Building Resilience through Inclusive and Climate Adaptive Disaster Risk Reduction (BRDR) Program

Training on Tathyanka App for Survey on Disaster Risk Assessment at Household Level at Ratnanagar Municipality

Date	February 8 and February 9, 2022			
Location Hotel Royal Safari, Sauraha, Chitwan				
Participants *See annex list of participants (Aggregated by Gender)				
Summary (max 1 page)	Municipal level training on "Training on Tathyanka App for Survey on Disaster Risk Assessment at Household Level" was conducted in Ratnanagar Municipality with the participation of 65 people.			
	A risk assessment framework was finalized in close coordination of NDRRMA,			

A risk assessment framework was finalized in close coordination of NDRRMA, ADPC, YI-Lab and Ratnanagar Municipality, based on which questionnaire was developed. 50 enumerators were provided with a two-day hands-on training on Tathyanka app to collect household level geotagged data. Two field supervisors from YI-Lab have been stationed in the municipality to monitor the household survey in close coordination with the municipality and YI-Lab to ensure that household survey is being conducted smoothly and to maintain the quality of data.

The training on Tathyanka App for Survey on Disaster Risk Assessment at Household Level at Ratnanagar Municipality started with project overview. The session was followed with an interactive session where the participants' knowledge of key indicators and terminologies was tested. This was followed by hands-on training on Tathyanka app and the indicators used in the data collection were elaborated. A mock data collection was organized during which the enumerators were sent to nearby households to collect sample data. The collected data from each enumerator were analyzed and validated and feedback was provided during the practical session. A post test was conducted to understand the overall learnings of the enumerators during the training. At the end, all the enumerators were teamed up in a group of two, three or four, as per the number of households in the wards, and were assigned to conduct household surveys in the respective wards. The enumerators were also guided on the communication and coordination mechanism that should be followed during the survey.

One of the major learnings from the survey was that as each enumerators had to create his/her unique user id, the account creation in Tathyanka app and providing them with the access to the form should have been done prior to the training, along with ward-wise grouping of the enumerators. This would have saved a lot of time for the mock sessions, feedback, and discussions. For this a virtual orientation session prior to the training is recommended. The training duration should be increased to make sure that the collected real data on the second day of the household survey is checked and analyzed and necessary feedback could be provided to each enumerator during the one-to-one session.

Background/ Introduction

Disasters hit the most vulnerable group the hardest. For example, people with disabilities, children and the elderly are not only more vulnerable to disasters /or climate-related disasters, but they also have fewer resources to prevent, cope with and adapt to disasters. Several studies analyzing the impacts of disasters have revealed that women and children have greater risks to their survival and recovery in the aftermath of natural disasters. Gender and right-based perspectives need to be included in the risk assessment process, in other word, a risk assessment needs to be gender & right-sensitive so it will result in more efficient and cost-effective disaster risk reduction interventions. For risk assessment, a household survey is on-going to identify the household level risk. The risk assessment will be carried out by combining the hazard, exposure, and vulnerability (sensitivity, adaptive capacity) index. The questionnaire has been prepared in Tathyanka app consists of all the questions that were considered in hazard, exposure, sensitivity, and adaptive capacity indicators.

Objectives

The main objective of the program is to support the municipal government process of decision making in Disaster Risk Reduction and Management through risk informed approach.

Likewise, the main objective of the training was to enhance the enumerator's understanding on DRRM, importance of their role in data collection and provide hands-on on Tathyanka App for data collection for disaster risk assessment at household level at Ratnanagar Municipality.

