pregnant women in the MHV villages reported to be delivered in 2012.

63% assisted by midwifes in public health centers, 22% by trained health personnel (TBA) at home and 15% by traditional birth attendance (TBA). The proportion of deliveries assisted by TBA is extremely high in the northeast provinces of Ratanak Kiri and Mondul Kiri by 82% and 28% respectively.

Immunization Coverage

The information about immunization of women and children is taken from the focus group discussion in the villages with comparing to data recorded in the health center's registration.

Table 2.3: Immunization of Children in MHVs		
PROVINCE	VILL	Fully Immunized
KAMPOT	3	81%
TAKEO	3	84%
KANDAL	5	80%
PREY VENG	16	93%
SVAY RIENG	14	92%
KAMPONG CHAM	4	90%
KRATIE	7	98%
STUNG TRENG	11	81%
RATTANAKIRI	13	71%
MONDULKIRI	14	78%
Grand Total	**90**	**83%**

The registers in health centers are used to measure the vaccination coverage in the selected model healthy villages, in which the targeted children are recorded.

- The vaccination coverage of children reported to be high at most of the selected villages according the registers as well as verbal report by mothers in FGD.
- In average, the vaccination coverage in each province is high by 80% or over as shown in table 2.3; the coverage in Northeast provinces looks to be slightly lower than the centrals by around 10%.
- TT2+ for women is also high according to verbal report of mothers in the focus village group discussion.

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[3] Skill Attendance at Birth (http://www.unfpa.org/public/mothers/pid/4383)

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3. HYGIENE AND SANITATION

Lack of water and sanitation is one of the biggest issues affecting the health of children across Cambodia, particularly for those who live in the countryside. Too many children are still denied the most basic rights to safe water, the dignity of using a toilet and the simple practice of washing hands with soap. For the children are severe, as high occurrences of diarrhea, skin disease, respiratory illnesses such as pneumonia, intestinal and other waterborne and excreta-related diseases cast a shadow over child health and in many cases, result in death.

High incidences of diarrheal diseases alone account for one fifth of the deaths of children at age five and under in Cambodia, and an estimated 10,000 overall deaths annually, largely owing to lack of sanitation and poor hygiene practices[4].

Improving hygiene through use of latrines and hand washing with soap, protecting water sources from faecal contamination, ensuring sustainable sources of water, as well as monitoring water quality remain key challenges for Cambodia.

The hygiene and sanitation practice information is obtained from the focus group discussion by asking villagers where they currently get water from and also ask if they have boiled water or used filter or did nothing with these water before drinking. The availability of water sources, defecation facilities as well as people behavior are well connected to this practices.

The clean source of water is defined as public pipe, protected spring, bottle water, rain water collection, pump, as well as ring well with protected cover.

The use of latrine of households and number of latrines in the village are recorded by the Village Management Groups; the direct observation whether the household compound is clean or not is also noted in the questionnaire set.

Table : Key Hygiene and Sanitation Measurements in 90 MHVs, 2013			
Hygiene & Sanitation Practice		**# of Villages**	**PERCENT**
Rate of HHs using safe water source	<25%	62	**69%**
	25-49%	15	**17%**
	50-74%	2	**2%**
	>=75%	11	**12%**
Rate of HHs drinking boiled water	<25%	26	**29%**
	25-49%	27	**30%**
	50-74%	18	**20%**
	>=75%	19	**21%**
Rate of HHs having latrine	<25%	69	**77%**
	25-49%	17	**19%**
	50-74%	4	**4%**
	>=75%	0	**0%**
Total		**90**	

Note: Clean water source defined as water from pump and protected ring wells

o The coverage of using water from clean water sources is low at most of villages in first batch. 62 among 90 selected villages which corresponds to 69% found lower use of clean sources (less than 25% of village's households). Only 11 villages (12%) where people highly used clean sources.
The reason is mainly due to availability of clean water sources in their communities.

o The proportion of villages where most people drinking boiled water is moderate by 21%. Not many households in MHVs are currently using water filters.

o The rate of using latrine is very low. 69 villages among 90 which equal to 77% contains less than 25% latrine installed households.

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[4] *Water, Hygiene and Sanitation, UNICEF (*www.unicef.org/cambodia/8.WASH.pdf)

E. CONCLUSION AND RECOMMENDATION

The project has done a wide rank of activities to control communicable diseases since CDC1 through improving the regional corporation in CDC, capacity building of health staff, strengthening community preparedness and control and rapid control of outbreaks…etc.

As additional to what we have done, the Model Healthy Village should be designed with mainly focus on strategic activities:

(i) Skills building to community based-MHV team includes a wide range of learning subjects and activities. They can be classified as follow:
- Understanding GMS-CDC2 project, the concepts and process of MHV development;
- Practical skills building: assessment, planning, monitoring, facilitation etc.
- Awareness raising: Campaign organizing, group meeting…
- Understanding of development issues: Health (CDC) including primary health care and key local CDC guiding concepts, sanitation, environment, and gender sensitivity etc.
- Post training follow up

(ii) Awareness raising for communities on core CDC topics like Diarrheal disease, Dengue fever, Common Fever, Flu and Intestinal parasites mentioning the Preparedness/Prevention, Recognition, Treatment and care, Referral, and Follow up.

(iii) Collaboration with local authorities that support shared ownership of all phases of community health improvement, including assessment, planning, investment, implementation, and evaluation.

The project also plan to provide latrine materials to targeted households in the selected villages aims at improving their sanitation practices and for village management groups as the model households.

(iv) Strengthening the monitoring and supervision and regular feedback on performance.

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Reference

1. ADB GMS-CDC2 Project/*MHV Guideline 5 Feb 2013*

2. ADB GMS-CDC2 Project/*Design and development Output 2.0, 22 July 2012*

3. MOP/Identification of poor household 2011

4. UNFPA/*Skill Attendance at Birth* (http://www.unfpa.org/public/mothers/pid/4383)

5. UNICEF/*Water, Hygiene and Sanitation, (*www.unicef.org/cambodia/8.WASH.pdf)

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