



**REPORT ON MID TERM REVIEW  
STRENGTHENING PRIMARY HEALTH CARE -2  
PROJECT**

**ULAANBAATAR, 2015**

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## Abbreviations

AHD	Aimag health department
BU	Bayan-Ulgii
GA	Gobi-Altai
IEC	Information Education Communication
HDC	Health Development Center
FGD	Focus group discussion
KHO	Khovd
NGOs	Non governmental organizations
M&E	Monitoring and Evaluation
NLM	Norwegian Lutheran Mission
MOH	Ministry of Health
MTR	Mid Term Review
RDTC	Regional diagnostic and treatment center
PHC	Primary health care
SPH-2 project	Strengthening primary health care 2 project

## FOREWORD

Norwegian Lutheran Mission (NLM) is an international NGO, which implements development activities in 13 different countries of the world. We have been running our activities continually in Mongolia since 1994 in all areas of development.

NLM-M decided to implement Strengthening Primary Health Care Project, (SPH), based on an initiative from the Ministry of Health and financed by NLM. The project was based on NLM-M's previous experiences from the successful implementation of "Health Development Project" in Darkhan and Selenge aimags from 1998-2008. 90% of the projects are supported financially by the Norwegian Government's Agency for Development, called NORAD, and 10 % of it is supported financially by NLM organizations in Norway.

In order to implement the SPH project, NLM-M has established a "Memorandum of Understanding" with MOH and Governor's Offices and AHDs of Khovd, Gobi-Altai and Bayan-Ulgii aimags during 2008-2012. Since 2013 to 2017, the SPH-2 project is being implemented in all the aforementioned provinces.

The project has supported over 4362 (duplicated numbers) doctors and specialists of remote area to attend in continuous postgraduate medical training with 3808.5 credits during 2013-2015. Additionally SPH-2 supported and promoted 6 SHC and 4 schools as a health promoted model centers. As well as spread out their best practices to others.

With support and collaboration of MOHS and MESC, some of the best practices not limited in the target aimags but also could spread all over nationwide. We assume that it can be one of the good opportunities of sustainability.

We had an external evaluator carry out this midterm evaluation (MTR) of SPH-2. By this we have benefits of finding achievements and weaknesses, define specific recommendations to improve the project performance and learn lessons.

It seems clearly from the evaluation, through the goal and objectives all activities implemented successfully, primary health care services' quality and availability improved and community behavior and attitude changed positively in western aimags.

I would like to express my gratitude to B.Bulganchimeg, MTR evaluator and Master on Hospital Administration, our stakeholders and everyone who supported a successful fulfillment of the evaluation.

*Bayarjargal, S Project leader, "PRIMARY HEALTH CARE -2" PROJECT, NLM-M*

## CHAPTER ONE: SURVEY METHODOLOGY

### Background:

The project has been implementing with a goal to create quality and client centered primary health care services by the first phase in 2008-2012 and the second phase starting from 2013. In total 13% of the population is residing in the western aimags. These aimags are remote from the center, have poor infrastructure, key health indicators are below country and aimag averages, unemployment is high, and poverty rate is 51.1%. These reasons became a basis of continuation of the project 2.

This Midterm Review was conducted based on an initial plan included in the project document.

### 1.1 Survey goals and objectives

#### Goal

Assess the project achievements since 2013 up till now towards improving the health status of the population in the target provinces through strengthening the primary health care and lessons learned to be used in the next years

#### Specific objectives

- a) Assess the implementation process
- b) Analyze the accomplishments against project documents
- c) Identify issues and recommend further corrections
- d) Lessons learned to be used for further years

#### Target groups

1. *Members of aimag health administration bodies, specified by*
  - a. Managers and officers in aimag health departments
  - b. Senior health officers working at Social Development Departments of Aimag Governor Offices
2. *Medical professionals and health workers working in primary health care services, especially*
  - a. Physicians (university educated doctors)
  - b. Mid-level health specialists; baghfeldshers, nurses, midwives and pharmacists
  - c. Public health workers
3. *Other professionals working in other sectors important for primary health education and care*
  - a. School doctors and health teachers
  - b. Kindergarten teachers
4. *Community in target aimags, especially*
  - a. School pupils 1st – 9th grade
  - b. Kindergarten children

## 1.2 Survey methodology

The survey is used cross-sectional and descriptive survey methods including qualitative and quantitative techniques. Before starting the survey pretesting was carried out and minor changes were made in questionnaire and focus group discussion (FGD) questions.

*Quantitative survey:* Pupils of 5, 7, 9 grades were chosen as a representative of school pupils of 1<sup>st</sup>-9<sup>th</sup> grade with systematic sampling method. Previously trained researchers conducted questionnaire survey among pupils and parents using semi structured interview methods. Observation survey was taken to explore how healthy behavior and attitude of school and kindergarten children established and its environment. In addition, key informant interview was performed to evaluate activities carried out among health, education and governor officials. A face-to-face interview was used to conduct a questionnaire survey of school pupils, parents and key partners.

*Qualitative survey:* Totally 16 FGDs were organized with 6-12 persons in each discussion. FGDs were held with the following representatives in total 160 participants:

1. Steering committee members
2. Aimag health department officers and heads and doctors of family health centers
3. Officials from Education and culture department and directors and teachers of schools and kindergartens
4. Representatives from model streets

FGD was used to reveal how the project reached the target groups; determine what challenges faced in the project and provision of PHC services, and verify findings of the questionnaire survey.

*Desk review:* It was used to review the project documents and health indicators in order to substantiate the survey findings.

## 1.3 Sampling and survey unit

The survey covered all 7 units from Bayan-Ulgii, Khovd and Gobi-Altai Aimags including 4 soums chosen with multiple stage sampling techniques.

Sample size was determined with Raosoft program as 240 people which would qualify 5 percent of standart errors and 95 percent of confidence level. Pupils from 5, 7, 9 grades were selected by systematic sampling method as the below.

Aimags	School pupils		Parents		Partners
	Center	Soum	Center	Soum	
Gobi-Altai	45	30	20	30	25
Khovd	45	30	20	20	25
Bayan-Ulgii	45	30	20	20	25
Total	135	90	60	70	75

**Data collection methods:**

Focus group discussion, key informant interview, desk review and observation methods were used for data collection. Three to five persons were selected from each aimag and trained on survey objectives and survey methods, sampling, filling questionnaire and observation.

