RESEARCH ARTICLE :

# Study of situational aspects of the farmers in lower Shivalik hills

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**SUMMARY :** The study was undertaken with the objective to study the situational aspects of the farmers in lower Shivalik hills. Two hundred and forty respondents from Hoshiarpur district, Punjab and Kangra district, Himachal Pradesh were selected using multistage random sampling design. The data were collected with the help of interview schedule. Findings of the study revealed that majority of respondents had temporary workers in family with employment upto 120 days. Majority had upto 2 migrants in family, with inter-state migration and education as the main reason for migration. Utilization of forest resources by majority of respondents was found to be high in both the district.

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# BACKGROUND AND OBJECTIVES

Agriculture is the mainstay of our country's economy. The green revolution of late 1960s and early '70s provided many success stories. But green revolution came with its own bag of worries. First of all it was proved beneficial mainly for large farmers and the small and marginal farmers, who comprise maximum number of farmers in our country, were the ones who benefited least from this green revolution. Secondly, it was helpful in uplifting food production in few pockets of the country leaving others on their own fate. Green revolution was mainly successful in Punjab and Haryana. But there too it brought a lot of side-effects. Wide-spread occurrence of ill-effects of green revolution technologies in all intensively cultivated areas of Punjab and Haryana is threatening the sustainability of the important agricultural production systems and national food security. Not only have the yield and productivity of major crops stagnated, declining incomes in agriculture due to falling land holdings and a deteriorating natural resource situation have meant that few among the youth seem interested in pursuing agriculture. The deterioration of soil quality and declining water tables due to unhindered ground water extraction have led to a rise in the cost of cultivation. With mechanization almost reaching a saturation point, labour use in agriculture has declined to the detriment of workers hitherto employed in agriculture. The worsening of the agrarian situation in Punjab has also been evident from

farmer suicides, still a small number but a phenomenon unheard of prior to the 1990s. This alarming condition of farmers in our country can be linked to situational aspects. The situational aspects of the respondents provide us insight into the use of forestry as an alternative source of income for the farmers so that they could sustain their livelihoods. Forests provide a wide spectrum of livelihoods for people in the form of direct employment, self-employment and secondary employment. Dependence on forest resources is an important source of livelihood for a large number of poor families in lower Shivalik hills. The ease of access and proximity to widely dispersed rural markets, enable people to generate a major share of their household income from forest based livelihood. But during the recent decades, the levels and patterns of forest dependence, nature and strength of needs for forest products and access to tree resources has changed considerably among people of the state. Therefore, in order to understand the contribution of forest and forest outputs to livelihood of the farmers, poverty reduction, socio-economic upliftment, environmental conservation and rural development, it is imperative to explore and devise a research plan on multi-disciplinary approaches. Situational characteristics refer to the various factors which influence as well as reflect the situation of the respondent in a particular area. In the present study, employment status, migration status of the respondents and utilization of forest resources were studied under situational characteristics. So keeping these points in view the present study was conducted with the following specific objectives, to study employment status and migration status of the respondents in lower Shivalik hills and to study their utilization of forest resources in lower shivalik hills.

## RESOURCES AND METHODS

The present study was conducted in lower Shivalik hills of Punjab and adjoining areas in Himachal Pradesh.

A multistage random sampling design was used for the selection of sample. From the state of Punjab, Hoshiarpur district and from Himachal Pradesh, Kangra district was selected randomly. From Hoshiarpur district, Dasuya and Mukerian blocks were selected and from Kangra district, Sullah and Nagrota blocks were selected randomly. From Dasuya block, Shangla, Hamja and Samanshahid villages were selected and from Mukerian block, Adampur, Tanda Ramshai and Budhobarkat villages were selected. Likewise in Kangra district under Sullah block, Gadiyara, Garh jamula and Baskehr villages were selected and under Nagrota block, Amtrar, Masal and Malan villages were selected. Selection of respondents was done by proportionate stratified random sampling technique based on size of land holding namely marginal, small, semi-medium, medium and large. Twenty farmers from each village were selected randomly to make the total sample size of 240 respondents. The data were collected with the help of interview schedule from the respondents of both the districts. The data were analyzed with the help of common statistical tools, appropriate to the nature of data and for the purpose of the study. The statistical tools used in the analysis were mean score and z-test.

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## OBSERVATIONS AND ANALYSIS

Situational characteristics of the respondents included employment status, migration status and utilization of forest resources.

