

# Technical Report on Survey of Migration and Women's Empowerment in Agriculture



Prepared by Nepa School of Social Sciences and Humanities

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## Table of Contents

INTRODUCTION .....	1
2.1 Objectives of the study .....	1
2.2 Description of the sample .....	2
SAMPLING SELECTION PROCESS AND SPECIFICS .....	2
3.1 Basic data.....	2
3.2 Sample selection .....	3
3.3 Description of the questionnaire items .....	4
4. PROJECT SCHEDULE IN PHASES.....	7
5. ENUMERATORS AND TRAINING .....	7
5.1 Qualifications for hire.....	7
5.2 Training .....	7
Overview Field monitoring.....	9
6.1 Field work.....	9
6.2 Fieldwork details .....	10
6.3 Interview Time and Venue .....	10
6.4 Quality Assurance.....	10
6.5 Other quality control methods .....	11
6.6 Callback procedure .....	11
7. Post- field debriefing session .....	11
<i>Listing</i> .....	11
<i>Sampling</i> .....	12
<i>Questionnaire</i> .....	12
<i>Weather condition</i> .....	12
ANNEX I: Team composition for the study .....	13
Annex 2: Photos from the training and field.....	14

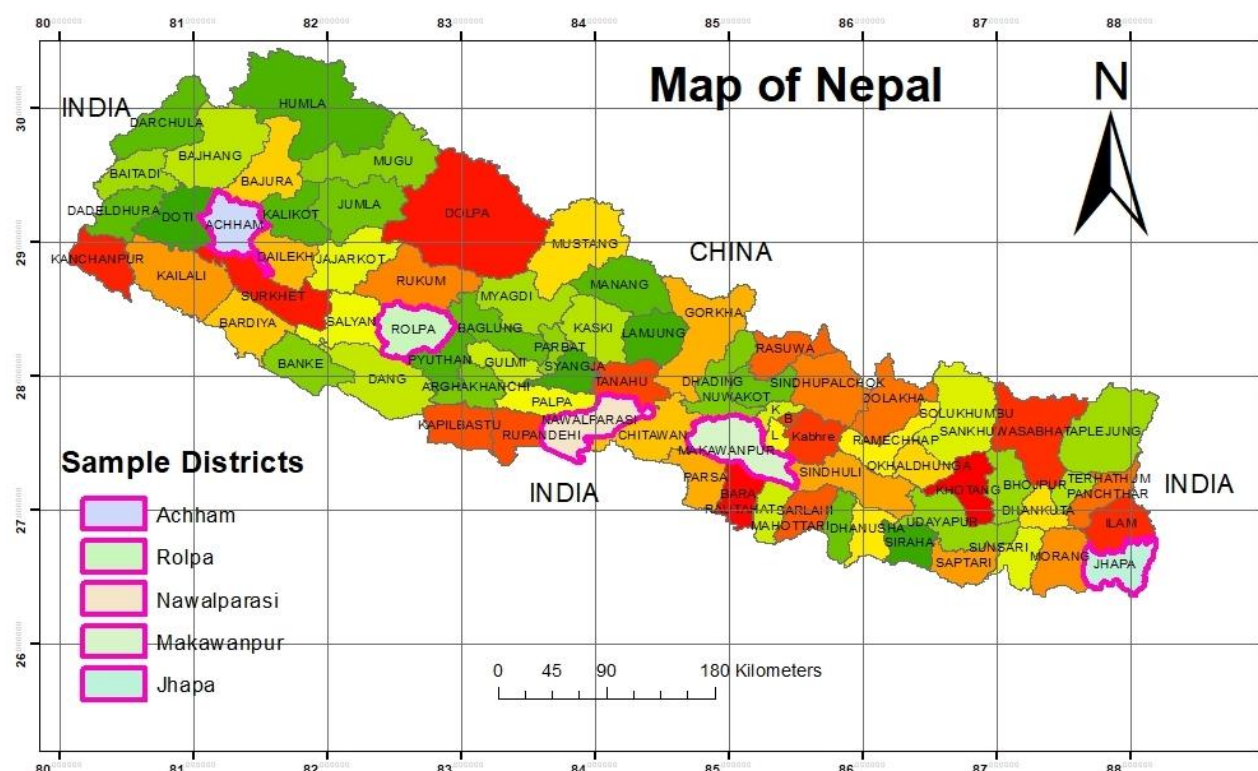
## INTRODUCTION

Rural transformations and the changes in family farming are important issues that help understand the expanding role of women in agriculture. In many countries around the world, women's roles in agriculture are expanding. The increasing role of women in agriculture is often in response to key drivers such as male out-migration and the growth of commercial farming as well as other factors including conflict, agro-technologies, and poverty. It is often assumed that women stand to gain greater autonomy in decision-making and empowerment in the absence of their husbands or any male member of a household. However, on the flip side, if migration turns out to be rather unsuccessful and remittances inadequate, women face greater workloads and financial difficulties, leading to women's disempowerment and greater poverty. The employment rates of women involved in the agriculture sector have not changed significantly in the last few decades. However, their roles and responsibilities are changing—from contributing family members on the farm to primary farmers or from subsistence farming to wage employment—but these changes are hard to detect at the national level due to inadequate data. In this regard, Food and Agriculture Organization (FAO) conducted a study on migration particularly related to women's work, empowerment and welfare.

### 2.1 Objectives of the study

The objective of the study is to collect adequate information to understand the determinants, and consequences of migration particularly from a gender perspective. Its objective is also, to identify with the linkages between the migration of family members and changes in women's empowerment in the household and in the broader agricultural sector.

## 2.2 Description of the sample



## SAMPLING SELECTION PROCESS AND SPECIFICS

### 3.1 Basic data

<b>Sample size –Household</b>	1000
<b>Sample size –Migrant</b>	500
<b>Sample size- Non-Migrant</b>	500
