SOCIO-ECONOMIC STATUS OF SMALL FARMERS IN KONKAN REGION

By

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FACULTY OF AGRICULTURE

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A thesis submitted to

Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli

(Agricultural University)
Dist. Ratnagiri (Maharashtra State)

In partial fulfillment of the requirements for the degree of

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(AGRICULTURE)

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CERTIFICATE

This is to certify that the thesis entitled **SOCIO-ECONOMIC STATUS OF SMALL FARMERS IN KONKAN REGION** submitted to the Faculty of Agriculture, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Dist. Ratnagiri, Maharashtra State in the partial fulfillment of the requirements for the degree of **DOCTOR OF PHILOSOPHY (AGRICULTURE) in EXTENSION EDUCATION,** embodies the results of a piece of *bonafide* research carried out by **VAISHALI DIGAMBAR PAGAR** under my guidance and supervision. No part of this thesis has been submitted for any other degree or diploma. All the assistance and help received during the course of investigation and the sources of literature have been duly acknowledged by her.

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THESIS ABSTRACT

The present study was conducted with the objectives to study the profile of the small farmers, to study the socio-economic status of the small farmers, to find out the relationship between selected characteristics of the small farmers and their socio-economic status. An ex-post-facto research design was used for the present study. Considering the variation observed in Konkan region from each district one coastal and one hilly region Tehsil were selected to study status of small farmers from different locality of Konkan region. Therefore, Vengurla and Vaibhavwadi tahsils were selected from Sindhudurg

district and Shrivardhan and Karjat from Raigad district were selected purposively. Fifty small farmers from five villages in each tahsil were selected by n^{th} number method of random sampling, making a sample of 200 small farmers. The data were collected with the help of specially designed interview schedule. Personal interview technique was used for data collection. The nine personal and socio-psychological characteristics namely, age, farming experience, family education status, cropping pattern, creditworthiness, risk orientation, market orientation, cosmopoliteness and attitude toward improved farm practices were considered as independent variables, while socio-economic status of small farmers was the dependent variable for the present study. The selected characteristics were quantified by assigning scores. For measuring the socio-economic status of the farmers, a scale consisting 152 sub-items, grouped under twenty-one main items was specially developed. On the basis of score obtained, the small farmers were grouped into suitable categories by using mean and standard deviation as a measure of check. Correlation analysis and regression analysis were done to meet the needs of the study. The data were presented in tabular and graphic forms.

Majority of the small farmers belonged to 'middle' age category with farming experience between '13 to 35 years', had family education status between '3.9 to 6.5', cropping pattern score in between '3 to 11', creditworthiness between '2 to 22.99 lakh'. Majority of small farmers scored '10 to 14' in risk orientation, had scored '11 to 14' for market orientation, cosmopoliteness score in between '17 to 29' and scored in between '42 to 50' for attitude towards improved farm practices.

More than fifty per cent of the small farmers had 'middle' socio-economic status followed by 'lower middle' socio-economic status and 12 per cent of small farmers had 'upper middle' socio-economic status. While, only 5 percent of the small farmers had 'high' socio-economic

status and negligible (0.5 per cent) percent of the small farmers had 'low' socio-economic status, respectively. It mean that most of the small farmers had lower middle to upper-middle socio-economic status.

Among the selected independent variables, family education status, cropping pattern, creditworthiness, risk orientation, market orientation, cosmopoliteness and attitude toward improved farm practices had positive and significant relationship with socio-economic status of small farmers.

Only two variables i.e. age and farming experience showed no statistical relationship with the socio-economic status of small farmers.

Out of nine selected independent variables under study, seven variables exerted positive direct effect and two independent variables exerted no effect on socio-economic status of small farmers. The highest positive effect was exhibited by the variable cosmopoliteness (0.5848) followed by creditworthiness (0.3129), while lowest effect was exhibited by the variable farming experience (0.0070). The overall effect of all independent variables explained 58.48 per cent variation in socio-economic status of small farmers.

The study implies that the planners and policy makers may motivate the small farmers to adopt the different cropping by providing the subsidies and price protection. The small farmers need to be motivated to take up different components along with crop production so that the socio-economic status of the small farmers is elevated.

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CHAPTER I

INTRODUCTION

Indian villages are the mirror of India's past and present. The concept of Village differs from country to country. To the western school of thought, the concept of village is more or less recent and modern whereas to the eastern school of thought, it is more basic and older. In the epics, some details are available about the villages.

According to Mahabharta, "A village has certain characteristics: multi types of inhabitants with cattle farm and small hamlets." Giving a full amount of an Indian villages and its organisation during the Mahabharta period.

Small- holder farmers are vital for India’s agriculture and rural economy. Small-holder farmers - defined as those marginal and sub-marginal farm households that own or/and cultivate less than 2.0 hectares of land - constitute about 78 per cent of the country’s farmers (Agricultural Census 1990-91). These small-holders owned only 33 per cent of the total cultivated land; with contribution to national grain production was 41 per cent. Their contribution to household food security and poverty alleviation is thus dis-proportionately highand is increasing. Moreover, as the national population increases, so does the number of small-holdings. Moreover, their marketable surpluses are increasing. In the nation’s food-security interest, such increase must be sustained. Those features notwithstanding, small- holder families, together with the families of land- less agricultural workers, constitute the bulk of India’s hungry and poor.

During the 1990s, annual rates of increase in agricultural productivity and yields were less than in the 1970s and 1980s; it is thus noteworthy that in the 1990s the investments in agriculture - in

its research, technology, and infrastructures - were substantially less than in the two preceding decades.

Commenting on the key findings of India's first set (1950s) of Studies of the Economics of Farm Management, Amartya Sen (1964) highlighted the inverse relationship between farm size and productivity. Collective farming was deemed inappropriate for India and the importance of land reforms on efficiency grounds was recognized. However,Green-Revolution technologies seemed to change this relationship under some circumstances (Saini, 1971). Nonetheless, this current analysis (of most of the household- level data-sets on costs of farm production for the 1980s and 1990s) suggests that small-holder farmers are perhaps the more-productive. Their vital contribution to India's food and agricultural economy and to its national food security results from the small-holders' responsiveness to public policies and to national investments in agricultural research and development and in public infrastructure. Thus, the current declines in public investment in these critical public goods raise much concern for future agricultural growth. There are strong and urgent needs for policy interventions to reverse these declining trends of public investment in agriculture and its infrastructures.

During fifty years and more, India made immense progress towards security of food and livelihoods. Since 1950, population almost tripled, but food-grain production more than quadrupled there was thus substantial increase in available food-grain per capita. India is now among the largest producers of rice, wheat, pulses, fruits, vegetables and milk.This agricultural transformation and the associated broad-based economic growth have helped to double the income per person and increase in life expectancy, lessen poverty

incidence by nearly one-half, and render the country self-sufficient in food. Famine and mass starvation belonged to the past.

Hence, there is crucial need and national self interest for policy actions to reverse the trend of decreasing investment, and to strengthen and sustain the productivity and livelihood of the small-holder sector and its value-addition component. Such actions must include strengthening of agrarian reform and of land-lease markets and of infrastructures and institutions, creating off-farm employment through small and medium-size enterprises, and developing and diffusing size and scale-neutral technologies that save land and costs, and that enhance crop and livestock yields.

Notably, food insecurity and poverty are less for those rural households that own a piece of land (however small) and/or a buffalo. Correspondingly, these institutional and technical interventions shall need to be complemented by expanded rural education and skills development, especially for rural women, and by information systems and rural friendly mechanisms to access them.

Small holder families constitute more than half of the national population. It is thus disappointing that notwithstanding their substantial and increasing contribution to the national food supply and to agricultural GDP, these small- holder families nonetheless constitute more than half of the nation's totals of hungry and poor. Policies and programmes to lessen poverty and food insecurity, and to enhance equity and sustainability of incomes and livelihoods, should thus seek to achieve an agriculture-led broad-based economic development and to do so by according highest priority to small-scale agriculture.

Compared to many other countries in the world India is a rich country of poor people. The poverty of the people is basically the

poverty of the peasants, who constitute over 70.00 percent of the population of India. One of the main reasons responsible for the poverty of Indian farmers is the very small holdings on which they are operating and hence they are called small and marginal farmers who alone form 75.00 percent of the farmers in India. Their problems are manifold and to solve them and to improve their conditions fairly good investment is required.

However their life situation does not seem to be highlighted enough for anyone to have a comprehensive understanding of the possible solutions to be evolved in our attempt to alleviate their sufferings and to improve their living conditions.

Socio-economic status is an important factor, which pervades all fields of social action in Indian society. This is needless to say that a man's position in the socioeconomic status hierarchy determines, by-an-large, his behavior in the society. People belonging to higher socioeconomic status are said to be more modernized in their values and behaviors than the people who are in comparatively low ranges of the socio-economic status.

Statement of the problem

The need and significance of quantifiability and measurability of the concept and variables in social science have led to the formulation of devices/methods for their measurement. Socio-economic status (SES) is one of the most important variables in social science studies /researches. It plays a significant role in planning and execution of developmental programmes and, therefore, there is a need for the development of a valid and reliable instrument for the measurement of SES. Socio-economic status of a family would mean the ranking of the family in the milieu to which the family belongs, in respect of defined variables *viz.*, physical assets, economic status, education,

occupation, social position, social participation, political influence, *etc*. Some elements of the above variables have a tendency to go together.

Socioeconomic status (SES) is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation. When analyzing a family's SES, the household income, farmers' education, and occupation are examined, as well as combined income, versus with an individual, when their own attributes are assessed. With this view, the study was undertaken on socio-economic status of the small farmers of Konkan region with the following specific objectives.

1. To study the profile of small farmers.
2. To develop a scale to measure socio-economic status of small farmers.
3. To know the socio-economic status of small farmers.
4. To find out the relationship between personal, socio-economic and communication variables of small farmers with their socio-economic status.

Hypotheses

A) General hypothesis

Socio-economic status of the small farmer's is relatively low.

B) Specific hypotheses

1) The socio-economic status of the small farmer differs significantly with regard to their personal and socio-psychological characteristics.
2) There is no relationship between socio-economic status of the small farmers and their personal, socio-economic and communication variables.

Scope of study

It is felt that the currently available scales are either outdated or there is a need for redefining of some relevant items for indicating the SES accurately. Moreover, these scales were developed on smaller samples drawn from sub-strata of population and not on larger representative cross-section of the community. In Konkan region, mono-cropped based farming system is observed, which is mainly rain fed farming. To provide an insight into a cross-cultural profile of these farmers and with a purpose of developing a reliable and valid instrument for measuring the Socio-Economic Status, study wasplanned and carried out.

