

INFORMATION NEEDS AND USE OF DIGITAL TECHNOLOGY FOR INFORMATION BY MOUNTAIN WOMEN: A STUDY OF KINNAUR AND LAHAUL SPITI DISTRICTS OF HIMACHAL PRADESH

Manoj Sharma *

Abstract

The present era is the era of information, one cannot think about their advancement and development without digital technology. People need information on various aspects of their social and economic life. The women who play a crucial role in the development of society and the economy need the information to be the lead in the society. Mountain women have a lot of potentials to contribute to the growth of the economy, but they have limited access to the information with which they can enhance their capacity. In the era of digital technology, women residing in the mountains can contribute to the economy without leaving their native place if they have access to digital technology. The present paper is an attempt to evaluate the information needs of the mountain women of Himachal Pradesh. It results of the study show that mountain women need information on the various social and economic aspects. It was also found that mountain women want to fulfill their information needs, but there is a lack of digital literacy and digital infrastructure. The limited access to digital technology is a challenge and disadvantage for mountain women.

Keywords: *Technology, development, economy, digital literacy*

The present paper is the outcome of the project titled "Bridging the Mountainous Divide through Digital Astuteness and Capacity Building of Rural Women in Himachal Pradesh" funded by IMPRESS Scheme of Ministry of Education and ICSSR, New Delhi.

* Assistant Professor Grade I, Department of Humanities and Social Sciences, National Institute of Technology, Hamirpur, Himachal Pradesh. Email: manoj@nith.ac.in

1. Introduction

Information has become an integral element for progress in society. According to Kemp “information has been described as the fifth need of man ranking after air, water, food and shelter”. Everyone needs information about everything even in his day-to-day life (Bachhav, 2012). Women, irrespective of location, need information on family health, food and nutrition, family planning, and child education, but rural women also need information regarding agriculture and animal husbandry for their involvement in socio-economic growth. However, the women who live in villages have a lack of access to information resources and inability to have access to Information and Communication Technology (Hossain & Islam 2012). In the mountain areas, the situation is even worse. Due to the mountainous divide, both men and women have very limited access to information and digital technology. Mountain areas face demographic challenges in their way. Their population density is lower than in other parts of the territory and, in many cases, the population has fallen or is at risk of falling below a critical mass where services can no longer be provided. People in mountains lack a lot of amenities and lagging in the race of development. Mountain people rank among the most deprived sectors of the world's population, and yet it is well recognized that their stewardship of mountain natural resources is closely linked to the sustainability of life in lowland areas. What has received less attention, however, is the dominant role that women in these mountain areas play in natural resource management, agricultural production, and the well-being and very survival of mountain families, including children. In mountain regions, as in the rest of the world, women, as a class, are more undernourished, more under-compensated for their labour and more underrepresented informal decision-making bodies than men. There is a digital divide in remote and rural India, perpetuated by inequalities related to physical access to digital technology, low literacy, low economic status and inadequate social and health awareness. Rural and tribal people are amongst the most disadvantaged segments of society and are often exploited due to their illiteracy and

concomitant lack of awareness. They are deprived of development processes that were initiated and intended for their advancement, prosperity and security (Nedungadi, et.al., 2018). A large population in the Indian Himalayan Region States has limited access to amenities such as electricity, water supply, broadband connectivity, roads, education and sanitation. There are low employment opportunities (particularly in the non-farm-based sector) within the region and several communities have limited market access. Traditional skills and knowledge are facing challenges due to the uncertainties related to climate change and market volatility. There is a limit to what these traditional skills and knowledge can achieve in isolation. These have to be supplemented by customized knowledge and new skills. The usage of digital technology is a must for everyone to be a part of developing nation and their contribution to the economy and society. In mountain regions, generally, females reside at the native place to look after the family, perform farming activities and perform rituals. On the other hand, male members go to the other part of the state and country for earning. The usage of digital technology can play a vital role in enhancing the contribution of mountain women in the development of the nation. Keeping in view, the above facts, the specific objectives of the paper are: (1) To evaluate the information needs of the mountain women; (2) to explore the source of information of mountain women and (3) to know the use of digital technology to get the information.

