

# 3 Health Workforce Performance and Accountability

*(Availability, Competency, Responsiveness and Productivity)*



**A Report of Operational Research**

**MAY 2012**



### **Disclaimer**

This publication is part of an Operational Research entitled “Barriers to Effective Policy Implementation and Management of Human Resources for Health in Nepal” under the project *Support to Health Workforce Through Civil Society Engagement* funded by the European Union and the Ladham Trust. The contents of this publication are the sole responsibility of SOLID Nepal and can in no way be taken to reflect the views of the funding organisations.

### **Copyright © SOLID Nepal 2012**

Any part of this publication may be freely published with appropriate acknowledgment.

### **Cover Photo © SOLID Nepal 2011**

### **Design and Printings**

The Creative Hands (SELF-MOTIVATED, INDEPENDENT & CREATIVE DEAF GROUP)  
Chhetrapati, Kathmandu, Nepal

### **Principal Investigator**

Dr Khem Bahadur Karki (MBBS, MPH)

### **Report Writer**

Dr Amod Kumar Poudyal (MSc Stats., PhD)

### **Recommended Citation**

Society for Local Integrated Development Nepal (SOLID Nepal) and Merlin Nepal. Barriers to Effective Policy Implementation and Management of Human Resources for Health in Nepal: Health Workforce Performance and Accountability (Availability, Competencies, Responsiveness and Productivity). Lalitpur, Nepal: SOLID Nepal; 2012



Government of Nepal  
**Ministry of Health & Population**

Phone: 4.

262987  
262590  
262802  
262706  
262935  
262862

Ramshahpath, Kathmandu  
Nepal

Date: .....17<sup>th</sup> July, 2012.....

Ref: .....

## Preface

Ministry of Health and Population has committed, through its second Nepal Health Sector Programme Implementation Plan (2010-2015), to improve the health and nutritional status of the people by providing them equal opportunity to receive quality health care services free of charge or at affordable cost thereby contributing to poverty alleviation. The ministry promotes access to and utilisation of essential health care and other health services, emphasising services to women, children, and poor and excluded. The plan and programmes are focused to changing risky life styles and behaviours of most at-risk populations through behaviour change and communication interventions.

The health sector requires competent and motivated health workforce to achieve the stipulated goals and targets of the health plan and the programmes. Nepal health sector is facing critical human resources for health (HRH) crisis for service delivery. Deployment and retention, production of skill mix human resources and their equitable distribution, availability, productivity, performance and accountability of the human resources for health are some of the major issues to be addressed by the health system. On the other hand, non-communicable diseases, accident and injuries and other new emerging diseases will require more epidemiologists and public health experts. A scientific and robust strategic plan for managing HRH both in public and private sectors, maintaining equilibrium in supply and demand, delivering efficient services to people so as to achieve MDGs, is now a prime concern for the Ministry.

The Ministry of Health and Population has prepared a HRH Strategic Plan (2011-2015) aiming to ensure the equitable distribution of appropriately skilled human resources for health to support the achievement of health outcomes in Nepal and in particular the implementation of Nepal Health Sector Programme-2 (NHSP-2). The HRH Strategic Plan has given main focus to achieve the appropriate supply of the health workers, equitable distribution of them, improved health workers performance, effective and coordinated HR planning, management and development across the health sectors.

Both the NHSP-2 and HRH Strategic Plan has highlighted the need of operational researches to find out the bottlenecks of health system in terms of policy implementation and HRH management there by to recommend the appropriate actions to strengthen the health system.

This operational research carried out by Society for local Integrated Development Nepal (SOLID Nepal) and Merlin with financial support from the European Commission and Ladham Trust helps to generate empirical evidence highlighting the key gaps and existing challenges in six key areas : a) Distribution and skill mix of HRH, b) Training, recruitment , placement and retention, c) performance and accountability, d) HRH management, e) working conditions and f) Civil Society Organisation's engagement . This will definitely support MoHP for further human resources planning and its effective implementation.

The MoHP would like to thank SOLID Nepal, Merlin, the European Union and Ladham Trust for carrying out this research. There is great appreciation to all research and logistics teams for their efficient work and to the research participants, for their valuable contribution to the research study.

  
Dr. Praveen Mishra  
Secretary

Kupondole - 1, Lalitpur  
PO Box 8975, EPC 1641  
Kathmandu, Nepal

T (977-1) 5544250  
F (977-1) 5544450  
E [Kathmandu@merlin-nepal.org](mailto:Kathmandu@merlin-nepal.org)

Chair **Lord of Ewelme**  
Chief Executive **Carolyn Miller**  
Charity Numbers **113511161016607**



## Foreword

It is my great pleasure to introduce this report on the *Barriers to Effective Policy Implementation and Management of Human Resources for Health in Nepal*. This report was the result of a comprehensive piece of nationally representative operational research, conducted by Society for Local Integrated Development (SOLID) Nepal in partnership with Merlin Nepal, which encompassed all Nepal's development regions and ecological belts. That research and, subsequently, this report were made possible with the financial assistance of the European Union and the Ladham Trust.

Every man, woman, youth and child has the right to enjoy the highest attainable standard of physical and mental health. The practical realisation of this right, however, has one significant precondition: To enjoy the highest attainable standard of health, every individual must first have access to suitably qualified and motivated health workers. While fundamental, this requirement remains a major challenge in many countries, particularly those which have significant geographical, economic and/or human resource constraints.

The Nepal Health Sector Programme – Implementation Plan II (NHSP-IP II, 2010-2015) mentions that Nepal has experienced a 35% growth in population since 1991, however the public workforce only increased by 3% during the same period, and approximately 25% of the total health workforce are unskilled. While having an adequate number of qualified health workers physically in place is obviously vital to ensuring access to quality healthcare, so too is the distribution and mix of those health workers, the quality and appropriateness of their training, their workplace performance and accountability, the effectiveness of their management structures and their working conditions. All of these contributing factors were assessed and analysed as part of this operational research.

SOLID and Merlin also recognise the proactive role civil society organisations (CSOs) can play in regard to human resources for health. As such, the current and potential roles of CSOs were considered throughout this research.

It is our hope that this publication will not only provide a holistic picture of the current health worker situation in Nepal, but also present all stakeholders engaged in Nepal's health sector with tangible recommendations which will, in turn, facilitate every Nepali accessing their right to the highest attainable standard of health.

More information on the importance of health workers and the challenges they face can be found on Merlin's Hands Up for Health Workers campaign site: [www.handsupforhealthworkers.org](http://www.handsupforhealthworkers.org).

Catherine Whybrow  
Country Director  
Merlin Nepal

14 Years of  
Dynamic, Steady and Dedicated efforts ..... moving ahead

# स्थानीय एकीकृत विकास समाज नेपाल

## Society for Local Integrated Development Nepal

### Acknowledgements

It is our immense pleasure to bring forth the series of reports of operational research entitled "Barrier to Effective Policy Implementation and Management of Human Resources for Health in Nepal" under the project "Support to Health Workforce through Civil Society Engagement". This operational research highlighted six crucial thematic areas of Human Resources for Health (HRH) in Nepal: 1) Distribution and skill mix of health workforce; 2) Recruitment, training, placement and retention of health professionals with an emphasis on public-private partnership; 3) Health workforce performance and accountability; 4) HRH management from central to district level; 5) Working conditions of health workforce; and 6) Role of civil society in HRH.

We would like to express our heartfelt thanks to the secretary of Ministry of Health and Population, Dr. Prabin Mishra for his steady and constructive support from the very beginning of the project. We highly acknowledge the senior officials from the ministry namely Dr. Baburam Marasini, *Senior Public Health Administrator*; Ram Chandra Khanal, *Senior Public Health Administrator* and Kabiraj Khanal, *Undersecretary* for their support in each and every step of the operational research especially for thorough review of the research findings and providing substantial inputs. Our sincere thanks also go to other officials in the ministry and its departments for their valuable supports.

It will be a true injustice if we do not acknowledge Mr. Raghu Ghimire, an *HRH expert in Nepal* for his selfless reviewing of the reports and providing valuable feedbacks in all the reports. We are also indebted to Prof Dr. Chop Lal Bhusal, *Chairman*; Dr Shanker Pratap Singh, *Member Secretary*, Nepal Health Research Council for their encouragement and guidance in the research processes. Dr Rajendra BC, a well known researcher has also contributed a lot to refine and make the research meaningful. Thank you Dr BC.

We never forget associate professors, Dr. Amod Kumar Poudyal and Bidhan Acharya for their great contribution in research design and also report writing.

We also would like to mention a constant support provided throughout the research from Catherine Whybrow, *Country Director* (Merlin Nepal). We are equally thankful to Maxime Piasecki former *Country Director*, Dr. Mukesh Prajapati, *Former Country Health Director*, Dr. Sayed Masoom Shah, and *Former Country Health Programme Manager of Merlin Nepal* for their inputs in the research process. We highly appreciate the work done by Gabriella Saunders for enriching the reports. Similarly, we are equally indebted to Lizzy Berryman, *Health Advisor*; Dr. Rajesh Narwal, *Health Officer*; Marta Persian, *Regional Programme Coordinator*; Dr. Samson Agbo, *Head of Health*; Gabor Beszterczey, *Head of Asia Region*; Katherine Schwarz, *Former Regional Programme Coordinator*; Pete Jones, *Former Programmes Assistant* and Charlotte Rooney, *Programmes Assistant* of Merlin UK for their valuable feedbacks and suggestions in research processes and reports.

Sincere gratitude goes to the energetic and innovative report writing teams from both SOLID Nepal and Merlin Nepal, without their creative penning, the reports would not have come to this form.

Lastly, we are very much thankful to European Union and Latham Trust for providing the fund for the whole project. We are also very much grateful to the entire SOLID Nepal Team as well as Merlin Nepal for their continued support. We highly acknowledge all the individuals, institutions and stakeholders who have actively participated in this research processes.



Dr. Khem B. Karki,  
Executive Director/Principal Investigator  
SOLID Nepal  
May 2012



#### Head Office

Sardobato, Lalitpur  
GPO Box No. : 9565 Kathmandu, Nepal  
Tel. No. 977-1-5-548455, Fax : 977-1-5-553770  
Email : solidnepal@wlink.com.np, Website : www.solidnepal.org.np

गतिशील, निरन्तर र निष्ठापूर्ण प्रयत्नहरूका १४ वर्ष ..... अघि बाकि रहेछौं

# ACRONYMS

<b>AHW</b>	Auxiliary Health Worker
<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>ANM</b>	Auxiliary Nurse Midwife
<b>ARI</b>	Acute Respiratory Infection
<b>BCG</b>	Bacillus Calmette-Guerin
<b>BN</b>	Bachelors in Nursing
<b>BPH</b>	Bachelors in Public Health
<b>BPKIHS</b>	B.P. Koirala Institute of Bachelor in Science
<b>CBOs</b>	Community Based Organisations
<b>CDD</b>	Control of Diarrheal Diseases
<b>CDR</b>	Central Development Region
<b>CMA</b>	Community Medical Assistant
<b>CSO</b>	Civil Society Organisation
<b>CTEVT</b>	Council for Technical Education and Vocational Training
<b>DDC</b>	District Development Committee
<b>DfID</b>	Department for International Development
<b>DHO</b>	District Health Office
<b>DoHS</b>	Department of Health Services
<b>DPHO</b>	District Public Health Office
<b>DPT</b>	Diphtheria, Pertussis and Tetanus
<b>EC</b>	European Commission
<b>EDPs</b>	External Development Partners
<b>EDR</b>	Eastern Development Region
<b>EHCS</b>	Essential Health Care System
<b>EPI</b>	Expanded Programme on Immunization
<b>FCHV</b>	Female Community Health Volunteer
<b>FGD</b>	Focus Group Discussion
<b>FPAN</b>	Family Planning Association of Nepal
<b>FWDR</b>	Far western Development Region
<b>FY</b>	Fiscal Year
<b>GIZ</b>	Gesellschaft fur Internationale Zusammenarbeit GmbH (formally GTZ)
<b>GP</b>	General Practice
<b>HA</b>	Health Assistant
<b>HDI</b>	Human Development Index
<b>HFMC</b>	Health Facility Management Committee
<b>HIV/AIDS</b>	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
<b>HP</b>	Health Post
<b>HR</b>	Human Research
<b>HRD</b>	Human Research Development
<b>HRH</b>	Human Resources for Health
<b>HuRDIS</b>	Human Resource Development Information System
<b>HuRIC</b>	Human Resource Information Centre
<b>IMNCI</b>	Integrated Management of Neonatal and Childhood Illness
<b>IMPAC</b>	Integrated Management of Pregnancy and Childbirth
<b>I/NGO</b>	International Non-Governmental Organisation
<b>IOM</b>	Institute of Medicine

