Role of ICT for Women Empowerment: with Reference to a Member of Female Cooperatives (Case of Kaski)

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Abstract

Information and Communication Technology (ICTs) can bring a progressive change in individuals' everyday lives. ICTs help people live better lives in various domains such as employment, health, agriculture, education, etc. In a developing country like ours, this steady shift is also visible. However, in terms of social growth and economic empowerment, women in rural Nepal have encountered numerous hurdles. The primary purpose of this study was to investigate the role of information and communication technologies (ICTs), especially mobile phones, in empowering the members of women cooperatives in the Kaski District. The specific objectives were to examine the socioeconomic characteristics of the respondents, extent of use of ICT(mobile phones) among rural women to assess the level of socioeconomic empowerment of the respondents by the use of mobile phones. A questionnaire was used to obtain information from respondents, and interviews were taken where necessary. The research was a survey in the form of descriptive research (Methodology was applied research based on the purpose and data collection was descriptive-correlation). The research population included all members of 3 women's cooperatives in Kaski. The respondents were 75 rural women selected through random sampling from those cooperatives. ICT plays various roles in empowering women, such as offering entrepreneurial opportunities, breaking isolation, providing linkages to inputs and markets, assisting small and medium-sized businesses, reducing poverty and illiteracy, and improving rural women's income and savings. The problems affecting the use of ICT devices include absence and erratic supply of electricity, low level of awareness etc.

Keywords

Information and Communication Technologies, Empowerment, Women's Cooperatives

1. Introduction

The ubiquity of mobile phones in the last two decades has brought transformational changes in the lives and livelihoods of people. Apart from being an effective means of communication, the mobile phone has been widely recognized as a tool to promote development opportunities, particularly in remote and economically lagging areas [1]

The widespread use of Information and Communication Technologies (ICT) has the potential to close the digital divide that now exists between industrialized and developing countries. Developed countries provide easy access to ICT (mobile phones, computers, and the internet). In contrast, developing countries cannot deliver ICT services to disadvantaged individuals or rural areas due to economic and social issues. Even within a country, there are disparities in access to ICT between urban and Rural areas [2].

According to Mansell and Wehn (1998), effective use of ICT can build and empower society through increased inclusion, well-being, cooperation, and involvement. Knowledge, education, and skills all have an impact on the quality of life. Without an awareness of users' actual capabilities, ICT cannot facilitate growth or transform people's lives. For example, computer training will not help poor individuals unless it addresses or improves their capacities, including their literacy level. People can have access to and share information via ICT tools, which can boost their capabilities and empower them [2].

According to Hafkin and Taggart (2001), the United Nations claims that the Lack of ICTs is the third most important issue facing women globally, after poverty and violence against women. Sometimes the failure to incorporate a gender focus in the ICT development process can have negative repercussions. [3]

Women are often the poorest of the poor because of the extreme forms of discrimination persist in many parts. [4].Women worldwide are affected by poverty differently, depending on their age, race, ethnicity, linguistic background, ability, citizenship, and sexual orientation.

Women have limited access to resources and the economy despite their active involvement in caring for family members, livestock, and agricultural work (food production, preservation, and processing), domestic work, and health care because men have traditionally dominated their community. However, the World Bank (2008) claims that empowering women would improve their quality of life and eradicate poverty in developing countries. ''

In a traditional setting, such as Nepal, access to education and employment might bring about significant improvements in women's lives, but powerful patriarchal norms effectively hold them back. In modern-day rural Nepal, no significant improvements in 'power structures' within familial settings are observed, even if they have access to education and jobs. As previously stated, traditional societal standards in rural Nepal are a barrier to women's Empowerment. Women in these traditional contexts are allowed to work but do not have complete control over their earnings. An improved financial situation does not imply Empowerment in rural Nepal, giving the project a new perspective. It is accepted that a household can benefit immensely in any society if women take up a role in generating income. [5].

This research investigates the transformation in terms of positive and negative impacts and how they occur. Rural women have changed as persons and as members of society as a result of the passage of time and space. In addition to providing excellent and efficient communication, ICT allows the 'need for speed' to intrude on privacy, democratic norms, and social interactions. The research demonstrates how rural women may make better decisions as collective members of traditional living by understanding the nature of communication, paving the way to economic independence and self-sufficiency. This study focuses explicitly the on the extent of use of ICT and socioeconomic Empowerment through its use.

2. Literature review

2.1 Status of women and ICT

The collection of reviews clearly demonstrates that women's position is low not only in our country but also in other countries. Aside from their low socioeconomic status, women have less access to ICTs than males. However, the situation is slightly better in the case of mobile phone technology than in other ICTs.