II. Sample Design and Methodology

The present study was based on the primary data which was collected through a sample survey by administering the interview schedules. For the collection of primary data multistage purposive-cum-random sampling was adopted. At the first stage, two districts, namely, Kinnaur and Lahaul & Spiti, were selected purposively. At the second stage, four blocks, two from each district, were selected. At the third stage, 16 gram panchayats, four from each block, were selected randomly. At the fourth stage, a total of 320 women respondents, 20 from each gram panchayats, were selected to obtain their opinion and perception on their information needs.

The analysis and interpretation of tabulated data has been carried out with the help of various mathematical methods, statistical tools and graphical methods. Under ranking scales, we make relative judgments against other similar objects. The respondents under this method directly compare two or more objects and make choices among them. Rank order is given accordingly to the total number of preferences for each factor. In the present study, a ranking scale was used to make a relative judgment about the respondent's preferences toward different sources of information. In this study, the ranking given by the respondents was converted into points and individual points of the variable were added to get total points and then based on total points re-ranking was made.

III. Results and Discussion

Here an attempt has been made to analyze the informational needs of the rural women in Kinnaur and Lahaul & Spiti district of Himachal Pradesh.

(A) Information Need

The opinion of the sample respondents on different kinds of information needs have been analyzed in Table 1 (a) and (b), block-wise data show that majority of women in Kalpa and Nichar block of Kinnaur district requires information on job opportunities, information on community welfare schemes, information on events around the world, information regarding the certain disease, information regarding small business, information about latest discovery in science, politics & current affairs, entertainment information, local, state and national news and social events to some extent. Whereas information about health, child care, agriculture, regarding market and business was the requirement of rural women to great extent. On the other hand, the information needs of the women in the Spiti and Lahaul block of Lahaul & Spiti district were more or less the same as in Kinnaur district.

Table 1 (a): Information Need of Mountain Women

	Kinnaur						Lahaul & Spiti					
	Kalpa			Nichar			Spiti (at Kaza)			Lahaul (at Keylong)		
	NA (%)	TSE (%)	TGE (%)	NA (%)	TSE (%)	TGE (%)	NA (%)	TSE (%)	TGE (%)	NA (%)	TSE (%)	TGE (%)
Inf.1	22.50	43.75	33.75	20.00	40.00	40.00	13.75	62.50	23.75	15.00	83.75	1.25
Inf.2	0.00	80.00	20.00	0.00	80.00	20.00	7.50	78.75	13.75	3.75	75.00	21.25
Inf.3	0.00	60.00	40.00	0.00	53.75	46.25	1.25	71.25	27.50	0.00	77.50	22.50
Inf.4	0.00	18.75	81.25	0.00	22.50	77.50	3.75	11.25	85.00	2.50	1.25	96.25
Inf.5	0.00	82.50	17.50	0.00	78.75	21.25	7.50	72.50	20.00	0.00	76.25	23.75
Inf.6	0.00	18.75	81.25	0.00	13.75	86.25	8.75	13.75	77.50	12.50	20.00	67.50
Inf.7	37.50	35.00	27.50	27.50	43.75	28.75	18.75	21.25	60.00	21.25	23.75	55.00
Inf.8	0.00	15.00	85.00	0.00	7.50	92.50	3.75	17.50	78.75	3.75	28.75	67.50
Inf.9	10.00	13.75	76.25	10.00	13.75	76.25	10.00	15.00	75.00	7.50	12.50	80.00
Inf.10	41.25	43.75	15.00	45.00	31.25	23.75	35.00	43.75	21.25	38.75	42.50	18.75
Inf.11	25.00	57.50	17.50	25.00	53.75	21.25	16.25	58.75	25.00	13.75	61.25	25.00
Inf.12	48.75	11.25	40.00	50.00	10.00	40.00	18.75	50.00	31.25	15.00	50.00	35.00
Inf.13	25.00	51.25	23.75	25.00	51.25	23.75	20.00	62.50	17.50	2.50	45.00	52.50
Inf.14	15.00	50.00	35.00	7.50	57.50	35.00	23.75	55.00	21.25	6.25	50.00	43.75
Inf.15	45.00	43.75	11.25	40.00	50.00	10.00	38.75	52.50	8.75	10.00	52.50	37.50
Inf.16	0.00	88.75	11.25	0.00	90.00	10.00	12.50	72.50	15.00	3.75	75.00	21.25
Inf.17	11.25	57.50	31.25	10.00	62.50	27.50	16.25	57.50	26.25	5.00	60.00	35.00
Inf.18	11.25	32.50	56.25	10.00	37.50	52.50	13.75	33.75	52.50	5.00	30.00	65.00