<b>KII</b>	Key Informant Interview
<b>LA</b>	Laboratory Assistant
<b>MBBS</b>	Bachelor of Medicine, Bachelor of Surgery
<b>MCHW</b>	Maternal and Child Health Worker
<b>MD</b>	Doctor of Medicine
<b>MDGs</b>	Millennium Development Goals
<b>MN</b>	Masters in Nursing
<b>MoGA</b>	Ministry of General Administration
<b>MoHP</b>	Ministry of Health and Population
<b>MoLD</b>	Ministry of Local Development
<b>MSc</b>	Masters in Science
<b>MWDR</b>	Midwestern Development Region
<b>NAMS</b>	National Academy of Medical Science
<b>NCD</b>	Non-Communicable Disease
<b>NDHS</b>	Nepal Demographic and Health Survey
<b>NFCC</b>	Nepal Fertility Care Centre
<b>NFHP</b>	Nepal Family Health Programme
<b>NFHS</b>	Nepal Family Health Survey
<b>NGO</b>	Non-governmental Organisation
<b>NHP</b>	National Health Policy
<b>NHSP IP</b>	Nepal Health Sector Programme Implementation Plan
<b>NHTC</b>	National Health Training Centre
<b>NSI</b>	Nick Simons Institute
<b>PAHS</b>	Patan Academy of Health Sciences
<b>PHA</b>	Public Health Administrator
<b>PHC</b>	Primary Healthcare Centre
<b>PHO</b>	Public Health Officer
<b>PIS</b>	Personnel Information System
<b>PKRU</b>	Pokhara University
<b>PPP</b>	Public-Private Partnership
<b>PSC</b>	Public Service Commission
<b>PSI</b>	Population Service International
<b>RHD</b>	Regional Health Directorate
<b>RTI</b>	Right to Information
<b>SAHW</b>	Senior Auxiliary Health Worker
<b>SBA</b>	Skill Birth Attendant
<b>SHP</b>	Sub-Health Post
<b>SLTHP</b>	Second Long Term Health Plan
<b>SN</b>	Staff Nurse
<b>SSMP</b>	Support to Safe Motherhood Programme
<b>SWAP</b>	Sector-wise Approach Plan
<b>TT</b>	Tetanus Toxoid
<b>TU</b>	Tribhuvan University
<b>UNFPA</b>	United Nation Family Planning Association
<b>UNICEF</b>	United Nation International Children Emergency Fund
<b>UVP</b>	Utero vaginal prolapsed
<b>VDC</b>	Village Development Committee
<b>VHW</b>	Village Health Worker
<b>WDR</b>	Western Development Region
<b>WHO</b>	World Health Organization

# GLOSSARY

<b>Ecological Belts</b>	Nepal is made up of three ecological belts running laterally across the country: the Mountain belt in the northern highlands, Hill in the central belt, and Tarai lowland plains in the southern belt.
<b>Basic-level HWs</b>	Basic-level HWs have received Technical School Level Certificates (TSLC). They are trained for 12-18 months, primarily through affiliated institutions of CTEVT and are able to provide basic services in their trained areas.
<b>Birthing Centre</b>	A health facility with the equipment and skilled birth attendants to assist women to give birth safely.
<b>Deputation</b>	Deputation is the secondment of personnel, irrespective of the numbers of sanctioned posts, for a given period of time.
<b>Development Regions</b>	For administrative purposes, Nepal is divided up into five Development Regions: Eastern Development Region (EDR), Central Development Region (CDR), Western Development Region (WDR), Midwest Development Region (MDR), and Far Western Development Region (FWDR).
<b>Facilities</b>	For the purpose of this report, facilities can mean either those provided to health workers i.e. housing, or those in the health centre i.e. x-ray machines.
<b>High-level HWs</b>	High-level health workers have obtained either a Bachelor or Post-Graduate degree in Health Sciences. These high-level health workers provide more advanced services and are produced by different universities and autonomous academic institutes, and their affiliated institutions.
<b>HRH</b>	Human Resources for Health (HRH) include those 'engaged in actions whose primary intent is to enhance health' (1).
<b>Ilaka</b>	A segment within a district that comprises several, largely homogeneous VDCs. There is one Health Post in each Ilaka.
<b>Mid-level HWs</b>	Mid-level health workers have attended a three-year training course (Proficiency Certificate-Level or Diploma-Level courses). They perform a curative, preventative, and diagnostic function, and are responsible for supervising the basic-level HWs. They are produced primarily by affiliated institutions of CTEVT, and by Tribhuvan University (TU), Kathmandu University (KU) and B.P. Koirala Institute of Health Sciences (BPKIHS).
<b>Paramedical</b>	Paramedical staff are a section of the health workforce representing basic and mid-level technical categories, including Health Assistants, Auxiliary Health Workers, Laboratory Technicians, Laboratory Assistants, Radiographers, Anaesthetic Assistants, Ophthalmic Assistants, Physiotherapy Assistant.
<b>Sanctioned posts</b>	Sanctioned posts are posts that have been centrally approved by the MoHP within health institutions.
<b>Safe Abortion</b>	Legal abortion performed by certified medical staff in registered health facilities.
<b>Skill mix</b>	The 'combination of different health workers that produce a given level of healthcare' (2).
<b>Wards</b>	These refer to clusters within the VDC, of which there are 9 in each VDC.



## DESB DESCRIPTIONS OF NEPALI HEALTH STAFF ACRONYMS YMS

<b>AHW</b>	Auxiliary Health Worker: AHWs are trained for one year after secondary school. They are the Sub-Health Post in-charge and also service providers in the HP, PHC and Hospitals. Their main role is to provide promotive and preventive care in the community and refer to primary healthcare facilities.
<b>ANM</b>	Auxiliary Nurse Midwife: ANMs are based at Health Posts to conduct maternal and child health care services. They are trained for 18 months and like the MCHW, the ANM's main job is to conduct antenatal clinics, provide TT immunization, nutrition education, conduct normal deliveries, recognize danger signs and refer women to for more specialized care. ANMs provide Safe Motherhood services, Basic Emergency Obstetric Care and Family Planning services.
<b>FCHV</b>	Female Community Health Volunteers: FCHVs are grassroots level health volunteers based in their respective Wards, who are selected by the Mothers' Groups and trained for 18 days on basic healthcare. They are responsible for conducting Mother's group meetings and delivering health messages to the Mothers and distributing pills, condoms, polio drops, oral rehydration salts and Vitamin A. The government provides training and refresher training to them.
<b>HA</b>	Health Assistant: HAs are based in Health Posts as the Health Post In-charge, holding a Proficiency Certificate in Medical Science (General Medicine). They perform promotive, curative and preventative roles and are responsible for supervising the Health Post staff and Sub-Health Posts in their area. HAs report to the District Public Health Office (DPHO)/DHO at district level.
<b>MCHW</b>	Maternal and Child Health Worker: MCHWs are selected mainly from the local VDC. MCHWs are based in Sub-Health Posts to provide maternal and child health services, after receiving six months' training. MCHWs conduct antenatal clinics, provide TT immunization, post natal clinic nutrition education, and conduct normal deliveries. They also provide counseling to couples on family planning and provide Family Planning services. They are also responsible for conducting EPI clinics and PHC/ORCs.
<b>SBA</b>	Skilled Birth Attendant: "An accredited health professional, such as a midwife, doctor or nurse, who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period and in the identification, management and referral of complications in women and newborns (3)."
<b>VHW</b>	Village Health Worker: VHWs are the community level government employee with six months' initial training. Together with MCHWs, they conduct outreach clinics in their villages, and are involved in immunization of children under the age of one year. In addition, they distribute contraceptive pills, condoms and refer clients for other methods of family planning. They supervise FCHVs and attend Mother's group meetings. They also provide health education in the village.

# EXECUTIVE SUMMARY

**Introduction:** The performance of health workers plays a crucial role in the improvement of health outcomes, due to its impact on accessibility to health services and appropriateness of care provided to service users. Despite its key impact on health outcomes, there is limited evidence on the performance of health workers and effective strategies in Nepal. This report therefore provides insight into health workforce performance in Nepal, looking at the four dimensions of health workforce performance: availability, competency, responsiveness and productivity. It informs policy-makers and managers on interventions to improve health workforce performance in Nepal.

**Methodology:** A cross-sectional descriptive study was conducted using mixed method with observation checklist. Fifteen districts representing eco-developmental regions of Nepal were selected using multi-stage cluster sampling method. Out of 404 sample, 747 health workforce from 375 health institutions were interviewed (<10% non-response rate) using the Probability Proportionate to Size method as per WHO guideline. Observation was carried out in 256 health facilities. Further, secondary review was carried out for triangulation of findings.

**Key findings:** Despite the fact that policies are in place to ensure the availability of health workers, less than half of health workers were present in their place of work and active at the time of survey. Reasons for absenteeism among HWs included deputation, training, leave and transfer. For doctors, the main reason for absence was deputation (38%), and for nurses, it was leave (23%). The situation was particularly difficult in remote rural areas particularly the western mountain regions.

A common theme among service users, service providers and civil society organisations was the need to address the limited availability of health workers by building and enhancing the capacity of the primary health care staff and community health workers. At the same time staff reported a lack of training and poor resourcing of health facilities.

Local governments chose to address the issue by recruiting temporary staff at the local level, predominantly from the same area. In comparison to permanent staff, the short term suitable solution does not ensure that staff are sufficiently supported with the correct salary and benefits package or career structure.

Staff competency was assessed through self evaluation. A high percentage of health workers (Doctors 29.4% and HA/AHW 11.4%) felt they were unable to work to the expected standard. The main reasons were reported to be lack of training and performance management. This study has suggested that it is not only the lack of training that affects staff performance but the quality of existing training. Trained staff do not meet required competency levels and there is limited management training which has affected the quality of district and facility management. Health workers are often not provided with the job description or outdated job descriptions with poorly defined responsibilities. In addition to these constraints over half the health staff interviewed stated they had insufficient equipment and medical supplies in their facilities. This lack of support affected services that could be provided, the confidentiality of service and communication between health staff and patients. In turn this affected the sense of pride in health workers and their connection with the community. There is limited resources for communities to address shortfalls in clinical care. Accountability systems are weak; and district and village development committees have limited budgets and authority.

**Conclusion and Recommendations:** A more effective recruitment system and greater investment in permanent positions is required, as well as a more decentralised system to support improved information on staff availability and more appropriate deployments. The training curricula needs to be revised and updated, with a greater emphasis on broader public health skills such as IMNCI and IMPAC to support primary health workers to undertake greater clinical roles in the absence of doctors in remote areas. Formal training for community health workers that enables task shifting is also crucial. A greater emphasis on health management is required, as well as. Civil Society Organisations can work with local authorities to ensure appropriate accountability and complaint systems, which are essential for ensuring improved performance in the health workforce.

# TABLE OF CONTENTS

Acronyms	I
Glossary	II
Descriptions of Nepali Health Staff Acronyms	IV
Executive Summary	V
List of Tables and Figures	VIII
<b>Chapter I: Introduction</b>	<b>1</b>
1.1 Background	1
1.2 Aims and Objectives	2
<b>Chapter II: Methodology</b>	<b>3</b>
2.1 Primary Data Collection and Analysis	3
2.1.1 Quantitative Methods	3
2.1.1.1 Sample Design	3
2.1.1.2 Research Participants	4
2.1.1.3 Data Collection Tools and Processes	4
2.1.1.4 Data Analysis	4
2.1.2 Qualitative Methods	4
2.1.2.1 Research Participants	4
2.1.2.2 Data Collection Tools and Processes	4
2.1.2.3 Data Analysis	5
2.2 Secondary Data Collection and Analysis	5
2.3 Validity and Reliability	5
2.4 Ethical Issues	5
<b>Chapter III: Availability of Health Workers</b>	<b>6</b>
3.1 Availability of Health Workers	6
3.2 Explanations for Absenteeism of Health Workers	8
3.3 Impact of Health Worker Unavailability	10

# TABLE OF CONTENTS

<b>Chapter IV: Competency of Health Workers</b>	<b>12</b>
4.1 Competency of Health Workers	12
<b>Chapter V: Responsiveness of Health Workers</b>	<b>18</b>
5.1 Policy provision for Health Workers' Responsiveness	18
5.2 Status of Health Workers' Responsiveness	18
5.3 Community Feedback/Complaint Mechanisms and Their Effectiveness	21
<b>Chapter VI: Productivity of Health Workers</b>	<b>22</b>
6.1 Unclear Job Descriptions	22
6.2 Lack of Supervision and Monitoring	23
6.3 Availability of Basic Amenities and Services	24
6.4 Pride in Work and Connection with Community	27
<b>Chapter VII: Conclusions and Recommendations</b>	<b>28</b>
7.1 Availability	28
7.2 Competency	29
7.3 Responsiveness	29
7.4 Productivity	30
References	31
Appendices	33

# LIST OF TABLES AND FIGURES

## TABLES

<b>Table 1:</b> Selected Districts for Research Study, Nepal 2011	3
<b>Table 2:</b> Percentage of Available Health Workers in Selected Districts by Type of Institution	6
<b>Table 3:</b> Availability of Radiographer & Lab Technicians Observed in Surveyed Health Facilities, 2011	7
<b>Table 4:</b> Percentage of Available Health Workers in Selected Districts by Type of Geographical Regions	8
<b>Table 5:</b> Per cent Distribution of Level of the Competent Human Resources as Perceived by Respondent	12
<b>Table 6:</b> Self-Appraisal of Performance of Health Workers (%)	13
<b>Table 7:</b> Percentage Distribution of Delivery on Birthing Centre Conducted by Different HRH	14
<b>Table 8:</b> Prescribed Essential Competencies and Gaps in Midwifery Curricula in Nepal According to ICM Seven Competency Areas	15
<b>Table 9:</b> Percentage Distribution of Opportunity for Study or Training Since Start of the Job	16
<b>Table 10:</b> Health Workers Provide Counseling and Other Health Related Services Besides Regular Work	20
<b>Table 11:</b> Level of Respondent's Involvement in Mobilization of People	21
<b>Table 12:</b> Percentage Distribution of Defined Job Responsibility of HRH	22
<b>Table 13:</b> Percentage Distribution of Monitoring and Inspection	23
<b>Table 14:</b> Percentage Distribution of Monitoring and Inspection Form Higher Level in Health Institutions	24
<b>Table 15:</b> Availability of Physical Facilities, Buildings, and Rooms	25
<b>Table 16:</b> Prestige and Dignity Felt Working in the Institution	27

