

PAN LOCALIZATION Phase II

Research Report-Phase 2.1

E-Networking Research & Development

1. Introduction:

Socio-economic status of the society can not improve without the use of Information Communication & Technology (ICT). Many parts of the rural areas of Nepali communities are still not accessing the technology for fulfilling their daily basic needs and requirements. E-Network Research & Development (ENRD) has been working in Nepal since 2004 for expanding the access of internet and computer to the hand of rural communities. ENRD is closely working with rural community for the expansion of the Wi-Fi network and their associated services such as e-mail internet, VoIP phone, tele-education, tele-medicine etc. in many areas of the country. "All the villages serviced by the Wi-Fi network have no access via motorable roads and are only accessible on foot".¹ After connecting the Wi-Fi network rural community can benefit from the use of ICT and related services for their fulfilling basic needs such as communication, education and health. Obviously, the common people of third world are at a farer distance from the ICT and they think ICT as something available just to the elite and the educated group. Therefore ENRD has been focusing to change their feeling and attitude with ICT and empower them by giving ICT knowledge through the training.

Since May, 2007 to September 2009 PAN LOCALIZATION phase II project is being carried out with the aid of a grant from the International Development Research Centre (IDRC), Ottawa, Canada, administered through the Center for Research in Urdu Language Processing (CRLUP), National University of Computing and Emerging Sciences, Lahore, Pakistan (NUCES). Under the PAN LOCALIZATION project, E-Networking Research & Development (ENRD) has been conducting ICT training on selected five sites of the project areas. ENRD as a Country Partner Institute (CPI) is working with the Madan Puraskar Pustakalaya (MPP) as a Country Component (CC). ENRD is conducting training program at Danda Gaun in Rasuwa district, Jhuwani of Chitwan district, Tolka of Kaski district, Nangi and Shika of Myagdi district. Under this PAN project ENRD has organized 3 phases of training including in Kathmandu and project areas. First Layer Training focused on among the Training of Trainer (TOT) who is able to train other local trainer in the project areas. The TOT level training was organized in the Kathmandu where, 5 participants were the operators of selected 5 centers and 3 participants were staffs of ENRD. Second Layer Training focused on the selected leader of each boundary partner defined according to the outcome mapping framework of each center. This training is defined as Local Level Leadership Training (LLLT). Local Level Leadership Training has provided to 5 participants of each boundary partners by the operator. After LLL training third Layer Training Program was organized by the local community with the help of the leader of each boundary partner. All the participants of the each team are associated from local people of each boundary partner. This training is focused on the use of the technology with the basic level of computer operating knowledge. This training is defined as End User Training (EUT). In this way each center will produce 25 end users representing from the each 5 different boundary partners according to the location. The entire project will be evaluated on the

¹ Wireless Nepal for an Inclusive Nepali Society (page no-9)

basis of this training. All the respondents 31 peoples covered from the participant of the first layer up-to third layer trainees from each center.

1.2 Objectives:

Specific objectives of research are given as below:

To finalize the change upon training across the boundary partner

To analyze the build capacity of the participants after the training

To discuss the role of different factors to succeed the program

1.3 Methodology:

Every research should follow some social research method if it will be a scientific research. This research also follows the scientific research method such as questionnaire, interview, observation and interpretation of data and analysis of the data to use of qualitative and quantitative research method. All 155 universes are covered in the research those are the participants of the training, all are the supposed to be a sample of the research.

This research based on different five sites where ENRD conducted training to give ICT knowledge and empowering them through the computing system. Following listed are the located sites of the project areas:

- 1) Danda Gaun, Rasuwa
- 2) Jhuwani, Chitwan
- 3) Tolka, Kaski
- 4) Nangi, Myagdi
- 5) Sikha, Myagdi

Each sites covered 31 respondents and they evaluated by structured questionnaires, interview, observation and skill test. Each site has different type of boundary partners defined according to the outcome mapping frame work. For example- In Tolka of Kaski and Shikha of Myagdi, Hotel professionals selected as a boundary partner instead of Farmer. Similarly, in Nangi of Myagdi, Ex-Army and forest User's groups selected are selected as boundary partner.² In Jhuwani on End-User, training youth boys and youth girls groups selected as boundary partners instead of teacher group.

1.4 Limitations:

This research study is covered only those respondents who participated in 3 phases of training as a trainees. So this study tries to cover all the participants of the whole training as a main respondent of the study. It focused only training participants, their social status, output knowledge and build further capacity through the training and further strategy. It is the comparative study of I, II and III stages of training into their performance as well their entering capacity building from the training.

2. Result Findings and Analysis

2.1 Social Status of the Trainees:

Social status of the trainees has been carried out according to the gender; age group; ethnic and cast group; and the education status. Each status has been separately analyzed as follows.