Providing an insight into a cross-cultural profile of these small farmers, it would suggest guidelines for further improvement, highlighting some of the strong points of farming systems in sustaining productivity and stability which can be further reinforced in the locale of the study and replicated elsewhere under similar situations. It is expected that this study will have far-reaching implications for the planners, policy makers, administrators, scientists and change agents.

Limitations of the study

The research study in social science has to face some limitations and the present study is no exception of this rule.

As this study forms a part of the doctoral degree programme, the time and other resources at the disposal of the student researcher are limited. These limitations determines the restricted selection of only one district as the locale of the study and also the sample size and therefore, findings have to be viewed in the specific context of the conditions prevailing in the area and cannot, perhaps be generalized for a wider geographical area. However, careful and rigorous procedures have been adopted in carrying out the research as objectively as possible.

CHAPTER II

REVIEW OF LITERATURE

A comprehensive review of literature is an integral part of any investigation. It not only gives an idea on the work done in the past and assists in delineation of problem area, but also provides basis for interpretation and discussion of findings. As on date, literature or empirical evidences on farming systems related to social aspects is rather scarce. However, an effort was made to review the available literature having direct or indirect bearing on the present study. The review is presented under the following heads.

2.1 Profile of the small farmers

2.2 Socio-economic status of the small farmers

2.3 Relationship between selected characteristics and socio-economic status of the small farmers

10.1 Socio-economic profile of small farmers

10.1.1 Age:

Tawade *et al.* (1991) in their study on the intensity of training needs felt by poultry farmers about poultry husbandry, revealed that majority of the poultry farmers were from adult age group, having average age of 46 years.

Kumaran (1994) in his study found that majority (71.66 per cent) of the respondents belonged to middle age group, followed by young age (15.83 per cent) and old age group (12.50 per cent).

Sonawane (1995) carried out a study on the 'Buffalo management practices in Thane district of Maharashtra state' and revealed that 54.67 per cent respondents belonged to the 'middle age' group (35 to 56 years), while 28.00 per cent respondents were of

'young age' group (upto 34 years) and 17.33 per cent respondents belonged to the 'old age' group (57 years and above).

Anonymous (2003) in the study on 'Identification of farming systems and their relation as perceived by farmers in Maharashtra State (Konkan region)'reported that maximum number of the adopters (40.00 per cent) and non-adopters (45.00 per cent) of farming system were of 'middle age'.

Khadse (2003) in his study on 'Economics of various farming systems in the Marathwada region of Maharashtra State'reported that the age of 38.50 per cent of the family members was above 36 years, while 30.84 per cent of the family members were below 18 years. The highest number of family members above 35 years was observed in the crop + sweet orange farming system (43.49 per cent) and the lowest in the crop + local cow farming system (33.93 per cent). The maximum number of family members in the crop + buffalo farming system were in the age group of 18 to 35 years (37.00 per cent) and the minimum in the crop + sweet orange farming system (20.24 per cent).

Anonymous (2004[a]) in the study on 'The Hindu Survey of Indian Agriculture'revealed that majority (66.67 per cent) of the respondents were of 'middle age', followed by 'old age' (26.00 per cent) and 'young age' (24.00 per cent), respectively.

Anonymous (2004[b]) in his study entitled, 'Few aspects of Sahyadri variety growers of Konkan region' reported that majority (64.00 per cent) of the respondents were from 'middle' age category, while remaining respondents were equally distributed in 'young' age (19.00 per cent) and 'old' age (17.00 per cent) category. The average age of the respondents was 48 years.

Hadole (2005) revealed that a majority of the farmers adopting rice based farming system (63.00 per cent) belonged to 'middle' age

category. Average age of farmers adopting rice based farming system was 47.36 years.

Deore (2006) in a study on awareness of farmers regarding organic rice cultivation practices revealed that majority (63.00 percent) of the respondents belonged to 'middle' age category, while 19.00 per cent and 18.00 per cent of the respondents were in 'young' and 'old' age category, respectively.

Krishna *et al.* (2007) observed that majority (55.33 per cent) of the rice growers were in 'middle' age group, while 43.34 per cent and 1.33 per cent of the respondents were in 'old' and 'young' age group respectively.

Tambat (2007) in his study entitled 'knowledge and adoption of recommended cultivation practices by the summer rice growers', revealed that majority (76.00 percent) of the respondents belonged to 'middle' age category, while 17.33 per cent and 6.67 per cent of the respondents were in 'old' and 'young' age category, respectively.

SonaliRanaware (2009) in her study observed that majority (71.67 per cent) of the respondents belonged to 'middle' age category, while 15.00 per cent and 13.33 per cent of the respondents were in 'old' age and 'young' age category, respectively.

Thakur (2011) revealed that majority (81.66 per cent) of the respondents belonged to 'middle' age category, while 9.17 per cent each of them were in old age and young age category.

Thus, in most of the past studies, it was noticed that majority of the respondents belonged to middle age category.

10.1.2 Farming Experience

Gandhi (1993) in his study on the cropping pattern followed and inputs used by the farmers in Konkan region, revealed that 74.44 per cent of the farmers from North Coastal zone and 68.00 per cent from South Konkan coastal zone had 'medium' farming experience. The average farming experience of the North Konkan Coastal zone farmers was nine years and that of the South Konkan Costal zone farmers was 15 years.

Kumaran (1994) reported that majority (65.83 per cent) of the respondents had 'medium' level of farming experience (15-35 years).

Narmatha (1994) reported that almost half of the respondents had 'medium' level of farming experience.

Lakshminarayan (1997) reported that about 34.00 per cent of the farmers had 'low' farming experience. While, 33.50 per cent and 32.50 per cent of the farmers had 'high' to 'medium' farming experience, respectively.

Nagabhushanam (1997) observed that majority (69.00 per cent) of the farmers were marginal with 'medium' level of farming experience of 18-35 years.

Suradkar (2001) observed that majority (65.55 per cent) of the respondents had 'medium' farming experience; while 18.00 per cent of them had 'low' farming experience and 16.50 per cent had 'high' farming experience.

Anonymous (2004[b]) in a study on economic analysis of rice based cropping system in coastal agro-ecosystem of India, reported that 82.00 per cent of the farmers had 'more than 10 years' experience in farming.

Punam Desai (2004) observed that majority (81.00 per cent) of the respondents had 'medium' rice cultivation experience; while 10.00

per cent of them had 'high' rice cultivation experience and 9.00 per cent had 'low' rice cultivation experience.

Bhamre (2008) in his study entitled ' A survey on present status of farm mechanization in north Konkan coastal zone' found that majority (66.00 per cent) of the farmers had 'medium' farming experience, while 19.00 per cent and 15.00 per cent farmers had 'low' and 'high' farming experience respectively.

Prajakta Karandikar (2009) found that 58.18 per cent of the respondents had medium farming experience, while 26.36 per cent of them had 'high' farming experience and 15.46 per cent had 'low' farming experience. The average farming experience of the respondents was 17 years.

Kavita Pichad (2011) in her study revealed that majority of the respondents from Konkan region (70.00 per cent) and Western Maharashtra (63.33 per cent) had 'medium' farming experience, while 18.33 per cent of Konkan and 26.67 per cent of Western Maharashtra respondents had 'high' farming experience. Whereas,11.67 per cent of Konkan respondents and 10.00 percent of Western Maharashtra respondents had 'low' farming experience.

Bite (2012) revealed that majority (65.00 per cent) of the respondents belonged to 'medium' experience category (18 to 45 years), while 19.00 per cent of the respondents had 'high' experience (46 years and above) and 16.00 per cent had 'low' (upto 17 years) farming experience. The average farming experience of the respondents was 31 years.

In most of the earlier studies, the respondents were found to have medium farming experience.

10.1.3 Family Education Status

Kokate (1984) in his study on 'Dairy farming system and technological gap in tribal setting' found that 50.00 per cent of the tribals were having either 'low' or 'no' family education status. Only 17.00 per cent of them had 'high' family education status.

Sinha (1996) revealed that over two-third (71.66 per cent) of the farmers were having 'high' education level.

Nagabhushanam (1997) in his study found that majority of the farmers were educated.

More (2000) in his study on 'Aspirations of tribal women' reported that 17.00 per cent of the tribals were having 'low' education status. While 66.00 per cent were having 'medium' education status and 17.00 per cent had 'high' education status.

Dipali Topare (2006) revealed that majority (67.92 per cent) of the respondents felt under 'medium' family education status category, while 18.65 per cent and 13.43 per cent respondents were belonged to 'low' and 'high' categories of family education status, respectively. The average score of family education status was 1.91 per cent.

Kadam (2006) reported that maximum number of (37.31 per cent) of the mango growers had 'secondary' education, followed by 'graduation' (22.28 per cent). An equal number (19.17 per cent) of the mango growers had 'primary' and 'higher secondary' education. Only 2.07 per cent of the mango growers had 'pre-primary' education. The average educational level of the mango growers was 11th standard.

Monali Sur (2008) observed that majority (72 per cent) of the respondents families were educated 'upto high school' (5th to 10thstd.) followed by 27.33 per cent of the respondents families were educated 'upto primary school' (1st to 4thstd.).

Radha Redij (2009) reported that maximum number (68.67 per cent) of the respondents were in 'medium' category of family education status, followed by 18.66 per cent and 12.67 per cent respondents were in 'low' and 'high' category of family education status, respectively. The average family education status score of the respondents was 7.29.

Bite (2012) reported that majority (78.50 per cent) of the respondents belonged to 'medium' family education status category, while 12.50 per cent were belonged to 'low' family education status and very few respondents (9.00 per cent) belonged to 'high' level of family education status category.

It makes clear from the review that most of the earlier researcher had observed their respondents to be having medium to low family education status.

10.1.4 Cropping Pattern

Gandhi (1993) in his study entitled 'A study of the cropping pattern and inputs used by the farmers in konkan region' in his study reported that, the respondents from South Konkan Coastal zone had 1.33 ha (54.73 per cent) area under cereals, 0.13 ha (5.35 per cent) under pulses, 0.01 ha (0.41 per cent) under oil seeds, 0.04 ha (1.65 per cent) under vegetables and 0.92 ha (37.86 per cent) under fruit crops.

Waghmare (2001) while studying indigenous technological knowledge about fruit crops observed that, majority (80.11 per cent) of the respondents were from 'medium' category, while 11.67 per cent and 8.33 per cent of them were from 'high' and 'low' category of cropping pattern respectively.

Bhamre (2008) concluded that majority (64.00 per cent) of the farmers belonged to 'high' cropping pattern group, while 25.00 per

cent and 11.00 per cent farmers had 'low' and 'medium' cropping pattern respectively.