## FIGURES

<b>Figure 1:</b> Levers to Enhance Health Workforce Performance	1
<b>Figure 2:</b> Reasons for Unavailability of HRH in the Previous Three Months (%)	9



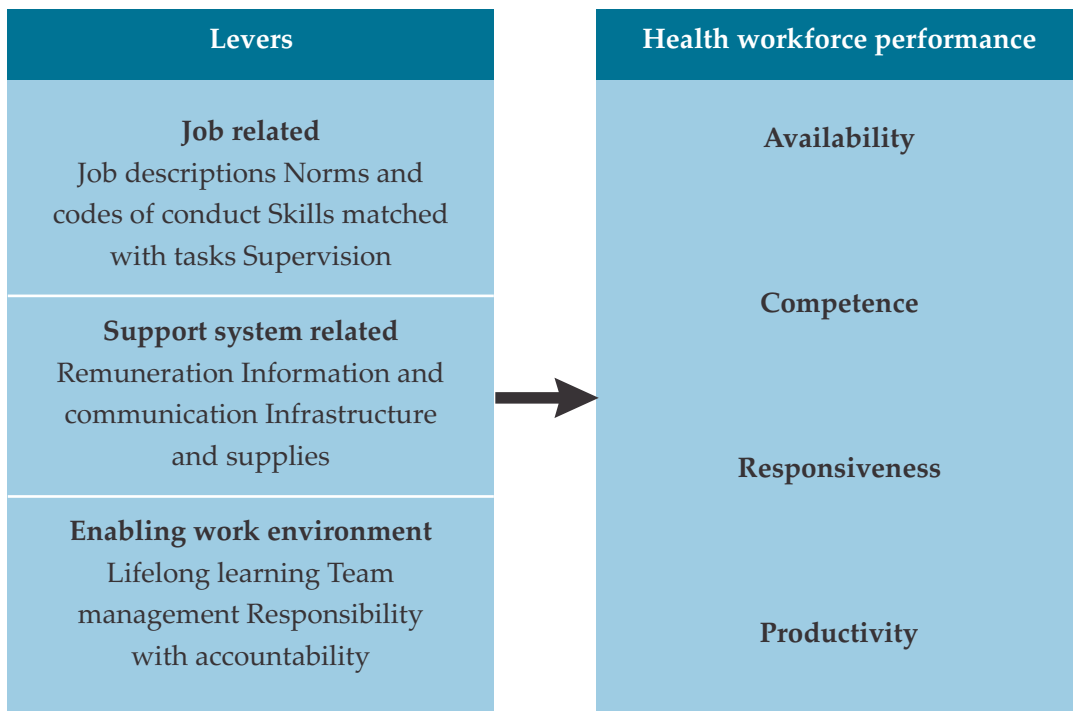
# CHAPTER I INTRODUCTION

## 1.1: Background

The performance of the health workforce plays a crucial role in the improvement of health outcomes, due to its impact on accessibility to health services and appropriateness of care provided to service users (4). Performance is not only crucial for policy, but serves as ‘a powerful tool for influencing the behaviour of health workers if linked to rewards and sanctions’ (5). It also interrelates with other key human resources for health strategies, such as recruitment and retention, which have limited impact without interventions to improve the performance of health workers (5).

Health workforce performance can be measured through indicators related to availability, competency, responsiveness and productivity, as outlined in *The World Health Report 2006: Working together for Health* (5). These are influenced by levers that enhance health workforce performance, which can be job-related, support system related or related to an enabling working environment (see Figure 1).

Figure 1: Levers to Enhance Health Workforce Performance



Source: *The World Health Report 2006: Working together for Health*

The levers of workforce performance include the presence of clear updated job descriptions, matching skills to tasks, proper information and communication, lifelong learning capacity, team management, accountability, etc. However, the levers and dimensions of health workforce performance have been poorly analysed and monitored to date, and require further analysis. This report therefore provides insight into health workforce performance in Nepal, looking at the four dimensions of health workforce performance: availability, competency, responsiveness and productivity, as well as the levers and how they impact on the HRH situation in Nepal. This report also intends to inform health policy-makers, planners and managers on interventions to improve health worker performance in Nepal.

## **1.2 Aims and Objectives**

This report is part of an operational research project which aims to facilitate the improved delivery of healthcare in Nepal through strengthened policy development and implementation of human resources for health (HRH) by enhancing civil society engagement.

Specific objectives of this research report are as follows:

1. To assess the performance and accountability of the health workforce, with a specific focus on the availability, competency, responsiveness and productivity of the health workforce in Nepal.
2. To describe the gaps in performance and accountability of the health workforce.
3. To formulate recommendations to the Ministry of Health and Population to inform decision-making and advocate for improvements in HRH policy and strategic plans.



# CHAPTER II

## METHODOLOGY

A cross-sectional descriptive study, using both qualitative and quantitative research methods, was conducted in 15 districts of Nepal to obtain comprehensive information on the Human Resources for Health (HRH) situation in the country.

### 2.1 Primary Data Collection and Analysis

#### 2.1.1: Quantitative methods

##### 2.1.1.1: Sample Design

A multi-stage cluster sampling method was used to select a representative sampling frame for this study (see Appendix 1). Of the 75 districts in Nepal, 15 districts were selected, one from each of the three ecological belts (Mountain, Hill and Tarai) and each of the five development regions (Far-Western, Mid-Western, Western, Central and Eastern) using a random sampling method.

Table 1: Selected Districts for Research Study, Nepal 2011

Development Region	Far-western	Mid-western	Western	Central	Eastern
Ecological Belt					
Mountain	Darchula	Mugu	Manang	Rasuwa	Sankhuwasabha
Hills	Doti	Pyuthan	Palpa	Lalitpur	Panchthar
Tarai	Kailali	Bardiya	Kapilvastu	Dhanusha	Jhapa

The sampling frame consisted of 5146 health institutions in the selected 15 districts, including Government Hospitals (Regional, Zonal or District), Primary Health Centres, Health Posts, Sub-health Posts, Ayurvedic Centres, Non-governmental and Private health outlets. A total of 404 health institutions were then selected using the Probability Proportionate to Size (PPS) method, based on the size of health institution by available HRH, as per WHO guidelines (6) (see Appendix 2). Out of the selected health institutions, data was collected from 375 health facilities. A total of 29 health facilities were not included in the study due to the unavailability of staff, demonstrating a response rate of 93 per cent (see Appendix 3).

### *2.1.1.2 Research participants*

Research participants were service providers including Doctors, Specialists, Nurses, Midwives, Public Health Workers, Health Assistants, Auxiliary Health Workers, Laboratory Technicians, Radiographers and Pharmacists.

### *2.1.1.3 Data collection tools and processes*

An interviewer-administered questionnaire was carried out by Public Health graduates trained as enumerators with 747 health workers from the 375 selected health institutions in 15 districts, selected on the basis of WHO guidelines (6). Self-appraisal forms were also completed by 54 doctors, 218 nurses and 324 paramedical staff from within the sampling frame, with the exclusion of 20 respondents due to lack of complete information. An observation checklist was also carried out by research supervisors in 256 health facilities, in keeping with WHO standards of observing at least one third of health facilities from the sampling frame (6).

### *2.1.1.4 Data analysis*

Quantitative data was entered into a computer software system (EpiData 3.1) by trained data entry personnel. In order to validate the data, 10 per cent was randomly cross-checked. After editing and cleaning, the data was transferred onto a statistical software package (SPSS 17.0) for analysis.

## **2.1.2 Qualitative Methods**

### *2.1.2.1 Research Participants*

Based on availability, a total of 645 participants were selected for the qualitative study, which aimed to support quantitative research findings (see Appendix 4). Participants were selected from the following groups: service providers, as in section 2.1.1.2, and also inclusive of Female Community Health Volunteers (FCHVs), Maternal and Child Health Workers (MCHW); service users, such as exit-patients of health service outlets; and lastly the facilitator group which included members of Government Health Institutions including District Public Health Office, District Health Office, District Development Committee, and Village Development Committee; Professional Associations; Civil Society organisations and people working in Trade Unions and the field of advocacy, civil rights, media and social campaigns; local leaders, social workers and school teachers.

### *2.1.2.2 Data Collection Tools and Processes*

Key data collection tools included Focus Group Discussions (FGDs) and Key Information Interviews (KIIs), conducted by Public Health graduates. A series of 74 FGDs were held, with at least one group of service providers, service users and Health Management Committees in each district. Purposive sampling was used to select 29 informants to take part in semi-structured KIIs. A consultation workshop was also held with MoHP and other key stakeholders to discuss findings and recommendations.

### 2.1.2.3 Data Analysis

Qualitative data was transcribed and translated into English, and was then analyzed according to different thematic areas based on the relevant research objectives. The data was then triangulated with quantitative and secondary data findings.

## 2.2 Secondary Data Collection and Analysis

A review of the literature on national and international research papers on HRH was carried out. The review also included key national MoHP health Policies, Plans and Acts (7-16), as well as key information on health worker production numbers from University websites and key contacts. Findings from the secondary data were triangulated with both qualitative and quantitative data.

## 2.3 Validity and Reliability

1. A standard statistical tool was used to determine the sample size and sampling strategy to reduce systematic error in the design phase of the study, based on WHO Standards.
2. Internal consistency reliability was ensured in quantitative data analysis by obtaining Cronbach's Alpha on key variables (>0.85).
3. To avoid questionnaire information bias, questionnaires were pre-tested in three districts, and feedback from the pre-test was incorporated into the final questionnaire design to improve validity and reliability.
4. To avoid interviewer information bias, interviewers, who were Public Health graduates, were trained for two days on data collection tools and methods according to WHO standard protocols.
5. Regular supervision visits were carried out, with appropriate feedback ensured from the central level during the collection of data.
6. Triangulation of primary and secondary data ensured consistency of the research data.

## 2.4 Ethical Issues

Ethical approval for this study was obtained from the Nepal Health Research Council (NHRC), and researchers adhered to national NHRC standard operating procedures and ethical guidelines for health research. Informed consent was obtained from each respondent, and confidentiality in terms of information disclosed and identity of respondents was ensured.

# CHAPTER III AVAILABILITY OF HEALTH WORKERS

Availability refers to the combination of distribution and attendance of existing health workers (17), which in turn is influenced by motivation and job satisfaction (17). Poor availability of staff can be attributed to absenteeism, mal-distribution of staff and poor skills mix, which are of particular concern in Nepal (17). This chapter focuses on the availability of health workers in Nepal and the reasons and impact for the absenteeism of health staff.

## 3.1 Availability of Health Workers

The Labour Act 1992 outlines the working hours of health staff, whereby health workers in the public sector are entitled to a one hour break during an eight hour working day, and one day of leave during a 48 hour working week (18). Health services are usually available until 2pm, after which HWs should be engaged in administrative tasks. In the non-state sector, these conditions depend on the specific organizational policy. As per the Health Service Regulation Act 2010, all government staff are entitled to 30 days home leave per year in addition to 12 days of sick leave, 12 days of casual/festival leave, study leave for up to 4 to 6 years as well as extraordinary leave up to 3 years (the employee must have worked for at least 2 years). Female staff are entitled to a 10 week maternity leave, and fathers are entitled to 15 days of paternity leave. Staff must work in their designated work station for a minimum of 240 days per year. In each health facility, there are attendance registers in place, and leave is monitored through an integrated supervision check-list by the in-charge and district authorities.

Despite the fact that policies are in place to ensure the availability of health workers, out of total sanctioned positions, 14 per cent of posts were not fulfilled (see Appendix 5). Though fulfilled positions were above 80 per cent, less than half of health workers were found at their working stations at the time of survey (see Table 2), emphasising the gap between policy and practice.

Table 2: Percentage of Available Health Workers in Selected Districts by Type of Institution

Types of Institutions	Doctors	Nurses	ANM	HA
Hospitals	100	85.7	92.9	64.3
PHC	17.6	41.2	82.4	58.8
HP	0	0	71.4	35.7
SHP	0	0	33.3	4.2
Ayurvedic Centres	46.2	0	15.4	38.5
Private clinic/hospital	44.4	33.3	55.6	22.2
I/NGO Clinic/Hospitals	47.1	52.9	35.3	17.6
<b>Average</b>	<b>36.4</b>	<b>30.4</b>	<b>55.2</b>	<b>34.5</b>

Source: HRH Field Survey 2011 \*At least one health worker was available at the time of survey

Doctors were available in only 36.4 per cent of the 70 health facilities with sanctioned posts for doctors, and out of a total of 57 health facilities with sanctioned positions for nurses, only 30.4 per cent had nurses available. Although there was at least one doctor in all hospitals surveyed, qualitative information among service users and FCHVs highlighted the absence of doctors and medical superintendents, particularly during night shifts in the district hospitals. All 256 health facilities had either sanctioned or locally recruited posts for ANMs and HAs. In total, 55.2 per cent of facilities had ANMs available at the time of survey, while only 34.5 per cent of health facilities had HAs available.

In terms of diagnostic health staff, only six per cent of health facilities had available radiographers with no radiographers available in the MWDR. Furthermore, Laboratory Technicians were available in only 19 per cent of health facilities. (see Table 3). Focus group discussions with FCHVs, management committees and journalists all highlighted the demand for improvements in laboratory services, as beneficiaries were forced to travel long distances to obtain these services.

