

LIVELIHOOD SECURITY OF TRIBAL PEOPLE IN THANE DISTRICT OF MAHARASHTRA

R.P. Mahadik* and P.A. Sawant**

ABSTRACT

The study was conducted in two backward tehsils namely Jawhar and Vikramgad of Thane district of Konkan region by personal interviewing 100 tribal farmers. Overall livelihood security status indicated that nearly three-fourth of them had 'medium' livelihood security status, while more than one fourth of them had 'high' livelihood security status. Major occupation showed negatively significant relationship with livelihood security, while economic motivation had positively significant relationship with livelihood security status of the respondents.

INTRODUCTION

Livelihood security is of vital importance considering growing population of the country. Sustainable development includes infrastructure facilities, food and nutrition, housing, clothing, etc. Farmers do not have that much security of life due to scarcity of resources and other factors. The present study was conducted to know the present status of livelihood security of the farmers from backward districts Maharashtra and the factors influencing it. The specific objectives of the study were as follows.

1. To study the status of livelihood security of farmers of backward districts.
2. To study the factors affecting the livelihood security of farmers of backward districts.

RESEARCH METHODOLOGY

The study was conducted in Thane district of Konkan region. Two backward tehsils namely Jawhar and Vikramgad were selected. Five villages were selected randomly from each tehsil and ten farmers were selected randomly from each village. Thus, 100 respondents were selected from ten villages. Data were collected by personally interviewing the respondents with the help of specially designed structured schedule. Data were analyzed by using suitable statistical tools.

Livelihood security status : For measuring

livelihood security status, the index developed by Rai et.al (2008) was used with slightly modifications. For calculating livelihood security status different nine components were considered namely, infrastructure status, food availability and nutrition status, housing status, clothing status, health and sanitation status, economic status, technological status, agricultural status and employment status. For each component index was calculated as given below.

1) Infrastructure Status

a) Roads :

To connect Tehsil : Tar road (2) Kachha (1)

To connect District : Tar road (2) Kachha (1)

b) Communication :

TV : Yes (1) / No (0)

Radio : Yes (1) / No (0)

Newspaper : Yes (1) / No (0)

Telephone / Mobile : Yes (1) / No (0)

c) Institutions :

School :

Primary (1) / Secondary (2) / College (3)

Bank : Yes (1) / No (0)

Gram Panchayat : Yes (1) / No (0)

Co-operative Society : Yes (1) / No (0)

Post office : Yes (1) / No (0)

* Junior Research Assistant, Department of Extension Education, College of Agriculture, DBSKKV, Dapoli, Ratnagiri.

** Head, Department of Extension Education, College of Agriculture, DBSKKV, Dapoli, Ratnagiri.

Electricity : Yes (1) / No (0)

Animal Shed : Pucca (2) / Kachha (1)

Maximum obtainable score = 19

Infrastructure status index =

$$(\text{Obtained Score} / 19) \times 100$$

2) Food Availability and Nutritional Status

Food availability and nutritional status index =
(Consumption / Requirement) x 100

Calculated for individual item and then average was worked out

| S. No. | Per Day Per Capita requirements | Men | Women | Average |
|--------|---------------------------------|-----|-------|---------|
| 1 | Cereals | | | |
| | Wheat | | | |
| | Jowar | 520 | 440 | 480.00 |
| | Rice | | | |
| 2 | Pulses | 50 | 45 | 47.50 |
| 3 | Vegetables | | | |
| | Leafy | 40 | 100 | |
| | Other | 60 | 40 | 60.00 |
| | Roots and tubers | 60 | 50 | |
| 4 | Oil and Fat | 45 | 25 | 70.00 |
| 5 | Milk | 200 | 150 | 175.00 |
| 6 | Sugar and Jaggery | 35 | 20 | 28.00 |

(Source : Nutritive value of India Foods, National Institute of Nutrition, ICOMR, Hyderabad)

3) Housing Status

Minimum requirement : Hall, kitchen and bedroom for each couple

Housing status index = (Actual available facility score / Requirement) x 100

4) Clothing Status

Requirements : Three dresses per head per year

Clothing status index = (Actual number of dresses available / Requirement) x 100

5) Health and Sanitation Status

Availability of PHC : Yes (1) / No (0)

Vaccination : Yes (1) / No (0)

Death of children : Yes (0) / No (1)

Water purification : Yes (1) / No (0)

Clean water storage : Yes (1) / No (0)

Drainage : Yes (1) / No (0)

Public Toilet : Yes (1) / No (0)

Appearance of diseases : Yes (0) / No (1)

