

# **NEPAL HEALTH RESEARCH COUNCIL (NHRC)**

## **ANNUAL REPORT**

**Fiscal Year 2067/68  
(17 July 2010 – 16 July 2011)**



**NHRC**



**Government of Nepal**

## FOREWORD

Nepal Health Research Council (NHRC) is an autonomous body under the Ministry of Health and Population, Federal Democratic Republic of Nepal. NHRC was established in 1991 by an Act of Parliament and was given the responsibility to promote and coordinate health research for improvement of the health status of people of Nepal. NHRC aims to create conducive environment for health research and helps the researchers and research institutions in enhancing their research capacity.

NHRC has been providing health research grants, conducting research trainings workshops and dissemination programs to promote research activities. In order to carry out the activities NHRC receive funding support from the Government of Nepal/Ministry of Health and Population, World Health Organization, Maryknoll Fathers and Brothers, UNFPA and UNICEF for research and training programs.

It is my great privilege to bring out the annual report of the NHRC for the fiscal year 2067/68 (17 July 2010 – 16 July 2011). This report reflects the activities implemented within the year and it has also highlighted the achievement accomplished to share information about the research activities. In order to promote health research and improve utilization of the research findings for development of health policy in Nepal.

I would like to express my sincere thanks to all the institutions and individuals who supported NHRC to carry out its activities with the further direction.

Lastly, I would like to give my thanks to all the NHRC staffs for their great effort in publishing this annual report.

**Prof. Dr. Chop Lal Bhusal**  
Executive Chairman  
Nepal Health Research Council

# **NEPAL HEALTH RESEARCH COUNCIL (NHRC)**

## **Executive Committee**

### **Executive Chairman**

Prof. Dr. Chop Lal Bhusal

### **Vice Chairman**

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Dr. Shanker Pratap Singh

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Prof. Dr. Suman Rijal

Dr. Samjhana Dhakal

Dr. Devi Gurung

### **Representatives**

Ministry of Finance – Member

Ministry of Health & Population – Member

National Planning Commission – Member

Chief, Research Committee, Institute of Medicine – Member

Chairman, Nepal Medical Council – Member

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## **1. INTRODUCTION**

Nepal Health Research Council (NHRC) is the national apical body for promoting health research in the country. NHRC was established in 1991 by an Act of Parliament and was given the responsibility to promote and coordinate health research for improvement of the health status of people of Nepal.

It has focused its attention on research capability strengthening through training of individual on research methods in order to develop a critical mass of people who can develop good quality research proposals. It serves as the main national institution responsible for technical and ethical review of proposals submitted by individual health researchers, national authorities, NGO, INGO's and universities. After appropriate review these proposals are approved by NHRC. The aim of NHRC has been to maintain high levels of technical and ethical standards of research carried out in Nepal.

NHRC has been providing health research grants to the researchers in order to enhance the research activities throughout the country. It also conducts research trainings, workshops and dissemination programs in development regions to promote research activities and research. NHRC also facilitates access to research finding from different research reports, journals, books, magazines etc. through the library and digital data base.

## **2. OBJECTIVE OF NHRC REPORT**

The main objective of publishing the annual NHRC report of the fiscal year 20067/68 (17 July 2010 – 16 July 2011) is to compile all the activities in a systematic order and to share information about the research activities. It is stated in Nepal Health Research Council's Act, 1991 Section 17 that Council shall have to submit an annual report of its activities to Government of Nepal within six months from the end of the fiscal year.

## **3. NHRC MAJOR ACTIVITIES**

### **3.1 Health Research Grants**

NHRC has been supporting and encouraging researchers and students to conduct research by providing several grants under various titles. Grants are specifically focused to encourage and support researchers who intend research on the priority health related areas. Grants are provided to the skilled researchers to promote health research culture and to create more research activities within the country. The grants are provided by the Government of Nepal as well as Maryknoll Fathers and Brothers Project and WHO.

*(For more information refer to Annex – I)*

### **3.2 Workshop, Training and Programs**

NHRC has been providing various training, programs on various health related matters such as training workshop on health systems research proposal development, training workshop on advanced health systems research methodology, networking meetings of health research institutions, interactive workshop for the reviewers, training workshop on how to prepare, write and publish a scientific paper and health research methodology in Ayurveda sciences. The total number of conducted training/workshops/meetings with the support of Government of Nepal, World Health Organization, UNFPA, UNICEF and Maryknoll Fathers and Brothers Project.

*(For more information refer to Annex – II)*

### **3.3 Dissemination of Health Research Findings**

Nepal Health Research Council has felt that conducting research is not enough therefore it felt important that the findings of the research need to reach to the appropriate audience for the best utilization. One of the means to reach the audience is through dissemination and on the other hand it helps to raise the public awareness towards the research findings as well as influences the policy makers. Therefore NHRC has conducted dissemination workshops in different regions of Nepal.

*(For more information refer to Annex – III)*

### **3.4 Capacity Strengthening Training**

Nepal Health Research Council had provided different types of training according to the needs in the relevant fields in order to strengthen the knowledge and capacity of the staffs and officials.

*(For more information refer to Annex – IV)*

### **3.5 Publications**

NHRC has published a number of publications such as Index Reviewed Journal of Nepal Health Research Council, proceedings on different National and International Training Workshops, Dissemination Reports and Research Report of the various studies conducted by NHRC.

*(For more information refer to Annex –V)*

### **3.6 Research Projects/Activities**

Nepal Health Research Council conducted various research activities supported by Government of Nepal, World Health Organization and other different agencies.

#### **3.6.1 Revision and Dissemination of National Health Research Policy of Nepal Status: Completed**

**Objectives:**

**General:**

- To revise National Health Research Policy of Nepal.

**Specific:**

- To organize consultative meetings to revise the national health policy.
- To disseminate the national health policy.
- To publish the finalized national health policy.

#### **3.6.2 Revised and Field test the training manual of Health Research Methodology Status: Completed**

**Objective:**

- To strengthen the training on health research methodology.

#### **3.6.3 Preparation of a Bibliography of Health Research Proposal Approved by Nepal Health Research Council (NHRC) from the Year 2003 to 2009 (7 Years).**

**Status: Completed**

**Background:**

The main aim of Nepal Health Research Council (NHRC) is to promote health research culture in the country by encouraging researchers to conduct the research activity. Many researchers have lack of knowledge about the information of research project carried out in the country. Due to this there is possibility of duplication of the research activity. One of the main sources of avoiding duplication of research is to provide information to the researchers of the research projects carried out within the country. In this context to forming health research bibliography helps to provide the researchers of the recent health related activity.

**Justification:**

Nepal Health Research Council has been providing approval to many research proposals that has been sound in technical and ethical aspects. The first bibliography

was developed in 1991-2002. Through the bibliography many researchers has been able to know the health research projects carried out or ongoing within the country and has helped avoiding duplication of same research being carried out many a time. Thus it served as an important document both to the policy makers and to the researchers. Since then it has not developed any of such. It is essential to develop a bibliography of the approved research proposals. Through this we could view the research areas conducted in the country and also could point out the new areas of research that has not been conducted. This also could help avoiding duplication of the similar research activities being carried out many a time and promoting to conduct new prioritized areas essential to the country itself. So that NHRC produced the bibliography of health research proposals approved from the year 2003 to 2009 (7 Years).

**Objectives of the Activity:**

To Prepare the Bibliography of Health Research Proposals Approved by Nepal Health Research Council from the Year 2003 to 2009 (7 Years).

**3.6.4 Revised and Update of NHRC Proposal Approval Format and Grant Format  
Status: Completed**

**Objectives:**

**General:**

- To revised and update proposal approval and grant format of NHRC.

**Specific:**

- To organize meetings to revise the proposal approval and grant format of NHRC.
- To disseminate the proposal approval and grant format of NHRC.
- To publish the final proposal approval and grant format of NHRC.

**3.6.5 Ethical Review of Health System Research: Preparation of Standard  
Operating Procedure (SOP) of Ethical Review Board (ERB) of NHRC**

**Status: Completed**

**Objectives:**

**General:**

- To improve the ethical standards of conducting health research.

**Specific:**

- To prepare Standard Operating Procedures (SOP) of Ethical Review Board (ERB) of Nepal Health Research Council (NHRC).



### 3.6.6 Nepal Environmental Health Action Plan 2011

**Status: Completed**

#### **Background and Rationale:**

The fundamental link between environmental protection and economic development was first recognized in the 1972 *Declaration of the UN conference on the Human Environment (Stockholm Declaration)*. It has focused world-wide attention on the environmental hazards that threaten human beings. WHO compiled a wide-ranging survey of environmental hazards to human health. Numerous documents have developed the concepts in the *Stockholm Declaration* into strategies for managing the serious environmental problems facing the international community.

After 20 years, in June 1992, the United Nations Conference on Environment and Development (UNCED) was held in Rio de Janeiro. It came up with declaration of Principles on Environment and development and an agenda for change during the 21st century, referred to as Agenda 21. Chapter 6 of Agenda 21 deals with sustainable development and health. *Agenda 21* acknowledges the dependence of human health on a healthy environment. It requires all countries to have programs to identify environmental health hazards and to reduce the risks. It has been used as a priority-setting tool for the policies of many international agencies and countries. In response to *Agenda 21*, the Nepal Environmental Policy and Action Plan (NEPAP)-1993 prepared by Government of Nepal and endorsed by the Environmental Protection Council, was the first program to comprehensively articulate the environmental policies of Nepal.

The environmental health was recognized as an issue by the government after the introduction of NEPAP. Based on the NEPAP's sectoral environmental strategies, the Nepal Environmental Health Initiative (NEHI) had been prepared as part of Government of Nepal's continuing effort to incorporate environmental concern into the national planning and development process in 1996 with the support of WHO. But due to the lack of initiative on the part of the government, the draft of NEHI was not even finalized. Therefore, no major breakthrough was made towards integrating health and environmental issues in the development plans in Nepal till 2000.

Environmental health means wellbeing based on the health of the surrounding environment. Environmental health covers the assessment, correction, control and prevention of environmental factors that can adversely affect health as well as the enhancement of those aspects of the environment that can improve human health.

WHO has defined environmental health as "the control of all those factors in man's physical environment which exercise or may exercise deleterious effect on his physical

development, health and survival". Environmental health involves those aspects of public health concerned with the factors, circumstances, conditions in the environment or surroundings of humans that can exert an influence on health and well-being.

Environmental Health provides the basis of public health. Improvement in sanitation, drinking water quality, food safety, disease control and housing conditions are central to the improvement in the quality of life.

On behalf of Ministry of Health and Population, Nepal Health Research Council (NHRC) with the support of WHO carried out "Situation Analysis of Environmental Health in Nepal in 2002". It has covered major environmental health issues such as water pollution, air pollution, municipal solid waste, noise pollution, food safety, excreta disposal, hazardous waste. Nepal Health Research Council and World Health Organization in coordination with major stakeholders of environment and health sectors prioritized the Nepal Environmental Health Research Areas in 2006 which includes issue of water, air, waste, pesticides, occupational health and safety, food safety/security, climate change, road traffic accident and cross-cutting issue such as knowledge, attitude, practice, policy, economy etc. Later in 2009, NHRC with the support of WHO conducted and updated "Situational Analysis of Environmental Health in Nepal 2009" covering major issue of water pollution, air pollution, solid waste including hazardous waste and climate change. In order to develop the synergy among the partners working in the field of environment and health and to promote environmental health in Nepal, Nepal Environmental Health Action Plan (NEHAP) has been aimed to develop. NEHAP is a broader conceptual action plan which provides mandate as well as guidance to all of the environmental health related sectors. Environmental health is a multi-sector activity which covers numbers of environmental related sector linking with public health. In the context of Nepal, Environmental Health covers Water, Waste Water, Sanitation, Solid Waste, Health Care Waste, Indoor/Outdoor Air, Food Safety, Road Safety, Chemical Safety, Healthy Setting and Climate Change. In this activity present environmental status has been assessed, linked with public health and action outlined for improvement or maintenance of the required condition. In this following definitions are used:

- Air Pollution
- Water Supply and Sanitation
- Food Safety
- Climate Change
- Solid Waste
- Healthy Setting

- Road Safety
- Health Care Waste
- Chemical Safety

**Objectives:**

- The overall objective was to develop Nepal Environmental Health Action Plan (NEHAP) through assessment and consultation with related stakeholders.

### **3.6.7 Report on Rapid Assessment of Emergency Preparedness Response in Nepal**

**Status: Completed**

**Introduction:**

The Government of Nepal has classified Nepal as one of the hotspots of multi hazards. The country faces high frequency and intensity of a multiple hazards including floods, landslides, forest fire, drought, hailstorms, avalanche, conflict, earthquake etc. Among 200 countries, Nepal ranks 11<sup>th</sup> and 30<sup>th</sup>, respectively, with regard to relative vulnerability to earthquake and flood (UNDP/BCPR, 2004). An inventory of past disastrous events during 1971-2006 reveals that epidemics takes the largest toll of life every year, and that landslide, flood (including the flash floods) and urban or rural fire are the principle hazards in terms of their extent and frequency of occurrence as well as the spread and intensity of physical and socio-economic impacts (NSDRM 2008). According to the Global Earthquake Safety Initiative, Kathmandu is exposed to the greatest earthquake risk per capita among 21 megacities around the world, largely due to building collapse and insufficient preparedness and medical care (GHI/UNCRD, 2001). If an earthquake of the 1934 magnitude is repeated at this point of time, an estimated 40 000 deaths, 90,000 injured and 600,000–900,000 homeless can be expected (GHI/NSET, 1999). Such numbers pose a tremendous challenge to the health system of the country, which is highly vulnerable to any seismic event. Nepal's health system is highly vulnerable to natural and man-made disasters. As such, it is imperative that the health sector focus its work on improving and strengthening the health system of Nepal against possible disasters that may occur.

Efforts have been ongoing since early 2000 to enhance the level of emergency preparedness in Nepal in all sectors. The Ministry of Home Affairs (MOHA) is the national focal Ministry for coordination of various aspects of disaster management in Nepal. The focus of disaster management in Nepal is changing from reactive (relief and response) to proactive (preparedness) risk reduction, as seen in the "National Strategy for Disaster Risk Management 2009" prepared by Home Ministry. This strategy has

been broadly divided into the Cross-sectoral and sectoral strategies for Disaster Risk Management. The sector-specific strategies are focused on addressing the identified gaps in particular sectors.

They are divided into the five Priorities for Action. The following sectors have been considered

(MOHA, 2009):

- Agriculture and Food security
- Health
- Education
- Shelter, Infrastructure and Physical Planning
- Livelihood Protection
- Water and Sanitation
- Information, Communication, Coordination and Logistics
- Search and Rescue, and Damage and Needs Assessment

Implementation and follow-up of the Strategy is the most important tasks. While the National Government is the ultimate responsible agency for implementing the Strategy; the latter envisages decentralization of authority as well as responsibilities. Disaster Management focal points have also been appointed in key line Ministries including Ministry of Health and Population. Health sector is a main area where numerous partners have implemented various programs with the same goal of enhancing health sector preparedness for emergencies. The programs have focused on enhancing the overall readiness of the health sector through training of its personnel, development of guidelines and implementing simulation exercises at national, regional and district levels.

The World Disaster Report 2006 highlighted the discouraging fact that around 58% of the total Number of people killed in natural disasters during the decade 1996-2005 was from SEAR countries. In 2005, three countries (Bangladesh, India and Indonesia) were among the top ten countries most affected by natural disasters. The benchmark framework is a response to the collective experience of five SEAR countries during the earthquake and Tsunami of 26 December 2004, the recurring emergencies in all SEAR member countries and the global call for improved emergency preparedness actions across the countries. All the countries in SEA Region are committed to it. The benchmarks would help to set standards and can be applied to specific situations in the member countries. The application of benchmarks approach would facilitate planning, monitoring and evaluation and allow adoption of country specific approaches.

The Emergency and Humanitarian Action (EHA) Program of WHO SEARO and its partners have applied the process of setting benchmarks as a tool to assess the quality and improve performance in emergency preparedness and response. The benchmarks are an expression of the consensus and commitment of the countries. Benchmarking is a strategic process often used by businesses to evaluate and measure performance in relation to the best practices of their sector. The SEARO Benchmark Framework consists of 12 benchmarks which were developed through a participatory process that involved the member countries in the Region. The benchmarks are the product of a regional consultation in Bangkok in November 2005. Each benchmark has a corresponding set of standards, and indicators which were developed following a regional consultation in Bali 2006. Each benchmark has one or more standards. The standards denote the technical reference level of quality or attainment of the benchmark. The standards are qualitative and universal in nature and are applicable in any operative environment as they specify the minimum level to be attained. The standards were derived from each benchmark. In order to measure the progress or achievement of each standard there are several indicators identified. These indicators relate to health sector and all the partners within the sector including the government at different levels, private sector (for profit and not for profit) and academic institutions. Similarly there are indicators for other key sectors outside the health sector that impact the overall preparedness and response. Some examples of these key sectors include water and sanitation, food security and food safety, sanitation and waste management etc. For each of the indicator there is questions/checklist that helps to assess the indicator. The assessment of indicators can be done by qualitative and quantitative means. The assessment of indicators would contribute to establishment of the baseline and to assess progress.