2.2 Role of mobile phones in women empowerment

Mobile phones are providing knowledge, economic independence, social security, social networks and self-confidence to rural women, mainly young girls seeking employment opportunities and working in small and medium level towns. Usage of mobile phones does have an empowering effect on women, especially on rural women.

2.3 Factors affecting the level of Empowerment

Variables like caste, education, landholding, family type and size were significantly associated with the knowledge level of the respondents. [6]

2.4 The extent of use of mobile phones by the respondents

Mobile phone technology has diversified uses, ranging from communication to obtaining information, from getting entertainment to getting economic benefits and from time-saving to providing a sense of safety and security among women.

2.5 Barriers to access and use of ICTs

Gender roles and communication patterns, Lack of education and' information poverty', Cost of ICTS and rural infrastructure, the gender-biased altitudes of society and women towards information and communication technology and there exists technophobia among females''.[7]

3. Methodology

The research is based on the Positivist and Constructivist paradigm with its objective and subjective reality. The research Strategy will be correlation and Phenomenology. And the research approach will be an inductive research approach as it starts with the observations and theories that are proposed towards the end of the research process as a result of observations and analysis.
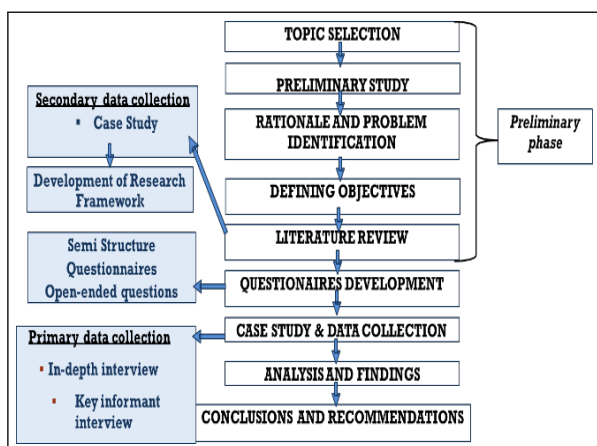

Figure 1: Methodology

Figure 2: Case Area

Women cooperatives from the rural and suburban areas in Kaski are selected for the study. The regions where the study has been carried out are Pokhara Metropolitan City(Malepatan), Hemja Sarankot. The women's cooperatives of these three areas are active entities, either producing local vegetables and foods (like processed crops and byproducts of farm crops) or

Table 1: Criteria for selection of women cooperatives

Criteria	Description
Legal status	Registered in competent authority as per the Cooperative Act, 1992
Age of the cooperative	Registered at least five years ago and been in business for the equivalent years
Membership	With majority of members smallholder farmers (having land holding size of <0.5 hectare)
Cooperative businesses	Involved in member-oriented one or more types of services

saving and credit.

3.1 Data Collection Method

To address the key research objectives, this research used both qualitative and quantitative methods and a combination of primary and secondary sources. Individual in-depth interviews, direct observation, and group discussion utilizing semi-structured and unstructured questions are used to obtain qualitative data. Another research strategy was correlational research or survey research which was quantitative research.

3.2 Method of Selection of the respondents

The members of the rural women's cooperatives were selected as the unit of analysis. Thus, the respondents consisted of women who were members of these cooperatives, from whom a sample of 75 individuals was selected using simple random sampling techniques. From the list of members of cooperatives, a list of mobile phone users and nonusers was prepared. Through a proportionate random sampling method, 60 mobile phone users (Group A) and 15 nonusers (Group B) were selected from the list. Thus, a total of 75 members were chosen for the present study.

The entire questionnaires are broadly categorized into four headings: general information, the extent of mobile use, Empowerment of women, barriers in the usage of mobile phones.

To fulfil the objective, following framework has been used.
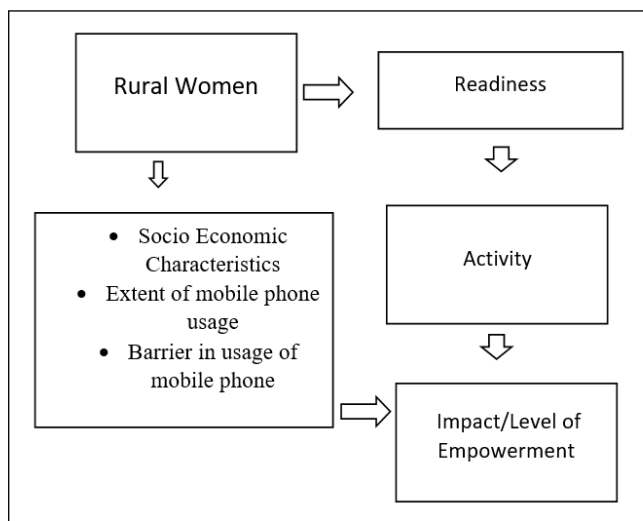
Figure 3: Theoretical Framework