**Analysis:**

Data was entered in statistical Epi-Info-6 after coding and checking the collected information. Statistical analysis was used mean, distribution, correlation and standard deviation tools in quantitative data. Narrative texting and categorization was used in qualitative survey.

**Weakness of evaluation:**

1. Some of the relevant national and local indicators were insufficient particularly statistical data on oral health, accidents and injuries of children, appropriate use of medicine and environmental health.
2. No interview and meeting was held with representatives of aimag general hospitals
3. Few soums were participated in the survey. Evaluation team had no chance to see activities of supportive supervision team in the selected soums for the survey.
4. Depending on language barrier, only school which lessons taken in Mongolian language were chosen in the survey from Bayan-Ulgii aimag.

## CHAPTER TWO: EVALUATION FINDINGS

### 2.1 Evaluation of implementation process

Steering committee was created in each target aimag and included the project coordinator in the composition of the team. This helps to support activities from the higher level administration, guides the project objectives and influences in the decision making. Steering committee approves an annual plan based on local needs and partners' comments and takes monitoring in the implementation. The units were highly satisfied with performance of local project officers during MTR visits.

- *Strengths of the project*

Most of the FGD respondents were highly satisfied with capacity building for education and health professionals through intellectual investment. Little funding has given precise outcomes and improved cooperation. The project covered all soums without selection of soums. The project made large contribution to capacity building of medical staff in remote soums. Actually coverage of health care professionals in trainings particularly from remote soums and baghs is not sufficient due to regular shortage of the government budget.

Also the respondents mentioned the following activities as strength of the project:

- Set up Steering committee
- Improved collaboration – forums with specific theme and experience sharing
- Learnt team building methodology
- Organized supportive supervision teams
- Conducted M&E after each activities
- Organized Medical Olympiads for school pupils
- Improved implementation through advocacy and influence in higher management
- Established model schools, kindergartens, streets and health centers

Feature of the project from other projects were expressed as follows:

- Steering committees were established at aimag level and implementing at grassroots. The most projects are implemented at ministry level.
- All soums of aimags were covered in the project and performance monitoring is conducted after each intervention.
- Good practices were disseminated through experience sharing and regional forums.
- Documents were open for review and clear to understand.

Weaknesses:

Most of respondents had no answer on weaknesses but some expressed poor funding for supportive environment on health, no funding for material things, such as equipment, and some trainers are not well qualified.



## Challenges:

One of the main challenge was high turnover rate of primary health care professionals. One other challenge was that citizens participating in model street project expressed their financial shortage even they have positive attitude and willing to involve in activities to improve environment during FGD and meetings with them. The citizens who improved the environment were very active and willing to disseminate their practices, give information to others and share experience.

### 2.1.1 Meeting the objective:

Generally, meeting the objective is sufficient and almost fulfillment rates have come out in the target aimags. Objective 1, the aimag health administration bodies are strengthening and monitoring the primary health care services effectively, were implemented with the higher rate and Objective 3, health knowledge and healthy attitudes among the community in target aimags improved with the lowest rate (Table 1). Improved implementation of activities gradually year by year was relevant with improved partners' knowledge, attitude and skills.

**Table 1. Implementation of objectives by aimags and years**

Objectives	2013			2014			2015			Total
	BU	GA	KHO	BU	GA	KHO	BU	GA	KHO	
Objective 1	91%	99%	91%	96%	91%	86%	97%	78%	100%	89%
Objective 2	77%	76%	84%	71%	85%	86%	100%	97%	94%	83%
Objective 3	84%	76%	83%	83%	86%	83%	73%	82%	82%	79%
<b>Sub total</b>	84%	84%	86%	84%	88%	85%	90%	86%	92%	84%
<b>Total</b>	<b>84%</b>			<b>85%</b>			<b>89%</b>			<b>86%</b>

Objective implementation is sufficient as 88% in Khovd, 86% in Gobi-Altai, and 85% in Bayan-Ulgii. Activities with the lowest implementation rate and its influencing factors (Annex 1):

1. 20-40% of school doctors are taking credits by distance training: School doctors do not need to have credits for license because they are considered like a social worker. This may be no incentive to participate in trainings.
2. Budget used for M&E by AHD increased by only 5%. This may relate to no increase of aimag health department expenses due to country economical recession and no separate estimation for monitoring activities.
3. A health network of local mass media publishing health articles on a regular basis through networking. Mass media entities with no actual financial support from the project, so had no intention to work with the project.
4. At least 1 seminar and experience sharing meetings to disseminate initiatives on creating healthy environment organized by local NGOs: Local NGOs have not similar mandate with the project and insufficient sustainable actions. Therefore, project implementation unit

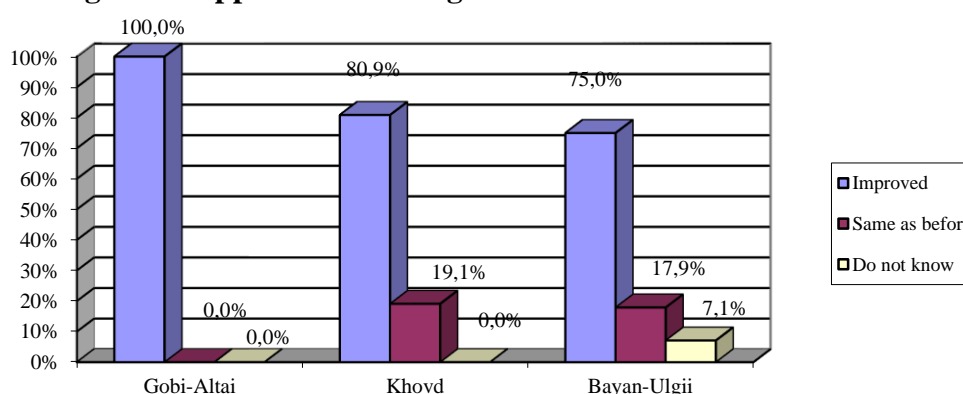
conducted a training on proposal writing among school doctors and teachers, funded the proposals and achieved good outcomes.

### 2.1.2 Findings of discussions with key partners

Totally 70 participants from steering committees, and health and education organizations involved in key informant interviews. From them 31.4 percent was males and 68.6% females. They were 25-60 year old and average age was  $40.0 \pm 8.9$ . In terms of gender, most of social sector staff is female. However, male participation and role particularly in activities among parents is shown increasing. Additionally, males are participating actively in the activities targeted in alcohol, tobacco and male health organized by the project.