These benchmarks integrate multi-sectoral concerns at community, sub national and national levels. This means that if all benchmarks are achieved, the level of preparedness of the country will be high and inter-sectoral linkages and wide participation on by all stakeholders will be achieved. This would help to mitigate the impact of disasters. While the health sector has made progress in emergency preparedness, it is critical to take a stock of action and also to independently verify whether the course of actions taken is appropriate. Further there is a need to verify whether the emergency response capacity of MoHP Nepal is adequate to respond to the health challenges that may arise in a severe disaster. In order to assess the preparedness of MOHP for emergency response at the time of Disaster, this rapid assessment is done.

## **Objectives:**

The overall objective of this rapid assessment is to identify the level of preparedness of the health sector of Nepal in responding to disasters.

The specific objectives would be:

- a. To describe the level of preparedness of the health sector to emergencies by:
  - i. Identifying capacities in place in key areas,
  - ii. Identifying gaps in key areas.
- b. To relate the findings of the assessment to the existing programs being implemented on emergency preparedness in the health sector.
- c. To identify key areas where gaps exist.
- d. To advocate on bridging the gaps that are identified by the survey.

### **3.6.8 Identification of Public Health Problems Resulting from Climate Change and Preparation of Guidelines for its Prevention in Nepal.**

**Status: Completed**

#### **Introduction:**

Climate change is a current global concern, which is near unanimous scientific consensus. Human activities have been defined as the responsible factors for rising atmospheric concentration of greenhouse gases. The average global temperature is projected to increase between 1.4 and 5.8 °C by the end of this century (IPCC, 2001). These facts suggest that climate is changing, and is widely showing varying impacts on human health. The trends of mortality and morbidity are in increasing order due to heatstroke, cold, drought or storms and other environmental disaster. The major climatic vulnerability and relative risk has been listed out mostly in developing country rather than developed country (IPCC, 2001). Hypothermia, hyperthermia, death, injuries, psychological stress has well-thought out the direct health impact of climate change- extreme weather and climate induced disaster. And chronic effect of climate change on human may have indirect health impact like, cardio-respiratory disorder, malnutrition, vector borne diseases, diarrheal diseases and psychological diseases (Jonathan et al, 2005). There is broad consensus that climate changes can affect human health. The IPCC fourth assessment report concludes that climate change currently contributes to the global burden of disease and premature deaths. At this early stage the effects are small, but are projected to progressively increase in all countries and regions (IPCC 2007).

Nepal is one of the most climate sensitive Himalayan countries, though it has negligible emission of greenhouse gases that are climate susceptible. The prevalence of

respiratory disorder, diarrheal disease and other vector borne diseases are increasing in Nepal. The reasons behind it are poor sanitation, hygiene and air pollutants exceeding the national ambient air quality standards and poor quality of water (Dhimal et.al, 2009). More than 3.4 million people do not have enough food to eat and some 28,000 children under five die each year from easily preventable illnesses. Women, children and underprivileged population, mainly in the Mid- and Far-Western hill and mountain regions are likely to be suffered from food deficit than remaining part of country (NHT, 2010). The sufferings of food- insecurity or decline in agricultural food production are due to floods, droughts and irregular precipitation, which are the end consequences of climate change (Malla, 2008). The health impacts of climate change in the context of Nepal are noticeable. However, studies on health impacts of climate change in Nepal are limited. This study aims to explore the effects of climate change on diarrheal and vector borne diseases using qualitative information from health professionals and community people and analyzing past data of diarrheal diseases and malaria.

### **Objectives:**

The general objective of this study was to identify the public health problems resulting from climate change and preparation of guidelines for its prevention in Nepal.

The specific objectives are as follows

- To explore the effect of climate change in health in different climatological regions especially on vector borne and water borne diseases,
- To assess the relationship between climatic factors and health effect specially malaria and diarrhea in different climatological region of Nepal,
- To review the policies of Government of Nepal regarding agriculture, water, sanitation, shelter, transport and energy with respect to climate change and human health, and
- To develop guidelines for good practices to protect human health from climate change.

### **Conclusion and Recommendation:**

Climate change has a relation to the occurrence of the disease. People living on Himalayan range and at low land area are more vulnerable to extreme climatic conditions. The effects of climate change pose a huge public health challenge to all nations at present. The occurrence of disease and the changing trend in the prevalence of climate sensitive diseases is certainly a result of climate change. Regression analysis in terai region shows that with rise of minimum temperature diarrheal and malaria disease seems to be increasing whereas diarrheal disease seems to be decreasing in rise of rainfall. Similarly in hilly region with rise in the maximum temperature malaria cases decreases and increase with rise of minimum temperature. Increase in rainfall also



shows the increase in diarrheal numbers. Himalayan region time series analysis shows that increase in minimum temperature trend of malaria cases also increases and diarrheal disease also increases with increasing rainfall. Different policies of line agencies and of the government were reviewed. Each policy has directly or indirectly addressed the issues related to climate change and its health consequences. Policies have strongly mentioned the provision to deal with the health hazards and the consequences related to climatic events. If the policies can be followed accordingly in more comprehensive way then in some way the matters of health impacts resulting from climate change can be addressed.

According to the altitudinal variation, there is shifting of malaria and other vector borne diseases from Terai to Himalayan region. Climate change is happening and is obviously a major concern in the entire sector that influences health. Some sort of fluctuation in the disease pattern is occurring. Water borne disease has decreased since few years because of many multiple interventions from government sector and others partners but we cannot overshadow the extreme climatic conditions that are the major factors for inducing disease.

Water resources all over the places are drying out every year and the scarcity of water resources has definitely affected the sanitation practice of the people. Most of the water supply has been contaminated and its quality has been degraded. Lack of water resources has facilitated the occurrence of diarrhea, typhoid etc. Temperature has increased over the years that have reduced the working capacity of the people with excessive heat and the agricultural productivity has been reduced due to erratic and unseasonal rainfall. Lack of water resources has facilitated the occurrence of diarrhea, typhoid etc. Increased temperature has reduced the working capacity of the people with excessive heat and the agricultural productivity has been reduced due to erratic and unseasonal rainfall. On overall, the prevalence of vector borne diseases has reduced in terai regions due to massive intervention programs but indigenous cases are reported from higher altitudes including hilly regions but mountain regions are still free from indigenous cases of malaria and other vector borne diseases. Distribution of mosquitoes has been seen in higher altitudes and has compelled the people to use bed nets for sleeping even in mountain regions. However, detail entomological study has not been carried out to confirm the diseases vectors. Diarrheal diseases and skin diseases have been found problem in all ecological regions of Nepal and found associated with poor quality and quantity of water and poor sanitation and hygiene. Those diseases which were mainly reported in lower parts of Nepal have been increasingly reported from upper parts to such as cholera, typhoid, Rota viral diarrhea and viral fever etc. Based on the findings of the study following recommendations are made



In order to confirm the attribution of climate change, the recording and reporting system of climate sensitive diseases should be strengthened at health facility level, entomological study should be carried from where indigenous malaria cases are reported and in other suspected new places too. The water supply and sanitation coverage need to increase and should ensure the quality of supplied drinking water implementing water quality surveillance.

- As this study is primarily based on secondary data and qualitative data collected from the field, detail prospective study is required to discern the attribution of climate change on vector –borne and diarrheal diseases in Nepal.
- There is dire need of prospective studies on altitudinal distribution of vector borne diseases and their vectors, their susceptibility to insecticides in the context of climate change.
- Similarly, study on diarrhea and its attributing factors, forecasting the season of diarrhea and preparing early warning system are important aspect for managing diarrheal outbreak in the context of climate change.
- Public health are the most sensitive and important indicator of the nation development and thus to safeguard it comprehensive policy and programs also should be brought forth based on emerging evidences from local and international context.

### **3.6.9 Assessment of Medical / Health agencies Designated as Research Centres in Nepal**

**Status: Completed**

#### **Introduction:**

Nepal Health Research Council (NHRC) Act (1991) has given more emphasis to regulate various kinds of health research activities in the country. This is basically to protect the rights and safety of human participants involved in the health research.<sup>1</sup> National Ethical Guideline for Health Research (2001) stressed some direction towards conducting health research with application of ethical principles, but most of the organizations/individuals that are conducting health research in Nepal are not taking informed consent from the study participants, thus violating the rights and safety of such participants. Majority of organizations/individuals are not interested to submit their research proposal for ethical approval from any recognized review boards/committees.<sup>2</sup> Moreover, most of medical/health agencies (hospitals, polyclinics, NGOs etc.) designated as research centres were reluctant to collaborate and networking with each other. It has been argued that putting the word “Research” in any agency’s name made easier to get the various things (equipments, medical supplies etc.) from abroad without paying or paying minimum or discounted government tax than

others.<sup>3</sup> It has been stated that more than 75 percent of the research centres that are functioning in the country are not conducting any health research although they have written the word “research” in their signboard. Study revealed that such practices were done to make their agency’s name fancy and catchy for the public to draw their attention.<sup>2</sup> It seems that the most of the agencies/organizations are using the word “research” for the purpose of their business strategy, probably not at all for the purpose of uplifting the health research scenario in the country.

Ministry of Health & Population (MoHP) has provisioned that each and every centres that are holding “Research” word in their title name should have to conduct at least two researches per year in different topics of their relevant health areas with the permission from NHRC Act 2047 BS. If such research centres couldn’t able to conduct any health researches within the period of two years after its establishments, the MoHP may warn such centres and they will have to take out the word “Research” from their signboard and relevant documents. It was a matter of huge discussion in the year 2005, not only in the national newspaper, but also in the famous TV channel (Image), run by the well-known TV artist named Mr. Kedar Khadka. Since then, NHRC and MoHP couldn’t able to look back with their propositions and commitments to regulate such mal-practices in health research in the country. However, NHRC went on advocating the situations in different forums and meetings. Now, the time has come to initiate the same thing in different perspectives.

In this context, NHRC would like to update the number of Medical/Health Agencies (Hospitals, Polyclinics, NGOs etc.) designated as Research Centres established since 15 July 2005 to 31 December 2010, and assess those research centres that came into functional before 15 July 2005.

### **Objectives:**

The major objectives of the study were:

- To find out the existing number of Medical/Health Agencies (Hospitals, Polyclinics, NGOs etc.) designated as Research Centres till 31 December 2010,
- To find out the distribution of health related research centres in Nepal,
- To assess these research centres in terms of its research related characteristics, and
- To find out the reasons for putting the word “research” into their signboard.

### **Conclusions and Recommendations:**

It has been concluded that there were 370 research centers presented in Nepal till 31 December 2010. It was also concluded that only 20 percent research centers were found to conduct health related research program in Nepal. Forty percent of the research

centers in Nepal didn't know the actual reason for putting the word "research" into their signboard.

Based on the findings, the most important recommendations are given as follows:

Mass awareness campaign need to be broadcasted through appropriate channel of media for those centres that are holding "Research" word in their title name should have to conduct at least two researches per year in different topics of their relevant health areas with the permission from NHRC.

Develop capacity of those research centres that are willing to conduct some sort of health research in their working areas.

- Promote regional level research meeting and workshop so that such centres will get an opportunity to share their research ideas/activities/concept proposal and receive feedback in order to promote research work at regional level.
- Strengthen the networking and coordination between such research centres. For which NHRC should play a facilitative role.
- Delays and difficulties encountered by the research team of respective research centres while implementing the research projects at the field setting should have to be informed to NHRC.
- Encourage these research centres to submit their research proposal(s) either at the ERB of NHRC or IRC of the respective institution and take the ethical approval letter(s).
- Strengthen surveillance system for monitoring these research centres and maintain a good harmony with National Intelligence Bureau (NIB), Social Welfare Council (SWC), NGO Federation, Ministry of Information and Communication (MIC), Ministry of Industry (MoI), CDO, District Development Committees (DDC), Regional Health Directorate Office (RHDO) and District Health Offices (DHO).
- Prepare the Terms and Conditions for putting the word "Research" in the title name of any organization / agency / centre / institute / polyclinic / hospital.
- Conduct series of orientation workshop in order to make aware lawyers and senior officials of NIB, SWC, MIC, MoI, CDO, DDC, RHDO, DHO and umbrella organization of Foreign Employment Agencies regarding putting the word research in any health facility and NGO names.

### **3.6.10 In-depth Review of Effectiveness and Efficiency of *Aama Surakshya Karyakram* to address Barriers in Accessing Maternal Health Services in Nepal**

**Status: Completed**

**Background:**

In the year 2005, Ministry of Health & Population (MoHP) introduced a Maternity Incentive Scheme (MIS) to provide cash incentives to mothers delivering their babies in government health facilities, as well as corresponding incentives to health workers and support to health facilities in low Human Development Index (HDI) districts. The incentive scheme was implemented across the country without considering the policy recommendation of piloting it in limited number of districts and subsequently expanding in other districts. As a result, different operational complications were encountered. Three operational studies were carried out respectively on process monitoring, process and impact evaluation to address the emerging need to modify operational processes after two years of MIS implementation. On the basis of the recommendations made by these three operational studies, the MIS operational guideline was amended. The Family Health Division along with the MoHP developed yet another policy paper that recommended provision of incentives to all delivering mother by removing the parity condition. Subsequently, the MIS was changed into Safe Delivery Incentive Programme (SDIP) to make it more appropriate. With these provisions, the desired outcome, for example to raise the number of institutional deliveries, was not met even if the access barriers were addressed to the greater extent. Besides the cost of transportation, operational studies found that the most significant barrier is the institutional cost and recommended that such costs should be covered since many women were not in a position to cover them. The SDIP was branded as *Aama Surakshya Karyakram (ASK)* that covers the cash incentive to mother to cover the transport cost, free institutional delivery and incentive to the health workers. Subsequently, the ASK was reviewed after one month of implementation and that review recommended a change in the unit cost being provided to the health facilities as it does not meet the requirements. Following the recommendations, a policy paper was prepared and the unit cost to the 25-bedded hospital was increased.

**Rationale:**

Although it was thought that the ASK has contributing to raising the number of institutional deliveries, the provision of incentives to health workers who visit households for deliveries has been considered barrier to the encouragement of institutional deliveries as such incentive continue to promote home delivery, but now it is being phased out to emphasize the importance of facility deliveries. The payment has been reduced from NRs. 300 (US\$ 4) to NRs. 200 (US\$ 3) per case. (Note: 1 US\$ = NRs. 72, and taking round figure)

The incentive scheme at the urban level is irrelevant as the amount provided is not significant for middle class urban people. On the other hand, the incentive amount could be increased for rural poor women. The provision of 24 hours services in health

facilities with birthing centres is not being practiced and monitored effectively mainly due to absence of Skilled Birth Attendants (SBAs) specially during nights. Another big question would be whether such schemes have effectively been utilized by poor category of the people, or not? Is the scheme beneficial to them? In this context, in-depth review of ASK in terms of its effectiveness and efficiency is an utmost important to better address barrier in accessing maternal health services in Nepal.

### **Description of the Study and Its Effectiveness:**

Maternal mortality, as a largely avoidable cause of death, is an important focus of international development efforts, and a target for Millennium Development Goal (MDG). In Nepal, maternal mortality includes all deaths that occur to women during pregnancy, during birth, and up to two months after birth or the termination of the pregnancy. The review of supporting evidences points to a significant decline in maternal mortality. Against background of stagnating Maternal Mortality Ratios (MMR) worldwide this is a considerable achievement for Nepal. Maternal mortality ratio (per 100,000 live births) is reduced from 415 in 2001 to 281 in 2006. Nepal maternal mortality and morbidity study done in eight districts (2009) showed that MMR has been reduced to 229 (with variation between districts), which gives a rough idea that Nepal is on track to meet MDG 5. Given the political instability and rising numbers of births (despite decline in fertility) this decline is particularly impressive. The most likely causes of the decline in MMR may be due to ongoing intervention of ASK in all the districts by 14 January 2009. If the present progress continues, it seems likely that Nepal will achieve MDG related to maternal health by 2015. However, the achievement is not uniform across rural and urban setting. Therefore, there is urgent need to identify the groups who are excluded from access of maternal health services. Identification of excluded groups would give us population at risk to prioritize and utilize the scarce resources available in health sector more effectively and efficiently.

*Aama Surakshya Karyakram* provides a cash payment [NRs.500 (US\$ 7) in the flat region, NRs.1,000 (US\$ 14) in hill region and NRs.1,500 (US\$ 21) in mountain region) to mother after delivery at a health facility. Similarly, ASK also provides a payment to health facility for the provision of free care: normal delivery at health facility with 25 and more beds NRs. 1,500 (US\$ 21) and health facility with less than 25 beds NRs. 1,000 (US\$ 14), Complication NRs. 3,000 (US\$ 42), and Caesarean Section (C-Section) NRs. 7,000 (US\$ 97).