*See annex for the detailed agenda

Expected Output

The expected output of the training is:

Enhancing the understanding and knowledge of enumerators in Page 2
 DRRM and importance of household level data for risk assessment

- Enumerators are trained on the indicators used in the disaster risk assessment and the methodology followed for the data collection
- Collection of household level data of Ratnanagar municipality

Process and Methodology

The risk assessment framework was finalized in close coordination of NDRRMA, ADPC, YI-Lab and Ratnanagar Municipality and questionnaire was developed based on the framework. The testing of app, form and its functionality were conducted. A data collection guide containing details on the do's and don't before, after and during the survey and the details of the indicators used in the questionnaire was prepared. Before conducting the training, in close coordination with Ratnanagar municipality, 15 municipal enumerators were identified. Likewise, for the remaining 35 enumerators, Oxford College of Engineering and Management from Chitwan were contacted by Youth Innovation Lab and the list of enumerators were finalized.

The training was conducted on 8th and 9th of February ,2022 where 7 members from Youth Innovation Lab were actively involved in conducting the training and handling other logistic and administrative works. In two days, training, presentation on overview of the project, DRRM terminologies, importance of data collection, role of enumerators and ultimate use of collected data was conducted. Hands-on training on tathyanka app was carried out and enumerators learnt about each question in the form, type of data to be entered and the overall household survey plan. The 50 enumerators will be deployed in the various wards of the municipality for a tentative duration of 20-25 days, during which each enumerator will be collecting around data of 20 households each day. The data collection guide, ward/tole wise map, name of tole, and COVID safety package was provided to the enumerators at the end of the training.

Two field supervisors from YI-Lab have been stationed in the municipality to monitor the household survey that is being conducted by the enumerators in Ratnanagar municipality. The Kathmandu based team of YI-Lab are also in close coordination with field supervisor to ensure that household survey is being conducted smoothly. The field supervisors will be working on data checking and cleaning parallelly.

Training Sessions

Day 1

SESSION TITLE: TRAINING AND PROJECT OVERVIEW

In the session on "Training and Project Overview", led by Angela Tamrakar, DRR Program Officer at Youth Innovation Lab welcomed all the participants present in the training and gave a brief overview of the project and training. She continued the session with remarks from representatives of ADPC- Maan Thapa, Country Representative and Premuka Rai, Program Coordinator. Maan Thapa gave overview of the project, its vision, importance of the collected data and the things that enumerators should follow during the training and household survey. After his remarks, Premuka Rai talked about the main objective of the training, survey and data quality, and also shared her experience on her previous survey works. The session was handed over to Pradip Khatiwada, where he discussed the bigger part of the project, developing VisRisk for Ratnanagar municipality by using the data that the enumerators were about to collect at household level. He then talked about the importance of data collection and how it can help local government to understand where disaster might happen and helps them to rethink how future losses can be reduced. He further sensitized the enumerators on a few DRR terminologies like;

- Hazard
- Disaster
- Exposure
- Vulnerability
- Capacity
- Risk and
- Risk Assessment

The session was further continued by Angela Tamrakar where she mentioned about the Do's and Don'ts of the training and clearly highlighted the ground rules of the training. After this, the Introduction session was conducted.

SESSION TITLE: INTRODUCTION OF ENUMERATORS

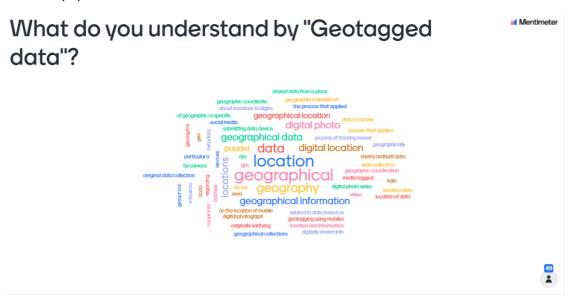
This session was conducted with a fun game and the main objective was to encourage the enumerators from different backgrounds to interact with each other and feel comfortable working together. The participants were asked to find the same shoe size person and make a team. The participants then introduced themselves to everyone. After the introduction session, Angela discussed the things that should be considered while conducting household surveys. She clearly mentioned the following points in this part:

- Collect field data responsibly
- Maintain quality of data
- Record answers as instructed by the trainers and guided by supervisors
- Be respectful to the interviewee while collecting data

- Ask all applicable questions
- Do not make unauthorized variations in the words used in the questions
- Edit the answers to check if all the questions have been recorded properly before submitting
- Maintain consistency in recording the answers for each household
- Ensure all the questionnaires and equipment are accounted for
- Do not falsify and fabricate the responses
- Should respect the culture, tradition and language of the interviewee while conducting household survey
- Keep the collected data confidential

SESSION TITLE: PRE-TEST

In this session, the participants were asked about their knowledge of some of the key indicators and terminologies used in the survey such as understanding of geotagged data, hazard and sensitive population.



