Training of Professionals (ToP)
Impact Evaluation Report

Karunafoundation

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EXECUTIVE SUMMARY

Karuna Foundation Nepal, conducted “Training of Professionals” workshop for 5 days in 2008 targeting grass-root level health workers of Kavre and Sunsari. The program was conducted in 2008 in all the health facilities of Sunsari and all the Sub-Health Posts of Kavre. Same program was conducted in all the Health Posts and Primary Health Care Centers of Kavre in 2011. Major goal of program was to prevent birth defects and childhood disability by health workers in the community through improvement of maternal and child health indicators (mainly immunization, nutrition and safe motherhood. The project aimed at improving the competency and commitment of health workers in carrying out disability prevention activities such as counseling, provision of improved health care and timely referral. The aim of this evaluation study was to identify the impacts of program on health worker, health facility, and community of Kavre and Sunsari and to generate evidence for management decision.

It was an institution-based study. Study was conducted utilizing both qualitative and quantitative research methods and tools. Study was conducted in Kavre and Sunsari taking health facility in-charge as study population. Simple random sampling was applied to select health facility. Fifteen health facilities (9 from Kavre and 6 from Sunsari) were selected for study. Document schedule and in-depth interview guideline was used to collect data. All quantitative data were entered, processed and analyzed using Excel. Qualitative data were analyzed thematically.

The study revealed that all the health workers were aware of childhood disability prevention measures. Counseling on importance of preventive health services to pregnant and postpartum women was reported to be practiced by almost all health workers. Referral of disabled children to higher-level institution was common practice of health workers. There was increase in coverage of maternal and child health indicators (safe motherhood, immunization and nutrition) in most of the selected health facilities of Kavre and Sunsari. However, coverage was lower than that of national average. Higher coverage of maternal and child health indicators

were seen in Sunsari, in comparison to Kavre. In spite of lower coverage of maternal and child health indicators, increment in coverage was more in Kavre (13.4%) than in Sunsari (5.3%). Coverage of nutrition and safe motherhood indicators were below the national coverage during evaluation period. Coverage of DPT-Hep B-Hib3 and Polio-3 was higher than national in Sunsari. All the four immunization indicators of Kavre were below the national coverage, except for DPT-Hep B-Hib3 coverage (91%). TT2 coverage was higher than national (47%) in Kavre and lower than national in Sunsari (16%). There were no specific disability prevention activities conducted in Sunsari, while many health facilities in Kavre had conducted such activities. Dapcha Health Post of Kavre conducted childhood disability prevention related activities, with active community participation. Other health facilities such as Mahendrajyoti Sub-Health Post and Chalal Ganeshsthan Sub-Health Post of Kavre also conducted childhood disability prevention related activities.

Overall, Training of Professional played was found to improve 15 selected maternal and child health indicators by an average of 13.4% in Kavre and 5.3% in Sunsari in selected facilities. Undoubtedly, Training of Professional is a program with innovative concept. It aimed to prevent birth defects and childhood disability in community through improvement of immunization, nutrition and safe motherhood indicators. It is necessary to implement such program in other districts with direct involvement of local community and FCHVs in program. Further, ToP might bring more impact if intensive follow up of health workers and strict monitoring and supervision system is put in place.

ACKNOWLEDGEMENT

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Vow of thanks goes to DHO of Kavre and Sunsari. I am greatly indebted to all participants (health facility in-charges, MCHW and ANM) who enthusiastically participated in the study. This study could not have been completed without their information.

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LIST OF ABBREVIATIONS

AHW	Auxiliary Health Worker
ANC	Antenatal Care
ANM	Assistant Nurse Midwives
CB-NCP	Community Based Neonatal Care Package
DHO	District Health Office
FCHV	Female Community Health Volunteer
HA	Health Assistant
HFOMC	Health Facility Operation and Management Committee
HMIS	Health Management Information System
HP	Health Post
KFN	Karuna Foundation Nepal
MCHW	Maternal and Child Health Worker
PHCC	Primary Health Care Center
PHC/ORC	Primary Health Care Outreach Clinic
PNC	Postnatal Care
SHP	Sub Health Post
ToP	Training of Professionals
VDC	Village Development Committee
VHW	Village Health Worker

CHAPTER I: INTRODUCTION

1.1 Description of the Training of Professionals (ToP) program

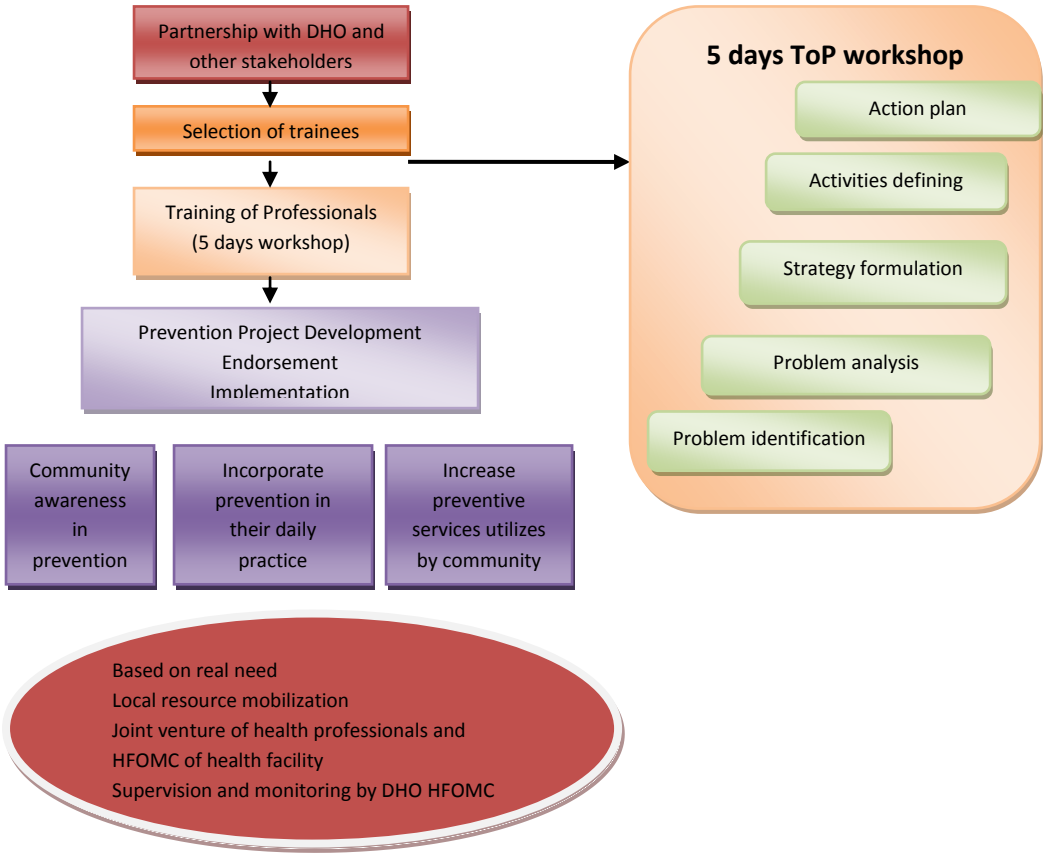
Karuna Foundation Nepal (KFN) had conducted 5 days workshop Training of Professionals (ToP) from 2008 to 2011 to improve knowledge and skill of grass-root level health workers (AHW, HA, ANM, MCHW) in preventing childhood disability. Program covered whole Kavre and Sunsari. Health workers were trained on topics like impact, causes, and prevention of childhood disability. Health Management Information System (HMIS) indicators contributing to childhood disability prevention, community based rehabilitation and its component and plan for disability prevention were included in ToP workshop. After workshop, childhood disability prevention project was launched in each health facility of Kavre and Sunsari. Prevention project was endorsed by Health Facility Operation and Management Committee (HFOMC) of each health facility. District Health Office (DHO) took the lead of the project in each district. Major goal of ToP was to promote prevention of birth defects and childhood disability by health workers.

Objectives of ToP program were:

- To improve knowledge of health workers on impact, causes and prevention of childhood disability,
- To motivate health workers on preventing childhood disability,
- To improve referral practice of disabled children to appropriate health facility by health workers ,
- To provide information on community-based rehabilitation center to health workers,
- To improve HMIS indicators contributing to disability prevention status,
- To increase active participation of health workers in disability prevention,
- To develop capacity of health workers to analyze the problems in delivering preventive services to and

- To formulate childhood disability prevention project to solve the identified problems.

Figure 1: Process of ToP



1.2 ToP Logic Model

Logic model had been used to make ToP evaluation easier. This logic model provides a snapshot of ToP program and serves as a single-page summary of program that can be easily shared with stakeholders. Logic model includes inputs (work force, money and material necessary for program implementation), activities (actual interventions that the program implements in order to achieve desired outcomes), outputs (direct results obtained because of program activities) and outcomes (changes, impacts, or results of program implementation).