Generally 97.1% of the respondents rated activities held by the NLM project as good and 2.9% as satisfactory. By the implementation of NLM project, local government support for health activities has increased by 84.3%, 12.9% same as before and 2.8% do not know (Figure 1).

**Figure1. Support from local government for health activities**

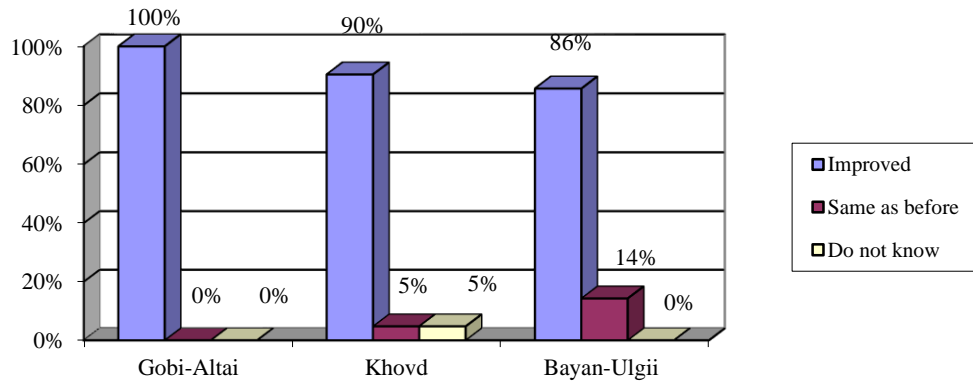


*NLM is taking a lot of attention on individual skills and building capacity of soum health center physicians and nurses. Also regular monitoring is made on local activities. More than 30 percent of local development fund will be spent for soum health center and schools as an initiative of the public health sub council. Dental doctors visits the soum twice a year regularly and dental illness is decreasing year by year as 22% in 2013, 24% in 2014 and 15% in 2015.*

*S.Khureltumur, Local governor, Mukhkhairkhn soum, Khovd aimag*

91.4 percent of the respondents considered that cooperation between health and education organizations was improved, 7.1% same as before and 1.4% do not know (Figure 2). In terms of facilities, 100 percent of representatives from health organizations, 95 percent of representatives from local government, 75 percent of representatives from schools and kindergartens answered as improved. It may show the project needs to work more with education sector.

**Figure2. Cooperation between health and education organizations**



*NLM project is not only taking an attention on capacity building but also connects local organizations with Ministry of Health inviting relevant officials from MOH when organize a regional forum in the recent years. Moreover, sufficient contribution is made in capacity of health professionals through supporting research activities.*

*S.Dorj, Official in charge of health, Local governor office, Khovd aimag*

Any organization, which participate in the project, has improved its managerial support (95.7%) in health activities.

The project has reached good outcome through multisectoral cooperation in behavior change communication. Education officials are having good understanding about health, healthy practice and attitude is important for school children, not only educating them. Small children are very quick in taking knowledge and practice in its behavior. Therefore, cutting health education lessons from the early education program by the decision of Ministry of Education, Culture and Science is backward step in healthy lifestyle and practices.

*School doctors did not belong to either school or health department before. After participation in trainings organized by NLM project, social worker and school doctor had possibility working together. The most important thing is collaboration. I am almost qualified in dental check up. My main job is to take attention on 6<sup>th</sup> teeth of children. If milk teeth are healthy also regular teeth will be strong. Also it would be very helpful to pupils if I had better knowledge regarding health of eye and ear.*

*S.Sainsanaa, Officials from Education and culture department, Khovd aimag*

The best skills improved with NLM project are personal communication, team work and experience sharing (Table 2).

**Table 2. Outcomes of NLM trainings and activities**

	Skills	Good /%/	Satisfactory/%%/	Same as before /%/
1	Ethics and communication	97.1	2.9	
2	Team building	95.7	4.3	
3	Training and counseling skills	92.9	5.7	1.4
4	Experience sharing	95.7	4.3	
5	Learning from each other	91.4	5.7	2.9
6	Conduct advocacy	87.1	10.0	2.9
7	Improve own knowledge and skills	85.7	14.3	
8	Conduct monitoring	78.6	17.1	4.3
9	Organize public health activities independently	74.3	24.3	1.4

The followings are the best activities carried out by NLM named by key informant interview:

- On job trainings as intellectual investment 72.9%
- Experience sharing activities 34.3%
- Healthy behavior support activities, for instance oral health and hand washing practice etc. 30%
- Regional consultative forums 27.1%
- Multisectoral cooperation 20%.

Comments to improve the project in the further: To provide sustainability and continue the project 47.1%

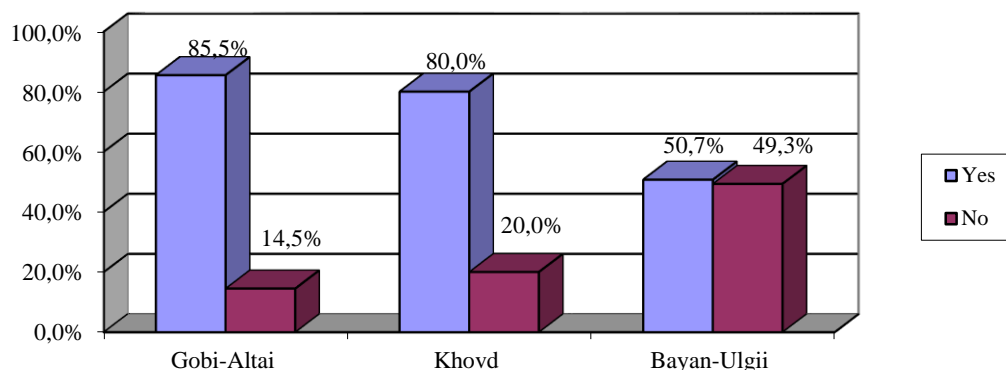
- To conduct capacity building trainings for health and education workers 30%
- To support cooperation 24.3%
- To provide support in health lessons for pupils of 1-5 grades
- To conduct trainings and advocacy for local administrators changed with 2016 election
- To provide coordinators at soum level.

### 2.1.3 Findings of questionnaire taken from pupils

Totally 226 pupils of 5,7,9 grades from aimag centers and soums participated in the survey. 45.6% of them were male and 54.4% of them female. Their family members were from 2 to 10 and average numbers of family members are  $5.5 \pm 1.4$ .

