

## Original Research Article

### Profile of the Farmers

S. C. Holkar\*, J. R. Kadam, Y. S. Ekhande and S. S. Raykar

Department of Extension Education, College of Agriculture, Dr. Balasaheb Sawant Konkan  
Krishi Vidyapeeth, Dapoli- 415712, District – Ratnagiri, M. S., India

*\*Corresponding author*

#### ABSTRACT

The present study was conducted in Mahad and Khalapur tahsils of Raigad district of Konkan region. The sample was constituted 120 respondents drawn from twelve villages of two tahsils. The respondents were interviewed with the help of a specially designed schedule. The ex-post-facto research design was used for the present study. The main objective of this study is to study Profile of the farmers. The analysis of data revealed that the average age of the respondents was 50 years majority 45.00 per cent of the respondents were found with secondary level of education. This may be due to the availability of schools and high schools at village level and higher secondary education at taluka level nearly nine out of ten respondents had marginal land holding. The findings resemble to the overall scenario of Konkan agriculture, wherein pre dominance of small and marginal farmers is seen. The average area under cultivation was quite satisfactory. Owing to typical geographical situation particularly in industrial area of Konkan region, where average size of area under cultivation was comparatively low. The majority (60.84 per cent) of the respondents had 'medium' farming experience. The majority (93.35 per cent) of the respondents found to be in the 'medium' annual income. The majority (54.17 per cent) of the respondents had 'poor' cropping pattern. The majority (78.34 per cent) of the respondents found to be in the 'medium' level of information seeking behavior. This makes evident that awareness and importance attached to information seeking by the respondents. The majority (63.33 per cent) of the respondents found to be in the 'medium' level of risk preference. The majority (60.84 per cent) of the respondents found to be in the 'medium' scientific orientation.

#### Keywords

Animal foods,  
paper, winery, jute  
bags etc

#### Introduction

Industry plays an important role in the growth and development of a country. Industrialization enhances productivity, raised per capital income and accelerates the pace of saving and capital formation. Industrialization in India can help the progress of agriculture, trade transport and all other economic activities. Industrialization is

the key of economic commodity development. It will make possible in use of our human and physical resource. Industrialization is an important for generating employment opportunities, utilization of all types of resources, education, training, research and development, improving the productivity of labour and balanced regional development. Importance of Industrial growth bring a rapid

increase in the national income of the country. To establish the large number of industrial units we can create more employment opportunities and absorb large number of unemployment's. In India other sectors cannot use all resources, but industrialization is a uses of optimum resources. In India agriculture wastages materials used to make different products i.e. animal foods, paper, winery, jute bags etc. Industrial sector create a quality manpower, provides education, training for workers, thus it will prove the quality of our manpower. The industrial development of Raigad district has really catalyzed when in 1970 the industrial establishment has been banned in Mumbai Metropolitan. The Maharashtra Industrial Development Corporation has developed the full facilities in industrial estates at Patalganga, Uran, Panvel, Taloja, Khalapur, Khopoli, Roha, Nagothane, Managoan and Mahad. The Raigad district is having various prominent industrial areas which includes MIDC areas, co-operative industrial estates and scattered industrial development. The Chemical Industry, Iron Industry and many other industries are located at the most fertile areas in Raigad districts. People use polluted water, pesticide, fertilizers to gain the growth of rice, coconut, vegetables, fruits and flowers. This has created serious ecological problems and atmosphere is polluted due to emission of poisonous and hazardous gas by chemical and fertilizer plants. The 70.00 per cent of the world's poor who live in rural areas, agriculture is the main source of income & employment development of national economy is not successful unless and until there is development of rural sector. In India agriculture development is critical for meeting the growing demand for food, raw material and for creating more employment opportunities in rural sector. The development progress of the economy depends upon the performance of agriculture.

