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Women, Environment and Sustainable Development: A Case Study of *Khul Gad* Micro Watershed of Kumoun Himalaya

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Abstract

Women in the marginal areas of Uttarakhand have always played and continue to play a significant role in managing and operating most of the household and agricultural activities. They are the main subsistence provider in the hills and considered the backbone of hill agriculture. Their lives are intrinsically related to land, water, forest, which are the main components and integral parts of an eco-system. An adverse effect on any one of these components disturbs the other components due to strong linkages and interrelationship with each other and creates havoc on the life of people, especially women in the region. However, in recent years, environmental degradation, poor resource management and increased migration of men to the plains have deteriorated the livelihood options and added more workload to women of the region. The sufferings of the communities in these hilly areas are gradually increasing and their standard of living is declining because they have been neglected at both policy and practice levels by the government. The nexus between women, environment degradation and poverty are poorly understood and rarely treated in an integrated way. Therefore, the key objective of the present paper is to analyse the work participation of women operating at different sub-systems, impact of environmental degradation and role of women in sustaining the traditional agro-ecosystem in *Khul Gad* micro-watershed of Kumoun Himalaya.

Key words: Kumoun Himalaya, environment, sustainable development, questionnaire survey, women, Uttarakhand

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Introduction

A considerable amount of literature all over the world have established that women are involved in agricultural activities alongside other domestic works (Boserup, 1970; Momsen, 1991; Sarma, 2009; also, Bhattacharyya et al., 2010; Bhattacharyya et al., 2011; Bhattacharyya and Vauquline, 2013). Data provided by the Food and Agriculture Organization (FAO), 1999 revealed that in developed countries, women's contribution to agricultural labour force was 30.7 per cent while for developing countries it was 43.6 per cent. This high work-participation rate of women in the labour force is determined by the nature of the economy of the area (FAO, 2011; Elborgh-Woytek, 2013). Though there are enough literatures that focus on the importance and contribution of Indian women to both agricultural and household activities (Bhattacharyya, 2009; Bhattacharyya et al., 2010, 2011; Bhattacharyya and Vauquline, 2013; Sen Gupta, 1969; Desai and Krishnaraj, 1987; Biswas, 1990; Samal, 1993), yet, the information regarding the role of hill women in central Himalayan region is lacking in terms of its functioning at different sub-system levels of development (Pokhriyal, 1994; Tyagi, 2006).

Therefore, one of the key objectives of this paper is to analyse the work participation of the women of the marginal areas of *Khul Gad* micro-watershed, Kumoun Himalaya region of Uttarakhand, operating at different sub-systems—impact of environmental degradation and the role of women in sustaining the traditional agro-ecosystem. The paper begins by outlining the workforce participation of women in Uttarakhand. Following this, I draw a sketch of the area where this research was undertaken. This follows a description of the methodological issues. Then I go on to discuss the findings of the study area where women, especially a daughter-in-law, remain the nucleus of the household followed by a discussion of the conservation and management of the hill ecosystem in the light of the *Chipko* movement. Then I discuss a 'way forward', where I argue that the relationship between women, environment and poverty needs to be better understood at the policy level and thereby, this nexus should be treated in an integrated way.

