

Migration Pattern and the increasing Participation of Females in the Economy of Hill Rural Areas: A Study of Pauri district in Uttarakhand

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Abstract: *The problem of ever increasing migration from the hill rural areas has always posed a serious concern for the economy of these regions. The migration has constantly been so substantial that the economy of the state has been termed as 'money order economy'. To paramount the adverse situation the economy of these regions is already surrounded with the problems of lack of infrastructural facilities, employment and income generating opportunities. Poorly developed agriculture has always remained a major factor but that too has only acted as mere source of subsistence of living for the inhabitants of these regions. Among these adversities the women of these areas have taken the entire burden of the economy. This has been reflected in the increasing participation of women in the economy of these regions. The present study focuses on the pattern of migration and its impact on the increasing participation of women in the economy of these regions. The study also primarily reflects upon the comparative analysis of migration and participation of workforce in these regions on the basis of gender within different sectors of the economy. The study finally comes up with the dimension which the policies of the development of these regions should necessarily possess.*

I. Introduction

Uttarakhand is one of the states which are marked by the large number of population residing in the hill rural areas. These hill rural areas offers most tough working and living conditions for its inhabitants. The area do not provide conducive terrains for the development of industries or other source of employment generation. The absence of industries and other source of income and employment generation in these areas have always hooked its inhabitants towards agriculture and allied activities. Over the past two decades the ever increasing population pressure on land and poor status of agriculture has led to increased pushed migration from these areas. The migration has been so substantial that the economy of the state is termed as 'money order economy'. The poor and tough environmental and geographical settings of these hill rural areas have always posed severe challenges before the workers engaged in agriculture. This has further led to under developed nature of agriculture which is marked with problems of poor technology, lack of irrigation facilities, poor land structure and holdings etc. All these have enacted to largely push agriculture as a mere mode of subsistence. The increased migration of the youths from these areas has further made the agriculture development a major challenge. The problem of alcoholism, domestic violence and lack of male contribution in the economy of these regions has always posed a major threat on the existence of these regions and its inhabitants. Among these adversities the women of these regions have played a significant role which not only confides to the boundaries of domestic chores but in recent years have out shored to such an extent that they have become the back bone of the economy of these regions. The increased participation of women in agriculture and other income generating activities has given a new life to the subduing economy of these far flung regions. The increased participation of women in the economy of these regions which is largely brought out by the increased migration of the youths, have not only started the rebuilding of the economy but also simultaneously acting as a source of women empowerment in these regions. This is further reflected in the growing literacy rate, awareness level, and political participation of women in these regions.

II. Review of literature

The literature reviewed reflects upon the fact that economy of rural areas of Uttarakhand is mainly dependent on the agriculture as these regions are geographically constrained for the industrial development. The importance of agriculture in these regions is not in terms of income generation as large part of agriculture activities in these regions are mainly carried out for subsistence. The importance of agriculture in these regions is mainly because of its capacity to engage working population.

The contribution of agriculture to the state's domestic product is about 22.4 per cent (*Source: Agriculture Statistics at a Glance, 2007*) and the population dependent on agriculture for their livelihood is about 75-85 percent (*Source: Malhotra (2005)*).

The development of the hills is primarily linked to the development of agriculture and its allied activities. Since the hills are constrained in the development of large-scale industrialization, and due to infrastructure constraints the development of the service sector is also constrained, the growth and development of the agriculture sector remains the prime focus. (Malhotra, S.P., 2005).

More than three-fourths of Uttarakhand's total population depends on agriculture for their livelihood and the economy is predominantly dependent on mountain agriculture. However, the land holdings are small and fragmented, and irrigation facilities limited. Soil and water conservation is another issue for inclusive development. For physical, geographical and environmental reasons, the scope for agricultural policies based on modern input-intensive agriculture is severely constrained in the hill regions. As a result, the majority of the rural population in the hills either survives on subsistence agriculture or migrates to other parts of the country for employment. The state faces the challenge of promoting livelihoods to retain people through local employment and income generation and to enhance their quality of life. (Mittal, Tripathi, Sethi, 2008)

Official data for the year 2001, in India reported that 53% of male workers, 75% of all women workers, 85% of all rural women workers are in agriculture, and surprisingly, this percentage has declined by less than 4 points since 1972-73 (Government of India, 2001)

About 75% of the total population of the state is dependent on agriculture. Agriculture pattern in this region is very complex. Terraced slopes covers about 80% of the hill agriculture land, which is completely dependent on the rain, whereas remaining 20% area lies in the valleys and plains, which is fairly irrigated. Agriculture of the region is inter-linked with farming, animal husbandry and natural resources (Rao and Saxena, 1994; Maikhuri et al, 1996).

