# Annual Report 2018/19







### FROM THE EXECUTIVE CHAIR'S DESK

Annual Report of Nepal Public Health Foundation has captured the major highlights of all the activities of the Foundation in the domain of research, policy dialogue and project implementation happened during the fiscal year of 2018/19. As in every bygone year, this year too has added a stone in the growing edifice of NPHF as a developing institution. Its ability to deliver has increased visibility and substantially and it is consolidating its networking with regional and international research organizations.



We successfully completed the research project and disseminated the findings on drivers Stunting reduction and U5MR reduction. Nepal was chosen as global exemplar country regarding these achievements and NPHF has collaborated with Sick Kids (Canada), Partners in Health (USA) and University of Global Health Equity (Rwanda) to conduct research in understanding the factors that led to such achievements despite enormous geographical, political and institutional problems., Several other projects which have focused on restoration and strengthening of health system in past few years in earthquake affected districts, among marginalized and hard to reach communities: SPARSH-M in Chepang communities of Makwanpur, SAHaS Project in Lalitpur, Kavre, Dolakha, Dhading, Nuwakot, Gorkha, Ramechhap, Okhaldhunga and Solukhumbuare were also completed in this fiscal year. Similarly Life Saving Comprehensive Nutrition Response Including Integrated Management of Acute Malnutrition in Flood Affected areas of Morang and Sunsari districts began with the objective to manage the cases of Severe acute malnutrition and prevent the under 5 children from malnutrition.

NPHF with GARP-Nepal has taken the lead in raising awareness and conducting research about Antimicrobial Resistance in human and animal population. Several proposal have been submitted to sustain the continuation of this very important project. Phase II Farmers Health and Environment, Nepal (FHEN) project is near completion and the proposal for Phase III has been submitted. Study on highly hazardous pesticide poisoning that may lead to suicide has also entered its second year.

With these projects we have developed a strong working relationship with our partners such as UNICEF, Project HOPE, WHO and CDP. We are developing partnership with Bangladesh (icddr,b) and Boston University. NPHF is in the executive board of South East Asian Public Health Educational Institution Network (SEAPHEIN) and also in the advisory board of Global Health Institute, Xian University, China.

NPHF works closely with the Government in every project, in areas ranging from policy dialogues to flood related disaster management and prevention of epidemics. This year NPHF executive chair represented in the high level advisory committee for drafting Nepal's Global Action Plan to accelerate process of meeting Sustainable Development Goals. NPHF also collaborated with Physicians with Social Responsibility to deal with disaster situation in the tornado affected area.

I also want to take note that since NPHF has continued its activities related to Institutional Social Responsibilities, emphasizing on volunteerism and working in villages to promote organic farming and nutrition program in rural villages.

The fine tradition of NPHF Lecture on 30th June every year has continued, this time graced by Dr. Suniti Acharya, founding member of NPHF in an inspiring lecture title "Health, Development, Equity and Universal Coverage in Federal Nepal". NPHF has also continued to honor distinguished professionals who have contributed in Public Health with Life Time Achievement Award at the time of its Annual General Body Meeting. Last year recipient being Prof. Madan Upadhyay and Dr. Tirth Rana. This year the honor goes to Dr. Dibyashree Malla and Dr. Nirakarman Shrestha.

With these words, once again I would like to thank Basudev Bhattarai, Manisha, Prakriti Sharma, Prapti Sharma for their effort in preparing this report and all those who have contributed in various ways in the activities of the NPHF. It is a pleasure and honor to work alongside a group of exceptionally proficient executive board members and dedicated staffs for their determined efforts in taking NPHF to a new high.

**Dr. Mahesh Kumar Maskey**Executive Chair
Nepal Public Health
Foundation

# **Table of Content**

FROM THE EXECUTIVE CHAIR'S DESK	11
Table of Content	iv
Abbreviations	v
About Nepal Public Health Foundation	1
Districts Covered by NPHF Projects	2
PROJECT LIST	3
Global Antibiotic Resistance Partnership (GARP)-Nepal	4
Farming Health and Environmental Nepal (FHEN)	5
Evaluation of FHEN project	7
Highly Hazardous Pesticide Poisoning Gathering Requisite Information for Decision (HOPE-GRID)	
Association of pesticide exposure and pregnancy outcome from a tertiary care hosp Chitwan District, Nepal	
Program List	13
Ninth Annual General Meeting (AGM)	13
Ninth Nepal Public Health Foundation Lecture	14
	14
Research Dissemination	15
Stunting decline in Nepal: A Country Case Study	15
Exemplars in Global Health: Reducing Under-5 Morality in Nepal	16
Activities	17
Internship/Volunteering Program	17
Advisory Committee Meeting HOPE-GRID	17
Board Meeting, NPHF	18
Disaster Management in Bara	18
Nepal Public Health Educational Institute Network (NePHEIN)	19
Annual Plan and Strategy	20
NPHF core activities plan	
Public Health Foundation Website and Social networking	20
Institutional social responsibility	21
FIELD SPOTLIGHT	
Field Case Study	
Case study report of FCHVs	
ANNEXURE	30
Photo Gallery	32

### **Abbreviations**

AFU Agriculture and Forestry University

AGM Annual General Meeting
AHF Alternative Health Financing
AI Appreciative Inquiry
AMR Anti- Microbial Resistance

ANC Antenatal Care

BUSPS Boston University School of Public Health
CBHI Community Based Health Insurance

CDDEP Centre for Disease Dynamics, Economics and Policy

CDP Centre for Disaster Philanthropy

COI Conflict of Interest

CPHE Continuing Public Health Education

CSC Central Steering Committee
CSR Corporate Social Responsibility
D(P)HO District (Public) Health Office
DCC District Coordination Committee
DDA Department of Drug Administration
DEPROSC Development Project Service Centre

DHO District Health Office
DRI Drug Resistance Index
ECG Electro Cardiogram

EPI Expanded program of Immunization FCHVs Female Community Health Volunteer

FGD Focus Group Discussion FHD Family Health Division

FHEN Family Health and Environment - Nepal

FSP Fulbright Specialist Program

GARP-Nepal Global Antibiotic Resistance Partnership - Nepal

HCWs Health Care Workers
GDP Gross Domestic Product
GPS Geographic Positioning System

HAZ Height for Age Z-score

HFOMC Health Facility Operation Management Committee

HHPs Highly Hazardous Pesticides H-MG Health Mother's Group

HMIS Health Management Information System

icddr;b International Centre for Diarrheal Disease Research, Bangladesh

ICER International Conference on Epidemiologic Research

IECInformation Education CommunicationIMAMIntegrated Management of Acute MalnutritionINGOsInternational Non- Governmental Organization

IOM Institute of Medicine
IPM Integrated Pest Management
IRR Initial Rapid Health Response
KU Kathmandu University

MG Mother's Group

MG-H Mother's Group for Health

MIRA Mother and Infant Research Activities

MNCHN Maternal, Neonatal, Child health and Nutrition

MOLD Ministry of Livestock Development

NCE No Cost Extension

NDHS Nepal Demographic and Health Survey

NePHEIN Nepal Public Health Education institute Network

NGOs Non- Governmental Organization

NHEICC National Health Education, Information and Communication Centre

NHRC Nepal Health Research Council
NPHF Nepal Public Health Foundation
NPHL National Public Health Laboratory

Nepal Veterinary Council NVC Organo-phosphorus Poisoning OP **Out Patient Department** OPD OTC **Outpatient Therapeutic Center** Patan Academy of Health Sciences **PAHS** Primary Health Care Centre PHCC Personal Protective Equipment PPE University of Global Health Equity **UGHE** 

U5M Under Five Mortality
PIH Partners in Health
SAM Severe Acute Malnutrition
SC Stabilization Center
SWC Social Welfare Council

TB Tuberculosis

TUTH Tribhuvan University Teaching Hospital UGHE The University of Global Health Equity

UNICEF United Nations International Children's Emergency Fund

UHC universal health coverage WHO World Health Organization

# **About Nepal Public Health Foundation**

### Introduction

Nepal Public Health Foundation (NPHF) is an independent, autonomous, non-political and nonprofitable organization established in April 2010 AD by a group of public health experts and activists with a mission to have concerted public health action, research, and policy dialogue for health development, particularly of the socio-economically marginalized population and with a goal to ensure civil society's pro-active intervention in public health. NPHF aims to prioritize public health action and research areas; facilitate interventions in collaboration with national and international partnerships with special emphasis to build community capacity for healthcare. NPHF is committed to strengthening health system generating quality evidences for policy formulation process through high quality research. Health policy and system research, social determinants of health, nutrition, maternal and child health, sexual and reproductive health are its major focus areas. Since its inception, NPHF has taken initiatives to advocate the relevant public health issues at national and regional level. Besides it has established good linkages with academic institutions, civil society and different nongovernment organizations.