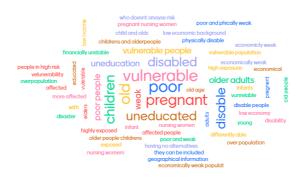




Mentimete

In your opinion, what is Sensitive Population?







SESSION TITLE: DATA COLLECTION METHODOLOGY

This session was led by Alina Khatiwada, DRR Research and Communication Officer at Youth Innovation Lab. She talked about the indicators used for risk assessment, the app that the enumerators will use in household surveys and types of questions included in the prepared form. She explained briefly about all the indicators considered under the main components-Hazard, Exposure, Vulnerability, Sensitivity and Adaptive Capacity. She further talked about the tathyanka app and the type of questions included in the questionnaire form. This session ended with the discussion on the key questions raised by enumerators on the type of question. This was addressed in the hands-on session of the training.

SESSION TITLE: HANDS-ON TRAINING ON TATHYANKA APP

This session was led by Arun Kumar Mandal, Technical Lead at Youth Innovation Lab. He discussed all the features of the app and its functionality. The participants with issues on account creation were solved in this session. The username of all the enumerators were added in the backend of the app and the form of questionnaire was shared to each of the enumerators.

SESSION TITLE: HANDS-ON TRAINING ON DATA COLLECTION

Hands-on training on data collection was led by Alina Khatiwada and in the interactive session, she explained each questions in the form using tathyanka app. She talked about what each question meant, what type of data should be entered and how to approach each house to collect data. The questions were divided into 9 groups.

In Day 1 of the training, the questions of the following groups were covered:

 General Questions: This group included the questions on the ward details, name of the tole where survey is conducted, house number, GPS coordinates, Consent of

Page 6

house owner to provide data and information on COVID vaccination of the family of the house owner.

- Basic Details of House Owner: The information on house owner like name, age, sex, marital status, mother tongue and ethnicity were included in this group of questions. Each option on the questions in the aforementioned topic was discussed.
- Family Member Details: In this part of the form, the questions on the total number of family members, age group disaggregated by gender, availability of identity revealing documents, presence of sensitive population in the house like- pregnant and lactating, widowed, chronically ill, differently abled, single woman, elderly citizen, were mentioned. More details on sensitive population on the basis of their gender, COVID vaccination were included. In terms of the presence of differently abled, the questions on the availability of identity documents, type of disabilities and availability of cards were included in this part. Likewise, questions regarding the education status of each of the family members were included in this part of the form.
- Other Family Members Details: The questions to take details on the other families living in the house were included in this group of questions. If other families were living in the house, the question of the total number of families disaggregated by gender was discussed in this part of the training.
- Economic Condition of House Owner Family: This part of the form consisted questions on the occupation details, land holding, income and expenditure, saving, credit and loan, reservations, allowances and special privilege system, insurance details, occupational and livelihood and communication information.

The first day of the training ended with the discussion on questions from the aforementioned group of forms. The enumerators were given the task of studying the data collection guide provided and preparing for the next day. Paras Shrestha, UIUX Designer at Youth Innovation Lab gave the closing remarks and shared some tips for household survey.

Day 2

SESSION TITLE: REFLECTION OF DAY 1

Welcome remark was given by Angela Tamrakar and reflection of day 1 was conducted jointly by Angela and Alina where the enumerators were requested to write down the learnings from Day 1 and the most important points that should not be missed by the enumerators. The enumerators also explained their learnings of day 1.