The literature based on various researches further indicates that even after playing a significant role in the economy of hill rural areas, agriculture is in the state of under development and is marked with various problems. The problems are mainly infrastructural and are accentuated by the tough geographical conditions of these regions.

While men predominate in urban areas, the interior rural districts are amongst the few in all of India that contain significant female majorities (Rawat, 2004). When men migrate to cities, apart from the domestic chores of cooking, fetching fuel, fodder and water, looking after children, the tasks of caring for livestock and agricultural work also fall on women's shoulders.

(Sekhar, 2007) found that women's participation in the rural economy is significant. In Uttarakhand, young men generally migrate to the plains in search of employment, whereas women are left behind to cultivate the land and take care of the children and the older generation.

Since agricultural fields are located on terraces in the hilly region and are generally very small, modern agricultural implements cannot be used. As a result, agricultural work becomes highly time-consuming, thus increasing women's workload tremendously. Men prefer to do less time-consuming work which requires less labor, and generates more and quick money. They do not show much interest in routine agricultural work because it requires hard labor and is less productive. Therefore, instead of sharing the work with women, they prefer to migrate to urban areas (Nautiyal, 2003).

The agricultural work in Uttarakhand comprises diverse activities including making compost for fields, providing water for cultivation, beside plowing the fields, sowing, harvesting, winnowing, picking and cleaning vegetables. Traditionally, all agricultural work, except plowing was done by women. However, increasingly women are taking up plowing also, especially in female-headed households, single women homes and among nuclear families (USNPSS, 2005).

The contribution of women and their role in the family as well as in the economic development and social transformation are pivotal. Women constitute 90 per cent of total marginal workers of the country. Rural women who are engaged in agriculture form 78 per cent of all women in regular work. Economic empowerment of women by micro entrepreneurship led to the empowerment of women in many things such as socio-economic opportunity, property rights, political representation, social equality, personal right, family development, market development, community development and at last the nation development. Women comprise half of human resources they have been identified as key agents of sustainable development and women's equality is as central to a more holistic approach towards stabilizing new patterns and process of development that are sustainable. Sathiabama. K(2010).

Although migration has been always a part of the problem, in recent years the loss of able bodied men has left villages with only women, children and the old and disabled, in an increasingly degraded landscape. Apart from the labour and time spend, the carrying of heavy loads over long, rough and difficult terrain cause numerous physical and health issues which plague women in the mountains.

Difficult terrain, lack of transport, the lack of employment along with small farm sizes and low farm incomes has fuelled large migration from rural areas of the state to the cities across the country. The various studies as stated above further reflects upon the importance of women in the economy of the rural areas which dominates the regions of Uttarakhand. The importance of women enhances amidst the severe

problem of migration of males and mainly of the youths from these regions to the urban areas. The women are left back to work in most tough conditions after taking care of the domestic chores.

Rural women play a critical role in the rural economies of both developed and developing countries. In most parts of the developing world they participate in crop production and livestock care, provide food, water and fuel for their families, and engage in off-farm activities to diversify their families' livelihoods. In addition, they carry out vital reproductive functions in caring for children, older persons and the sick. The changes associated with globalization, diversification of rural livelihoods, increased labour mobility, climate change and food insecurity, as well as other global trends, have brought both gains and challenges for women. (UN, 2008)

Although the ever changing workers pattern in the hill rural areas of Uttarakhand triggered by the migration of the youths and males has posed a major challenge for the economy of these regions but among this adversities a ray of hope lies among the females of these regions which are not only bearing the heavy burden of domestic chores but also actively participating in the economy of these regions.

III. Objectives of the Study

Keeping in perspective the increasing role of women in these hill rural areas and their importance in the economy the study aims to deduct the following aspects related to women participation in economy of the state:

- To identify the existing pattern of workers in hill rural areas in context of male and female distribution
- To study the factors leading to the existing worker distribution pattern in the economy with major emphasis on migration
- To study the role and contribution of women workers in the economy of these regions
- To study the status and problems of women workers in hill rural areas.