3.3 Statical analysis of data

a. Frequency and percentage were used for tabular analysis.

$$\text{Percentage (\%)} = \frac{\text{Frequency of specific cell}}{\text{Total no of observations}} \times 100$$

b. Mean and standard deviation was computed to categorize the respondents

I. Arithmetic mean

II. Correlation Coefficient

Correlation coefficients are used to measure how strong a relationship is between two variables, and it is calculated by using the SPSS tool

4. Analysis and Findings

4.1 Socioeconomic Characteristics of Respondents

Table 2 summarizes the demographic profile and descriptive statistics. These findings indicated that 70.4% of the respondents were ordinary members, and 29.6% contributed to a mobile phone user group management committee. In the nonmember category, all of them are regular members. The majority of the rural women who participated in our study were in their middle age for mobile. The majority of women (94.0%) are literate in the mobile phone user group, while 72% have no education in the nonuser group. Most of the respondents are married and have medium landholdings.

Table 2: Socio-economic profile of respondent

Variables	Mobile User	Non- User
Membership Status		
· Ordinary	68.40%	100%
· Management committee	21.60%	
Age		
· Young	35%	13%
· Middle Age	55%	22%
· Old	10%	65%
Education		
· No Education	6%	72%
· Literate	94%	28%
· Primary education	31%	12%
· High School	39%	16%
· Diploma	30%	
Marital Status		
· Unmarried	36.60%	26.60%
· Married	55.50%	60%
· Widowed	5%	6.60%
· Separated	3.33%	6.60%
Land Holdings		
· Landless	1.66%	13.33%
· Marginal	5%	46.66%
· Small	23.33%	26.66%
· Medium	60.00%	6.66%
· Large	10%	6.66%

Category	No of Respondent		Percentage (%)	
	MU	NU	MU	NU
Low	4	4	6.67	26.67
Medium	43	10	71.67	66.67
High	13	1	21.66	6.67

4.2 Decision-making Pattern

To study the decision-making pattern of respondents, six distinct areas of decisions, generally taken in the family were identified in the study, are as follows

• Home management related decision

• Child-rearing related decision

• Money management related decision

• Socio-religious rituals related to decision

• Farm management related decision

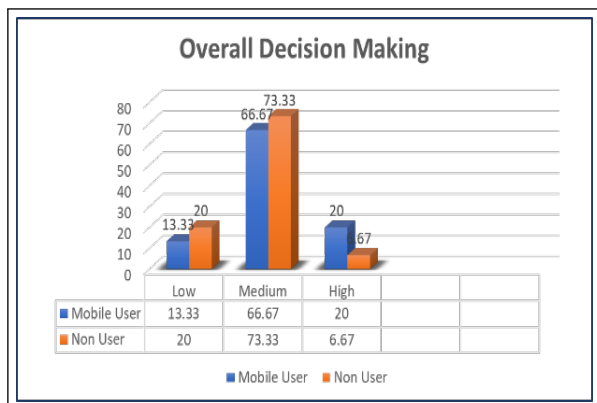• Animal management related decision[9]

Figure 4: Overall Decision Mattern

The majority of mobile phone users (66.67 percent) and nonusers (73.00 per cent) had a medium level of overall decision making. The results show that mobile phone users were better off in overall decision-making pattern than the nonuser

4.3 The extent of use of ICT

Table 3 summarizes the extent of use of mobile phones by the respondents, which indicates that most respondents (65%)use smartphones. Most of them learn to use the mobile phone through the help of family members and can operate features like making and receiving calls/SMS. Only 36% of respondents use the internet on their mobile phones, and the primary purpose of using the internet is social networking. Table 3 shows a descriptive statistic of the respondent's statements about the extent of use of ICT in cooperatives.

To understand the current shortcomings and the impacts of ICT on our respondents' personal and work life, coefficient of variation score was used to sort their answers by importance 1 being most important.

Although the findings of this study revealed that our respondents were capable of using ICT equipment, post-study interviews revealed that they had not obtained these abilities as a result of their membership in the cooperative. They learned how to use devices such as computers and smart phones at home and with the help of friends and family members.