A monitoring mechanism has been developed from community to central level. The Village Development Committee (VDC) secretary, village ward representative or Female Community Health Volunteer (FCHV) identify the expected deliveries with the help of mothers groups and recommend the mothers to use SBAs. The Health Facility

Management Committee (HFMC) provides the incentives based on recommendation of the VDC secretary, ward representative or FCHV and the health worker requires submission of birth certificates in the case of home delivery. Primary Health Care Centres (PHCC)/Hospitals and District (Public) Health Offices [D(P)HO] also monitor the progress of ASK quarterly and send the report to the Regional Health Directorate and the Department of Health Services (DoHS). The MoHP and DoHS regularly review the progress and problems of the scheme in quarterly review meetings. There is a provision of involving I/NGOs in the management and monitoring of the scheme. Representatives from the NGOs take part in the review meeting and they share their experiences and provide feedback to DoHS. An early assessment revealed that delays in the release of funds increases the problems for financial SDIP management at the health posts (HPs) level. These findings were used in the revision of the SDIP, ASK guidelines and recording and reporting tools which have helped to monitor the scheme and ensure proper implementation.

However, the increasing numbers of peripheral health facilities implementing *ASK* increases the risk of misuse of cash. Similarly, despite the *ASK* guideline's mandate that HFMC distribute the unit cost, it is being argued that only few HFMCs are doing this. This creates a big question of effectiveness and efficiency of *ASK*.

Several studies looking particularly towards SDIP and *ASK* have already been carried out such as Evaluation of SDIP, Rapid Assessment of SDIP, Review of Evaluation and Monitoring Activities focused *ASK*, Rapid Assessment of *ASK* etc. The outcome of these studies needs to be reviewed. Similarly, there are several key questions which need to be answered such as what percentage of users received the incentive on discharge? What is the total sum distributed to users and health workers via this scheme? How does this compare across the different eco-development zones of the country? This in-depth review coupled with finding answers of above mentioned key questions explores how much *ASK* is effective and efficient to address barriers in accessing maternal health services in Nepal. This definitely generates some sort of evidence to underpin policy and strategy development to safeguard the rights of poor mothers and newborns to life and health.

**General Objective:**

- In-depth review of *Aama Surakshya Karyakram* in terms of its effectiveness and efficiency to address barrier in accessing maternal health services in Nepal.

**Specific Objectives:**

- Review *ASK* programs,
- Find out the socio-demographic characteristics of mothers, who delivered their child in the health facility,

- Find out access barriers faced by Mothers,
- Examine perception of quality of care and experiences by recently delivered mothers,
- Assess mothers' awareness on ASK,
- Assess mothers' knowledge on ASK,
- Assess mothers' satisfaction regarding various factors towards effectiveness of ASK,
- Identify reasons for not visiting health facility by the mothers, who had delivered their child at the home settings,
- Assess FCHVs, TBAs and VDC Leaders' knowledge on ASK,
- Assess ASK related information disseminated by the health facilities,
- Assess the service utilization of mothers,
- Explore mothers' delivery status and trends of institutional deliveries,
- Assess programme and fund management approach and Issues, and
- Propose evidence based programmatic and policy recommendations.

### **Conclusions and Recommendations:**

The implementation of ASK is progressive, and there is a gradual increase in Institutional deliveries. Literature review revealed that false claims for institutional delivery made by health providers were reduced to 4 percent in the year 2010 from 24 percent in the year 2009. One-third mothers decided by themselves to come to the health facility. Majority of mothers might not face distance as access barrier as two-third of them was residing near to the health facility (within reach of 60 minutes). Nearly all mothers (98%) had received the maternal health services immediately once they arrived in the health facility and expressed that there was no language barriers within the facility. Less than half of the mothers (40%) didn't receive the knowledge of transport incentive and said that they were satisfied with the quality of health services, but in the for maternal health treatments offered, almost all (98%) were satisfied. All mothers were satisfied with the information provided for the health services. Only one-tenth mothers indicated that it compensated their transport cost. All the mothers were aware of free maternal and child health care services including delivery care. They did not have any idea about whether the cash payment was basically provided as transport incentive or for some other purposes.

Mothers delivered at home as they were not well prepared to go to health facility. Moreover, there was no prolong labour pain, and normal delivery occurred within hours of labour pain. They were trying to come to the health facility only when labour pain started as they might think that vehicles are easily available and facilities are located nearby. In Hill and Mountain areas, most of the villagers have



no access to road. Lack of transportation facility hindered for institutional delivery. Sometime it might take two or more days to reach the hospital, which was expensive for them.

Health care providers had a very good understanding about **ASK APPLIED IN HEALTH FACILITIES**. Auxiliary Health Workers still preferred to conduct delivery in home settings instead of referring mothers to health facilities for safe delivery. **NONE OF THEM FIGURED OUT THAT THERE WAS A PROVISION OF TRANSPORT INCENTIVE; THEY ONLY KNEW THAT THERE WAS A CASH PAYMENT, BUT THEY DIDN'T KNOW EXACTLY FOR WHAT SPECIFIC PURPOSE MOTHERS WERE RECEIVING SUCH PAYMENTS.**

In order to build confidence on the sustainability of the *ASK* among district level personnel, central level authority must provide adequate human resources, increase the number of SBAs, provide essential equipment's (delivery sets, forceps etc.), and release the budget in time.

Nine-tenth sampled health facilities didn't show any evidence regarding annual planning and budgeting done for *ASK*. All health workers agreed that reporting system was still poor. It was quite interesting to observe that none of the PHCCs were found to perform any of financial and social audits. However, all hospitals were performing financing audit.

All of them also didn't know that health providers are also receiving some incentive from the government for providing delivery services. Although majority of health facilities (80%) displayed the citizen charter, only 60 percent had displayed information on *ASK* in the same citizen charter.

We also found that most of the health facilities (90%) had not displayed data related to *ASK* in the notice board of health facility. However, they put the list of the delivered women (after verification) on the wall of health facilities and VDC/DDC office buildings, but all the service providers still did not put the name of delivered woman on public places. The *ASK* is not adequately benefitted for hard to reach women group who are living in remote areas.

On the whole, it can be said that *ASK* found to be effective and efficient in order to address barriers occurring inside the health facility and financial barrier except geographical barrier in accessing maternal health services in Nepal. It has also been concluded that *ASK* has not adequately benefitted the hard to reach women groups who are living in remote areas.



**Recommendations:**

- Free health care policy and free delivery schemes need to be integrated by initiating the process of recording and reporting along with financial part for free delivery schemes and free health care policy into Health Management Information System.
- In order to address geographical barriers, the location of present health care infrastructure which is built through the interest of some influential person's in the community without caring need-based approach and compatible with political divisions need to be revisited and additional health facilities need to be built in those areas where disadvantaged and hard to reach community can have better access.
- In order to minimize the barriers occurring inside the health facility to receive maternal health services and benefits, social service unit in each hospital, as proposed in health sector Gender Equity and Social Inclusion strategy by the MoHP, needs to be established as early as possible.
- There is a need to update a realistic, cost-effective, quality assurance strategy. The strategy needs to be directed towards providing quality maternal health services at the district and below levels. The strategy must be responsiveness to the felt needs and concerns of consumers. Moreover, it is an utmost important to promote a quality culture within the district health system, and need to make them accountable.
- Information and communication need to be provided to the consumers regarding rights and responsibilities in terms of quality of care. "Citizen Charter" being displayed in the health facility needs to incorporate an overview of service users' rights and provider's duty.
- There is an urgent need of annual planning and budgeting for ASK and financial and social audits at PHCCs. Moreover, social auditing needs to be encouraged specially for delivery related incentive schemes.
- Client centred behaviour of service-provider needs to be encouraged.
- Awareness for free delivery services along with transport incentive schemes under ASK needs to be disseminated frequently at the community level through different means and medias including mothers groups, FCHVs and local NGOs.
- Vacant posts of the health workers at the peripheral levels needs to be fulfilled and ways needs to sought to prevent frequent transfer and deputation of staffs. There is a need to go for appropriate measures for moral boosting of the staffs.
- Monitoring and evaluation system needs to be strengthened by implementing the integrated monitoring and evaluation guidelines, and its process.
- Appropriate health care providers need to be trained as SBAs.

- The Remote Area Guidelines, which envisage the provision of community-based services where SBAs are not currently available, need to be implemented as soon as possible.
- The strategy in which FCHVs provide counselling to prepare for safe delivery should include their capacity building for providing better maternal care.

### **3.6.11 A pilot study to identify the major high risk HPV types present in Cancer cervix (Ca Cx) cases in patients visiting two tertiary hospitals in Kathmandu.**

**Status: Ongoing**

#### **Objectives:**

##### **General:**

- To identify the type of Human Papillomavirus presented in cervical cancer cases in tertiary hospital with the aim to initiate a larger scale nationwide assessment as the next step of this study.

##### **Specific:**

- To identify HPV types using molecular screening method of Polymerase Chain Reaction,
- To assess feasibility of using molecular methodology in HPV typing in Nepali setting,
- To enable second phase larger nationwide study on HPV types in Nepali population.

### **3.6.12 A Longitudinal Study on Aedes Mosquitoes and Climate Change along an Altitudinal Transect in Central Nepal**

**Status: Ongoing**

#### **Objectives:**

The general objective of this study is to assess the effects of climate change on the altitudinal distribution of potential dengue virus vectors in Nepal. The specific objectives are:

- To assess the knowledge, attitude and practice of community people about dengue fever and its potential vectors,
- To ascertain the presence or absence of possible dengue vectors at different altitudes and in different ecological regions,

- To determine different entomological indices used in the study of dengue vectors (Container Index, Household Index, Breteau Index, Ovitrap Index) in different altitudes,
- To identify and characterize the breeding places of dengue vectors and the environmental conditions associated with dengue vector breeding,
- To assess the influence of climatic factors on the temporal and spatial distribution of dengue vectors in Nepal,
- To assess the insecticide resistance of dengue vectors at different temperatures,
- To determine the origin of dengue vectors in Nepal (using DNA bar-coding approaches),
- To determine the climatic tolerance of dengue vectors from different altitudes in Nepal at different temperatures and relative air humidities,
- To identify the diversity of dengue vectors in Nepal using the molecular techniques,
- To evaluate the suitability and cost-effectiveness of different methods used for the sampling of dengue vectors for monitoring and evaluating the vector control programs of Government agencies, and
- To recommend appropriate strategies for controlling dengue vectors in the context of Nepal.

### **3.6.13 Infants Feeding Knowledge, Practices and Hindering Factors in Kathmandu Valley.**

**Status: Completed**

#### **Background & Introduction:**

Adequate nutrition is critical to child health and development. The period from birth to two years of age is particularly important because of the rapid growth and brain development that occurs during this time. The period is often marked by growth faltering, micronutrient deficiencies and common childhood illnesses, as children transition from exclusive breastfeeding to solid foods in addition to breast milk.

During this critical period of rapid growth and development, appropriate nutrition is essential because the effects of malnutrition at this age are often irreversible later in life. Insufficient nutrient intake, which results from suboptimal care and feeding practices and inadequate access to nutrient rich foods, as well as frequent infections, is the primary causes of malnutrition among children under two years of age.

Breastfeeding is an unequalled way of providing ideal food for the healthy growth and development of infants. It is also an integral part of the reproductive process with important implications for the health of mothers. Breast milk is the natural first food for babies. It provides all the energy and nutrients that the infant needs for the first months of life and it continues to provide up to half or more of a child's nutritional needs during the second half of the first year and up to one-third during the second year of life. Breast milk promotes sensory and cognitive development and protects the infant against infectious and chronic diseases. Exclusive breastfeeding reduces infant mortality due to common childhood illnesses such as diarrhoea or pneumonia and helps for a quicker recovery during illness. These effects can be measured in resource-poor and affluent societies.

Breastfeeding contributes to the health and well-being of mothers. It helps to space children, reduces the risk of ovarian cancer and breast cancer, and increases family and national resources. Breast feeding is a secure way of feeding and is safe for the environment. While breastfeeding is a natural act, it is also a learned behavior. An extensive body of research has demonstrated that mothers and other caregivers require active support for establishing and sustaining appropriate breastfeeding practices.

In addition to individual health benefits, breastfeeding provides significant social and economic benefits to the nation, including reduced health care costs and reduced employee absenteeism for care attributable to child illness. The significantly lower incidence of illness in the breastfed infant allows the parents more time for attention to siblings and other family duties and reduces parental absence from work and lost income. The direct economic benefits to the family are also significant.

Research in the United States, Canada, Europe, and other developed countries, among predominantly middle-class populations, provides strong evidence that human milk feeding decreases the incidence and severity of diarrhea, lower respiratory infection, Otitis Media, Bacteremia, Bacterial Meningitis, Botulism, Urinary Tract Infection, and Necrotizing Enterocolitis. There are a number of studies that show a possible protective effect of human milk feeding against sudden infant death syndrome, insulin-dependent diabetes mellitus, Crohn's disease, ulcerative colitis, lymphoma, allergic diseases and other chronic digestive diseases.

Global Strategy on Infant and Young Child Feeding 2002 (WHO and UNICEF) recommends exclusive breast feeding up to six months and complementary food for child should start from 6 months of age. WHO and UNICEF launched the **Baby-friendly Hospital Initiative** in 1992, to strengthen maternity practices to support breastfeeding.

*According to WHO, "Exclusive breastfeeding" is defined as no other food or drink, not even water, except breast milk (including milk expressed or from a wet nurse) for 6 months of life, but allows the infant to receive ORS, drops and syrups (vitamins, minerals and medicines).*

To reduce infant mortality and ill health, WHO recommends that mothers first provide breast milk to their infants within one hour of birth – referred to as “early initiation of breastfeeding”. This ensures that the infant receives the colostrum (“first milk”), which is rich in protective factors. Prelacteal feeding, giving liquids or foods other than breast milk prior to the establishment of regular breastfeeding, deprives the child of the valuable nutrients and protection of colostrums and exposes the newborn to the risk of infection.

Breastfeeding alone is not adequate to meet a child’s nutritional needs after the first six months of life. In the transition to eating the family diet, children from the age of about 6 months are fed small quantities of solid and semi-solid foods throughout the day. WHO recommends that infants start receiving complementary foods at six months (180 days) of age in addition to breast milk initially 2-3 times a day between 6-8 months, increasing to 3-4 times daily between 9-11 months and 12-24 months with additional nutritious snacks offered 1-2 times per day, as desired.

The transition from exclusive breastfeeding to full use of family foods is a very vulnerable period. It is the time when many infants become malnourished, contributing significantly to the high prevalence of malnutrition in children under five years of age worldwide. It is essential therefore that infants receive appropriate, adequate and safe complementary foods to ensure the right transition from the breastfeeding period to the full use of family foods. WHO estimates that 2 out of 5 children are stunted in low-income countries.

The belief that breast milk alone is nutritionally insufficient after 3 or 4 months, combined with the fact that complementary foods given in many developing countries are both nutritionally inadequate and contaminated, led to concern about the so-called “weanling’s dilemma”(the choice between the known protective effect of exclusive breastfeeding against infectious morbidity and the {theoretical} insufficiency of breast milk alone to satisfy the infant’s energy and micronutrient requirement). The weanling’s dilemma and the risk of mortality associated with early introduction of complementary foods are concerns primarily in developing countries.

The WHO and UNICEF developed The Global Strategy for Infant and Young Child Feeding in 2002 to revitalize world attention to the impact that feeding practices have on the nutritional status, growth, development, health, and survival of infants and young children. This strategy is based on the conclusions and recommendations of expert consultations, which resulted in the global public health recommendation to protect, promote and support exclusive breastfeeding for six months, and to provide safe and appropriate complementary foods with continued breastfeeding for up to two years of age or beyond. However, many children are not fed in the recommended way. Many mothers, who initiate breastfeeding satisfactorily, often start complementary feeds or stop breastfeeding within a few weeks of delivery. In addition, many children, even those who have grown well for the first six months of life, do not receive adequate complementary feeds. This may result in malnutrition, which is an increasing problem in many countries.

**General Objective:**

- To assess the knowledge, practices and hindering factors for proper feeding practices among mothers of under one year child of Kathmandu valley.

**Specific Objectives:**

- To assess the knowledge on breast feeding among mothers of under one year children,
- To assess the practices on breast feeding among mothers of under one year children,
- To find out the hindering factors for early initiation and exclusive breast feeding practices,
- To assess the knowledge on complementary feeding,
- To assess the practices on complementary feeding, and
- To find out the hindering factors on proper complementary feeding practices.

**Conclusion & Discussion:**

Proper infant and young child feeding is of fundamental importance for human survival, growth, development, health and nutrition. The period from birth to two years is often marked by growth faltering, micronutrient deficiencies, and common childhood illnesses such as diarrhea, as children transition from exclusive breastfeeding to solid foods in addition to breast milk. This study is carried out in 6 health institutions of Kathmandu, Lalitpur and Bhaktapur district of Kathmandu valley including 3 hospitals and 3 PHCCs (1 hospital and 1 PHCC from each district). This study is attempted to assess the knowledge and initiation practice of exclusive breast feeding and complementary feeding. The main purpose of this study is to find out the hindering factors of infant feeding practices.