Before formally moving to hands-on training on data collection, a mentimeter test was conducted by Alina Khatiwada, to know about the knowledge of the enumerators on the questions covered in day 1 and questions to be covered in day 2. The enumerators were asked their opinion on building code, their understanding of exposure and the format of typing land holding data in the form. Out of 42 responders, 35 answered the correct answer of exposure and out of 36 responders, 24 gave the correct writing format of land holding information. With this, it was concluded that the day 1 training was pretty successful. But as our main objective was to make all the enumerators clear on each question, the revision of the confused questions was conducted via enumerators themselves and the team of trainers. The snapshots of the menti survey is presented below.

In your opinion what is building code?

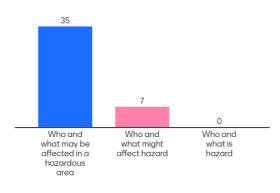
Mentimeter



44

What do you understand by Exposure?

Mentimete



42

How do you type information of land holding?

Mentimeter



36

SESSION TITLE: HANDS ON TRAINING ON DATA COLLECTION

The hands-on training on data collection was continued by Angela Tamrakar. She discussed the remaining questions on this session.

- Access to Various Resources: This part of the form included questions on the accessibility of
 resources like drinking water, financial institutions, education institutions, nearest road,
 medical center, security forces, market, sanitation, early warning system, safe shelter and
 other natural resources, from the house.
- **Details of the House:** This part of the form included questions on structure of house of the house owner, building code, construction materials of wall, roof, foundation of the house, current condition of house and ground surface in which house is built.
- Hazard and Disaster: This part of the form included questions on historical damage and loss
 data due to disaster, knowledge of disaster, training received and social assistance after the
 occurrence of disaster.
- Community Groups: The questions on involvement of the family members in any community group, DRRM community and participation of woman in decision making process in the community/ward/municipality.
- Other Questions: Other questions like citizenship number, phone number and picture of the house was included in this part of the form.

All the questions were discussed in this session and key questions on the aforementioned questions were conducted.

SESSION TITLE: FIELD DATA COLLECTION

The enumerators were sent to collect sample data from nearby households as directed by the field supervisor Pratik Baral. The enumerators were given 2 hours to collect 3 HH/Enumerator.

SESSION TITLE: ANALYSIS OF COLLECTED DATA

After the collection of data, the challenges faced by each enumerator were discussed and confusion regarding questions were cleared. All the enumerators submitted the data which was analyzed by Alina Khatiwada.

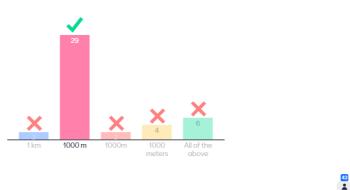
SESSION TITLE: FEEDBACK ON COLLECTED DATA

In the feedback session on collected data, the findings were discussed. Enumerators were found to be confused in the question of age group disaggregated by gender and most of the mistakes were found to be in the spelling of the places and other questions in which they had to type. The enumerators were guided again by the team of trainers.

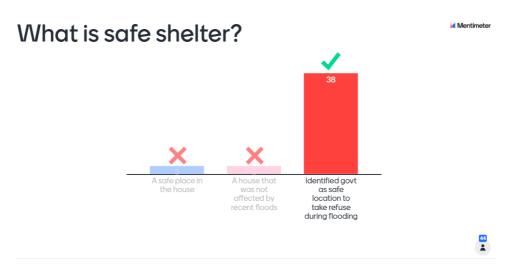
SESSION TITLE: POST TEST

The post test was conducted by Angela Tamrakar using mentimeter based on the questions prepared. The enumerators were asked about their understanding of geotagged data, safe shelter, format to type distance to resources, house designed with building code, sensitive population and hazard. The results of the post test are presented below.