### Vision

• Ensuring health as the right and responsibility of the Nepali people.

### Mission

 Concerted public health action, research and policy dialogue for health development, particularly of the socio-economically marginalized population.

### Goal

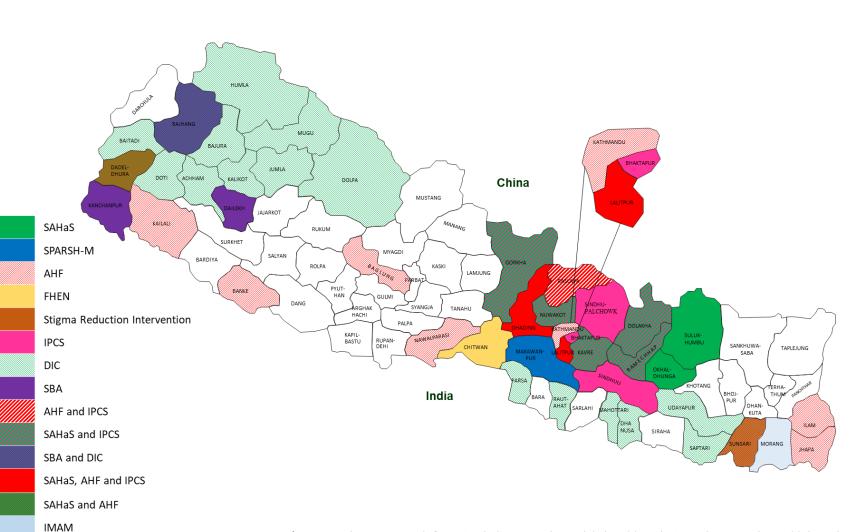
- Ensure Civil Society's pro-active intervention in public
  - Health policy and Systems Research
  - Human Resource Development
  - Communicable Disease Control
  - Non-Communicable Disease Control
  - Nutrition Research
  - · Maternal and Child Health
  - Safe Food production through Pesticide Minimization
  - Disaster Prevention and Management
  - Coordination, Advocacy and Communication
  - Social Determinants for health
  - Health Economics
  - Epidemiology, Biostatistics and Demography
  - Health Promotion and Social Mobilization

### **Objectives of NPHF**

- Engage public health stakeholders for systematic reviewed analysis of existing and emerging health scenario to generate policy recommendations for public health action; especially in the context of the changing physical and social environment, the increasing health gap between the rich and the poor, and the impact of other sectors on health.
- Prioritize public health action and research areas and facilitate pilot interventions in collaboration with national and international partnerships with special emphasis to building communities' capacity.
- Strengthen health system through systems thinking for effectively responding to the problems of public health.
- Support / establish existing or new community based public health training institutions.
- Ensure continuing public health education (CPHE) by disseminating latest advancements in public health knowledge and research. Publish books, monographs, educational materials and self-learning manuals.
- Provide research fund for deserving researchers and public health institutions, with priority given to community-based institutions.

# **Districts Covered by NPHF Projects**

IMAM and Stigma Reduction Intervention



<sup>\*</sup>GARP Nepal, BHS, Appraisal of Stunting decline, Exemplar in Global Health: Reducing under 5 mortality, Highly hazardous pesticide poisoning are nation-wide projects

# **PROJECT LIST**

Global Antibiotics Resistance Partnership (GARP) - Nepal (2013-ongoing)

Farming Health and Environmental Nepal (FHEN) (2017-2020)

Highly Hazardous Pesticides Poisoning- Gathering Requisite Information for Decision Making (HOPE-GRID, Nepal) ( 2018-2020)

Association of pesticide exposure and pregnancy outcome from a tertiary care hospital in Chitwan District, Nepal

### Global Antibiotic Resistance Partnership (GARP)-Nepal

Global Antibiotic Resistance Partnership (GARP)-Nepal is part of a 15-country partnership organized by the Center for Disease Dynamics, Economics & Policy, an American and India-based "think tank" and funded by the Bill & Melinda Gates Foundation. It was initiated in May 2013 in Nepal by Nepal Public Health Foundation, as part of a global effort to preserve the effectiveness of antibiotics.

### **Activities carried out**

### 1. Training for Community Pharmacists

GARP-Nepal in collaboration with Department of Drug Administration (DDA) developed a training manual for community pharmacists to equip them with required knowledge on prudent use and sale of antimicrobials to limit the spread of resistance. The manual is written by DDA and the training was provided to about 100 community pharmacists in Kathmandu and Biratnagar.

Fig 1. Mr. Arbind Baniya Facilitating the Program

### 2. Training for Veterinarians

A training program was held for practicing veterinarians on September 30, 2018 at Nepal Veterinary Association (NVA) in accordance with the Memorandum of Understanding signed between NVA and GARP-Nepal/NPHF on the issue of antimicrobial resistance. A total of 22 veterinarians participated in the training. Additionally, officials from Nepal Veterinary Council (NVC), Nepal Veterinary Association (NVA) and Global Antibiotic resistance Partnership (GARP) Nepal were present.



Fig 2. Discussion during the Training

### 3. Workshop on AMR Curriculum

In order to incorporate the issue of anti-microbial resistance into the core curriculum of medical classes and circulate it among the medical colleges of Nepal, a workshop on Medical AMR curriculum was held on 16 December 2018 in collaboration with Nepal Medical Council (NMC). A total of 18 individuals including Chairman of NMC; Vice-Chancellors -Patan Academy of Health Sciences, National Academy of Medical Sciences, and Rapti Academy of Health Sciences; Deans- Institute of Medicine, and Kathmandu University School of Medical Science and other members of NMC attended the workshop



Fig 3. Dr. Dharma Kant Baskota, Chair NMC Delivering His Welcome Remarks

### 4. Proposal development

Further funding sources on Anti- Microbial resistance was explored. The proposal on this regard was developed by the GARP team and was submitted.

# Farming Health and Environmental Nepal (FHEN)

After the successful completion of first phase of Farming, Health and Environment Nepal Project (FHEN), Phase-II was launched in September 2017 in Chitwan district. FHEN is one of the projects of Nepal Public Health Foundation aimed to improve the health of farmers and consumers by promoting a healthy and sustainable food production in Nepal with a focus on Integrated Pest Management (IPM). This project has been developed to address the growing problems of



Fig 4. Training on IPM to local farmers in Chitwan

irrational use of pesticides in farming. Core target groups are local farmers, pesticide retailers, pesticide sprayers, school teachers, health workers and community people (consumers). One of the major activities of the project is to train local farmers on IPM with practical exercises based on Farmers' Field School concept, onsite

coaching and equipment support. Health workers and Female Community Health volunteers are also trained for their capacity enhancement to prevent and manage pesticide poisoning in the community. Awareness of pesticides to the community is spread through schools as well. Besides, we also advocate this issue at the district and national levels through workshops and by writing scientific articles and disseminating information through local and national media.