The study indicated that 98.5 percent were still breastfeeding at the time of interview and this was nearly similar to the study carried out in Vhembe District of Limpopo Province of South Africa which indicated 97 percent were breastfeeding at that time.

A study conducted in Kolkata revealed that 52.73% mothers had correct knowledge about "age of weaning" but in our study it is higher showing positive response i.e. 78.2 percent had correct knowledge about initiation time of weaning.

Most of the mother in the study (67.6%) had initiated breastfeeding to their child up to 1 hour of child birth and 90.4 percent within 24 hours indicating positive result in our study which is higher than the report of Nepal Health Demographic survey 2006 i.e. 35.4 percent children were breastfed within one hour of birth and 85.5 percent within one day of birth. In the study 80.3 percent had right knowledge that breast milk should be fed up to 1 hour of childbirth but among them 74.6% had initiated breastfeeding up to 1 hour. The reasons behind all mothers not initiating up to 1 hour might be they had undergone cesarean and infection in breast.

The study in MCH clinic of TUTH revealed 70 percent respondent's response was that exclusive breast feeding is nutritious for baby and promotes optimum development of the baby. 96 percent respondents expressed that exclusive breast feeding is the best to baby's health whereas in our study 45.7 percent said exclusive breastfeeding increases immunity power of baby. Similarly, in the view of 32.2 percent and 21.2 percent the benefits of exclusive breastfeeding are nutritious and makes child healthy. Similarly, in the view of 32.2 percent and 21.2 percent the benefits of exclusive breastfeeding are nutritious and makes child healthy.

The study in Pokhara identified that colostrums was given as the first feed to (86.2%) babies whereas our study indicated 90.7 percent fed colostrums to their babies. The study revealed that the mean time of breastfeeding in daytime was 7.7 which is nearly similar to the result of NDHS 2006 i.e. mean number of daytime feeds is 8.

Regarding the practice of exclusive breastfeeding 51.3 percent children under 6 months were exclusively breastfed in our study. This result is slightly less than the NDHS 2006 in which exclusive breast feeding was 53 percent under 6 months' children. Similarly, exclusive breast feeding at 4 months and 6 months were 58.1 percent and 30.8 percent which is lower than the exclusive breastfeeding rates in East Asia and the Pacific i.e. 61% at 4 months and 35 percent at 6 months. The reason behind not practicing exclusive breast feeding up to 6 months indicated by our qualitative study was the mother's inability to produce enough breast milk. This was because mothers got special care and nutrition till 2 months after delivery. Then they are obliged to get back to their regular household chores, field works or other services. So they do not get the proper



rest and nutrition and can't produce enough breast milk and as a result child get deprived of breast milk and had to introduce other food. Another reason revealed by the study was perception of mother that the child gets thirsty in the sun when massaged in the sun so there was a practice of providing water at 1-2 months of delivery.

This study indicated that only 23.7 percent had right practiced in initiation of complementary food and more 43.5 percent had wrong practiced in its initiation among the respondents who had right knowledge about initiation time of complementary food. The reasons might be the same as why they could not practice exclusive breastfeeding for 6 months.

The 2006 NDHS data showed that mothers of children under 6 months of age with a higher level of education are less likely to exclusively breastfeed i.e. two in three children under 6 months whose mothers have a primary education are exclusively breastfed; only one in three children of mothers with SLC and higher level of education are exclusively breastfed. Nearly similar type of result was revealed in this study i.e. the highest proportion of exclusive breast feeding practice was found in children of mothers who are illiterate and informal education than children of literate mothers among who had right knowledge of exclusive breast feeding and child having  $\geq 6$  months.

Mothers who made antenatal clinic visits were at a higher risk for no exclusive breastfeeding than those who made no visits in the report of NDHS 2006 which is similar to the study i.e. women who had got ANC (21.3%) were less likely to practice exclusive breast feeding than women who had not ANC visit (40%) among mothers who had right knowledge of exclusive breast feeding and child having  $\geq 6$  months.

NDHS 2006 revealed that Cesarean deliveries were associated with delay in timely initiation of breastfeeding as same as our study i.e. women who had got cesarean (27.2%) were less likely to early breastfed after child birth in comparison to women who had not got cesarean (77.1%).

### **Recommendations:**

- Early initiation (within one hour) of breast feeding was found better then NDHS survey in the study area but who did not practice the breast feeding within one hour were the mother having caesarian delivery . So, further study should be done with caesarian delivery to identify where they can feed their child within hour or not.
- Almost the entire mother expelled the benefits of early initiation and exclusive breast feeding to child side but none of them expelled their benefits to mother side. So, there should be the proper health education about the benefits of early initiation and exclusive breast feeding to the mother.



- Health education about proper infants feeding should be delivered to mother in law and husband also because we found that most of the mother who discard colostrums and initiate complementary feeding before six month are due to family member's pressure.
- To promote exclusive breast feeding up to six month, should be focus on diet of lactating mother.

### **3.6.14 Developing Traditional Knowledge Digital Library (TKDL).**

**Status: Ongoing**

**Objective:**

Digitalization of ancient texts that are procured from National Archive.

**Rationale:**

In the context of Intellectual Property Rights in the WTO and TRIPS regime, every nation - especially signatory member countries of such international agreements and treaties - has already initiated to protect their codified and non-codified knowledge and relevant other resources in digitalized forms. Documentation of such knowledge is the fundamental stage of protection. Once documented in authorized agencies and assurance of intellectual rights by laws, such resources can be made accessible through internet establishing Traditional Knowledge Digital Library (TKDL) in various languages.

**Outcomes:**

- Protection from privacy and unethical practices by outsiders.
- Further study for further research in future.
- Pioneer project that can demonstrate digitalizing of ancient texts, extrempleraly work to other relevant organization.

**Impact:**

NHRC's initiation to digitalized ancient texts will encourage other relevant organization like National Achieve, National Academy of Science and Technology, Ministry of Science and Technology, various organizations of Ayurveda sectors, museums and others. NHRC might lead the activities in larger scale with collectives efforts of national and international organizations like World Intellectual Property Rights Organization.

### **3.6.15 Assessment of Burden of Disease in Nepal**

**Status: Ongoing (Data entry and Draft Report writing phase)**

**Objective:**

To estimate the burden of disease and injuries in terms of Disability Adjusted Life Years (DALY) among the population of Central Development Region of Nepal in the year 2009 (From 1/12/2006 to 1/12/2016).

### **3.6.16 A study on the Plasmodium vivax relapse pattern in Far western Region of Nepal.**

**Status: Ongoing**

The **objective** of the study is to assess the relapse rate of Plasmodium *vivax* malaria during six months follow-up period in two districts of Far Western region of Nepal. The study area consists of altogether six health institutions from Kailali and Kanchanpur districts where the maximum number of Plasmodium *vivax* cases were recorded last year. It is a Prospective longitudinal study that assesses the relapse rate of Plasmodium *vivax*.

Almost hundred blood samples which were identified with Plasmodium *vivax*, were collected from the six health institutions of Kailali and Kanchanpur and the samples were sent for laboratory diagnosis. The laboratory diagnosis and final report writing of the study is still in the process.

## **3.7 Supervision and Monitoring of Health Research Projects**

Every year team of NHRC supervises and monitors the approved and granted research projects. The main objective is to observe and evaluate research projects which consist of experts and member of Executive Board and Ethical Review Board to ensure that researchers maintain ethical standard of the research project and comply with methodology approved in the proposal submitted to NHRC.

*(For more information refer to Annex – VI)*

## **3.8 Strengthening NHRC Library**

NHRC library is functioning from the establishment of NHRC since 1991 with the purpose of providing research based health information. The main aim of the NHRC library is to provide the maximum level of health information to health professionals and researchers throughout the country. NHRC library has been continuously receiving support from Maryknoll Fathers and Brothers, USA. Due to the support from the funding agency the library has been able to expand its services in various health related research information including photocopy services, medline services and free access to internet. NHRC is trying to provide the research based information in all aspects of health related subjects available in the country. It provides materials from HINARI. It has network with other health related libraries and information centers based in

Kathmandu. It is also an active member of Health Literature Library Information System (HELLIS) Nepal which is a communication center and national focal point. Being associated with HELLIS Nepal, NHRC library has participated in developing the HELLIS Nepal web page.

### **3.9 Approved Health Research Proposals**

The total number of health research proposals approved by the NHRC Executive Board was eighty five. In order to facilitate the review of the research proposals submitted for an approval, NHRC charges the processing fees while approving such proposal.

*(For more information refer to Annex – VII)*

### **3.10 NHRC Representation in various National and International Programs**

NHRC represented in various national and international programs. NHRC Executive Board Members ethical review, board member and NHRC staffs participated in eighteen international and fifty-one national workshops, seminars, meetings, forums and summit.

*(For more information refer to Annex – VIII)*

### **3.11 NHRC MEETINGS**

#### **a) Executive Board Meetings**

During the fiscal year, NHRC organized a total of seven Executive Board Meetings.

*(For more information refer to Annex – IX)*

#### **b) Ethical Review Board Meeting**

During the fiscal year, NHRC organized a total of fourteen Ethical Review Board Meetings.

*(For more information refer to Annex - X)*

## **4. FUNDING PARTNERS OF NHRC**

In order to carry out the activities planned for the fiscal year. NHRC receive the fund from the Government of Nepal/Ministry of Health and Population. NHRC also receive

funds from the World Health Organization, Maryknoll Fathers and Brothers, UNFPA, UNICEF for research programs and trainings.

#### **4.1 Government of Nepal**

NHRC has been receiving a regular annual budget since the year 2000 from GoN. The date of the fiscal budget of the Government of Nepal starts from Shrawan (July) and ends at Ashad (July). NHRC has been able to perform various activities like research grants, trainings, workshops, monitoring and supervision of research studies and disseminate the research finding in the regional level.

#### **4.2 World Health Organization (WHO)**

World Health Organization has been providing technical support and funds to Nepal Health Research Council (NHRC) since its establishment for conducting various health related programs. WHO has supported NHRC mainly to conduct the programs under Health System Research Program and Environmental Health Programme.

#### **4.3 Maryknoll Fathers and Brothers (MFB)**

In January 2000, Maryknoll Fathers & Brothers (MFB) of Maryknoll Society, with Headquarter in Maryknoll, New York, United State of America, entered into a five-year agreement with Nepal Health Research Council (NHRC). MFB agreed to collaborate with NHRC in fulfilling its objectives as stated in the NHRC Act 1991 of Nepal Government.

MBF is a leading helpful hand in strengthening the NHRC Ethical Review Board and NHRC library: resources materials, networking equipment's, furniture etc, providing training workshop on the members of Ethical Review Board and Institutional Review Committees of Research Institutions, Networking meeting of Institutional Review Committee's meetings, Training to the Reviewer and Researchers (Training Researchers on writing in Biomedical Journals), and Exposure visit to the NHRC staffs, publication of NHRC journals. It is also helping for providing the research grant to facilitate research in the country and support Ethical Review Board (ERB) meetings of NHRC.

### **5. CONCLUSION AND RECOMMENDATION**

After receiving the funds from Government of Nepal and other donor organizations, NHRC was able to carry out various activities such as:

1. Providing research grants to the researchers,
2. Strengthening information system of NHRC library,
3. Supervision & monitoring of various kinds of health related research projects carried out in Nepal and visit Institutional Review Committee/Board,
4. Providing various trainings / workshops,
5. Purchasing various kinds of office items,
6. Conducting national and international meetings / workshops,
7. Publishing scientific journals, research reports and guidelines,
8. Capacity strengthening of NHRC staffs, and
9. Conducting different health research.

NHRC has made significant progress towards developing a health research system in the country, but still a lot of activities need to be continued with additional new ones. NHRC has accomplished a number of activities with national and international support. It has aimed is to expand its activities with more research, meetings, seminars, and conferences which is needed in the nation.

## 6. ANNEXES

### Annex – I: Status of Research Grants

#### I) Source of Fund: Maryknoll Fathers & Brothers

1. **Title:** Study of Population Density of *Culex Quinquefasciatus*, (Diptera: Culicidae), Vector of Filariasis in Bhaktapur District, Nepal  
**PI:** Ms. Reena Byanju
2. **Title:** Antenatal Care and Birth Preparedness Practices among Mothers in Mahottari District, Nepal  
**PI:** Dr. Rosy Sharma

#### II) Source of Fund: World Health Organization (WHO)

##### UG Grant

1. **Title:** Antiulcerogenic activity of Avipattikar Churna on Gastric and Duodenal Ulcers in Experimental Rats.  
**PI:** Mr. Shreekrishna Lamichhane
2. **Title:** Study on Practice of Storage and Handling of Medicines in Community Pharmacies in Pokhara, Nepal.  
**PI:** Mr. Prakash Khadka
3. **Title:** Study on Reproductive Health of Muslim Women in Muslim Community of Nepal.  
**PI:** Mr. Aarif Teli
4. **Title:** A Study on Hand Washing Practices Among the Health-Care Workers.  
**PI:** Ms. Aishana Joshi
5. **Title:** Impact of Educational Intervention on Knowledge and Practice of Safety Precaution of Cytotoxic Drugs Administration Among Nurses.  
**PI:** Ms. Sarala Pande
6. **Title:** Practice of Family Planning with Hoske-1, Kavre.  
**PI:** Ms. Sashikala Kafle
7. **Title:** Phytochemical Screening and Evaluation of Hair Growth Promoting Activity.  
**PI:** Mr. Bikash Adhikari
8. **Title:** In Vitro Evaluation and Price Variation Study of Different Brands of Metformin Tablets (500mg) Available in Pokhara Valley.  
**PI:** Mr. Rupesh Poudel

- 9. Title:** Assessment of Quality of Life of People Living with HIV and AIDS.  
**PI:** Ms. Sabina Timilsina
- 10. Title:** Human Resources for Health: Forecasting Demand and supply.  
**PI:** Mr. Kabindra Regmi
- 11. Title:** Upper Respiratory Tract Infection in Workers of Brick Kilns in Bhaktapur District.  
**PI:** Ms. Samita Kila
- 12. Title:** Knowledge and Practice about the Danger Signs of Acute Respiratory Infection Among Mothers Having Children Under 5 Years.  
**PI:** Ms. Bonika Thapa
- 13. Title:** Factors Associated with Road Traffic Accidents in Kathmandu Valley.  
**PI:** Ms. Neha Deo
- 14. Title:** Role of Men in Contraceptive Decision Making and Use in Slum Area of Sinamangal, Kathmandu.  
**PI:** Mr. Laxman K.C.
- 15. Title:** Knowledge and Practices of Menstrual Hygiene Among Adolescent Girls in Kathmandu Valley.  
**PI:** Mr. Ashok Pandey
- 16. Title:** Knowledge and Practice of Rickshaw and Thela Pullers on Tuberculosis in Jaleshwor Municipality.  
**PI:** Mr. Saurabh Kishor Shah
- 17. Title:** A Study on the risk Factors of Ano-Rectal Diseases of Nepali Patients Receiving Treatment in TU, IOM, Ayurveda Teaching Hospital, Kirtipur.  
**PI:** Mr. Shiva Ram Khatiwoda
- 18. Title:** Knowledge, Attitude and Practice on HIV/AIDS: A Case Study of Spouses of Labor Migrants to India in VDC's of Mahendranagar.  
**PI:** Ms. Ranjana Chataut
- 19. Title:** Attitude and Practice of Solar Water Disinfection Technique Used for Safe Drinking Water Practice Among the Urban Slum of Gairegaun, Tinkune, Kathmandu, Nepal.  
**PI:** Mr. Amit Mishra
- 20. Title:** A Study on Knowledge and Attitude Regarding Prevention of HIV/AIDS Among Female Sex Workers (FSWs) of Kathmandu Valley.  
**PI:** Mr. Niraj Kumar Sah

### **PG Grant**

- 1. Title:** A Study of Factors Associated with Delays in Diagnosis and Treatment Among Tuberculosis Patients in Sunsari District, Nepal.  
**PI:** Mr. Manish Chaudhari

2. **Title:** Experiences of Work Place Violence Among Nursing Personnel.  
**PI:** Ms. Durga Laxmi Shrestha
3. **Title:** Effect of Educational Intervention on Knowledge Regarding Emergency Contraception Among 10+2 Girl Students.  
**PI:** Mrs. Devi Kumari Sapkota
4. **Title:** Impact of Educational intervention on Knowledge of Hypertensive Clients Regarding Complications of Hypertension.  
**PI:** Ms. Mathura Sapkota
5. **Title:** Impact of Educational Intervention on Awareness Regarding Girl Trafficking Among Adolescents.  
**PI:** Ms. Bandana Thapa
6. **Title:** Factors Associated with Early Discontinuation of Intrauterine Device – A Nested Case Control Study.  
**PI:** Mr. Subash Thapa
7. **Title:** Knowledge of Female Sex Workers on HIV/AIDS in Kathmandu Valley.  
**PI:** Mr. Ishwor Koirala
8. **Title:** Factors Affecting Health Seeking Behavior Among Mothers of Sick Children.  
**PI:** Ms. Purna Devi Shrestha
9. **Title:** Depression and Anxiety Among Adolescent Students at Higher Secondary School.  
**PI:** Ms. Menuka Bhandari
10. **Title:** Prostate Cancer Screening in Population of Eastern Nepal: A Field Study.  
**PI:** Dr. Narayan Prasad Belbase
11. **Title:** Impact of Educational Intervention on Awareness Regarding Breast Cancer among Non-health Female Staffs of IOM.  
**PI:** Ms. Roshani Gautam
12. **Title:** Perception of Quality Nursing Care Among Nurses and Patients.  
**PI:** Ms. Bedantakala Thulung
13. **Title:** A Study on Change in KAP on Infant and Young Child Feeding Practices of Under Two Years Children After Implementation of Baal Vita Program (Sprinkles) in Raksirang VDC of Makwanpur District.  
**PI:** Mr. Kamal Prasad Kandel
14. **Title:** Air Pollutants and Its Health Impact in School Children of Kathmandu Valley.  
**PI:** Ashish Adhikari
15. **Title:** Social Factors Affecting the Utilization of Maternal Health Care Services Among the Dalit Women of Suryapura VDC of Rupandehi District.