Workforce Participation of Women in Uttarakhand

The women in the study area play a predominent role in operating and managing most agricultural and household activities (such as working in the agricultural fields, cattle care, fuelwood, fodder and water collection, including cooking and childcare) and therefore, they are considered as the backbone of agricultural and domestic pursuits. Their lives are primarily related to land, water, forest, which are the main components and integral parts of an ecosystem (FAO, 1999, 2011; also Pokhriyal, 1994; Tyagi, 2006). Degradation of these resources, in turn, has a disproportionate effect on women. The notion of the *Himalayan Dilemma*[1] by Ives and Messerli (1989) is regarded as a major geographical contribution to the theory of the Himalayan environmental degradation. It refers to "deforestation, land sliding, and large-scale downstream flooding, coupled with statements about uncontrolled population growth, increasing poverty, and malnutrition. These processes physical, human, socioeconomic, and political—are frequently linked together into a gigantic cause-and-effect drama which is claimed to be pushing both the Himalaya and the northern plains of the Indian subcontinent to the brink of environmental and socio-economic collapse" (Ives and Messerli, 1989: 15). By meticulous examination of the disturbing symptoms of environmental degradation, Ives and Messerli (1989) conclude that the central causes of the Himalayan Dilemma are not solely environmental rather it attributes to socio-economic and political factors. The Himalayan Tsunami of June 2013 that damaged the eco-sensitive areas of Uttarakhand: Sonaprayag, the *Char Dham* areas of Gangotri, Yamnotri, Kedarnath and Badrinath by triggering flash floods and land-

[1] Himalayan Dilemma by Ives and Messerli (1989) is the basis of the widely supported prediction that the Himalayan region is inevitably drifting into a situation of environmental supercrisis and collapse, a process of thought to which we refer as the theory of Himalayan environmental degradation.

slides, and leading to hundreds of deaths, while hundreds more were missing (Agarwal, 2013). This tsunami can be referred to as an offshoot of the Himalayan Dilemma, which is mainly man-made, albeit partly environmental. Therefore, it can be argued that the notion of the Himalayan Dilemma can further push the debate on maintaining an ecological balance in this sub-Himalayan region by bringing home the centrality of the environmental role of the women, both as cause and consequence of the environmental degradation as well as agency of environmental protection and regeneration.

In a slightly different context, feminists like Vandana Shiva argue that there is an intimate link between women and nature in contemporary society for women are identified as being close to nature (*prakriti*) and men as close to culture (*sanskriti*). As nature is seen inferior to culture so women are seen as inferiors to men (Shiva, 1988). This research however does not engage the debate of inferiority and superiority between men and women. Nevertheless, Vandana Shiva is one of the first feminists from India who embraced and intertwined both the principles of feminism and ecology by protesting against the continued ecological disaster. She was one of the first women to be involved with the *Chipko* movement. The term *Chipko* in Hindi means 'to hug'— a movement to save the ecology of the Himalayas through preservation of the forests, and thereby, balances the sub-Himalayan ecosystem. Notwithstanding, the research aims to study the women's activities and its impact on environment and the ways to sustain development in *Khul Gad* micro watershed of the Kumoun Himalaya.

It is in the said context, the research unravels that there is a massive male out-migration in Uttarakhand due to lack of farm activities. In the past, male migration was mainly during the seasonal forest-felling operation but over the years, after attaining the required educational qualification, most men migrate to Almora, Haldwani and Nainital for regular employment. Currently, it is the case that most families send their male child(ren) for better education to the towns. Hence, the entire agriculture and household burden falls upon the women. The 2011 Census of India (provisional) does record fairly high female work-participation rates (WPR) in various districts of Uttarakhand (see also, Table 1, which is based on 2008 data of Government of Uttarakhand).

Table 1: Female Work Participation Rates in Districts of Uttarakhand, 2008 (%)

Districts	Female Work Participation Rates
Almora	49.6
Pithoragarh	49.5
Uttarkashi	49.2
Chamoli	47.7
Tehari- Garhwal	46.2
Garhwal	44.8
Nainital	22.6
Dehradun	24.8

Source: **GoU, 2008, Directorate of Economics and Statistics, Planning Department, the Government of Uttarakhand (accessed 15 July 2013)**

However, the Census of India considers women as marginal workers. These women in no way work less than their professional counterparts: their primary activity is agricultural work and not domestic work. On an average, these hill women work 15-16 hours a day. Their tasks include weeding, harvesting, home gardening, livestock and poultry rearing, and fuel and water collection. However, these activities are not considered as 'economic activities', and are therefore excluded from the labour force surveys (Momsen, 1991). What is even more pathetic is that these women although unpaid are the main workers and work full-time but are still considered as marginal workers (Sarma, 2009). In the said context, Venkateswaran (1992) stated that in Indian Himalayas, a pair of bullock works 1,064 hours, a man 1,212 hours and a woman 3,485 hours in a year on a hectare farm. Yet sadly, these women are officially perceived and recorded as only 'family helpers', and not as economic contributors to agricultural products and productivity (Momsen, 1991; Sarma, 2009; Shahzad, 2004).