Dhaygude (2008) observed that more than three-fifth (63.50 per cent) of the farmers had 'medium' cropping pattern, while more than one-fifth (21.00 per cent) had low cropping pattern. The average cropping pattern score of the respondents was 5.10 indicating medium cropping pattern.

Urmila Rajput (2008) revealed that, 78.33 per cent of the respondents had fair cropping pattern, while 14.17 per cent of the respondents had good cropping pattern and only 7.50 per cent of the respondents had poor cropping pattern.

Langote (2009) in their study 'technological gap in respect of dairy management practices' reported that, maximum number (41.67 per cent) of the respondents had 'low' cropping pattern, while 39.16 per cent and 19.17 per cent respondents had ' medium' and 'high' cropping pattern respectively.

Radha Redij (2009) revealed that maximum number (40.00 per cent) of the respondents were from 'high' cropping pattern category, while 30.67 per cent of the respondents were from 'low' cropping pattern category.

Rohini Patil (2011) observed that, majority (63.33 per cent) of the respondents from progressive village had fair cropping pattern, while 36.67 per cent of the respondents had best cropping pattern. Whereas, in non-progressive village, more than half (51.67 per cent) of the respondents had fair cropping pattern and 43.33 per cent of the respondents had poor cropping pattern, while not a single respondent from non-progressive village belonged to best cropping pattern.

The reviews of past researches make it evident that in the majority of the researches the farmers followed medium category of cropping pattern.

10.1.5 Creditworthiness

Yadav *et* al. (2003) in their study entitled 'profile of the borrowers of the agricultural loan' reported that half of the borrowers had borrowed loan for the 'first time'. More than half (53.33 per cent) of the borrowers were 'self-motivated', whereas. 36.67 per cent were motivated by 'Gramsevak' to borrow loan. More than half (52.50 per cent) of the borrowers were 'irregular borrowers' of loan, while 47.50 per cent were 'regular borrowers'. More than half (52.50 per cent) had taken loan 'only once', whereas 12.50 per cent farmers had borrowed loan 'thrice and more'.

Desai (2008) reported that more than three-forth (79.50 per cent) of the beneficiaries had 'medium' creditworthiness, while 13.00 per cent of the beneficiaries has 'high' creditworthiness and 7.50 per cent of beneficiaries had 'low' creditworthiness. The average creditworthiness of the beneficiaries was Rs. 16.70 lakh.

Rupali Sawantmorye (2010) revealed that less than one-half (46.67 per cent) of the respondents had 'medium' creditworthiness, while 31.66 per cent of the respondents had 'low' creditworthiness and 21.67 per cent of the respondents had 'high' creditworthiness. The average creditworthiness of the respondents was Rs. 10.77 lakh.

It can be inferred from the review of past studies that majority of the farmers were having medium creditworthiness.

10.1.6 Risk Orientation

Mane (1990) stated that 67.40 per cent of the beneficiaries had 'low' risk preference and 32.60 per cent of them had 'high' risk preference.

Nirban and Sawant (1990) in their study entitled 'Some socio psychological correlates of risk preference in mango cultivation' observed that majority (64.29 per cent) of the mango growers belonged to 'high' risk bearing category, while others (35.71 per cent) belonged to 'low' risk bearing category.

Kokate and HiraNand (1991) revealed that less than one-half (43.30 per cent) of the respondents had 'medium' risk orientation, whereas 40.10 per cent and 16.60 per cent of the respondents had 'low' and 'high' risk orientation.

Nalband (1993) revealed that one-half of the tribal and non-tribal beneficiaries had 'medium' risk preference. More than one-fourth (25.76 per cent) of the tribal and 30.43 per cent of the non-tribal block beneficiaries had 'high' risk preference, while 24.24 per cent of the tribal and 20.29 per cent of the non-tribal block beneficiaries had 'low' risk preference.

Kumaran (1994) reported that majority (86.66 per cent) of the respondents had ‘medium’ level of risk orientation.

Saravanakumar (1996) found that, the majority (70.00%) of the mango growers of Dharmapuri district were in the medium scientific orientation category followed by low (15.83%) and high (14.17%) category

Anonymous (1998) reported that majority (72.73 per cent) of the respondents had 'medium' risk orientation, 16.36 per cent of the respondents had 'low' risk orientation and 10.91 per cent of the respondents had 'high' risk orientation.

Gupta (1999) observed that, majority (64.00%) of respondents were average risk bearers followed by low (24.67%) and high (11.33%) risk bearers.

Jadhav (1999) revealed that majority (56.00 per cent) of the respondents had 'medium' risk orientation, while more than one-fourth (27.00 per cent) had 'low' risk orientation and 17.00 per cent of the respondents had 'high' risk orientation.

Meeran and Jayaseelan (1999) found that, about three fourth (72.00%) of the shrimp farmers were found to have high level of risk orientation followed by medium (26.00%) and low level (26.00%) of risk orientation.

Natikar (2001) in his study indicated that, the subscriber farmers belonged to high risk orientation category (67.5%) followed by medium risk orientation (16.87%) and low risk orientation (15.63%) categories.

Madhavareddy (2001) indicated that, more than two-third of NGO beneficiaries had low risk orientation (66.7%), high (23.3%) and medium (10%) belong to risk orientation categories respectively.

Palkar *et al.* (2002) observed that two-third (66.67 per cent) of the respondents had 'medium' level of risk orientation, 23.33 per cent of the respondents had 'high' level of risk orientation and one-tenth (10.00 per cent) of the respondents had 'low' level of risk orientation.

Thorat (2003) found that majority (84.00 per cent) of the respondents had 'medium' level of risk orientation, 10.00 per cent of the respondents had 'high' level of risk orientation and only 8.00 per cent of the respondents had 'low' level of risk orientation.

Ninga Reddy (2005) reported that, 56 per cent belonged to medium risk orientation category followed by high 28 per cent and low 19.33 per cent risk orientation categories respectively.

Nejkar (2008) reported that less than half (47.50 per cent) of the respondents had 'medium' risk orientation, while 38.34 per cent and 14.16 per cent of the respondents had 'high' and 'low' risk orientation, respectively.

Todase (2010) revealed that three-fifth (60.00 per cent) of the respondents from Konkan region and 61.33 per cent respondents from Vidarbha region had 'medium' risk orientation. The average risk orientation of the respondents from Konkan region was 13.20 and that of respondents from Vidarbha region was 13.52.

In most of the earlier studies, the respondents were found to have medium category of risk orientation.

10.1.7 Market Orientation

Tapase (1996) found that one-half (55.50 per cent) of the respondents had 'medium' market orientation, while 18.00 per cent and 26.50 per cent of the respondents were having 'low' and 'high' market orientation, respectively.

Ahire (1997) found that majority of the respondents (59.34 per cent) had 'medium' market orientation, while 24.66 per cent had 'high' market orientation. And only 16.00 per cent of the respondents had 'low' market orientation.

Patil (1998) revealed that, majority (59.00 per cent) of the respondents had 'medium' market orientation, while 29.00 per cent and 12.00 per cent of the respondents were having 'high' and 'low' market orientation, respectively.

Manvar (1999) showed that more than one-half of the respondents (51.33 per cent) had ‘medium’ market orientation whereas about one-fifth of them (22.00 per cent) had ‘high’ market orientation. At the same time 26.67 per cent of the respondents had ‘low’ market orientation.

Misal (2002) found that 46.00 per cent of the respondents had 'medium' market orientation, while 29.00 per cent of the respondents had 'low' market orientation and 25.00 per cent of the respondents had 'high' market orientation.

Thorat (2003) observed that nearly one-half (48.00 per cent) of the respondents had 'medium' market orientation, while 34.00 per cent 18.00 per cent of them had 'high' and 'low' market orientation, respectively.

Yadav (2004) observed that nearly three fourth (74.00 per cent) of the beneficiaries had ‘medium’ market orientation. However, only 18.00 per cent and 8.00 per cent of the beneficiaries had ‘low’ and ‘high’ market orientation, respectively. The average market orientation score was 25.05 indicating their ‘medium’ level of market orientation.

Kadam (2006) observed that more than half (55.44 per cent) of the respondents were in the ‘medium’ category, while 22.80 per cent and 21.76 per cent of the respondents were in ‘low’ and ‘high’ category, respectively.

More (2011) observed that nearly two-third (65.33 per cent) of the respondents had ‘medium’ market orientation. However, only 18.67 per cent and 16.00 per cent of the respondents had ‘high’ and ‘low’ market orientation, respectively. The average market orientation score was found to be 14 indicating their ‘medium’ level of market orientation.

It can be said that the respondents of the earlier studies possessed the medium market orientation.

10.1.8 Cosmopoliteness

Shaha *et al.* (1999) observed that more than three-forth (77.00 per cent) of the respondents had 'low' level of cosmopoliteness, 12.00 per cent and 11.00 per cent of the respondents had 'medium' and 'high' level of cosmopoliteness, respectively.

Puri (2003) found that less than two-third (64.00 per cent) of the respondents had 'medium' level of cosmopoliteness, while 24.00 per cent and 12.00 per cent of the respondents had 'high' and 'low' level of cosmopoliteness, respectively. The average cosmopoliteness score of the respondents was 12.64.

Khule *et al.* (2008) observed that majority (68.00 per cent) of the respondents had 'low' degree of cosmopoliteness followed by medium and high degree of cosmopoliteness.

Sawant (2010) reported that majority (64.83 per cent) of the farmers had 'medium' level of cosmopoliteness, followed by 19.31 per cent of the farmers had 'high' level of cosmopoliteness and remaining 15.86 per cent of the farmers had 'low' level of cosmopoliteness. The average cosmopoliteness score of the respondents was 14.6.

Todase (2010) revealed that two-third (66.67 per cent) of the respondents from Konkan region and 62.67 per cent respondents from Vidarbha region had 'high' level of cosmopoliteness. The average cosmopoliteness of the respondents from Konkan region was 16.70 and that of respondents from Vidarbha region was 19.14.

The reviews of earlier studies bring forward the fact that the respondents were differed with regards to their cosmopoliteness.

10.1.9 Attitude towards improved farm practices

Anonymous (2001) in the study entitled 'impact of production technology of selected crops recommended by SAUs in Maharashtra' indicated that 89.34 per cent of the respondents had 'favorable' attitude towards mango production technology, whereas, 6.56 per cent of the respondents had 'neutral' attitude towards mango production technology and 4.10 per cent of the respondents had 'unfavorable' attitude towards mango production technology.