² PAN LOCALIZATION phase II Baseline Survey Research Report, ENRD (Page no.2)

Table 1, Gender Participation of the Trainees

Table 1.1, Gender Participation of the Trainees (In TOT Level Training)

S.N.	Shikha Center	Male	Female	Total
1	Nangi Center	1	0	1
2	Jhuwani Center	1	0	1
3	Tolka Center	1	0	1
4	Danda Gaun	1	0	1

In TOT level training all the participants were represented from the each telecenter. There was no any participation of female. Almost all participants from the male line and they have responsibility for provide training to there local boundary partners. .

Table 1.2, Gender Participation of the Trainees (In Local Level Leadership Training)

S.N.	Center Name	Male	Female	Total
1	Shikha Center	3	2	5
2	Nangi Center	4	1	5
3	Jhuwani Center	4	1	5
4	Tolka Center	3	2	5
5	Danda Gaun Center	2	3	5

In Local Level Leadership Training (LLLT) each participants participated representing from different boundary partners defined from the outcome mapping framework. So in the Local Level Leadership training (LLLT) total participants were five in each telecenter.

In this training from the Shikha Center 3 participants were male and 2 participants were female. From the Nangi Center 4 participants were male as well 1 participant was female. From the Jhuwani Center 4 participants were male and 1 participant from female. Respectively, Tolka Center male participations were 3 and female participations were 2 as Danda Gaun Center female participants were larger then male participants, where female were 3 male were 2.

Table 1.3, Gender participation of the Trainees (In End-User Training)

S.N	Center Name	Male	Female	Total
1	Shikha Center	9	16	25
2	Nangi Center	8	17	25
3	Jhuwani Center	11	14	25
4	Tolka Center	17	8	25
5	Danda Gaun Center	7	18	25

In End-User Training (EUT) 5 Participants from the one defined boundary partners. So each centers has 5 different boundary partner which made possible to have training up to $5 \times 5 = 25$ participants. Till to the end of the training process total participants were 25 recognized as end-users from each telecenter.

From Shikha Center 16 participants were female and only 9 participants were male. From Nangi Center 17 participants represented from female and 8 participants represented from male. From the Jhuwani Center 14 participants were female and only 11 participants were male. Accordingly 17 participants participated from male and 8 participants were female in Tolka Center and Danda Gaun 18 participants were female only 7 participants represented from male group. In End-User training women representation is more effective than male participation.

Table 2, Respondents divided on the basis of Age group

Table 2.1, In the Training of Trainer (TOT) Level Training

S.N	Center Name	10--20	20-30	30-40	40-50	50-60	60-70	Total
1	Shikha Center	0	0	1	0	0	0	1
2	Nangi Center	0	0	1	0	0	0	1
3	Tolka Center	0	0	1	0	0	0	1
4	Jhuwani Center	0	1	0	0	0	0	1
5	Danda Gaun Center	0	1	0	0	0	0	1

In the TOT level training, from Jhuwani Center and Danda Gaun Center 2 participants from 20 to 30 age groups. From Shikha, Nangi and Tolka 3 participants from 30 to 40 age groups.

Table 2.2, In the Local Level Leadership Training

S.N	Center Name	10--20	20-30	30-40	40-50	50-60	60-70	Total
1	Shikha Center	1	1	2	0	1	0	5
2	Nangi Center	0	3	1	1	0	0	5
3	Tolka Center	2	1	2	0	0	0	5
4	Jhuwani Center	2	2	1	0	0	0	5
5	Danda Gaun Center	1	3	1	0	0	0	5

In the Local Level Leadership Training, from Shikha Center 1 participant from 10 to 20 of age group and 1 participant represented from 20 to 30 of age group. Accordingly, 2 participants from 30 to 40 of age group, 1 participant represented from 40 to 50 of age group as well 1 participant covered 50 to 60 of age group and no any participant represent from 60 to 70 of age group.

On Nangi Center 3 participants from 20 to 30 of age group. 1 participant represented from 30 to 40 of age group and 1 participant covered from 40 to 50 of age group and no any participants represent from age 40 to 50, 50 to 60 and 60 to 70 of age group. On Tolka Center, 2 participants represented from 10 to 20 of age group. 1 participant represented from 20 to 30 of age group. 2 participants represented from 30 to 40 of age group. Respectively no one any participants represented from 40 to 50, 50 to 60 and 60 to 70 of age group.

On Jhuwani Center, 2 participants represented from 10 to 20 of age group. 2 participants engaged from 20 to 30 of age group. 1 person participated from 30 to 40 of age group and no any persons covered from the age of 40 to 50, 50 to 60 as well 60 to 70 of age group. On Danda Gaun Center, 1 participant was 10 to 20 of age group. Participants were 3 from age group of 20 to 30 and 1 participant from 30 to 40 of age group presented on the training. No covered age group of 40 to 50, 50 to 60 and 60 to 70 on this center.