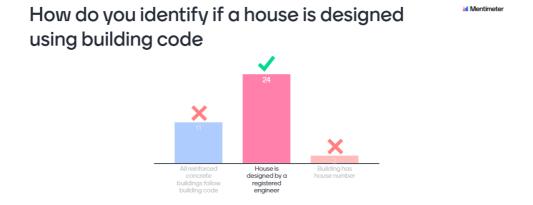
What is the format to type the distance to resources?



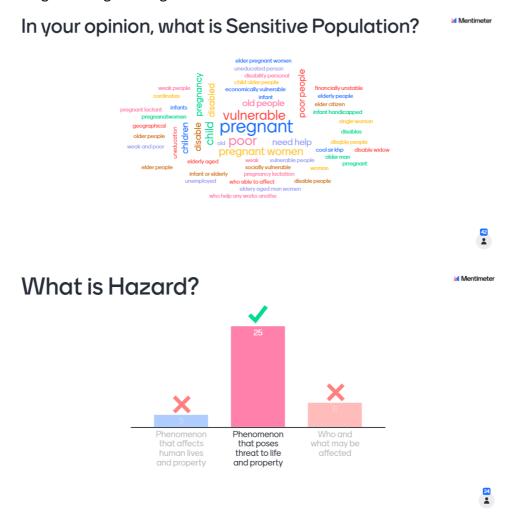
Out of 43 responders, 29 responded to the correct answer on the format to type the distance to resources i.e., 1000 m.



In the question of their understanding of safe shelter, out of 44 responders, 38 gave the correct answer.



Likewise, out of 37 responders, 24 gave the correct answer to the question to identify if a house is designed using building code.



Similarly, out of 34 responders, 25 gave the correct answer in the understanding of hazard i.e., phenomenon that poses threat to life and property.

What do you understand by "Geotagged data"?





SESSION TITLE: REMARKS FROM COLLEGE REPRESENTATIVE

After conducting the post test, the representative of Oxford College, Bhim Bhandari was asked to give his remarks on the project and household survey. He motivated the enumerators to work actively and collect the correct data without fabricating and falsifying. He also highlighted the importance of data quality and how the enumerators were getting an amazing opportunity to work closely with the municipality.

SESSION TITLE: GROUP ASSIGNMENT TO EACH WARD OF THE MUNICIPALITY

In this session, all the enumerators were teamed up and each group of 2,3 and 4 as per the number of households in the ward, were assigned to conduct household surveys in the respective wards. The enumerators were also guided on the communication and coordination mechanism that should be followed during the survey.

NOTE – PLEASE INCLUDE THE OPENING SESSION, CLOSING SESSION, PRE-TEST AND POST TEST DETAILS IN REPORT PART

LESSON LEARNT

On the basis of the two days' training, lessons learnt are:

- The list of enumerators participating in the training, whether from the school/college or the municipality and their preference for any particular ward for survey should have been preconfirmed and their Ward-wise grouping for data collection during the survey could have been done before the training.
- As some of the participants were not familiar with the use of technological tools for data collection, some extra efforts were needed to train them. A pre assessment of their technological competence would be useful in the future.
- The Tathyanka user name, if created initially, could have saved time, and the schedule won't be off track.
- As an enumerator chose not to continue with the training, citing his other priorities, it was
 realized that it is necessary to keep some enumerators in the waiting list, or training of some
 extra number of enumerators during the training could be done to ensure the desired number
 of enumerators during the field survey.

ACTION POINTS

On the basis of the two days' training, the action points are:

- Ward wise group of enumerators should be formed on day 1 based on their ward preferences resulting in smooth interaction and coordination.
- Ward-wise map, tole map, and name of tole should be given to enumerators beforehand.
- Tathyanka app user name could be created by the team beforehand and shared with the enumerators.

RECOMMENDATIONS

- A virtual orientation session should be conducted before the training, to brief them about the objective of the training, the app to be used for data collection and the ways to create user id and logging in into the system.
- An assessment of the technological competence and skills of the enumerators should be carried out to understand the time that would be required to train them.
- The training duration should be increased to make sure that the collected real data on day 2 of the training during the mock data collection is checked and analyzed and necessary feedback could be provided to each of the enumerators in detail.
- The account creation in Tathyanka app and username addition in the form should be done prior to the training either in a virtual session or physical session so that the training on data collection would run smoothly without any technical issues.