- PI:** Ms. Srijana Pathak  
**16. Title:** Socio-Cultural Attitude Towards HIV/AIDS: A Contemporary Situation Analysis of People Living with HIV and AIDS in Gorkha District.
- PI:** Mr. Amir Banjara  
**17. Title:** Girls Trafficking in Sindhupalchowk District.
- PI:** Ms. Sunita Subedi  
**18. Title:** Status of Tobacco consumption Among Selected 3 Private Schools of Kathmandu District.
- PI:** Ms. Sunita Ghimire  
**19. Title:** Dietary Pattern in Women of Reproductive Age and Relation to health in a Selected VDC of Kathmandu District.
- PI:** Dr. Gita K.C.  
**20. Title:** Status of Depression and Anxiety Among Paralysis Patients in Selected Hospitals of Kathmandu Valley.
- PI:** Dr. Omprakash Khaniya.

## **Annex - II: Status of Training Workshops**

1. Dr. Shanker Pratap Singh, Member-Secretary and Dr. Laxmi Raj Pathak, Member, Ethical Review Board of NHRC, Mr. Joseph L. Thaler, Research Collaborator, Maryknoll Fathers and Brothers, Prof. Dr. Ramesh Kant Adhikari, Coordinator, Ethical Review Board of NHRC, Mrs. Shailee Singh Rathor, Project Coordinator, Maryknoll Fathers and Brothers Project, Mr. Gopal Krishna Prajapati, Program Officer, South Asia Forum for Health Research (SAFHeR) and Mr. Bir Bahadur Ghising, Driver, NHRC to conduct Ethical Reviewers Workshop at College of Medical Sciences from 17-19 March 2011, Bharatpur, Chitwan, Nepal.
2. Prof. Dr. Chop Lal Bhusal, Executive Chairman, Mr. Joseph L. Thaler, Research Collaborator, Maryknoll Fathers and Brothers, Prof. Dr. Ramesh Kant Adhikari, Coordinator, Ethical Review Board, Mrs. Shailee Singh Rathor, Project Coordinator, Maryknoll Fathers and Brothers Project and Mr. Gopal Krishna Prajapati, Program Officer, South Asia Forum for Health Research (SAFHeR), NHRC to conduct "Workshop on Role of the Institutional Review Committee in Promoting Ethical Health Research from 6-7 May 2011, Nepalgunj, Banke, Nepal.
3. Dr. Krishna Kumar Aryal, Senior Research Officer, Mr. Bipin Dangol, Dr. Gajanand Prakash Bhandari and Prof. Dinesh Binod Pokharel to conduct the Training Workshop on Detection Management & surveillance of Arsenicosis Cases in Nepal from 29-2-2068 to 1-3-2068 and in the same program Dr. Shanker Pratap Singh, Member-Secretary, Assistant Research Officers, Mr. Bikram Dhimal, Mr.

Hari Datt Joshi and Mr. Pukalal Ghising, Accountant, NHRC visited the same places from 28-2-2068 to 1-3-2068, Birgunj, Parsa, Nepal.

4. One day Consultative Meeting entitled "Letter of Intent on Grants Programme for Implementation Research on MDG 4, 5 & 6" on 29 July 2010, NHRC Training Hall, Ramshah Path, Kathmandu, Nepal.
5. Training Workshop on Advanced Health Systems Research Methodology from 01-15 August 2010, NHRC Training Hall, Ramshah Path, Kathmandu, Nepal.
6. One day Health Research Libraries Workshop on 06 September 2010 (21 Bhadra 2067), Hotel Himalaya, Kupondole, Lalitpur, nepal.
7. One day Preparatory Meeting on Regional Meeting of South Asia Forum for Health Research (SAFHeR) on 27 August 2010 (11 Bhadra 2067), Wunjala Moskva Pvt. Ltd., Naxal, Kathmandu, Nepal.
8. Two days Regional Meeting of South Asia Forum for Health Research (SAFHeR) on 28 – 29 August 2010 (12 – 13 Bhadra 2067), Hotel Yak & Yeti, Durbar Marg, Kathmandu, Nepal.
9. One day meeting on the Revision and Dissemination of National Health Research Policy on 08 September 2010 (23 Bhadra 2067), Hotel Greenwitch, Lalitpur, Nepal.
10. One day meeting of Indexed Program of Journal of NHRC on 01 November 2010 (15 Kartik 2067), Hotel Shanker, Lazimpat, Kathmandu, Nepal.
11. Training Workshop on Health Systems Research Proposal Development on 27 October 2010 to 01 November 2010 (10-15 Kartik 2067), NHRC Training Hall, Ramshah Path, Kathmandu, Nepal.
12. Training Workshop on Scientific Publication on 21-23 January 2011, Hotel Himalaya, Kupondole, Lalitpur, Nepal.

13. Training Workshop on Health Systems Research Proposal Development on 20-25 February 2011 (08-13 Falgun 2067), NHRC Training Hall, Ramshah Path, Kathmandu, Nepal.
14. Workshop on Role of Institutional Review Committee in Promoting Ethical Health Research from 06 – 07 May 2011 (23 – 24 Baisakh 2068), Nepalgunj Medical College, Kohalpur, Banke, Nepal.
15. Capacity Building Workshop on Data Management and Research Methodology from 20-25 June 2011 (6-11 Ashadh 2068), NHRC Training Hall, Ramshah Path, Kathmandu, Nepal.

### **Annex – III: Dissemination Programs**

Nepal Health Research Council organized four dissemination programs in **Development Regions, Central, Eastern, Western and Mid & Far-Western Regions** with the aim of disseminating the research findings to be done in the study area to inform to the policy makers and people of that area.

The objectives of the dissemination were:

- To disseminate the findings of research, and
- To explore the areas for utilization of research findings.

**1) Western regional dissemination workshop on health research findings**

➤ Date: 03 Poush 2067

**2) Mid & Far-Western regional dissemination workshop on research finding**

➤ Date: 14 Poush 2067

**3) Eastern development regional dissemination workshop on research findings**

➤ Date: 24 Poush 2067

**4) Central development regional dissemination workshop on research findings**

➤ Date: 07 Chaitra 2067

## **Annex – IV: Capacity Strengthening**

- 1) To Participate in the Harvard Course on "Strengthening Human Resources for Health", 07 – 22 August 2010, Boston, USA. (Prof. Dr. Chop Lal Bhusal)
- 2) To participate in the International Training Course on Environmental Health Impact Assessment (EHIA), 19 September – 03 October 2010, Bangkok, Thailand. (Mr. Meghnath Dhimal)

## **Annex – V: Status of Publications**

- 1) Final Reports of the Research Activities conducted by Nepal Health Research Council (NHRC).
- 2) 1 (One) Peer Reviewed and 1 (One) Indexed Journal of Nepal Health Research Council (NHRC).
- 3) Proceeding Reports of different Training & Dissemination Workshops.
- 4) Research Report on Environmental Health Research Activities.

## **Annex – VI: Status of Health Research Projects Monitored and Supervised**

The team of NHRC consists of Board member, Ethical Review Board member and experts from different fields supervises and monitored the approved research projects.

The objectives of the visit is to supervise and collect the information to determine whether the key activities are being carried out as it is mentioned in the research proposal submitted to NHRC maintaining the ethical standard. The major purpose of monitoring is to provide information about the progress, changes and discomfort occurs during the implementation phases.

- 1) **Research Title:** Safety and Efficacy of Liposomal Amphotericin B in Nepalese Patients with Visceral Leishmaniasis.  
**PI:** Prof. Dr. Suman Rijal  
**Inspection site:** BPKIHS, Dharan, Sunsari  
**Date of Supervision:** 23 – 24 Poush 2067  
**Monitoring and Supervision Team:**
  1. Dr. Laxmi Raj Pathak
  2. Dr. Shanker Pratap Singh
  3. Dr. Ajit Raymajhi

4. Mr. Meghnath Dhimal
5. Mr. Bijay Kumar Jha
6. Mr. Pukalal Ghising

**2) Research Title:** Effectiveness of Smoking Cessation Advice among Tuberculosis Patients in Eastern Nepal

**PI:** Dr. Ian Campbell

**Inspection site:** Morang & Sunsari

**Date of Supervision:** 25 – 27 Poush 2067

**Monitoring and Supervision team:**

1. Mr. Meghnath Dhimal

**3) Research Title:** Burden of Disease in Nepal

**PI:** NHRC

**Inspection site:** Kavrepalanchowk

**Date of Supervision:** 01 – 02 Chaitra 2067

**Monitoring and Supervision team:**

1. Prof. Dr. Chop Lal Bhusal
2. Dr. Shanker Pratap Singh
3. Mr. Bijay Kumar Jha
4. Mr. Bir Bahadur Ghising

## **Annex – VII: Status of Approved Health Research Proposals**

- 1. Title:** Overview and Analysis of provision of standard of Old age Home and elderly people in Nepal.
- PI:** Mr. Surya Prasad Tiwari
- Institution:** University of Aberdeen, Department of Public Health
- Approved Amount:** USD 1,500.00
- Funding Agency:** Self-Funded
  
- 2. Title:** Motion Sensitivity in children and adult of Kathmandu Valley.
- PI:** Mr. Mahesh Raj Joshi
- Institution:** Department of Optometry and Visual Science, Buskerud University College
- Funding Agency:** Hogskolen Buskerud, Department of Optometry and Visual Science
- Approved Amount:** US \$ 850.00

- 3. Title:** Structural factors associated with an increased risk of HIV infection among men who have sex with men in Nepal.
- PI:** Mr. Keshab Deuba
- Institution:** Netherland Development Organization
- Funding Agency:** SIRF Mathias Moyerson Research Apprenticeship
- Approved Amount:** US \$ 2,777.00
- 4. Title:** Micronutrients intake and their relation to disease progression and morbidity among people living with HIV/AIDS in the Kathmandu Valley, Nepal.
- PI:** Dr. Krishna Chandra Poudel
- Institution:** University of Tokyo
- Funding Agency:** The Ministry of Education, Culture, Sports, Science and Technology, Japan
- Approved Amount:** US \$ 9,583.00
- 5. Title:** Retention in care, ART adherence and health status of HIV-positive patients attending NGO clinic in Kathmandu, Nepal.
- PI:** Dr. Krishna Chandra Poudel
- Institution:** The University of Tokyo
- Funding Agency:** The University of Tokyo
- Approved Amount:** US \$ 1,800.00
- 6. Title:** Bio equivalence study of control release (CR) Sodium Valproate Tablet in Healthy Human Volunteers
- PI:** Prof. Dr. Panna Thapa
- Institution:** Kathmandu University
- Funding Agency:** Nepal Pharmaceutical Laboratories (NPL) Pvt. Ltd
- Approved Amount:** US \$ 5,741.00
- 7. Title:** A study on the socio-demographic and behavioral factors associated with injecting drug use or HIV infection among female drug users in Kathmandu Valley, Nepal.
- PI:** Mrs. Bhagbati Pandey Ghimire
- Institution:** Kyoto University, School of Public Health, Japan
- Funding Agency:** Self-Funded
- Approved Amount:** N/A
- 8. Title:** Impact of maternal nutrition on low birth weight in Nepal.
- PI:** Dr. Ojaswi Acharya

- Institution:** University of Greenwich  
**Funding Agency:** Self-Funded  
**Approved Amount:** US \$ 2,200.00
- 9. Title:** Prevalence and Correlates of major depression and anxiety disorders among patients with alcohol use disorders in Nepal.  
**PI:** Dr. Sunder Prasad Neupane  
**Institution:** University of Oslo  
**Funding Agency:** University of Oslo  
**Approved Amount:** US \$ 20,000.00
- 10. Title:** Micronutrient Supplementation for Children in Food Insecure Districts- Endline Survey.  
**PI:** Ms. Nira Joshi  
**Institution:** New Era  
**Funding Agency:** UN-World Food Programme (WFP)  
**Approved Amount:** US \$ 76,272.00
- 11. Title:** Further psychometric testing of the participation scale in people with disabling conditions in the east of Nepal.  
**PI:** Mr. Nandalal Bastola  
**Institution:** Netherland Leprosy Relief (NLR), Biratnagar  
**Funding Agency:** Self-Funded  
**Approved Amount:** US \$ 1,000.00
- 12. Title:** Utilization pattern and controlling system of antibiotic in tertiary care hospital in Nepal.  
**PI:** Mr. Kadir Alam  
**Institution:** Manipal College of Medical Sciences, Pokhara  
**Funding Agency:** Self-Funded  
**Approved Amount:** N/A
- 13. Title:** Molecular epidemiology of HIV-1 in Nepal: Central Region.  
**PI:** Dr. Ruengpung Sutthent  
**Co-PI:** Dr. Nirajan Bhusal  
**Institution:** Mahidol University, Thailand  
**Funding Agency:** Mahidol University, Thailand  
**Approved Amount:** US \$ 2,000.00

- 14. Title:** Does Intravenous administration of paracetamol reduces morphine consumption in post-operative pain relief after LSCS?
- PI:** Dr. Shreya Thapa
- Institution:** Self
- Funding Agency:** Self-Funded
- Approved Amount:** N/A
- 15. Title:** Assessment of perceived unmet needs and related factors with HESPER Scale in humanitarian emergency settings.
- PI:** Mr. Nagendra Prasad Luitel
- Institution:** Transcultural Psychosocial Organization (TPO Nepal)
- Funding Agency:** WHO, Geneva
- Approved Amount:** US \$ 9,500.00
- 16. Title:** A School-based randomized controlled trial (RCT) of peer-led sexual health education in Nepal.
- PI:** Mr. Dev Raj Acharya
- Institution:** Aberystwyth University, School of Education and Lifelong Learning, Old College, Aberystwyth Walws, UK
- Funding Agency:** Aberystwyth International Postgraduate Research Studentship (AIPRS) and Trott Bequest Fund
- Approved Amount:** GBP 500/Year (3 year study)
- 17. Title:** Molecular characterization of dengue viral strains from Nepal and development of a dengue recombinant protein with diagnostic potential.
- PI:** Mr. Shyam Prakash Dumre
- Institution:** Thammasat University, Thailand
- Funding Agency:** TDR/WHO
- Approved Amount:** US \$ 15,000.00
- 18. Title:** Effectiveness of smoking cessation advice among tuberculosis patients in the eastern Nepal.
- PI:** Dr. Ian Campbell
- Co-PI:** Dr. Ghanshyam Kumar Bhatta
- Institution:** The Britain Nepal Medical Trust (BNMT) Head Office, Lazimpat
- Funding Agency:** The Britain Nepal Medical Trust (BNMT)
- Approved Amount:** US \$ 1,855.00



- 19. Title:** Field Trial of Maternal Influenza Immunization in Nepal: Mother's Gift-Nepal Field Trial.
- PI:** Dr. Laxman Shrestha
- Institution:** Department of Pediatrics, IOM TU Teaching Hospital
- Funding Agency:** Cincinnati Children's Medical Center
- Approved Amount:** US \$ 99,500.00
- 20. Title:** The Economic Burden of HIV/AIDS upon Households in Nepal.
- PI:** Mr. Ak Narayan Poudel
- Institution:** University of Aberdeen, UK
- Funding Agency:** Self-Funded
- Approved Amount:** N/A
- 21. Title:** Assessing provision of medical abortion at the primary level by Auxiliary Nurse Midwives Trained as Skill Birth Attendants in Nepal: An Implementation Research.
- PI:** Dr. Naresh Pratap K.C.
- Institution:** Family Health Division, DoHS, Teku, Kathmandu
- Funding Agency:** IPAS/Nepal
- Approved Amount:** US \$ 10,000.00
- 22. Title:** The impact of husbands attendance at child birth on birth outcomes, and maternal emotional well-being at four to six week Postpartum in Nepal.
- PI:** Ms. Sabitri Sapkota (Devkota)
- Institution:** Hiroshima University, Japan
- Funding Agency:** Self-Funded
- Approved Amount:** N/A
- 23. Title:** Molecular epidemiology of Mycobacterium Leprae in Nepal: Strain typing and molecular drug resistance testing.
- PI:** Dr. Deanna A. Hagge
- Co-PI:** Mr. Chhatra Bahadur Kunwar
- Institution:** Anandaban Leprosy Hospital, PO Box 151, Kathmandu, Nepal
- Funding Agency:** Leprosy Mission Nepal
- Approved Amount:** US \$ 10,000.00
- 24. Title:** Nepal Demographic and Health Survey, 2011.
- PI:** Ms. Anjushree Pradhan
- Institution:** New Era/Nepal