Area under discussion and Research Methodology

To study the changing pattern of worker in the hill rural areas of Uttarakhand, the present study focused on one of the thirteen districts of Uttarakhand i.e. Pauri Garhwal district. District Pauri has 15 development blocks from which six development blocks were selected for the research. District Pauri comprises largely of the rural areas which have mainly the hilly terrains. The district lacks infrastructural facilities and lacks industries and other sources of employment, apart from tourism, agriculture is a main form of occupation but is hampered by the poor environmental settings which results in the huge migration from the district and mainly from its rural areas. A total of 252 households were studied in the present research from all the six development of the district. The present study was concentrated in the hill rural areas and the target group comprises of its residents. For the study interview schedule method was used for extracting primary data.

Demographic analysis of the district

According to the 2011 census provisional data 83.59 percent of the total population of the Pauri district resides in rural areas. Census of 2011 further shows that majority of population residing in rural areas of the district is of females, while males constitutes 46.6 percent of the total rural population the female comprises of 53.4 percent. In the urban regions of the district the male population is larger than that of females. Pauri Garhwal is one of the two district in Uttarakhand which have recorded negative decadal growth rate but the urban growth rate in these two districts registered positive growth rate (Source: Census of India, 2011) which is indicative of an increasing trend of urbanization. The total population in Pauri district declined by 1.51 percent in which growth rate in Urban areas of the district was 25.37 but in rural areas was -5.49. The details of the growth pattern of the population in district Pauri is shown in the table given below.

Table No.1 Growth rate of Rural-Urban population in Uttarakhand during 2001-2011

District	Persons		Males		Females	
	Rural	Urban	Rural	Urban	Rural	Urban
Pauri Garhwal	-5.49	25.37	-5.02	19.20	24.88	41.69

Source: census of India, 2011, Provisional population totals

All the demographic data reveal the occurrence of migration from the rural areas of the district to the urban areas of the district or to the other states. The data further reflects upon the fact that rural areas of the district are dominated by the female population which is continuously showing an increase. The highest sex ratio in the rural areas of district Pauri in the entire region further signifies the fact.

Other revealing fact that evolves from the census 2011 is that majority of the growth in male population even after being overall negative in rural areas has been due to the increase in male child population (0 to 6 years). The data shows that the male child population growth rate has been much higher than the girl child population in the rural areas of district Pauri Garhwal which is the main cause of the marginal increase in the male population in rural areas otherwise the migration of the males from these regions has negatively affected their population in the rural areas.

Research findings

Migration has always acted as a major factor in changing the economic and social scenario of any region. Migration has always been associated with the rural areas of Uttarakhand. Keeping in perspective the falling population growth rate in the rural areas of Uttarakhand the study has stressed on identifying the magnitude of migration of the local people from these regions. The study for meeting its objectives has researched to identify the extent of migration and its impact on the change in the pattern of distribution. The results of the study are as follows.

Table No: 2 Percentage of migration from the families residing in hill rural areas

Name of Block	No. of families				Total
	Families with 1 migrant member	Families with 2 to 3 migrant members	Families with More than 3 migrant members	Families with No migrant member	
Duggada	14	16	09	03	42
Jairikhal	06	08	21	08	43
Pabau	17	04	09	12	42
Kaljikhhal	06	10	15	09	40
Khirsu	19	11	06	05	41
Pauri	04	12	19	09	44
Total	66 (26%)	61 (24%)	79 (31%)	46 (19%)	252

Source: Field Survey 2013, UGC MRP

The study shows that migration is one of the most widespread phenomena in the hill rural areas of Uttarakhand. The table No.1 depicts that almost 81 percent of the families residing in these regions are affected from the migration. The data also reflects upon the fact that migration is equally occurring from all the regions of the district. The study further studied the distribution of migration on the gender basis; the results of the study are shown in the table given below:

Table: No.3 Distribution of migrants on the Gender basis

Name of Block	Sex of migrant		Total
	Male	Female	
Duggada	79	13	92
Jairikhal	82	22	104
Pabau	53	14	67
Kaljikhhal	70	18	88
Khirsu	54	20	74
Pauri	59	32	91
Total	397 (76.9%)	119 (23.1%)	516