<b>Target area</b>	Representatives from 5 districts (spread east to west in Nepal and involving both the hills and the Tarai - Jhapa, Makwanpur, Nawalparasi, Rolpa and Achham)
<b>Age group</b>	18 years and older
<b>Gender</b>	Male, female and others
<b>Ethnicity</b>	Reflects the diversity of ethnic groups in five sample districts
<b>Socio-economic class</b>	Across all socio-economic classes, focused mostly on rural population.

### 3.2 Sample selection

The study was administered to a sample of 1000 households (500 migrant and 500 non-migrants). A multistage sampling procedure was adopted for the selection of the respondents.

The sampling framework is described in detail below:

In the first stage, thorough a review of the government's data on migration, districts were selected based on judgment sampling (i.e., non-probability sampling). Based on suggestions from FAO Nepal office, IDA identified five clusters from the five development regions with dense migration population. The clusters were a representation of both the hill and Tarai ecological regions. FAO experts used their informed judgment to identify one district in each of the five development regions.

In the second stage, proportional numbers of village development committees (VDCs) and/or municipalities were selected from every sampled district through simple random sampling technique

Subsequently in the third stage, VDCs were further distributed into wards. Two wards from each VDC were selected using simple random sampling. Thus, in each ward the sample size was 20<sup>1</sup>, which means that the sample size in each VDC was 40. Thus, five VDCs with sample size of 40 in each VDC added up to a total of 200 sample size per district.

In the fourth stage, households in each sampled wards were selected through a stratification based on the presence of migrant household members in order to ensure that the households with migrants represent at least 50% of the sample. Since the official listing was not available in the master frame of the Central Bureau of Statistics, a listing method, noting among others, the migrant and non-migrant households, was done in each ward to identify 10 migrant, and 10 non-migrant households. The 10 households in each stratum were selected using simple random sampling.

Finally, once the households were selected for the interview, the next task was to select the respondent from within the household. The household modules of the questionnaire, was completed by the most knowledgeable person in the household, which in most cases was the primary working-age couple or the spouse of the migrant. The A-WEAI module was completed according the following protocol:

***In migrant households:*** The A-WEAI module was completed by the spouse (or partner) of the migrant or another female member of working age when the migrant was not married (was asked to the mother).

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<sup>1</sup> A ward generally has around 150 households on average – the actual size ranges from 1 to 6,247 households. A ward in the Tarai generally tends to have more households than wards in the hills. A district has between 13 and 115 VDCs. A VDC invariably has 9 wards.