Source: Field Surve

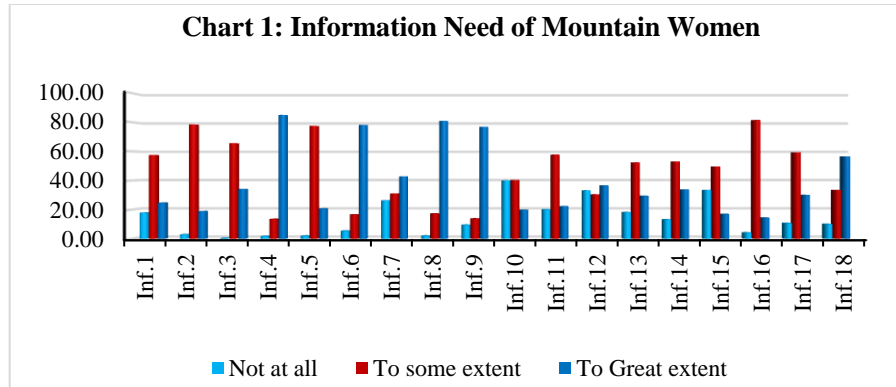
Note: NA = Not at all; TSE = To Some extent; TGE = To Great Extent;
 Inf.1=Information on job opportunities; Inf.2=Information on community welfare schemes; Inf.3=Information on events around the world; Inf.4=Health information; Inf.5= Information regarding certain disease; Inf.6=Information regarding child care; Inf.7=Information regarding education; Inf.8=Information regarding agriculture; Inf.9=Information regarding Market; Inf.10=Information regarding prices; Inf.11=Information regarding small business opportunities; Inf.12=Information regarding micro-credit schemes; Inf.13=Latest discovery in science and technology; Inf.14=Politics and current affairs; Inf.15=Entertainment information; Inf.16=Local, state and national news; Inf.17=Social events; Inf.18=Business information.

Overall data presented in Table 1 (b) reveals that women require different kinds of information. Among these, health information, child care information, information regarding agriculture, information regarding the market, information regarding prices, information regarding micro-credit schemes and business information were the most important, as the majority of respondents reported that they need this information to great extent. Hence, it can be said that mountain women in both districts required various kinds of information for their development.

Table 1 (b): Information Need of Mountain Women (Kinnaur and Lahaul & Spiti)

Information	Not at all (%)	To some extent (%)	To great extent (%)
Inf.1	17.81	57.50	24.69
Inf.2	2.81	78.44	18.75
Inf.3	0.31	65.63	34.06
Inf.4	1.56	13.44	85.00
Inf.5	1.88	77.50	20.63
Inf.6	5.31	16.56	78.13
Inf.7	26.25	30.94	42.81
Inf.8	1.88	17.19	80.94
Inf.9	9.37	13.75	76.88
Inf.10	40.00	40.31	19.69
Inf.11	20.00	57.81	22.19
Inf.12	33.13	30.31	36.56
Inf.13	18.13	52.50	29.37
Inf.14	13.12	53.13	33.75
Inf.15	33.44	49.69	16.87
Inf.16	4.06	81.56	14.38
Inf.17	10.62	59.38	30.00
Inf.18	10.00	33.44	56.56

Source: Sample survey



During the conversation with the respondents, it was observed that women were eager to know new things and want to adopt and adapt themselves to the changing technology. In such a situation digital technology can play an important role in equipping them with the information so that they can contribute their efforts to enhance the economic, social and political condition of their family and society.