Study Area: A Prologue

The study area, *Khul Gad* watershed ($29^0$34'30.20''–$29^0$38'48.03''N latitude and $79^0$32'20.71''–$79^0$37'11.19''E longitude), which consists of 28 revenue villages, lies 25 kms west of the Almora town in the Hawalbagh Devel-

opment Block of Almora district in the Uttarakhand. Khulgad is a tributary of the river Kosi, which joins the western Ramganga in the plains of Uttar Pradesh. Its peculiar spatial location has been one of the negative factors in the matter of development planning. Even otherwise, the area has been greatly exposed to the natural processes of slope insatiability and soil-erosion. Out of the total population, 68.23 per cent people are literates and the percentage of male and female literacy is 55.11 per cent and 44.59 per cent respectively. It is interesting to note that significant population of the study area, that is, 30.59 per cent of the total population is Scheduled Caste.[1]

Methods

In this research, I use Women in Development (WID) approach to examine the hilly women's contribution to everyday activities. The origin of WID dates back to the 1970s, when a network of female professional developments in Washington coined it. In 1970, Ester Boserup evaluated this debate based on the division of work between men and women and recognised that women's activities are largely unpaid and therefore, remains unrecognised in economic development. In short, this approach focuses on increasing women's independence and their empowerment. This debate resurfaced the argument among feminists and other scholars that women's both domestic and paid activities must be considered to have contributed towards the national economy (Boserup, 1970). Taking this argument, the findings from our village-based questionnaire survey in 505 households show that although hilly women of the study region bear the brunt of household and agricultural activities, as mentioned above, they are still considered as marginal workers by the Census of India and other labour force survey and hence, their activities are not considered as 'economic' (Momsen, 1991). In the following section, I discuss the findings from the field survey.

[1] The Constitution of India recognises Scheduled Caste as a marginalised group of peoples, who are both economically and socially backward (Bhattacharyya, 2009, 2013).

Findings from the Field Survey

The notable demographic feature of the surveyed villages, which is related to the migration phenomenon, is the seemingly progressive sex ratio (Table 2). The total population of the watershed is 2,572, consisting of 1238 males and 1334 females, that is, the female accounts for 51.87 per cent of the total population. The females exceeded the male only in the age group 15-59 years, whereas the male outnumbered the females in 0-5 years and 60 and above age groups. This corroborates with our observation that in all villages, the male members are either children or the aged, implying that the whole household responsibility, including caring for the children and the aged, lies on the women. Overall, the occupational structure presents a murky picture. The percentage of total worker and non-workers is 48.55 per cent and 51.45 per cent respectively. In terms of total workers, the percentage of the main workers is 31.22 per cent and marginal workers are 68.78 per cent. Out of the total main workers, 79.03 per cent are engaged in cultivation while 20.97 per cent are engaged in other activities. Unsurprisingly, the percentage of workers engaged in household industries is nil. While in the case of females, the work participation rates are computed as 52.07 per cent (Table 3), which is almost double when compared to the female work participation rate at national average, which stands at 25.6 per cent.

Out of the total female workers, the main and marginal workers constitute 27.24 per cent and 72.76 per cent respectively—that the proportion of female marginal workers are much higher than the main workers could be due to the technical definition of the Census of India. However, from our research, we witnessed that on an average these hilly women worked for more hours than their male counterparts did.