### **Activities carried out**

### A. Research

a. Conducted the study on situation assessment about the use of pesticides and its health effects in Chitwan District and disseminated the findings and report at various levels of the District

b. Research on pesticide exposure and pregnancy outcomes at Chitwan District is ongoing

### B. Advocacy

Series of advocacy meetings with local government and provincial government have been conducted for the establishment of laboratory to measure pesticide residues in foods, development of pesticide minimization guideline and designation of programs to

### **Project Objectives:**

- To prevent occupational pesticide poisonings among farmers, professional sprayer-men and pesticide retailers by strengthening their knowledge, attitude and practice on IPM and organic alternatives to pesticides.
- To prevent pesticide poisonings including those due to self-harm and accidents by increasing awareness in the villages among the health care workers about treatment and prevention.
- To facilitate advocacy to reduce pesticide poisonings and pollution by dissemination of knowledge, strategies and materials developed in the project at district and national levels.

### **Project Area:**

Twenty Four wards of 4 different municipalities of Chitwan District namely Bharatpur metropolitan, Khairahani municipality, Kalika municipality and Rapti municipality

### **Supporting partner:**

Danish Society for Occupational and Environmental Health (DASAM) and Dialogos reduce the use and harm associated with pesticide use in agriculture farming.

### C. Field level interventions

Field Level intervention are focused to raise awareness among different target group about harmful effects of pesticide, its safe handling and internalization of their responsibilities for safe food production and consumption through pesticide minimization.

- 1. Developed various IEC materials and awareness videos
  - Produced flip charts, awareness flex, leaflet, brochure and short awareness raising videos.
- 2. Completed farmers field schools at 5 different places
  - 145 farmers were trained
- 3. Organized FCHVs training at 4 different groups
  - 100 FCHVs were trained
- 4. Organized training to periphery level health care workers
  - 26 health workers were trained
- 5. Accomplished training to school teachers
  - 43 school teachers were trained at 2 different groups
- 6. Conducted review programs to pesticide retailers
  - 24 pesticide retailers were trained
- 7. Follow up programs to different target groups
- 8. Community campaigns at different wards and areas
- 9. News and article publication/FHEN phase II in social media: 500+ followers
  - https://www.facebook.com/nepalpublichealthfoundation/videos/2247285435581586/
  - https://swasthyakhabar.com/story/28761
  - https://swasthyakhabar.com/story/28468
  - <a href="https://swasthyakhabar.com/story/28793">https://swasthyakhabar.com/story/28793</a>
  - https://narayanionline.com/2019/07/04/26870/#

### D. Monitoring and Evaluation

1. Internal audits have been completed at regular intervals

**No any financial irregularities**. Also the auditors appreciated the management of supporting documents.

- 2. External evaluation has been accomplished
- 3. Central Steering Committee (CSC) meetings at every quarter and review meeting between CSC members and FHEN field staffs have been conducted
- 4. Dialogos team had visited the field office, Chitwan

### E. Miscellaneous

1. Development of proposal for the 3rd phase of FHEN

### **Evaluation of FHEN project**

The current FHEN phase II was implemented in September 2017 and will remain till February 2020. In the current stage, the project has undertaken training as a key means for imparting IPM to the core target groups for dissemination and advocacy for public policy. A local NGO of Nepal, the NPHF together with the DASAM/Dialogos, a Danish Non-Governmental Organization (NGO) takes responsibility to implement the project activities.

### **Data and Methods**

The methods of data collection included three major activities, such as (i) study baseline survey and review of quarterly reports and other related documents, (ii) field visit and observation, and (iii) interactions with different target groups, project's field staffs and central staffs, and Central Steering Committee (CSC) members.

### **Findings**

The evaluation findings are organized in two ways: first is the achievement and the second is impact.

### **Training achievements**

As per the objectives, firstly to prevent occupational pesticide poisonings among the users by strengthening their knowledge, attitude and practice on IPM and organic alternatives to pesticides.

Secondly, the training to prevent pesticide poisonings including those due to self-harm and accidents by increasing awareness in the villages.

Thirdly, to facilitate advocacy to reduce pesticide poisonings and pollution by dissemination of knowledge, strategies and materials developed in the project at district and national levels.

# Project's performance and impacts Relevancy

This project is very relevant to Nepal, as yet 95% of the farmers are using chemical pesticides in the crops without knowing their harmful effects in both the health of the consumers and surrounding environment.

### **Efficiency**

The project appears to be efficient, as all the planned activities mentioned in the project document are found completed in time. The project's quarterly reports are written in organized,



Fig 5. Photo During Evaluation of FHEN Project

### **Objective**

As per the ToR, the objective of this work is to assess the performance of the project training activities and suggest recommendations for further strengthening of the project.

### **Recommendations for Next Phase:**

The project should prepare and include the followings in its next phase:

- Besides focusing on awareness about the health impacts of pesticide, it should focus on post-harvest management such as market linkage, cold stores, accreditation of the IPM products and so on. preparation of standard protocol for pesticide handling of poisoning cases
- Preparation of standard protocol for pesticide handling of poisoning cases, as to control haphazard use of different types of chemicals in vegetables and fruits.
- As the farmers are encouraged to grow the farm product from IPM method, it is essential to adopt methods about how to ensure to get adequate amount of organic pesticide.
- It needs to work on preparing technical inputs for the laboratory establishment, type, parameters, limitation, as laboratory for pesticide analysis is to be established by the municipalities.
- One of the ways of widespread dissemination of IPM use in the farming is through involving BPH and MPH students as interns in the project. This should be continued and

consistency, and timely manners. The project seems efficient and flexible by producing increased number of trainees.

### **Effectiveness**

The project staff are undoubtedly competent in providing pesticide management training, as it is reflected through the fact that they have received several invitations to deliver lectures to the Cooperatives and Mother Groups about the safe handling of pesticides. The project has initiated to formulate pesticide acts and guidelines through DCC. However, in the changed context of federal political structure, an advisory/advocacy committee at the municipal level would have tremendous impact on the project effectiveness. As irrational use of pesticide is a serious issue in Chitwan as in other Terai districts.

### **Sustainability**

The project appears to be sustainable, as the municipalities have allocated NRS 2,000,000 - 5,000,000 for the coming fiscal year to minimize chemical pesticide. Close collaboration and coordination with the municipalities and their ward offices have built up the trust between the local government and stakeholders.

### **Impacts**

One of many impacts of the project's training was to impart knowledge on severe chronic consequences of chemical pesticide and how to spray pesticides in safer way by using Personal Protective Equipment (PPE), keeping the spray tool in safe place, time and duration of spraying. It is found that the farmers upon receiving the training were practicing IPM in the vegetable farming.

# Highly Hazardous Pesticide Poisoning Gathering Requisite Information for Decision-Making (HOPE-GRID)

Intentional pesticides poisoning is a significant clinical and public health problems in Nepal. In 2014, WHO estimates that Nepal had the 7th highest suicide rate in the world (24.9 per 100,000). Evidence shows that restricting the sale of the highly hazardous pesticides (HHPs) most commonly linked to suicides is a highly effective way of reducing deaths and injuries from pesticide poisoning. Since countries may register different pesticide formulations that are imported or produced locally under different names, each country needs to conduct its own assessment of what HHPs lead to most harm. Thus, we aim to identify the highly hazardous pesticides currently responsible for majority of pesticide suicides in Nepal. Clinical and pesticide data for pesticide poisoned patients presenting to at least 13 hospitals, information on the pesticides for sale in local shops and data from the police and toxicology labs post-mortem records for patients who die before hospital presentation will be collected. These data will be analysed and presented to the national pesticide regulator in Nepal so that decisions about priority pesticide regulation can be informed.