Figure 2: Training of Professionals (ToP) Logic Model

Input	Activity	Output	Impact
• ToP curriculum and manual • Trainer from KFN • Training materials • DHO of Kavre and Sunsari • Finance from KFN • Project staffs •Computers and software's	• Conducted 5 days training to HA, AHW, MCHW and ANM on childhood disability prevention • Plan and implement childhood disability prevention project in each health facility • Conduct supervision of disability prevention project from DHO along with KFN staffs • Conduct bi-annual review meeting of ToP with Ilaka level health facility • Provide seed money of Rs. 20,000 to each health facility • Endorsement by HFOMC • Monitoring of HMIS indicators contributing to disability prevention • Evaluation of	• 5 days training to HA, AHW, MCHW and ANM on childhood disability prevention • Total 457 health workers trained •150 projects implemented	**i. On health workers** • Increase in knowledge of preventing and managing childhood disability • Increase in counseling on importance of preventive health services (safe motherhood, immunization, nutrition) to pregnant and postpartum women • Increase in referral of disabled children to higher-level institution **ii. On health facility** • Increase in supervision and monitoring • Increase in conduction of disability prevention activities • Increase in utilization of preventive health services by pregnant women, mothers, under-five children and improvement of maternal and child health indicators (immunization, nutrition, safe motherhood) contributing to prevention of childhood disability

	disability prevention project on review meeting and provided certificate and prizes to best performing health workers		iii. **On community** • Increase in mobilization of community resource (FCHV, social workers, community-based organizations, mother's group, community leaders, students) in preventing childhood disability • Increase in community awareness of childhood disability prevention • Establishment of organization's working for disability in community. • Increase in community participation in childhood disability prevention

CHAPTER II: ToP EVALUATION PLAN

2.1 Rationale of the ToP evaluation

This evaluation was conducted to examine the effectiveness of the ToP program in achieving its objectives and assessing whether it returned good results of investment. It aimed to identify the impacts of ToP in health workers, health facility and community. KFN is currently running Share & Care Project (SC) in some VDCs of Sunsari, Rasuwa, Ilam and Kavre. Prevention and Rehabilitation Project (P&R) is also undergoing in some of the VDCs of Sunsari and Rasuwa. KFN is now planning to re-launch ToP program as a part of SC and PR project. Therefore, it was necessary to evaluate the effectiveness of ToP program. It was must to know whether ToP program was cost effective and whether it really improved the skill of health workers in preventing childhood disability in community.

The findings of this impact evaluation will assist in confirming whether ToP achieved its intended outcome and checking whether there has been desired effect in the target population (grass root level health worker) and in community. In addition, this evaluation is intended to generate evidence to share with donors, other stakeholders and provide management information.

2.2 Objective of the ToP evaluation

Objective of this impact evaluation were as:

- To identify the impacts of ToP program on health worker.
    - Knowledge of preventing and managing childhood disability
    - Counseling on importance of preventive health services to pregnant and postpartum women
    - Referral of disabled children to higher-level institution
- To identify the impacts of ToP program on health facility.
    - Supervision and monitoring

- Conduction of disability prevention activities
- Utilization of preventive health services by pregnant women mothers and under-five children
- Improvement of HMIS indicators (immunization, nutrition, safe motherhood) preventing childhood disability

❖ To identify the impacts of ToP program on community.

- Community awareness of childhood disability prevention
- Establishment of organization's working for disability in community
- Community participation in childhood disability prevention
- Mobilization of community resources in childhood disability prevention

2.3 Evaluation questions

- Are health workers providing quality service (counseling on preventive service to pregnant women and mothers, referral of disabled children to appropriate health facility, appropriate knowledge on disability) for preventing and managing childhood disability?
- Is there active involvement of health facility (disability preventing and managing activities, regular meeting of HFOMC, timely monitoring and supervision, appropriate investment of seed money) in preventing and managing childhood disability?
- Is there increase in utilization of preventive health services by pregnant women, post-partum mothers and under-five children and improvement of maternal and child health indicators contributing to prevention of childhood disability?
- Is there increase in mobilization of community resources, establishment of organization's working for disability in community, awareness raising activities and management of disability prevention activities by community?

2.4 Methodology for Program Evaluation

In this section, methodologies such as study design, study method, study area, study population, data collection tools and techniques, sampling method and sample size, data processing and analysis, data interpretation, dissemination and sharing, have been included.

It was institutional based, impact evaluation study with descriptive, cross-sectional nature. As this study identified impacts of ToP at a single point of time, it was of descriptive, cross-sectional nature. Study compared maternal and child health indicators before and after ToP. Therefore, it was also before-and-after comparison study. Study method was of mixed type. Both quantitative and qualitative information were obtained from this study.

Study areas were ToP program implemented areas of KFN (Kavre and Sunsari). Study populations were in-charge, MCHW and ANM of health facility who attended ToP workshop. Total duration of study period was about 4 months from first week of October 2013 to last week of January 2014. Health facility in-charge, MCHW and ANM of selected health facility of each district were study unit.

Random sampling method (simple random sampling) was applied to select required health facility. Simple random sampling was done to ensure equal chances of selection of institutions. Ten-percentage health facility of each district was included as a study sample. Altogether, 9 health facilities (1 PHCC, 2 HP and 6 SHP) of Kavre and 6 health facilities (1 PHCC, 1 HP and 4 SHP) of Sunsari were selected as a study sample. Therefore, altogether 15 health facilities were selected for impact evaluation study. From each health facility, health-facility in-charge was interviewed. However, if in-charge was not available during the time of study, MCHW or ANM was interviewed.

Following are the list of health facility selected as a study sample.

KAVRE			
PHCC	Panchkhal PHCC		
HP	Ugrachandi Nala HP	Dapcha HP	
SHP	Panauti SHP	Rayale SHP	Hokse SHP
	Mahendrajyoti SHP	Chalal Ganeshsthan SHP	Dolalghat SHP
SUNSARI			
PHCC	Itahari PHCC		
HP	Hansaposa HP		
SHP	Babiya SHP	Gautampur SHP	
	Pakali SHP	Bhadgausinabari SHP	

Both quantitative and qualitative tools were used in this study. Tools were developed as per the objectives of the study. Quantitative tool like document schedule (supervision visit checklist) and qualitative tools like in-depth interview guideline were used to collect data from study population. Techniques for collection of data were on-site visit of health institution, review of health facility register/records, review of project reports and documents and face-to face interview with health workers.

Every completed questionnaire were edited at the end of each day to ensure its consistency and completeness. Coding of all data recorded into questionnaire were done to facilitate data entry process. Classification and tabulation of data were done to make analysis further easier. All the data were rechecked and cleaned after entry to ensure good quality of data. Data analysis were done as per the objectives of the

study. Descriptive analysis was done in case of quantitative data. All quantitative data were entered, processed and analyzed using Excel. Qualitative data were analyzed thematically.

CHAPTER III: FINDINGS

This evaluation study tried to explore both qualitative and quantitative findings. Quantitative findings like status of preventive health services indicators (immunization, nutrition and safe motherhood) after implementation of ToP are described in terms of univariate statistics like (bar diagram). Qualitative findings like impacts on health workers, health facility, and community due to ToP have been tried to explore through the help of in-depth interview guideline with health workers. Qualitative findings have been interpreted thematically as per study objectives.

3.1 Impact on Health Workers

Knowledge on childhood disability prevention

Almost all health workers of Kavre and Sunsari had good knowledge on childhood disability prevention. All respondents cited utilization of preventive health services like immunization, nutrition, and safe motherhood for the prevention of childhood disability. All respondents reported to have shared knowledge on disability prevention to FCHVs, especially in FCHVs' monthly meeting.

Counseling on importance of preventive health services

Most of health workers of study site of Kavre and Sunsari had counseled about importance of preventive health services to their patient especially to pregnant women. Health workers counseled less to postpartum women because of less postpartum visit in health facilities. However, some Health Post in-charge of Kavre told that due to overflow of patients, they did not always get enough time for counseling.

Trend of counseling has increased than before because of increase in awareness among health worker, after ToP. We have focused more on counseling on cause of disability and its prevention in mother's group meeting through FCHV.

In-Charge, Hokse SHP, Kavre

We focus especially on counseling because it will increase health communication between patient to patient and increase referral to health facility.

In-Charge, Panchkhal PHCC, Kavre

Referral of disabled children to higher-level institution

Referral of disabled children to appropriate institution was seen in all studied health facility of Kavre and Sunsari. Most of the health workers of Kavre referred disabled cases to Apanga Hospital, Dhulikhel Hospital, Sheer Memorial Hospital and Hospital and Rehabilitaton Center for Disabled Children (HRDC) of Banepa. Also, most of health workers of Sunsari, referred disabled children to HRDC.

We first categorize the grade of disability, counsel and refer them to appropriate institution. Referral practice used to be very less in past days, because of less awareness, however, such practices have increased now.

In-Charge, Dapcha HP, Kavre

3.2 Impacts on Health Facility

Disability prevention related activities

Out of nine selected health facility, four facility conducted disability prevention related activities in Kavre. Specially, conduction of such activities with active participation of community, HFOMC and health workers was seen on Dapcha Health Post of Kavre. However, most of health facilities of Sunsari did not conduct any such activities. The health workers cited other priority programs of

Government of Nepal to be the reason behind inability to conduct disability prevention activities.

We conducted quiz competition on preventive health services like nutrition, immunization, safe motherhood to pregnant and postpartum women and distributed prizes to winner. We also provided health education to students on disability for 3 to 4 years after ToP, but

We conducted survey on childhood disability in our V.D.C after attending ToP. Besides this, we have also developed our own target to be achieved by certain period. If that target is not achieved, we discuss about it rigorously in HFOMC meeting and identify problems and their solutions as well.

In-Charge, Dapcha HP, Kavre

We educated FCHV about prevention of chil
knowledge in mother's group meeting. We esp

In-Charge, Pakali SHP, Sunsari

Specially after attending ToP, we conducted classes on topics like disability and pregnancy care to government schoolchildren (twice in a year).

In-Charge, Chalal Ganeshsthan SHP, Kavre

Investment of seed money (provided by KFN for disability prevention project)

Almost half of the facilities of Kavre had not spent all the seed money provided by KFN. Most of seed money was spent in buying furniture's for PHC/ORC. Likewise, in Sunsari, utilization of seed money was done for PHC/ORC clinic, immunization clinic and bicycle for ANM.

We bought hand mike from that seed money to raise awareness on preventive services in community.

In-Charge,Mahendra Jyoti SHP, Kavre

Utilization pattern of preventive health services by pregnant women, mothers and under-five children

In most of the health facilities of Kavre, utilization pattern of preventive health services was in increasing trend in last 4 years. Reasons behind it may be due to increase in awareness on health facility seeking behavior by community people and accessible PHC/ORC to community people. Except for Itahari PHCC, trend of utilization pattern of preventive health services was in increasing trend in last 4 years, especially immunization and nutrition.

Utilization pattern of preventive health services is very good, with almost 100% coverage. ToP has also played some role in this, however, credit goes entirely to different integrated programs of government and also increased health seeking behavior of people.