(B) Source of Information

As capacity building largely depends on the informativeness of the people, it is important to have different sources available for getting information. In mountain areas, people used different sources to get information. In this regard, data have been collected from the respondents about the sources of information.

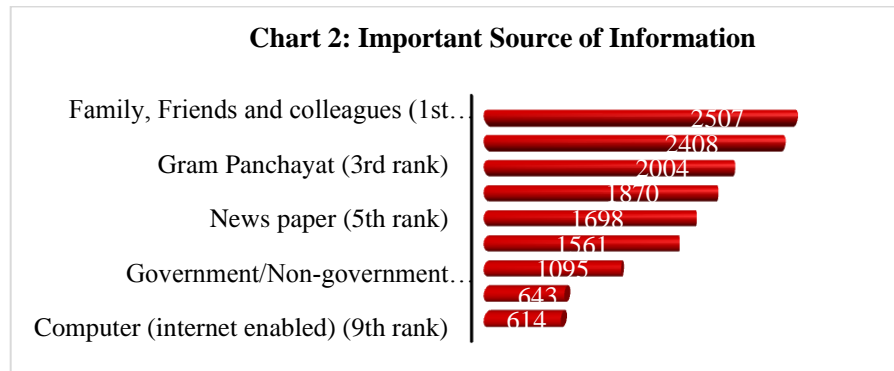
Table 2: Source of Information to the Mountain Women

Source	Kalpa		Nichar		Spiti		Lahaul		Total	
	P	R	P	R	P	R	P	R	P	R
Family, Friends and colleagues;	603	1	593	2	659	1	652	1	2507	1
Market Place/village choupal	436	5	450	5	463	4	521	4	1870	4
News paper	485	3	463	4	361	5	389	5	1698	5
Government/Non-government organization	248	7	247	7	304	7	296	7	1095	7
Radio/TV	570	2	603	1	639	2	596	2	2408	2

Mobile Phone (basic/smart)	429	6	466	3	359	6	307	6	1561	6
Computer (internet enabled)	201	8	195	8	106	9	112	9	614	9
Lok Mitra Kendra	166	9	143	9	160	8	174	8	643	8
Gram Panchayat	462	4	440	6	549	3	553	3	2004	3

Source: Sample survey

Note: i) P=Points; R=Ranking. ii) Points are given as 9 to 1st rank, 8 to 2nd rank, 7 to 3rd rank and so on.



Data in Table 2 indicates that family, friends and colleagues, followed by radio/TV and gram panchayat, is the most important source of information to the rural women in all the blocks under study. In Kalpa block, family, friends and colleagues, radio/TV, newspaper and gram panchayats are the main sources of information to the rural women. While in Nichar block, Radio/TV, family, friends and colleagues, mobile phone and newspaper are the main sources. On the other hand, in Lahaul and Spiti block, family, friends and colleagues, radio/TV, newspaper and gram panchayats and market place/village choupal were reported to be the main source of information.

It was observed that though Internet-enabled mobile phone is in the sixth place, now people start using mobile phone with internet facilities. Some of the areas in Lahaul Spiti district had still didn't have 4G network connectivity. Hence, there is a need to develop proper infrastructure so that people, especially women, can take advantage of digital technology.