***In non-migrant households:*** The A-WEAI module was completed by an equal number of male and female members of working age. In case of multiple couples respondent who was more involved in agriculture was randomly selected.

The description of the samples is given in the table below:

Ecological Region	District	VDC	Wards	
Eastern Tarai/plains	Jhapa	Chakchaki	1	3
		Dhaijan	6	2
		Khajurgachhi	9	8
		Korobari	1	7
		Sharanmati	8	6
Central/Hills	Makwanpur	SarikhhetPalase	7	5
		Kankada	8	3
		Handikhola	6	9
		Hurnamadi	4	5
		Manahari	5	1
Western Tarai/plains	Nawalparasi	Ramnagar	2	8
		Tribenisusta	9	7
		Kawaswoti	9	1
		Rapauliya	4	8
		Kumarwarti	1	6
Mid-western/Hills	Rolpa	Dhawang	2	7
		Harjang	3	9
		Masina	4	8
		Kareti	2	5
		Jaulipokhari	2	7
Far-western/Hills	Achham	Khodasadevi	8	7
		Gajara	7	4
		Maltikot	6	2
		Marku	2	4
		Layati	8	5

### 3.3 Description of the questionnaire items

There were two sets of questionnaire - the Household Questionnaire which captured comprehensive information from households pertaining to employment, migration, remittance, livestock, agriculture among others, and the Women's Empowerment in Agricultural Index (WEAI) questionnaire designed to measure the empowerment, agency, and inclusion of women in the agricultural sector.



The questionnaires were initially formulated in English by the Food and Agriculture Organization (FAO). Once the questionnaires were finalized, it was translated by the Nepa School team who also made suitable changes so as to make it pertinent to the Nepali context.

A short description of each module of the questionnaire is listed in the table below:

Module	Headings of WEAI Questionnaire	Description
<b>Module A</b>	Individual Identification	This section covered the basic demographic information of the respondents.
<b>Module B</b>	Role in household decision-making around production and income generating activities	This section covered decision-making around agricultural production
<b>Module C</b>	Access to productive capital	This section covered access to decision making power over productive resources.
<b>Module D</b>	Access to financial services	This section covered respondents control over use of income.
<b>Module E</b>	Group membership	This section covered respondents participation in groups, and leadership in the community
<b>Module F</b>	Food insecurity and experience scale	This section covered respondent's access to food.
<b>Module G</b>	Time Allocation	This section covered day to day activities of respondents
<b>Module H</b>	Agricultural activities and migration	This section covered the agricultural activities performed and migration status of women.

Module	Headings of Household Questionnaire	Description
<b>Module I</b>	Roster and current migration	This section captured personal information of all the people residing in a household and their migration status.
<b>Module II</b>	Employment	This section captured the employment status, income, and expenditure of the respondents.
<b>Module III</b>	Migration History	This section captured the migration history of the respondents and their family members.
<b>Module IV</b>	Current and Seasonal Migration	This section captured the current and seasonal migration status of the respondents and their family members.
<b>Module V</b>	Past Migration	This section captured the past migration status of the respondents and their family members.
<b>Module VI</b>	Migration Financing	This section captured finances pertaining to migration. This section will only be asked to respondents who are current migrants
<b>Module VII</b>	Remittances	This section captured the frequency of remittance, total amount of remittance received, channels through which remittance was sent , decision on remittance money among others
<b>Module IX</b>	Crop Production and use	This section captured information on total land owned by the household, types of crops grown, crops produced and sold, total value of crops among others.
<b>Module X</b>	Livestock	This section captured personal information on ownership of small and big livestock, buying and selling of livestock or their products.
<b>Module XI</b>	Agricultural inputs	This section captured information on agricultural inputs such as fertilizers, seeds, land rental, fodder among others.
<b>Module XII</b>	Transfer and other income sources	This section captured personal information on assistance/transfer in cash from either the government or any private or public organization.
<b>Module XII</b>	Housing and wealth	This section captured personal information on total land and other property owned by an individual.
<b>Module XIII</b>	Distance to services	This section seeks to capture the distance of the household to the nearest market place, hospital or other service centers