**Employment status :**

Status in employment refers to the status of an economically active person with respect to his or her

| Table 1 : Distribution of the respondents according to their Employment status | | Kangra ($n_1$=120) | | Hoshiarpur ($n_2$=120) | | Total (n=240) | |
|---|---|---|---|---|---|---|---|
| Employment status | | f | % | f | % | f | % |
| No. of workers in family | Temporary | 67 | 55.8 | 62 | 51.7 | 129 | 53.8 |
| | Permanent | 15 | 12.5 | 13 | 10.8 | 28 | 11.7 |
| Employment generation | upto 120 days | 44 | 36.7 | 41 | 34.2 | 85 | 35.4 |
| | 120-240 days | 13 | 10.8 | 8 | 6.7 | 21 | 8.8 |
| | >240 days | 25 | 20.8 | 26 | 21.7 | 51 | 21.2 |

employment. It was measured in terms of number of workers in the family, employment generation (man days/ annum) and nature of employment of the respondents by using the scale of Thakur and Sharma (2009). This further refers to the type of explicit or implicit contract of employment with other persons or organizations that the person has in his or her job. The respondents were asked about their nature of employment and it was found that majority of the respondents in both Kangra (55.8%) and Hoshiarpur (51.7%) districts with 53.8 per cent of overall respondents had temporary employment while 12.5 per cent in Kangra, 10.8 per cent in Hoshiarpur and 11.7 per cent of overall respondents had permanent employment. Regarding employment generation, majority of the respondents in both Kangra (36.7%) and Hoshiarpur (34.2%) district had employment upto 120 days *i.e.* upto 4 months and remaining 31.6 per cent in Kangra and 28.4 per cent in Hoshiarpur had employment more than 120 days. Overall, 35.4 per cent, 8.8 per cent and 21.2 per cent respondents had employment upto 120 days, 120-240 days and more than 240 days, respectively (Table 1). This may be due to the fact that more number

of respondents were having temporary type of employment.

**Migration status :**

Migration status referred to the change of settlement from one place to another. It included mainly emigration from present location to other place for the want of better wages, better education, better living conditions and better health facilities. Migration status of the respondents was measured in terms of number of migrants in the family, migration distance and reason for migration by using scale of Sharma (2005). In present study (Table 2), we mainly dealt with the emigration of respondents from present districts to other places. It was revealed in the study that majority of the respondents in both the Kangra and Hoshiarpur districts with 71.7 per cent and 74.2 per cent, respectively with 72.9 per cent of overall respondents had number of migrants in family upto 2 and only 11.7 per cent in Kangra, 19.2 per cent in Hoshiarpur and 15.4 per cent of overall respondents had number of migrants more than 2 per family. Regarding migration distance, it was found in the study that majority of the respondents

| Table 2 : Distribution of the respondents according to their migration status | | | | | | (n=240) |
|---|---|---|---|---|---|---|
| Migration status | | Kangra (n$_1$=120) | | Hoshiarpur (n$_2$=120) | | Total | |
| | | f | % | f | % | f | % |
| No. of migrants in family | Upto 2 | 86 | 71.7 | 89 | 74.2 | 175 | 72.9 |
| | >2 | 14 | 11.7 | 23 | 19.2 | 37 | 15.4 |
| Migration distance | Inter-district | 25 | 20.8 | 39 | 32.5 | 64 | 26.7 |
| | Inter-state | 45 | 37.5 | 51 | 42.5 | 96 | 40.0 |
| | Abroad | 30 | 25.0 | 54 | 45.0 | 84 | 35.0 |
| Nature of migration | Seasonal | 31 | 25.8 | 44 | 36.7 | 75 | 31.3 |
| | Permanent | 69 | 57.5 | 45 | 37.5 | 114 | 47.5 |
| Reasons for migration | Better wages | 41 | 34.2 | 49 | 40.8 | 90 | 37.5 |
| | Better living conditions | 32 | 26.7 | 36 | 30.0 | 68 | 28.3 |
| | Education | 56 | 46.7 | 69 | 57.5 | 125 | 52.1 |
| | Health facilities | 21 | 17.5 | 34 | 28.3 | 55 | 22.9 |

| Table 3 : Distribution of the respondents according to their utilization of forest resources | | | | | | (n=240) |
|---|---|---|---|---|---|---|
| Sr. No. | Forest product | Kangra (n$_1$=120) | | Hoshiarpur (n$_2$=120) | | |
| | | Mean | Rank | Mean | Rank | z-test |
| 1. | Fuel wood | 2.77 | 1 | 2.71 | 2 | 0.34 |
| 2. | Fodder | 2.50 | 2 | 2.79 | 1 | 0.91 |
| 3. | Timber | 2.26 | 3 | 2.10 | 3 | 0.81 |
| 4. | Fruits, vegetables etc. | 2.01 | 4 | 1.74 | 5 | 1.96* |
| 5. | Fibre | 1.40 | 6 | 1.89 | 4 | 1.98* |
| 6. | Handicrafts | 1.60 | 5 | 1.11 | 6 | 2.15* |
| 7. | Medicine | 1.12 | 7 | 1.03 | 7 | 0.14 |