Table 3: Availability of Radiographer & Lab Technicians Observed in Surveyed Health Facilities, 2011

Characteristics	Availability of Radiographer		Availability of Lab Technicians		Total (N)
	Yes (N)	%	Yes (N)	%	
<b>Ecological Belts</b>					
Mountain	3	5.1	12	20.3	59
Hill	5	5.7	15	17	88
Terai	6	6.3	20	20.8	96
<b>Development Regions</b>					
EDR	5	12.2	11	26.8	41
CDR	3	3.7	12	14.6	82
WDR	4	9.8	7	17.1	41
MWDR	0	0	6	18.8	32
FWDR	2	4.3	11	23.4	47
<b>Types of Institutions</b>					
Hospitals	7	50	13	92.9	14
PHC	1	5.9	13	76.5	17
Health Post*	1	2.4	5	11.9	42
Sub-Health Post*	1	0.7	4	2.8	144
Private clinic/hospital	3	33.3	7	77.8	9
I/NGO Clinic/Hospitals	1	5.9	5	29.4	17
<b>Total</b>	<b>14</b>	<b>5.8</b>	<b>47</b>	<b>19.3</b>	<b>243</b>

Note: \* Locally recruited

Source: HRH Field Survey 2011

In terms of availability according to geographical region, focus group discussions with FCHVs highlighted the lack of ANMs and skilled delivery staff as a key problem, leaving them without support from higher level staff for health service delivery for women in rural areas. However, the availability of ANMs was higher in the Mountain region, particularly because many posts were locally recruited or upgraded from MCHWs, compared to the low availability of all other health workers in the Mountain region (see Table 4), which was expressed during key informant interviews (KII) and FGDs.

Table 4: Percentage of Available Health Workers in Selected Districts by Type of Geographical Regions

Characteristics	Doctors	Nurses	ANM	HA
<b>Ecological Belts</b>				
Mountain	35.3	35.7	54.8	16.1
Hill	51.9	58.3	48.4	18.7
Tarai	57.7	63.2	38.8	22.3
<b>Development Regions</b>				
EDR	57.1	60	64.4	17.8
CDR	37.0	45.8	40	16.5
WDR	60.0	42.9	32.6	23.3
MWDR	50.0	57.1	32.4	26.5
FWDR	63.6	77.8	61.2	18.4

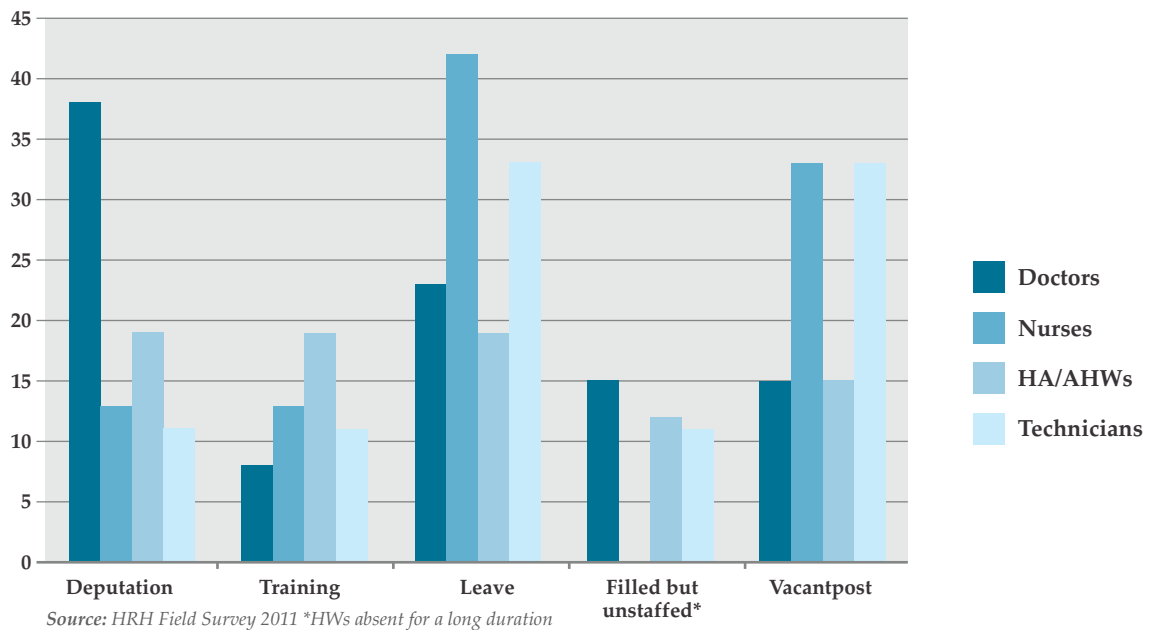
Source: HRH Field Survey 2011

Information from the observation checklist showed that most health institutions closed before the appropriate time and service providers were not always present at their working stations. I/NGO representatives in Dhanusha/Kapilvastu had observed staff coming to the health facility to confirm their attendance and then leaving immediately.

### 3.2 Explanations for Absenteeism of Health Workers

Respondents were questioned as to the reasons for the unavailability of health workers who had been absent during the previous three months. Absenteeism was accounted for by deputation (21.1%), training (13.3%), leave (30.5%), and those who were absent for a long duration without any explanation or who were transferred but not present at the post (9.9%). A total of 25.1 per cent of those absent was due to the vacancy of the position. For doctors, the main reason for their absence was deputation (38%), and for nurses, it was leave (23%). (see Figure 2).

Figure 2: Reasons for Unavailability of HRH in the Previous Three Months (%)



A key informant interview carried out with senior health officials confirmed the reason behind the unavailability of doctors and nurses in the EDR region of the Hills belt: *“The nurses who have their placement here are away on educational leave. Among the three sanctioned posts for doctors, only two are filled and among those two doctors one is on Kaaz (deputation).”*

Qualitative information revealed that training was often given as a reason for the unavailability of health staff. According to the HFOMC in the EDR, there are difficulties in service provision owing to the absenteeism of health workers, particularly doctors at the PHC level: *“It has been 3 months since the doctor went on leave; the other staff here say that he has gone for the training.”* This shows that unauthorised absenteeism can create a great deal of uncertainty among service users and providers. Service users in Panchthar district stated that most of the time, they did not have access to a doctor as doctors do not want to work in remote settings. They suggested: *“Doctors are not available regularly in district hospital. They are mostly busy attending training and seminars and the treatment is done by HA and AHW.”*

Dual practice was given as a further reason for the unavailability of health staff, as stated by a public health officer of Palpa district: *“Even though the health institutions should be open from 10-5, the patient flow is less after 2pm onwards. Therefore most of the health in-charge in Palpa provide service through their private clinic after 2 pm.”*

Furthermore local authorities in Mugu highlighted that health workers were able to receive their salaries as a result of being present according to attendance records, despite their absence from the health facility. Moreover, they expressed the lack of awareness among service users on how to report their concerns, and that even if they wanted to complain, appropriate action would not be taken.

### 3.3 Impact of Health Worker Unavailability

The negative impact of the unavailability of health workers, including long-term absenteeism, was emphasised in all geographical areas among all groups: service users, service providers and other community members.

#### *Closure of health facilities*

Health facilities were reported to be open for limited hours and with limited services by college students in Kailali district (FWDR, Tarai): "The health post should be open at 10am and close at 5pm, but they open it only after 11 am and they close it at 2pm. Patients come from far away and wait for them from the early morning but if a patient is a little late, they do not examine the patient." Furthermore, often health facilities were permanently closed due to the long absence of health workers. Similarly, a service user in the EDR of the Hill belt stated that: *"There are not sufficient health workers at the Health Post; there is one ANM and AHW available at the Health Post. Now the Health Post In-Charge is on leave, only the ANM is providing service. They used to stay on leave, so most of the time the Health Post remains closed."*

#### *Low Skill Mix*

*"There are no doctors and treatment facility as desired. How much can one ANM appointed by the management committee do? Even if we get treatment free of cost but what is the use as there is no health person. Also, those who are available don't know how to do treatment properly."* (FGD Panchthar).

In all ecological belts (Mountain, Hill, Tarai), FGDs among all groups emphasised the negative implications for health service delivery, due to the fact that support staff were often found providing services in the place of doctor and other health workers.

FGDs with members of Management Committee of Gauradaha Health Post, Jhapa, also highlighted this issue: *"Health centres should have the staff with knowledge in health, but here a person from completely different background who is a VDC secretary, has been placed. It is shameful that in the post which should be fulfilled by a skilled and experienced health person has a VDC secretary instead and how can a person with no knowledge related to health field serve the people?"*

#### *Forced to seek other services*

Due to the unavailability of doctors, service users in a hospital in Darchula (FWDR, Mountain) claimed that although facilities were available, they were forced to seek services outside of the country: *"The hospital has provision of maternal and neonatal health services, a birthing centre, ambulance service and cooperative health workers. However, doctors are not always available and for complicated illnesses people go to the bordering Indian town for treatment."* However there is a cost involved in this referral that cannot always be easily met. Access to services was limited as service users were forced to travel far from their villages even for simple treatment.

In both the Mountain and Hill belts, service users claimed that they were compelled to seek services from traditional healers or FCHVs, who could not always provide the services that they require. A service user in the EDR of the Hill belt stated that *"There are only traditional healers, lamas, birth attendants and FCHV who provide direct service to us."*



In Mugu district, a policy maker of DDC highlighted the inconvenience of the unavailability of health staff: *"HFs are opened and run most of the time by support staff...HWs are present on the paper and on that basis they are given salary. People are compelled to come to district hospital walking 3-4 days since HWs are not available at local Hfs."* (DDC policy officer).

A common theme among service users, service providers and civil society organisations was the concern that lower cadres of staff were trying to undertake clinical duties beyond their capacity to address the unavailability of key health workers particularly doctors. A journalist from Doti argued: *"If the health centre is carefully observed, we will find ANM, FCHVs, MCHW working in the health centre as doctors...if doctors are really not available in the communities, community health workers should be trained properly."* This was supported among a group of MCHW, VHW and FCHV in Darchula, who were required to fill the positions of absent health staff: *"We are in urgent need of training, since we are compelled to fill higher responsibilities than our mandated positions."*

A coping strategy of local governments to deal with the long-term absenteeism of health workers was explained by the HFOMC in Sankhuwashabha District: *"Health workers go for deputation to provide services elsewhere...In some health facilities, health workers are recruited from the VDC budget to continue health services in the absence of government placed HRH."* It has been argued that the availability of health workers on temporary or wage-based contracts is often better than those on a permanent contract, which suggests the need to strengthen the capacity of those on temporary contracts. However, this is a short term solution as temporary staff do not receive an appropriate benefits package and there are limited opportunities for staff development within a health system reliant on short term placements. Another strategy suggested by one District Health Officer in Rasuwa district was the recruitment of health workers from the local area: *"They are always ready to work in their own village so it is easy for us to mobilise the local human resources than the human resources from outside the district."*

Furthermore, it is also essential to strengthen accountability systems, which could be carried out at the community level through participative monitoring of attendance and availability. As pointed out by local authorities, there was no clear system to report service users' and health workers' concerns.

At District level, appropriate bodies should have a mandate to collect feedback, and have regulation ensuring timely response, and transparency of actions taken.

At community level, policies and regulations should be shared with the communities (on boards, in meetings, etc), as well as a clear training and deputation schedule. Service user committees should be set up and informed on complaint mechanisms and on the responsible bodies with whom to address formal complaints.

# CHAPTER IV COMPETENCY OF HEALTH WORKERS

According to the World Health Organisation, competency refers to the ‘tasks different levels of health workers are trained to do and are capable of performing’ (5). Competent health employees are those with a combination of technical knowledge, skills and behaviour (5). This chapter focuses on the competency of health workers, existing challenges, as well as strategies to address those gaps.

## 4.1 Competency of Health Workers

The respondents were questioned on the numbers of competent staff in their facilities. Around one third (35.6%) of respondents believed there were insufficient numbers of competent staff in their health facilities. Competency of staff was particularly limited in the Mountain ecological belt (6.7%), compared to the Hill belt (18.7%). Only 14 per cent felt they had a sufficient number of competent staff. (see Table 5).

Table 5: Percentage Distribution of Level of the Competent Human Resources as Perceived by Respondent

Characteristics	Level of the competent human resources for health			
	Sufficient	Moderate	Insufficient	Total
<b>Ecological Belts</b>				
Mountain	6.7	49.2	44.2	120
Hill	18.7	49.1	32.2	273
Tarai	12.4	52.3	35.3	474
<b>Development Regions</b>				
EDR	11.7	53.8	34.5	197
CDR	26.6	45.3	28.1	192
WDR	7.8	50.0	42.2	116
MWDR	1.0	52.5	46.5	101
FWDR	13.5	52.5	34.0	141
<b>Place of Work</b>				
Rural	9.9	52.1	38.0	534
Urban	23.5	46.9	29.6	213
<b>Total</b>	<b>13.8</b>	<b>50.6</b>	<b>35.6</b>	<b>747</b>

Source: HRH Field Survey 2011

The most feasible method to appraise staff in this study was through a self-appraisal form, given time constraints and different quality of facilities and supervision systems. There were 29.4 per cent of doctors, 5.8 per cent of Nurses/ANMs and 11.4 per cent of HA/AHW who reported that they were often unable to perform to the expected standards of service delivery. This relates to both their perception of their competency as well as the level to which they were sufficiently resourced. (see Table 6).