## 4. PROJECT SCHEDULE IN PHASES

No.	Phase	Start date	End date
3.1	Translation and editing the questionnaire	20 May, 2017	20 June 2017 Reviewing and editing the questionnaire and making changes in the android form continued till the start of the field staff training.
3.2	Pre-testing the hard copy of the Nepali questionnaire	6 July 2017	8 July 2017 Checking whether or not the respondents would understand the questions; whether or not the skip patterns are correct
3.2	Designing ODK software	22 June, 2017	28 July, 2017
3.2	Pre-test	19 July, 2017	20 July 2017 Checking whether or not the android version proceeds smoothly; whether or not the skipping pattern is correct
3.3	Field staff training	22 July, 2017	27 July, 2017
3.4	Field survey	28 July, 2017	21 August 2017
3.5	Debriefing Session	23 August, 2017	23 August, 2017 Field teams provided a feedback on the fieldwork, including the challenges faced and how these were tackled.

## 5. ENUMERATORS AND TRAINING

### 5.1 Qualifications for hire

Enumerators deployed to the field survey were those who have regularly worked for Nepa School. The key qualifications sought in the enumerators besides having experience in under taking surveys was language competency. They needed to be able to converse in local languages spoken in the sampled Tarai and Hill districts. Therefore, the caste and ethnic background of the enumerators also mattered. Supervisors and monitors were chosen based on their experience in conducting previous IDA surveys and who were well-accustomed to the process and methods of social surveys. The name list of enumerators, supervisors and monitors is given in the Annex I below.

### 5.2 Training

The training was conducted with the aim of making all the field work personnel—enumerators, supervisors and monitors—able to complete the survey successfully. It aimed at fostering

knowledge about the questionnaire to enumerators, supervisors and monitors so that enumerators would be able to undertake effective interviews with the respondents.

The training went on for seven days, from 22 July 2017 to 27 July 2017 at IDA premises, Chahabil Kathmandu. There were a total 22 enumerators, five supervisors, and two monitors for the training. Additionally, there were personnel from Nepa School as well as FAO, as resource persons during the training.

Below is a brief description of the training, including the activities on each day:

### ***22 July, 2017***

The training started at 8 am. It commenced from the introduction of the enumerators and all the team members of and FAO. In the introduction, each of them started with their name, address, education and work experience. Vanya Slavchevska from FAO then gave a general introduction and the objective of the study and Sudhindra Sharma from Nepa School briefed the two modules of the questionnaires. In addition, a short session on sampling design of the survey, listing, and protocol was also discussed. This was followed by distribution of hard copy of the Nepali version of the household level questionnaire which was discussed in detail.

### ***23 July, 2017***

On the second day of the training the Nepali version of A-WEAI questionnaire was distributed among the enumerators. All the questions were explained one by one according to the theme. Furthermore, the types of questions, their variations, skip pattern, formatting and instruction was also thoroughly discussed.

### ***24 July, 2017***

On this day, the session started with the orientation on basic use of tablet set. The android version of the questionnaire was shown on the projector and each question was thoroughly discussed. This was done to make the enumerators familiar with the android software. During the day a practice session was conducted where the enumerator filled out both household level questionnaire and A- WEAI on the tablet.

### ***25 July, 2017***

After the practice session, a pilot test, a part of the training itself, was conducted using android tablets on 25 July, 2017, Kushadevi VDC of Kavrepalanchowk district. All total 22 enumerators, six supervisors, and two monitors along with other core Nepa School team members went to the field. They were divided into teams, and each team was led by a monitor. The feedback session for the pilot test was held at the training venue the next day.

## ***26 July, 2017***

The day started with the feedback session from the pilot test. During the feedback session some problems and confusions in the android version of the questionnaire were identified. The issues identified then were addressed during the feedback session. Some of the issues that came up during the feedback session are as follows:

- Few spelling and grammatical errors in the questionnaire
- Some of the questions needed to be reframed
- Few questions were not pertinent to the Nepali context
- Some questions needed clarification

The Nepa School and the FAO team made changes to the questions according to the feedback received from enumerators and field monitors.