### **Project Objective:**

- Identify burden of pesticide-related admissions and mortality in Nepalese hospitals.
- Study the spectrum of pesticides responsible for poisoning-related admissions and deaths.
- Study the spectrum of pesticides available in the pesticide shops

### **Project Area:**

Dharan, Janakpur, Kathmandu, Lalitpur, Chitwan, Butwal, Pokhara, Nepalgunj, Dang, Surkhet, Dhnagadi

### **Supporting partner:**

University of Edinburg, Center for pesticide suicide prevention

### **Activities carried out:**

- > Celebrated world suicide prevention day.
- Conducted Advisory committee meeting.
- ➤ Retrospective data (1st phase From 15th April 2017- 15th April 2018) collection completed in 7 hospitals (i.e Teaching Hospital, Bir Hospital, Patan Hospital and Bharatpur Hospital, Bheri Zonal hospital, Lumbini Zonal hospital, Pokhara Academy of health sciences ).
- Retrospective data (2nd phase From 16th April 2018- 15 April,2019) collection completed in 4 hospitals (i.e Teaching
  - Hospital, Bir Hospital, Bharatpur Hospital, Bheri Zonal hospital).
- Memorandum of Understanding (MoU) sign in 3 hospitals (i.e Dhulikhel hospital, Bharatpur hospital and Bheri hospital).



Fig 6. Rally on World suicide prevention day



Fig 7. Advisory committee meeting



Fig 8. Data collection from register

# Association of pesticide exposure and pregnancy outcome from a tertiary care hospital in Chitwan District, Nepal

Nepal Public Health Foundation formulated a research project based on the on identifying effect of pesticide exposure on pregnancy outcomes. The project was rolled out in May 2019 and the project has a planned duration of 6 months. Chitwan was chosen as the study site to perform the study since the majority of the household use pesticide on a daily basis. Bharatpur Hospital was prioritized because of its affordability and because the hospital provides incentive (delivery allowance) to the incoming pregnant women



Fig 9. Data collection in Bharatpur Hospital

depending on the area they are from.

According to the latest estimate, the annual import of pesticides in Nepal is about 211 ton i.e. with 29.19% insecticides, 61.38% fungicides, 7.43% herbicides and 2% others. Pesticide misuse is being a serious concern mainly in the commercial pocket areas of agricultural production, where farmers are suffering from environmental pollution. Incidence of poisoning is also increasing because of intentional, incidental and occupational exposure. Potential health effects associated with exposure to pesticides during pregnancy have become a major public health concern due to the widespread use of pesticides and the high sensitivity of the fetus and pregnant mother to toxic exposures. Consequently pesticide exposure in relation to such endpoints as infertility, miscarriage, stillbirth, preterm delivery, low birth weight, and birth defects are increasingly becoming subject area of research

To our knowledge, there are no studies so far regarding the pesticide exposure and adverse pregnancy outcome in Nepal. Therefore, this study aims to explore the adverse

### **Project Objective:**

To identify the association of pesticide exposure and pregnancy outcome visiting in Tertiary Care Government Hospital in Chitwan District, Nepal.

**Project Area:** Chitwan District

Supporting Partner: Nepal Public Health Foundation

Further Study Plan: This pilot project will be further initiated into a bigger project in collaboration with other partners. We have planned to use biomarkers as the main method to find out the existence of pesticide in pregnant women's blood. For this analysis, blood will be drawn from the cord after the delivery.

effects of maternal exposure to pregnancy outcome such as Still Birth, Low Birth Weight, Premature Birth and Appar score. So, this study is expected to inform the policy makers to formulate the plans, policies and programs for reducing the pesticide exposure.

### **Activities carried out**

- Research project designing
- Involvement of interns from Boston University in the research.
- Pretesting of questionnaire
- Recruitment of Data enumerators
- Data collection
- Data Analyzing



Fig 10. Data collection of Pesticide exposure and pregnancy outcome research

# **Program List**

### **Ninth Annual General Meeting (AGM)**

Nepal Public Health Foundation (NPHF) organized 9th Annual General Meeting on September 07, 2018 at Hotel Shanker, Lazimpat under the Chairmanship of Dr. Mahesh K. Maskey, Executive Chair of NPHF.

The meeting began with welcome speech by Dr. Mahesh K. Maskey, Executive Chair of NPHF. Prof. Dr. Sharad R Onta, Founding Member of NPHF delivered his presentation on 'Public Health Ac- 2018'. As Program II was started, Dr. Sameer M. Dixit, General Secretary of NPHF outlined the updates of each projects activities and financial statement of fiscal year 2018/2019. He concluded his remarks by thanking the staffs for their contribution and dedication towards their work, hoping for similar commitment and enthusiasm in the years to come. This was followed by presentation on annual plan of fiscal year 2018/19 of NPHF by Prof. Dr. Lochana Shrestha. The AGM endorsed bylaws (Administrative and Financial) and amendment in constitution. Also, two eminent personalities and members of our NPHF family. Dr. Madan Prasad Upadhyay, and Prof. Dr. Tirtha Rana were awarded with a prestigious life time achievement award. After, the discussion about further approaches of NPHF, the meeting was adjourned.



Fig 11. 9th Annual General Meeting

### **Ninth Nepal Public Health Foundation Lecture**

Nepal Public Health Foundation has been organizing public health lecture as its core activity every year inviting eminent personalities on 30th June to foster collective action on people with common agendas of public health. The inaugural lecture of year 2010 was delivered by Mr. Kul Chandra Gautam, a former Deputy executive Director of UNICEF and Assistant Secretary-General of the United Nations. Then after we had lectures by other eminent personalities working in Public Health every year.

The program started with the welcome address of Dr. Mahesh K. Maskey, Executive Chair of NPHF. He also introduced the keynote speaker of the Program.

This year, 2019 we invited Dr. Suniti Acharya, an eminent personality in Public health as a guest

Equity, universal coverage in Federal Nepal". This program was organized in MOHEGO Building, IOM, TUTH, Maharajgunj. She highlighted the progress of Nepal on Health Development, Equity, and universal coverage in Federal Nepal. Moreover she exposed the challenges and opportunities towards the road of universal health coverage (UHC) in Nepal.

The Programme was well attended by representative from different NGOs, INGOs, Educational institutions, Doctors, Clinical Medicine students, Students of IOM and other public health colleges. After the Lecture of Dr. Suniti Acharya, there was lively discussion session on various issues highlighted by her lecture. The session was moderated by Dr.Mahesh Kumar Maskey, executive chair of Nepal Public health foundation. The program ended by Dr. Samir Mani Dixit, Secretory, Nepal



Fig 12. Dr. Suniti Acharya delivering lecture on Nepal Public Health Foundation Lecture Series

lecture in Nepal Public Health Lecture series. She delivered lecture on "Health Development Public Health Foundation, by expressing his gratitude.

### **Research Dissemination**

### Stunting decline in Nepal: A Country Case Study

Despite of low Gross Domestic Product (GDP) with political instability and armed conflict, Nepal has made impressive gains in nutrition status of population. According to Nepal Demographic Health Surveys (NDHS), stunting in Nepal has declined from 57% in 2001 to 41% in 2011 to 36% in 2016, an annual decline of 1.6 percentage points and is commended as exemplar for success story in global nutrition forum. The Ministry of Health along with other related ministries has put tremendous efforts in reducing stunting prevalence. Evidences have also helped to reveal critical factors behind Nepal's story of change in nutrition. In light of the belief that Exemplar countries may provide essential case study for discovering the diverse determinants responsible for successful reduction, Nepal was chosen for this study. The project was started from 1st December 2017 in Kathmandu collaboration with Sick Kids Hospital, Canada. On 21st December 2018, Nepal Public Health Foundation conducted a dissemination program of this project. The program was started by the welcome remarks given by Dr. Mahesh Maskey followed by a presentation on the overview of the project by Mr. Raj Kumar Subedi. With few discussion and remarks given by some of the Public Health expert, the program was adjourned.