*indicates significance of value at P= 0.05 level

| Table 4 : Overall distribution of respondents according to their utilization of forest resources | | | | | (n=240) | |
|---|---|---|---|---|---|---|
| Range | Kangra | (n₁=120) | Hoshiarpur (n₂=120) | | Total | |
| | f | % | f | % | f | % |
| Low (4-8) | 19 | 15.8 | 22 | 18.3 | 41 | 17.1 |
| Medium(8-12) | 32 | 26.7 | 25 | 20.8 | 57 | 23.8 |
| High (12-16) | 69 | 57.5 | 73 | 60.8 | 142 | 59.2 |

(37.5%) in Kangra district had inter-state migration but in Hoshiarpur majority *i.e.* 45 per cent had migrated to abroad. On the other hand in Kangra only 25 per cent had migrated to abroad and 20.8 per cent had inter-district migration. In Hoshiarpur, 42.5 per cent had inter state migration and around 32 per cent had migrated inter-district. Overall, 26.7 per cent, 40 per cent and 35 per cent respondents had migrated to inter-district, inter-state and abroad, respectively.

In Kangra more than half of the respondents (57.5%) had permanent migration and only one fourth had seasonal migration but in Hoshiarpur, comparatively equal number of respondents with 37.5 per cent had permanent migration and 36.7 per cent had seasonal migration. Overall, 31.3 per cent respondents had seasonal migration whereas 47.5 per cent had permanent migration. The most important reason cited by the respondents in both the districts was education. 46.7 per cent respondents in Kangra district and 57.5 per cent respondents in Hoshiarpur district claimed education as the main reason for their migration. The next important reason was for the want of better wages in both the district with 34.2 per cent respondents in Kangra and 40.8 per cent respondents in Hoshiarpur.

**Utilization of forest resources :**

It referred to the utilization of forest resources in their daily life and degree of utilization of these products as perceived by respondents. To get the respondent's perception towards the utilization of forest resources in their daily life, seven broad classes of forest products were incorporated in the schedule and the degree of utilization of these products was measured on a 3-point continuum namely, frequently, occasionally and never with their respective scores 3, 2 and 1 by using scale developed by Singha *et al.* (2006). By summation of the response scores the respondent's cumulative scores were determined which were later utilized for assessment of the overall level of utilization of forest resources in the respondent's daily life. The mean was worked out for utilization of each forest product and then rankings were

given in both the districts and it was found that fuel wood was most important forest product in Kangra district followed by fodder, timber, fruits, vegetables etc., handicrafts, fibre and then at last medicine. While in Hoshiarpur, it was revealed that fodder was most important forest product followed by fuel wood, timber, fibre, fruits, vegetables etc., handicrafts and at last medicine.

As shown in Table 3 z-test was worked out to find whether there was any difference among the responses and utilization of forest products by the respondents and it was further revealed that a significant difference (at 5 % level of significance) was found in case of handicrafts, fibre and fruits, vegetables etc. This difference may be due to the reason that more small scale industries lie in Hoshiarpur district as compared to Kangra district.

**Overall distribution of respondents according to their utilization of forest resources :**

The overall distribution of the respondents according to their utilization of forest resources was found as depicted in Table 4 and it was revealed that majority of respondents in both Kangra (57.5%), Hoshiarpur (60.8%) districts and 59.2 per cent of overall respondents had high level of utilization of forest resources. In Kangra, nearly one fourth respondents (26.7%) had medium level of aspiration and only 15.8 per cent had low level. Nearly one fifth of respondents (20.8) had medium level of utilization of forest resources and 18.3 per cent respondents had low level in Hoshiarpur. Overall, 23.8 per cent respondents had medium level of utilization of forest resources and 17.1 per cent respondents had low level The results are in contradiction with Singha and Talukdar (2002) as well as with Krishnamoorthy *et al.* (2003).

**Conclusion :**

Employment status of the majority of the respondents was found to be temporary. Migration status revealed that majority of respondents had upto 2 migrants in family with majority of them migrated to inter-state

and education was cited as the main reason for their migration. Utilization of forest resources was found to be high in both the districts with a significant difference in utilization of handicrafts, fibre and fruits and vegetables. This difference may be due to the reason that more small scale industries lie in Hoshiarpur district as compared to Kangra district.

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