Women: The Nucleus of the Hill Society

As stated elsewhere, women make important contributions to the agricultural and rural economies of all regions of the world. However, the exact contribution both in terms of the magnitude and the nature of the work is often difficult to assess and shows a high degree of

variation across countries and regions. Likewise, in the study area too, women equally share the bread-earning responsibility of the family and work shoulder to shoulder with their menfolk in various agricultural and animal husbandry operations in everyday life. Both the activities necessitate a high degree of involvement of human power. In other words, women are the main subsistence provider in the area and their participation was found in almost all the rural occupations. However, I repeat again that their everyday hard work both as farmers and as homemakers remain invisible with no rights over their agricultural lands.

Most male members of the households have migrated elsewhere in search of livelihood because the local economy scarcely offered any work opportunity outside the subsistence farming, and the only opening was to venture out into the plains. While this trend has increased manifold in the last five decades, the nature of the hill economy remains the same, and still maintains the conventional gender-based divisions of labour. Based on the field survey 2013, Table 4 presents women's contribution in various activities: women are engaged in 86 per cent of agricultural activities; 84 per cent in

Table 2: Demographic Characteristics of *Khul Gad* Watershed

Villages	Households	Total Population	Male	Female	Sex Ratio	Literacy (%)	Male (%)	Female (%)
Batgal Routela	35	162	74	88	1189	61.11	55.56	44.44
Adhar Muafi	12	60	28	32	1143	60.01	52.78	47.22
Bimola	104	534	276	258	935	70.97	59.1	40.9
Jyoli	104	495	227	268	1181	58.85	63.06	36.94
Khunt	79	467	232	235	1013	60.81	59.86	40.14
Naula	78	349	154	195	1266	64.76	47.79	52.21
Salla Rautela	93	505	247	258	957	77.62	54.08	45.92
Total	**505**	**2572**	**1238**	**1334**	**1077**	**68.23**	**55.11**	**44.59**

Source: Field Investigators Survey, June 2013

Table 3: *Khul Gad* Watershed: Female Occupational Structure (in percentages)

Villages	Total Worker	Main Worker	Marginal Worker	Non Worker
Batgal Routela	58.06	21.6	78.4	41.94
Adhar Muafi	56.82	33.8	66.2	43.18
Bimola	54.57	44.3	55.7	45.43
Jyoli	51.97	22.1	77.9	48.03
Khunt	49.75	24.8	75.2	50.25
Naula	57.45	14.8	85.2	42.55
Salla Rautela	53.41	37.9	62.1	46.59
Total	**52.07**	**27.24**	**72.76**	**47.93**

Source: Field Investigators Survey, June 2013

Table 4: Women's Contribution in Various Activities in *Khul Gad* Watershed (%)

Activities	Women's contribution
Agriculture	85.7
Cattle care	83.5
Fuel-wood collection	90.6
Fodder collection	94.7
Water collection	90.8
Cooking	96.9
Child care	95.0

Source: Field Investigators Survey, June 2013

cattle rearing; 91 and 95 percent respectively in fuel and fodder collections; while 91 per cent are engaged in water collection, and 97 and 95 per cent are respectively engaged in cooking and childcare. However, the struggle for survival has become more difficult for those households, where the women receive no remittance from the migrant male members of the family. Our findings thus unfold that women perform the bulk of the activities in the precarious mountain where they are engaged in the aforementioned activities from dawn to dusk (Table 4). This finding is similar to the studies made elsewhere by Bhattacharyya et al., (2010), Bhattacharyya et al. (2011) Bhattacharyya and Vauquline (2013) and Sharma (2008). Detailed analysis of the everyday work and the different activities performed by the women and the time devoted towards each activity has been made to unpack the extent of everyday drudgery in a difficult hilly environment. When their routine work were cross-tabulated with independent variables such as caste, religion, class, head of household, male and female, we did not find any significant differences rather these activities depended on the social status of these women, that is, daughter(s), daughter(s)-in-law, or a mother in law. In other words, one can say that the marital status of a woman play an important role in the amount of work she does. This finding bears resonance to the study conducted by Bhattacharyya (2009; 2013) on the changing status of middle class Assamese women in Assam. Table 5 illustrates the average time spent on daily activities by the family members of the study area.