### Research findings:

- Stunting prevalence and reduction varied by province in Nepal
- The greatest average annual % point improvement in stunting was in Provinces 3 and 4, followed by Province 7
- Disparities in stunting persisted and in some cases increased across wealth, education and area of residence
- Child growth trajectories show, from 1996-2016, a major shift of the entire child HAZ curve to the right, while wide variation remains; significant improvements in HAZ at birth (almost 1 SD HAZ improvement, some gains among 9-20 month olds.
- Difference-in-differences models show significant time\*covariate interaction terms for: availability of health posts, primary health care facilities, piped water source, skilled birth attendance, diarrhea incidence, maternal anemia during pregnancy
- Decomposition analysis suggests child growth gains from 1997-2012 due to: improvements in parental education, wealth index, maternal nutrition, maternal and newborn healthcare utilization, reduced fertility, reduction in rates of open defecation.

Long-standing successful health programs, strong community-based programs, improvements in non-health sector and nutrition-sensitive sectors critical to child stunting decline.

Nepal Public Health Foundation Annual Report 2018/19

### **Exemplars in Global Health: Reducing Under-5 Morality in Nepal**

The rates of U5M in Nepal dropped between 2000 and 2015 to become one of the lowest in the South Asia region. The University of Global Health Equity (UGHE) worked with the teams at bgC3 and the Bill and Melinda Gates Foundation to better understand countries' successes in reducing under-5 mortality (U5M). This work was initially designed with two aims: 1) developing and testing an implementation framework and mixed methods approach to understand the successes of these countries and 2) extracting actionable knowledge focused on implementation strategies and key contextual factors to inform other countries working towards the same goal. The final dissemination program of 'Exemplars of Global Health: Reducing under Five Mortality in Nepal' to share and discuss the project findings. The program was held on Shanker Hotel, Lazimpat, Kathmandu, Nepal on 16th Nov 2018. Evidence based intervention and Neonatal-specific Mortality Evidence-Based Interventions were carried out.

### **Findings of Research**

The reasons behind the under-five mortality decline in Nepal were due to the Interventions or treatments that have been proven effective through outcome evaluations. The research identified Evidence based interventions directed at amenable under five mortality through literature review, guidelines and recommendation review expert input and focused on those relevant to Low middle income countries. The major identified under five killers in Nepal are Preterm birth complication, neonatal sepsis, Diarrhoea, pneumonia, malnutrition, undernutrition and other infectious diseases. The Evidence based intervention was able to address Major Causes of Death.

### **Activities**

### **Internship/Volunteering Program**

Nepal Public Health Foundation accepts interns from every national and international platform. Interns from Tribhuvan University-Institute of Medicine, BP Koirala Institute of Health Sciences, Wageningen University, Netherlands, Lund University, Sweden; SRM University, India; Boston University School of Public Health, USA and other students studying Bachelor / Masters in healthrelated fields have successfully completed their internship till date. The internship period can be from minimum of 4 weeks to maximum of three months but are extended under special circumstances. In any condition the period can't exceed 6 months.

This year, two students from Boston University School of Public Health, studying Master in Public Health completed their 6 weeks internship along with respective field work whereas one student from Padmashree School of Public Health, Banglore completed three month of internship as a part of their academic requirement.

### Name of Interns

Ms. Reshma Neupane Ms. Kristina D'orsey Mr. Rajesh Rana

# **Advisory Committee Meeting HOPE-GRID**

A meeting was held at NPHF office at 3:30pm on 25th January in order to formation of advisory committee with their roles, responsibilities, expectation and discussion to support the research project. The meeting included participation of Dr Mahesh Kumar Maskey, Dr Buddha Basynat, Ms Sangeeta Lama, Mr Janak Thapa, Dr. Rakesh Ghimire, Dr.Gael Robertson, Ms Manisha Pokhrel, Dr Dilliram Ram sharma and Dr Guna Raj Lohani

In the two days session we have discussed on following highlighted topics.

### **Presentations from Nepal**

Brief introduction about the project including background, methodology, study sites, study plan, articles related with pesticides highlighting the pesticides suicide issues.

### **Discussions**

Overall research project;

- Approaches from pesticide shop from respective place in number
- Data monitoring, audit and coding, entry and analysis
- Interim analysis of data
- Compare data set from other sources police data and hospital data.
- How do we go from here needs expert consultation
- When to conduct next meeting
- Social aspects of pesticides suicide issue

### Agenda topic

- Openings and introduction
- Introduction to the project
- Advisory committee: Roles, responsibilities, expectation, Discussion
- Support to study hospital
- Next steps and closing

### Way forward

This meeting and discussion was part of project and this type of proceeding provides a short overview of the discussion and experience from the team and also highlights the main solutions and recommendation provide by the participants .Also all member found the sharing experience invaluable and agreed to sharing information with each other.

### Conclusion

Finally meeting was concluded by sharing experiences and vote of thanks for all the participants and looking forward to follow all the major discussion point for future betterment of ongoing research.

### Recommendations

- Refine the methodology for Nepal to include scientific data with a community approach.
- Baseline data from the police sources.
- Monthly review meeting of Nepali team of the entire Nepal team.
- Data sources should be collected.
- Next advisory meeting at least three times a year probably in 2nd week of April.

### **Board Meeting, NPHF**

Nepal Public Health Foundation holds Board meeting in every two months. In the fiscal year 2018/17, total 7 board meetings were held. The board committee consists of nine executive board members; Dr. Mahesh K. Maskey who is the president (executive chair) of the NGO, Dr. Buddha Basnyat is the vice president, Dr. Sameer Mani Dixit is the general secretary, Dr. Lochana Shrestha is the treasurer along with Dr. Aruna Upreti, Dr. Karuna Onta, Dr. Rajendra BC, Dr. Abhinav Vaidhya and Mr. Narayan Subedi as the board members of NPHF. The board meeting is the meeting done to update the implemented plans, help with the planning, brief the current activities, planning the future activities etc.

### **Disaster Management in Bara**

After the storms hit Bara on 31st March 2019 (Chaitra 17, 2075), NPHF and PSRN took initiative to help the victims. The need for Psycho-social counselling was felt and thus a team with 8 member was formed (who were fluent in local language and inclusive of gender and different faculties in IoM) from PSRN-student's chapter and provided them with basic training of psychosocial counselling. The initiative for this was done by Dr. Mahesh Maskey and Dr. Sharad Onta. This training was given by Department of Psychiatry and Mental Health in Institute of Medicine for 2 days. The team travelled to Bara on 28th of Chaitra under the leadership of Dr. Birat Kumar Gautam and included Dr. Homendra Kumar Sah, Sushma Sah (BPH), Anita Shah (Nursing), Priyanka Chaudhary (Pharmacy), Kriti Karn (BASLP), Bivek K. Sah (MBBS), Saroj Chaudhary (MBBS). The team met with Dr. Madhav Lamsal who was the representative of government and provided them with necessary orientation. Since, a need for manpower to analyze the consequences of the storm by directly talking with the victims, was felt, the objective was extended to:

- To provide Psycho-social counselling to victims of Bara storm.
- To analyze about various aspects of disaster management:
- Initial Rapid Health Response (IRR)
- Health Services after IRR.
- Distribution of Relief Materials
- Public health Issues
- To Relay of information to health officials at work
- To Discuss on the short-comings of disaster management

For Eg: importance of First Aid with authorized personnel (Ward chief) was done.