## ***27 July, 2017***

On this day, mock sessions were conducted throughout the day. The enumerators were divided in a group of two and were provided with tablets for the mock session. The reason behind conducting the mock session was to be familiar with the questions, the tablet and the software. Furthermore, field planning was also done. In order to ensure data quality assurance, Hiranya Baral, Survey Field Coordinator, assigned roles and responsibilities to all the monitors, supervisors and the enumerators, and prepared them to leave for data collection the next day. It was also decided that the Nepa School team would go on field monitoring to ensure that no problem comes up.

## **Overview Field monitoring**

Nepa School core team conducted the field monitoring for the project in Makwanpur and Nawalparasi districts from 9 August 2017 to 15 August, 2017. The objective of the field monitoring was to check if the survey is going on well, and to inform the enumerators about issues found during data monitoring. The initial plan was also to cover Rolpa district for field monitoring, however, due to the challenging weather condition, the plan was cancelled.

### **6.1 Field work**

Fieldwork of the study was conducted from 28 July up to 21 August. The data collection in the survey was done through ODK software in a tablet. Each enumerator used a tablet with ODK application installed that contained the structured questionnaire for the survey. An additional printed copy of the questionnaire and backup chargers were also provided to the survey team in case of emergency use.

## 6.2 Fieldwork details

During the fieldwork, all the teams worked properly in their respective districts. On the first day of the fieldwork, monitors and supervisors along with the enumerators visited the ward office to get the listing of the migrant and non-migrant household. In addition, the enumerators also talked with knowledgeable persons of their respective wards to get the listing. After the listing was complete in a particular ward, the enumerators proceeded with the survey. During the survey, enumerators built rapport with the respondent, and then only started the survey. There were times when the respondent could not answer some of the questions related to agriculture and livestock, in such situation, another member of the family supported the respondent to answer the questions. When any technical problem in the tablet questionnaires would arise, then the enumerator would come out and then consult with the monitor or supervisor to tackle the problem.

## 6.3 Interview Time and Venue

Since it was the harvesting season most of the people were involved in their agricultural work, therefore, the interview was scheduled according to the convenience of the respondents. The time schedule for the interview varied in each district. It would start early in the morning or in the afternoon depending upon the district and flexibility of the respondent. The enumerators took two hours on an average to complete one interview. However, as the enumerators got familiar with the questionnaire, the interview time decreased by 15 minutes on an average.

## 6.4 Quality Assurance

Appropriate measures were taken to ensure the quality of the study in each steps of the survey process. Before the actual fieldwork was underway, Nepa School team with conjunction with FAO team went through revisions on the format and the contents of the questionnaire in order to eliminate ambiguities, language complexity, and confusing skip patterns. In addition, matured and experienced field staff who meet minimum education qualification, who have local language proficiency, and the contextual understanding of the study, were selected for the project.

Field work training was an important part of the quality control process. The training focused on an in-depth discussion of the questionnaire in order to familiarize the enumerators with the questions, options, skip patterns, and other details. In addition, the enumerators conducted mock interviews in order to train them on how to conduct interviews. Furthermore, detailed field plan were placed with 22 enumerators, five supervisors, and two monitors. Field plan was devised so as to meet any foreseen and unforeseen challenges as well as to ensure smooth operation of day to day field activities.

After finishing the survey each day during the evening, supervisor would recheck the entire interview and if there were any missing data, they would then consult with the respective enumerator and edit the response. This helped in controlling the data quality. After rechecking all the data, supervisor kept record of the interview in their logbook and sent the interview responses to the server.

As a part to data quality assurance, Nepa School team visited two out of five field sites from 9 August till 15 August 2017. First two days were important considering the use of ODK software and problems faced using tablets for data collection. In addition, it was also important to discover the difference in the response received during the training and during the actual fieldwork.

### 6.5 Other quality control methods

- **Interview observations:** Interview observations were done by supervisor or monitor to observe how the enumerator is conducting the interview.
- **Spot-checks:** Spot-checks were done to ensure that correct respondents were selected for interview, and the selection process are also correct.
- **Back-end check:** Back end check was continuously being performed by Nepa School team to find the missing data and errors.