It is apparent from the findings (Table 5) that a man works only 9.5 hours in a day, where he spends most of his time in paid activities. He does not perform any agricultural activities except for ploughing. A plough is a large farming tool, which is pulled across the soil to turn it over usually before the seeds are planted, and in the study area, there is a common belief that only the men are supposed to plough the field. This is the only heavy work that a man of the house usually performs and that too occasionally. Notwithstanding, on an average, a daughter spends 8 hours performing mostly lighter household tasks like cutting vegetables, cleaning pots and sometimes even (and whenever needed) fetches water and collects fuel-woods, while a daughter-in-law works 16 hours a day with only one hour of leisure. Their everyday tasks mainly involve carrying out all the backbreaking heavy work—mostly fetching water, fuel-wood and fodder alongside other agricultural activities. These findings support the previous findings of Momsen (1991). They work for longer hours than their mothers-in-law do and unmarried girls, these findings again bear resonance to the studies made by Bhattacharyya (2009; 2013).

Mothers-in-law in the study area usually enjoy all the privilege and perform much lighter tasks. However, in the absence of a daughter-in-law, she needs to engage in activities like collection of fuel, fodder and even work in the agricultural field(s). Otherwise, the work of mother-in-law remains confined to the kitchen garden, taking care of her grandchildren and distribution of food within the household.

In the study area due to rapid exhaustion of forest, everyday women have to travel approximately 9 to 10 kms in search of water, fuel, fodder and for various other minor forest products. Thus, from our findings, one can say that a woman covers a distance of 3,250 to 3,750 kms in a year. Therefore, in these traditional peasant communities, there used to be a common perception that *ghass lakdi ka sukh*, that is, 'biomass reward' (which literally means easy availability of livelihood resources),

and this was considered as one of the key factors while finding suitable grooms for their daughters. However, today the parents of a daughter search for a groom who has a service or a white collar or a green collar job.

Table 5: Average Time Spent (in hours) on Daily Activities by the Family Members in Khul Gad Watershed

Activities	Man	Mother-In-law	Daughter	Daughter-In- law
Daily household tasks and care activities	0.5	2.0	2.5	5.0
Animal husbandry	1.0	1.0	1.0	2.5
Collection/ fetching activities	-	-	3.0	6.0
Agricultural/ on-farm activities	-	2.5	-	2.5
Work in paid activities	8.0	-	-	-
Visit to market places and gossiping	2.0	-	1.5	-
Leisure activities	5.5	3.0	4.0	1.0
Total time	**17.0**	**8.5**	**12.0**	**17.0**
Time excluding leisure and visit to market place and gossiping	9.5	5.5	8.0	16.0

Source: Field Investigators Survey, June 2013

Understanding the Linkages between Women, Environment and Sustainable Development

Women play a vital role in the conservation and management of sustainable eco-system in the region. Since time immemorial, women are traditionally involved in protecting and conserving their natural resources in these mountain areas. As stated above, it is pertinent to note that the study area has provided the most interesting case study for documenting the relationship between the rural women and natural resource endowment, in the process of the popular *Chipko* movement for the protection of forests and forest-based ecology. It is also relevant to note that the local women, the major victims of the destruction of the forests and forest-based ecology of the region, mainly led the movement.