### The Findings of our visit were:

- The majority of effected household were kachha houses while the majority of deceased were from non-pillar brick houses.
- The immediate effort of local people and use of local resources in the management of injured people was one of the important factor in keeping the number of deceased to a minimum.

- Lack of a trained first aid management team led to improper transportation of the injured ones which might itself have increased the trauma and be the cause of long term disability.
- The hospitals nearby showed clear lacking of disaster preparedness skill but provided a strong support system to the health management.
- The health intervention and management of injured people have been adequate and effective.
- The distribution of relief material was almost adequate and was executed in a very planned manner after few day of the event leading to nearly homogenous distribution (except few areas).
- Lack of proper demonstration of use of relief materials was found to be a serious issue especially with piyush and chlorine tabs.
- The prime concern of the affected people for now was found to be re-building of their houses.
- The most important limiting/delay factor for progress towards rehabilitation of homes was the
  attitude of people and dependency upon government along with direction of some stakeholders
  to wait for it.
- The health post in-charge and FCHVs were the key person for health promotion activities but in some areas they were not as effectively done as it should have been.
- Recreational activities was found to be one of the most effective way to decrease the psychosocial distress.

After 7 days of visit, the team became successful to achieve their objectives and returned to Kathmandu 4th of Baisakh, 2076. Presentation was done at NPHF on 7th of Baisakh and subsequently in PSRN and IoM.

### **Nepal Public Health Educational Institute Network (NePHEIN)**

Nepal Public Health Education Institute Network (NePHEIN) is network of public healthinstitutions in Nepal. It was formed on July 06, 2011 with an aim to produce competent manpower and conduct researches to effectively address the challenges of the country. Also, to mobilize the knowledge, expertise and talent of the academic institutions and other research organizations contributing directly or indirectly in conducting quality public health researches; and to foster the mutual help and collaboration among aforementioned institutions to address existing and future challenges in public health. Nepal Public Health Foundation, secretariat of it

called for meeting on March 16, 2017. Participants from Institute of Medicine, BPKIHS, Nepal Academy of Medical Sciences, KU Medical College and Patan Academy of Health Sciences attended the meeting. Major outcomes of the meeting were reformation of executive body, creation of its website, preparation of profile of all public health institutions in Nepal, plan for drafting proposal on national seminar on Universal Health Coverage and communicable diseases. They also agreed upon consulting WHO Nepal and Government of Nepal for above activities. They also made consensus of continuing NPHF as its secretariat.

# **Annual Plan and Strategy**

### NPHF core activities plan

### **Nepal Public Health Foundation Lecture Series**

Nepal Public Health Foundation has been organizing public health lecture as activity every year inviting eminent persons on 30th June to foster collective action of people around common agendas of public health. The inaugural lecture of year 2010 was delivered by Mr. Kul Chandra Gautam, a former Deputy executive Director of UNICEF and Assistant Secretary-General of the United **Nations** who highlighted on 10+2agenda for public health. In 2011, Prof. Dr. Mathura Prasad Shrestha, Advisor of NPHF delivered lecture on "Understanding Public Health: Conceptual and Philosophical Foundation". In 2012, Dr. Mrigendra Raj Pandey presented his lecture on "Control of Non-Communicable Disease: Scientific, Social and Spiritual perception". In 2013, Dr. Hemang Dixit presented his lecture on "Public Health in the

past, present and future". In 2014, Dr. Rita Thapa, Advisor of NPHF presented on "Changing Public Health Paradigm- (Changing Maternal Child and Family Planning)". In 2015, Dr. BD Chataut, Founding Member of NPHF delivered lecture on "Unveiling the debate on Euthanasia". In 2016, Dr. Buddha Basnyat, Vice- President of NPHF delivered lecture on "From a Reluctant Researcher to Public Health Advocacy: My Life and Times". In 2017, Dr. Badri Raj Pande, Founding Member of NPHF delivered lecture on "Switching to Public Health from Clinical Pediatrics - a reminiscence". In 2018, Dr Dharma Sharna Manandhar delivered the lecture on the topic "My adventure in Public Health Research". In 2019 Dr. Suniti Acharya delivered lecture on "Health Development Equity, Universal coverage in Federal Nepal".

**Total Budget:** Rs. 100,000

It covers the cost of hall, book, token of love, etc.

Source of fund: NPHF Main account.

### **Health Policy Dialogue**

Nepal Public Health Foundation was established with a mission to have concerted public health action, research, and policy dialogue for health development, particularly targeted to marginalized population. There is a need for NPHF to focus on pertinent public health issues and act as a pressure group, engage in continuous evidence informed policy advocacy based on research conducted by NPHF and others for policy implications.

NPHF members are nominated in key policy making committees such as High-Level Health Advisory Committee, thematic groups of the New Health Policy 2014, thematic group of health for all. This involvement gives members the opportunity to engage in policy dialogues. Members have also taken lead roles in advocating public health policy matters.

From this fiscal year it has been planned to organize a health policy dialogue once in every three months inviting the policy makers and government officials. World Health Organization will be the supporting partner for this activity.

### **Public Health Foundation Website and Social networking**

### Official website

Nepal Public Health Foundation has its own official website: www.nphfoundation.org which provides updates of all the activities of NPHF. In 2017, the old website was redesigned and published. The materials are also being updated

regularly. Further, coordination will be done with Nepal Health Research Council (NHRC) for exploration of possibility to establish digital library.

As we are already planning to involve all of our current projects into this digitalization system, we are also planning to initiate mapping structure of all our working areas (districts) in the website.

### Project exploration and bidding

For exploration of grants and funds, a team will be formed which will spare their certain time in exploring grants and funds. The team will be responsible for providing assistance to develop the proposal. In this fiscal year, a dozen of proposals are anticipated to be developed.

### **Collaboration with Government**

Series of meetings will be held with different divisions/departments/centers of Ministry of Health and Population Areas of collaboration will be discussed and eventually this will create a platform to work together with government.

### **Modular Lecture**

A modular lecture programme will be conducted once in every month which will last for one week mainly targeting the bachelor and masters level students as well as fresh graduates in medical and allied health disciplines. On an average, NPR 5000 will be charged per participant for a week-long course. Assuming an

average of 15 participants per course, the expenses and income is as follows:

Expenses per programme: Rs. 40,000 (Making a total of Rs. 4,80,000 in a year)

Income per programme: Rs. 75,000 (Making a total of Rs. 9,00,000 in a year)

### **Interaction with Health Journalists**

An interaction programme will be conducted four times in a year where current issues of health will be discussed.

Budget: Rs. 10,000 per programme making a total of Rs. 40,000 for a year.

This cost covers the refreshment, hall cost and transportation and communication cost.

### **Institutional social responsibility**

### NPHF field office

Nepal Public Health Foundation has initiated a field programme in Namobuddha VDC of Kavre District with the aim of improving socio economic status of community along with the nutritional status of children. Basically, whole programme is encountered to the concept of community empowerment. The vision is to establish an exemplary farm which will uplift the status of the community people.

# people for taming cows. Milk produced will be distributed to the community school located over there and the surplus products will be sold in the market. The profit gained will be used to buy egg to feed the school children daily and also for the sustainability of the project. At the end, the farm will be handed over to the community.

### **Approaches**

Animal husbandry has been conceptualized to achieve this aim. Agriculture and allied activities have been the core livelihood for majority of the rural people in Nepal. A farm will be established in a ward of the VDC engaging the community

### **Working partner**

Sanima Bank Limited will provide financial support for this programme as a part of their Corporate Social Responsibility (CSR) along with loan of nominal interest rate.