### 6.6 Callback procedure

Interview was face-to-face in the selected location. In most of the cases two members of the selected household were interviewed for household and A-WEAI survey. While in few cases, one member administered both the household and A-WEAI questions. After selection of the respondent, if the respondent is not able to present during the interview, two call-backs were made in order to find the respondent at home. If the respondent was still not present at home on the interviewer's third visit (second call-back) due to various reasons, a substitute sample was used for the interview.

## 7. Post-field debriefing session

The field staff debriefing session for the study was held on 23 August, 2017 at Nepa School premises. Below is a brief description according to the theme of the issues that came up during the field work:

### *Listing*

- Listing is generally done considering the lowest unit, which is the ward; however, ward size may vary from place to place.
- In the rural hills, the population in a ward may be small but the households are very spread out.
- In Tarai, the population is quite dense so listing the names of all the household in a short period of time is challenging. In addition, when the population of the ward is quite dense, secondary source of information is not accurate for the listing. In one of the wards in Makwanpur district, the ward chairperson was able to identify households with external migration but could not identify households with internal migration.

- Listing should be done by visiting each and every respondent's households rather than from the secondary data.
- It was difficult to do a thorough house-to house listing in most of the districts due to limited time frame. Since it was the peak monsoon season, which is characterized by heavy and continuous rains, the weather also created problems during the fieldwork.
- There were some confusion in listing in the Nepal-India border areas. Many of the people in border areas are Indians and not Nepali. (Nepal and India have an open border with people from India moving to Nepal with ease and vice versa). For example, in Trivenisusta of Nawalparasi district, people identified themselves as Indians.

### ***Sampling***

- It was difficult to locate non-migration households in Achham, Nawalparasi and some of the VDCs of Jhapa district. Conversely, it was difficult to locate migration household in some of the VDCs of Makwanpur district.
- In Kakada VDC of Makwanpur district, the sampled ward was ward number 3. However, due to very small population in the ward which would have meant inadequate number of households to be sampled, ward number two and three were merged to get an adequate sample size. Likewise, in Makwanpur, Sarikhet VDC the initial sampled ward i.e., ward number 7 had to be replaced by ward number 6 due to flood and inundation in ward number 7.

### ***Questionnaire***

- Respondents were hesitant to answer questions pertaining to the number of kitchen utensils owned. It was difficult as well as time consuming to count all the utensils specially spoons and plates.
- It was difficult for the male respondent to answer the A-WEAI questions as they could not answer some of the questions.
- There were too many protocols on the Household level questionnaire.

### ***Weather condition***

- Excessive rain in the country caused major flooding and landslide in some of the sampled district. In Korobari VDC of Jhapa district, interview had to be stopped for one day due to flood. However, after the flood receded the enumerators continued with the interview and completed it.
- Due to bad weather condition, i.e., incessant clouds and rains, in some instances GPS could not be recorded in the concerned households where the interviews were taken. This is specially pertinent in some of the VDCs of Achham, Rolpa, and Makwanpur districts.

### ANNEX I: Team composition for the study

S N	Name	Designation	Male/Female	District
1	<b>Devraj Dhakal</b>	<b>Supervisor</b>	Male	<b>Achham</b>
2	Sunita Dawadi	Enumerator	Female	
3	Sharmila Budhathoki	Enumerator	Female	
4	Hom Prasad Basnet	Enumerator	Male	
5	Nirajan Khadka	Enumerator	Male	
6	<b>Bharat Neupane</b>	<b>Supervisor</b>	Male	<b>Rolpa</b>
7	Kusum Acharya	Enumerator	Female	
8	Nirmala Kafle	Enumerator	Female	
9	Ramchandra Rokaya	Enumerator	Male	
10	Chiranjibi Gautam	Enumerator	Male	
11	<b>Mamta Hamal</b>	<b>Supervisor</b>	Female	<b>Jhapa</b>
12	Sital Koirala	Enumerator	Female	
13	Umesh Sapkota	Enumerator	Male	
14	Pashupati Bista	Enumerator	Male	
15	Hemraj Adhikari	Enumerator	Male	
16	<b>Prakash sapkota</b>	<b>Supervisor</b>	Male	<b>Makawanpur</b>
17	Padam Acharya	Enumerator	Male	
18	Bhuwan Sharma	Enumerator	Male	
19	Iksha Pokhrel	Enumerator	Female	
20	Laxmi Upreti	Enumerator	Female	
21	<b>Nishu Aryal</b>	<b>Supervisor</b>	Female	<b>Nawalparasi</b>
22	Samiksha Subedi	Enumerator	Female	
23	Rukmini Pandit	Enumerator	Female	
24	Raj Kumar Das	Enumerator	Male	
25	Saroj Parajuli	Enumerator	Male	
26	Ramesh Dulal	<b>Monitor</b>	Male	<b>Nawalparasi, Makwanpur, Jhapa</b>
27	Ramesh Dhungana	<b>Monitor</b>	Male	<b>Achham, Rolpa</b>