The Chipko movement, which was launched in 1971 by the local people under the leadership of Mr. Chandi Prasad Bhatt of Dashauli Gram Swaraja Sangh (DGSS) in the Garhwal Himalayas of Uttarakhand, aimed at growing awareness towards rapid deforestation (Guha, 2000, 2002; Routledge, 1993; Shiva and Bandyopadhyay, 1986). This movement practiced the Gandhian methods of Satyagraha and non-violent re-sistance, through the act of hugging trees to protect them from being felled. This movement is, primarily a livelihood protection movement rather than a forest conservation movement. However, 26 March 1974 is a historical day for the *Chipko* movement: on this day, in a small village of Reni in Uttarakhand, women were alone, as all the men had gone for work. Taking advantage of the absence of men, the forest officials accompanied by labourers came to chop the trees (Guha, 2000, 2002; Routledge, 1993; Shiva and Bandyopadhyay, 1986). However, Srimati Gaura Devi gathered 27 women and young girls—all stood in front of the trees that had been marked for felling, and addressed the forest officials and lumbermen, “Brothers! the forests are our maternal home and the source of our livelihood also. If you destroy it, the mountain will come tumbling down onto our village” (see, Küchli, 1999: 13; Agarwal, 2013; also read Sharma, 2013).

Srimati Gaura Devi continued to stand before these officials and said, "This forest nurtures us like a mother; you will only be able to use your axes on it if you shoot me first" (see, Küchli, 1999: 13; Agarwal, 2013). All these women under the leadership of Srimati Gaura Devi stood vigilant for three days and nights to prevent the lumbermen from felling the trees. This led all the officials and labourers to relent and go away because they had failed to reckon the ‘women power’. This was indeed a historic victory of the *Chipko* movement. After this landmark incident, the government of Uttar Pradesh passed a legislation, which banned felling of trees for commercial exploitation within 1200 sq. km of the river catchment. Notwithstanding, a considerable research and documentation activities, generated by the movement, contributed significantly to redefine the issues of women and

environment, and the debates and discourse on the subject. It has been realised even at the policy level, both nationally and internationally (e.g., the United Nations) that deterioration in the natural environment has a direct impact on women's lives, but women have traditionally been excluded from the decision-making process governing environmental resource exploitations. It has thus been recognised that involving women in the decision-making process in the planning of natural resources use, protection and generation will yield double dividends; it will improve their status and ensure that such schemes will lead towards sustainable development.

The Way Ahead

Women continue to play a crucial role in mountain societies as a very significant proportion of the work force in food production (FAO, 2011) and as key players in managing and sustaining their natural resources and environment. As stated above, over the years, poverty, increasing population and inappropriate development interventions in the Himalayas has led to adverse effects on the environment, although according to Ives and Messerli (1989), the deleterious effects are socio-economic and political rather than environmental. Nonetheless, this Himalyan Dilemma indeed calls for greater attention: perhaps "a long-term approach, based on defining multiple solutions in which uncertainty is likely to be a continuing reality. This, they [Ives and Messerli (1989)] argue, will require fundamentally new and different thinking about the development of the region and the critical role of the indigenous subsistence farmer. They [Ives and Messerli (1989)] argue cogently for the kind of policies and programmes that are sensitively attuned to, and supportive of, these people who are the prime actors at the interface of the man-nature relationship on which the region's future depends" (Ives and Messerli, 1989: 4).

In the said context, I argue that gradually in the study area, the contribution of women in natural resource management are being recognised but still special attention must be given in order to make them an equal partner in the policy framing or in program implementation. Here, I would like to mention about one Mahila Mangal Dal presently working in the study area under the guidance of Srimati Manju Kunjwal. Her husband died in 1962 in the Indo-China war, after which she returned to her native village and started working for environment conservation and women's livelihood security and their rights. She developed a large group of women from 17 villages and started plantation on the community lands and uncultivable wastelands. After few years, they developed their own forest in order to fulfil their requirement of fuel and fodder. From their practical experiences and managerial skills, they have acquired immense knowledge of the various types of plants, grass, medicinal plants, kind of fuel wood and various species of fodder plants. They always preferred a mixed forest, which can meet their demands of fuel, fodder, fruits and food as well as maintain the bio-diversity of the mountains. They are perfect in making an optimum use and conservation of natural resources.