Misal (2002) observed that majority (55.00 per cent) of the respondents had 'neutral' attitude towards use of *paclobutrazol*technology, whereas, 23.00 per cent and 22.00 per cent of the respondents had 'favorable' and 'unfavorable' attitude towards use of *paclobutrazol* technology, respectively.

Monica Singh (2005) found that majority (59.09 per cent) of the respondents had 'neutral' attitude towards use of *paclobutrazol* technology followed by 'favorable' (23.00 per cent) and 'unfavorable' (22.00 per cent) attitude towards use of *paclobutrazol* technology, respectively.

Siddu *et al*. (2009) conducted study in Mandya district selecting 400 farmers from 6 talukas following random sampling procedure. The findings revealed that most of the farmers had favorable attitude towards improved agricultural practices. The psychological factors found positive significant association with farmers' attitude towards the improved agricultural practices were, achievement motivation, perception, economic motivation, knowledge and self-confidence. These significant variables are to be improved among the farmers to bring desired changes in their behavior to enhance the capacity to enable them to increase the crop productivity and their income.

The results of the past studies indicated that the respondents had differential attitude towards variousfarm technologies.

10.2 Socio-economic status of the small farmers

Shinde (1982) reported that a considerable number (44.00 per cent) of the respondents from command area and only 10.00 per cent respondents from control area had 'high' socio-economic status. More than one-fourth (26.00 per cent) of the respondents from control area had 'low' socio-economic status, while only 4.00 per cent of the respondents from command area had 'low' socio-economic status.

Mehta (1983) revealed that majority (65.00 per cent) of the respondents belonged to 'medium' socio-economic status category, whereas 20.50 per cent and 14.50 per cent respondents were having 'low' and 'high' socio-economic status, respectively.

Chawkekar (1984) observed that majority (78.00 per cent) of the mango growers were in 'medium' socio-economic status category, while 14.50 per cent and 7.50 per cent of respondents were having 'high' and 'low' socio-economic status,respectively.

Sawant (1984) reported that majority (72.50 per cent) of the farmers had 'medium' socio-economic status. Remaining 15.00 per cent and 12.50 per cent farmers had 'low' and 'high' socio-economic status, respectively.

Kanherikar (1985) revealed that majority (65.91 per cent) of the tribal farmers were in 'medium' socio-economic status category, 26.82 per cent tribal farmers were in 'low' socio-economic status category and only 7.27 per cent tribal farmers were in the category of 'high' socio-economic status.

Saner (1986) noticed that about 31.00 per cent of farmers had 'low' level of socio-economic status, while 49.00 per cent and 19.00 per cent of them had 'medium' to 'high' level of socio-economic status.

Takate (1987) observed that 42.00 per cent of the respondents belonged to the 'medium' socio-economic status group and slightly more than one-fourth (27.33 per cent) of the respondents belonged to 'low' socio-economic status group.

Dhane (1991) revealed that 55.53 per cent of the respondents belonged to the 'medium' socio-economic status group. Out of the total respondents, 21.34 and 23.33 per cent were in 'high' and 'low' socio-economic status group, respectively.

Dusane (1992) observed that majority (53.64 per cent) of the respondents were in 'medium' socio-economic status category, while 31.28 per cent belonged to 'low' socio-economic status category. Only 15.08 per cent of the respondents had 'high' socio-economic status.

Mhamane (1996) revealed that majority of the respondents (65.50 per cent) belonged to 'medium' socio-economic status category, while 17.50 per cent belonged to 'low' socio-economic status category and 17.00 per cent belonged to 'high' socio-economic status category.

Sawant (1999) reported that four fifth (81.00 per cent) of the respondents were in 'medium' socio-economic status category. Further, 13.00 per cent of the respondents were in 'low' socio-economic status category and only 6.00 per cent of the respondents were in the category of 'high' socio-economic status.

Mai Chand and Sharma (1999) reported that majority (66.00 per cent) of the tribal women had 'low' socio-economic status, 32.00 and 2.00 per cent of tribal women had 'medium' socio-economic status and 'high' socio-economic status, respectively.

Tamilselvi and Somasundaram (1999) concluded that the farm women adopting the wet land farming system had high socio-economic status than the farm women adopting the dry land farming system.

More (2000) reported that majority (65.00 per cent) of the tribal women were in ‘medium’ socio-economic status category. Further, 20.00 per cent of the tribal women were in 'high' socio-economic status category and only 15.00 per cent tribal women were in the 'low' socio-economic status category.

Jadhav (2001) revealed that about four-fifth (79.17 per cent) of the respondents had 'medium' socio-economic status, while only 11.66 per cent of them had 'high' socio-economic status. Remaining 9.17 per cent of them had 'low' socio-economic status.

Bellurkar *et al.* (2003) reported that 70.50 per cent of the rural women involved in dairy and animal husbandry were from 'low' socio-economic status, followed by 'medium' (28.10 per cent) and 'high' (1.40 per cent) socio-economic status.

Hadole (2005) revealed that less than three-fourth (74.00 per cent) each of the farmers adopting rice based farming system, horti based farming system and overall sample had ‘medium’ socio-economic status, 15.00 per cent farmers adopting rice based farming system had ‘lower middle’ socio-economic status, while 14.00 per cent of the farmers adopting horti-based farming system had ‘upper middle’ socio-economic status. Average socio-economic status score of the farmers adopting rice based farming system and horti based farming system was 71.95 and 80.75, respectively.

Dubey *et al.* (2008) revealed that majority of the on campus trainees (43.33 per cent) had medium socio-economic status followed by low socio-economic status (36 per cent) and only 20.67 per cent had higher level of socio-economic status, whereas, in case of on-campus trainees 55.33 per cent had low socio-economic status followed by 42 per cent medium level and only 2.67 per cent had high level of socio-economic status. Thus, it can be concluded that the on-

campus trainees had higher socio-economic status than the off-campus trainees.

Singh *et al.*(2009) reported that majority of farmers belonged to medium socio-economic status (66.0%) followed by 18.0 percent to low socio-economic status, while 16.0 percent farmers posses high score category of socio economic status.

The majority of findings from past studies reviewed in this section lead to conclude that the respondents were having medium socio-economic status.

10.3 Relationship between selected characteristics and socio-economic status of the small farmers

Thakur and Sinha(1989) found that there was a positive and significant relationship of variables namely, education, risk preference, economic motivation and sources of information with socio-economic development of farmers, while age had negative and non-significant relationship with socio-economic development of farmers.

Dusane (1992) revealed that age and education had positive but non-significant correlation with socio-economic status, while positive and significant correlation was noticed between risk preference and socio-economic status of the respondents.

Mhamane (1996) reported that at overall level, the correlation of the characteristic namely, education, risk orientation and scientific orientation with socio-economic status were positive and significant. The variable age had non-significant association with socio-economic status of the respondents.

Bihari *et al.* (1999) revealed that the variable sources of information had positive and significant correlation with socio-

economic status, while the variable risk preference was found to be negatively correlated with the socio-economic status.

Jadhav (2001) reported that age had positive but non-significant association with socio-economic status, while family education and mass media exposure had positive and significant correlation with socio-economic status.

Hadole (2005) revealed that in case of farmers adopting rice based farming system, the characteristics namely, economic motivation, risk orientation, scientific orientation, market orientation, extension contact, sources of information and mass media exposure had positive significant relationship with socio-economic status, while, in case of farmers adopting horti-based farming system, all the characteristics had positive and significant relationship with socio-economic status. At overall level also, all the characteristics had positive and significant relationship with socio-economic status.

Singh *et al.* (2009) reported an attempt on the association between age, education, land holding and socio-economic status with economic motivation. Except education, age, land holding and socio-economic status have been found to have significant association with economic motivation.

Differential relationships were noticed between profile characteristics and socio-economic status of farmers after reviewing the earlier studies.

CHAPTER III

METHODOLOGY

The research methods and techniques used in the present investigation are explained under the following major heads.

3.1 Research design

3.2 Locale of the study

3.3 Description of the study area

3.4 Sampling procedure

3.5 Variables and their empirical measures

3.6 Procedure employed in data collection

3.7 Economic analysis

3.8 Analytical tools

3.9 Operational definitions of important terms

3.1 Research design

The ex-post-facto research design was adopted for this study, since the phenomenon has already started and is continuing.

Ex-post-facto research is the most systematic empirical enquiry, in which the researcher does not have direct control over the independent variables as their manifestation has already occurred or as they are inherent and not manipulatable. Thus, inferences about relations among variables were made without direct intervention from concomitant variation of independent and dependent variables.

3.2 Locale of the study

The research work was conducted in Konkan region of Maharashtra State. Konkan is rich in verdant natural beauty, endowed with a coastline of 720 km and exotic agricultural produce

including mango, cashew and beetel nut. It includes Thane, Raigad, Ratnagiri and Sindhudurg districts, besides Mumbai and Mumbai Suburban District. The ancient land has produced galaxy of veterans from different walks of life. Konkan's beautiful beaches, greenery, world famous Warli art and sea forts attract a steady stream of visitors and tourists. Exciting Konkan Railway route is an engineering marvel. The country's first Atomic Power Plant is at Tarapur in Thane district.

Konkan region has total area of about 30746 sq. kms. administered by twelve subdivision offices (Thane three, Raigad four, Ratnagiri three and Sindhudurg two). This region has fifty talukas (Mumbai Suburban three, Thane fifteen, Raigad fifteen, Ratnagiri nine and Sindhudurg eight).

In this region, 46 small ports, number of ST buses, 45 railway stations, and airport like Chhatrapati Shivaji International Airport (Sahara-Mumbai) and Chhatrapati Shivaji Domestic Airport (Santacruz-Mumbai) are used as means of transport.

As per 2011 census, Konkan has 2,48,07,357 total population in which male population was 1,32,81,860 and female population was 1,15,25,497. Among this population, total literacy percentage was 81.36. Total literates were 1,80,97,558, literate male were 1,04,24,866 and literate females were 96,72,692.

Spoken languages in Konkan are Marathi, Hindi, English, Konkani (Daldi) and Malvani. Folk arts are Koli dance, govinda, adivasi dance, bhajan, keertan, bharud, jakdi, naman, dashaavtaar, chitrakathi, panngu/, gaji (Dhangari).

Total area under irrigation was 4,38,454 hectares and area under horticulture crops was 2,29,896 hectares. Main crops grown in this region were rice, nagli, mango, cashew, coconut, jackfruit, beetle-

nut and spices.

3.3 Description of study area

3.3.1 Location

Raigad district is located between 17°51’ and 19°80’ north latitude and 72°51’ to73°40’ east longitude. Raigad district is surrounded by Sahyadri hills in the east and A*rabi*an sea in the west. It has 240 km coastal length. Raigad district is bounded by Thane district at north, Pune and Satara district at east, Ratnagiri district at south and *Arabian* Sea in west.