- Funding Agency:** USAID/ICF Macro  
**Approved Amount:** US \$ 595,047.00
- 25. Title:** Integrated biological and behavioral surveillance surveys among Female sex workers and Injecting drug users in Kathmandu and Pokhara Valley.
- PI:** Dr. Krishna Kumar Rai  
**Institution:** National Center for AIDS and STD Control, MOHP, Teku, KTM  
**Funding Agency:** ASHA Project managed by FHI/Nepal and funded by USAID/Nepal  
**Approved Amount:** US \$ 123,401.00
- 26. Title:** Effects of international male migration on left behind (spouse and elderly parents) in Chitwan district of Nepal: A mixed methods study.
- PI:** Mr. Yagya Murti Bhurtyal  
**Institution:** University of Aberdeen, UK  
**Funding Agency:** Self-Funded  
**Approved Amount:** N/A
- 27. Title:** Baseline survey in Duwakot and Jhaukhel VDCs of Bhaktapur district to establish Health and Demographic surveillance site.
- PI:** Dr. Abhinav Vaidya  
**Institution:** Kathmandu Medical College  
**Funding Agency:** Nordic School of Public Health  
**Approved Amount:** US \$ 9,369.00
- 28. Title:** The scale, impact and prevention of unintentional child injuries in Makwanpur district of Nepal.
- PI:** Mr. Pushpa Raj Pant  
**Institution:** University of the West of England, UK  
**Funding Agency:** WHO, Department of Violence and Injury prevention and disability, Geneva  
**Approved Amount:** US \$ 13,590.00
- 29. Title:** Enhancing quality in Global Health Delivery: Piloting a mortality and morbidity conference in rural Nepal.
- PI:** Dr. Bikash Gauchan  
**Institution:** Nyaya Health/Bayalpata Hospital, Badelgada, Achham, Nepal  
**Funding Agency:** Nyaya Health  
**Approved Amount:** US \$ 5,250.00

- 30. Title:** Diagnostic approaches in the clinical management of snake bite envenoming in rural Nepal.
- PI:** Prof. Dr. Sanjeeb Kumar Sharma
- Institution:** Department of Internal Medicine, BPKIHS, Dharan, Nepal
- Funding Agency:** The UBS Optimus Foundation
- Approved Amount:** US \$ 31,000.00
- 31. Title:** Health status of and risks to Nepalese male migrant workers in the Middle East and Malaysia.
- PI:** Mr. Pratik Adhikary
- Institution:** Bournemouth University, School of Health and Social Care, UK
- Funding Agency:** Self-Funded
- Approved Amount:** N/A
- 32. Title:** Baseline study in Bangladesh, India and Nepal enhancing mobile populations' access to HIV/AIDS services information and support (EMPHASIS).
- PI:** Ms. Ranjana Saradhi
- Co-PI:** Ms. Sanju Bhattarai
- Institution:** ACNielsen ORG-MARG Pvt. Ltd. 3rd Floor, Bharat Yuvak Bhawan, 1, Jaisingh Road, New Delhi- 110001
- Funding Agency:** EMPHASIS Project- CARE International/Nepal
- Approved Amount:** NRs. 1,888,719.00
- 33. Title:** Determining effective community-based communication and referral systems for increasing medical abortion access among rural women in Nepal.
- PI:** Dr. Mahesh Chandra Puri
- Institution:** CREHPA, Lalitpur
- Funding Agency:** WHO, Geneva
- Approved Amount:** US \$ 87,929.00
- 34. Title:** Engaging private pharmacists and chemists to promote safe use of medical abortion pills by women in Nepal.
- PI:** Mr. Ananda Kumar Tamang
- Institution:** CREHPA, Lalitpur
- Funding Agency:** WHO, Geneva
- Approved Amount:** US \$ 80,947.00

- 35. Title:** Modeling the transmission of HIV and program responses in Kathmandu, Nepal: the interpretation and use of HIV and STI behavioral and biological surveillance data.
- PI:** Mr. Anthony Dee Bondurant
- Co-PI:** Dr. Laxmi Bilas Acharya
- Institution:** Royal Residence Park Apartments, 9 Wireless Road, # 604 Lumpini, Pathumwan , Bangkok, 10330 Thailand
- Funding Agency:** Self-Funded
- Approved Amount:** N/A
- 36. Title:** Use of contraceptive and its continuation among women seeking safe abortion services in Nepal.
- PI:** Dr. Mahesh Chandra Puri
- Institution:** CREHPA, Lalitpur
- Funding Agency:** Society of Family Planning making a contribution to the University of California, San Fransisco
- Approved Amount:** US \$ 38,950.00
- 37. Title:** A pilot study for children and pregnant women's thyroid stimulating hormone (TSH) test for screening Iodine Deficiency Disorder (IDD) in Sindhupalchowk and Myagdi districts.
- PI:** Prof. Chitra Kumar Gurung
- Institution:** Public Health and Infectious Disease Research Center (PHIDReC), New Baneshwor, Kathmandu
- Funding Agency:** Society for eliminating Nepalese Iodine Deficiency (SENID), Osaka, Japan
- Approved Amount:** US \$ 1,500.00
- 38. Title:** A pilot study to identify the major high risk HPV types present in Cancer cervix (Ca Cx) cases in patients visiting two tertiary hospitals in Kathmandu.
- PI:** Prof. Dr. Chop Lal bhusal
- Institution:** Nepal Health Research Council (NHRC)
- Funding Agency:** Nepal Health Research Council (NHRC)
- Approved Amount:** NRs. 763,560.00
- 39. Title:** Biomedical and health experimentation in South Asia: Critical perspectives on collaboration, governance and competition.
- PI:** Dr. Ian Harper

- Co-PI:** Dr. Jeevan Sharma  
**Institution:** University of Edinburgh, School of Social and Political studies, George Square, Edinburgh, Scotland  
**Funding Agency:** Economic Social Research Council (ESRC) and DFID  
**Approved Amount:** US \$ 26,295.00
- 40. Title:** The use of continuous positive airway pressure (CPAP) during sleep at 4200 m for the prevention of sleeping oxyhemoglobin desaturation and the development of acute mountain sickness.  
**PI:** Dr. Pamela Lesley Johnson  
**Co-PI:** Dr. Buddha Basnyat  
**Institution:** University of Sydney, Department of Medicine, Australia  
**Funding Agency:** Self-Funded  
**Approved Amount:** US \$ 4,500.00
- 41. Title:** Rapid assessment of community knowledge and attitudes related to Typhoid fever and participation in the VIVA vaccination program in Kathmandu Valley, Nepal.  
**PI:** Mr. Deepak Chandra Bajracharya  
**Institution:** Mitra Samaj, Sanepa, Lalitpur, Nepal  
**Funding Agency:** International Vaccine Institute  
**Approved Amount:** US \$ 6,543.00
- 42. Title:** A hospital based retrospective study of snakebite epidemiology in Terai and inner-terai of Nepal.  
**PI:** Mr. Deb Prasad Pandey  
**Institution:** Department of Zoology, Birendra M. Campus, TU, Bharatpur, Chitwan  
**Funding Agency:** Global snakebite initiative (GSI), Melbourne, Australia  
**Approved Amount:** US \$ 2,000.00
- 43. Title:** FHI Nepal CHBC Program Assessment.  
**PI:** Ms. Dale Davis  
**Co-PI:** Dr. Laxmi Bilas Acharya  
**Institution:** Family Health International/Nepal  
**Funding Agency:** FHI/Nepal  
**Approved Amount:** US \$ 22,259.00
- 44. Title:** Health impact from particulate matter, Kathmandu Valley, Nepal.

- PI:** Ms. Anobha Gurung  
**Institution:** Yale University, School of Forestry and Environmental Studies  
**Funding Agency:** The Yale Institute of Biospheric Studies  
**Approved Amount:** US \$ 4,750.00
- 45. Title:** Knowledge, attitude and practice regarding safe motherhood among married women of reproductive age in Kavrepalanchok district of Nepal.
- PI:** Ms. Saraswoti Kumari Shrestha  
**Institution:** Bangladesh Institute of Health Sciences, University of Dhaka  
**Funding Agency:** Bangladesh Institute of Health Sciences, University of Dhaka  
**Approved Amount:** US \$ 1,428.57
- 46. Title:** Understanding and overcoming barriers to scaling Skilled Birth Attendants utilization in improving maternal, newborn and child health in Nepal.
- PI:** Dr. Mahesh Kumar Maskey  
**Institution:** Nepal Public Health Foundation  
**Funding Agency:** WHO, Geneva  
**Approved Amount:** US \$ 459,280.00
- 47. Title:** Research on climate change vulnerability assessment of public health and health care systems in Kathmandu, Nepal.
- PI:** Dr. Gajananda Prakash Bhandari  
**Institution:** Nepal Public Health Foundation, 1085, Thirbam Malla Road, Maharajgunj, Kathmandu-3, Nepal  
**Funding Agency:** WHO, Kobe Centre, Japan  
**Approved Amount:** US\$ 9,600.00
- 48. Title:** Investigation of genetic selection for physiological advantage to hypobaric hypoxia amongst stable populations residing permanently at high-altitude in Nepal.
- PI:** Prof. Hugh Edward Montgomery  
**Co-PI:** Dr. Dhana Raj Aryal  
**Institution:** UCL Institute for Human Health and Performance; University College London, 4th floor, Rockefeller Building, 21 University Street, London, WC1E 6JJ, UK  
**Funding Agency:** University College London and collaborators personal contributions  
**Approved Amount:** US\$ 5,000.00

- 48. Title:** Detection of mutations (185delAG and R1443X) in the breast cancer susceptibility gene BRCA1 by PCR-mediated site-directed mutagenesis in Nepali Breast Cancer patients.
- PI:** Ms. Pabita Basnet
- Institution:** School of Biotechnology, Whitehouse Institute of Science and Technology, Knowledge Village, Khumaltar height, Lalitpur, Nepal
- Funding Agency:** School of Biotechnology, Whitehouse Institute of Science and Technology
- Approved Amount:** NRs. 89,100.00
- 49. Title:** Perception, experience and health outcome of the women who had gone through Uterine Prolapse (UP) Surgery in Doti.
- PI:** Dr. Naresh Pratap K.C
- Institution:** Family Health Division, Department of Health Services, Teku, Kathmandu
- Funding Agency:** WHO Country Office, Nepal
- Approved Amount:** US\$ 9,900.00
- 50. Title:** Multivitamin and mineral supplementation in women of childbearing age and assessment of perinatal outcome in Nepal.
- PI:** Ms. Jamuna Tamrakar Sayami
- Institution:** TU Teaching Hospital, Maharajgunj
- Funding Agency:** Global Nutrition Empowerment (GNE), USA
- Approved Amount:** NRs.3,856,480.00
- 52. Title:** Measuring the management/Leadership Training needs of rural-based Hospital managers in Nepal.
- PI:** Mr. Ian Chadwell
- Co-PI:** Mr. Raju Bhitrakoti
- Institution:** Nick Simons Institute; PO BOX 8975; EPC 1813, Kathmandu, Nepal
- Funding Agency:** Nick Simons Institute
- Approved Amount:** US\$ 4,000.00
- 53. Title:** Primary and Secondary prevention of uterine prolapse in Nepal.
- PI:** Ms. Ranjita Rajwar

<b>Institution:</b>	University of Southern Denmark Campus Esbjerg Denmark; Public Health Faculty Niels Bohrs Vej 9-10 DK- 6700, Esbjerg Denmark
<b>Funding Agency:</b>	Self-Funded
<b>Approved Amount:</b>	US\$ 4,000.00
<b>54. Title:</b>	Factors affecting the utilization of skilled birth attendants for delivery in Kaski district of Nepal.
<b>PI:</b>	Mr. Yuba Raj Baral
<b>Institution:</b>	London Metropolitan University, Department of Applied Social Sciences, 62-66 Highbury Grove, London, N52AD
<b>Funding Agency:</b>	Self-Funded
<b>Approved Amount:</b>	N/A
<b>55. Title:</b>	Knowledge, attitude and preventive measures amongst married women of reproductive age towards uterine prolapse in the 8 VDC of Surkhet district of Nepal.
<b>PI:</b>	Ms. Ashma Baruwal
<b>Institution:</b>	College of Public Health Sciences, Chulalongkorn University, Institute building 3 (10th-11th floor), soi Chulalongkorn 62, Phyathai road, Bangkok 10330
<b>Funding Agency:</b>	Self-Funded
<b>Approved Amount:</b>	N/A
<b>56. Title:</b>	An evaluative study of quality and utilization of services and maternal and neonatal health (MNH) related knowledge and care seeking behavior in the intensive intervention area, versus in CB-NCP only implementation areas.
<b>PI:</b>	Prof. Dr. D.S. Manandhar
<b>Institution:</b>	Mother and Infant Research Activities (MIRA), 1st floor, YB Bhavan, GPO Box 921, Thapathali, Kathmandu
<b>Funding Agency:</b>	Health Right International
<b>Approved Amount:</b>	US\$ 43,917.00
<b>57. Title:</b>	Health related quality of life after vaginal hysterectomy with pelvic floor repair for uterine prolapse in Nepalese women.
<b>PI:</b>	Dr. Rolina Dhital
<b>Institution:</b>	Department of Community and Global Health, Graduate School of medicine, The University of Tokyo, 7-3-1 Hongo, Bunkyo-Ku, Tokyo, 113-0033, Japan



<b>Funding Agency:</b>	Department of Community and Global Health, Graduate School of medicine, The University of Tokyo, 7-3-1 Hongo, Bunkyo-Ku, Tokyo, 113-0033, Japan
<b>Approved Amount:</b>	US\$ 2,500.00
<b>58. Title:</b>	Impact of community-and home-based interventions for improved newborn care practices in Nepal.
<b>PI:</b>	Mr. Deepak Paudel
<b>Institution:</b>	Center for International Health; Ludwig-Maximilian's University, Munich, Germany
<b>Funding Agency:</b>	Self-Funded
<b>Approved Amount:</b>	N/A
<b>59. Title:</b>	A randomized, double-blind, clinical trial of two dose regimens of VINS polyvalent antivenom (ATCJO6AAO3) for the treatment of snake bites with neurotoxic envenoming in Nepal.
<b>PI:</b>	Prof. Dr. Sanjeeb Kumar Sharma
<b>Institution:</b>	Department of Internal Medicine, BPKIHS, Dharan, Nepal
<b>Funding Agency:</b>	Swiss National Science Foundation
<b>Approved Amount:</b>	US\$ 240,000.00
<b>60. Title:</b>	Treatment of early neuritis in Leprosy (TENLEP).
<b>PI:</b>	Dr. Krishna Bahadur Tamang
<b>Institution:</b>	Lalgadh Leprosy Service center (LLSC), PO Box 96, Kathmandu
<b>Funding Agency:</b>	Wibautstraat 137, 1097 DN Amsterdam, The Netherlands
<b>Approved Amount:</b>	US\$ 146,362.00
<b>61. Title:</b>	Evaluating the outbreak response to dengue in Nepal.
<b>PI:</b>	Ms. Karolina Maria Griffiths
<b>Co-PI:</b>	Mr. Megha Raj Banjara
<b>Institution:</b>	Liverpool School of Tropical Medicine; Pembroke Place, Liverpool L3 5QA UK
<b>Funding Agency:</b>	Self-Funded
<b>Approved Amount:</b>	US\$ 5,620.00
<b>62. Title:</b>	Psychosocial factors determining quality of life among cancer patients in Nepal.
<b>PI:</b>	Mrs. Tara Shah
<b>Institution:</b>	College of Nursing, BPKIHS, Dharan
<b>Funding Agency:</b>	Self-Funded
<b>Approved Amount:</b>	N/A