Source: Field Survey 2013, UGC MRP

The study reveals that majority of the migrants from the households of hill rural regions are males. The table no.2 shows that 76.9 percent of the migrants are males while only 23.1 percent of the migrants are females. The huge migration of the males relatively to females clearly reveals that in the case of majority of migration from the households of hill areas, females are left behind in the rural areas. Various studies have reflected upon the fact that females are left back to not only take care of the children’s and elders in households but also to share the burden of the agriculture activities which is largely carried out in these regions. The study keeping in purview the huge migration of males further emphasized in identifying the factors which have resulted in it. The results of the study are as follows:

Table: No.4 Distribution of migrants on the basis of Age and purpose of migration

Purpose of migration	Age distribution of migrants				Total
	0-14 years	15-30 years	31 to 50 years	Above 50 years	
Employment	-	127	102	56	285
Education	12	43	09	14	78
Others*	31	69	35	18	153
Total	43 (8%)	239 (46%)	146 (28%)	88 (18%)	516

Source: Field Survey 2013, UGC MRP

The above table depicts that majority of the migrants who have migrated from these regions fall in the age group of 15 to 30 years and also from the age group of 31 to 50 years. This clearly signifies that these sections of the population which constitutes the main workforce of any section of community has moved away from these regions resulting in loss of human resource which negatively has an effect on the economic development of these regions which are itself surrounded with number of problems. The study further shows that majority of the migration from these regions have been due to the unavailability of employment opportunities in them.

Others*: include migration of members along with head of families

Family income source- in case of family having a migrant worker and other major reason like health

Table: No.5 Source of Income/Subsistence of rural families

No. of families with migrant workers and their categorization of source of living	Main source of Income/subsistence in rural areas of families residing in rural areas				Total families
	Agriculture and allied activities	Entrepreneurship other than agriculture	Part of the Income send by the migrant workers	Others	
Primary source	44 (17%)	37 (15%)	83 (33%)	88 (35%)	252
Secondary source	147 (58%)	24 (10%)	49 (19%)	32 (13%)	252

Source: Field Survey 2013, UGC MRP

Other: include income from pensions, other employment work in rural areas and support from other government schemes

The study shows that agriculture is one of the main sources of income and subsistence in these regions. Although still the larger percentage of families primary source of income and subsistence is income send by the migrant workers from other regions but still about 75 percent of the families are primarily or secondarily dependent on agriculture and allied activities. Table:

No.6 Male-Female participation in Agriculture in families having migrant member

Details of six blocks of district Pauri Garhwal	No. of family members engaged in agriculture		No. of family members engaged in MNREGA		No. of family members engaged in other income generating activities	
	No. of Male members	No. of Female members	No. of Male members	No. of Female members	No. of Male members	No. of Female members
Total	137	339	41	133	166	29
Percentage	28.8	71.2	23.6	76.4	85.1	14.9

Source: Field Survey 2013, UGC MRP

Note: These are the family members who are permanently residing in rural areas

The huge migration of the males has further pushed the females to not only actively get involved in the agricultural activities but also to participate in other income generating activities. The study reveals that participation of females in agricultural activities is significant in comparison to the male's participation. Further as per the importance of the agriculture in the economy of these regions the role of the females in the economy is been reflected to a greater extent. Apart from involvement in agricultural activities the female's participation is also higher in the MNREGA in these regions. Apart from agriculture and allied activities and in MNREGA work the participation of male workers is relatively larger than females. The other important aspect is that the number of male worker participating in these other activities is much less in comparison to the number of females participating in agriculture and in MNREGA work which further highlights the larger contribution of females in the economy of hill rural regions as workforce.

The other reasons apart from migration of males from these regions, which have resulted in the more participation of females in MNREGA are:

- Low wage rate: Due to low wage rate the males of the families pushes the females in MNREGA, while males of the families prefer to work in other similar private activities where wage rates are higher.
- Equal wage dissimilar work: The study revealed that males are reluctant to work under MNREGA and pushes females in these activities as MNREGA demand more work from males than females while the wage rates for both males and females are similar.