When the pupils are ill, they in double count seek care from parents (74.3%), school doctor or teacher (46.9%), soum and family health center (30.0%) and friends or emergency care (4.9%). Totally 72.1% of the pupils have taken services from family and soum health centers (Figure3) within 1-36 months, in average  $3.7 \pm 2.1$  months and the rest of pupils (27.9%) did not take these health services.

Pupils from Bayan-Ulgii aimag have the lowest rate in not taken health services. 87.3% of the pupils who did not take health services expressed they have no need to come to family and soum health centers, 7.9% of them go to general hospital and 3.2% of them considered family and soum health centers are far from their homes.

**Figure 3. Service taken from family and soum health centers**

Health lessons for 1-5 grades were cut from an education program in accordance to a comprehensive education program introduced in education system starting from the last year. However, 73.9% of pupils answered that health lessons are taught in schools. Maybe some teachers continue teaching health lessons -with their spirit and initiative. Pupils who participated in the survey from Bayan-Ulgii aimag had the least rate for this question (28.7%).

Some pupils (75.7%) got right information from the lessons and others (24.3%) did not have sufficient information. Bayan-Ulgii pupils (26.9%) got the least information (Gobi-Altai 38% and Khovd 35.1%) according to what they answered.

### Key health practices of the pupils

Tooth brushing	Pupil brush teeth $3.7 \pm 2.2$ times a day and $2.4 \pm 0.6$ minutes per session.
Hand washing practice and knowledge	51.3% of pupils are washing hands when dirty, 43.8% sometimes and 4.9% regularly. The pupils in double count have right information about transmission of infections by dirty hands as hepatitis 31.4%, diarrhea 26.5% and any infectious diseases 23.9%. 11.9% of the pupils answered that they will get cough and 21.7% of them do not know.
Information about first aid for burning	37.1% of pupils from Gobi-Altai, 40.5% pupils from Khovd, and 22.4% pupils from Bayan-Ulgii got information on burning. 54.2% of the pupils in double count got information from school teachers, 36.4% from parents, 5.9% from own and other's experience, 2.5% from books and 0.9% from TV. 90.7% of the pupils evaluated burning risks at their home, 7.08% answered they do not have the risks at home and 2.21% do not know the risk.

Almost half of the pupils (45.6%) got information about NLM and 54.4% of the pupils have no information. Totally 81.6% of Gobi-Altai pupils, 42.7% of Khovd pupils and 12, 0% of Bayan-Ulgii pupils got information about NLM.

From the pupils who have information about NLM, 46.6% of them answered that NLM conducts cooperative activities with schools, 32.0% organizes trainings, 5.8% of them know that NLM provided disinfection lamp to a school, 1.9% as provided leaflets and handouts and 13.6% of them heard about NLM but do not know what they do. The most significant activities for the pupils are health competition and campaign organized by NLM (32.3%), trainings (31.9%), and teeth and hand washing and gymnastics (13.7%). But 17.7% of pupils do not know what activities NLM organizes. 87.5 % of pupils who answered do not know were pupils from Bayan-Ulgii aimag.

*The project helps a lot in the issues of child development, self independence and mind change reflected in education reform policy. It not only supports children development such as growth in healthy environment, recover her or himself and develop own talent but also finances our activities. Then we are highly satisfied in our cooperation.*

*Sh.Boldbaatar, Director, School No1, Gobi-Altai aimag*

For a question of how local TV carries out health programs, 19.5% of the pupils answered sufficient, 33.6% (one third of the pupil) of them do not know. It shows that pupils do not watch sufficiently TV programs or TV programs are not attracted to the pupils (Table3). Also some soums do not have local TV programs. Answer of sufficient is higher among Gobi-Altai pupils and answer of do not know is higher among Bayan-Ulgii pupils.

**Table 3. Status of health programson local TV**

	Sufficient		Satisfactory		Not sufficient		Do not know		No TV	
Gobi-Altai	24	54.6%	17	36.2%	7	28.0%	15	19.7%	13	38.2%
Khovd	13	29.6%	14	29.8%	9	36.0%	26	34.2%	13	38.2%
Bayan-Ulgii	7	15.9%	16	34.0%	9	36.0%	35	46.1%	8	23.5%
Total	44	19.5%	47	20.8%	25	11.1%	76	33.6%	34	15.0%

The pupils in double count got information about health from school doctors and teachers (47.8%), parents (38.9%), soum and family health centers (25.2%), TV and radio (24.3%) subsequently.

*Our school pupils previously do gymnastics counting themselves. Now they have more possibility to have better body sense and rest during the break doing gymnastics with music. There is strength that they have a wish to keep their weight determining their body mass index and measuring their weight regularly.*

*U.Bayarmaa, Social worker, Gobi-Altai aimag School No1*

The pupils need information about disease prevention (62.6%) in highest rate, but 17.8% of them do not need any information and 12.4% of them do not know. Almost half of the pupils

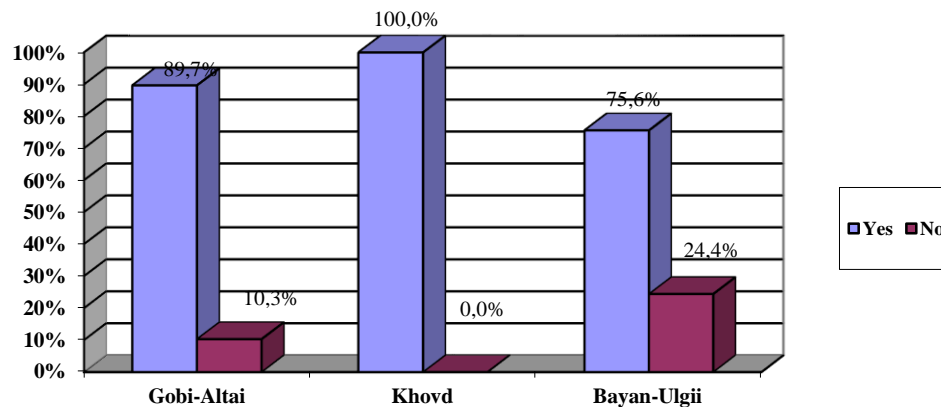
(45%) who answered that they do not need information were the pupils from Khovd. Some pupils expressed their wishes to have a medical checkups and information on face care.