In-charge, Jhumkabasi SHP, Sunsari

Especially, utilization of service by pregnant women has increased. ToP has played role because of increase in knowledge especially in counseling skills.

In-Charge, Rayale SHP, Kavre

Everything has increased than before, however PNC visit has not increased in ratio like others. ToP has played role mostly in rural areas, through counseling and referral.

In-Charge, Panchkhal PHCC, Kavre

Functioning of HFOMC

There were very few health facilities with active HFOMC in Kavre. Conduction of periodic staff meeting and, review meeting was not found to be practiced in regular manner. Almost all the selected health facilities had conducted monthly meeting, but not in a pre-specified date. In most of the cases, HFOMC were found to be passive in disability prevention related activities. In Sunsari, recruitment of staffs,

monthly meeting, monitoring, and supervision of health programs of facility, supply of equipments were major activities conducted by HFOMC.

> We have a very active HFOMC. They fulfill our each need in an appropriate time. They have a special role in prevention activities.
>
> **In-Charge, Dapcha HP, Kavre**
>
> There is no any significant role of HFOMC. They come only in meeting, if needed, because we have such tradition from past.
>
> **In-Charge, Nala HP, Kavre**

Service utilization in PHC/ORC

Utilization of preventive services was reported to be in increasing trend by health workers in most of the selected health facilities of Kavre. Likewise, in Sunsari, utilization of preventive services in PHC/ORC was increasing in most of the selected health facilities, except for Itahari PHCC, where PHC/ORC is not functioning recently. Not enough services to handle community people's need was spelled out by almost all in-charges of Sunsari. Though utilization of preventive services were slightly increasing in last 4 years in most of health facility, decreasing trend of ANC visit was seen because of availability of private family planning centers in Sunsari.

> Though service users have increased than before, it's not satisfactory number. HFOMC has conducted research in this matter. It's particularly because of mismatch between their expectation and our service.
>
> **In-Charge, Dapcha HP, Kavre**
>
> Number of service users is average. Due to nearer city area, there is no such load of people in PHC/ORC. Services are enough but we have limited space.
>
> **ANM, Panauti SHP, Kavre**

Supervision and monitoring practice

Monitoring and supervision system was slow in most of studied health facilities of Kavre and Sunsari. Most of health workers had negative attitude towards monitoring and supervision. Majority of them stressed on poor functioning of monitoring and supervision systems from upper level like DHO.

> Monitoring and supervision is almost zero. There is lack of proper monitoring and supervision environment in our setting. Higher level institutions rarely come to our facility. It doesn't make any difference because nothing is going to change after this work also.
>
> **In-Charge, Panchkhal PHCC, Kavre**
>
> We love to do supervision in timely basis. But it's not being regular due to budget and weak work plan. We also give suggestions but no any improvement. So what's the use of monitoring and supervision?
>
> **In-Charge, Mahendrajyoti SHP, Kavre**

Status of maternal and child health indicators (immunization, nutrition, safe motherhood) preventing childhood disability

Immunization status of Kavre and Sunsari

Overall immunization coverage of Sunsari district was higher than Kavre district, though increment in coverage were slight in comparison to Kavre district. Coverage of some of the immunization indicators like DPT-HepB-Hib3 and Polio-3 were higher than national coverage during evaluation period, in Sunsari. Itahari PHCC was the only facility where coverage of immunization decreased, after ToP.

Similarly, coverage of immunization increased in Kavre, after implementation of ToP. All the selected health facilities of Kavre showed increment in coverage. Despite more increase in coverage than Sunsari, immunization coverage was lower than that of Sunsari. DPT-HepB-Hib3 coverage of Kavre was higher than that of national during evaluation period. Rest of all immunization indicators coverage was lesser than that of national.

Figure 3: Immunization indicators of Kavre district

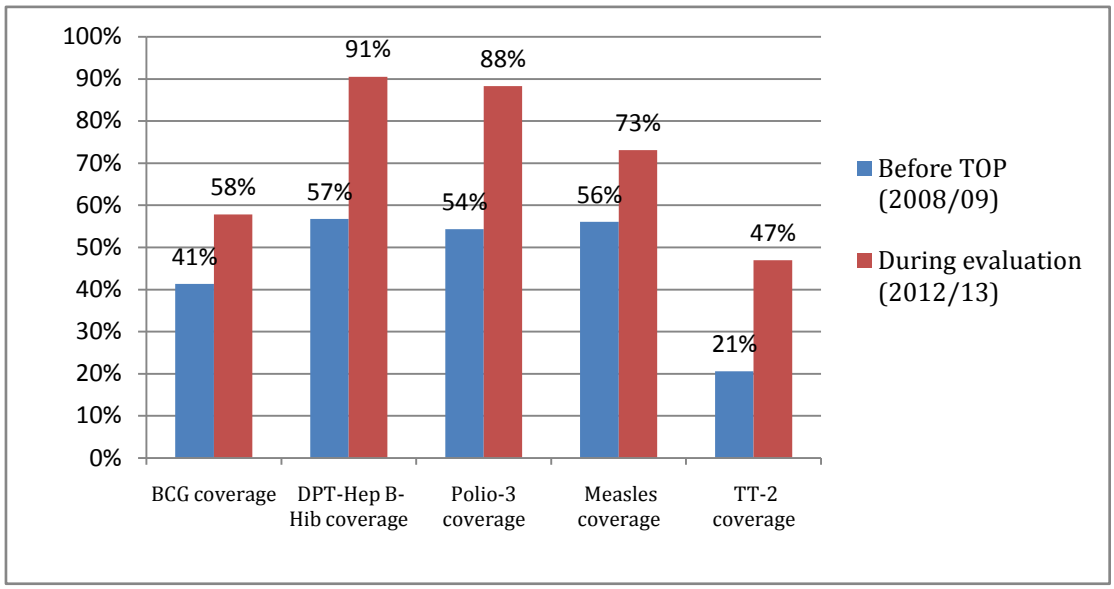
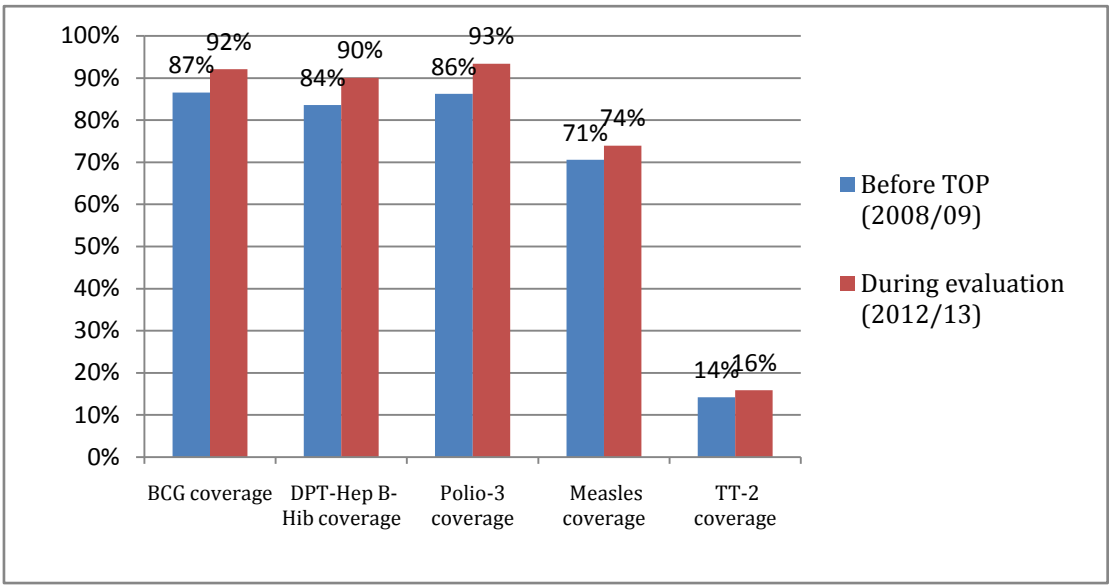


Figure 4: Immunization indicators of Sunsari district



Nutritional status of Kavre and Sunsari

There was decrease in coverage of almost all nutritional indicators in Kavre district. Higher increase in coverage was observed in PHCC and HP. Twice increment in coverage was seen in Panchkhal PHCC of Kavre, though coverage was lower than that of national. Slight increase in coverage was seen in Dapcha HP of kavre. Coverage of nutritional indicators in selected SHP were decreasing.

Overall status of nutritional indicators of Sunsari increased than before, however coverage was lower than that of national. Slight increase in coverage was found in selected SHP and HP.