(C) Use of Digital Technology

Digital technology has brought unprecedented changes in the life of people. It not only eases life but also provides a lot of information to make life better. Therefore, data have been collected to see which of the digital technology the women were used to fulfill their information need. Data in Table 3 reveal that television and cybercafe were the two main sources for getting information used by the women in Kalpa and Nichar block of Kinnaur district. Concerning internet-enabled phones, data show that the majority of respondents in the Kalpa block (35.00 percent) and Nichar block (36.25 percent) always used an internet-enabled phone to get information. While 21.25 percent in Kalpa and 25.00 percent of respondents in Nichar block sometimes used an internet-enabled phone while remaining were using it either rarely or never. About the basic phone and internet-enabled computer and Lok Mitra Kendra majority of respondents in both the block were never used these sources. While in the case of cybercafes about 32 percent in Kalpa and about 43 percent of respondents in Nichar block either sometimes or always used this source to get information. On the other hand, data collected from Spiti and Lahaul block of Lahaul & Spiti district depict that television was the main source of getting information or fulfill their information need. While concerning the other sources, the majority of respondents reported that they never used them as a source of information.

Table 3: Use of Digital Technology for getting Information

Technology	Kalpa				Nichar			
	N	R	S	A	N	R	S	A
TV	5.00	20.00	20.00	55.00	8.75	18.75	23.75	48.75
Internet enabled phone	21.25	21.25	21.25	36.25	28.75	11.25	25.00	35.00
Basic phone	61.25	16.25	21.25	1.25	51.25	13.75	27.50	7.50
Internet enabled computer	67.50	13.75	12.50	6.25	52.50	10.00	22.50	15.00
Lok Mitra Kendra	40.00	26.25	21.25	12.50	27.50	22.50	33.75	16.25
Cybercafé	37.50	30.00	18.75	13.75	26.25	31.25	22.50	20.00
	Spiti (at Kaza)				Lahaul (at Keylong)			
TV	16.25	17.50	11.25	55.00	7.50	21.25	17.50	53.75
Internet enabled phone	45.00	26.25	23.75	5.00	43.75	21.25	26.25	8.75
Basic phone	41.25	30.00	23.75	5.00	25.00	36.25	27.50	11.25
Internet enabled computer	73.75	10.00	12.50	3.75	62.50	17.50	18.75	1.25

Lok Mitra Kendra	72.50	12.50	10.00	5.00	51.25	20.00	22.50	6.25
Cybercafé	66.25	21.25	8.75	3.75	57.50	23.75	12.50	6.25

Source: *Field Survey*

Note: N = Never; R= Rarely; S=Sometimes; A=Always

Hence it can be concluded that women in Lahaul and Spiti block use TV and basic mobile phone for getting information. The majority of women didn't use Internet-enabled phones and computers, Lok Mitra Kendra and cybercafe. This was so because most of the women, particularly in the Kaza block, were unaware of such centers. The personal observation reveals that though the majority of respondents didn't use internet-enabled phones and computers, yet now the time is changing slowly. In Kinnaur district, the situation is improving and women have shown their interest to operate internet mobile phones and computers. There is a need to spread awareness and widen the scope of internet facilities to the far-flung areas of the state.

IV. Conclusion

It is a fact that information is the first requirement to move forward and mountain women have limited avenues for getting information, as they are busy in their household works almost the whole day. In their free time, they used to watch television, which is the main source of information for them. Though some of the women were using the internet the percentage was not that encouraging. There is also a lack of knowledge regarding different types of digital initiatives taken by the government. Hence, it is important to develop digital infrastructure and spread digital awareness and education among mountain women. It will not only make them informative but also enhance their capacity and skill. There is a need for dedicated efforts to provide access to digital technology and making mountain women digitally literate will help to achieve the mission of inclusive development in the country.

References

1. Bhagachand Bachhav, N. (n.d.). Information Needs of the Rural Farmers : A Study from Maharashtra, India: A Survey Maharashtra, India: A Survey. Retrieved December 31, 2020, from <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2043&context=libphilprac>
2. Hossain, A., & Islam, S. (2012). Information Needs of Rural Women: A Study of Three Villages of Bangladesh Bangladesh. <https://core.ac.uk/download/pdf/188078357.pdf>
3. Nedungadi, Prema P., Menon, Rajani, Gutjahr, Georg, Erickson, Lynnea and Raman, Raghu, (2018) "Towards an inclusive digital literacy framework for digital India", Education + Training, <https://doi.org/10.1108/ET-03-2018-0061>