#### 2.1.4 Findings of the survey from parents

For the survey 122 parents participated from the project aimags. From them 27.9% are male and 72.1% female. The participants' education is primary (5.7%), secondary (41.8%), technical education (4.10%) and high education (47.5%). From them 58.2% are working in state and private sectors, 27.1% unemployed, 9.8% herders, and 5.4% pensioners or students. People between 23-63 of age participated in the survey and average age was  $31.5 \pm 8.9$ .

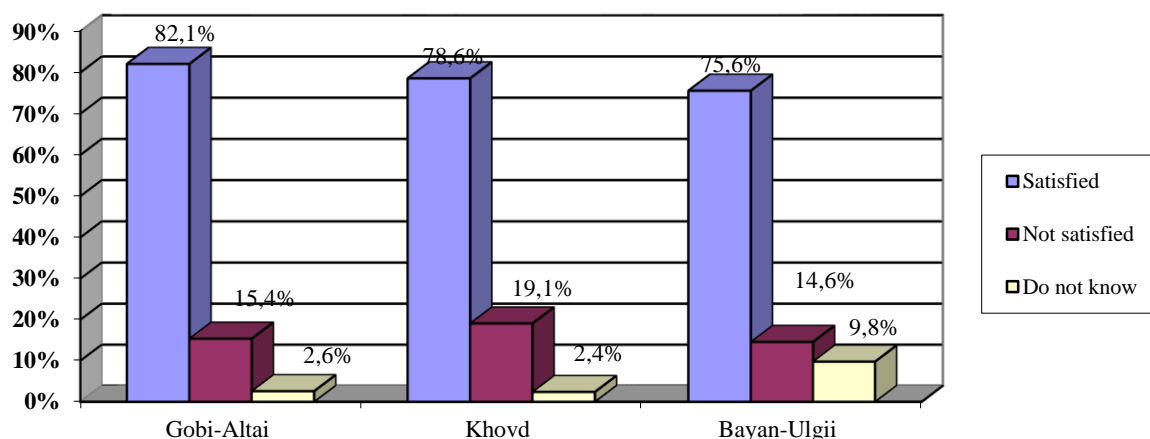
Most of the respondents (77.9%) seek care from family and soum health centers when they are ill, 16.4% from aimag general hospitals, 2.5% are taking self care and 3.2% from other sources like friends or private clinics. 88.5% of the respondents got services from family and soum health centers and 11.5% did not come there (Figure 4). The nearest time when they seek care from family and soum health centers is  $3.36 \pm 5.5$  months. The reasons why not seeking care from the center are: no need them (64.7%), going to general hospital (23.5%) and family and soum health centers are far from their home (11.8%).

**Figure 4. Service taken from family and soum health centers**



75.4% of the respondents are taking expected professional services from family and soum health centers, 16.4% cannot and 8.2% do not know. For this question, Khovd aimag has higher percentage (26.2%) in not taking proper services (Gobi-Altai 7.7% and Bayan-Ulgii 14.6%). The significant number of the respondents (78.7%) has satisfied with services provided by family and soum health center, 16.4% not satisfied and 4.9% do not know. There is no difference between aimags in the satisfaction rates (Figure 5).

**Figure 5. Satisfaction of the respondents on family and soum health centers**



When the respondents or their family member are ill, physicians of family and soum health centers provide prescriptions 87.2% in Gobi-Altai, 78.6% in Khovd and 56.1% in Bayan-Ulgii aimag (Table 4). 97.4% of Gobi-Altai respondents take a medicine with prescriptions, 88.1% of Khovd and 77.1% of Bayan-Ulgii respectively.

**Table 4. Prescription practice of family and soum health center doctors**

	Always		Sometimes		No prescription		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Gobi-Altai	34	87.2%	5	12.8%	0	0.0%	39	100.0%
Khovd	33	78.6%	6	14.3%	3	7.1%	42	100.0%
Bayan-Ulgii	23	56.1%	10	24.4%	8	19.5%	41	100.0%
<b>Total</b>	<b>90</b>	<b>73.8%</b>	<b>21</b>	<b>17.2%</b>	<b>11</b>	<b>9.0%</b>	<b>122</b>	<b>100.0%</b>

### Key healthy practices of the parents

Tooth brushing	The parents brush their teeth $2.0 \pm 0.9$ times a day and duration of brushing is $3.0 \pm 2.1$ minutes.
Hand washing practice and knowledge	41.0% of parents are washing hand when it is dirty, 38.5% sometimes and 20.5% regularly.  90.2% of the parents in double count have right information about transmission of infections by dirty hands and 9.8% of them do not know.
Information about first aid for burning	74.4% of the respondents from Gobi-Altai, 64.3% respondents from Khovd, and 39% respondents from Bayan-Ulgii have got information on burning.  42.1% of the respondents in double count got information from internet, 38.2% from people, 10.5% from TV and remaining got from other



sources. 70.8% of the information is right, 26.4% wrong and 2.8% do not know. 89.3% of the respondents considered that they have burning risks at home, 8.2% do not have and 2.5% do not know.
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Self medication of antibiotics was 19.7% among the respondents. It is a considerable rate of wrong practice particularly for antibiotic use. 24.4% of the respondents from Bayan-Ulgii, 19.1% of Khovd and 15.4% of Gobi-Altai are using antibiotics at home without instruction of a physician (Table 5). More Gobi-Altai (46.2%) and Khovd (38.1%) respondents use pain reliever and Bayan-Ulgii participants (41.5%) cough drugs. Higher rate of not using a medicine at home is among the respondents from Khovd (21.4%) and Bayan-Ulgii (19.5%) and lower rate among Gobi-Altai respondents (10.3%).

**Table 5. Selfmedication at home**

Aimag	Antibiotics		Hypertension drugs		Cough drugs		Pain reliever		No drug		Total	
GA	6	15.4	1	2.6%	10	25.6%	18	46.2%	4	10.3%	39	100%
KHO	8	19.1%	2	4.8%	16	38.1%	7	16.7%	9	21.4%	42	100%
BU	10	24.4%	1	2.4%	17	41.5%	5	12.2%	8	19.5%	41	100%
<b>Total</b>	24	19.7%	4	3.3%	43	35.3%	30	24.6%	21	17.2%	122	100%

Information taking about NLM is 74.4% among Gobi-Altai respondents, 69.1% Khovd and 26.3% Bayan-Ulgii in that order. 60.9% respondents know that NLM conducts IEC activities on health and 8.7% support for organizations. But 29% of the respondents do not know what they do.