Table 2.3, In the End-User Training

S.N	Center Name	10--20	20-30	30-40	40-50	50-60	60-70	Total
1	Shikha Center	7	12	4	0	1	1	25
2	Nangi Center	1	9	10	4	1	0	25
3	Tolka Center	20	5	0	0	0	0	25
4	Jhuwani Center	23	1	1	0	0	0	25
5	Danda Gaun Center	6	13	4	2	0	0	25

In the End-User Training from Shikha Center 7 persons were include from 10 to 20 of age group. Group 20 to 30 of age group covered 13 persons. On this Center 4 persons were from 30 to 40 of age group. Participant participated from age of 50 to 60 was 1 and no any represented from age 40 to 50 and 60 to 70 on the center.

From Nangi Center 1 person participated 10 to 20 of age group. In the training this center covered 13 persons from 20 to 30 of age group and 4 participants participated from age group of 30 to 40. From age group 40 to 50 have no covered and 1 participant from age group of 50 to 60 and no participants participated from age group of 60 to 70. On Nangi Center, 1 person only participated from 10 to 20 of age group. Participants were including 9 persons from 20 to 30 of age group. Participants have represented from group of 30 to 40 were 10 persons. From age group 40 to 50 have covered 4 participants and only 1 person from age group of 50 to 60. No has covered from age group of 60 to 70 on the center.

On the Tolka Center, number of 20 participants participated from the age group of 10 to 20. AN age 20 to 30 have covered only 5 persons and not covered of age 30 to 40, 40 to 50, 50 to 60 and 60 to 70 on this center. On Jhuwani Center, 23 persons included of age group 10 to 20. Only 1 person participated from age group of 20 to 30 and from 30 to 40 of age group also covered one person on the center. No any participation from age group of 40 to 50, 50 to 60 and 60 to 70 has covered as a participant of the training.

Likewise, on Danda Gaun Center, only 6 persons from the age of 10 to 20 and 13 numbers have covered age group of 20 to 30. 4 participants have covered from age group of 30 to 40 as well only 2 persons have covered age group of 40 to 50. Participants from the age group of 50 to 60 and 60 to 70 not covered in this center.

Table 3, Respondents divide on the basis of Ethnic and Caste Group

Table 3.1 Ethnic and Caste status of the respondent on the TOT Level Training

S. N	Center Name	Ethnic	Dalit	Brhamin/chhetri	Total
1	Shikha Center	1	0	0	1
2	Nangi Center	1	0	0	1
3	Tolka Center	0	0	1	1
4	Jhuwani Center	1	0	0	1
5	Danda Gaun Center	0	0	1	1

Note: (Ethnic group understood certain group of ethnic such as Gurung, Magar, tharu, Tamang and Newar are include on this research study. Even though Dalit as a caste group of Nepal in this group only Nepali has included on the study. On Brhamin and Chhetri have covered Adhikari, Sapkota, Poudel and Thakur are included in the study).

In the TOT level training on Shikha Center only 1 participant from ethnic group. Nangi Center 1 person participant from ethnic group and Tolka Center 1 person participated from group of Brhamin and Chhetri. In the Jhuwani Center 1 person from ethnic group and Danda Gaun Center 1 person represent from Brhamin/ Chhetri group. Among 5 participants 3 participants represented from ethnic communities.

Table 3.2, Ethnic and Caste status of the respondent on the Local Level Leadership Training

S. N	Center Name	Ethnic	Dalit	Brhamin/chhetri	Total
1	Shikha Center	5	0	0	5
2	Nangi Center	5	0	0	5
3	Tolka Center	2	0	3	5
4	Jhuwani Center	2	0	3	5
5	Danda Gaun Center	3	0	2	5

On the Local Level Leadership Training on Shikha Center 5 persons were participated from Ethnic group as well Nangi Center 5 persons were participated from Ethnic group on the training. In the Tolka Center 2 participants from Ethnic and 3 participants from Brhamin Chhetri group. On Jhuwani Center 2 persons participated from Ethnic group and 3 persons from Brhamin and Chhetri group and Danda Gaun Center 3 participants from Ethnic group and 2 persons from Brhamin/Chhetri group were participate in the training on this center.