The data analysis suggests that there has been more participation of females in low income generating activities and in subsistence related activities i.e. agriculture while the male work force has been more limited towards high wage rate employment relatively to that of females. This movement in the female workforce from traditional activity like agriculture to activities like MNREGA is a first positive step in towards the overall economic empowerment of women of such areas. The involvement of women in such income generating activities is not only making them think independent but also inculcating the feeling of confidence and anxiety to acquire higher skills and education to move above in the employment level hierarchy. The same development process could lead in future to the more involvement of females in the other income generating activities.

Health problems inflicting the female workforce in hill rural areas

Table: 7 Major Health problems of Women in rural areas

Health Problems	Age Group of Females				
	Upto 10 years Sample Size= 75	Above 10 years to 20 years Sample Size= 105	Above 20 to 40 years Sample Size= 165	Above 40 years Sample Size= 121	Total and percentage of the total sample size Sample Size= 466
Pregnancy related problems	--	09	29	--	38
Weakness/Anemia/Malnutrition	23	18	05	08	54
Respiratory problems	01	06	11	26	44
Major infections	--	--	09	06	15
Digestive problems	03	--	03	--	06

Muscle/Joint/Bone related problems	--	01	12	32	45
Other major life threatening problems	--	--	02	01	03
Total and percentage of the total sample size	27 (36%)	34 (32.4%)	71 (43.03%)	73 (60.3%)	205 (43.9%)

Source: Field Survey 2013, UGC MRP

Note: Only the persistent and long existing health problems were considered

Even after bearing the huge burden of the economy of these areas the females of hill rural regions are inflicted with various health problems which act as barrier in their economic empowerment process. The study shows that majority of the females in the working age group are suffering from various health problems which are further aggravated by the poor health facilities for the women in these regions. The above table further reveals that many of the health problems of these women which include muscle, joint, bone related problems are occurring because of their strenuous work activities. The health problem among these women gets long time untreated because of their unrevealing nature of such problems to other family members. Further due to the customary dedication of the women and knowing their role in the family these women gives secondary importance to their health. Keeping in purview the importance of these women in the economy and their significant contribution as work force which is rapidly increasing it is very important to develop such policies which could gives highest priority to the health of the female work force in such backward regions.

IV. Conclusion and policy prescriptions

Long awaited development in the hill rural regions of Uttarakhand has pushed backward the development of these regions relatively to the other regions of Uttarakhand or to the other states of the regions. This has resulted in the persistent migrations of the major workforce from these regions which largely constitutes the male youths of these regions. This has put pressure on the economy of these regions which is largely subdued by the increasing participation of women workers in the agriculture and other income generating activities in these regions. This has rapidly shifted the work force composition of workers on the basis of their gender among these regions. The shift has resulted in the higher work force participation of women mainly in agriculture and allied activities and also in low income generating activities like MNREGA. It is further important to emphasize that agriculture and allied activities are largely carried out merely for subsistence. Further the participation of males is very less relatively to females in agricultural and allied activities. The males of the regions are relatively contributing less than females and the participation of the males is largely in the higher wage rate employment relatively to the females in terms of paid labour. Even though the increasing participation of women is only in subsistence pattern of work or in the low income generating activities it constitutes a major contribution in the economy of these regions which are marked with inexistence of employment opportunities amidst poor infrastructural facilities. The increasing participation of female work force in such regions will not only revive the economy of such regions but could also pave way for restricting the persistent process of migration of males from these regions.

Keeping in highest perspective the increased workforce participation of females in agriculture and low wage employment the government support becomes essential to such section of the population. The government support should focus on supporting the active female workforce through imparting skill development to get them involved in the higher paid work or to step up in entrepreneurship development. The government should further act on removing the barriers in the female’s workforce participation which largely constitutes of the health problems. The other major emphasis should be on the supportive programs for the development of agriculture activities as the women constitutes the major workforce involved in agriculture. The changing trend in the increase in the female work force participation is a positive sign of initialization of the women empowerment process. Thus the role of the government and other development actors like social activities, NGO’s and others should be to promote the involvement of women in the economic sphere. The increasing participation of women and greater gains from it will not only economically make them independent but will also help in a long way in the overall development of such regions. Amidst the poor scope of industrialization and other bigger large scale employment generating opportunities the government has always failed with every policy framework to stop the persistent migration from these regions which has negatively affected the development of such regions. The government should strictly follow the policy of supporting the existing female work force which is very essential and only best possible alternative in front of them to deal with the problem of migration and under developed status of these regions.

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