Table 6: Self-Appraisal of Performance of Health Workers (%)

Characteristics	Doctors (N=51)	Nurses/ANMs (N=210)	HA/AHW (N=315)
Rarely performed (<25%)	7.8	1.0	3.8
Sometime performed (25-50%)	21.6	4.8	7.6
Performed in most cases (50-75%)	39.2	16.2	14.9
Performed in majority of cases (>75%)	31.4	78.0	73.7

Source: HRH Field Survey 2011

Focus group discussions found that beneficiaries were concerned and dissatisfied with the competency of health workers. Feedback on service provision at primary health care level was varied, and the main concerns were that staff often referred patients directly to Kathmandu and India although such referrals were impossible for beneficiaries or to the district hospital for health problems they expected to be managed at the primary level.

A participant of a mothers' group in a SHP in Panchthar district said: *"The available health workers here cannot manage emergency conditions in delivery cases. And due to lack of a laboratory facility, we have to go to the district hospital for even small health problems which is very costly."*

Female service users of a HP in Pyuthan district were pleased with the services and service providers. They found service providers were competent to provide them most of the services they needed. However, the service users of Pyuthan district hospital were not happy with doctor and services provided by the hospital. A FGD participant of the service users of the hospital said, *"The doctors here are not good. We do get services from the hospital for minor illnesses but if the illness is severe, the doctors refer to go outside for the treatment."*

Regarding the competencies of a family planning service provider in Pyuthan district hospital, a female participant said, *"I did sterilization (minilap) last year in Magh (December-January) hospital but I delivered a child this year and four other friends of mine have the same problem."*

The reason for poor competency in staff is cited by desk and field research to be poor training and poor performance management.

## Training

The current curriculae for all health cadres are outdated resulting in professional silos, ill equipped health professionals, limited progression in teaching and a mismatch between available professionals and need. The research is particularly focused on MCH care. The study showed that most of the facility deliveries were conducted in birthing centres and by SBA trained Nurse/ANM (86%) followed by SBA trained doctors (46.7%). (see Table 7).

Table 7: Percentage Distribution of Delivery on Birthing Centre Conducted by Different HRH

Delivery conducted by	Per cent
SBA Trained Nurse/ANM	86.1
SBA Trained Doctor	46.7
ANM	41.5
Doctor	26.9
AHW	21.1
HA	9.0
MCHW	8.0

Source: HRH Field Survey 2011

While this coverage is good, desk research has indicated performance gaps in maternity staff because of poor training. According to a research study in Nepal by Nick Simons Institute (2007) there was a performance gap of 21.2 per cent during a maternity clinical skills assessment. Furthermore, 73 per cent of participants were performing deliveries at their workstation or private clinics, without having received any in-service training on clinical maternity skills (19). A joint study by NSI and CTEVT in 2006 found that 69 per cent of ANM students had poor clinical skills (20). The reasons were found to be the lack of dedicated clinical practice sites and clinical exposure.

In association with UNFPA, the Midwifery Association of Nepal (MIDSON) identified the gaps in Essential Competencies among the existing midwifery curriculum of ANM, Staff Nurse, BSc Nursing and Post Basic Nursing in Nepal comparing with International Confederation of Midwives (ICM), Essential Competencies for Basic Midwifery Practice, 2010. The ICM has identified 231 essential competencies within 7 competency areas:

- social, epidemiologic and cultural context of maternal and newborn care
- pre-pregnancy care and family planning
- provision of care during pregnancy
- provision of care during labour and birth
- provision of care for women during the postpartum period
- postnatal care of the newborn
- facilitation of abortion-related care

Comparing with this standard, MIDSON identified a 22.9 per cent gap in essential competencies of the curriculum of SBA, a 16 per cent gap in ANM's curriculum and a 12 per cent in Proficiency Certificate Level in Nursing (PCL Nursing). Similarly, the study found seven per cent gaps in Bachelor in nursing and around 10 per cent in BSc Nursing. The greatest gaps in the curricula were in safe abortion and post abortion care across all curricula, gap in the ANM curriculum (81%), followed by SBA (31%), PCL Nursing and PBN (25%). (see Table 8).

Table 8: Prescribed Essential Competencies and Gaps in Midwifery Curricula in Nepal  
According to ICM Seven Competency Areas

Essential Competencies	Percentage Gaps in Midwifery Curricula				
	SBA	ANM	PCL	BScN	PBN
Social, epidemiologic and cultural context of maternal & newborn care	26	17.4	13	0	0
Pre-pregnancy care and family planning	32	27.3	14	4.5	18
Provision of care during pregnancy	26	6.9	8.6	1.7	6.9
Provision of care during labour and birth	21	11.1	14	15.9	13
Provision of care for women during postpartum period	4.2	8.3	8.3	4.2	8.3
Postnatal care of the newborn	24	4	8	0	0
Facilitation of abortion-related care	31	81.3	25	18.8	25

Source: Report of Desk Review workshop of Midwifery Components in Existing Nursing Curriculum, MIDSON 2011.

Training deficiencies not only affect clinical competency but also management skills. The Human Resources for Health, Strategic Plan 2011-15 identified gaps in the existing training programmes, namely training in management, human resources, data management and finance (16) District health systems are frequently led by MBBS or MD graduates who have more technical medical skills than the management skills required for DHO posts; therefore the majority of DHOs are not sufficiently skilled or productive.

The problem of training relates not only to basic curricula content and quality of training but also opportunities for post graduate training. The respondents were asked whether they had any opportunity for study or training since qualification and employment. More than half (59%) of the total respondents complained that training opportunities were insufficient and 19 per cent stated they had received no training or study opportunities since qualification. (see Table 9 for details).

Table 9: Percentage Distribution of Opportunity for Study or Training since Start of the Job

Characteristics	Sufficient Opportunities	Insufficient Opportunities	No Opportunities
<b>Ecological Belts</b>			
Mountain	18.3	66.7	15.0
Hill	27.8	54.9	17.2
Tarai	20.3	58.2	21.5
<b>Development Regions</b>			
EDR	19.8	54.8	25.4
CDR	32.8	49.0	18.2
WDR	19.8	62.9	17.2
MWDR	13.9	69.3	16.8
FWDR	22.0	64.5	13.5
<b>Place of Work</b>			
Rural	22.3	62.5	15.2
Urban	23.9	47.9	28.2
<b>Sex</b>			
Female	26.9	54.5	18.5
Male	20.0	60.9	19.1
<b>Type of Institutions</b>			
Hospital	24.5	60.4	15.1
PHC	23.1	71.2	5.8
Health post	24.0	64.5	11.6
Sub-Health post	20.7	66.7	12.7
Ayurvedic Centres	5.7	48.6	45.7
Private Clinic/Hospital	10.9	34.5	54.5
I/NGO Clinic/Hospital	37.3	36.3	26.5
<b>Service Categories of HRH</b>			
Doctors	28.8	43.8	27.5
Paramedical	18.1	65.7	16.2
Technicians	17.9	48.2	33.9
Nurses/ANMs	29.4	54.0	16.6

Source: HRH Field Survey 2011

Among the type of institutions, staff in Ayurvedic centres received very few opportunities and only 26 per cent from government hospitals reported sufficient opportunities. Paramedical and community staff cadres had the least opportunities for training and all stated this as a reason for struggling to meet community demands (see Table 9).

FCHVs felt constrained by their illiteracy and lack of training. They stated that they felt the training they received was poor and their facilitators were really only interested in reporting their attendance. Despite this, they are given new responsibilities on a regular basis to address lack of qualified staff (21). (Please refer to Reports 2 and 4 for more information on Training).

*“We have to work in a complicated sector with pregnant women and children, but work with very little knowledge. Sometimes, we fear that we might give out the wrong medicine.” FCHV, Panchthar*  
*“I have never received any trainings. It would have been better if there were some trainings available.” FCHV, Shankarpur, Darchula*

*“Only Vitamin A and polio training has been given to us. At that time all FCHVs were called to participate but we need more trainings along with medicine.” FCHV Kimathanka, Sankhuwasabha.*

# CHAPTER V RESPONSIVENESS OF HEALTH WORKERS

Responsiveness defines how well the health system meets the legitimate expectations of the population and ensures that ‘people are treated decently, regardless of whether or not their health improves or who they are’ (5). The health service is responsible for ensuring dignity, confidentiality, autonomy, prompt attention, social support, basic amenities, and choice of provider (22). Responsiveness is influenced by availability, competency and motivation of health staff. This chapter examines the responsiveness of health workers in Nepal and strategies to address gaps in responsiveness.

## 5.1 Policy provision for Health Workers’ Responsiveness

The Health Service Act 1997 puts forward the conduct expected of Health Workers, including punctuality and regularity, discipline and obedience to other employees, restrictions on using political influence, taking part in politics or criticising government, and restrictions on doing an act recklessly or with ulterior motive (10). It states that: *‘No employees shall, in rendering health services to a patient in the course of performing his or her duties, so act recklessly or with ulterior motive as likely to cause loss or damage to the body of the patient’*. It also outlines a section on ‘Powers to warn’, stating that if an employee is disobedient, the health worker will receive a warning and records of such are kept on the personal file of the employee. There is, however, a significant gap between policy provisions and practice, where patients are not always respected by health workers and the lack of an accountability system means that changes in HWs’ responsiveness is a challenge.

## 5.2 Status of Health Workers’ Responsiveness

### *Staff Attitudes and Behaviour towards Service Users*

There were mixed reviews surrounding staff attitudes and behaviour towards service users. During a FGD with service users in a PHC in Palpa district, they were content with the service providers and services: *“The service which is provided by the PHC is good. HA and ANM are available at the PHC, and since one year a doctor is always available at the PHC. They give us service on time and they are competent to treat our illnesses.”* The good delivery of service by community health workers was also reported by service users and facilitators groups during qualitative data collection. This showed promptness of care and competency among health workers.

On the other hand, service users in other areas reported poor conduct, mainly among hospital doctors and nurses. This was less so in PHC facilities, with some specific exceptions. Complaints were mainly around opening hours, communication and regarding



discrimination in two districts. During a KII with a member of the Hospital Development Committee, the chairman from Bardia complained that the health workers often gave more of their time to administration, with minimum time to the patient. Doctors were also not staying full time in the facilities, and there was a general sense of lack of responsibility among health workers. A FGD with mothers of children under five years at Kailali said staff should be trained on how to behave and communicate with patients. They reported poor behavior of the nurses in the hospital: *"They (Nurses) committed much negligence in the hospital. I was scolded and beaten by a nurse during my delivery. They used anything to cut umbilical cord."*

Several participants stressed the lack of female doctors in the health facilities, with whom they would feel more at ease and could share their problems. This was emphasized by an adolescent student from Panchthar district, who shared her experience about the misbehavior of a male health provider: *"Recently I visited the hospital with a pain on my hand but the doctor tried to touch my other body parts rather than treating of my hand."* This example of sexual misconduct raises serious concerns around health workers' behaviour and the need for effective community feedback or complaint mechanisms and punishment systems.

### ***Management of Patient Confidentiality and Privacy by Health Staff***

Focus Group Discussions among service users, including women with children under five years, in Bardiya, Doti, Darchula, Kailali, Lalitpur and Palpa, expressed their satisfaction with the management of privacy and confidentiality by health staff. Among adolescents in Panchthar, their lack of trust in Health Workers was conveyed: *"Many health service providers make the confidential issues of the patients, a topic to talk on in the tea shop. No privacy is maintained by them."*

FGDs in Pyuthan emphasised the difference between the management of patient confidentiality among private and public health facilities. Service users of a private clinic mentioned that they were pleased with the services provided, and that privacy and confidentiality were maintained. On the other hand, service users at a Health Post in the district mentioned their discomfort during check-ups with Health Workers due to the fact that these occur in the same room where medicine is distributed and where patients are waiting to be seen: *"There is no privacy, and we feel very uncomfortable during the check-up. Doctors explain all the problems in front of others and privacy is not maintained."*

### ***Involvement with Community***

Sixty seven per cent of total respondents reported providing counseling and other health related services in addition to their regular work. This percentage was higher in remote areas (78%).

Similarly, staff were more likely to work outside their normal hours to respond to urgent needs in rural areas than urban. Beneficiaries, VDCs and FCHVs from seven districts reported staff working in distant areas were available outside of working hours to respond to urgent health needs. Around 50 per cent of staff were not involved actively in the community mobilization program in health awareness. Nearly half (40%) of urban respondents had never been involved in such awareness programme (see Table 10).

Table 10: Health Workers Provide Counseling and other Health Related Services Besides Regular Work

Characteristics	Number	Per cent (%)	Total
<b>Ecological Belts</b>			
Mountain	94	78.3	120
Hill	182	66.7	273
Tarai	223	63.0	<b>354</b>
<b>Development Regions</b>			
EDR	126	64.0	197
CDR	127	66.1	192
WDR	65	56.0	116
MWDR	67	66.3	101
FWDR	114	80.9	<b>141</b>
<b>Place of Work</b>			
Rural	368	68.9	534
Urban	131	61.5	<b>213</b>
<b>Type of Institutions</b>			
Hospital	62	58.5	106
PHC	43	82.7	52
Healthpost	84	69.4	121
Sub-Healthpost	193	69.9	276
Ayurvedic Centres/Ausadhalaya	25	71.4	35
Private Clinic/Hospital	27	49.1	55
I/NGO Clinic/Hospital	65	63.7	<b>103</b>
<b>Service Category</b>			
Doctors	33	67.3	80
Paramedical	83	74.8	376
Technicians	22	62.9	56
Nurses/ANMs	89	69.0	<b>235</b>
<b>Total</b>	<b>499</b>	<b>66.8</b>	<b>747</b>

Source: HRH Field Survey 2011

The Table 11 shows that more male staff (32%) were involved in health promotion and mobilization compared to female and it is thought that this largely reflects immunization activities. As expected, staff working in PHC (35%), HP (35%) and SHP (34%) were more involved in health promotion and outreach than staff in hospitals (18%) and private clinic/hospitals (9.1%). See other details in Appendix 6.