Table 3.3, Ethnic and Caste status of the respondent on the End-User Training

S. N	Center Name	Ethnic	Dalit	Brhamin/chhetri	Total
1	Shikha Center	20	3	2	25
2	Nangi Center	23	0	2	25
3	Tolka Center	17	1	7	25
4	Jhuwani Center	9	0	16	25
5	Danda Gaun Center	11	0	14	25

In the End-User Training on Shikha Center 20 participants involved from different ethnic group and 3 participants involved from Dalit group among 25 participants. On Nangi Center among the 25 participants 23 persons from Ethnic group only 2 participants from Brhamin and Chhetri group. On Tolka Center 17 participants involved from Ethnic group, 1 participant from Dalit and 7 participants from Brhamin and Chhetri among 25 participants. On Jhuwani Center and Danda Gaun Center 9 participants from Ethnic group and 16 participants from Brhamin and Chhetri involving of 11 persons of ethnic group and 14 persons from Brhamin/Chhetri group respectively.

Table 4, Formal Education status of respondent

Table 4.1 Formal Education Status of respondent on TOT level training

S.N.	Center Name	Lower					Total
		Only Read & write	Primary Education	Secondary Education	Secondary Education	Higher Education	
1	Shikha Center	0	0	0	0	1	1
2	Tolka Center	0	0	0	0	1	1
3	Nangi Center	0	0	0	0	1	1
4	Jhuwani Center	0	0	0	0	1	1
5	Danda Gaun Center	0	0	0	0	1	1

In the TOT, level training one person participated from each telecenter. On Shikha Center 1 participant cover secondary education likewise on Tolka Center also 1 participant got secondary level education. On Nangi, Jhuwani and Danda Gaun Center participants got secondary level education respectively. Therefore, across five participants of TOT level training they all have a achieved secondary level education so they all are familiar with Nepali as well English languages.

Table 4.2 Formal Education Status of respondent on Local Level Training

S.N.	Center Name	Only Read & write	Primary Education	Lower Secondary Education	Secondary Education	Higher Education	Total
1	Shikha Center	0	1	1	2	1	5
2	Tolka Center	0	0	1	2	2	5
3	Nangi Center	0	1	0	2	2	5
4	Jhuwani Center	0	0	0	0	5	5
5	Danda Gaun Center	0	0	1	3	1	5

In the Local Level Training 5 persons participated from different boundary partners on training.

In this training on Shikha Center 1 person studied primary education, 1 person from lower secondary level, 2 persons from secondary level and only 1 person has covered higher education among 5 participants.

On Tolka Center 1 person got lower secondary level, 2 persons have studied secondary education and 2 persons achieved higher level education among 5 participants of training.

On Nangi Center 1 participant got only primary education, only 2 persons got secondary level education and 2 persons have got higher education among 5 participants.

On Jhuwani Center among 5 participants, all have got higher level education.

On Danda Gaun Center 1 participant studied lower secondary education, 1 participant has got secondary education and 3 participants enrolled higher education among 5 participants.

Table 4.3 Formal Education Status of respondent in End-User Training

S.N.	Center Name	Only Read & write	Primary Education	Lower Secondary Education	Secondary Education	Higher Education	Total
1	Shikha Center	5	5	5	5	5	25
2	Tolka Center	2	0	7	11	5	25
3	Nangi Center	9	5	1	5	5	25
4	Jhuwani Center	0	0	0	1	24	25
5	Danda Gaun Center	0	2	1	9	13	25

In End-User training 25 participants in each center were involved from same boundary partners. Among 25 participants on Shikha Center 5 persons only read and write, 5 persons enrolled primary education, 5 participants enrolled lower secondary education, 5 persons enrolled secondary level education and 5 persons got higher education.

On Tolka Center among 25 participants from 2 participants can read and write. 7 participants enrolled lower secondary level education, 11 participants hold secondary level education and 5 persons enrolled higher level education across 25 participants.

On Nangi Center 9 persons can easily read and write. 5 persons have got primary education, 1 person got lower secondary level education, 5 persons have secondary level education and 5 persons got higher level education across 25 participants.

On Jhuwani Center 1 person got secondary level, education and 24 persons enrolled on higher education among 25 participants.

On Danda Gaun 2 participants can only read and write, only 1 person got primary education, 9 persons got secondary level education and 13 persons hold higher level education among 25 participants of the training.

Table 5, Comparision of Knowledge among the Participant according to pre and post Status

Table 5.1 Pre and Post status of Knowledge based on training among the TOT level Participants

Pre-Status of knowledge	Post-Status of Knowledge
1. Basic computer operating knowledge <ul style="list-style-type: none"> • Computer open and manually shut down • Use CD and play song and movie through CD player 2. Window base Microsoft Office application open and close 3. Window base Internet Browser and Messenger <ul style="list-style-type: none"> • Internet Explorer, Yahoo Messenger and MSN. 	1 In-depth computer hardware assembling knowledge 2. Microsoft Windows and Nepalinux operating system installation knowledge <ul style="list-style-type: none"> • Nepalinux live CD • NepaLinux in PC 3. open office and Microsoft office application installation <ul style="list-style-type: none"> • Open office org • Open office calc • Open office empres 4. Open software Base Internet Browser and Messenger <ul style="list-style-type: none"> • Mozilla Firefox and Gimp Messenger etc 5. Troubleshooting and error management <ul style="list-style-type: none"> • Hardware • Operating System • Application

On TOT level training 1 person from each center as a participant. Including 5 participants have participated in the training and they all are operator of the centers. Participants of ToT had no knowledge about Open Office Software and NepaLinux before training now they aware about the knowledge and they successfully transferred their achieved knowledge to Local Level Leadership trainees.