- 63. Title:** The epidemiology of *Taenia solium* in the Sunsari and Morang districts of Nepal.
- PI:** Mr. Brecht Devleesschauwer
- Co-PI:** Dr. Suman Rijal
- Institution:** Department of Virology, Parasitology and Immunology, Faculty of Veterinarian Medicine, Ghent University, Ghent, Belgium
- Funding Agency:** Self-Funded
- Approved Amount:** US\$ 2,000.00
- 64. Title:** Health in the Hills: An analysis of the health-seeking behaviors of people in rural Makwanpur.
- PI:** Ms. Laurel Sydney Gabler
- Co-PI:** Dr. Kedar Prasad Baral
- Institution:** University of Oxford; BHF Health Promotion Research Group, Dept. of Public Health, Richards Building, 2nd Floor, Old road campus, H, England, UK
- Funding Agency:** University of Oxford, Dept of Public Health and the Rhodes Trust
- Approved Amount:** US\$ 9,864.00
- 65. Title:** The role of school and family in health seeking behavior (sexual reproductive) of adolescents in Kathmandu, Nepal: A case study of secondary schools.
- PI:** Mr. Sudarshan Paudel
- Institution:** Department of Community Health Sciences, School of Medicine, Patan Academy of Health Sciences, GPO 26500, Kathmandu, Nepal
- Funding Agency:** Self-Funded
- Approved Amount:** N/A
- 66. Title:** PLHIV Survey on assessing their perception of access to prevention, treatment, care and support, satisfaction with services, stigma, livelihood and serological assessment of Hepatitis B and C co-infection.
- PI:** Dr. George Ionita; Co-PI: Mr. Sanjay Rijal
- Institution:** HIV/AIDS PMU, UNDP Nepal, UN House, Pulchowk, Lalitpur, Nepal
- Funding Agency:** UNDP-HIV AIDS Program Management Unit
- Approved Amount:** US\$ 14,500.00

- 67. Title:** Contaminated food and water as probable risk factors for typhoid and paratyphoid fever in Lalitpur Sub-metropolitan city in Kathmandu Valley.
- PI:** Dr. Buddha Basnyat
- Institution:** Patan Academy of Health Sciences, Patan Hospital, Lalitpur, Nepal
- Funding Agency:** Oxford University Clinical Research Unit-Vietnam
- Approved Amount:** US\$ 9,000.00
- 68. Title:** Development of the Nepalese growth standard for the school-aged children.
- PI:** Dr. Megha Raj Banjara
- Institution:** Public Health and Infectious Disease Research Center (PHIDReC); New Baneshwor, Kathmandu
- Funding Agency:** School Health and Nutrition Project (SHNP) (DOHS/DOE/JICA), Child Health Division, DOHS, Teku, Kathmandu, Nepal
- Approved Amount:** US\$ 14,500.00 (NRs. 2,063,376.00)
- 69. Title:** Scoliosis in non -ambulatory youth with duchenne muscular dystrophy in Nepal and Australia-A pilot study.
- PI:** Dr. Rohit Kumar Pokharel
- Institution:** Muscular Dystrophy Foundation Nepal, Kupandole, Kathmandu
- Funding Agency:** Self-Funded
- Approved Amount:** US\$ 1,000.00
- 70. Title:** Government knowledge and control over contributions of international aid organizations and INGO's to health in Nepal.
- PI:** Dr. Aditi Giri
- Institution:** 138 Shree Ram Marga, Battisputali, Kathmandu
- Funding Agency:** Global Health through education, training and service (GHETS)
- Approved Amount:** US\$ 4,000.00
- 71. Title:** Can novice ultrasound users learn effective ultrasound techniques, and is a portable light-weight ultrasound device effective and durable in rural Nepal?
- PI:** Dr. Michael P. Wilson
- Co-PI:** Dr. Mingma Sherpa
- Institution:** Department of Emergency Medicine, University of California San Diego
- Funding Agency:** Self-Funded
- Approved Amount:** N/A

- 72. Title:** Nutritional status and social influence in Dalit and Brahmin women and children in Lamjung using mixed methods.
- PI:** Ms. Prajula Mulmi
- Institution:** Brown University, 47 Preston Street, Providence, RI 02906, USA
- Funding Agency:** Brown University, Framework in Global Health
- Approved Amount:** US\$ 3,500
- 73. Title:** Leprosy-related disability and the association with secondary mental health problems in the Eastern region and the far west region of Nepal.
- PI:** Dr. Krishna Prasad Dhakal
- Institution:** Netherlands Leprosy Relief (NLR), Country Representative Office, PO Box: 25270, New Baneshwor, Kathmandu, Nepal
- Funding Agency:** Netherlands Leprosy Relief (NLR)
- Approved Amount:** US\$ 1,000.00
- 74. Title:** The impact of the disability of a family member on the rest of the family in the Eastern region and Far western region of Nepal.
- PI:** Mr. Nandlal Banstola
- Institution:** Netherlands Leprosy Relief (NLR), Eastern Leprosy Control Program, Biratnagar
- Funding Agency:** Herengracht 37, 2312 LB Leiden, The Netherlands
- Approved Amount:** US\$ 1,500.00
- 75. Title:** Psychosocial-economic disposition of children affected by AIDS (CABA) and families shouldering the burdens in Nepal: A case study among the double orphans living with HIV, age of 8-17 years old in Nepal
- PI:** Mr. Shiva Lal Acharya
- Institution:** Tri-Chandra Campus, Ghantaghar, Kathmandu, Nepal
- Funding Agency:** Self-Funded
- Approved Amount:** N/A
- 76. Title:** Cross-cultural validation of the ISMI Scale in Nepal.
- PI:** Ms. Willemijn Berthine Mirjam Van spanje
- Co-PI:** Mr. Prakash Raj Wagle
- Institution:** Athena Institute, Vrije Universiteit, Amsterdam (VU University Amsterdam)
- Funding Agency:** Netherlands Leprosy Relief
- Approved Amount:** US\$ 500.00

- 77. Title:** The effect of self-help groups on the experiences of stigma among persons affected by leprosy in Nepal.
- PI:** Ms. Maria anna van langen
- Co-PI:** Mr. Prakash Wagle
- Institution:** Athena Institute, VU University;
- Funding Agency:** Netherlands Leprosy Relief
- Approved Amount:** US\$ 500.00
- 78. Title:** Genes and the fertility of women of Tibetan origin at high altitude in Nepal.
- PI:** Dr. Cynthia M. Beall
- Co-PI:** Dr. Buddha Basnyat
- Institution:** Case Western Reserve University; 10900 Euclid, Avenue, Cleveland, OH 44106 USA
- Funding Agency:** U.S National Science Foundation
- Approved Amount:** US\$ 38,000.00
- 79. Title:** Identification and life cycles of trematode parasites of domestic ruminants, Rhinos and Elephants in and around Chitwan National Park, central Nepal.
- PI:** Mr. Ramesh Devkota
- Institution:** The University of New Mexico
- Funding Agency:** The University of New Mexico
- Approved Amount:** US\$ 10,000.00
- 80. Title:** Characterization of potentially novel astrovirus in archived frozen stool samples.
- PI:** Ms. Orntipa Sethabutr
- Co-PI:** Dr. Sanjaya Kumar Shrestha
- Institution:** Armed Forces Research Institute of Medical Sciences; (AFRIMS), Department of Enteric Diseases, AFRIMS, Thailand
- Funding Agency:** Department of Enteric Disease, AFRIMS, Bangkok, Thailand
- Approved Amount:** US\$ 1,000.00
- 81. Title:** Detection of inborn errors of metabolism through simple urine tests in mentally retarded individuals from association for mentally retarded (AWMR) and Navjyoti center, Kathmandu.
- PI:** Dr. Arti Sharma Pandey
- Institution:** Department of Biochemistry; Basic Sciences Block; Kathmandu Medical College, Duwakot, Bhaktapur

<b>Funding Agency:</b>	Self-Funded
<b>Approved Amount:</b>	NRs. 4,500.00
<b>82. Title:</b>	Understanding of Psychosocial well-being among women affected by armed conflict in Nepal.
<b>PI:</b>	Dr. Martha S. Bragin
<b>Co-PI:</b>	Dr. Karuna Onta
<b>Institution:</b>	Hunter College School of Social work, City University of New York, USA
<b>Funding Agency:</b>	CARE Austria
<b>Approved Amount:</b>	US\$ 40,744.52
<b>83. Title:</b>	Measuring the Stigma and discrimination experienced by people living with HIV.
<b>PI:</b>	Ms. Sangita Khatri
<b>Institution:</b>	Family Planning Association of Nepal; PO Box: 486, Kathmandu, Nepal
<b>Funding Agency:</b>	Global poverty alleviating fund through International Planned Parenthood Federation
<b>Approved Amount:</b>	US\$ 9,990.00
<b>84. Title:</b>	A study to assess differences and difficulties regarding reproductive health values and health seeking behavior of villagers in relation to female community health volunteer program in Dillichaur VDC of Jumla district.
<b>PI:</b>	Ms. Kei Miyamoto
<b>Co-PI:</b>	Ms. Roshani Laxmi Tuitui
<b>Institution:</b>	Nihon Fukushi University Graduate School; Japan
<b>Funding Agency:</b>	Self-Funded
<b>Approved Amount:</b>	US\$ 1,000.00
<b>85. Title:</b>	Assessment of drinking water treatment behavior and water guard use among household in 19 program districts.
<b>PI:</b>	Ms. Esther Anne Saville
<b>Co-PI:</b>	Mr. Mahesh Paudel
<b>Institution:</b>	Population Services International (PSI)
<b>Funding Agency:</b>	PSI/Nepal (Internal Fund)
<b>Approved Amount:</b>	US\$ 9,980.00

## **Annex – VIII: Status of NHRC Representation in various National and International Programs**

### **International**

1. Dr. Gajanand Prakash Bhandari, Senior Epidemiologist of NHRC participated in Informal Consultation Research to Assess the Impact of Climate Change Communicable Disease on 14-18 September 2010, New Delhi, India supported by WHO, SEARO.
2. Prof. Dr. Chop Lal Bhusal, Executive Chairman of NHRC participate in the Workshop for Capacity Building on Research Ethics from 21-25 November 2010, New Delhi, India, supported by WHO, SEARO.
3. Dr. Shanker Pratap Singh, Member-Secretary, Dr. Gajanand Prakash Bhandari, Senior Epidemiologist and Mr. Meghnath Dhimal, Research Officer of NHRC participate in the (Asia Arsenic Network) from 4-10 December 2010, Bangladesh, Dhaka supported by WHO.
4. Dr. Krishna Kumar Aryal, Senior Research Officer, NHRC participate in Presentation about Air Pollution for "Air Pollution Control and Prevention Initiative for Mitigating Health Impact in Nepal", on Sixth Stake-Holders and the Regional Coordination Meeting of Male Declaration on Centre from 27-30 June 2011, New Delhi, India supported by UNICEF.
5. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Inception Workshop on Country Health Intelligence Portal (CHIP) organized by World Health Organization (WHO) on 27-29 July 2010, Kathmandu, Nepal.

### **National**

1. Dr. Gajanand Prakash Bhandari, Senior Epidemiologist of NHRC visited Kailali and Kanchanpur District to participate in Tropical Disease related research work entitled "A Study on the plasmodium vivax relapse pattern and genetic polymorphism pattern of p.vivax in Far Western Region of Nepal" from 4-6 Shrawan 2067.
2. Ms. Anju Bhatta, Assistant Research Officer of NHRC visited Kailali and Kanchanpur to participate in Tropical Disease related research work entitled "A Study on the plasmodium vivax relapse pattern and genetic polymorphism pattern of p.vivax in Far Western Region of Nepal" from 4-16 Shrawan 2067.
3. Ms. Anju Bhatta, Assistant Research Officer of NHRC visited to Kailali and Kanchanpur District to participate in Tropical Disease Related Research Work "A Study on the plasmodium vivax relapse pattern and genetic polymorphism pattern of p.vivax in Far Western Region of Nepal" approved by NHRC on 12-17 Ashoj 2067.
4. Mr. Umesh Ghimire, Assistant Research Officer of NHRC visited to Kailali, Dharan and Kanchanpur to participate in Tropical Disease Related Research Work "A Study

- on the plasmodium vivax relapse pattern and genetic polymorphism pattern of p.vivax in Far Western Region of Nepal" approved by NHRC on 11-21 Ashoj 2067.
5. Prof. Dr. Chop Lal Bhusal, Executive Chairman of NHRC visited Universal Medical College, Bhairahawa Institutional Review Committee (IRC) from 26-28 Ashoj 2067.
  6. Dr. Shanker Pratap Singh, Member-Secretary of NHRC visited Pokhara and Baglung to participate in Data Sharing and National HIV Research Agenda from 8 Kartik to 1 Mangsir 2067.
  7. Dr. Gajanand Prakash Bhandari, Senior Epidemiologist, NHRC to participate in Opportunity Experience for Medical Research in the Health Sector of Nepal from 12-13 May 2011, BPKIHS Dharan, Nepal.
  8. Assistant Research Officers Mr. Hari Datt Joshi and Mr. Bikram Dhimal visited Dhading, Doti, Bajhang to collect Data on Health Impact of Climate Change from 24 November to 1 December 2010.
  9. Dr. Gajanand Prakash Bhandari, Senior Epidemiologist, NHRC visited Dhangadhi, Nepal to participate in Epidemic Control for Volunteer Training from 19-23 Poush 2067.
  10. Mr. Pusushottam Dhakal, Research Officer, Assistant Research Officers, Ms. Pratibha Basnet, Ms. Numa Karki visited Burden of Disease Monitoring 4&5 Health Indicator related study research work from 11 Poush 2067 to 3 Magh 2067 and Mr. Harsha Raj Dahal, Mr. Sandesh Poudel, Ms. Ajala Khanal, Ms. Lila Neupane, Ms. Rajani Pokharel, Mr. Nilaramba Adhikari, Mr. Anurag Singh Ghimire, Mr. Umesh Ghimire, Ms. Sujata Achary visited Burden of Disease Monitoring 4&5 Health Indicator related study research work from 12 Poush 2067 to 12 Magh 2067.
  11. Research Assistants Mr. Manoj Thapa and Mrs. Yasoda Sapkota visited Doti, Surkhet to collect data In-depth Reviewing Effectiveness and Efficiency of Ama Surakchha to Address Various in Assessing Maternal Health Service in Nepal from 22 Poush 2067 to 5 Magh 2067.
  12. Mr. Meghnath Dhimal, Research Officer, NHRC, visited Morang, Sunsari, Dhankuta and Sankhuwasabha to collect data on Identification of Public Health Problem Resulting from Climate Change from 5-9 February 2011.
  13. Assistant Research Officers, Mr. Hari Datt Joshi and Mr. Bikram Dhimal, NHRC visited Morang, Sunsari, Dhankuta and Sankhuwasabha to collect data on Identification of Public Health Problem Resulting from Climate Change from 5-11 February 2011.
  14. Assistant Research Officers, Mr. Hari Datt Joshi and Mr. Bikram Dhimal, NHRC visited Sunsari, Jhapa and Morang to collect data on Monitoring and Evaluation of Health Related Research Center from 29 Magh 2067 to 04 Falgun 2067.
  15. Mr. Umesh Ghimire, Assistant Research Officer, NHRC visited Kailali and Kanchanpur to collect Blood Sample of Tropical Disease Related Research Work "A



- Study on the plasmodium vivax relapse pattern and genetic polymorphism pattern of p.vivax in Far Western Region of Nepal" from 23 Magh 2067 to 01 Falgun 2067.
16. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Institutional Review Committee (IRC), Nepalgunj Medical College Teaching Hospital, Nepalgunj, Banke from 23-26 February 2011.
  17. Mr. Pradeep Belbase, Senior Training Assistant and Mr. Bikram Dhimal, Assistant Research Officer of NHRC visited Chitwan, Birgunj and Janakpur to participate in Assessment of Medical Health Agencies Designated and Health Research Center from 19-25 Falgun 2067.
  18. Mr. Purushottam Dhakal, Research Officer and Assistant Research Officer, Ms. Numa Karki visited Kavre district to collect data of Burden of Disease Monitoring 4&5 Health Indicator related study research work from 22 Falgun 2067 to 15 Chaitra 2067 and Assistant Research Officers, Mr. Harsha Raj Dahal, Mr. Sandesh Poudel, Ms. Ajala Khanal, Ms. Rajani Pokharel, Mr. Nilaramba Adhikari, Mr. Anurag Singh Ghimire, Ms. Sujata Acharya, Ms. Pushpa Thapa Magar visited Kavre District to collect data of Burden of Disease Monitoring 4&5 Health Indicator related study research work from 24 Falgun 2067 to 15 Chaitra 2067 and Assistant Research Officer Mr. Baibav Shrestha visited in the same program from 25 Falgun 2067 to 15 Chaitra 2067.
  19. Assistant Research Officers, Mr. Hari Datt Joshi and Mr. Bikram Dhimal visited to collected data on Health Impact Resulting from Climate Change in Chitwan, Dhading, Nuwakot and Rasuwa District from 13-20 March 2011.
  20. Research Assistants Mr. Manoj Thapa and Mrs. Yasoda Sapkota visited Manang District to collect data In-depth Reviewing Effectiveness and Efficiency of Ama Surakchha to Address Various in Assessing Maternal Health Service in Nepal from 15-31 March 2011.
  21. Mr. Pradeep Belbase, Senior Training Assistant, NHRC visited Rupandehi, Palpa, Kaski, Baglung, Lumjung to collect data of Assessment of Medical Health Agencies Designated as Health Research Center in Nepal from 1-15 Chaitra 2067.
  22. Dr. Shanker Pratap Singh, Member-Secretary visited in BPKIHS, Dharan to attend the 18<sup>th</sup> Research Committee Meeting of BPKIHS, Dharan from 27-28 March 2011.
  23. Mr. Pradeep Belbase, Senior Training Assistant and Assistant Research Officer Mr. Bikram Dhimal, NHRC visited Kailali, Kanchanpur, Banke, Bardiya, Dang and Surkhet to collect data of Monitoring and Evaluation of Medical Health Agencies Designated as Health Research Center in Nepal from 10-25 Baishakh 2068.
  24. Dr. Gajanand Prakash Bhandari, Senior Epidemiologist, NHRC visited BPKIHS, Dharan to participate in Opportunity Experience for Medical Research in the Health Sector of Nepal from 12-13 May 2011.
  25. Mr. Pradeep Belbase, Senior Training Assistant and Assistant Research Officer Mr. Bikram Dhimal, NHRC visited Kavre District to collect data of Assessment of Medical

Health/Agencies (Hospital, Poly Clinics, NGO, etc.) Designated as Health Research Center in Nepal from 12-13 Jesth 2068.