Thus, the long association of women with environment is being gradually utilised in the process of solving major environmental problems, by using their traditionally acquired skills and integrating them with scientifically studied and developed techniques. Women are now seen as the solution of the development-environment crisis—as major assets to be harnessed in initiatives to conserve resources and as fixers of ecological problems (Pati, 2000). In this context, women have several roles to play: producers, users, consumers and administrators of water, energy, agricultural products, and natural resources; and as educators of their children, through whom they can encourage rational and farsighted attitudes towards food, water and energy consumption.

Today, various major forest acts and environment policies are being formulated but hardly any attention and recognition has been given to these women groups. Especial efforts are needed to strengthen and promote these

women groups at grassroots level. We should accelerate our efforts not only at policy level to pressurise the Government to include women's participation in decision making but also promote environmental education and activism at local level. Thus, the perfect ecosystem can be maintained only when women will be recognised as the manager of eco-system in the region because the inter-relationship of land, water, forest, and animals can be best understood only by women in a broader and more holistic way than anyone else.

Further, environmental education and activism are the priority areas where women should be given opportunities to enhance their capabilities. Women have less opportunities of exposure to new ideas and technologies, thus a movement to empower women must become a major focus of any policy and development programmes. Women's views, opinion, their needs, problems and priorities must be addressed in the national and international agenda. The successful and innovative efforts of women in every region must be highlighted to sensitise the planners and policy makers. The learning of these successful case studies, indigenous knowledge of women must be incorporated in the sustainable development programmes. As women have deep relationship with all the components of the ecosystem, they should be given opportunity to participate in the village eco-system planning trainings (Tyagi, 2006).

Conclusion

This research adopted the WID approach. I thereby urge that women's unpaid activities must be counted for in the official statistics. In addition, I urge that the role of hill women needs to be certified in various programme that improve their capacities in addressing the issues pertinent to rural development and village ecosystem management. However, a woman is not fully considered as a potential human resource, and has been marginalised in terms of benefits from the development policies and programmes. Any type of technological and economic reformation will not be successful until the effective involvement and the active participation of women are not attained in the formulation, implementation and evaluation of any agricultural development strategy. There are two important facets of agricultural development strategy: first, appropriate farm technology must be identified and developed with the effective participation of women, then the phenomenon of environmental sustainability will automatically emerge. Second, to provide the institutional incentives and generate the socio-political efficacy to the rural women, which will lead to the improvement in the efficiency of the women work force (Pokhriyal, 1994).

In addition, it is important to enhance the social security of these women by setting up processing industries and management of natural resources, cultivation of medicinal plants, etc. that can increase employment opportunities both for men and women in this region. This might reduce the migration of the men folk.

Nevertheless, I reiterate again that the female of the hilly region of the country are not marginal workers rather they are the main workers. Unfortunately, these women do not possess the status of farmer. If these women are given the status of farmer, they will get their right over their respective lands, which will go a long way in empowering them and improving their status. Nonetheless, in the midst of all these worries, a hill woman remains firmly devoted to her work, keeps her composure and are simply honest.

About the Author

Dr. Suman Singh obtained her M.A. in 1996 and Ph.D in 2000 from Banaras Hindu University. She now teaches at the Department of Geography, Banaras Hindu University. She has completed two research projects: one as a Co-Principle Investigator, Department of Science and Technology project titled "Community Participation in Natural Resources Management in Chopan Block of District Sonbhadra, Uttar Pradesh" and the other, a University Grants Commission project entitled "Participatory Integrated Watershed

Management for Rudra Gad and Gadmola Gad of Garhwal District, Uttrakhand". She is also a Principle Investigator of a UGC Sponsored project, entitled "Evolving Women's Participation for Integrated Area Development of Khul Gad Micro-Watershed, Kumaon Himalaya, Uttrakhand". She visited Bhutan and Japan for international conferences and has published several articles in national and international journals.

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