Table 5.2 Pre and Post status of Knowledge based on training among the Local Level Leadership Training Participant

Pre-Status knowledge of Local Level Leadership Training Participant	Post-Status Knowledge of Local Level Leadership Training Participant
<p>1. Participants had seen and heard lot of about the computers but never got chance to touch and use the computer.</p>	<p>1 Basic computer Knowledge</p> <ul style="list-style-type: none"> • Knowledge in Open source software <p>2. Can use open office suite</p> <ul style="list-style-type: none"> • Open office org. • Open office calc. • Open office Impress <p>3. Open software Base Internet Browser and Messenger</p> <ul style="list-style-type: none"> • Mozilla Firefox and Gimp Messenger etc

Local Level Leadership Training provided by TOT level trainers to different boundary groups. In the training 5 persons participated as trainees from each center. Among the trainees they had almost no knowledge of computing system. In the training they got Open Source Software system in the depth so now they are empowered about it and they provided training to same boundary groups. They can operate the software system and develop the content according to their needs.

5.3 Pre and Post status of Knowledge based on training among the End-User Training Participant

Pre-Status knowledge of End-User Training Participant	Post-Status Knowledge of End-User Training Participant
<p>1 They have not seen computers but heard about computers.</p> <ul style="list-style-type: none"> • They had keen Interest to learn about the computer but they had no any knowledge about computing system. 	<ol style="list-style-type: none"> 1 Basic computer Knowledge <ul style="list-style-type: none"> • They can use the computer • Knowledge in Open source software 2. They can use open office suite <ul style="list-style-type: none"> • Open office org. • Open office calc. 3. Knowledge about Internet Browser and Messenger <ul style="list-style-type: none"> • Mozilla Firefox and Gimp Messenger etc 4. They can use computer for general propose 5. They can express the idea about the computer

End-User Training participants were same boundary partners and including 25 on each center. They had no knowledge about ICT and they didn't have idea to conduct the computer before training. They were curios to gain ICT knowledge and would like to use that knowledge on daily activities. Therefore in the training provided basic knowledge of Open Source Software. After training all participants aware about computing system and they use the computer to write letters, documents, send mail and their general purpose. They are involving to diffuse ICT knowledge and its positive impacts sharing with local people.

3. Effective circumstances of the training behalf of Participants

In the training we evaluated based on Ethnic participation have a more effective. In the TOT, level training three participants participated from the ethnic communities. It is essential and credential circumstance of social perspectives. By the training, they introduced trainer and they got more knowledge about Open Source Application as well they qualified to provide knowledge to other people. They are capable to sustain their ICT infrastructure without any availability of out source. Even now, Ethnic communities not get opportunity from the society and state so under the PAN phase II we concerned with them.

In the Local Level Leadership, training total participants are 25. Among the 25 participants, 17 participants participated from Ethnic communities. They gained knowledge through the training and explored their knowledge to same boundary groups. They learned about Open Source Application and ICT knowledge and diffusing the knowledge to their communities. They can use achieved ICT knowledge and applying knowledge to their accessibility. Wherever they use the knowledge they will improve their life be a secure and they created job to other people.

In the End-User training each center, covered 25 participants from the 5 different boundary partners have aggregated 125 participants as well. Among 125 participants, 77 numbers of participants were from regarding ethnic groups. In the End-User training 4 participants represented from Dalit group. End-User training they gained basic ICT knowledge and skill to learn the computing system. They able to knew about Open Source Application and localized computing system can be used on their daily activities. They empowered by the computing system and explored achieved knowledge to local people and Dalit communities.

These are essential and important output of training where involved the Ethnic and Dalit communities who are excluded for a long period in the society. By the training, they organized and built knowledge about ICT as well localized computing technology.

As a gender, perspective we can evaluated training could be useful but there was bit gap in the TOT Level training.

In TOT Level training, no one representation from female group but Local Level Leadership training and End-User training women participations be satisfied. In Local Level Leadership training, number of women participants including nine among 25 participants.