63.4% in Bayan-Ulgii, 56.4% in Gobi-Altai and 35.8% in Khovd correspondently responded that local TV are broadcasting enough health information. At the other hand, 22.0% of Bayan-Ulgii participants, 10.3% of Gobi-Altai and 11.9% of Khovd said they do not know.

62.3% of the respondents in double count got health information from family and soum health centers, 18.0% from newspapers, 12.3% from internet, and 8.2% from TV and radio. Also, 50.8% of the respondents in double count need information on disease prevention, 12.3% need information about particular diseases and 24.6% do not need any information.

### 2.1.5 Findings of observations

In total 20 organizations including 10 schools and 10 kindergartens were covered by the observations. Table 6 shows that the best implemented activities in the project sites are oral health and hand washing practices. Information on burning and appropriate use of medicine is not given sufficiently and there is a need to increase efforts in this regard and improve the activities.

**Table 6. Observation sheet for schools and kindergartens**

N <sup>o</sup>	Questions	Yes /%/	No /%/
1.	Having health cabinets and corner	85.0	15.0
2.	Having IEC materials on healthy behaviors	95.0	5.0
3.	Having IEC materials on oral health	95.0	5.0
4.	Having IEC materials on appropriate use of antibiotics	45.0	55.0
5.	Having IEC materials on prevention from child burning	35.0	65.0
5.	Having posters on tooth brushing instruction on the walls of health cabinets	90.0	10.0
6.	Having posters on hand washing instruction on the walls of health cabinets	90.0	10.0
7.	Having a soap for each child	85.0	15.0
8.	Having a tooth brush for each child	95.0	5.0
9.	Having wet tooth brushing in dormitory and kindergarten	75.0	25.0
10.	Toothbrushes are kept hygienically stored	80.0	20.0

Sustainability of healthy practices such as hand washing and tooth brushing is created at home, schools and kindergartens due to project sites organized training in triple settings like school teachers, parents and children. Environment for healthy practices is in place at schools and kindergartens through posters and leaflets are placed on health corners and walls of rest rooms and each child is having their soap, brusher and tooth paste. However, dry brushing set up is widely available for kindergarten and primary school children; middle and high school children are still having insufficient supply. This may only have relevance to schools and kindergartens which are mostly serving children more than twice of its capacity.

During the observation, children who were randomly selected, were performing hand washing and tooth brushing practices right way and explaining its practices accurately. School and kindergarten officials pointed out some statistical findings that how infectious diseases and teeth illness decreased thanks to the project implementation. Moreover, their knowledge about healthy environment has improved a lot, particularly teachers' knowledge and attitude on disinfection. Schools and kindergartens have placed disinfection lamps in its rooms and provided instruction to workers and have been doing registration for control.

## 2.2 Sustainability

From the initial phase the project was properly designed to create supportive environment in improving multi-sectoral cooperation, mobilizing aimag governors' office and building capacity of professionals of family and som health centers. The project has been implementing through a plan which is discussed and approved by steering committees with comments from partners. The plan is most likely achievable because the budget is precisely included in the plan.

Relevant ministries are involved in the key activities and interventions are conducted with comprehensive participation of administration, organizations and families. The steering committees at aimag and health sub councils at som are working regularly and local

administrators are taking efforts with clear understanding how multi-sectoral cooperation is essential for health promotion. The most sites have been taking some important decisions in

*Sustainability would be provided when legal environment is in place. For instance our aimag set up supportive environment in sustainability through an aim to be teeth illness free aimag at 2020. Within this framework, contracts were made between entities and taking higher administration reports regularly.*

*Tungalag, Director, Local governor's office, Munkhkhairkhan soum, Khovd aimag*

sustainability of health promotion, particularly Munkhkhairkhan soum which decided to spend more than 30 percent of local development fund for soum health center and schools.

Effective interventions such as public health model soums and model streets at local governor's level, nursing model center at health organizations, healthy organizations and oral health model schools and kindergartens are implementing successfully mobilizing particular communities. Improved capacity building of these organizations is making contribution to sustainability.

Experience sharing and regional forums in certain topics were substantially valuable for education and health organizations.

*Organizing a regional forum on public health at our soum we conducted public health interventions such as cleaning wastes, establishing waste disposal points, building 30 toilets in accordance to standard and creating health cabinets before the event and citizens were highly motivated.*

*Kh.Erjanat, Soum governor, Bugat soum, Bayan-Ulgii aimag*

*I participated in an experience sharing regional forum in Munkhkhairkhan soum and was trained on how to improve collaboration. Then I introduced activities on healthy diet among children and it was implemented successfully.*

*B.Nurbek, Social worker of soum governor office, Bugat soum, Bayan-Ulgii aimag*

Monitoring and evaluation team organizes meeting 3-4 times a year and supportive supervision teams conducted monitoring linking with on job training based on approved M&E plan.

The project developed job description for school doctors. That has required that the aimag health department should provide professional guidance to them. Schools organize health campaigns a year regularly, information is given to parents same time with pupils, health cabinets were established and every education unit has TV and health corner. These facilities will be input for the further interventions.

*Environmental health campaign was successful because citizens involved themselves in this intervention. Through collaboration with parents during oral health campaign, their knowledge was improved and created possibility to promote healthy practices at home.*

*D.Delgerbayar, Director of Public administration division, Governor's office, Khovd aimag*

Sustainability is largely dependent on individual who is working at a local position. For instance L.Khatanbaatar, Officer in charge of health at Education and culture department, Gobi-

Altai aimag said that “I promise that I take ownership on the project activities maintaining its sustainability when I’m in this position” at wrap up meeting in Gobi-Altai aimag.

### 2.3 Local ownership

Project steering committees have meetings 3-4 times a year, discuss a plan, approve it and make decision on timely manner. All partners were involved in FGDs equally and had sufficient knowledge and great interest in the project continuation. General accomplishment of the planned activities (86%) shows that local ownership is in place.

Gobi-Altai and Khovd aimags has the slogan that 1 activity should give 2 outcomes and Bayan-Ulgii has 1 activity to 1 outcome. It provides possibility to disseminate interventions and share experiences from others.

Physicians of aimag general hospitals and RDTCs participated actively in on job trainings for professionals of family and soum health centers. It provided support in local training capacity, communication between trainees and trainers, taking advice, experience sharing and communication between health facilities. On job training were organized among newly graduated physicians on topics of child illness, injuries, gynecology and emergency care in 10 days and also for nurses and laboratory workers in 5 days.