Figure 5 : Nutrition Indicators of Kavre district

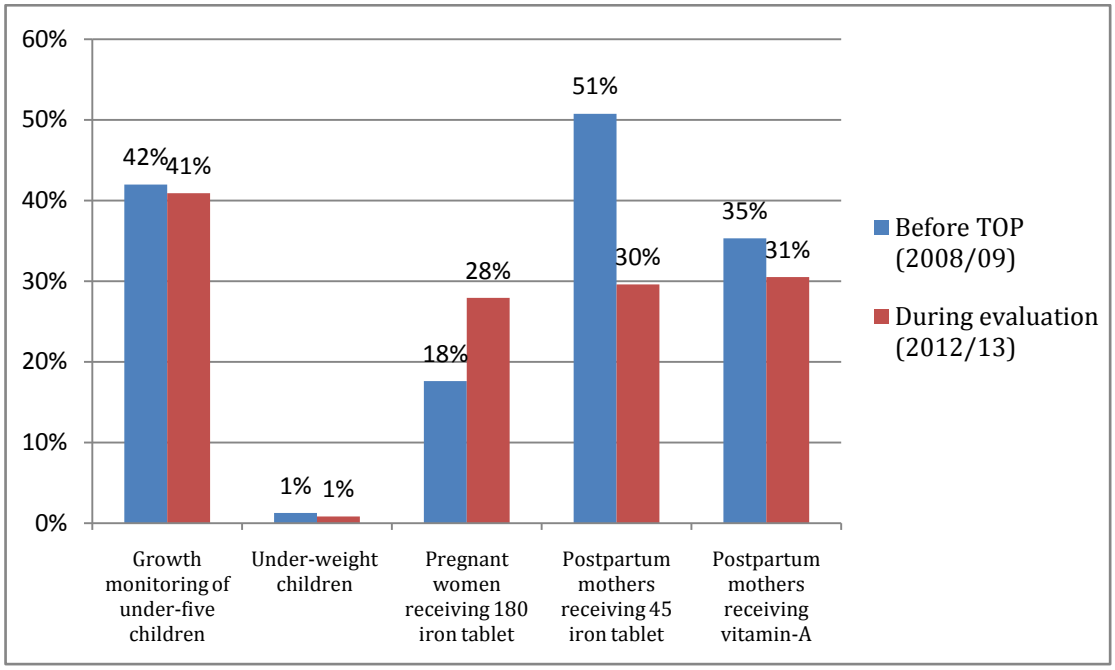
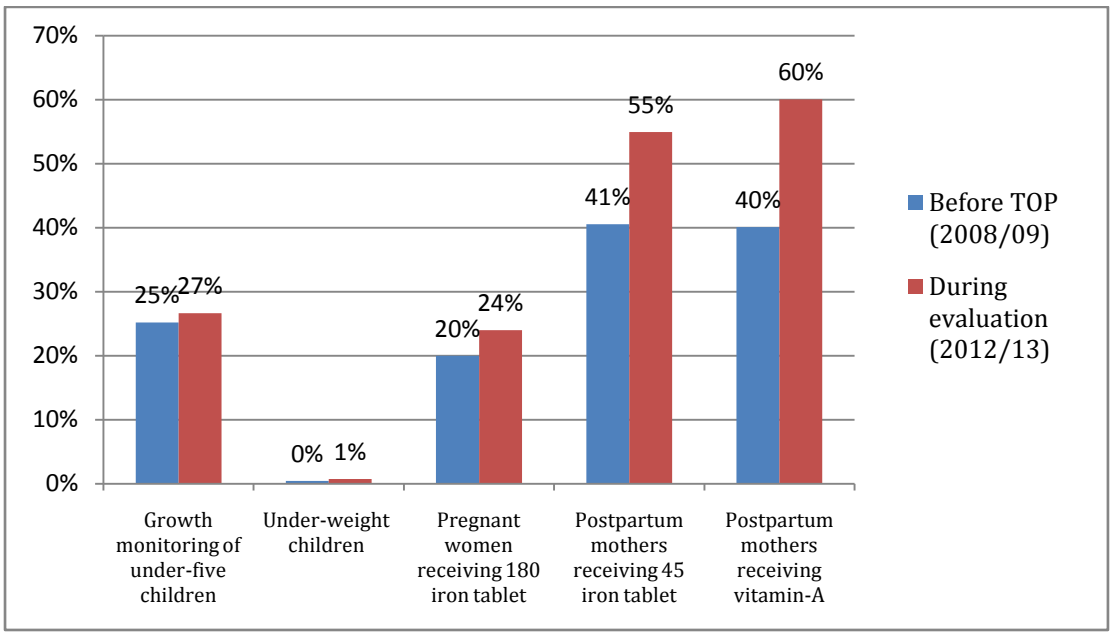

60%
50%
40%
30%
20%
10%
0%
42%
41%
1%
1%
18%
28%
51%
30%
35%
31%
Growth monitoring of under-five children
Under-weight children
Pregnant women receiving 180 iron tablet
Postpartum mothers receiving 45 iron tablet
Postpartum mothers receiving vitamin-A
Before TOP (2008/09)
During evaluation (2012/13)

Figure 6 : Nutrition Indicators of Sunsari district



Safe motherhood indicators of selected health facilities of Kavre and Susari

Coverage of most of safe motherhood related indicators was seen increasing in Kavre district, after implementation of ToP. Increase in coverage was remarkable with almost twice increase in some of the indicators like 4 ANC visit and delivery in health facility in Panchkhal PHCC. Four ANC visit increased from 19% to 52%. Similarly, delivery in health facility increased from 12% to 25%. However, coverage of safe motherhood indicators during evaluation was lower than that of national.

In Sunsari, indicators like 1st ANC visit and 4 ANC visit were seen increasing after ToP, though the coverage was lower than that of national. Coverage of some of the indicators like delivery in health facility, 1st PNC visit and 1st visit of neonate were very low. Most of the safe motherhood indicators of Itahari PHCC decreased after ToP. This is further explained in discussion section (Page 31).

Figure 7 : Safe motherhood indicators of Kavre district

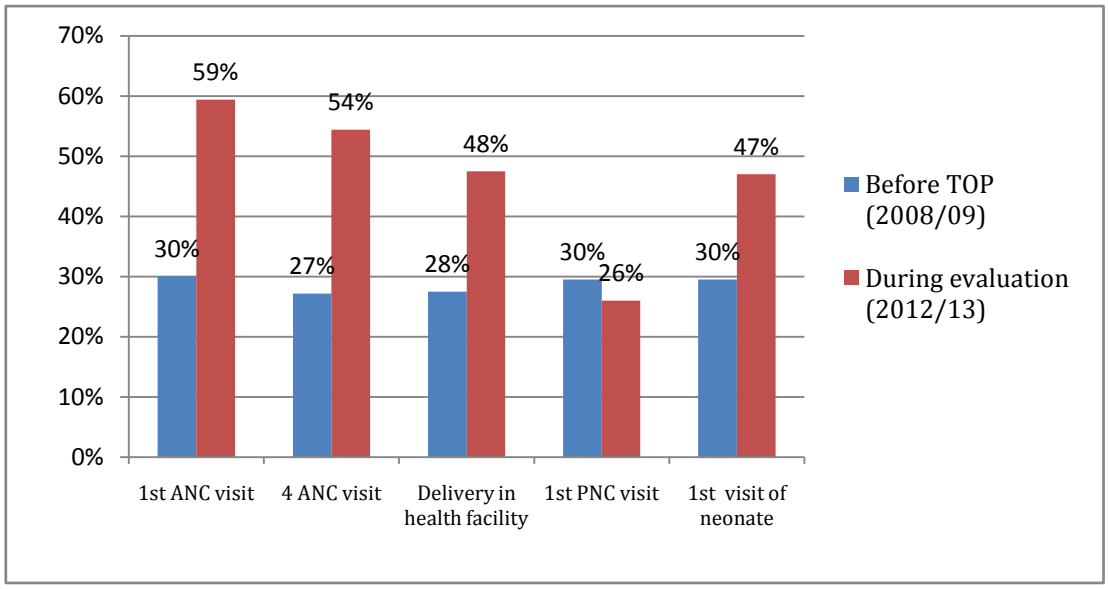
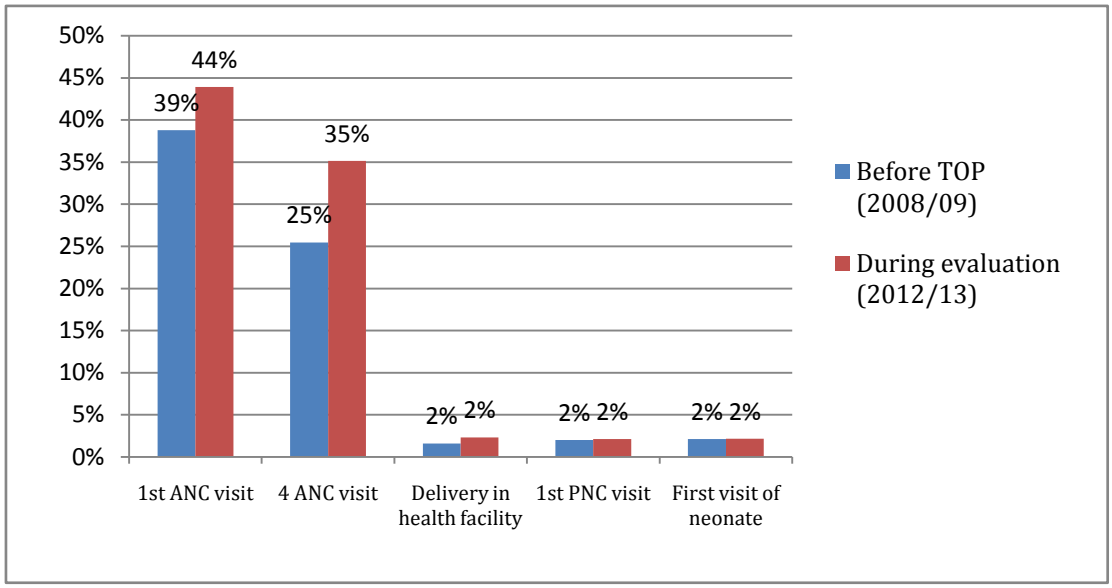