Maximum obtainable score = 8

Health and sanitation status index = (Obtained Score / 8) x 100

6) Economic Status

Requirement : Rs. 592 x 12 x number of members in the family

Economic status index = (Actual annual income / Requirement) x 100

7) Technology Status

Information availability

Extension contact : Most frequent (3) / Always (2) / Sometimes (1) / Never (0)

Print media : Subscriber (3) / Easily available (2) / Available with difficulty (1) /

Not available (0) Electronic media : Owned (3) / Easily available (2) / Available

with difficulty (1) / Not available (0)

Input availability

Improved variety : Easily available (2) / Available with difficulty (1) / Not available (0)

Fertilizers : Easily available (2) / Available with difficulty (1) / Not available (0)

Chemicals : Easily available (2) / Available with difficulty (1) / Not available (0)

Technology status index = (Obtained score / 18) x 100

8) Agriculture Status

Expected productivity (Cereals, Pulses, Oilseeds, Vegetables, Fruit crops): Minimum productivity as per DBSKKV recommendations

Agriculture status index = (Actual productivity / Expected productivity) x 100

9) Employment Status

Requirements: 313 man days per head per year

Employment status index = (Actual Employment/365)x100

10) Livelihood Security Status = (A + B + C + D + E + F + G + H + I) / 9

Where,

A: Infrastructure Status

B: Food Availability and Nutritional Status

C: Housing Status

D: Clothing Status

E: Health and Sanitation Status

F: Economic Status

G: Technology Status

H: Agriculture status

I: Employment Status

RESULTS AND DISCUSSION

The findings of the present study are presented under the following heads.

1. Livelihood security status of the respondents

The data with respect to livelihood security status are presented in table 1.

It is observed from table 1 that majority (62.00 per cent) of the respondents had 'medium' infrastructure status, followed by 38.00 per cent having 'high' infrastructure status.

As regards the food availability and nutritional status, it was noticed that majority (82.00 per cent) of the respondents were in 'high' category, while 18.00 per cent respondents were in 'medium' category.

All the respondents (100.00 per cent) had 'high' housing status.

The information pertaining to clothing status indicated that majority (58.00 per cent) of the respondents were from 'medium' category, while 28.00 per cent and 14.00 per cent of the respondents were from 'low' and 'high' category, respectively.

A large majority (95.00 per cent) of the respondents were from 'medium' health and sanitation status category, while only 5.00 per cent of them were from 'high' category.

With respect to economic status, it was seen

that majority (56.00 per cent) of the respondents had 'high' economic status, followed by 'medium' economic status (43.00 per cent). Only 1.00 per cent of the respondents had 'low' economic status.

Table 1 further indicated that majority (85.00 per cent) of the respondents had 'low' technological status, while 15.00 per cent of the respondents had 'medium' technological status.

As far as agriculture status is concerned, it was observed that more than half of the respondents (52.00 per cent) had 'medium' agriculture status while, 31.00 per cent had 'low' and 17.00 per cent had 'high' agriculture status.

Nearly three-fifth (58.00 per cent) of the respondents had 'high' employment status, while 42.00 per cent had 'medium' employment status.

Classification of the respondents according to their overall livelihood security status indicated that nearly three-fourth (74.00 per cent) of them had 'medium' livelihood security status, while 26.00 per cent of them had 'high' livelihood security status.

Conclusion can be drawn from these findings that the respondents had relatively good status with regard to food and nutrition, housing, income and employment, while they had moderate status in respect of infrastructure, clothing and health and sanitation. However, their technological and agricultural status was not satisfactory, indicating thereby the vast scope for improving their agriculture through technological interventions. The findings were similar with finding of Rai et al. (2008)

2. Factors affecting the livelihood security status of the respondents

The data with respect to factors affecting livelihood security status of the respondents are presented in Table 2.

The data presented in Table 2 indicated that the variables namely age, family education status, family size, annual income, mass media exposure, extension contact and social participation had non-significant relationship with livelihood security status of the respondents. The data further revealed that, the major occupation showed negatively significant relationship with livelihood security, while economic motivation had positively