26. Research Officers Ms. Femila Sapkota and Ms. Sushhama Neupane, NHRC has been nominated to participate as focal point and alternate focal point respectively for emergency nutrition cluster organized by UNICEF on 13 December 2010.
27. Nepal Health Research Council organized Central Advisory Committee Meeting supported by Maryknoll Fathers and Brothers project, Enhancement of Nepal Health Research Council (NHRC) of the fourth year 13 November 2010 to 12 November 2011 activity on 11 May 2011 (28 Baishakh 2068).
28. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Inception Workshop on Country Health Intelligence Portal (CHIP) organized by World Health Organization (WHO) on 27-29 July 2010, Kathmandu, Nepal.
29. Mr. Hari Datt Joshi Assistant Research Officer, NHRC has been nominated as a participant in Out of Mercury Interaction Program organized by National Health Training Center, Teku, Kathmandu on 27 Ashadh 2068.
30. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in 60<sup>th</sup> Country Coordination Mechanism (CCM) Meeting organized by HIV/AIDS and STI Control Board, Rani Marg, Baluwatar, Kathmandu on 3<sup>rd</sup> August 2010 (18 Shrawan 2067).
31. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Development of Country Health Intelligence Portal (CHIP) organized by Ministry of Health and Population on 14-16 September 2010, Kathmandu, Nepal.
32. Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in Technical Consultation Workshop to develop the National HIV Surveillance organized by National Center for AIDS and STD Control, Teku, Kathmandu on 28-29 September 2010.
33. Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in 2010 IBBS among Wives of Migrants (Round II) Dissemination organized by National Center for AIDS and STD Control Teku, Kathmandu on 12 October 2010.
34. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Consultative Meeting for Multi sectoral response on the development of NSP (2011-2016) organized by HIV/AIDS and STI Control Board, Rani Marg, Baluwatar, Kathmandu on 12 October 2010 (26 Aswin 2067).
35. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Mental Health and Chronic Physical Illness: The Need for Continued and Integrated Care organized by Ministry of Health and Population on 10<sup>th</sup> October 2010, Kathmandu, Nepal.
36. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in The Second Partnership Forum Meeting organized by HIV/AIDS and STI Control Board, Rani Marg, Baluwatar, Kathmandu on 2<sup>nd</sup> November 2010. (16 Kartik 2067).

37. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in IBBS Dissemination Meeting organized by National Center for AIDS and STD Control Teku, Kathmandu on 24<sup>th</sup> December 2010.
38. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Seminar of Systematic Capacity Enhancement organized by Ministry of Health and Population on 21<sup>st</sup> January 2011, Kathmandu, Nepal.
39. Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in Technical Working Committee Meeting NDHS 2011 organized by Ministry of Health and Population on 19<sup>th</sup> January 2011, Kathmandu, Nepal.
40. Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in Technical Workshop on Annual Review and Planning Meeting and Monitoring and Evaluation System Strengthening (MESS) organized by National Center for AIDS and STD Control, Teku, Kathmandu on 3-5 February 2011.
41. Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in Dissemination of National Estimate of HIV Infection, 2009 Report organized by National Center for AIDS and STD Control, Teku, Kathmandu on 4<sup>th</sup> February 2011.
42. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Dissemination Meeting: Review of the Evidence for Health Sector Nutrition Interventions in Nepal organized by Department of Health Services, Teku, Kathmandu on 16-17 March 2011.
43. Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in 3<sup>rd</sup> Partnership Forum Meeting organized by HIV/AIDS and STI Control Board, Teku, Kathmandu on 25 March 2011 (11 Chaitra, 2067).
44. Prof. Dr. Chop Lal Bhusal, Executive Chairman and Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in Celebration Ceremony of World Health Day 7<sup>th</sup> April 2011 organized by Department of Health Services, Teku, Kathmandu on 7 April 2011.
45. Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in Sharing / Feedback of Asia Pacific Regional Consultation on Universal Access to HIV Prevention, Treatment, Care and Support; Getting to Zero" organized by National Center for AIDS and STD Control, Teku, Kathmandu on 13 April 2011 (30 Chaitra 2067).
46. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Technical Advisory Committee Meeting NDHS 2011 organized by Ministry of Health & Population, Ramshah Path, Kathmandu on 17 April 2011.
47. Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in Technical Advisory Committee Meeting NDHS 2011 organized by Ministry of Health & Population, Ramshah Path Kathmandu on 15 April 2011.
48. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Information Dissemination Meeting: Review of the Evidence for Health Sector Nutrition

Interventions in Nepal organized by Department of Health Services, Teku, Kathmandu on 9 June 2011.

49. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in MTR of 10 Years of Visions 2020: The Right to Sight in Nepal organized by Ministry of Health and Population on 9-11 June 2011, Kathmandu, Nepal.
50. In the first session, Dr. Mahesh Kumar Maskey, Chairman, Dr. Sarita Upadhyay, Member-Secretary, NHRC participated in Regional Consultation on Regional Strategy for Research for Health (HSRH) organized by Ministry of Health and Population supported by WHO on 6-8 July 2011, Kathmandu, Nepal and in the second session as per the decision of Supreme Court Prof. Dr. Chop Lal Bhusal, Executive Chairman and Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in the same program.
51. Mr. Bijay Kumar Jha, Training Officer and Mr. Purushottam Dhakal, Research Officer, NHRC participated in Project Monitoring and Evaluation System 5 days Training Program organized by Nepal Administrative Staff College, Jawalakhel, Lalitpur on 23-27 Jestha 2068.
52. Mr. Hari Datt Joshi, Assistant Research Officer, NHRC has participated in Interaction Program organized by Forum for Justice, Sankhamul Marg, New Baneshwhor, Kathmandu on 30 May 2011 (16 Jeshta 2068)
53. Mrs. Sushhama Neupane, Research Officer, NHRC has participated in "Advocacy in Development of Advanced Practice Nurse Role" organized by Institute of Medicine, Maharajgunj, Kathmandu on 19-2-2068.
54. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Regional Training from Science to Practice-HIV Prevention among Sex Workers organized by HIV/AIDS and STI Control Board, Rani Marg, Baluwatar, Kathmandu on 12 August 2010 (27 Shrawan 2067).
55. Prof. Dr. Chop Lal Bhusal, Executive Chairman and Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in Workshop to Disseminate Reports of GHPSS, GYTS, GSPS and WHO NCD Step-wise Surveillance organized by Ministry of Health and Population, National Health Education Information and Communication Center, Teku, Kathmandu on 28 Shrawan 2067 (13 August 2010).
56. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Social Health Security/Social Health Insurance (SHP/SHI) Technical Working Committee Meeting organized by Ministry of Health and Population on 3 Bhadra 2067 (19 August 2010), Kathmandu, Nepal.
57. Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in Under Health Sector Information System-National Strategy National Health Information Policy Committee (NHIPC) Meeting organized by Management Division, Department of Health Services, Teku, Kathmandu on 18 Bhadra 2067 (3 September 2010).

- 58.** Mr. Chandra Bhushan Yadav, Library and Information Officer, NHRC participated in Orientation and Refreshing Training for HELLIS Participants and other Regional, Zonal and Private Hospital Libraries organized by National Health Education, Information and Communication Center, Teku, Kathmandu on 12-14 Ashoj 2067 (28-30 September 2010).
- 59.** Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in World Rabies Day (Multi-sectoral Journal Interaction Program) organized by Epidemiology and Disease Control Division (EDCD), Teku, Kathmandu on 12 Ashoj 2067 (28 September 2010).
- 60.** Ms. Namita Ghimire Sharma, Research Officer, NHRC participated in Public Opinion Poll on Tobacco Control Regulation Study Findings Dissemination organized by National Health Education, Information and Communication Center, Teku, Kathmandu on 5 Kartik 2067 (22 October 2010).
- 61.** Mr. Meghnath Dhimal, Research Officer, NHRC participated in Dissemination of Health Facility Mapping Survey 2009/2010 organized by Management Division, Department of Health Services, Teku, Kathmandu on 8 Kartik 2067 (25 October 2010).
- 62.** Prof. Dr. Chop Lal Bhusal, Executive Chairman, Mr. Padam Bahadur Giri, Legal Consultant and Mr. Nirbhay Kumar Sharma, Senior Administrative Officer, NHRC participated in Controversary meeting raised by construction of NHRC Library Building Land on 08 Kartik 2067 (25 October 2010), MoHP, Ramshah Path, Kathmandu.
- 63.** Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in (Strategic Information M&E Surveillance and Research) Interaction Program organized by NCASC, Teku, Kathmandu on 14 Mangsir 2067 (13 November 2010).
- 64.** Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Health Sector Development Partners Forum organized by Ministry of Health and Population on 16 Mangsir 2067 (2 December 2010), Kathmandu, Nepal.
- 65.** Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in HIV/AIDS and STD Implementation Discussion Program organized by National Center for AIDS and STD Control 4-5 Poush 2067 (19-20 December 2010), Teku, Kathmandu, Nepal.
- 66.** Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Intersectoral Coordination and Collaboration in Health Policies and Plan in Alignment with NHSP II and Engagement of Civil Society for Health Sector Development organized by Ministry of Health and Population supported by WHO on 26 December 2010 (11 Poush 2067), Kathmandu, Nepal.
- 67.** Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Bachelor in Science, Nursing (BSN) Oncology organized by Bharatpur Cancer Hospital, supported by Ministry of Health and Population 27 Poush 2067 (11 January 2011), Kathmandu, Nepal.

68. Mrs. Sushhama Neupane, Research Officer, NHRC participated in National Workshop on Core Competency of International Health Regulation organized by Epidemiology and Disease Control Division, Department of Health Services, Teku, Kathmandu on 3-4 Falgun 2067 (15-16 February 2011).
69. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Private Practitioners' Workshop (PP Workshop) organized by National Tuberculosis Center, Thimi, Bhaktapur 16 Falgun 2067 (28 February 2011).
70. Mr. Meghnath Dhimal, Research Officer, NHRC participated in Initial Environmental Examination Report Terms of Reference (TOR) organized by Ministry of Health and Population on 10 Chaitra 2067 (24 March 2011), Kathmandu, Nepal.
71. Ms. Namita Ghimire Sharma, Research Officer, NHRC participated in IBBS Capacity Enhancement Workshop organized by National Center for AIDS and STD Control on 16-17 Chaitra, 2067, Hotel Summit, Kupandole, Lalitpur.
72. Mr. Chandra Bhushan Yadav, Library and Information Officer, NHRC participated in Integrated Code Development Work organized by Management Division, Department of Health Services on 13-14 Chaitra, 2067, Kathmandu, Nepal.
73. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Global Plan for the Decade of Action for Road Safety 2011/2020 organized by Ministry of Health and Population 2068-1-28 (11 May 2011), Kathmandu.
74. Dr. Shanker Pratap Singh, Member-Secretary, NHRC participated in 50 Bed above Private and NGO Hospital, Nursing Home, etc. construction, approval, renewal and infrastructure building organized by Ministry of Health and Population 17 Jestha 2068, Kathmandu, Nepal.
75. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Smoking and Tobacco Control Discussion Program organized by NHEICC on 21 Jestha 2068, Teku, Kathmandu.
76. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Governance and Accountability Workshop organized by MOHP 30 Jestha 2068 (13 June 2011).
77. Mrs. Sushhama Neupane, Research Officer, NHRC participated in National TB Prevalence Survey Workshop organized by National TB Center, Sanothimi, Bhaktapur on 7 Ashadh 2068 (21 June 2011).
78. Mr. Umesh Ghimire, Assistant Research Officer, NHRC participated in WHO Lymphatic Filariasis Elimination Guidelines and Revised Guidelines comparative study organized by EDCD, Teku, Kathmandu, Nepal.
79. Mrs. Sushhama Neupane, Research Officer, NHRC participated in Mental Health Discussion Program organized by MOHP on 15 Ashadh 2068 (29 June 2011), Teku, Kathmandu, Nepal.
80. Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in National Ayurveda Research and Training Center Meeting by MOHP on 29 Ashadh 2068 (29 June 2011), NHTC, Teku, Kathmandu, Nepal.



- 81.**Dr. Gajanand Prakash Bhandari, Senior Epidemiologist, NHRC participated in Nepal Science Policy Dialogue on Climate Change organized by ISET Nepal supported by START and BSAS (Bangladesh Center for Advanced Studies on 16-17 August 2010, Kathmandu, Nepal.
- 82.**Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in National Dissemination Meeting on Medical Abortion Study organized by Center for Research on Environment Health and Population Activities (CREHPA) on 10 September 2010 (25 Bhadra 2067), Kathmandu, Nepal.
- 83.**Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in HIV and AIDS Review Meeting organized by National Planning Commission Secretariat on 6 September 2010, Kathmandu, Nepal.
- 84.**Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Department of Community Medicine Final Presentation of Community Health Diagnosis Program MBBS First Year (II Batch) organized by KIST Medical College on 24 September 2010, Lalitpur, Nepal.
- 85.**Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in National Guideline on Malaria Treatment Integration into Medical Curriculum organized by Nepal Medical Association on 1-3 November 2010, Kathmandu, Nepal.
- 86.**Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in National Dissemination of the study entitled" Factors determining preference for and barriers to use of medical abortion among women in Nepal" organized by Center for Research on Environment Health and Population Activities (CREHPA) on 19 December 2010 (04 Poush 2067), Kathmandu, Nepal.
- 87.**Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Regional Civil Society Meeting on Non Communicable Disease (NCDs) organized by Nepal Public Health Foundation on 10-12 January 2011, Kathmandu, Nepal.
- 88.**Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in 1<sup>st</sup> National Harm Reduction Media Conference organized by Recovering Nepal on 11-12 January 2011, Kathmandu, Nepal.
- 89.**Mr. Hari Datt Joshi, Assistant Research Officer, NHRC participated National Profile/SAICM capacity Assessment Review and National SAICM Priority Validation Meeting on 10 March 2011, Kathmandu, Nepal.
- 90.**Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Interaction Program on Research of Infectious Disease in Nepal organized by United Team of Research in Microbiology on 16 June 2011 (2 Ashad 2068), Kathmandu, Nepal.
- 91.**Prof. Dr. Chop Lal Bhusal, Executive Chairman, NHRC participated in Workshop on Preparing a Situation Analysis of Children and Women using a Human Rights Based Approach (HRBA) organized by United Nations Children's Fund on 16 June 2011 (2 Ashad 2068), Kathmandu, Nepal.

92. Dr. Mahesh Kumar Maskey, Chairman, NHRC participated in The Consultative meeting CSOs/NSAs on the Crisis in Human Resource for Health in Nepal organized by Save the Children on 12 July 2011, Kathmandu, Nepal.

### **Annex – IX: NHRC's Executive Board Meetings**

<b><u>S. N.</u></b>	<b><u>Meetings</u></b>	<b><u>Date</u></b>
1.	150 <sup>th</sup> Meeting	2067-04-02
2.	151 <sup>th</sup> Meeting	2067-06-11
3.	152 <sup>th</sup> Meeting	2067-06-25
4.	153 <sup>th</sup> Meeting	2067-09-02
5.	154 <sup>th</sup> Meeting	2067-11-10
6.	155 <sup>th</sup> Meeting	2068-03-16
7.	156 <sup>th</sup> Meeting	2068-03-26

### **Annex – X: NHRC's Ethical Review Board Meetings**

<b><u>S. N.</u></b>	<b><u>Meetings</u></b>	<b><u>Date</u></b>
1.	80 <sup>th</sup> Meeting	2067-4-13
2.	81 <sup>th</sup> Meeting	2067-5-02
3.	82 <sup>th</sup> Meeting	2067-6-10
4.	83 <sup>th</sup> Meeting	2067-6-24
5.	84 <sup>th</sup> Meeting	2067-8-12
6.	85 <sup>th</sup> Meeting	2067-08-29
7.	86 <sup>th</sup> Meeting	2067-09-14
8.	87 <sup>th</sup> Meeting	2067-10-17
9.	88 <sup>th</sup> Meeting	2067-11-20
10.	89 <sup>th</sup> Meeting	2067-12-18
11.	90 <sup>th</sup> Meeting	2068-01-07
12.	91 <sup>th</sup> Meeting	2068-01-21
13.	92 <sup>th</sup> Meeting	2068-02-20
14.	93 <sup>th</sup> Meeting	2068-03-27





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