Today also rural area has not improved significantly over the years. In rural youth seek employment in urban areas. In the absence of regular and gainful employment, rural labour migrates and joins the formal sector in urban areas, where conditions are not better. In India, after green revolution, use of agricultural chemicals got momentum and it raised manifold. As these were used more unscientifically, they started showing negative impact on the soil, water and air, and as a whole, on the environment which otherwise could be termed as pollution. More than 1000 agrochemicals are being manufactured and used for agriculture, as well as, public health purposes. Fungicide represents about 10.00 per cent of total. Although efforts are made to restrict pesticides to the targeted crops and their pests, pesticides easily reach adjacent vegetation, wild life, soil, water and sometimes humans. In this way, the impact of pesticides is felt throughout the environment and public health. Industrial farming is bad for the health of workers, eaters, and downstream neighbors. Some of its costly health impacts, herbicides and insecticides commonly used in agriculture have been associated with both acute poisoning and long-term chronic illness. Industrial farming treats that fertility as a resource to be tapped, not maintained. Monoculture exhausts soil fertility, requiring costly applications of chemical fertilizers. Soils used to grow annual raw crops and then left bare for much of the year have poor drought resistance, increasing irrigation costs. Monoculture degrades soil structure and leaves it more vulnerable to erosion, resulting for soil replacement, cleanup, and lost farmland value. Industrial farms don't support the rich range of life that more diverse farms do. As a result, the land suffers from a shortage of the ecosystem services, such as pollination, that a more diverse landscape offers. There is a need to convey the message that prevention

of adverse health effects and promotion of health are profitable investments for employers and employees as a support to a sustainable development of economics. There is thus every reason to develop health education packages based on knowledge, aptitude and practices and to disseminate them within the community in order to minimize human exposure to effect of industrialization. With this background the present study has been designed to give and insight into “Effect of industrialization on agriculture and allied sectors as perceived by the farmers from Raigad district”.

Keeping above fact in view, the present study was designed to analyze effect of industrialization on agriculture and allied sectors as perceived by the farmers from raigad district with the following specific objective.

To study the profile of the farmers.

### **Materials and Methods**

The study was conducted in Raigad district. two tahsils Mahad and Khalapur having maximum industries in red zone area were selected purposively for present study. Six villages from each tahsils adjacent to industrial red zone area were selected. Thus, total twelve villages from two tahsils were selected. Ten farmers from each village were selected to comprise a sample of 120 respondents. Collected data were classified, tabulated and analyzed by using statistical methods like frequency, percentage, mean and standard deviation. ‘Ex-post facto’ research design was used in the present study.

### **Results and Discussion**

The findings of the present study as well as relevant the discussion has been summarized under the following heads:

### **Association between profile of the farmers and perceived effect of industrialization on agriculture and allied sectors**

The data in respect of the selected personal and socio-economic profile of the farmers are presented and discussed in this part.

#### **Age**

The distribution of the respondents according to their age is given in Table 1.

It is revealed from the Table 1 that nearly two-third (65.00 per cent) of the respondents belonged to ‘middle’ age category, followed by 20.84 per cent ‘young’ age category and ‘old’ 14.16 per cent. The average age of the respondents was 50 years.

It can be inferred that highest numbers of respondents were in the age group of 41 to 60 years.

The probable reason might be that the less interest among the young generation to be a part of farming occupation and the majority of ‘medium’ aged respondents engaged in farming and being responsible for survival of their families.

#### **Education**

The information pertaining to the formal education of the respondents is presented in Table 2.

It is found from Table 2 that a maximum number (45.00 per cent) of the farmers had completed ‘secondary’ education, followed by ‘primary’ 21.66 per cent. The farmers in the category of ‘higher secondary’ were 11.66 per cent, followed by ‘preprimary’ 17.50per cent. Only 3.34 per cent farmers had education up to ‘graduation’, while 0.84 per cent of them were ‘illiterate’. The average

educational level of the respondents was 8<sup>th</sup> standard.

It can be concluded from the above data that majority 45.00 per cent of the respondents were found with secondary level of education. This may be due to the availability of schools and high schools at village level and higher secondary education at taluka level.

### **Land holding**

With respect to land holdings of the respondents, the data is presented in Table 3.

It is seen from Table 3 that maximum number (90.85 per cent) of the respondents had 'marginal' size of land holding; while 8.33 per cent of the respondents had 'small' land holding, 0.82 per cent of the respondents had 'semi-medium' land holding. The average size of land holding was 0.64 ha.

This findings leads to conclude that nearly nine out of ten respondents had marginal land holding. The findings resemble to the overall scenario of Konkan agriculture, wherein pre dominance of small and marginal farmers is seen.

### **Area under cultivation**

With respect to Area under cultivation of the respondents, the data is presented in Table 4.