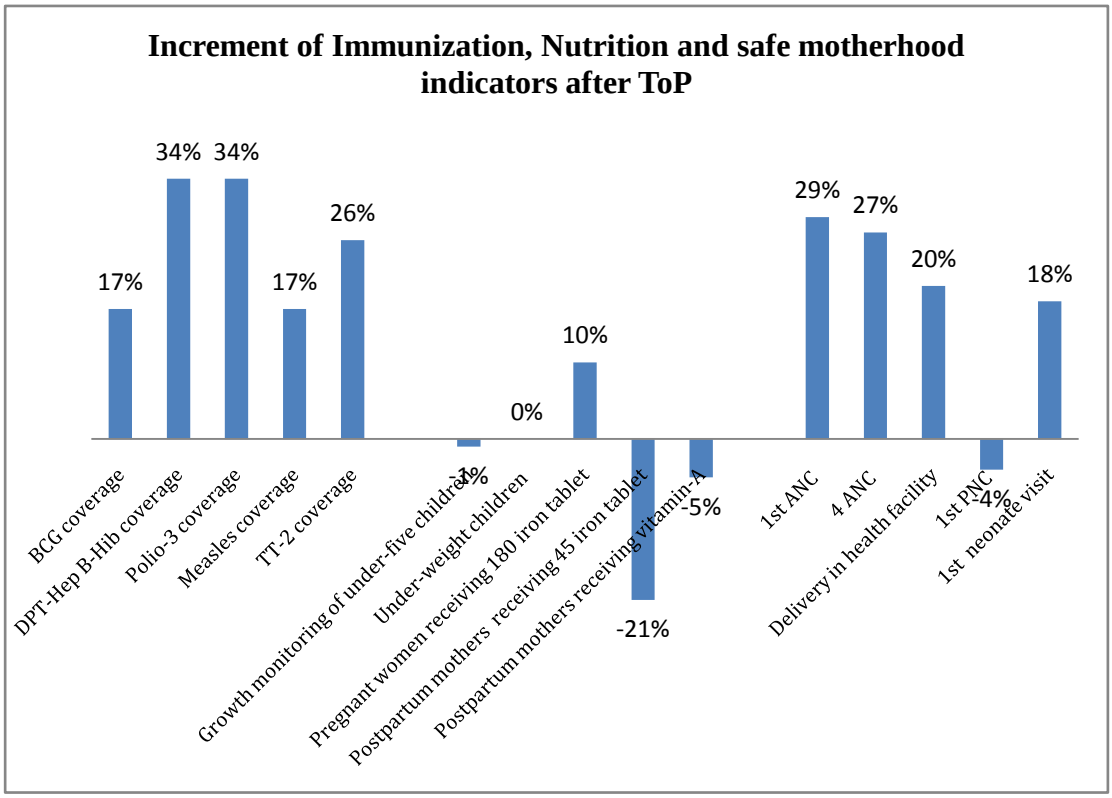
Figure 8 : Safe motherhood indicators of Sunsari district



3.3.Increment of Indicators after ToP in Kavre

Most of the indicators of Kavre increased after ToP, except for some of the indicators like growth monitoring of under-five children, postpartum mother receiving 45 iron tablet, postpartum mother receiving vitamin A and Ist PNC visit. Greater increment of coverage was seen than that of Sunsari. Overall, an increase of 13.4% on selected 15 indicators was observed in Kavre district after ToP in comparison to before ToP.

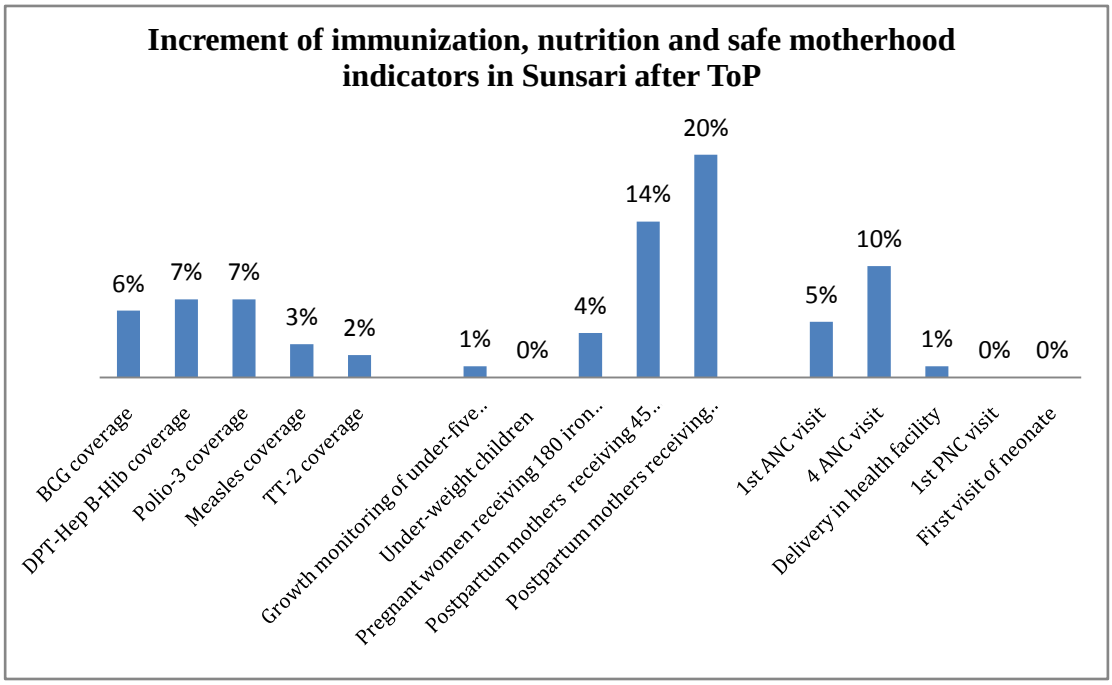
Figure 9: Increment of indicators after ToP in Kavre



3.4 Increment of Indicators after ToP in Sunsari

Almost all indicators in Sunsari increased after ToP. Some of the indicators like Ist PNC visit and Ist visit of neonate remained same. Increment in coverage of indicators was lesser than that of Kavre.i,e average increase on selected 15 indicators was 5.3% in Sunsari.

Figure 10: Increment of indicators after ToP in Sunsari



Impacts on Community from Health Worker's Perspective

Community awareness of childhood disability prevention

According to in-charges of health facility, trend of awareness was increasing in last 4 years, with more awareness on pregnant women and school children. This study revealed that in Kavre, mothers of under-five children were more aware than any other group in community, though all age group had also developed awareness. Most of the community people have heard about childhood disability prevention through FCHV, health workers and in some cases through HFOMC members.

Most of health workers of Sunsari reported women of reproductive age group as a group with more awareness on childhood disability, due to ANC visit to health facility in pregnancy. Women also developed awareness through mother's group meeting, through FCHV. Level of awareness was in increasing trend in last 4 years. Community people knew about childhood disability from different programs and health workers.

> Community people have developed awareness on childhood disability, through awareness program conducted by health facility and FCHV. We have conducted networking and program in VDC about disability with community. Educated people and mother's are group with more awareness.
>
> **In-Charge, Bhadgaunsinabari SHP, Sunsari**
>
> We can't say that all the community people have developed awareness. But it's sure that pregnant women and students have specially developed awareness.
>
> **ANM, Panauti SHP, Kavre**

Mobilization of community resource in preventing childhood disability

Mobilization of community resource in childhood disability prevention was very less in Kavre and nil in Sunsari. Dapcha HP and Panauti SHP were the only health facilities of Kavre where community people themselves conduct disability prevention activities.

We conduct awareness campaign in festivals in coordination with community people. Students get actively involved in such campaign. Whole program is managed by metropolitan. We are just facilitator.

ANM, Panauti SHP, Kavre

Involvement of FCHV in preventive health services

FCHV were actively involved in providing preventive health services in both districts. They were the main source of information regarding measures of disability prevention mostly to pregnant and postpartum women. Trend of recording and reporting by FCHV was excellent especially in last 4 years.

FCHV are actively involved in providing preventive health service, counseling and referral. We conduct monthly meeting for FCHV, where we discuss about health issues i.e, who has not come for ANC or PNC visit, who has not immunized their children. There is also active involvement of HFOMC in monthly meeting of FCHV. We have also 100% reporting status of FCHV.

In-Charge, Dapcha HP, Kavre

Organizations working for disability in community

There are a couple of organizations working for disability in catchment areas of selected health facilities of Kavre. However, none of them was directly involved in childhood disability prevention. Most of them were providing curative services. Some of the organizations working for disability in community were Spinal Cord Injury Rehabilitation Center, Portage Nepal, Hospital and Rehabilitaton Center for Disabled Children of Banepa. There were no any organizations working specifically for disability prevention in catchment areas of selected health facilities of Sunsari.

Hospital and Rehabilitaton Center for Disabled Children of Banepa works in area of prevention besides rehabilitation. Hospital conducts campaign in different areas of district with special focus on under-18 children. Mobile team of HRDC visits community to identify new case of disability. After finding new case, they counsel and refer to appropriate facility.

In-Charge, Panchkhal PHCC, Kavre

Portage Nepal of Banepa, conduct disability program. They mobilize trainer to community and, provide training to disabled children of community, counsel them and refer to appropriate facility. Due to Portage Nepal, FCHV and health workers, awareness on childhood disability prevention has increased than before. Student, teachers, and mothers of disabled children are more aware.

In-Charge, Mahendrajyoti SHP, Kavre

Disabled children in catchment areas

Number of disabled children in catchment areas of selected health facilities of Sunsari has decreased than before, as reported by health workers. Same status was seen in catchment areas of study sites of Kavre, for e.g. number of under-15 disabled children in Dapcha V.D.C was reduced to 15 from 20 in last 5 years (data obtained from disability survey of Dapcha V.D.C). Reason behind it might be mostly due to improvement in preventive service utilization by pregnant women and improvement in health status as well. However, some specific disabled cases were seen in catchment areas of Rayale SHP of Kavre.

After ToP training, we collected list of disabled children in ward. We found that congenital disabled children have reduced very much than before. Because of increase in awareness, and more ANC check up number of disabled children has reduced than before.

In-Charge, Dapcha HP, Kavre

Case study of Dapcha HP of Kavre

Dapcha HP, located in Dapcha V.D.C of Kavre district is well-equipped health facility with beautiful surroundings. It takes about 4 hour's bus ride from Dhulikhel to reach there. Dapcha HP has set the very good example of active participation in health programs and health related issues. Group of well-qualified staffs: HA, 2 AHW, 2 ANM and MCHW are providing services to the community. Health post has also hired 2 extra staffs through HFOMC for birthing center. In-charge of Dapcha HP took part in ToP in 2011.

Disability prevention project was developed in year 2011 with the lead of in-charge Mr. Bhagirath Adhikari. Series of activities related to childhood disability prevention were conducted with active involvement of health workers, HFOMC, FCHV and community people.