The project creates supportive supervision teams based on local needs and sends them for 5 days to soums providing on job training and advice, and conducts monitoring after certain period. However, the selected soums had not got visit from this supervision team, but MTR team visited in Tsetseg soum, Khovd aimag, on the way. The colleagues of this soum health center were highly satisfied with this intervention and they made a lot of changes in public health and clinical settings, quality of services and comfort for workers and clients with the recommendations of supportive supervision team.

The project sites initiate activities with local development fund and other international sources like World Vision (INGO) using their knowledge on how to write a proposal obtained from the project trainings and got substantial outcomes.

*We trained in proposal writing and got funding for projects on “Healthy future, healthy body and clear mind in healthy body”. For instance School No1 got funding of 20 million tugrug for improving the environment through the proposal writing.*

*L.Khatanbaatar, Officer in charge of health at Education and culture department, Gobi-Altai aimag*

After demonstration training on promotion of model streets at Gobi-Altai aimag, Khovd and Bayan-Ulgii aimags organized a competition among bags and the selected bags implemented activities to make fences similar and create standard hygiene settings and waste disposal points.

*People are trained how to work together. They are having one objective. I was introduced to and got to know the situation of the families. Since I was appointed as a bag head I had not got to know the families I should serve. So the outcomes were great and visible results came from this campaign. People were introduced to each other.*

*L.Otgontsagaan, Head of Tsambagarav bag, Khovd aimag*

*NLM project provided knowledge to people. Use of drinking water, toilet and hygiene facilities is improved. Green areas are established. Families are taking outside cleaning once a week.*

*Kh.Komarov, Head of Bag 5, Bayan-Ulgii aimag*

The project only provided technical guidance in environment improvement for model streets, although it is evidently shown during the observation that people are largely motivated and understood importance of team building and learning from each other. However, some Khovd participants in the FGD for model street citizens mentioned that people widely have inappropriate use of medicine because they get insufficient information about it.

## **2.4 Lessons learnt**

1. Not starting a project evenly in terms of time and human resources in project aimags is getting a challenge in comparison. For instance: Rates on multi-sectoral cooperation and project implementation are lower in Bayan-Ulgii aimag than other 2 aimags. It may relate to the initial later start and coordinator's input of part time basis.
2. Personal communication trouble, especially the language barrier, is a challenge for behavior changing activities. For instance, during MTR, to understand each other fully we needed additional resources such as translation, more time and human resource in BU aimag.
3. By the observations, individual's motivation and effort is crucial in the implementation. Therefore, not only promotion of effective interventions, experience sharing and dissemination to others is important, but also significant attention should be put on weak sites; particularly mobilizing initiative, effort and mind of local workers is very important.
4. Geographical location and feature should be reflected in funding of outreach activities, M&E and information sharing. For example: Road of Munkhkhairkhan soum, Khovd aimag is in bad condition and not connected to internet.
5. After the project completion, healthy practices would face difficulty when cooperation between local government, and health and education organizations is weak in state. Cutting of health lessons from the education program by the ministry will be a contribution in this regard. Then the existing activities have to be sustained with effective and regular multi sectoral cooperation.

6. Oral health and hand washing practices has improved, however findings on rational use of medicine and information about burning show that behavior change of adults takes time and effort.

## CHAPTER THREE: CONCLUSION AND RECOMMENDATIONS

### 3.1 Conclusion

Project implementation is sufficient and on track.

#### Objective 1: Supportive environment

- Set up cooperation environment between local government, health and education sectors.
- Relevant ministries participate in regional forums.
- Support is in place at all levels through providing right information and knowledge to management teams.
- Performance monitoring is done after each activity, estimating outcomes, supporting sustainability and already existed capacity.

#### Objective 2: PHC accessibility and quality

- Most of pupils and parents of the project aimags seek care from family and soum health centers when they are ill. It is the good indicator of primary health care service accessibility.
- There is no answer of poor quality of services from the reasons why not coming to health centers.
- Three of four parents are taking expected professional services from family and soum health centers.
- More than three of four parents are satisfied with services of family and soum health centers.
- Skills and practices of PHC professionals are improved and there are positive changes (Annex 2) in key health indicators.

#### Objective 3: Healthy practice

- The project focused on few issues such as oral health, hand washing and healthy environment and reached good outcomes.
- Local administration and health and education officials understood importance of cooperation in healthy practices. School and kindergarten pupils have learnt tooth brushing and hand washing practices and supportive environment was set up at the schools and kindergartens.
- Insufficient information about burning and poor appropriate use of medicine may contribute to burning risk and antibacterial resistance. Also poor vision is prevalent among pupils. Then encouraging of healthy practices for vision protection is essential for pupils in the further.

- Meeting of objectives to establish health network among mass media organizations and organize training on project proposal writing for NGOs is insufficient due to these organizations are private and independent. Consequently, these objectives have limited coordination and guidance from the project.

### Key achievements

- The most effective intervention is regional forums and experience sharing. During the intervention, entities got the following benefits:
  - ✓ Unit initiates a lot of activities, maintain its activities and improve
  - ✓ Learning by doing
  - ✓ Get proud by its achievements
- Model projects have been implemented successfully with its mobilization by experience sharing and regional forums
  - ✓ Higher management teams involve actively and support financially
  - ✓ Expand the activities and disseminate others
  - ✓ Citizens and families are promoted and mobilized
  - ✓ Living and work environment has improved
  - ✓ Healthy behavior and attitude is gradually changed and improved
- Effective interventions for particular target groups:
  - ✓ Healthy organization and model center for organizations
  - ✓ Model street for families
  - ✓ Behavior change communication, peer education, health campaigns and Olympiads for school pupils

### Sustainability

The following practices of the project would be a basis of sustainability depending on local administration initiatives and efforts:

- At local government level: Steering committee, Public health sub-council, Public health model soum, model street
- At health organization: nursing model center, supportive supervision team, and on job training
- At schools and kindergartens: healthy organization, oral health model school and kindergartens.