In End-User, training total participants were 125 and each center covered 25 from different boundary groups. Numbers of women participants were including 73 among 125 participants. As a number of participated women in the training were effective as well, they played vital role to learn computing system. They succeed to deploying the knowledge among other women who have been not getting opportunity to learn ICT and computing system. Through the computing system, they can organize local rural women in the development sector. They can mobilized women and raise women issues by the use of computing system. They can connect their family members who have been living long time before from the village on the abroad to easy way through the help of Internet.

In different phase of training all ages of persons were include in the training. In TOT level training almost all participants covered age of 20 to 40 of age in-group. All peoples participated from youth and middle age of group. Therefore, they supposed as a active and energetic age of groups. Therefore, they can further conduct the training, do share their knowledge to other same age of group, and mobilized them by the use of computing technology.

In Local Level Leadership, training mostly participants participated from 20 to 30 of age group. From 30 to 40 age of group also participated of large number in training. This result shows that the number of participants coming from the active age of group in the training. They can their have knowledge to deploy to other active group of people and they succeed to develop ICT infrastructure as their wishes. They will be empowering the other related groups who have a lack of knowledge about localized computing system. They can organize unemployed people to provide ICT knowledge through the training.

In the Local Level Leadership training also was include one person from age group of 40 to 50. He represent old age group, it is pleasure for us because such old people also mobilize in the training. He did not have knowledge about ICT so this opportunity was a credential facility to his life. He deployed the knowledge to other his relate group and organize them to use ICT and through the computer. He explores ICT knowledge regarding to those who are very remote from ICT facilities. In the End-User training, all participants were 155 and 25 participants from each center. In this End-User, training 57 persons represent age group of 10 to 20 as well age group of 20 to 30 covered 40 peoples in the training. From age group 30 to 40 covered 19 persons in the training. This presented data showed that mostly participants represented from active age of group. They deployed the ICT knowledge to other people and empowered the people through the uses of local knowledge by localized computing system. From age group of 40 to 50 represented six persons and from 50 to 60 age of group covered only two persons. Comparatively both age of groups lower participation than other age of groups, but it is important that these groups representation in training were appreciative factors. Because after training they could be motivated, other their contemporary groups who will be interest to reach near about ICT and localized computing system. They can organize old people through ICT and empower them by acquired knowledge. They succeeded to handle the leadership to deploy the knowledge whose perspective not clear about ICT and computing system.

In the different three phases, training participants acquired different level of formal education. Our training mostly concerned with Nepali localized technology, not necessary all participants should achieved formal education from the educational institutions. It is concerned that if they acquired certain formal education they feel easy to learn training materials. In this perspective, our participants in the TOT level training all participants acquired higher formal education. They are familiar to read and write in Nepali as well English. They can easily pick up training materials and they prepared training materials for Local Level Leadership training in Nepali version. They provided Local Level Leadership training in the own project site by independent way.

In the Local Level Leadership, training 11 persons achieved higher education level as well 9 persons covered secondary level. In the training three persons, required lower secondary and three participants meet primary level education. Among 25 participants, 11 participants meet higher education and nine persons meet secondary level. Their qualification show that more number of participants has certain formal education which can be support to learned computing system by the training. They can understand technical language and they shared confusing term to their friends, who were participating to them in the training. They provided training to same boundary partners on their sites. They set schedule for the training and modified manual according to their choice, that prepared by operator.

In the End-User, training 52 persons acquired higher education among 125 participants. Even though 31 participants meet, secondary level and 14 participants have lower secondary level. After than 12 persons have acquired primary level and 16 participants only read and write. Understanding factor is that, from women, farmer, hotel professionals and Dalit boundary groups only read and write but other boundary groups acquired higher than these groups. We found that almost participants in the End-User training are covered literate people. Almost participants were literate so trainer feels easy to teach them about ICT in localized computing technology. It is not necessary to all the participants should be literate, but their literacy they can felt easy to pick the knowledge. After they deploy the knowledge to their contemporary people, who will interest to know the ICT and localized computing system. Their literacy will support to understand ICT terminology too easily.

3.1 Role of the local management body in the PAN Phase II training

Without the support of the local community and local level participation no any program can be sustainable and smoothly run. In PAN Phase II project the local level management committee has played vital role. Since the starting of project, all the local level management committee has cooperated with the project management team of ENRD. Basically creating the better environment for the training, providing the space for the training and encouraging local community to participate in the training are the major role played by local management committee. The formation methodology of the management committee is built from the different approach in different centers. For example in the case of Jhuwani center of Chitwan management team of community library has supported to organize the training and cooperated with the ENRD training management team. In the case of Tolka, Kaski Mothers groups and government school managed all the training and they mobilize the community to successfully conduct the training. Mothers group managed the training space, computers and electricity facilities and school has provided the dedicated teachers for the ToT level. In the case of the Danda Gau of Rasuwa Government school has appointed one school teacher in ToT level and community management body has provided support on mobilizing community. Similarly in the case of Nangi of Myagdy School management committee, School teachers and community group has supported to conduct the training. In the case of Shika all the training has been organized and managed by school management body.