CONCLUSION

In light of the prepared report considering the objectives along with lessons learned and action points, the following conclusions were derived.

- The project would assist local governments in making disaster risk reduction and management decisions by using a risk-informed approach.
- The training promoted the enumerator's knowledge of disaster and its impact on vulnerable populations.
- The training helped to understand the data's importance and its use for minimizing the risk of disaster and early preparedness.

ANNEX-1

Participant List

Name	Gender	Organization	Designation	Contact
Aarati Kumari Poudel	Female	Ratnanagar Municipality	Enumerator	9867866372
Asmita Amgai	Female	Ratnanagar Municipality	Enumerator	9861965590
Bikram Dhakal	Male	Ratnanagar Municipality	Enumerator	9845864500
Dhankala Sharma	Female	Ratnanagar Municipality	Enumerator	9860860927
Sobita Lamichhane	Female	Ratnanagar Municipality	Enumerator	9845085759
Jamuna Parajuli	Female	Ratnanagar Municipality	Enumerator	9845617603
Nirmala Pudasaini	Female	Ratnanagar Municipality	Enumerator	9860194831
Nisha Chaudhary	Female	Ratnanagar Municipality	Enumerator	9824238029
Rekha Pokharel	Female	Ratnanagar Municipality	Enumerator	9865381215
Rita Silwal	Female	Ratnanagar Municipality	Enumerator	9849607109
Santoshi Panta	Female	Ratnanagar Municipality	Enumerator	9847709138
Sapana Khanal	Female	Ratnanagar Municipality	Enumerator	9865010885
Sujal Acharya	Male	Ratnanagar Municipality	Enumerator	9827251488
Yam Kala Poudel	Female	Ratnanagar Municipality	Enumerator	9845865371
Yogendra Lamichhane	Male	Ratnanagar Municipality	Enumerator	9845483903
Abina bishwokarma	Female	OCEM	Student	9742541340
Ahaan khanal	Male	OCEM	Student	9840850877
Ashok Kumar Ishar	Male	ОСЕМ	Student	9816707298
Ayush Adhikari	Male	ОСЕМ	Student	9843131033
B P Koirala Male OCEM		OCEM	Student	9804280913
Bhabish Khanal	Male	OCEM	Student	9809136846
Binod Acharya	Male	OCEM	Student	9862444116
Dibya Chepang	Female	OCEM	Student	9821172680
Jagat Bahadur Thapa	Male	OCEM	Student	9862880987
Janak Kandel	Male	OCEM	Student	9847666357
Krishna Pariyar	Male	ОСЕМ	Student	9841506481
Maneep Budhathoki Male		ОСЕМ	Student	9807219484
Dipak Rimal	Male	ОСЕМ	Student	9849456236
Narayan Poudel	Male	OCEM	Student	9812229276
Nimesh Phuyal	Male	ОСЕМ	Student	9865020727