Sindhudurg district is situated on the western coast of India and lies between 15°37’ to 16°40’ north latitude and 73°19’ to 74°13’ east longitude. The district has an average east-west spread of about 60 km, except it extremities which tapper to join coastal lines about 100 km

3.3.2 Topography

The topography of the Konkan region is hilly and many villages are situated in remote interior area. The Konkan region is located on the western coast of India.

The Raigad district has geographical area of 7152 Sq. Km. Population is 2.2 million. Average rainfall is 330 cm. Rivers like, Kalu, Patalganga, Amsa, Kundlika, Ghod, Ulhas, Bhogwati, Savitri and Gandhar exist in this district.

The geographical area of Sindhudurg district is 5207 Sq.Km. Population is 1.05 million. Climate is hot and humid. Average rainfall is 300 cm. Rivers like Devgad, Gad, Shuk, Achra, Terekhol, Sahyadri, Kurla, Kalna and Tilari flow in this district.

3.3.3 Soils

The soils of the south Konkan are *lateritic* with bright red colour and are termed as rice soil and *varkas* soil, while the soils of north Konkan are medium black. The pH of the soil ranges from 5.5 to 6.5, which indicates its acidic nature.

a. Raigad District:

The distribution of major soil types as follows:

a) Coarse soil trap (35.00 per cent)

b) Laterite and Lateritic soils (30.00 per cent)

c) Coastal alluvial and coastal saline soils (35.00 per cent)

In Raigad district the sub soil stratum consist of "Deccan Trap" which is completely impervious to percolation, thereby causing an acute shortage of water in summer though it receives rainfall varying from 2000 to 3500 mm. in different parts. On the hill slopes, the soil is reddish which is used for grasses. The shell sands near the coast are suitable for plantation of coconut and areca nut. The reddish brown and coffee brown soils are excellent for paddy cultivation and are capable of producing a second crop.

b. Sindhudurg District:

The soil formation in the district was controlled mainly by climate. Most of the soils were derived from Lateritic rocks. The soils are classified based on physical characteristics into four types viz., Rice soil, Garden soil, Varkas soil and Alluvial soil. The Rice soils are termed as 'Mali soils' when situated in higher levels, 'Kuryat soils' in lower levels and 'Panthar or Vaigam' when situated near water courses. Varkas soils are reddish brown to yellowish red in colour and are situated on hill slopes. These soils are poor in fertility, shallow in depth and coarse in texture. Garden soils are of mixed origin, yellow red to brown in color and are located in the valley portions. These soils

are light, well drained and fairly fertile. Coastal Alluvial soils are recent deposits found along the coastal tracts and constitute deep loam. Due to inundation of sea, part 4 of the coastal soils has become salty. In the Deogad, Malwan and Vengurla talukas practically entire strip is salty.

The maximum soil of Sindhudurg district is lateritic soil with red color. The soils are acidic in nature with Ph ranging in between 5.5 to 6.5.

3.3.4 Climate

The climate of the Konkan is generally warm and humid. Monsoon rains are received usually during the months of June to September. The average annual precipitation is about 3000 mm to 3500 mm. The intensity of rains is high in the month of July. The temperature of the districts varies from 17.0°C to 36.0°C.

3.3.5 Crops

Rice *(Oryza sativa L.)* is the major staple food of the Konkan, followed by Nagli *(Eieusine coracana)* and Vari *(Panicum miliaceum).* These crops are mainly grown in *kharifseason.*

After the harvest of *kharif* rice, the pulse crops namely Wal *(Dolichus abab),* Cowpea *(Vigna unguicuata),* and Mung *(Vigna vadiata)* are grown on residual moisture. Wherever irrigation facilities are available, the short duration crops like, Ground nut (*Arachis hypogaea*), Watermelon (*Citrullus lanatus*) and some more vegetable crops are grown.

Among the horticultural crops, Mango, *(Mangifera indica L.),* Cashew nut *(Anacardium occidentale L.),* Coconut *(Cocus nucifera)* and Arecanut *(Areca catechu)* are the major fruit crops grown.

3.4. Sampling procedure

Sampling is a method of selecting a fraction of the population in such a way that the selected sample represents the population. For selection of sample, four stage sampling method namely, selection of districts, selection of tahsil, selection of villages and selection of respondents was followed.

3.4.1 Selection of districts

The research work was conducted in Raigad and Sindhudurg districts of Konkan region of Maharashtra State. These districts were purposively selected to cover wide area of Konkan region, so Raigad district from south and Sindhudurg from north Konkan were selected.

3.4.2 Selections of tahsils

Considering the variation observed in Konkan region from each district one coastal and one non coastal region Tehsil were selected to study the socio-economic status of small farmers from different locality of Konkan region. Therefore, Vengurla and Vaibhavwadi from Sindhudurg district and Shrivardhan and Karjat from Raigad district were selected purposively.

3.4.3 Selection of villages

A list of villages was prepared with help of Land revenue department and Agricultural Department for each selected tahsil separately. From the list, only those villages, having maximum number of small farmers as well as considering the remoteness of the villages, were considered for sampling. Later, five villages were selected from each of the four tahsils by random sampling method. Thus, 20 villages of Konkan region were selected for the study.

3.4.4 Selection of the respondents

List of the small farmers was prepared and ten farmers were selected by n^{th} number method of random sampling from each village. Thus, the sample was constituted of one hundred farmers from each district and the total sample size was two hundred small farmers.

3.5 Variables and their empirical measures

The methods and techniques used for measuring the independent and dependent variables are explained in this part.

3.5.1 Dependent variable

"Socio-economic status" was the dependent variable for the study.

According to Chapin (1928) socio-economic status is "the position an individual or a family occupies with reference to the prevailing average standard of cultural possession, effective income, material possession and participation in group activity of the community."

It is thus, an important determinant in bringing about change in the outlook of a farmer.

3.5.1.1 Construction and standardization of socio-economic status scale (SES)

Several attempts have been made to prepare socio-economic status scales, both outside and within the country, on the basis of social stratification. The level of income has been used by Taussing (1928) and occupation by Cattle (1942). Among multifarious measuring devices, the scale prepared by Chapin (1928), Shea (1937), Sewell (1940), Lewiss and Dhillon (1955), Freeman (1961), Trivedi (1963), Venkataramaiah (1983), Chorge (1985), Pual Mansingh (1993) are meant for rural families. None of these scales could adequately serve the purpose of appraising the socio-economic status of Konkan

farmers. Hence, the need for new tool was felt. In the present research work, the author has developed a scale which can specifically measure the socio-economic status of rural families in Konkan region.

3.5.1.2 Procedure followed in forming the socio-economic status scale

The procedure for construction and standardization of scale to measure the socio-economic status of the farmer respondents involved following five steps,

3.5.1.2.1. Collection of items

3.5.1.2.2. Selection of items

3.5.1.2.3. Item analysis

3.5.1.2.4. Assigning weightages to the items

3.5.1.2.5. Reliability and validity of the scale

3.5.1.2.1. Collection of Items

The socio-economic status scales developed by the earlier researchers were referred, discussion with the experts in the field of agricultural economics and agricultural extension were held, and list of 23 items was prepared. This list was circulated amongst the academic staff members in the departments of Extension Education and Agricultural Economics of Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli. The experts were requested to give their opinion about the relevancy and inclusion of each of the items, from the point of view of measuring the socio-economic status of the small farmers. The items, that were opined as relevant by majority of the experts were retained.

Accordingly, two items namely ‘details of family members’ and ‘location of farm’ were deleted and twenty-one items have been considered for developing the scale. These are (1) Education (2) Family

(3) Annual income (4) Number of earning members of the family (5)Land holding (6) Ownership of cultivated land (7) Cropping intensity (8) Sources of irrigation (9) Major occupation of family head (10) Employment of labor at farm (11) House (12) Subscription to publications (13) Material possession (14) Farm power, implements and equipments (15) Livestock possession (16) Indebtedness and Loan repayment behavior (17) Special position held (18) Social participation (19) Farm visits/ Exhibitions (20) Personal achievement (21) Marketing pattern

3.5.1.2.2. Selection of Items

Items specifying socio-economic status were collected from various sources using the following criteria used by Trivedi (1963) and Venkataramaiah (1983).

1. The item should be suited to the study area.
2. The item must be objectively observable.
3. The item must be a good indicator of socio-economic status.
4. The item should be measurable.
5. The item should be clear and specific.
6. Duplication of item should be avoided.

The list was prepared consisting 167sub-items. The prepared list of 167 sub-items was mailed to 100 judges. The judges were extension personnel of Agricultural Universities and *Krishi Vigyan Kendras* in Maharashtra, Gujarat, Rajasthan and Karnataka. They were requested to indicate the relevancy and inclusion of and assign rank each sub-item under the respective main item. Only 47 judges responded to the appeal and return this list after completing it in all respects. Further, this information was tabulated. Majority of the judges (95 per cent) have approved this sub-item list except two variables namely details of

family members and location of farm. Hence, these variables were deleted. Mean score of each sub-item was considered.

3.5.1.2.3. Item analysis

For evaluating internal consistency in the scale, inter items correlations were computed. It was assumed that if the main twenty-one items were internally consistent, the remaining once will also be consistent. With this assumption, their values were computed for the main items with the remaining ones. Product moment correlation between economic status and social status was found to be 0.57 at 1 per cent level. It was therefore, decided at this stage, to have a composite scale for socio-economic status. Correlations were also found out between the main items and social and economic status *viz.* economic status and education (0.41), family (0.45), annual income (0.55), number of earning members of the family (0.43), land holding (0.37), Ownership of cultivated land (0.48), cropping intensity (0.48), sources of irrigation (0.67), major occupation (0.40), house (0.36), material possession (0.94), farm power, implements and equipments (0.50), livestock possession (0.34), Indebtness (0.37), subscription to publications (0.58), social participation (0.59), special position (0.36), personal achievements (0.45) and marketing pattern (0.40).

Item analysis data were used for the selection of items. But this was not taken as the final criterion for inclusion of the items in or exclusion from the scale. These were utilized only as an aid to selection. The low discrimination value did not necessarily disqualify an item.

3.5.1.2.4. Assigning weightages to the items

A schedule comprising of the main items and sub-items was distributed among judges, so as to assign scores for the sub-items

under each main item, based on their importance in contributing to the determination of socio-economic status.