Specific activities conducted on prevention project were: development of target on immunization, nutrition and safe motherhood indicators to be reached within 1 year, review meeting on targets of immunization, nutrition and safe motherhood indicators, conduction of childhood disability survey on Dapcha V.D.C immediately after taking part in ToP, conduction of disability awareness campaign on specific day like national immunization day, complete utilization of seed money on PHC/ORC clinic to buy furniture's, dissemination of childhood disability prevention related knowledge on FCHV meeting, dissemination of childhood disability prevention related knowledge by FCHV on mother's group meeting and strict supervision of FCHV meeting by HFOMC.

Some of the good points of HP were maintenance of record of regular monthly staff meeting on last 4 years, 100% reporting status of FCHV in last 2 years and active involvement of HFOMC in health related issues. There were group of well-motivated and active health workers providing quality services in HP. Though there was decrease in coverage of some of the indicators in first year after Top, in overall coverage of all the indicators increased during evaluation period. Increase in coverage of some of the safe motherhood indicators was remarkable. Thirty-five

percent increase in coverage of 1st ANC visit and 45% increase in coverage of 4 ANC visit was seen.

After attending ToP, Dapcha HP developed immunization, nutrition and safe motherhood indicator targets to be reached within 1 year. Review meeting on achievement of target was also conducted after 1 year of target development. Health Post also completely utilized seed money provided by KFN in PHC/ORC related activities.

CHAPTER IV: DISCUSSION AND CONCLUSION

This evaluation study was undertaken to determine impacts of ToP on health worker, health facility and community according to the health workers. The study applied both qualitative and quantitative tool for identifying impacts and focused on the health workers as subject group to measure the impact of the intervention.

All the health workers were with good knowledge of childhood disability prevention. Sharing of knowledge to colleagues was common with maximum sharing in FCHV meeting and mother's group meeting (by FCHV to group of women). Counseling was also done by most of health workers, however sometimes due to high patient flow, they did not get time for counseling. There was also good referral practice of disabled children to appropriate institutions. However, this study could not verify health worker's verbal information on referral of disabled children and number of counseling done per day, due to lack of recording system on health facilities.

A very negligible impact of TOP on community was seen on both districts, as reported by health workers. One of the reasons for low impact on community may be inactive and less motivated health workers. It could also be due to other prioritized programs of government as well as programs of other private organizations. Had there been intensive follow up of health workers from KFN, there could have been more impact of ToP. A limitation of this study was that the impact on community was only measured by asking the health workers and not the community itself. Other and newer information could have been digested in this manner.

Improvement of maternal and child health indicators (immunization, nutrition and safe motherhood) was seen in most of the selected health facilities of both districts. Increase in health awareness of people especially women has encouraged people to seek preventive health services from health facilities. Further, FCHVs have played a catalytic role in increasing service utilization. They are close to community as well as are in regular contact with women and children. They counsel and refer community

people to health facility. Contribution of mass media like radio, television on mass education is also significant.

Coverage of immunization indicators was higher than nutrition and safe motherhood indicators in both the districts. There is system of rigorous follow up through FCHV on immunization of under-1 children in every ward of VDC. FCHV collect information on even a single missed case and refer those children to health facility or nearby EPI clinic. They discuss on which child received immunization or which child did not come. This system of rigorous follow up of immunization of under-1 children could have contributed on improving status of immunization indicators, which is rarely practiced in safe motherhood and nutrition programs.

As far as coverage is concerned both districts still scored lower than the national averages, leaving them to be one of the poorer health districts in the country.

Nutrition, Safe motherhood and Immunization Indicators in Kavre

Coverage of indicators in most of the selected health facilities of Kavre was lower than that of Sunsari, both before ToP and during evaluation. Reason behind it may be due to availability of well-equipped private facilities in Banepa, Dhulikhel and Kathmandu. Obviously, people would choose to go to Kathmandu, as it is just a 2 hours bus ride from a Dhulikhel. Health seeking behavior plus expectation of people has increased than before. According to health-facility in-charges of Kavre, most of the pregnant women of catchment areas of selected health facilities of Kavre preferred to go to private clinics for ANC/PNC visit and delivery even though services are free of cost in government health facility. Pregnant women are now more conscious for their baby, because of increase in health awareness level than before. They perceive quality of services as sub-standard. Therefore, they prefer private hospital of Kathmandu to government hospital of Kavre, even though services are costly. Another reason behind low coverage of indicators in Kavre could be due to selected study site. Most of the selected study sites of Kavre where close to Dhulikhel, Banepa, or Panchkhal PHCC, except for Dapcha HP. Therefore, it is obvious that people would choose Dhulikhel, Banepa, or Kathmandu.

There were few health facilities like Panchkhal PHCC of Kavre where coverage of some of the indicators like DPT-HepB-Hib and Polio-3 were 109% during evaluation. Panchkhal PHCC is well-equipped health facility, with sufficient number of qualified staffs. Therefore, people from other sites except target population may have gone to Panchkhal PHCC.

Similarly, in Dapcha HP of Kavre, 1st ANC visit was 98% and 4 ANC visit was 145% during the evaluation period. Dapcha is located far from Dhulikhel, in comparison to other selected health facilities of Kavre. Pregnant women of Dapcha's catchment areas might have preferred Dapcha HP rather than walking long distance to Dhulikhel or Kathmandu. Dapcha HP is also a well-equipped health facility with 24 hours birthing center service and sufficient numbers of staffs. Extra staffs like HA and ANM has been hired by HFOMC. Therefore, quality of care might be driving factor behind improved ANC visit.

In spite of less coverage, increment of indicators in Kavre was greater than in Sunsari. For e.g. there was almost 3 times increase in most of the safe motherhood indicators (4 ANC visit, delivery in health facility, 1st PNC visit, 1st visit of neonate) of Panchkhal PHCC, after ToP. Most of the nutrition indicators of Panchkhal PHCC also increased twice than before, though coverage was lower than that of national. Panchkhal PHCC is located just next to roadside on Panchkhal VDC. Infrastructure of this facility has improved than before. Therefore, it may be the cause for increase in safe motherhood indicators than before. However, while aggregating the data of whole district, some of the safe motherhood indicators decreased after ToP. Proportion of postpartum mothers receiving 45-iron tablet decreased by 21%. Postpartum mothers receiving vitamin-A and 1st PNC visit also decreased by 5% and 4% respectively. It could be due to feature of selected study site. Most of the selected health facilities of Kavre do not have birthing center (except Panchkhal PHCC and Dapcha HP). Therefore, target population of catchment areas of selected health facility of Kavre might have gone for delivery and postpartum visit to Kathmandu or Dhulikhel Hospital.

While aggregating the coverage of all the selected SHP of Kavre, increase in coverage was seen in most of the immunization indicators. However, nutrition and safe motherhood indicators were seen decreasing. Most of the selected SHP's were close to Banepa, Dhulikhel or Panchkhal PHCC. Therefore, there is possibility that target population of selected SHP's might have gone to nearby well-equipped private facility than SHP.

Nutrition, Safe motherhood and Immunization Indicators in Sunsari

Coverage of most of the indicators in Sunsari was greater than that of Kavre during evaluation period however, increment in coverage was lesser than that of Kavre. Another thing to be discussed here is coverage of maternal and child health indicators in most of the selected health facilities were greater than Kavre before ToP. Therefore, slight increment in coverage does not count at all. Most of the selected health facilities of Sunsari did not conduct any childhood disability prevention related activities, except for counseling and referral. Seed money was invested only for buying bicycle for ANM by most of the health facilities.

Coverage of some of the safe motherhood indicators like delivery in health facility, Ist PNC visit and Ist visit of neonates to the Health Posts in Sunsari were extremely low. It could be due to selected study site as only Itahari PHCC among selected health facility has a birthing center. This does not imply that the women deliver at home without assistance but more so that they choose to go elsewhere. Therefore more likely pregnant women might have chosen other private hospitals for delivery and PNC visit as there are many private facilities in the area.

Aggregating the coverage of all the selected SHP's, coverage of all the immunization indicators exceeded 90% except for TT-2 coverage (26%). Society in Terai region is male dominant. Women are less empowered. Especially, women from low socio-economic status have to depend on decision of husband or other seniors of house. Most of the selected SHP of Sunsari was from remote area. Therefore, there is possibility of women from low socio-economic status of remote area as a target population of selected SHP. It could have resulted in lower TT-2 coverage. Possibility

of target population going to other private health facilities cannot also be denied. There is availability of lots of private health facilities in Terai region because of geographical ease. Though coverage of safe motherhood and nutrition indicators was increasing, coverage was lower than that of immunization. Reason might be same as above.

Itahari PHCC was the only health facility of Sunsari, where most of the indicators were seen decreasing. Itahari PHCC is located in urban area of Itahari. There are many private health facilities available in Itahari. Therefore, people would prefer to go to those well-equipped private facilities than less equipped government health facilities. In addition, most of the people who live in Itahari and its surrounding are economically more advantaged than those living in remote areas. Rich people tend to visit private facility than government facility.

Disability prevention project

Prevention projects were developed by all health facilities, but most of the selected health facilities did not invest all the seed money. Most of the health facilities of Kavre, invested the money in PHC/ORC, and most of the health facilities of Sunsari used the money in buying cycle for ANM. Study also revealed less motivation of health workers regarding disability prevention project. Disability prevention project could have even more impact if they had focused more on indicators with less coverage. Review meeting was conducted mostly on Ilaka level health facility. Project should have involved lower level health facilities (SHP's) in review meeting, so that there would have been more feeling of ownership and lower level health facilities could involve more in disability prevention project.

Most of the selected health facilities of both the districts did not conduct any specific disability prevention activities except for counseling and referral. Conduction of such activities was almost zero in Sunsari. There were few health facilities of Kavre like Dapcha HP, Mahendrajyoti SHP, Panauti SHP, and Chalal Ganeshsthan SHP where some childhood disability prevention related activities were conducted. Dapcha HP was the one with active involvement in disability prevention project. Some of the

specific activities conducted by Dapcha HP include: development of maternal and child health indicator's target to be reached within 1 year, childhood disability survey on Dapcha VDC, conduction of disability awareness campaign on specific day, complete utilization of seed money and so on. All such activities in Dapcha HP were possible due to motivated health worker and active HFOMC.