Table 1. Livelihood security status of the respondents

| S No. | Components of livelihood security status | Respondents (N = 100) | |
|------------|---|-----------------------|---------------|
| | | Number | Percentage |
| 1. | Infrastructure status | | |
| | Low (Upto 33 per cent) | - | - |
| | Medium (34 to 66 per cent) | 62 | 62.00 |
| | High (67 per cent and above) | 38 | 38.00 |
| | Average : 61.40 per cent | | |
| | Total | 100 | 100.00 |
| 2. | Food availability and nutritional status | | |
| | Low (Upto 33 per cent) | - | - |
| | Medium (34 to 66 per cent) | 18 | 18.00 |
| | High (67 per cent and above) | 82 | 82.00 |
| | Average : 96.00 per cent | | |
| | Total | 100 | 100.00 |
| 3. | Housing status | | |
| | Low (Upto 33 per cent) | - | - |
| | Medium (34 to 66 per cent) | - | - |
| | High (67 per cent and above) | 100 | 100.00 |
| | Average : 88.62 per cent | | |
| | Total | 100 | 100.00 |
| 4. | Clothing status | | |
| | Low (Upto 33 per cent) | 28 | 28.00 |
| | Medium (34 to 66 per cent) | 58 | 58.00 |
| | High (67 per cent and above) | 14 | 14.00 |
| | Average : 50.57 per cent | | |
| | Total | 100 | 100.00 |
| 5. | Health and sanitation status | | |
| | Low (Upto 33 per cent) | - | - |
| | Medium (34 to 66 per cent) | 95 | 95.00 |
| | High (67 per cent and above) | 5 | 5.00 |
| | Average : 50.99 per cent | | |
| | Total | 100 | 100.00 |
| 6. | Economic status | | |
| | Low (Upto 33 per cent) | 1 | 1.00 |
| | Medium (34 to 66 per cent) | 43 | 43.00 |
| | High (67 per cent and above) | 56 | 56.00 |
| | Average : 77.42 per cent | | |
| | Total | 100 | 100.00 |
| 7. | Technological status | | |
| | Low (Upto 33 per cent) | 85 | 85.00 |
| | Medium (34 to 66 per cent) | 15 | 15.00 |
| | High (67 per cent and above) | - | - |
| | Average : 24.28 per cent | | |
| | Total | 100 | 100.00 |
| 8. | Agricultural status | | |
| | Low (Upto 33 per cent) | 31 | 31.00 |
| | Medium (34 to 66 per cent) | 52 | 52.00 |
| | High (67 per cent and above) | 17 | 17.00 |
| | Average : 48.02 per cent | | |
| | Total | 100 | 100.00 |
| 9. | Employment status | | |
| | Low (Upto 33 per cent) | - | - |
| | Medium (34 to 66 per cent) | 42 | 42.00 |
| | High (67 per cent and above) | 58 | 58.00 |
| | Average : 69.62 per cent | | |
| | Total | 100 | 100.00 |
| 10. | Overall livelihood security status | | |
| | Low (Upto 33 per cent) | - | - |
| | Medium (34 to 66 per cent) | 74 | 74.00 |
| | High (67 per cent and above) | 26 | 26.00 |
| | Average : 62.90 per cent | | |
| | Total | 100 | 100.00 |

Table 2. Factors affecting the livelihood security status of the respondents

| S. No. | Variable | Correlation coefficient (r) | Regression coefficient (b) |
|--------|----------------------|-------------------------------|---------------------------------|
| 1. | Age | -0.10469 ^{NS} | -0.01685 |
| 2. | Family education | -0.06415 ^{NS} | -0.303159 |
| 3. | Major occupation | -0.194969* | -3.274736 |
| 4. | Family size | -0.02641 ^{NS} | -0.186443 |
| 5. | Annual income | 0.147453 ^{NS} | 0.000029 |
| 6. | Economic motivation | 0.319016* | 1.348418* |
| 7. | Mass media exposure | 0.153582 ^{NS} | 0.6628942 |
| 8. | Extension contact | -0.014511 ^{NS} | -0.352895 |
| 9. | Social participation | 0.087522 ^{NS} | 0.043298 |
| 10. | Knowledge | -0.13478 ^{NS} | -0.045297 |
| 11. | Adoption | -0.03937 ^{NS} | 0.001134 |
| | | | (R² 0.177765) |

(NS : Non- Significant * Significant at 5 per cent level)

significant relationship with livelihood security status of the respondents. The findings were similar with finding of Gavade et al.. (2008-09)

CONCLUSION

The study revealed that out of nine dimensions of livelihood security, the farmers from study area showed non-satisfactory performance in respect of two dimensions namely technology and agriculture. Since agriculture is the main source of livelihood, it is imperative to guide, motivate and assist the farmers from the disadvantaged area to adopt improved farm technology, which would increase the crop productivity and ultimately the

income to achieve the livelihood standard of the farmers.

REFERENCES

- Anil Rai, S.D. Sharma, Prachi Misra Sahoo and P.K. Malhotra, 2008. Development of livelihood Index for Different Agro-climatic Zones of India. *Agricultural Economics Research Review*, Vol.21 July- December 2008 pp 173-182.
- Gavade A.A., Khonde A.A., Nakat P.G and Thakare U.G 2008-09. Factors influencing livelihood diversification in tribal women. *Asian Journal of Extension Education*, XXVII, 2008-09 pp 137-140.

□□□