The question of giving weightages to various main and sub-items was considered on the basis of mean value. In many earlier scales, arbitrary weightages are given which is not scientific. The scale values for the main and sub-items were obtained by the sum of the weightages of main and sub-items divided by the total score obtainable for relevant items. The scale values were worked out by using the following formula:

$$AM = \frac{\sum wi\ xi}{\sum wi}$$

Where, Wi = Weightage

Xi = Value of variate

3.5.1.2.5. Reliability and validity of the scale

3.5.1.2.5.1. Reliability of the scale

According to Anastasi (1976) reliability refered to the consistency of scores obtained by the individuals when re-examined with test on different occasions, or with different sets of equivalent items, or under other variable examining conditions. Thus, reliability is the accuracy or precision of measuring instrument. In order to determine the reliability of this scale, two types of reliability tests *viz.* Test-retest method and inter-judge reliability were carried out.

3.5.1.2.5.1.1. Test-retest method

This was conducted on 30 farmers selected randomly from different villages not included in study area. The score of each farmer was calculated. The second administration of the scale on the same sample was conducted one month after the first administration to give

a sufficient time gap. The retest correlation coefficient (i.e. product moment correlation coefficient between the two scores) was found to be 0.986.

3.5.1.2.5.1.2. Inter-judge reliability

Inter judge reliability was calculated in order to determine, whether the scale works free of interviewer's bias. This was measured by using the method recommended by Anastasi (1976). In the present study, 30 farmers were interviewed twice. The two sets of sources were compared using the rank order correlation, which was 0.93. This was found to be highly significant.

3.5.1.2.5.2. Validity of the scale

Validity refered to the ability of the instrument to measure what it proposed to measure.

3.5.1.2.5.2.1. Content validity

According to Kerlinger (1973), content validity is the representative- ness or sampling, adequacy of the content, the substance, the matter and the topics measuring instruments. Further, he stated that content validation consisted to essentially judgment, alone or with others. One judges the representativeness of the items. In the present study, the items of the scale were judged by the extension scientists in terms of their relevance in contributing to the determination of socio-economic status. Based on their judgment, the less relevant items were deleted. Therefore, the content validity of the scale was satisfied through experts' judgment.

3.5.1.2.5.2.2. Concurrent validity

Concurrent validity is usually tested by finding out how well the score corresponds to some outside criteria of the variable being

measured. The relationship of scale scores with identifiable groups was used as the criteria for the purpose.

A random sample of 30 persons was taken as the judging group. Each person was asked to name one or more persons, who he thought was of very high socio-economic status and very low socio-economic status. In all, 15 persons with high socio-economic status and 15 persons from lower group in a village were selected. The persons selected in the two groups were interviewed independently and their socio-economic status was measured. In order to judge the significance of difference between two groups, 't' test was employed. The calculated value was 2.14 which were highly significant. Thus, it was concluded that the developed instrument identified the two groups significantly. Therefore, the present scale was considered valid. The scored socio-economic status scale is given in Appendix.

3.5.1.2.6. Categorization of socio-economic status

Socio economic status categorization was done by the interval scaling using mean and standard deviation.

In interval scaling, the mean value of the distribution was taken as the basis and multiples of standard deviation was used for getting desired number of categories on both sides of the mean. The mean value was used as the central point for categorization, as this was found to reflect faithfully the distribution pattern of the sample. Standard deviation was used as the interval unit of measurement. It was decided to have five categories namely high, upper middle, middle, lower middle and low. Considering the mean and standard deviation these categories were formed. The socio-economic status categorization of small farmers by interval scale using mean (132.77) and standard deviation (34.49) is presented as below.

Sl. No.	Category	Socio-economic status (score)
1.	Low (mean – 2 SD)	Upto 63.8
2.	Lower middle (mean – 2 SD to -1 SD)	63.81 to 98.28
3.	Middle (mean – 1 SD)	98.29 to 167.26
4.	Upper middle (mean + 1 to 2 SD)	167.27 to 201.26
5.	High (mean + 2 SD)	201.27 and above

3.5.2 Independent variables

The personal and socio-psychological characteristics of the small farmers were considered as independent variables. The characteristics namely age, farming experience, family education status, cropping pattern, creditworthiness, risk orientation, market orientation, cosmopoliteness and attitude towards improved farm practices were studied. The operational definitions and measurement procedures adopted to quantify these variables are explained below.

3.5.2.1 Age

It referred to chronological age of the small farmers, in completed years, at the time of interview. Respondents were classified into three groups on the basis of mean (48.58) and standard deviation (11.14).

Sl. No.	Category	Age (years)
1.	Young	Upto 37
2.	Middle age	38 to 59
3.	Old	60 and above

3.5.2.2 Farming experience

It referred to the total number of years of experience in farming of the respondent at the time of investigation. By using the formula mean (23.82) ± standard deviation (11.19), three categories of farming experience were formed.

Sl. No.	Farming experience category (years)
1.	Upto 12
2.	13 to 35
3.	36 and above

3.5.2.3 Family Education Status

It referred to the educational status of all the members in a family in the eligible age group for formal education that is excluding the children below six year age. The year of formal education of each eligible family member was scored by one for respective standard completed by each member. The total score thus obtained was divided by the number of eligible family members to get family education status score. The average score for education of family indicated the overall family education status of the respondent.

$$FES = \frac{E_1+E_2+E_3+.... +E_N}{N}$$

Where,

FES = Family education status

$E_1+ E_2+E_3+.....+E_N=$ Sum of standard of education completed by each

family members under formal education

N =Number of family members above six years of age.

Accordingly, the respondents were grouped into three categories considering the mean (5.15) ± standard deviation (1.35).

Sl. No.	Family Education Status category (Score)
1.	Upto 3.8
2.	3.9 to 6.5
3.	6.6 and above

3.5.2.4 Cropping Pattern

It referred to the crops grown by the farmers in *kharif, rabi and* summer season, as well as annual and perennial crops on his/her land. This variable was measured with the help of procedure developed by Nirban (2004). One score was given for the crops grown in each of three seasons, while four score was given for annual crops and five score was given for perennial crops grown by the respondents. Thus, cumulative score was obtained and on the basis of this score, the respondents were categorized into different categories by using mean (7.41) ± S.D. (5.36).

Sl. No.	Cropping pattern category (Score)
1.	Upto 2
2.	3 to 11
3.	12 and above

3.5.2.5 Creditworthiness

It was conceptualized as, 'the equity or the net worth of the borrower, which indicate his net surplus or deficit of the assets'.

For calculating the creditworthiness of the farmer, the value of assets owned by him, so also the liabilities to be paid by him were worked out separately.

Assets: Farmers were requested to state the existing value of the items possessed by them.

Liabilities: The amount to be repaid by the farmers to the other persons/institutions from which they had borrowed in past.

The difference between assets and liabilities indicated the creditworthiness of the farmer. Accordingly, they were grouped into three categories using the mean (1231250.585) and standard deviation (1063789.857).

Sl. No.	Creditworthiness category (Rs.)
1.	Upto 1.99 lakh
2.	2 lakh to 22.99 lakh
3.	above 23 lakh

3.5.2.6 Risk orientation

Risk orientation is the degree to which the respondent is inclined towards risk and uncertainty and has courage to face the problems in farming or business. Risk orientation of the respondents was measured with the help of risk preference scale developed by Supe and Singh (1969). This scale consisted six items and these were scored on a five point continuum. There were four positive items and two

negative items in the scale. Scoring for the positive items were 5 to 'strongly agree', 4 to 'agree', 3 to 'undecided', 2 to 'disagree' and 1 to 'strongly disagree'. For negative item, the reverse order of scoring was followed. Three categories were formed by using the formula mean (11.88) ± standard deviation (2.09).

Sl. No.	Risk orientation category (Score)
1.	Upto 9
2.	10 to 14
3.	15 and above

3.5.2.7 Market orientation

Orientation of the individual towards the marketing system is called as market orientation. Market orientation of the respondent was measured with the help of market orientation scale developed by Samanta (1977). The scale consisted six statements, four were negative and two were positive.

The positive statements were given sore of five for 'strongly agree', four for 'agree', three for 'undecided', two for 'disagree' and one for 'strongly disagree'. Scoring was reverse for negative statements. Scores for all the items were summed up to arrive at the market orientation score of each respondent. Considering mean (11.69) and standard deviation (1.91) they were grouped into three categories.

Sl. No.	Market orientation category (Score)
1.	Upto 10
2.	11 to 14
3.	15 and above

3.5.2.8 Cosmopoliteness

It is operationalised as the degree to which the respondent is oriented to his immediate outside social system. Cosmopoliteness was measured with the help of scale developed by Nandapurkar (1981). The scale consisted of five items, the responses were collected on two point continuum namely 'yes' and 'no' and the score of 1 and 0 was given, respectively. The possible score were summed up as individuals score for cosmopoliteness. On the basis of mean (22.74) and standard deviation (6.49) they were grouped into three categories.

Sl. No.	Cosmopoliteness category (Score)
1.	Upto 16
2.	17 to 29
3.	30 and above

3.5.2.9 Attitude towards improved farm practices

Attitude of the small farmers towards the improved farm practices was measured with the help of attitude scale developed by Rajulachandran (2000). The scale consist 14 statements, eight were positive and six were negative.

The positive statements were given score of five for 'strongly agree' four for 'agree', three for 'undecided', two for 'disagree' and one for 'strongly disagree'. Scoring was reverse for negative statements. Scores for all the items were summed up to arrive at the attitude score of each respondent. Considering mean (45.78) and standard deviation (4.54) they were grouped into three categories.

Sl. No.	Attitude towards improved farm practices category (Score)
1.	Upto 41
2.	42 to 50
3.	51and above

3.5.3 Procedure employed in data collection

The information pertaining to the tools and technique of data collection followed in the present study was furnished in this part.

3.6.1 Construction of interview schedule

Keeping in mind the objectives of the study, an interview schedule was prepared. The schedule was developed in two parts. In the first part, questions related to the profile of small farmers were included.

The second part of the schedule included the questions related to the socio-economic status of the small farmer. While structuring the schedule, attention was given to make the questions simple, self explanatory with clarity, so that the small farmers could understand the same and give responses more accurately.

3.6.2 Pre-testing of interview schedules

The prepared interview schedule was pre-tested with the small farmers other than those selected for the study. This was felt essential to ascertain the suitability of the questions and to know whether the interview schedule can tap proper responses. It was also felt necessary to ascertain that the small farmers could understand the questions fully and give the needed information. Based on the reactions of the small farmers, the schedule was modified by making some

alterations/modifications in the questions. Later, the schedule was finalized and used for the collection of information. The draft of schedules used for collection of data is given in Appendix V.