The participation of the local government body in the training has involved effectively. Although local government body could not send any participant in the training as a trainer, but local government body specially the village ward committee of the Village development committee (VDC) has strongly advocate the program throughout the community group and admitted the project positively. So each member in the community has aware that there is running computer training in their village with the active support of local community people. Although with the existing political situation of the Nepal local government body is not elected since almost 10 years so it is just informally managing from the old management committee. Most of the government related work and development process of the village has been pending since long time. In such situation all the centers has effectively coordinated and received support from the ward committee and village development committee (VDC).

6. Challenges for the project

In the perspective of gender women participation were effective in End-User training than other training. We should keep on mind, if not, be involved women on TOT level training they ever think they not required to conduct ICT training independently.

In the Nepalese context cultural barrier also a genuine problem to mobilize women in ICT, sector. Before marriage, women can participate in the training, but after marriage, they have to go husband paternal home. It is not assured that husband paternal home will provide her the environment of participating and using ICT tools.

She will be engage in her paternal home and fulfill her responsibilities according to their family members' recommendation. Entire their family women role is subordinate than other family members. Women might be afraid to share her knowledge and capacity within the family. On enthusiastic environment, they cannot leave paternal home easily. This similar case happen in the Tolka centers of the Kaski.

In the local village, there are certain social statuses based on gender, age, sex and kinship relationships. In these contexts, women social status only based on gender, because they are, evaluated from the perspective of gender in their locality. They fulfill family responsibilities in the home. They provided care and rare to children as well family members. They are limited to work in the house chores and they cannot get opportunity to go outside the home without permission of male family members as well elders' family members. Except of their recognition women cannot decide their choices and cannot participate different activities in the communities.

Nepali society divides people based on Caste system. It determined their status under the norms of Caste system. Because of Caste, Brahmin group is pure and acquired high status in the society than other Caste groups. Although, Dalit group represents untouchable and lower Caste group in the Nepalese society. They have a certain work, to provide care of higher Caste and they not recognized to participate in public ceremony, to keep social relationships to other Caste groups. Even now, other higher castes group heisted to learn knowledge with Dalit persons. Higher caste people not encouraged to lower caste people to participate in the communities program. They might be hesitated to accepted lower caste people as a trainer in their local areas.

7. Further Strategies

Boundary Group- Farmer

- Boundary group Farmer sharing their knowledge about ICT among their related friends and with relatives.
- To extend the program in other areas of their community to coordinate with local leader.
- They empowered farmers to share their basic acquired knowledge and diffuse benefit of localized technology..
- They can able to send mail and reply the message from their family members, who are going to work or study on abroad.
- They can implement their ICT knowledge and skills to their daily activities.
- They organize further training to other farmer groups to help of Local Level Leadership.
- They advocate about the ICT to the other communities and can disseminate content among the community.

Boundary Group- Women

- Women can exchange their knowledge to other women of localized computing technology.
- They make environment for further training, to other women groups coordinating and supporting with, Local Level Leadership.

- Women share their ICT knowledge to empower other women on different activities.
- Women can communicate to their husband and other family members who are going outside of country by using Internet and email.
- They can diffuse their knowledge relating with women issues using localized technology.
- Women can organize training as well awareness program to other women to coordinate with local people.
- They can advocate other women to participate further training of localized computing technology.
- They can support to disseminate the digital content among the community members.

Boundary Group- Youths

- Youths can actively participated in community activities and deploy the knowledge with other youth.
- Youths can publish their digital content in the form of activity report and disseminate through their local website.
- Youths can organize discussion and advocacy program to relate with ICT benefit for rural people to coordinate with community.
- Youths can use their ICT knowledge to find job and other facilities.
- Youths can mobilize other unemployed youths to exchange ICT knowledge and its positive impact in their coming life.
- Youths can provide training to other youth help of Local Level Leadership.
- Youths can mobilize community to sustained localized community instead of out support.

Boundary Group- Student

- Student can implement their ICT knowledge and skills to their learning process.
- Students can disseminate their skill to other student groups.
- Students can organize workshop, experience sharing and interaction and advocacy program among student groups about ICT and localized computing system.
- Student can encourage giving training to other students to use of Local Level Leadership.
- Students can mobilize student to empower through the ICT knowledge and can be sustained ICT infrastructure by their initiative role.
- To extend the program in other areas coordinating with local people.