## **3.2 Recommendations**

#### At national level:

- To create supportive legal environment for best practice to spend more than 20% of local development fund for public health activities.
- To introduce nationally good practices created by the project such as capacity building trainings, on job trainings, supportive supervision teams, regional forums, and M&E guidelines.
- To provide support in sustainability of health lessons in schools at level of other important subjects like Math's, Mongolian language etc.
- To disseminate nationwide oral health and hand washing practices created by the project.
- To familiarize nationally the cooperation practices between local governor offices, schools and kindergartens which see health activities as their own benefit.
- To create supportive environment for the best practices like healthy street, school and centers with its budget and guidelines.
- To improve job description of school doctors and develop criteria of work stations.
- To develop and implement strategies for appropriate use of medicine for adults and vision protection for pupils.

#### At local level:

- To provide sustainability of good practices and disseminate to others
- To include more than 2 indicators of health promotion in evaluation criteria of health and education organizations
- To sustain activities of model centers and good practices and continue its promotion and dissemination
- To develop a joint plan for education and health organizations and follow up the performance
- To provide support in job description for school doctors and their continuous education

#### For Strengthening Primary Health care-2 project:

- To continue the project maintaining the project success and achievements
- To consider continuously cooperation of stakeholders
- To organize continuously experience sharing activities and regional forums, and support model centers
- To develop and implement specifically a strategy for appropriate use of medicine
- To reach effectively pupils via school teachers and doctors, peer education, health campaigns and Olympiads, parents via soum and family health centers, mobile phone and internet
- To seek possibility to implement a new project on appropriate use of medicine for adults, vision protection for children and child mortality for health organizations.

#### Reference materials



- Annual plans and its accomplishments
- Performance indicators of the project
- Annual project reports (2013-2015)
- Health indicators, HDC (2010-2014)
- Project main document

**REPORT WRITTEN BY:**

**BULGANCHIMEG.B, MASTER OF HOSPITAL ADMINISTRATION**

## Annex 1

## SPH-2 key indicators 2013-2015

Indicators	Output	2013			2014			2015			Average
		BU	GA	KHO	BU	GA	KHO	BU	GA	KHO	
1.1. Local implementation of national human resource policies and strategies for client centered performance, capacity building and management of health workforce by aimag health administration bodies improved	1.1a: AHD has reviewed the existing national policies and strategies and made plan for local implementation of it	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
1.2. Aimag health administration bodies have gained knowledge and skills on advocacy, management, training methodology and monitoring	1.2a: 80% of AHD staff participated in at least 2 trainings	100%	95%	100%	100%	100%	100%	100%	100%	100%	99%
	1.2b: Posttests results increased by at least 30% compared to pretests	54%	100%	86%	78%	70%	100%	100%	90%	100%	86%
1.3. Evidence-based monitoring and evaluation methods by aimag health departments improved	1.3a: AHD have renewed their own M&E tools and have plans for regular M&E	100%	100%	67%	100%	67%	100%	100%	100%	100%	93%
	1.3b: Budget used for M&E by AHD increased					100%	0%	100%	0%		50%
1.4 Cooperation between aimag's health administration and educational administration regarding health education in kindergartens and elementary schools in the target area established and working	1.4a: AHD and AECD have regular joint activities	100%	100%	100%	100%	100%	100%	80%	80%	100%	96%
	1.4b: AHD and AED have developed job description of school and kindergarten doctors				100%	100%	100%				100%
2.2 Quality management team activities with client centered focus at soum health centers and family health centers running according to guidelines	2.1a: Client satisfaction level of the service regarding the model issues among population in model soums increased by at least				74%	100%					87%

	5% comparing to last year's level.										
	2.1.b: At least 1 soum in each target aimags is starting doing after the model of model soums.				100%	100%	100%	100%	100%	100%	100%
	2.2a1: Health quality training in target aimags and illustration/ experience sharing trip to successful soum hospital organized by aimag health departments.	100%	100%	86%	100%	100%	100%	100%	100%	100%	98%
	2.2a2: 60% of the health centers have quality team management meetings monthly.	100%	15%	37.8 %	64%	100%	81%			60%	65%
2.3 Attitude, skills and performance of the primary health providers on organizing gender sensitive public health activities improved.	2.3a: Client satisfaction surveys among respective target population done at least once by 80% of soum and family health centers.	100%	86.3 %	100%	83%	100%	100%	100%	100%	100%	97%
	2.3b: 50% of the health centers have organized a public health activity focusing on men.	100%	100%	100%	30%	100%	100%	100%	100%	100%	92%
2.4 Discussion and exchange of information and experiences among health professionals in target aimags organized regularly.	2.4a: 3 forums organized by aimag health departments with support from Ministry of Health.	66%	66%	66%	100%	100%	100%	100%	100%	100%	89%
	2.4b: Partners share of budget in regional forums at least 10%.	49%	100%	100%	100%	100%	100%	100%	79%	100%	92%
2.5 The primary health providers are assuring their personal professional development as well	2.5a: 20% of primary health care professionals are	100%	100%	100%	60%	55%	92%				84%

as gaining evidence-based and up-to-date knowledge on essential diagnoses and treatment of common diseases.	taking credits by distance training.											
	2.5b: 20% of school doctors are taking credits by distance training.	0%	40%	83%	0%	0%	0%					21%
3.1 Awareness on child health and healthy lifestyle, including rational use of essential drugs and oral health, increased.	3.1a1: At least one school and kindergarten teacher from 50% of schools and kindergartens in target aimags trained in oral health, relevant child health and rational drug.	94%	73%	100%			90%		55%		70%	80%
	3.1a2: Average increase of more than 30% from pre to posttest during training.	74%	90%	100%					63%		74%	80%
	3.1a3: 75% of all teachers that attended training have made plan for how to implement the newly gained knowledge into their own classes.	100%	42%	67%			100%					77%
	3.1a4: 50% of all schools within the target aimags have material available for children regarding child health and oral health.	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	3.1b1: 75% of all health centers have IEC material available for clients regarding child health, oral health and rational drug use.	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

	3.1b2: 50% of all health centers are doing public health activities on child health and rational drug use at least once including totally minimum 50 participants.				100%	100%	100%	71%	78%	100%	92%
	3.1c: A health network is established in at least 2 of 3 target aimags.	100%	100%	100%	0%	0%	0%				50%
3.2 Awareness among community to create healthy environment increased.	3.2a: At least 1 community initiative to create healthy environment supported by AHD in each aimags.	100%	100%	100%	100%	100%	100%	50%	50%	50%	83%
	3.2b: Trained local NGOs in how to write project proposals about community health and healthy environment.	0%	0%	0%	100%	100%	100%				50%
*Average		84%	84%	86%	84%	88%	85%	90%	86%	92%	84%

### Key health indicators