3.6.3 Collection of data

Personal interview technique was used for collection of data. The small farmers were interviewed in February to March, 2013 as per their convenience at their residence. The interview schedule was checked immediately after the closure of interview for its completion in all respects.

3.7 Analytical tools

The data were compiled and processed and the established parameters like mean, frequencies, percentage and standard deviation were used as per the requirement. Besides this, correlation and regression analysis of the data was carried out according to objectives of the study.

3.7.1 Arithmetic mean (X)

Mean was calculated by summing up all the scores and dividing it by number of respondents. The formula was as under.

$$\bar{X} = \frac{\sum X}{n}$$

Where,

X = Mean

$\sum X$ = Sum of respondent's score

n = Number of respondents

3.7.2 Standard deviation

Standard deviation is a measure of variability calculated around mean. The usual symbol for Standard deviation is Greek letter ·σ (sigma). It was calculated by following formula.

$$= \sqrt{\frac{N \sum x^2 - (\sum x)^2}{N}}$$

σ = Standard deviation

$\sum x^2$ = Sum of squares of 'x' series

$(\sum x)^2$ = Square of summation of 'x' series

N = Number of respondents

3.8.2 Correlation coefficient test

The coefficient of correlation measures the degree of correlation existing between two variables. A good measure of coefficient of correlation is one, which supplies the answer in pure number, independent of the units in which the variables have been expressed and also indicates the direction of correlation. Pearson's correlation coefficients (r) were worked out for assessing the degree of association between the independent variables and socio-economic status of the small farmers in konkan region.

Where,

r = Coefficient of correlation

X = Score of independent variables

Y = Score of dependent variables

$\sum XY$ = Sum of product of ·x· and ·y· series

$\sum X^2$ = Sum of squared ·x· values

$\sum Y^2$ = Sum of squared ·y· values

N = Number of respondents

3.8.3 Regression analysis

Multiple linear regression analysis was carried out to know the effect of selected independent variables on the dependent variables. In the present study, the value of multiple determination (R^2) was worked out to find out the extent of contribution of the selected personal and socio-psychological characteristics of the farmers and total sample in their socio-economic status.

$$Y = a+b_1X_1+b_2X_2.....b_nX_n$$

Where,

y = Dependent variable

$X_1....X_n$ = Independent variables

a = Intercept

$b_1...b_2$ = The partial regression coefficient for the respective value

R^2 = Coefficient of multiple determination

Further, the data were subjected to step down analysis for knowing the most significant independent variables responsible for variation in the dependent variables.

3.9 Operational definitions of important terms

3.9.1 Socio-economic status

The position occupied by an individual or family with reference to the prevailing average standard of cultural possession and participation in group activities of the community.

3.9.2 Age

It refers to chronological age of the farmers, in completed years, at the time of interview.

3.9.3 Farming experience

The number of years actually spent in cultivation of crop by the respondents was treated as his farming experience.

3.9.4 Family Education Status

It refers to the educational status of all the members in a family in the eligible age group for formal education that is excluding the children below six year age.

3.9.5 Cropping Pattern

It referred to the crops grown by the farmers in *kharif, rabi and* summer season, as well as annual and perennial crops on his/her land.

3.9.6 Creditworthiness

It was conceptualized as, 'the equity or the net worth of the borrower, which indicate his net surplus or deficit of the assets'.

3.9.7 Risk orientation:

Risk orientation was the degree to which the respondent was inclined towards risk and uncertainty and had courage to face the problems in farming or business.

3.9.8 Market orientation

Orientation of the individual towards marketing system was called as market orientation.

3.9.9 Cosmopoliteness

It is operationalised as the degree to which the respondent is oriented to his immediate outside social system.

3.9.10 Attitude towards improved farm practices

It referred as an attitude of farmer whether positive or negative towards the improved and modern farm practices regarding their acceptance.

CHAPTER IV

RESULTS AND DISCUSSION

This chapter deals with the entire result and discussion of the present investigation. The information pertaining to this study was collected from the small farmers personally by means of interview, with the help of structured schedules. The data thus collected were classified, tabulated and analyzed in the light of the objectives of the study.

The facts and findings derived after analyzing the information are presented and discussed under the following main heads.

4.1 Socio-economic status of the small farmers in Konkan region

4.2 Profile of the small farmers in Konkan region

4.3 Relationship between selected characteristics of the small farmers and their socio-economic status

4.1 Socio-economic status of the small farmers of Konkan region

Socio-economic status of the small farmers was measured with the help of a specially developed scale. On the basis of the total score obtained by the small farmers, they were classified into five categories as shown in Table 1.

4.1. Socio-economic status

Table 1 Distribution of the respondents according to their socio-economic status (n = 200)

Sl.No.	Category (Score)	Number	Per cent
1.	Low	1	0.50
2.	Lower middle	50	25.00
3.	Middle	115	57.50
4.	Upper middle	24	12.00
5.	High	10	5.00
Total :		200	100.00
Minimum Score:63.25 Maximum score:272.00			

More than fifty per cent (57.50 per cent) of the respondents had 'middle' socio-economic status followed by 'lower middle' (25.00 per cent) socio-economic status and 12 per cent of respondents had 'upper middle' socio-economic status. While, only 5 percent of the respondents had 'high' socio-economic status and negligible (0.5 per cent) percent of the respondents had 'low' socio-economic status, respectively. It meant that most of the small farmers had lower middle to upper-middle socio-economic status.

It was hypothesized in the present study, that socio-economic status of the small farmers is low. This hypothesis is rejected looking to the observations made in the present study.

The findings of the present study are similar to the findings of Chawkekar (1984), Dhane (1991), More (2000) and Jadhav (2001). However, these results are different than those reported by Shinde (1982), Mai Chand and Sharma (1999),Bellurkar*et al.* (2003) and Hadole (2005).

4.2 Profile of the small farmers of Konkan region

In the present study, the profile of the small farmers was made in the context of selected personal and socio-psychological characteristics. The findings in this regard are presented as follows.

4.2.1. Age

Age denotes the chronologically completed calendar years by the respondents. Physical and psychological development of an individual is related to his/her age. Age influences behavior of an individual by exposing to varied situations for a number of times. Therefore, the age of the small farmers was considered as an essential aspect in the study.

The data collected from the respondents about this aspect are depicted in Table 2.

Table 2 Distribution of the respondents according to their age

(n=200)

Category	Low SES	Lower-middle SES	Middle SES	Upper middle SES	High SES	Overall Level
Young	-	6 (12.00)	21 (18.26)	2 (8.33)	-	29 (14.50)
Middle	1 (100.00)	31 (62.00)	68 (59.14)	19 (79.17)	10 (100.00)	129 (64.50)
Old	-	13 (26.00)	26 (22.60)	3 (12.5)	-	42 (21.00)
Total	1 (100.00)	50 (100.00)	115 (100.00)	24 (100.00)	10 (100.00)	200 (100.00)
Minimum age: 24				Maximum age:80		

The data depicted in Table 2 shows that majority of the respondents of all the categories of socio-economic status belonged to ‘middle’ age group followed by ‘old’ age group.

Majority of the (64.50per cent) respondents were found in the 'middle' age group followed by 'old'age group (21.00per cent) and only 14.50 per cent were followed in 'young' age group.

From the above finding, it could be inferred that great majority (85.50per cent) of the respondents were between middle to old age group. The probable reason might be that youngsters now migrated from agricultural operations and laborious works to the other occupations and from rural areas to the urban areas. Middle groups were actively engaged in labour work and being responsible for performing a variety of tasks.

The findings of the study are supported by Tambat (2007), SonaliRanaware (2009) and Thakur (2011).

4.2.2. Farming experience

The data pertaining to farming experience of the small farmers are presented in Table 3.

Table 3 Distribution of the respondents according to their farming experience(n=200)

Category (Years)	Low SES	Lower-middle SES	Middle SES	Upper middle SES	High SES	Overall Level
Up to 12	1 (100.00)	5 (10.00)	21 (18.26)	2 (8.33)	1 (10.00)	30 (15.00)
13 to 35	-	38 (76.00)	74 (64.35)	18 (75.00)	7 (70.00)	137 (68.50)
36 and above	-	7 (14.00)	20 (17.39)	4 (16.67)	2 (20.00)	33 (16.50)
Total	1 (100.00)	50 (100.00)	115 (100.00)	24 (100.00)	10 (100.00)	200 (100.00)
Minimum Experience:2			Maximum Experience:60			

The results in Table 3 showed that from all the SES categories majority of the respondents had farming experience ranging from '13

to 35 years' followed by '36 years and above' and up to 12 years respectively.

Majority (68.50 per cent) of the small farmers had farming experience between '13 to 35 years'. Less than one-fifth (16.50 per cent) of the farmers had 'above 36 years' of farming experience, while only 15.00 per cent of the small farmers had farming experience'upto 12 years'. The mean farming experience score of the small farmers was 23.83years. This might be due to the fact that the youngmembers from small farmer's familywere migrated to urban areas and elders doing farming from years to years who had the middle to high farming experience.

The findings of the present study are in conformity with the results obtained by Patil (1986), Gandhi (1993), Kumaran (1994) and Narmatha (1994).

4.2.3. Family Education Status

The results regarding family education status of the small farmers are presented in Table 4.

Table 4 Distribution of the respondents according to their family education status (n=200)

Category (Score)	Low SES	Lower-middle SES	Middle SES	Upper middle SES	High SES	Overall Level
Up to 3.8	-	15 (30.00)	27 (23.48)	1 (4.17)	-	43 (21.50)
3.9 to 6.5	1 (100.00)	30 (60.00)	69 (60.00)	13 (54.17)	6 (60.00)	119 (59.50)
6.6 and above	-	5 (10.00)	19 (16.52)	10 (41.66)	4 (40.00)	38 (19.00)
Total	1 (100.00)	50 (100.00)	115 (100.00)	24 (100.00)	10 (100.00)	200 (100.00)
Minimum Score:2				Maximum score:8.66		

The results from Table 4 pertained that the family education status of sixty per cent respondents from lower middle and middle category were found between '3.9 to 6.5' followed by education status 'up to 3.8'. While, more than half of respondents from upper middle and high category had family education status between '3.9 to 6.5' followed by education status '6.6 and above'.

Slightly less than sixty per cent of the respondent's family scored between '3.9 to 6.5' education status, while 21.50 per cent respondent's family belonged 'upto3.8' family education status score and 19.00 per cent of respondent's family had scored '6.6 and above'in education status. The probable reason might be the tendency of peoples of Konkan region to migrate to near metro cities after 12th and 10th class for searching jobs. It might be due to the average of educational standard calculated from all family members residing in villages.