Table 11: Level of Respondent's Involvement in Mobilization of People (%)

Characteristics	Very High	Adequate	Moderate	No involvement
<b>Sex</b>				
Female	26.9	25.9	18.9	28.3
Male	31.6	29.3	20.7	18.4
<b>Type of Institutions</b>				
Hospital	17.9	13.2	24.5	44.3
PHC	34.6	30.8	23.1	11.5
Healthpost	35.5	33.9	14.9	15.7
Sub-Healthpost	33.7	35.9	18.8	11.6
Ayurvedic Centres/Ausadhalaya	34.3	22.9	28.6	14.3
Private Clinic/Hospital	9.1	23.6	23.6	43.6
I/NGO Clinic/Hospital	31.4	17.6	17.6	33.3
<b>Service Category</b>				
Doctors	25.0	22.5	17.5	35.0
Paramedical	32.4	33.2	20.2	14.1
Technicians	21.4	17.9	25.0	35.7
Nurses/ANMs	28.9	23.8	19.1	28.1
<b>Total</b>	<b>29.7</b>	<b>28.0</b>	<b>19.9</b>	<b>22.4</b>

Source: HRH Field Survey 2011

The majority of focus groups reported that staff were involved in health awareness raising and outreach programmes. Health education sessions in schools were reported in four districts. Most management committee and FCHV focus groups highlighted the need for more awareness raising and promotion activities.

### 5.3 Community Feedback/Complaint Mechanisms and Their Effectiveness

Community feedback/complaint mechanisms are essential for improvements in workforce performance as they can be used not only to provide information on misconduct, but can also provide positive feedback from the community and can strengthen motivation among health workers. Although there is no provision for community feedback or complaints in government policy, it is included in the training to strengthen the Health Facility Operation and Management Committees (HFOMCs), and few facilities have complaint systems that ensure access, confidentiality and action based on complaints. However, observation showed that complaints boxes were not provided across the board, or if they were, often they were not in a suitable place.

# CHAPTER VI

## PRODUCTIVITY OF HEALTH WORKERS

Productivity has been defined as ‘producing the maximum effective health services and health outcomes possible, given the existing stock of health workers; reducing wastage of staff time or skills’ (5). Although there is no accepted ‘gold standard’ measure of health workforce productivity in the literature, health worker productivity has been measured in a variety of ways including levels of absenteeism from health facilities (23) or the share of time health workers spend on clinical care activities during working hours (24). Other measures include the number of health services provided, such as usual doctors’ visits or inpatient days, by a particular type of health worker, usually per doctor or nurse (25-26). This study looked at job descriptions, performance management, supervision and monitoring facility resources and pride in work and community acceptance.

### 6.1 Unclear Job Descriptions

The study found that from a total of 747 respondents, 17 per cent stated that their job responsibilities were not clearly defined, or that their job responsibilities did not match with their knowledge and skills. The least defined were reported by hospital staff (79.2%) and the closest match reported by staff in I/NGO Clinic/Hospitals (91%). (see Table 12).

Table 12: Percentage Distribution of Defined Job Responsibility of HRH

Characteristics	Job Responsibility Defined	Per cent	Total (N)
<b>Sex</b>			
Female	239	80.5	297
Male	383	85.1	450
<b>Service Categories of HRH</b>			
Doctors	67	83.8	80
Paramedical	313	83.3	376
Technicians	51	91.1	56
Nurses/ANMs	189	80.4	235
<b>Institution Type</b>			
Government	469	81.1	578
Nonprofit NGO	102	91.9	111
Private	51	87.9	58
<b>Types of Institutions</b>			
Hospital	84	79.2	106
PHC	43	82.7	52
Health Post	94	77.7	121
Sub-Health Post	228	82.6	276
Ayurvedic Centres/Ausadhalaya	31	88.6	35
Private Clinic/Hospital	49	89.1	55
I/NGO Clinic/Hospital	93	91.2	102
<b>Total</b>	<b>622</b>	<b>83.3</b>	<b>747</b>

Source: HRH Field Survey 2011

A further constraint was the system of upgrading positions; although training had been provided to upgrade staff to higher level positions for financial reasons, health workers complained that they were still working in their previous roles, as their job descriptions had not yet been revised. They were also not permitted to participate in the recruitment process to gain an official job in the same level, despite their eligibility.

## 6.2 Lack of Supervision and Monitoring

Supportive supervision is associated with increased productivity and investments in the provision of supervision to maximize the output of scarce human resources in primary health care facilities. However, only 17.4 per cent of the health facilities were regularly monitored by support committee members. Approximately 18.5 per cent of the respondents stated their facilities had never received a monitoring visit by a support committee member, 16.2 per cent of respondents had never been monitored or inspected by a higher level authority. Monitoring by supporting committee and higher authority was less frequent in urban health settings as compared to rural probably because of the greater community and local authority infrastructure and significance within rural communities. (see Table 13).

Table 13: Percentage Distribution of Monitoring and Inspection

Characteristics	Monitoring by Support Committee Member				Monitoring / Inspection form Higher Level			
	Frequently	Usually	Sometimes	Never	Frequently	Usually	Sometimes	Never
<b>Ecological Belt</b>								
Mountain	14.2	42.5	25.0	18.3	4.2	37.5	40.8	17.5
Hill	22.7	40.3	20.5	16.5	11.0	35.5	35.9	17.6
Tarai	14.4	37.0	28.5	20.1	7.1	37.6	40.7	14.7
<b>Geographical Region</b>								
EDR	18.8	29.9	29.9	21.3	7.6	35.5	40.1	16.8
CDR	14.6	44.3	21.4	19.8	8.3	35.4	37.5	18.8
WDR	17.2	42.2	25.9	14.7	6.9	39.7	39.7	13.8
MWDR	24.8	26.7	24.8	23.8	13.9	28.7	43.6	13.9
FWDR	14.2	51.1	22.7	12.1	5.0	44.0	35.5	15.6
<b>Locality</b>								
Rural	19.5	41.0	25.1	14.4	7.9	36.9	41.6	13.7
Urban	12.2	34.3	24.9	28.6	8.5	36.6	32.4	22.5
<b>Total</b>	<b>17.4</b>	<b>39.1</b>	<b>25.0</b>	<b>18.5</b>	<b>8.0</b>	<b>36.8</b>	<b>39.0</b>	<b>16.2</b>

Source: HRH Field Survey 2011

Staff in 33 per cent of private clinics and hospitals, 27 per cent of NGO facilities and 22 per cent of government hospitals reported the facilities had never been monitored or inspected by higher authorities. (see Table 14). (also see Appendix 6 for details).

Table 14: Percentage Distribution of Monitoring and Inspection form Higher Level in Health Institutions

Types of Health Institutions	Monitoring and Inspection form Higher Level				Total (N)
	Frequently	Usually	Sometimes	Never	
Hospital	5.7	28.3	44.3	21.7	106
PHC	13.5	42.3	40.4	3.8	52
Healthpost	12.4	47.9	34.7	5.0	121
Sub-Healthpost	5.1	34.4	47.1	13.4	276
Ayurvedic Centres/Ausadhalaya	5.7	20.0	54.3	20.0	35
Private Clinic/Hospital	1.8	38.2	27.3	32.7	55
I/NGO Clinic/Hospital	14.7	41.2	16.7	27.5	102
<b>Total</b>	<b>8.0</b>	<b>36.8</b>	<b>39.0</b>	<b>16.2</b>	<b>747</b>

Source: HRH Field Survey 2011

Village development committees were interviewed during FGDs and stated that budget constraints limited their ability to visit remote facilities. The study found a higher percentage of monitoring occurring in rural areas compared to urban areas, suggestive of greater community cohesion and structure in rural areas.

### 6.3 Availability of Basic Amenities and Services

In total across all development regions, more than 50 per cent of respondents were dissatisfied with the physical facilities in their institutions, which lacked essential equipment, medicine and physical facilities (see Table 15). Sixty per cent respondents from rural work places complained the physical facility, equipment and rooms were insufficient. More than 60 per cent of respondents from hospitals, PHC, SHP and Ayurvedic Centres stated that facilities were insufficiently resourced.

Table 15: Availability of Physical Facilities, Buildings, and Rooms

Characteristics	Enough (%)	Not enough (%)
<b>Ecological Belts</b>		
Mountain	32.5	67.5
Hill	54.2	45.8
Tarai	46.0	54.0
<b>Development Regions</b>		
EDR	41.6	58.4
CDR	50.5	49.5
WDR	43.1	56.9
MWDR	54.5	45.5
FWDR	46.8	53.2
<b>Place of Work</b>		
Rural	40.4	59.6
Urban	62.9	37.1
<b>Types of Institutions</b>		
Hospital	37.7	62.3
PHC	30.8	69.2
Health Post	57.0	43.0
Sub-Health Post	33.0	67.0
Ayurvedic Centres/Ausadhalaya	40.0	60.0
Private Clinic/Hospital	74.5	25.5
I/NGO Clinic/Hospital	77.5	22.5
<b>Categories of HRH</b>		
Doctors	48.8	51.3
Paramedical	41.0	59.0
Technicians	58.9	41.1
Nurses/ANMs	52.8	47.2
<b>Total</b>	<b>46.9</b>	<b>53.1</b>

Source: HRH Field Survey 2011

Most focus group discussions among service users highlighted a lack of medicines across facilities and problems in rural Mountain areas in securing a pipeline for medical supplies, given distance and transport constraints. Other common concerns were the lack of ambulances, limited service provision and lack of key medical equipment. There was a heavy reliance on private pharmacies and clinics and concern over the cost implications of using these services. Local authorities in one district in the Mountain belt stated that they could not demand good services and conduct if they could not in turn provide resources for facilities and basic amenities for staff.

In Mugu district, a policy maker of DDC described the condition of his health services: *"Health facilities do not have any signboard. HFs are opened and run most of the time by support staff. They distribute the medicine if they have them."*

A male beneficiary from Darchula district hospital stated: *"this hospital lacks lab facilities and x-ray equipment even though it is situated in the district headquarters. Because of these reasons patients pay higher charges in the private clinics and visit bordering Indian town health clinics for their treatment."*

Most focus group discussions highlighted a lack of medicines across facilities and problems in rural mountains areas of securing a pipeline for medical supplies given distances and transport constraints. Other common concerns were lack of ambulances, limited service provision and lack of key medical equipment. There was a reported heavy reliance on private pharmacies and clinics and concern over the cost implications of using these services. One FGD with a group of journalists reporting on rural areas stated the situation as follows:

*'Because of the weak physical infrastructure health workers never goes to Health Centres. Out of the total allocated budget of around 1 Lakh (NRs 100,000), the buildings are constructed with the expenditure not exceeding 50 Thousand. Some of the health Centres are run within the premises of office of VDC. Health workers are more interested to own their own medical Centre.'*

FGDs overall cited lack of delivery centres as an extremely important concern. Management committees, local authorities and community health workers stated a need for uterine prolapsed services in all areas.. Even where delivery services were available management committees and beneficiaries stated problems in access comprehensive obstetric care and extensive transportation times.

A Female Community Health Volunteer in Rasuwa district, said, *"There is no birthing Centre at HP. We have to go to the district hospital for the delivery. Therefore, many complications arise while taking the pregnant women to the district hospital."*

Availability of staff quarters and diagnostic facilities, are poor especially in rural settings. For example some health institutions are based in rented houses or share the space at other government buildings such as a VDC building. There is a limited number of good schools for children, and jobs for spouses. Staff report a lack of security, the poor security situation in rural areas was given as a cause resulting in widespread absenteeism of staff. In rural areas doctors are the least likely to be employed locally and the least likely to have a permanent home in the area of the hospital. This is, in part, due to the transitory nature of government doctors and limited efforts to recruit local people to serve as doctors, particularly in rural areas.



## 6.4 Pride in Work and Connection with Community

Prestige and dignity felt by health workers is directly linked to productivity. In this study, approximately 37 per cent of respondents stated they did not feel pride in their work (see Table 16). In focus group discussions health workers stated their sense of pride came from the ability to service their communities effectively and community acceptance and support. Only 56 (7.5%) respondents revealed that they were awarded by local community for their work. The level of community acceptance and support was also related to how related to how easily health workers could perform, and how much support the community could give. FCHV felt constrained by their lack of training and common statements were *'we do the best we can'*.

Table 16: Prestige and Dignity Felt Working in the Institution

Characteristics	Prestige and Dignity Felt			
	Very much	Enough	To some extent	Not at all
<b>Ecological Belts</b>				
Mountain	10.0	46.7	36.7	6.7
Hill	22.7	38.5	33.0	5.9
Tarai	24.3	42.1	29.4	4.2
<b>Development Regions</b>				
EDR	17.3	45.2	32.0	5.6
CDR	33.3	32.8	27.6	6.3
WDR	17.2	45.7	32.8	4.3
MWDR	18.8	38.6	34.7	7.9
FWDR	16.3	46.8	34.8	2.1
<b>Place of Work</b>				
Rural	20.4	43.4	31.1	5.1
Urban	23.9	36.6	33.8	5.6
<b>Total</b>	<b>21.4</b>	<b>41.5</b>	<b>31.9</b>	<b>5.2</b>

Source: HRH Field Survey 2011

# CHAPTER VII CONCLUSIONS AND RECOMMENDATIONS

This report has outlined the four dimensions of health workforce performance: availability, competency, responsiveness and productivity, as well as specific levers which constitute options for decision-makers, from which different strategies can be selected and combined to meet challenges in the health workforce. On the basis of the findings discussed in this report, the following summary of major findings is presented below.