Boundary Group - Teacher

- Teachers can implement their ICT knowledge and skills to their teaching process.
- Teachers can disseminate their skill, knowledge and content to other teachers and students as well..
- Teachers can organize workshop, experience sharing and interaction and advocacy program among other community about ICT and localized computing system.

- Teachers can encourage giving training to other members of the community to use of Local Level Leadership.
- Teachers can mobilize community leaders to empower through the ICT knowledge and can be sustained ICT infrastructure by their initiative role.
- To extend the program in other areas coordinating with local people.
- Teachers can help to better manage school management system by using ICT application such as student record keeping, financial record keeping, question preparation and printing, school related data management etc.

Boundary Group- Ex-Army

- Boundary group Ex-army sharing their knowledge about ICT among their related friends and with relatives.
- To extend the program in other areas of their community to coordinate with local leader.
- They empowered others ex-army to share their basic acquired knowledge and diffuse benefit of localized technology..
- They can able to send mail and reply the message from their family members, who are joining in army job in aboard.
- They can implement their ICT knowledge and skills to their daily activities.
- They organize further training to other ex-army groups to help of Local Level Leadership.
- They advocate about the ICT to the other communities and can disseminate content among the community.

4.Summary

Under PAN Localization Phase II, ENRD organized different level training to coordinate with local communities on selected five sites in project areas. In selected five sites such as Danda Gaun in Rasuwa, Jhuwani in Chitwan, Tolka in Kaski, Shikha in Myagdi and Nangi in Myagdi ENRD has been working since 2004. ENRD mobilize local people through the use of ICT since 4 years so local people have a kin interest to learned computer to use of localized computing system. ENRD organized different phases training under PAN phase II to TOT level, LLLT and EUT in the located five sites to empowered local people through the use of localized technology. In the TOT levels training 5 participants were involved who are operators of the located five centers. In the LLLT level training 25 participants were participated in the training. Each center covers 5 participants from different boundary partner. They trained by operator who were involved in TOT level training. In the EUT level training 125 participants were involve and each center covers 25 participants. They are selected from same boundary partners. End-User training provided by Local Level Leadership to coordinate with local management. ENRD trained total 155 trained people from rural Nepal in localized

computing technology. They can mobilize other local people and advocate them through the use of localized computing system.

Up to TOT level to End-User training mostly trainees were from 10 to 40 of age groups as well old people age group of 40 to 50 also participated in the training. In the training all ages of groups can get opportunity to learn the localized computing system. In the different phases training except of TOT level number of women participations were very high. Training has given to chance participated more people from ethnic communities. In the training Dalit group participations also more effective. Most of the participants acquired higher level education so they can understand training material and handled the local level training on their communities. Participants have a low level literacy about ICT knowledge and they have not any knowledge about localized computing system. After end of the training they able from the ICT knowledge and developed clear perspective about localized computing system. Enhancing ICT capacity they can mobilize other people under the computing system and provide advocacy to unaware people about ICT. By the training local people build their capacity and they empowered through the localized computing system.

PAN phase II training management team coordinated with local management team to conduct the training in local level. Local management team encouraged participants to participate in the training and provide support to manage the infrastructure. Training to enhance people to learned localized computing system but there still be a gap among some social groups. Women are encouraged by the training but they have to invest almost their time in the house chores. Nepali family structure based on paternal residence model so if women would be married far from maternal home she cannot involve the further ICT related program. Dalit group participated in the training program but high castes dominated dalit people in the community. Until they feel hard to recognized them as a local leader in the community.

Research Team

Project Advisor – Mahabir Pun, Chairperson of ENRD

Mr. Pun has provided his significant input to conduct the research as well as development of program.

Project Team Leader – Rajendra Poudel, Vice Chairperson of ENRD

Mr. Poudel has coordinated research team as well other ENRD staff. He has provided significant suggestions and gives timely instructions to successfully conduct the overall program.

Sociologist and Senior Researcher – Bidya Bhattarai

She designs the research and makes plan to success the research in time. Prepared research report and case study report after end of the research.

Rural ICT Expert – Uttam K. Acharya

He has supported to collect primary information from 5 centers. He has involved in the field for primary data collection with the coordinating of operator. He provided assisting role to prepare the research report as well case study report.

Outreach Assistant – Sachindra Katila

He has provided support to collect primary information from the different 5 centers. He has directly involved in the field and provides support to rural ICT expert to collect data.

Approbations

ENRD- Enetwork Research And Development

ICT -- Information Communication & Technology

IDRC - International Development Research Centre

CRLUP - Urdu Language Processing

NUCES- National University of Computing and Emerging Sciences, Lahore, Pakistan

MPP- Madan Puraskar Pustakalaya

CC- Country Component

CPI- Country Partner Institute

TOT- Training of Trainer

LLLT- Local Level Leadership Training

EUT – End User Training