**Total budget:** Rs. 10,000 per visit (Total in a year: Rs. 500,000)

This budget covers the transportation cost and refreshment for the staffs visiting the field site. The field visit will be done twice a month. There

is separate budget for the implementation of the project.

### **Urban Community Health Awareness Program**

The focus area of this activity is ward no. 4 of Kathmandu i.e. the area where NPHF office is located. The target population will be school children, adults and elderly population residing in this area. Following activities will be carried out in this fiscal year in collaboration with the local NGOs; Tusal Youth Club and Prayas Nepal:

- School health programmes
- Talk programme about in community in monthly basis

- Obesity screening programme
- Ward cleaning

**Budget:** Rs. 1,20,000 (Rs. 10,000 every month)

It covers the cost of screening programme, transportation cost. Payment to the senior physician for talk programme, etc.

Tentative date: Last Friday of every month

### **Budget structure**

Proposed total expenditure and income for NPHF core activities (2018/19), other than specific projects.

SN	Activities	No. of	Expenses	Income	Remarks
		activities	Amount	Amount (Rs.)	
		in a year	(Rs.)		
1	NPHF Lecture Series	1	100,000	9,00,000 (from	
1.	Health Policy dialogue	4	40,000	Modular lecture) + 1,000,000 NPR per year from voluntary donation	
2.	Proposal Exploration and bidding	12	300,000*		This will be compensated by the awarded project
3.	Modular lecture	12	480,000	- -	
4.	Interaction with health journalist	4	40,000		
5.	NPHF field programme	26	500,000		
6.	Urban community health awareness programme/ward cleaning	12	120,000		
Grand Total					320,000 NPRS
			1,580,000	1,900,000	

<sup>\*</sup>since this will be recovered from the awarded project, it is not added in the total amount

### **Working Partners**

The working partners for all the activities of this fiscal year:

### International/Multinational

- UNICEF Nepal
- Nepal Health Research Council
- Liverpool School of Tropical Medicine
- Boston University School of Public Health
- University of Edinburgh
- Oxford University
- Ipas
- WHO Nepal
- DIALOGOS, Denmark

### **Local Partners:**

- Nepal Health Research Council
- Prayas Nepal
- Tusal Youth Club

### **National Academic Partners:**

- Patan Academy of Health Science
- Tribhuvan University, Institute of Medicine

### Major reforms anticipated for FY 2018/19

- Formation of fund raising committee (with representation of board members)
- Roster preparation for mapping potential collaborators/consortium
- Departmentalization within NPHF
- Formation of Health Alliance
- Endorsement/amendment of organizational policies in different areas (e.g. administrative and financial by-laws, anti-fraud policies, constitution [amendment in areas such as account handling etc.], COI policies etc.)
- Exploration of collaboration with universities and councils for launching accredited courses with long term aim of starting university degree course.

# FIELD SPOTLIGHT

# **Field Case Study**

### महादेब खड्का

चितवन जिल्ला, कालिका नगरपालिका वडा नम्बर ७, स्थित जुटपानीमा विगत ३ वर्ष देखी तरकारी खेती गर्दै आउनुभएका महादेब खड्का गाउँघरमा एक सफल कृषकको रुपमा चिनिदै आउनुभएको छ। चार जना परिवार सहित तरकारी खेती गर्दै आउनुभएका ४५ वर्षिय महादेब खड्का नेपाल जनस्वास्थ्य प्रतिष्ठान द्वारा सञ्चालित १६ हप्ते आई.पि.एम् तालिमको एक सहभागी हुनुहुन्छ।

आई.पि.एम् कृषक पाठशालामा सहभागी भए पश्चात उहाँको बोली जस्ताको त्यस्तै ।



''९५ धुर जमीनबाट लगभग २५० के.जी काँका र घिरौला बैंचे । यसमा लगानी रु ३००० गरे र आम्दानी रु १०,००० भयो ।''

"आई.पि.एम् तालिम सिकेपछि यही पद्धती नै अबलम्बन गर्दे आएको छु । ३५० ग्राम सम्मको करेला फलाए । जैविक वनस्पतिबाट पिन किराहरुलाई व्यवस्थापन गर्न सिकन्छ है भनेर छरिछमेकीहरुलाई भन्दै आएको छु र आफूले तयार गरेको जैविक वनस्पति प्रयोग गर्ने विधि सिकाउँदै बाढदै आएको छु । अहिले हामीलाई नी कसरी बनाउने हो सिकाइदिनुन भन्दै निजकका किसान म सँग सिक्न आउनुहुन्छ ।"

"कृषिनै मूख्य पेशा हो र हालसालै ५ धुर जग्गामा बोडी लगाएको छु अनी ६/१२ फिटको प्लाष्टिक घर बनाउन लाग्दै छु।"

''किहलेकाँही कसैसँग विवाद भयो भने खेतबारी मा आउँछु , गोडमेल गर्दै तरकारी फलेको हेरिराख्दा रिस आफै बिस्तारी हराउदै गएको महसुस गर्छु ।''

"तरकारी फलाउनु भन्दा पिन यसको बजार व्यवस्थापनमा समस्या हुनी रहेछ । आफूले दुख गरी गरी उत्पादन गरेको तरकारीको मुल्य बेच्दा कम मुल्य पाउछौ तर त्यही तरकारी त्यही बजारमा उपभोत्ताले बढी मुल्यमा किनेको देख्दा दु:ख लाग्ने रहेछ ।"

"बजार व्यवस्थापन राम्रो भयो भने हाल २ कट्टामा लगाएको तरकारी बालीलाई ६ देखी ८ कट्टा सम्म पुराउने लक्ष्य राखेको छु।"

### फिरिल्ला मर्दानिया

कालिका नगरपालिका वडा नं ४ मा बसोबास गर्दें आउनुभएका फिरिल्ला मर्दानिया पेशाले एक कृषक र विषादी छर्ने व्यक्ती पिन हुनुहुन्छ । चार जना परिवार सँख्या रहेको उहाँको परिवारमा आफु केरा किसान हुनुहुन्छ भने छोरा इलिक्ट्रिसयन छन । फिल्ड अनुगमनको क्रममा उहाँ घरमा अनुपस्थित भएको हँदा उहाँको श्रिमती मायादेवी मर्दानिया सँग हामीले कुराकानी गर्ने मौका पायौं । भलाकुसारी गर्दा उहाँले भन्नुभएकका केही महत्वपुर्ण भनाई जस्ताको त्यसतै।



"पहिला अरुकोमा छर्न जानुहुन्थ्यो अहिले आफ्नोमा मात्र विषदी छर्नुहुन्छ।"

"तालिम अगाडी सुरक्षीत पहिरन लगाउनु हुनुहुन्थ्यो अहिले लगाउनुहुन्छ।"

"पहिला विषदी छर्नी ट्याङकी ८००० परेको , बाहिर राख्दा कसैले चोरदीने होकी भनेर आफु सुत्ने कोठामा राख्नुहुन्थ्यो अहिले छुट्टै घर बाहिर २,३ चोटी पखालेर घोप्टो पारेर राख्नुहुन्छ।"

"ट्याङकी भित्र राख्दा गनायो भन्दा म दिनभरि छर्केर आउँदा केही भएकोछैन तिमीहरुलाइ गनाउनी भन्नुहुन्थ्यो, अहिले आन्नद भएको छ । पहिला विषादी छर्दा हातमा उहाँको विविरा देखिन्थ्यो अहिले यस्तो समस्या देखिएको छैन ।"

"पहिले ज्ञान थिएन, अहिले ज्ञान आयो।"