## 7.1 Availability

### *Conclusions*

- Despite the fact that policies are in place to ensure the availability of health workers, less than half of health workers were found at their working stations at the time of survey.
- A common theme among service users, service providers and civil society organisations was the importance of enhancing the capacity of health workers who were required to fill the gaps of unavailable staff.
- A coping strategy of local governments to deal with the long-term absenteeism of health workers was to recruit temporary staff at the local level or from the local area.

### *Recommendations*

- Accountability systems, including transparency on training/transfer plans, attendance and availability of HWs, should be put in place to ensure the community can act as a monitoring body. Monitoring on absenteeism, and training/deputation and absence leave from the authority level and from CSOs and Local committees.
- Training of mid-level and community staff to ensure capacity to task shift with a strong emphasis on IMNCI/IMPAC and task-shifting provided for community staff.
- While improvements to temporary contracts will improve productivity and responsiveness of staff, the correct allocation of permanent staff and correct salaries and benefits will be a stronger longer term solutions. Staff on temporary contracts should be given the opportunity to become permanent members of staff within one year of service, which should be included in the Civil Service Act. This should be based on performance assessments at the local level, and the District Health Officer and Regional Health Director should provide the recommendation for sign off at the central level

## 7.2 Competency

### *Conclusions*

- Around one third (35.6%) of respondents believed there were insufficient numbers of competent staff in their health facilities. Competency of staff was particularly limited in the Mountain ecological belt (6.7%).
- Among the prescribed essential competencies for midwifery training, gaps were highest in the curricula on facilitation of abortion-related care, with the highest gap in the ANM curriculum (81%), followed by SBA (31%), PCL Nursing and PBN (25%).
- Explanations for poor competencies among Health Workers included lack of training opportunities and an ineffective performance management system.

### *Recommendations*

- Pre-service education and in-service training should be revised and upgraded with increased resources to ensure clinical placements and practical training and even greater emphasis on IMNCI, IMPAC and health management.
- The performance appraisal system should be on actual and fair evaluation of the work and there should be effective provision of reward and punishment.

## 7.3 Responsiveness

### *Conclusions*

- Staff responsiveness was mixed and very much dependent on the facility and area in which they worked but with no clear pattern in terms of facility, rural or urban or geographical location. Beneficiaries complained more about staff attitudes in hospital facilities and absenteeism and shortened working hours across all facilities. Key issues highlighted by beneficiaries were lack of female health workers, privacy, confidentiality and rough treatment. Yet, at the same time staff reported involvement in community mobilization work and working outside their hours and mandate to support their communities. The key finding is the lack of consistency in support and response and monitoring of performance.
- Feedback/complaint mechanisms are essential for improvements in workforce performance as they can be used not only to provide information on misconduct, but can also provide positive feedback from the community and can strengthen motivation among health workers. There is no clear system to report service users' and health workers' concerns.

### *Recommendations*

- Strengthen the accountability system by ensuring a patient charter and code of conduct that is regulated by health facility committee with representatives from CSO and HFOMC. At community level, policies and regulations should be shared with the communities (on boards, in meetings, etc), as well as a clear training and deputation schedule. Ensure beneficiaries have access to information on the services they can expect and system of complaints. Service users committees should be set up and informed on

complaint mechanisms and on the responsible bodies with whom to address formal complaints.

- HFOMCs to address resource issues that affect confidentiality, including sufficient rooms, space for privacy, where possible same sex staff, special provision for adolescents to ensure confidentiality.
- The support provided by the HFOMC should be strengthened through the implementation of a service user and service provider confidential feedback mechanism that can be managed jointly by CSOs and the HFOMC. A robust monitoring system should be put in place to ensure that changes are implemented within a given timeframe. At district level, appropriate bodies should have a mandate to collect feedback, and have regulation ensuring timely response, and transparency of actions taken. Ensure that sufficient authority is given to local authorities, and that supervision systems are in place to address concerns on staff responsiveness.

## **7.4 Productivity**

### *Conclusions*

- Health workers are often not provided with the job description for a new role. This creates a barrier for further promotion within the health system, and health workers become trapped in the system without any career progression opportunities.
- Job descriptions were outdated, and responsibilities were not clearly defined, or did not match with Health Workers' knowledge and skills. The process of upgrading staff without job descriptions contributed to lowering the productivity of Health Workers.

### *Recommendations*

- Clearly defined updated job descriptions should be available to each Health Worker, and should be used in conjunction with Performance Management appraisals.
- All facilities should be resourced to ensure staff can meet expectations from their job descriptions. This means regular facility audits and recommendations to authorities for improvements, which could be managed by CSOS and health staff. Sufficient funding and decentralized budget system to ensure facilities are sufficiently resourced plus staff housing is supported.
- Community/ facility health committees communicate to community what services to be delivered by their facilities and providers so community know what to expect from providers.

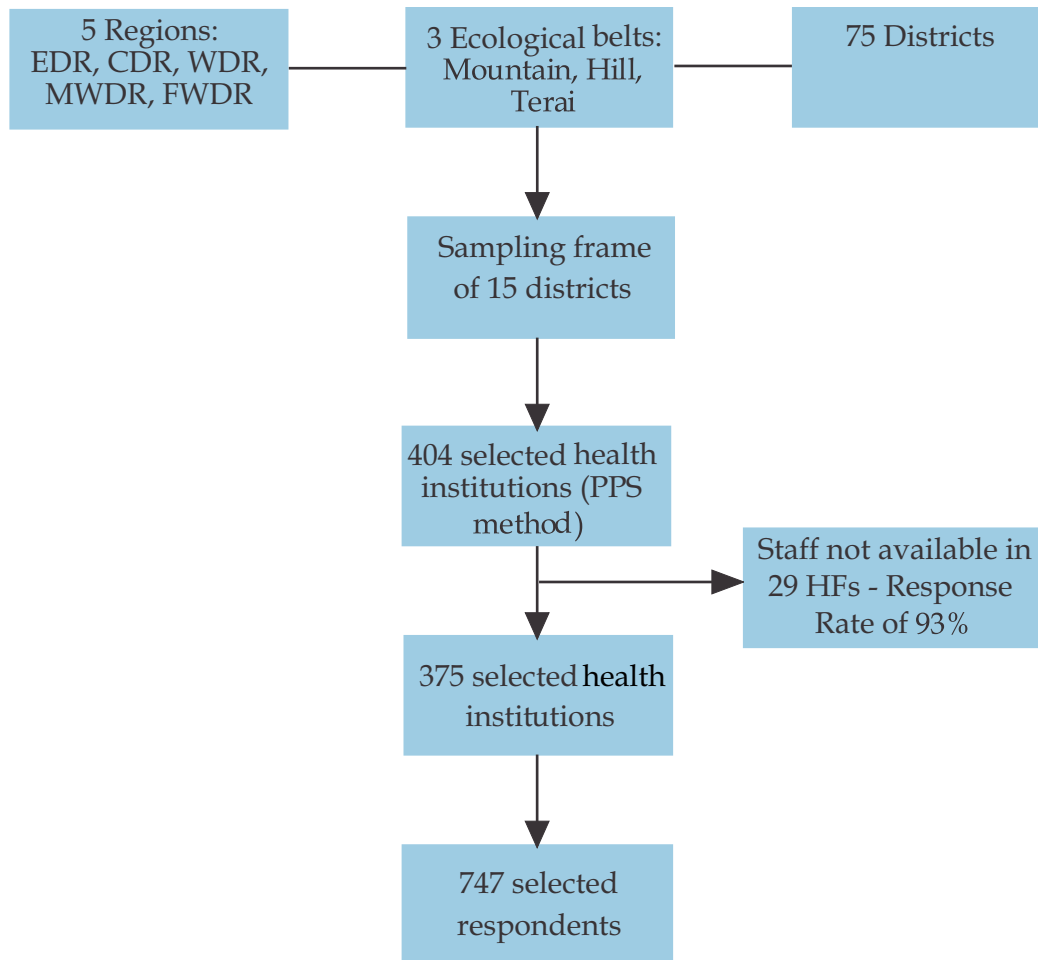
## REFERENCES

1. WHO SEARO. Health Systems Development- Human Resources for Health. [Electronic] 2008 [updated June18, 2008; cited 2012 February 16]; Available from: <http://www.searo.who.int/en/section1243/section1308.htm>
2. Fulton BD, Scheffler RM, Sparkes SP, Auh EY, Vujicic M, Soucat A. Health workforce skill mix and task shifting in low income countries: a review of recent evidence. *Hum Resour Health*. 2011;9(1):1.
3. WHO, ICM, FIGO. Making pregnancy safer: the critical role of the skilled attendant. Geneva, Switzerland: WHO; 2004.
4. Dieleman M, Harnmeijer JW. Improving health worker performance: in search of promising practices. World Health Organization; 2006 [cited 2012 February 18]; Available from: [http://www.who.int/hrh/resources/improving\\_hw\\_performance.pdf](http://www.who.int/hrh/resources/improving_hw_performance.pdf).
5. World Health Organization. World Health Report 2006: Working Together for Health. Geneva, Switzerland: WHO; 2006.
6. World Health Organization. Assessment of Human Resources for Health: Survey instruments and guide to administration: WHO, Geneva; 2002.
7. Government of Nepal. National Health Policy 1991. Ministry of Health, Government of Nepal; 1991.
8. Government of Nepal. Local Self Governance Act 2055 (1999). Government of Nepal; 1999.
9. Government of Nepal. Health Service Regulation 1999. Government of Nepal; 1999.
10. Government of Nepal. Nepal Health Service Act 1997 (5th Amendment 2010). Government of Nepal; 2010.
11. Ministry of Health (MoH) [Nepal]. Second Long Term Health Plan 1997-2017. Ministry of Health, Government of Nepal; 1999.
12. Ministry of Health (MoH) [Nepal]. Nepal Strategic Plan for Human Resources for Health 2003-2017. Kathmandu: Ministry of Health, Nepal; 2003.
13. Ministry of Health (MoH) [Nepal]. Nepal Health Sector Programme IP 2004-2009 Kathmandu: Ministry of Health, Nepal; 2004.
14. Ministry of Health and Population (MoHP) [Nepal]. National Policy on Skilled Birth Attendants: Supplementary to Safe Motherhood Policy 1998. Kathmandu: Ministry of Health and Population, Government of Nepal; 2006.
15. Ministry of Health and Population (MoHP) [Nepal]. Nepal Health Sector Programme Implementation Plan II (NHSP-IP II) 2010-2015 Final Draft. Kathmandu: Ministry of Health and Population, Government of Nepal 2010.
16. Ministry of Health and Population (MoHP) [Nepal]. Human Resources for Health Strategic Plan 2011-2015. Kathmandu: Ministry of Health and Population, Government of Nepal 2012.
17. Zurn P, Dolea C, Stilwell B. Nurse retention and recruitment: developing a motivated workforce. Geneva, Switzerland: World Health Organization, Department of Human Resources for Health; 2005.

18. Government of Nepal. The Labour Act, 2048 (1992). Government of Nepal; 1992.
19. Nick Simons Institute. Measuring the Quality of Rural-based Government Mid-Level Health Care Workers. 2007.
20. Nick Simons Institute, Council for Technical Education and Vocational Training. A focused study on Mid-Level pre-service Health Training Programs in Nepal. Kathmandu: Nick Simons Institute; 2006.
21. Frenk J, Chen L, Bhutta ZA, Cohen J, Crisp N, Evans T, et al. Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. *Lancet*. 2010 Dec 4;376(9756):1923-58.
22. Darby C, Valentine N, Murray CJ, de Silva A. Strategy on measuring responsiveness. GPE Discussion paper series: World Health Organization.
23. Chaudhury N, Hammer JS. Ghost Doctors: Absenteeism in Rural Bangladeshi Health Facilities. *The World Bank Economic Review*. 2004 January 1, 2004;18(3):423-41.
24. Kurowski C, Wyss K, Abdulla S, Mills A. Scaling up priority health interventions in Tanzania: the human resources challenge. *Health Policy Plan*. 2007 May;22(3):113-27.
25. Courtright P, Ndegwa L, Msosa J, Banzi J. Use of our existing eye care human resources: assessment of the productivity of cataract surgeons trained in eastern Africa. *Arch Ophthalmol*. 2007 May;125(5):684-7.
26. Vujicic M, Sparkes S, Mollahaliloglu S. Health workforce policy in Turkey: recent reforms and issues for the future. Washington: World Bank; 2009.

# APPENDICES

## Appendix 1: Sampling method



## Appendix 2: Derivation of Sample Size

Major features of sample determination:

1. Total Institutions = 5146
2. Total Hospitals, PHC/HC and HP = 1000
3. Proportion of Targeted Health Facilities =  $1000/5146 = 0.194$
4. The formulae for calculating the sample size

$$n = Z^2_{1-\alpha/2} * p * (1-p) * deff * (1+nr) / d^2$$

Where:

$$Z^2_{1-\alpha/2} = 5\% \text{ level of significance} = 1.96$$

p = proportion of the targeted coverage of health institutions

Note: Since all categories of health workforce are found in District Hospital, Primary Health Care Centres/ Health centres and Health Posts, the total number of these institutions (1000) is divided by the total health institutions (5146) in the country to calculate the proportion.

deff = Design effect, which is set as to minimize sampling variability caused by cluster sampling

The design effect set for this sample determination is 1.5

nr = Non response rate, which is an estimated rate for the non-response of respondents and it is set as 10 Per cent (0.1) in this sample selection.

d = Allowable error, which is usually considered as 0.05 that indicates its range from 14.4 to 24.4 Per cent.