There were practical challenges in assessing impacts of ToP. For e.g., it was difficult to determine whether improvement in maternal and child health indicators was solely due to ToP or other programs operating in study area. Program like CB-NCP were operating in study area. However, role of ToP cannot be underestimated as well. ToP had focused more on counseling on importance of preventive health services like immunization, nutrition and safe motherhood on reducing childhood disability.

First and foremost, concept of ToP was unique. However, certain things should have been addressed in implementation of disability prevention project like intensive follow up of health facility and health workers, review meeting on lower level health facility, strict monitoring and supervision of disability prevention project, refresher training to health workers and direct involvement of FCHV in prevention project.

Current study could not assess long-term impacts of ToP like prevention of birth defects and childhood disability because of short time period from implementation of ToP. Preventing birth defects and childhood disability requires long time. May be it was too early to evaluate long-term impacts like prevention of birth defects and childhood disability. Further, study did not collect data from community people. Therefore, information like community awareness on childhood disability prevention is based upon health worker's view. All the explanations behind coverage of indicators are also solely based on health worker's view and researcher's assumptions.

Replication of ToP

Prevention of disability is a complex concept as disability is caused by interplay of environmental and genetic factors. Improvement of maternal and child health status is considered to be one of the approaches. ToP, therefore aimed to build up competency of public health workers at the village level who provide basic health care in the community. However, to change attitude and systems regarding preventive health behavior and create impact on prevention of birth defect and childhood disability, the ToP program should encompass more then only a training and a prevention project for health workers. . It is essential to consider various issues while implementing such ambitious programs. Programs not only close to health facility and health workers but also close to community should be designed. Programs encompassing the principles of community participation, equity, sustainability, and inter-sectoral coordination are must. Undoubtedly, ToP can be replicated in other districts as well but with some modification on program design. For e.g. direct involvement of FCHV in disability prevention project, intensive follow up of health workers after training, pre-analysis of maternal and child health indicators and strict monitoring and supervision of disability prevention project could bring better outcome.

CHAPTER V: RECOMMENDATION

Based on study findings and interaction with study population, following recommendations has been made.

- **Training on disability prevention to FCHV** (FCHV are very close to community. They are the catalyst for referral of pregnant women, postpartum women and mother of under-five children to health facility. This approach would be more appropriate for sustainability and developing awareness of childhood disability prevention in community level).
- **Refresher disability training to health workers** (Providing training to health facility in-charge for only 1 time is not enough, they should be refreshed from time to time).
- **Strict monitoring and supervision system** (to ensure proper recording and reporting of disability related indicators and activities).
- **Pre-analysis of preventive services indicator contributing to childhood disability (**so that special program could be designed on particular indicators with low coverage).
- **Conduction of survey on childhood disability prior to implementation of ToP.** (Baseline data on birth defects and childhood disability could be helpful to compare with long-term impact of ToP, as major goal of ToP is to prevent birth defects and childhood disability in community).
- **Capacity building of VDRC (Village Disability Rehabilitation Committee) of each VDC (**could be helpful for sustainability of program).
- **Conduction of review meeting yearly on lower level health facility (**involving SHP-in charges in review program may help to increase ownership of program**)**.

ANNEXES

Annex I: In-depth Interview Guideline for Health Facility Staff (health facility in-charge or health worker)

Objectives

- To assess the impacts of ToP program in health worker, health facility and community.

District		Name of health facility		Date of data collection	
Respondent name		Designation		Name of interviewer	

Note: Please record the response in next paper.

A. Impacts on health worker

1. How long have you been working at this facility?
2. Had you taken part in Training of Professional (ToP) workshop conducted by Karuna Foundation Nepal in 2008?
3. How are you utilizing the knowledge of workshop in your facility? Have you also shared knowledge of disability prevention to your colleagues in health facility?
4. In your opinion, what should be done to prevent childhood disability?
5. What do you do when disabled children comes to your facility? Is there referral linkage with higher facility or organizations working for disability for difficult case?
6. Do you counsel patients (especially, pregnant women and postpartum mothers) visiting your health facility about importance of preventive health services on disability prevention? If yes, what do you counsel to them? About how many

pregnant and nursing mothers do you counsel per day? Has this trend of counseling increased than before?

7. Have you initiated any special recording and reporting system for preventing and managing childhood disability in community? If yes, what are the important indicators that you have been recording and reporting? How are they recorded and reported? How frequently you report about progress and to whom?
8. Disability prevention project has recently been completed in your facility. What were the activities conducted by this project for disability prevention in community and what was your role in project? Have you faced any problems while conducting this prevention project? Is yes, what actions were taken to tackle those problems?

B. Impacts on health facility

9. What is the status of utilization pattern of preventive health services by under-five children, pregnant and post-partum women in this health facility? Is there increase in load of women and under-five children utilizing preventive health services (immunization, nutrition, safe motherhood) in your facility in recent years? Has this number increased especially after implementation of disability prevention project?
10. How is HMOC functioning in your health facility? Is it actively involved in disability prevention activities? (timely review meeting, fund generating, local resource mobilization, timely recruitment of trained staff etc.)
11. How is PHC/ORC functioning? How often is it conducted? Has the no. of people especially, women and under-five children utilizing preventive services in PHC/ORC increased than before? Do the services provided by PHC/ORC is enough to handle community people's need?
12. Does your facility conduct awareness campaign in disability prevention from time to time? If yes, how many awareness campaigns are being conducted every year?
13. Is there proper functioning of monitoring and supervision system in you facility? Has this trend of monitoring and supervision increased than before? If any

problem are seen in health facility during monitoring and supervision, are action taken immediately?

14. What are the problems, that your facility is facing while providing preventive services to mother and children and what could be the solutions for those problems?

C. Impacts on community

15. Are people of your community aware about ways to prevent childhood disability? If yes, how did they know about it? Has the awareness on disability prevention in catchment areas of your facility increased than before? Which group of community has specially developed more awareness on disability prevention?
16. Are FCHV of your catchment areas actively involved in providing preventive health service to women and under-five children? Do they counsel and refer community people to health facility? Is there special recording and reporting mechanism by FCHV? Has the trend of recording and reporting system by FCHV improved than before, both in quality and quantity?
17. Is there any organizations working for disabled children in catchment areas of this facility? If yes, what is the number of such organizations? Are those organizations operated by externals like NGO and INGO? What does that organization do for welfare of disabled children?
18. Does community people themselves conduct disability awareness campaign in their community? Is yes, are those programs managed by community people themselves? Is there active involvement of community leaders, teachers, students, social workers, mother's group, and local organizations in such activities? Do community people conduct such activities by themselves or in coordination with your health facility and other organizations? How is fund generated for such activities in community?

19. Do you know any disabled children in catchment areas of your facility? If yes, has anything been done to disabled children by VDC? Has this number of disabled children increased or decreased than before?
20. Has the burden of disease in women and under-five children decreased than before or it has increased?
21. In your opinion, what are the major barriers in community that may hinder success of disability prevention programs? How can those barriers be overcome?
22. Do you have any suggestions to prevent and manage disability in community?

THANK YOU FOR YOUR TIME AND INFORMATION

Annex II: Document schedule for health facility

Impacts					
Impact indicators	**Before ToP (2008/09)**	**09/10**	**10/11**	**11/12**	**During evaluation (12/13)**
Immunization Indicators					
% of under-five children receiving BCG					
% of under-five children receiving DPT-Hep B-Hib-3					
% of under-five children receiving Polio-3					
% of under-five children receiving Measles					
% of pregnant women receiving TT-2					
Nutrition Indicators					
% of under-five children with growth monitoring (new)					
% of under-weight children (among growth monitored)					
% of pregnant women receiving 180 iron tablet					
% of postpartum mothers receiving 45 iron tablet					
% of postpartum mothers receiving vitamin-A					
Safe motherhood Indicators					
% of pregnant women with 1st ANC visit					
% of pregnant women with 4					

ANC visit % of women with delivery by trained health worker in health facility % of postpartum mothers with 1st PNC visit % of postpartum mothers with 3rd PNC visit % of postpartum mothers with 1st neonate visit					

Annex III: Evaluation plan method grid

Evaluation question	Impact indicators	Data source	Tools	Techniques
Are health workers providing quali service for preventing and managing childhood disability?	• No. of counseling on importance of preventive health services on preventing disability to pregnant women and mother • No. of referral of disabled children to appropriate facility • No. of health workers with knowledge of cause, impact and prevention of disability • No. of awareness campaign conducted by health workers in community	Health facility register, Project report and record, supervision visit of health facility and facility staff	Documen t schedule for health facility and health facility staff interview guideline	Face-to – face interview, document reviews, facility site visit and observation
Is there active involvement of health facility in disability prevention in community?	• No. of disability awareness campaign conducted by health facility • No. of regular meeting and review meeting of HFOMC • No. of supervision • Percentage of seed money invested in disability prevention	Facility site visit, facility register, Project report and record, supervision visit and health facility staff	Documen t schedule for health facility and health facility staff interview guideline	Face-to – face interview, document reviews, facility site visit and observation

Is there increase in utilization of preventive health services by pregnant women, postpartum mothers and under-five children and improvement of HMIS indicators contributing to prevention of childhood disability?	• No. of under-five children, pregnant and postpartum women receiving preventive services • **Indicators of HMIS preventing childhood disability** **Immunization** % of under-five children receiving (BCG, DPT-Hep B-Hib 3, Polio-3, Measles) % of pregnant women receiving TT-2 **Nutrition** % of pregnant women receiving 180 iron tablet % of postpartum mothers receiving 45 iron tablet % of postpartum mothers receiving vitamin-A % of under-five children with growth monitoring (new) % of under-weight children (growth monitored) **Safe motherhood** % of pregnant women	Facility site visit, facility register and project report and record	Document schedule for health facility	document reviews, facility site visit and observation

	with 1st ANC visit % of pregnant women with 4 ANC visit % of women with delivery by trained health worker in health facility % of postpartum mothers with 1st PNC visit % of postpartum mothers with 3rd PNC visit % of postpartum mothers with 1st neonate visit			
Is there increase in mobilization of community resources for preventing and managing disability?	• No. of organization's working for disability in community • No. of awareness raising activities done in community by community • No. of organizations providing income-generating and skill developing opportunities for disabled children	Project report and record, supervision visit and health facility staff	Health facility staff interview guideline and document schedule for health facility	Face-to – face interview and document review