### तारा बर्तीला

राप्ती नगरपालिका भण्डारामा बसोबास गर्दे आउनुभएका तारा बर्तीला र हरि प्र. बर्तीला पेशाले एग्रोभेट गर्दै आउनुभएको छ । चार जना परिवार सहित यही गर्दै आउन्भएका उहाँहरुमध्य तारा बर्तीलाले नेपाल जनस्वास्थ्य प्रतिष्ठानद्वारा सञ्चालित ३ दिने विषादी न्युनीकरण सम्बन्धी खुदा विकेता तालिममा सहभागी हन्भएको थियो ।



भलाकुसारी गर्दा उहाँले तालिम पश्चात भएका सिकाइ र अनुभव जस्ताको त्यसतै।

"१४ वर्ष देखी सञ्चालन गर्दै आएका छौं, २०६२ सालमा एग्रो रुपमा दर्ता र २०६५ सालमा भेटको रुपमा पनि दर्ता भएको थियो।"

"पसलमा आउने प्रत्येक ग्राहाकलाइ औषधी होइन विषादी हो भनेर बुक्ताउने गरेको छु। विषादी छर्दा सुरक्षीत पहिरन मात्र लगाएर छर्न्होला भन्दै विषादी दिन्छौ।"

"आजकल विषादी प्रयोग कर्ताले मास्क, पञ्जा लगाउन थाल्नुभएको छ।"

"तालिम अघि एग्रोको विषादी र भेटको औषधी सँगै थियो अहिले एग्रोको छुट्टै भेटको छुट्टै राख्दै आएको छौं।"

"पसलमा बस्दा सधै मास्क र पञ्जा लगाउने गर्छो । छोराछोरी लाई पसलमा बस्न दिन्नौं ।"

"अभौ पनि किसानहरु पंहेलो लेबलको विषादी माग्ने गर्छन, तैपनि क्षतीको अनुमान गर्दै विषादी दिन्छौ।"

"सामन्यतया साइपरमेथिन, इमिडाक्लोरोपिड, क्लोरोपाइरिफस किसानहरुले बढी प्रयोग गर्ने गर्छन ।"

# Case study report of FCHVs

Chitra Kumar Sunwar, Incharge Geetanagar Health Post, he is one of the participants of health workers training organized by Nepal Public Health Foundation.

"I have realized that to reduce the harmful consequences of pesticides, Integrated Pest Management methods is the most to be done by farmers. Having realized IPM is most necessary Ward Chairperson has allocated the budget to organize the program for pesticides minimization for upcoming fiscal year."



"It takes long time to come in practice but more were aware about the harmful effects of the pesticides and has started farming vegetables for their own purpose rather than visiting markets."

### Gyan Hari Wagle, Senior AHW, Geetanagar Health Post,

"Nepal Public Health Foundation helped me to gain knowledge regarding pesticides and techniques for safe handling. I believed, If only people practiced what they have perceived than it will reflect the positiveness and effectiveness of the program."

"It would be more effective if training program would be arranged for all health workers of every health facilities."

"It is necessary to include the commercial farmer as they are using the pesticides haphazardly to produce more crops."

"Local level governments are advocating to use the green level of pesticides in case of needs. However, there are



some fraud in the market who has aim just to earn money and those can replace the level indication. Such things should be considered by our government."

### Bhima Pandey, FCHV of Geetanagar

"There should be one day program for community, farmers especially for pregnant and lactating mothers on adverse effects due to pesticides and its safe handling because their diet habit directly linked with the health of the child."

"While visiting the home of the commercial farmer I saw he had placed the buckets used to mix the pesticides on the kitchen which is very perilous for our health. During



interrogating he mentioned he had no clue on its harmfulness. I counseled him and his family not to store those on kitchen and warned about the harmful effects of the pesticides on human health."

### Deepak Khadka, Teacher, Shree Shiddhartha Ma.Vi. Jagatpur,

"I would like to thank NPHF for providing the great opportunity to learn about the pesticides

and its harmful effects on health. Before training I was completely unaware on such topics (labels of pesticides, mode of entry of pesticides on our body, effects of pesticides on human and environment, waiting period of pesticides, things to do and not to do while handling pesticides). Video on health effects due to pesticides shown during training has opened my eyes and motivated me a lot to make community people more conscious about pesticides."



"After training I have facilitated four classes for grade 8, 9 and 10 about adverse effects of pesticides and prevention and I will continue this awareness program on weekly routine basis."

"Many of the students are from agricultural background. I believe this awareness program is beneficial for them and I hope students will relay information to their parents. So, this is very great opportunity to provide more awareness among student which is directly related to the community level."

# **ANNEXURE**

### **Advisors**

Mathura Prasad Shrestha Rita Thapa Kul Chandra Gautam Suniti Acharya

### Legal Advisor

Badri Pathak

### **Executive Board Members**

Mahesh Kumar Maskey (President/Executive Chair) Buddha Basnyat (Vice President) Sameer Mani Dixit (General Secretary) Lochana Shrestha (Treasurer)

Abhinav Vaidhya (Member)

Aruna Upreti (Member)

Karuna Onta (Member)

Rajendra BC (Member)

Narayan Subedi (Member)

### Life Members

Archana Amatya

Bishnu Chaoulagai

Janak K. Thapa

### **Ordinary Members**

Chhatra Amatya

### Founding Members\*

Aarati Shah

Achala Baidhya

Alina Maharjan

Arjun Karki

Ashok Bhurtval

B.D. Chataut

Badri Raj Pande

Bhagwan Koirala

Bharat Pradhan

Binjwala Shrestha

Daya Laxmi Joshi

Dharma Sharna Manandhar

Gajananda Prasad Bhandari

I.M Shrestha

Kedar P Baral

Lonim Prasai Dixit

Nabin Shrestha

Narendra Kumar Shrestha

Nilamber Jha

Rajani Shah

Ramesh Kant Adhikari

Renu Rajbhandari

Sharad Onta

Shanta Lal Mulmi

Shiba K Rai

Shrikrishna Giri

Shyam Thapa

Suresh Mehata

Tirtha Rana

\*Listed alphabetically by first name

### Staff Members

Janak Thapa, Project Coordinator
Ami Maharjan, Admin and Finance Cordinator
Santoshi Giri, Project Coordinator
Basudev Bhattarai, Assistant Program Manager
Prakriti Poudel, Project Officer
Prapti Sharma, Project Officer
Manisha Pokhrel, Senior Research Officer
Neson Rai, Senior Research Officer
Pooja Khanal, Communication Officer
Rabin Nepal, Account Assistant
Devraj Moktan, Driver
Dilip Thakur, Night Guard

### FHEN (Chitwan field Office)

Simrin Kafle, Project Manager Sunil Dulal, Agriculture Officer Usha Neupane, Project Officer Amrit Pokharel, Field Officer Shirjan Kumar Yadav, Admin and Finance Officer Kamala Gurung, Office Assistant

# **Photo Gallery**



Dr. Madan Prasad Upadhyay receiving Lifetime achievement award from NPHF



Dr. Tirtha Rana receiving Lifetime achievement award from NPHF



Advocacy meeting FHEN



Integrated Pest Mmanagment-Farmers Field School at kalika with Dialogos team



Group Photo of School teachers training, FHEN



Integrated Pest Management-Farmers Field School at Kumroj



Dr.Abhinav Vaidye interacting with Farmers, FHEN Project



Training to FCHV, FHEN Project



Followup visit to farmers, FHEN project Final internship presentation by Intern



Training to pesticide retailers



Kalika FFS closing program



**Group Photo after 9th Annual General Meeting** 



**Group photo after 10th Nepal Public Health Foundation Lecture Series** 



# नेपाल जनस्वास्थ्य प्रतिष्ठान Nepal Public Health Foundation

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