The data from Table 4 revealed that majority (92.50. per cent) of the farmers had 'marginal' area under cultivation, while 7.50 per cent of the respondent had 'small' area under cultivation. The average area under

cultivation was 0.62 ha. Therefore, it could be said that the average area under cultivation was quite satisfactory. Owing to typical geographical situation particularly in industrial area of Konkan region, where average size of area under cultivation was comparatively low.

### **Farming experience**

The data pertaining to the farming experience of the respondents are given in Table 5.

It is observed from table 5 that majority (60.84 per cent) of the respondents had 'medium' farming experience, while remaining 20.00 per cent of the respondents had 'low' and 19.16 per cent of respondents had 'high' experience in farming. The average experience of respondents was 31 years.

The study showed that majority of the respondents had fairly satisfactory experience in farming.

### **Annual income**

The data regarding annual income of the respondents are given in Table 6.

It was revealed that majority (93.35 per cent) of the respondents found to be in the 'medium' annual income, while 5.82 per cent respondents had 'high' annual income and 00.83 per cent respondents had 'low' annual income. The average annual income of the respondents was Rs.73650.75/-.

It means that, most of the respondents had fairly good economic returns.

**Table.1** Distribution of respondents according to their age

| Sl. No.             | Age (Years)         | Respondents (N=120) |               |
|---------------------|---------------------|---------------------|---------------|
|                     |                     | Frequency           | Percentage    |
| 1.                  | Young (Upto 40)     | 25                  | 20.84         |
| 2.                  | Middle (41 to 60)   | 78                  | 65.00         |
| 3.                  | Old ( 61 and above) | 17                  | 14.16         |
| <b>Average = 50</b> |                     | <b>Total</b>        | <b>120</b>    |
|                     |                     |                     | <b>100.00</b> |

**Table.2** Distribution of the respondents according to their educational level

| Sl. No.                         | Education (Standard)                         | Respondents (N=120) |               |
|---------------------------------|--|---------------------|---------------|
|                                 |  | Frequency           | Percentage    |
| 1.                              | Illiterate (No education)                    | 01                  | 0.84          |
| 2.                              | Pre-primary (Up to 4)                        | 21                  | 17.50         |
| 3.                              | Primary (5 to 7)                             | 26                  | 21.66         |
| 4.                              | Secondary (8 to 10)                          | 54                  | 45.00         |
| 5.                              | Higher secondary (11 to 12)                  | 14                  | 11.66         |
| 6.                              | Graduate (1 year degree programme and above) | 04                  | 3.34          |
| <b>Average = 8<sup>th</sup></b> |  | <b>Total</b>        | <b>120</b>    |
|                                 |  |                     | <b>100.00</b> |

**Table.3** Distribution of the respondents according to their land holding

| Sl. No.               | Land holding (ha)       | Respondents (N=120) |               |
|-----------------------|-------------------------|---------------------|---------------|
|                       |                         | Frequency           | Percentage    |
| 1.                    | Marginal ( Up to 1)     | 109                 | 90.85         |
| 2.                    | Small (1.01 to 2)       | 10                  | 8.33          |
| 3.                    | Semi Medium (2.01 to 4) | 01                  | 0.82          |
| <b>Average = 0.64</b> |                         | <b>Total</b>        | <b>120</b>    |
|                       |                         |                     | <b>100.00</b> |

**Table.4** Distribution of the respondents according to their Area under cultivation

| Sl. No.               | Area under cultivation (ha.) | Respondents (N=120) |               |
|-----------------------|------------------------------|---------------------|---------------|
|                       |                              | Frequency           | Percentage    |
| 1.                    | Marginal (Up to 1.0)         | 111                 | 92.50         |
| 2.                    | Small (1.01 to 2.0)          | 09                  | 07.50         |
| <b>Average = 0.62</b> |                              | <b>Total</b>        | <b>120</b>    |
|                       |                              |                     | <b>100.00</b> |

**Table.5** Distribution of the respondents according to their Farming experience

| Sl. No.         | Farming experience (Years) | Respondents (N=120) |               |
|-----------------|----------------------------|---------------------|---------------|
|                 |                            | Number              | Percentage    |
| 1               | Low (Up to 20 )            | 24                  | 20.00         |
| 2               | Medium (21to 40 )          | 73                  | 60.84         |
| 3               | High (41 & above)          | 23                  | 19.16         |
| <b>Mean= 31</b> |                            | <b>Total</b>        | <b>120</b>    |
|                 |                            |                     | <b>100.00</b> |