Table 3: Extent of use of ICT

Distribution of respondents according	No of Res pondent	Percen tages
the type of mobile phone they owned		
Button Phones	8	13.33
Multimedia Phones	13	21.66
Smart Phones	39	65
source of information from which they learned to operate mobile phones		
· Yourself	4	6.66
· With the help of a family member	41	68.33
· With the help of a friend/other cooperatives member	13	21.66
	2	3.33
· With the help of a neighbour	0	
the mobile phone feature which they can operate		
· Making/ Receiving calls	60	100%
	40	66.66%
· Sending/Rece iving SMS	34	56.66%
· Saving contacts	28	46.66%
· Clock: Setting time and date	19	38.33%
· FM	23	63.33%
· Camera	38	
internet usage on mobile phone		
· Yes	26	43.34%
· No	34	56.66%
the primary purpose of internet usage on mobile phone		
· Emailing	4	38.66%
· Social Networking	34	100%
· Browsing	21	61.76%
· Digital Payment	3	8.82%

4.4 Level of Empowerment

Table 3 summarizes the level of Empowerment from the use of ICT (especially mobile phones). These

Table 4: Respondents views on ICT usage in cooperatives

There are knowledgeable persons for solving potential technical problems in our cooperative.	1
There are communication and information devices in our cooperative.	1
Members have access to the internet in our cooperative	2
There are enough devices in our cooperative to acquire new information	3
All the members can use the available devices in cooperatives in the same way	5
Individual members can communicate with each other and the other cooperatives using the internet.	2
When members are in the cooperative, they spend most of their time working with computers, cell phones, etc.	5

sub-categories have a horizontal rather than a hierarchical orientation. The respondents' answers to the question "How much impact do they think ICT has had on different aspects of their lives?"

4.5 Barrier in the field of mobile phone usage

A significantly perceived barrier in the usage of mobile phones for the majority of the mobile phone user and nonusers is poor financial conditions and the high cost of the handset. If it clearly shows that financial situation plays a significant role in owning and using phones, if families income will increase, mobile phone penetration and its usage among rural women will also increase.

5. Discussion

As emphasized in many sources, empowering is defined as changes in life circumstances that enable individuals to raise their capacity to manage life more enriched and rewarding. With the concept of Empowerment becoming widespread, improvement in the situation of rural women is a significant issue in achieving rural social sustainability. The respondents' observations and feedback show that studied rural

Table 5: Level of Empowerment

Empowerment	Item	Rank
Personal Empowerment	· To feel one has a better place in society	3
	· To have a feeling of having a helpful presence in the society	4
	· To carry out my personal and professional affairs better than in the past	5
	· To gain more success in performing cooperative affairs	1
	· To participate in the various meetings and	4
	· To do things with more confidence and	3
	· To help and advise my friends and relatives in decision making	2
Social Empowerment	· To gain better experience in carrying out the cooperative's affairs	2
	· To have an important role in setting up the cooperative's programs	3
	· To improve my professional growth by being in contact with other members of the cooperative	1
	· To have a better knowledge of the cooperative's products sale	4
	· To find new ways of carrying out home and cooperative's affairs	5
	· To be able to better communicate with more	1

Table 6: Level of Empowerment

Economic Empowerment	· To have access to the various information resources	1
	· To be able to gain the credit to raise my family's economic status	2
	· To be able to sell homemade products	3
	· To improve my own and my family's economic status	4

women's cooperatives did not have the appropriate level of information and communication equipment. This has led to inefficiencies in learning how to apply technologies to address the cooperatives' needs. The Lack of infrastructural level can be considered as the limiting factor for rural women. The interview findings revealed that most members learned how to work with various communication devices through their friends and family members. In total, respondents' view about the impact of using ICTs in cooperatives was not remarkable. This shows that the current level of ICT adoption in rural women's cooperatives will not significantly impact cooperative members' personal and professional lives. Even though members considered that using ICT instruments had provided them with new knowledge, opportunities for change, enhanced self- confidence, and new social relationships, they were dissatisfied with the current level of ICT devices in their cooperatives. These results are in tune with the findings obtained from studies done by Tavakol & Ghazinouri Naeini (2011)[7], Alibaygi et al. (2012)[8] and Laizu et al. (2010)[9]. These studies tacitly concluded that rural women could not use the technologies due to social control and economic factors.

6. Conclusion and Recommendation

Women's cooperatives are perceived as the platform where members become more social, learn new things, and build new relationships with other women. Information and communication technologies also help in developing these capabilities. Empowered women can inspire and support new members to start their empowerment process in the long run. However, our findings reveal ICT has significantly less impact on members of these rural women's cooperatives. If they are provided with better access to ICT instruments, they will progress to the next stage of Empowerment. ICT services to women cooperatives could be a helpful way to encourage rural women to become more involved in participatory activities.

Active and in-depth female engagement in ICT in learning and education will motivate them to become more empowered. Intensive efforts must be undertaken to develop a culture of collaboration among rural women to supply ICT equipment collectively to inspire women to become empowered and overcome current inadequacies. In this regard, holding workshops, educational classes, and setting up media programs tailored to the status of rural women could be beneficial.

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