			Student	
Niranjan Bist	Male	OCEM	Stadent	9847393217
			Student	
Pawan Sharma	Male	OCEM		9827470788
			Student	
Prabin Sapkota	Male	OCEM	CL deal	9864575988
Roman Mahato	Male	OCEM	Student	9745389338
Noman Manato	iviaic	OCLIVI	Student	3743383338
Roshana Shrestha	Female	OCEM	Stadent	9840911200
			Student	
Sabina Timilsina	Female	OCEM		9825460750
Samriddhi Sharma			Student	
Maraseni	Female	OCEM		9811881811
Canaita Chuaatha	Famala	OCEM	Student	0005350453
Sangita Shrestha	Female	OCEM	Student	9865259153
Saral Adhikari	Male	OCEM	Student	9866115255
Saurav Chandra	Iviaic	CCLIVI	Student	3000113233
Gautam	Male	OCEM		9826442610
			Student	
Shiv Kumar Yadav	Male	OCEM		9813254202
			Student	
Shrijana Shrestha	Female	OCEM	6	9804251314
Smriti Kandel	Female	OCEM	Student	9861099013
Jillitti Kalluel	Telliale	OCLIVI	Student	9801099013
Sumiksha Shrestha	Female	OCEM	Student	9845787878
			Student	
Sumina Ranabhat	Female	OCEM		9817222181
			Student	
Sushma Aale	Female	OCEM		9827272852
Llaha Dawis :	Fame -1 -	OCENA	Student	0005255070
Usha Banjara	Female	OCEM	Student	9865255970
Usha Sharma	Female	OCEM	Student	9866116617
OSHA SHAHIIA	Terriale	CCLIVI	Student	3000110017
Yuvraj Sapkota	Male	OCEM		9862130453
			Student	
Shubha Laxmi Pariyar	Female	OCEM		9842086641
			Student	
Dipak Giri	Male	OCEM		

					Contact
S.N	Name	Gender	Organization	Designation	Number/Email
					Address
1	Man Thapa	Male	ADPC	Program Manager, ADPC Country Representation in Nepal	9841695918
2	Premuka Rai	Female	ADPC	Program Coordinator, ADPC Country Representation in Nepal	9849418811
3	Pradip Khatiwada	Male	Youth Innovation Lab	Executive Director	9841900488
4	Bhim Bhandari	Male	OCEM	Principal	9851053681
5	Krishna Hari Paudel	Male	OCEM	HOD, Science	
6	Alina Khatiwada	Female	Youth Innovation Lab	DRR Research and communication officer	9849645211
7	Angela Tamrakar	Female	Youth Innovation Lab	DRR program officer	9841735565
8	Arun Kumar Mandal	Male	Youth Innovation Lab	Senior Back-end developer	9804093087
9	Paras Shrestha	Male	Youth Innovation Lab	UI/UX designer	9849743676
10	Pratik Baral	Male	Youth Innovation Lab	Field Supervisor	9845297432
11	Sandip Yadav	Male	Youth Innovation Lab	Project associate	9818082512

12	Tenzing Sherpa	Male	Youth Innovation Lab	

ANNEX-2

Group Photo and photos from the event



Image 1: Mr. Maan Thapa, Country representative (ADPC) sharing the overview of the project, its vision, and guidelines to the enumerators.



Image 2: Ms. Premuka Rai, Program coordinator (ADPC) sharing the training objective along with her previous survey experiences.



Image 3: Mr. Pradip Khatiwada, Executive director (Youth Innovation Lab) sharing about VisRisk and importance of data collection.



Image 4: Ms. Angela Tamrakar, DRR Program Officer (Youth Innovation Lab) sharing the overview of the project and training.



Image 5: Ms. Alina Khatiwada, DRR Research and Communication Officer (Youth Innovation Lab) providing hands-on training on data collection



Image 6: Mr. Arun Kumar Mandal, Senior Backend developer (Youth Innovation Lab) explaining features of the app and its functionality.



Image 7: Mr. Paras Shrestha UI/UX Designer (Youth Innovation Lab) guiding the enumerators on practical issues they could face during the training. .



Image 8: Introductory session with the field enumerators, Hotel Royal Safari ,Sauraha , Chitwan



Image 9: Training of enumerators, Hotel Royal Safari, Sauraha, Chitwan



Image 10: Group photo, Hotel Royal Safari, Sauraha, Chitwan

ANNEX-3

AGENDA

- To provide the fundamental insights into disaster and its terminologies.
- To provide specific knowledge, skills, and techniques to the enumerators for the field data collection.
- To explain the impacts of disaster on vulnerable populations and use of the collected data for reducing the risk of disaster and early preparedness.

ANNEX-4

LINKS OF PRESENTATION

The presentation slides used in the presentation can be accessed through:

Presentation Slides