Annex IV: Trend analysis of immunization, nutrition and safe motherhood indicators of Kavre and Sunsari

Trend analysis of Kavre					
Immunization Indicators	**Increase in coverage**				
	First year(09/10)	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**	**Overall increase**
BCG coverage	3%	-1%	0%	14%	17%
DPT-Hep B-Hib3 coverage	13%	8%	3%	11%	34%
Polio-3 coverage	0%	24%	2%	9%	34%
Measles coverage	-6%	23%	-11%	11%	17%
TT-2 coverage	8%	7%	5%	7%	26%
Nutrition Indicators	**First year(09/10)**	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**	**Overall increase**
Growth monitoring of under-five children	-4%	-4%	2%	5%	-1%
Under-weight children	0%	-1%	0%	0%	0%
Pregnant women receiving 180 iron tablet	0%	-2%	2%	10%	10%
Postpartum mothers receiving 45 iron tablet	0%	-19%	-11%	9%	-21%
Postpartum mothers receiving vitamin-A	-7%	1%	-9%	11%	-5%
Safe Motherhood Indicators	**First year(09/10)**	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**	**Overall increase**
1st ANC visit	1%	48%	-32%	11%	29%
4 ANC visit	11%	7%	-10%	19%	27%
Delivery in health facility		28%	-2%	22%	20%
1st PNC visit		27%	4%	-4%	-4%
1st visit of neonate		27%	3%	18%	18%

Trend analysis of Sunsari					
Immunization Indicators	**Increase in coverage**				
	First year (09/10)	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**	**Overall increase**
BCG coverage	-1%	3%	-27%	31%	6%
DPT-Hep B-Hib coverage	1%	2%	-27%	30%	7%
Polio-3 coverage	2%	-2%	-24%	31%	7%
Measles coverage	4%	-5%	-20%	24%	3%
TT-2 coverage	4%	-2%	-6%	6%	2%
Nutrition Indicators	**First year (09/10)**	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**	**Overall increase**
Growth monitoring of under-five children	2%	-3%	-5%	8%	1%
Under-weight children	0%	1%	-1%	0%	0%
Pregnant women receiving 180 iron tablet	5%	-6%	-1%	5%	4%
Postpartum mothers receiving 45 iron tablet	4%	-2%	-4%	16%	14%
Postpartum mothers receiving vitamin-A	5%	7%	-15%	23%	20%
Safe Motherhood Indicators	**First year (09/10)**	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**	**Overall increase**
1st ANC visit	6%	-4%	-12%	15%	5%
4 ANC visit	6%	-1%	-10%	14%	10%
Delivery in health facility	4%	-2%	-3%	1%	1%
1st PNC visit	2%	-1%	-2%	1%	0%
First visit of neonate	2%	-1%	-2%	1%	0%

Trend analysis of SHP (average) of Kavre				
Immunization Indicators	**Increase in coverage**			
	First year (09/10)	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**
BCG Coverage	3%	-4%	-4%	8%
DPT-Hep B-Hib coverage	4%	2%	10%	17%
Polio-3 coverage	6%	10%	2%	17%
Measles coverage	2%	5%	-2%	19%
TT-2 coverage	9%	2%	-3%	15%
Nutrition Indicators	**First year (09/10)**	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**
Growth monitoring coverage of under five children	4%	-2%	-10%	3%
Pregnant women receiving 180 iron tablet	0%	-16%	12%	3%
Postpartum mothers receiving 45 iron tablet	0%	-6%	-20%	-4%
Postpartum mothers receiving vitamin-A	-7%	-1%	-6%	0%
Safe Motherhood Indicators	**First year (09/10)**	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**
1st ANC visit	1%	3%	-7%	9%
4 ANC visit	11%	-9%	-4%	0%

Trend analysis of SHP(average) of Sunsari				
Immunization Indicators	**Increase in coverage**			
	First year (09/10)	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**
BCG Coverage	2%	0%	3%	0%
DPT-Hep B-Hib coverage	-1%	5%	-1%	0%
Polio-3 coverage	0%	3%	0%	0%
Measles coverage	0%	1%	2%	1%
TT-2 coverage	6%	-3%	2%	1%
Nutrition Indicators	**First year (09/10)**	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**
Growth monitoring coverage of under five children	-2%	0%	0%	-4%
Pregnant women receiving 180 iron tablet	0%	0%	1%	0%
Pregnant women receiving 180 iron tablet	3%	-4%	2%	3%
Postpartum mothers receiving 45 iron tablet	2%	2%	1%	20%
Postpartum mothers receiving vitamin-A	3%	25%	0%	-4%
Safe Motherhood Indicators	**First year (09/10)**	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**
1st ANC visit	8%	-2%	-1%	12%
4 ANC visit	6%	2%	-2%	-3%

Trend analysis of Panchkhal PHCC of Kavre		
Immunization Indicators	**Increase in coverage**	
	First year (2011/12)	**Evaluation year (12/13)**
BCG Coverage	20%	16%
DPT-Hep B-Hib coverage	7%	5%
Polio-3 coverage	7%	5%
Measles coverage	-9%	12%
TT-2 coverage	31%	-10%
Nutrition Indicators	**First year (2011/12)**	**Evaluation year (12/13)**
Growth monitoring coverage of under five children	10%	4%
Pregnant women receiving 180 iron tablet	16%	17%
Postpartum mothers receiving 45 iron tablet	5%	8%
Postpartum mothers receiving vitamin-A	1%	8%
Safe Motherhood Indicators	**First year (2011/12)**	**Evaluation year (12/13)**
1st ANC visit	-26%	2%
4 ANC visit	2%	31%
Delivery in health facility	2%	38%
1st PNC visit	0%	52%
First visit of neonate	1%	35%

Trend analysis of Itahari PHCC of Sunsari				
Immunization Indicators	**Increase in coverage**			
	First year (09/10)	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**
BCG Coverage	0%	-5%	3%	-1%
DPT-Hep B-Hib coverage	2%	1%	2%	-6%
Polio-3 coverage	3%	-4%	-5%	0%
Measles coverage	5%	-6%	-2%	0%
TT-2 coverage	2%	-4%	2%	-1%
Nutrition Indicators	**First year (09/10)**	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**
Growth monitoring coverage of under five children	1%	-2%	-1%	-3%
Pregnant women receiving 180 iron tablet	4%	-6%	0%	0%
Postpartum mothers receiving 45 iron tablet	2%	-6%	0%	4%
Postpartum mothers receiving vitamin-A	7%	-2%	0%	-3%
Safe Motherhood Indicators	**First year (09/10)**	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**
1st ANC visit	6%	-4%	-3%	11%
4 ANC visit	1%	-4%	4%	-1%
Delivery in health facility	7%	-5%	2%	0%
1st PNC visit	5%	-4%	1%	1%
First visit of neonate	5%	-4%	1%	1%

Trend analysis of Dapcha HP of Kavre		
Immunization Indicators	**Increase in coverage**	
	First year (2011/12)	**Evaluation year (12/13)**
BCG Coverage	4%	20%
DPT-Hep B-Hib coverage	-2%	6%
Polio-3 coverage	-2%	6%
Measles coverage	-4%	5%
TT-2 coverage	-12%	15%
Nutrition Indicators	**First year (2011/12)**	**Evaluation year (12/13)**
Growth monitoring coverage of under five children	-12%	7%
Pregnant women receiving 180 iron tablet	1%	1%
Pregnant women receiving 180 iron tablet	-7%	18%
Postpartum mothers receiving 45 iron tablet	-5%	10%
Postpartum mothers receiving vitamin-A	-6%	9%
Safe Motherhood Indicators	**First year (2011/12)**	**Evaluation year (12/13)**
1st ANC visit	-82%	35%
4 ANC visit	-37%	45%
Delivery in health facility	-6%	6%
1st PNC visit	-6%	6%
First visit of neonate	-6%	5%

Trend analysis of Hansaposa HP of Sunsari				
Immunization Indicators	**Increase in coverage**			
	First year (09/10)	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**
BCG Coverage	0%	-5%	3%	-1%
DPT-Hep B-Hib coverage	2%	1%	2%	-6%
Polio-3 coverage	3%	-4%	-5%	0%
Measles coverage	5%	-6%	-2%	0%
TT-2 coverage	2%	-4%	2%	-1%
Nutrition Indicators	**First year (09/10)**	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**
Growth monitoring coverage of under five children	1%	-2%	-1%	-3%
Pregnant women receiving 180 iron tablet	4%	-6%	0%	0%
Postpartum mothers receiving 45 iron tablet	2%	-6%	0%	4%
Postpartum mothers receiving vitamin-A	7%	-2%	0%	-3%
Safe Motherhood Indicators	**First year (09/10)**	**Second Year (10/11)**	**Third year (11/12)**	**Evaluation year (12/13)**
1st ANC visit	6%	-4%	-3%	11%
4 ANC visit	1%	-4%	4%	-1%
Delivery in health facility	7%	-5%	2%	0%
1st PNC visit	5%	-4%	1%	1%
First visit of neonate	5%	-4%	1%	1%

Annex V: Work Plan

S. No.	Activities	Weeks (Ist week of October, 2013 to last week of January, 2014)															
		October				November				December				January			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Proposal development																
2	Finalization of proposal and tools																
3	Necessary preparation for field work																
4	Field work																
6	Data processing and analysis																
7	Preparation of preliminary report																
8	Finalization of report																
10	Submission of report to KFN																