**Table.6** Distribution of the respondents according to their annual income

| Sl. No.                       | Annual income (Rs.)                 | Respondents (N=120) |               |
|-------------------------------|-------------------------------------|---------------------|---------------|
|                               |                                     | Frequency           | Percentage    |
| 1.                            | Low (up to Rs. 22336/-)             | 01                  | 00.83         |
| 2.                            | Medium (Rs. 22337/- to Rs.124965/-) | 112                 | 93.35         |
| 3.                            | High (Rs. 124966/- and above)       | 07                  | 05.82         |
| <b>Average = Rs. 73650.75</b> |                                     | <b>Total</b>        | <b>120</b>    |
|                               |                                     |                     | <b>100.00</b> |

**Table.7** Distribution of the respondents according to their existing cropping pattern

| Sl. No.               | Cropping Pattern (Score) | Respondents (N=120) |               |
|-----------------------|--------------------------|---------------------|---------------|
|                       |                          | Number              | Percentage    |
| 1.                    | Poor (Up to 1)           | 65                  | 54.17         |
| 2.                    | Fair (2)                 | 38                  | 31.66         |
| 3.                    | Good (3 and above)       | 17                  | 14.17         |
| <b>Average = 1.81</b> |                          | <b>Total</b>        | <b>120</b>    |
|                       |                          |                     | <b>100.00</b> |

**Table.8** Distribution of the respondents according to their information seeking behavior

| Sl. No.               | Information seeking behaviour (Score) | Respondents(N=120) |               |
|-----------------------|---------------------------------------|--------------------|---------------|
|                       |                                       | Number             | Percentage    |
| 1                     | Low (up to 9)                         | 10                 | 08.34         |
| 2                     | Medium (10 to 13 )                    | 94                 | 78.34         |
| 3                     | High (14 and above)                   | 16                 | 13.32         |
| <b>Average =11.73</b> |                                       | <b>Total</b>       | <b>120</b>    |
|                       |                                       |                    | <b>100.00</b> |

**Table.9** Distribution of the respondents according to their risk preference

| Sr. No.              | Risk preference (Score) | Respondents (N=120) |            |
|----------------------|-------------------------|---------------------|------------|
|                      |                         | Frequency           | Percentage |
| 1                    | Low (Upto 16)           | 17                  | 14.17      |
| 2                    | Medium (17 to 20)       | 76                  | 63.33      |
| 3                    | High (21 and above)     | 27                  | 22.50      |
| <b>Average=18.78</b> |                         | <b>Total</b>        | <b>100</b> |
|                      |                         | <b>120</b>          | <b>100</b> |

**Table.10** Distribution of the respondents according to their scientific orientation

| Sl. No                 | Scientific orientation (Score) | Respondents(n=120) |               |
|------------------------|--------------------------------|--------------------|---------------|
|                        |                                | Number             | Percentage    |
| 1.                     | Low (up to 20)                 | 30                 | 25.00         |
| 2.                     | Medium (21 to 24)              | 73                 | 60.84         |
| 3.                     | High (25 and above)            | 17                 | 14.16         |
| <b>Average = 22.07</b> |                                | <b>Total</b>       | <b>100.00</b> |
|                        |                                | <b>120</b>         | <b>100.00</b> |

### **Cropping pattern**

The data pertaining the existing cropping pattern are presented in Table 7. It is observed from Table 7 that majority (54.17 per cent) of the respondents had ‘poor’ cropping pattern, whereas 31.66 per cent had ‘fair’ and only 14.17 per cent respondent had ‘good’ cropping pattern.

It means that most of the respondents follows cropping pattern such as rice-pulses where irrigation facilities were not available. The rice-horticultural crops, rice-vegetables and rice-oilseed cropping pattern was found where irrigation sources like well, bore well and river were available.

### **Information seeking behaviour**

The data pertaining to the information seeking behaviour of the respondents are presented in Table 8. It was revealed that majority (78.34 per cent) of the respondents found to be in the ‘medium’ level of

information seeking behaviour while, 13.32 per cent had ‘high’ and 8.34 per cent of the respondents had ‘low’ level of information seeking behaviour. The average score of information seeking behaviour of the respondents was 11.73.