The equation for deriving the sample size is given as below.

$$n = Z^2_{1-\alpha/2} * p * (1-p) * deff * (1+nr) / d^2$$

$$\text{or } n = (1.96)^2 * 0.194 * 1.5 * (1+0.1) / 0.05^2$$

$$\text{or } n = (3.84 * 0.16 * 1.5 * 1.1) / 0.025$$

$$\text{or } n = 1.01 / 0.025$$

$$\text{or } n = 404$$



### Appendix 3: Total Number of Institutions by Districts, Ecological Belts and Development Region

SN	Development Region	Ecological Belt	District	Selected Number of Institutions							
				District Hospital	PHCC/HC	Health post	Sub-Health Post	I/NGO - Clinic	Private Institution	Ayurvedic	Total Institution
1	Far-Western	Mountain	Darchula	1	1	5	10	0	0	1	18
2	Far-Western	Hills	Doti	1	1	4	16	1	0	3	26
3	Far-Western	Tarai	Kailali	1	2	3	13	2	1	2	24
4	Mid-western	Mountain	Mugu	1	1	1	4	2	0	0	9
5	Mid-western	Hills	Pyuthan	1	1	5	14	0	1	1	23
6	Mid-western	Tarai	Bardiya	1	1	3	9	6	0	1	21
7	Western	Mountain	Manang	1	0	2	1	0	0	1	5
8	Western	Hills	Palpa	1	1	4	23	1	0	3	33
9	Western	Tarai	Kapilbastu	1	1	3	27	1	0	1	34
10	Central	Mountain	Rasuwa	1	1	3	2	2	1	1	11
11	Central	Hills	Lalitpur	2	1	4	12	17	5	1	42
12	Central	Tarai	Dhanusa	1	2	4	37	2	0	3	49
13	Eastern	Mountain	Sankhuwasaba	1	1	4	10	1	1	2	20
14	Eastern	Hills	Panchthar	1	1	4	12	1	0	0	19
15	Eastern	Tarai	Jhapa	1	2	3	18	9	6	2	41
<b>Selected number of institutions by ecological belts</b>											
1	Mountain			5	4	15	27	5	2	5	63
2	Hills			6	5	21	77	20	6	8	143
3	Tarai			5	8	16	104	20	7	9	169
<b>Selected number of institutions by development region</b>											
1	Far-Western Development Region			3	4	12	39	3	1	6	68
2	Mid-Western Development Region			3	3	9	27	8	1	2	53
3	Western Development Region			3	2	9	51	2	0	5	72
4	Central Development Region			4	4	11	51	21	6	5	102
5	Eastern Development Region			3	4	11	40	11	7	4	80
<b>Total</b>				<b>16</b>	<b>17</b>	<b>52</b>	<b>208</b>	<b>45</b>	<b>15</b>	<b>22</b>	<b>375</b>

Source: HRH Field Survey 2011

### Appendix 4: Qualitative Data Collection

District	Focus Group Discussions (FGD)							Key Informant Interviews (KII)				Grand Total of Participants
	Management Group		Service Providers		Service Users		Total # of FGD	Management Group	Service Provider	Service User	Total # of KII	
	# of FGD	# of Participants	# of FGD	# of Participants	# of FGD	# of Participants						
<b>Sankhuwasabha</b>	1	9	1	10	1	12	-	-	-	-	-	-
	1	6	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	3	27	1	10	1	12	5	0	1	0	1	50
<b>Panchthar</b>	-	-	1	8	1	10	-	-	-	-	-	-
	-	-	1	13	1	6	-	-	-	-	-	-
	-	-	-	-	1	9	-	-	-	-	-	-
	-	-	-	-	1	7	-	-	-	-	-	-
<b>Total</b>	0	0	2	21	4	32	6	0	1	0	1	54
<b>Jhapa</b>	1	7	2	6	1	8	-	-	-	-	-	-
	-	-	1	10	-	-	-	-	-	-	-	-
	-	-	1	6	-	-	-	-	-	-	-	-
<b>Total</b>	-	7	3	22	1	8	5	1	1	0	2	39
<b>Dhanusha</b>	1	7	1	12	1	8	-	-	-	-	-	-
	-	-	-	-	1	10	-	-	-	-	-	-
<b>Total</b>	1	7	1	12	2	18	4	1	1	0	2	39
<b>Lalitpur</b>	-	-	1	4	1	9	-	-	-	-	-	-
	-	-	-	-	1	7	-	-	-	-	-	-
<b>Total</b>	0	0	1	4	2	16	3	1	1	1	3	23
<b>Rasuwa</b>	1	7	1	7	1	7	-	-	-	-	-	-
<b>Total</b>	1	7	1	7	1	7	3	0	1	0	1	22
<b>Palpa</b>	1	8	1	8	1	8	-	-	-	-	-	-
	1	-	1	7	1	9	-	-	-	-	-	-
	-	-	-	-	1	9	-	-	-	-	-	-
<b>Total</b>	2	8	2	15	3	26	7	1	1	0	2	51
<b>Manang</b>	-	-	1	7	1	10	-	-	-	-	-	-
<b>Total</b>	0	0	1	7	1	10	2	1	-	-	1	18
<b>Kapilvastu</b>	1	8	1	7	1	7	-	-	-	-	-	-
	1	6	-	-	1	6	-	-	-	-	-	-
<b>Total</b>	2	14	1	7	2	13	5	0	1	0	1	35
<b>Mugu</b>	1	14	-	-	1	8	-	-	-	-	-	-
<b>Total</b>	1	14	0	0	1	8	2	0	0	0	0	22
<b>Pyuthan</b>	1	6	1	7	1	9	-	-	-	-	-	-
	1	7	-	-	1	11	-	-	-	-	-	-
	-	-	-	-	1	9	-	-	-	-	-	-
<b>Total</b>	2	13	1	7	3	29	6	0	3	0	3	52
<b>Bardiya</b>	1	6	1	8	1	8	-	-	-	-	-	-
	-	-	1	8	1	9	-	-	-	-	-	-
	-	-	1	7	-	-	-	-	-	-	-	-
<b>Total</b>	1	6	3	23	2	17	6	1	2	1	4	50
<b>Doti</b>	1	8	1	9	1	11	-	-	-	-	-	-
	1	8	1	6	1	8	-	-	-	-	-	-
<b>Total</b>	2	16	2	15	2	19	6	0	1	1	2	52
<b>Darchula</b>	1	16	1	7	1	17	-	-	-	-	-	-
	1	8	-	-	1	15	-	-	-	-	-	-
<b>Total</b>	2	24	1	7	2	32	5	0	4	0	4	67
<b>Kailali</b>	1	9	1	6	1	6	-	-	-	-	-	-
	1	6	1	6	1	6	-	-	-	-	-	-
	-	-	-	-	1	9	-	-	-	-	-	-
	-	-	-	-	1	9	-	-	-	-	-	-
	-	-	-	-	1	12	-	-	-	-	-	-
<b>Total</b>	2	15	2	12	5	42	9	0	1	1	2	71
<b>Grand Total</b>	20	158	22	169	32	289	74	6	19	4	29	645

## Appendix 5: Fulfilment of HRH at Health Facility During Survey, 2011

Characteristics	Surveyed HF	Doctor			Nurse			Paramedics			Technicians			Total including other cadres		
		Sanctioned	Filled	Filled	Sanctioned	Filled	Filled	Sanctioned	Filled	Filled	Sanctioned	Filled	Filled	Sanctioned	Filled	Filled
		No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%
<b>Ecological belt</b>																
Mountain	62	19	12	63	87	75	86	95	78	82	21	15	71	331	287	87
Hill	91	89	53	60	233	206	88	152	135	89	66	44	66	725	607	84
Terai	103	86	55	64	183	170	93	188	195	104	44	44	100	810	715	88
<b>Development region</b>																
EDR	45	29	20	69	94	84	89	90	75	83	23	18	79	343	243	71
CDR	85	76	29	38	134	92	69	120	111	93	45	21	46	515	371	72
WDR	43	37	35	95	137	131	96	75	67	89	31	28	90	409	385	94
MWDR	34	12	10	83	44	37	84	61	62	102	14	14	100	190	175	92
FWDR	49	40	26	65	94	107	114	89	93	104	18	22	122	409	435	106
<b>Type of Institutions</b>																
Hospitals	14	107	76	71	232	216	94	72	81	113	64	55	86	633	567	10
PHC	17	15	8	53	69	54	78	52	46	82	17	20	118	200	162	19
HP	42	-	-	-	53	48	91	86	79	92	-	-	-	223	205	8
SHP	144	-	-	-	73*	72*	-	161	148	92	-	-	-	532	472	11
Ayurved Centres	13	13	11	85	1*	2*	-	18	19	106	-	-	-	54	55	-2
Private clinic/hospital	9	38	16	42	27	22	81	29	24	83	30	15	50	121	82	32
I/NGO Clinic/Hospitals	17	21	9	43	48	37	77	17	11	65	20	6	30	103	66	36
<b>Total</b>	<b>256</b>	<b>194</b>	<b>120</b>	<b>62</b>	<b>503</b>	<b>451</b>	<b>90</b>	<b>435</b>	<b>408</b>	<b>94</b>	<b>131</b>	<b>103</b>	<b>78</b>	<b>1866</b>	<b>1609</b>	<b>86</b>

Source: HRH Field Survey 2011

## Appendix 6: Level of Involvement in Mobilization of People

Characteristics	Level of involvement in the mobilization of people			
	Very High	Adequate	Moderate	No involvement
<b>Ecological Belts</b>				
Mountain	22.5	27.5	26.7	23.3
Hill	35.9	29.7	20.9	13.6
Tarai	27.4	26.8	16.9	28.8
<b>Development Regions</b>				
EDR	21.8	24.4	20.8	33
CDR	44.8	26.6	15.6	13
WDR	27.6	31.9	27.6	12.9
MWDR	25.7	31.7	17.8	24.8
FWDR	24.8	29.1	19.9	26.2
<b>Place of Work</b>				
Rural	32.6	32.2	20	15.2
Urban	22.5	17.4	19.7	40.4
<b>Total</b>	<b>29.7</b>	<b>28</b>	<b>19.9</b>	<b>22.4</b>

Source: HRH Field Survey 2011



## Field Research Team

### Research Management Team

#### SOLID Nepal

Dr. Khem B. Karki  
Bhuwan Baral  
Manju Neupane  
Raju Prajapati  
Binod Kumar Maharjan  
Sarita Chhetri  
Marichman Shrestha  
Tika Adhikari  
Jun Bahadur Tamang

#### Merlin Nepal

Catherine Whybrow  
Anant Nepal  
Dr. Khakindra Bhandari  
Chandika Shrestha  
Sajana Amatya  
Daman Baij

### Quantitative Data Entry/ Qualitative Data Transcription

Barsha Rijal  
Chandra Laxmi Bhasima  
Dip Prasad Khatiwada  
Kirti Sagar Baral  
Latshering Glan Tamang  
Mona Giri  
Mingma Glan Tamang  
Pasang Devi Tamang  
Pratikshya Khadka  
Radha Devi Gurung  
Roshni Poudel  
Sarita Chhhetri

### Research Enumerators/ Interviewers

#### Research Assistants

Dr Achyut Raj Karki  
Ajit Acharya  
Anita Bajgain  
Anup Adhikari  
Chandani Rana

#### Research Supervisors

Badri Prasad Mainali  
Barsha Rijal  
Chandra Laxmi Bhasima  
Dinesh Bhandari  
Kabita Adhikairi  
Kalpana Rimal  
Mona Giri  
Pasang Devi Tamang  
Pratiksha Khadka  
Ranjila Joshi  
Ranju Bhandari  
Roshani Poudel  
Sandeep Silwal  
Sangita Bajgain  
Sarita Adhikari  
Shekhar Adhikari  
Yubaraj Budhathoki

Anil Kumar Jha  
Anita Tako  
Archana Shrestha  
Bala Ram Aawasthi  
Basanta Katwal  
Basanti Thapa  
Bhanu Neupane  
Bharat Bhandari  
Chhaya Kumari Shrestha  
Dhankala Kunwar  
Dilip Khanal  
Dipak Tamang  
Durga Rokaya  
Ganesh Prasad Shrestha  
Govinda Sharma Neupane  
Gyanu Ojha  
Hemlal Kunwar  
Jit Bahadur Shrestha  
Keshav Ojha  
Khem Raj Baniya  
Kishor Shrestha  
Laxmi Rawal  
Laxmi Shah  
Mahabir Yadav  
Mahesh Prasad Shah  
Manu Dulal  
Parmeshwori Shah  
Puspa Pandey  
Ram Dhulari Rana  
Ram Nath Shah  
Randip Kumar Kunwar  
Renu Gupta  
Roshan Neupane  
Sabita Acharya  
Sandesh Bahadur Sunar  
Sarita KC  
Shankar Bhattarai  
Shreejana Chaudhary  
Sita Neupane  
Suman Shrestha  
Suman Tamang  
Sundar Singh Bohora  
Sunil Adhikari  
Sunita Kandel  
Tara Nath Fulara  
Yeshu Bai Rai



**Society for Local Integrated Development Nepal (SOLID NEPAL)**  
**Satdobato, Lalitpur**

*GPO Box No : 9565, Kathmandu, Nepal*

*Phone : 977-1-5548455, Fax : 977-1-15553770*

*Email : [solidnepal@wlink.com.np](mailto:solidnepal@wlink.com.np)*

*Web : [www.solidnepal.org.np](http://www.solidnepal.org.np)*