## Annex 2: Photos from the training and field

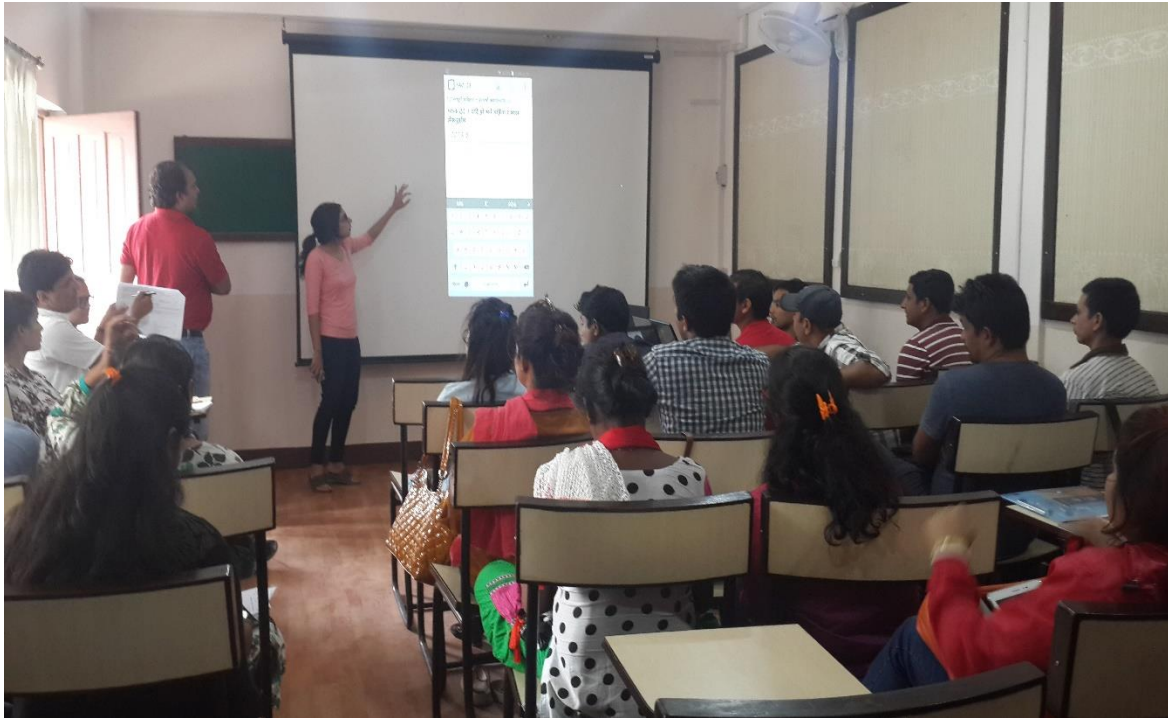


Figure 1: Explaining the android version of the questionnaire during the training



Figure 2: Enumerators going through the android version of the questionnaire



**Figure 3: Team involved in the study survey of Migration and Women's Empowerment in Agriculture**





Figure 3: Interview being conducted in Nawalparasi district



Figure 4: Interview being conducted in Jhapa district





Figure 4: Interview being conducted in Nawalparasi district



Figure 5: Interview being conducted in Nawalparasi district