This makes evident that awareness and importance attached to information seeking by the respondents. This satisfactory level of information seeking behaviour might have helped the respondents in acquiring details about the enterprise.

### **Risk preference**

The data pertaining the existing risk preference are presented in Table 9

It was revealed that majority (63.33 per cent) of the respondents found to be in the ‘medium’ level of risk preference, followed by 22.50 per cent in high level of risk preference whereas, 14.17 per cent were found to be in low level of risk preference.



This indicates that two third of the respondents were giving preference towards the medium level (63.33 per cent) of risk preference.

### **Scientific orientation**

The data pertaining the existing to scientific orientation are shown in Table 10.

It was revealed that majority (60.84 per cent) of the respondents found to be in the 'medium' scientific orientation.

While, 25.00 per cent and 14.16 per cent of them belonged to 'low' and 'high' scientific orientation category respectively. The average scientific orientation score was 22.07.

This might due to the fact that respondents with higher scientific orientation would try to gather more information, which would be applied at the field level for increasing production.

### **Implications**

The study has brought out some profile characteristics of farmers in Raigad district of Maharashtra state. Among them majority of the farmers were from middle age, secondary education, marginal size of land holding, marginal area under cultivation, medium farming experience, medium annual income, poor cropping pattern, medium information seeking behavior, medium risk preference, medium scientific orientation.

It is therefore, necessary to take of efforts by village level extension workers and extension functionaries for planning and implementation of training programme for increasing the awareness of effect of Industrialization on agriculture and allied sectors.

### **References**

- Badhe, D. K. (2012). Farmers' perception regarding environmental risk in use of pesticides in Anand district of Gujarat state. M.Sc. (Agri.) Thesis, (Unpublished) Anand Agricultural University, Anand, Gujarat.
- Choudhary, M. (2010). A study on pesticide using behavior of paddy growers in Khambhat taluka of Anand district. M.Sc. (Agri.) Thesis (Unpublished), Anand Agriculture University, Anand, Gujarat.
- Chaudhary Pooja (2014). Attitude of mango growers towards pesticides in Ratnagiri district of *Konkan* region. M.Sc. (Agri.) Thesis (Unpublished), Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri (M.S.).
- Darandale, A. (2010). Attitude of tribal farmers towards organic farming practices in maize crop. M. Sc. (Agri.) Thesis (Unpublished), Anand Agriculture University, Anand, Gujarat.
- Godse Sneha (2010). Plant protection practices followed by mango growers in Sindhudurg district. M.Sc. (Agri.) Thesis (Unpublished), Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri (M.S.).
- Jadhav Radha (2015). Agriculture in peri-urban area around Mumbai. M.Sc. (Agri.) Thesis (Unpublished), Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri (M.S.).
- Katole, R. T., Nikhade D. M and Kubde V. R. (1996). Awareness about plant protection measures in hybrid cotton AHH-468. *Maharashtra Journal of Extention Education*. 15: 181.
- Kesarkar, S. A. (2010). Cashewnut cultivation in Goa State with special reference to organic cultivation practices. Ph.D. (Agri.) Thesis



- (Unpublished), Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri (M.S.).
- Meshram, M. D. (1995). Constraints in adoption of paddy cultivation practices of improved varieties. M.Sc. (Agri.), Thesis (Unpublished), Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola (M.S.).
- Rao, M. S. and Dube, V. K. (2001). Managing agricultural production by minimizing environmental risk: A study of farmers' perception of environmental risk in pesticide use. *MANAGE Extension Research Review*, 70-77.
- Rathod, J. J. (2009). A study on adoption of recommended plant protection measures by chilli growers in Anand district of Gujarat state M.Sc. (Agri.), Thesis(Unpublished), Anand Agricultural University, Anand, Gujarat.
- Shinde, M. P. (2011). Attitude of the cotton growers towards integrated pest management. M.Sc. (Agri.) Thesis (Unpublished), Anand Agriculture University, Anand, Gujarat.
- Vaidya, A. C. (2004). A study of farmers' awareness regarding agricultural pollution in Gujarat. M.Sc. (Agri.) Thesis (Unpublished). Anand Agriculture University, Anand, Gujarat.
- Waghamare, G. S. (2014). Existing cultivation practices followed by the Turmeric growers in Sindhudurg district. M.Sc. (Agri.) Thesis (Unpublished) Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri (M.S.).