The findings of the present study are similar to the findings of Dipali Topare (2006) and Radha Redij (2009).

4.2.4. Cropping Pattern

The data regarding cropping pattern of the small farmers are given in Table 5.

The data in Table 5 revealed that more than half of the respondents from lower middle (50.00 per cent), middle (54.78 per cent), and upper middle (58.34 per cent) status category scored cropping pattern between '3 to 11'. While, majority (60.00 per cent) of the high status respondents had scored '12 and above' in cropping pattern.

Table 5Distribution of the respondents according to their cropping pattern (n=200)

Category (Score)	Low SES	Lower-middle SES	Middle SES	Upper middle SES	High SES	Overall Level
Up to 2	1 (100.00)	21 (42.00)	30 (26.08)	2 (8.33)	-	54 (27.00)
3 to 11	-	25 (50.00)	63 (54.78)	14 (58.34)	4 (40.00)	106 (53.00)
12 and above	-	4 (8.00)	22 (19.14)	8 (33.33)	6 (60.00)	40 (20.00)
Total	1 (100.00)	50 (100.00)	115 (100.00)	24 (100.00)	10 (100.00)	200 (100.00)
Minimum Score:1			Maximum score:22			

More than one half (53.00 per cent) respondents had scored '3 to 11' for cropping pattern followed by 27.00 percent and 20.00 per cent respondents had scored 'up to 2' and '12 and above' for cropping pattern respectively. The probable reason might be that majority of the farming felt under rainfed farming. Rice is the mono-crop followed by majority of the small and marginal farmers in Konkan region.

The findings of the present study are similar to the findings of Dhaygude (2008).

4.2.5. Creditworthiness

Creditworthiness may be defined as eligibility of an individual or firm to borrowmoney. It is nothing but the ability of a farmer to borrowmoney. The better one's creditworthiness, the more likely it is that a bank or other financial institution will extend credit. One establishes creditworthiness by repayingloans and other bills on time, spending prudently, and generally showing that one can behave in a financially responsible way.

The observations in respect of creditworthiness of the small farmers are presented in Table 6.

Table 6 Distribution of the respondents according to their creditworthiness (n=200)

Category (Score)	Low SES	Lower-middle SES	Middle SES	Upper middle SES	High SES	Overall Level
Up to 1.99 lakh	1 (100.00)	2 (4.00)	2 (1.74)	-	-	5 (2.50)
2 to 22.99 lakh	-	48 (96.00)	100 (86.96)	15 (62.50)	4 (40.00)	167 (83.50)
23 lakhs and above	-	-	13 (11.30)	9 (37.50)	6 (60.00)	28 (14.00)
Total	1 (100.00)	50 (100.00)	115 (100.00)	24 (100.00)	10 (100.00)	200 (100.00)
Minimum Score:1.66 lakh Maximum score:58.74 lakh						

The data presented in Table 6 clearly showsthat high majority of the respondents from lower middle (96.00 per cent) and middle (86.96 per cent) socio-economic status category had creditworthiness ranging between '2 lakh to 22.99 lakh'. On the other hand, three-fifth of the high socio-economic status respondents had creditworthiness '23 lakh and above'.

It is observed from findings that high majority of the respondents (83.50 per cent) had creditworthiness between '2 to 22.99 lakh', while 14.00 per cent of the respondents had creditworthiness '23 lakh and above' and only 2.50 per cent of respondents had creditworthiness'up to 1.99 lakh'. The average creditworthiness of small farmers was Rs.12.31lakhs.

It meant that most of the small farmers had medium creditworthiness. It might be due to having small land holding and less assets by the farmers. It might have direct and inverse effect on the socio-economic status of small farmers.

The results of the present investigation are consistent with the results obtained by Naikwadi (1985), Yadav *et al.* (2003) and Desai (2008).

4.2.6. Risk orientation

The results in respect to risk orientation of the small farmers are presented in Table 7.

Table 7 Distribution of the respondents according to their risk orientation (n=200)

Category (Score)	Low SES	Lower-middle SES	Middle SES	Upper middle SES	High SES	Overall Level
Up to 9	-	11 (22.00)	7 (6.09)	-	1 (10.00)	19 (9.50)
10 to 14	1 (100.00)	37 (74.00)	96 (83.47)	20 (83.33)	2 (20.00)	156 (78.00)
15 and above	-	2 (4.00)	12 (10.44)	4 (16.67)	7 (70.00)	25 (12.50)
Total	1 (100.00)	50 (100.00)	115 (100.00)	24 (100.00)	10 (100.00)	200 (100.00)
Minimum Score:3					Maximum score:17	

The result showed that majority of the respondents from lower middle (74.00 per cent), middle (83.47 per cent) and upper middle (83.33 per cent) socio-economic status categories had risk orientation between '10 to 14', while the risk orientation of majority of high status (70.00 per cent) respondents were '15 and above'.

More than three-forth (78.00 per cent) of the small farmers scored '10 to 14' in risk orientation followed by 12.50 per cent of small farmers had scored '15 and above' in risk orientation and 9.50 per cent of small farmers scored 'upto 9' in risk orientation respectively. The probable reason might be that the small farmers willing to take risk only if they had assurance of making profit.

The results of the present investigation are in conformity with the results obtained by Anonymous (1998) and Jadhav (1999).

4.2.7. Market orientation

The results regarding market orientation of the small farmers are given in Table 8.

Table 8 Distribution of the respondents according to their market orientation (n=200)

Category (Score)	Low SES	Lower-middle SES	Middle SES	Upper middle SES	High SES	Overall Level
Up to 10	-	11 (22.00)	39 (33.92)	9 (37.50)	-	59 (29.50)
11 to 14	1 (100.00)	32 (64.00)	72 (62.60)	8 (33.33)	10 (100 .00)	123 (61.50)
15 and above	-	7 (14.00)	4 (3.48)	7 (29.17)	-	18 (9.00)
Total	1 (100.00)	50 (100.00)	115 (100.00)	24 (100.00)	10 (100.00)	200 (100.00)
Minimum Score:8					Maximum score:16	

Market orientation showed the variation in each category of socio-economic status. More than sixty per cent of respondents from lower middle (64.00 per cent) and middle (62.60 per cent) category and all the respondents of high category had market orientation score between '11 to 14'.

It is observed that more than three-fifth (61.50 per cent) of the small farmers had scored '11 to 14' for market orientation, followed by score 'upto 10' (29.50 per cent) and '15 and above' (9.00 per cent) of market orientation respectively. However this might be due to the availability of marketable surplus and accessibility to the big markets like Mumbai and Pune for horticultural produce of the small farmers.

The results of the present investigation are consistent with the results obtained by Kadam (2006) and More (2011).

4.2.8.Cosmopoliteness

The data pertaining to cosmopoliteness of the small farmers are presented in Table 9.

Table 9 Distribution of the respondents according to their Cosmopoliteness (n=200)

Category (Score)	Low SES	Lower-middle SES	Middle SES	Upper middle SES	High SES	Overall Level
Up to 16	-	16 (32.00)	19 (16.52)	-	-	35 (17.50)
17 to 29	-	33 (66.00)	86 (74.78)	15 (62.50)	4 (40.00)	138 (69.00)
30 and above	1 (100.00)	1 (2.00)	10 (8.70)	9 (37.50)	6 (60.00)	27 (13.50)
Total	1 (100.00)	50 (100.00)	115 (100.00)	24 (100.00)	10 (100.00)	200 (100.00)
Minimum Score:9					Maximum score:38	

The data in Table 9 revealed that majority of the respondents from lower middle (66.00 per cent), middle (74.78 per cent) and upper middle (62.50 per cent) socio-economic status categories had cosmopoliteness score in between '17 to 29'. While, sixty per cent of

the high category respondents had scored '30 and above' in cosmopoliteness.

Majority of the respondents (69.00 per cent) had cosmopoliteness score in between '17 to 29' followed by 17.50 per cent of respondents had 'up to 16' score of cosmopoliteness and 13.50 per cent of respondents had '30 and above' score for cosmopoliteness respectively. The probable reason might be that awareness of the small farmers regarding different sources of information as well as availability of transport facilities at village level.

The results of the present investigation are consistent with the results obtained by Puri (2003) and Sawant (2010).

4.2.9. Attitude towards improved farm practices

The data pertaining to attitude of the small farmers towards improved farm practices are presented in Table 10.

Table 10 Distribution of the respondents according to their attitude towards improved farm practices (n=200)

Category (Score)	Low SES	Lower-middle SES	Middle SES	Upper middle SES	High SES	Overall Level
Up to 41	1 (100.00)	12 (24.00)	13 (11.30)	-	-	26 (13.00)
42 to 50	-	38 (76.00)	90 (78.26)	13 (54.17)	5 (50.00)	146 (73.00)
51 and above	-	-	12 (10.44)	11 (45.83)	5 (50.00)	28 (14.00)
Total	1 (100.00)	50 (100.00)	115 (100.00)	24 (100.00)	10 (100.00)	200 (100.00)
Minimum Score:34					Maximum score:56	

More than three-forth of the respondents from lower middle (76.00 per cent) and middle (78.26 per cent) socio-economic status categories had scored ’42 to 50’ regarding their attitude towards improved farm practices. More than half (54.17 per cent) of the respondents of upper middle category also scored ’42 to 50’ closely followed by (45.83 per cent) score ’51 and above’. And exactly same i.e. fifty per cent of the respondents of high category had scored ’51 and above’ and fifty percent had scored ’42 to 50’ in attitude towards improved farm practices.

Slightly less than three-fourth (73.00 per cent) of the respondents had scored in between ‘42 to 50’ for attitude towards improved farm practices followed by quite similar 14.00 per cent and 13.00 per cent of respondents felt into score categoryof ‘51 and above’ and ‘up to 41’for attitude towards improved farm practices respectively. The probable reason might be the sources of information *like* Television, radio, newspapers created awareness regarding improved technology among small farmers.

The findings of the present study are similar to the findings of Siddu and Prakash (2009).

The socio-economic category ‘low’ had only one respondent (0.50 per cent) who had ‘middle age’, farming experience ‘upto 12 years’, family education status between ‘3.9 to 6.5’, low cropping pattern ‘upto 2’ score, creditworthiness ‘upto1.99 lakh’, risk orientation score between ‘10 to 14’, market orientation score ‘11 to 14’, had cosmopoliteness between ‘17 to 29’ and scored ‘upto 41’ in attitude towards improved farm practices. This respondent felt in the category of below poverty line (BPL) as per Govt. policy.

4.3 Relationship between selected characteristics of the small farmers and their socio-economic status

4.3.1 Correlation analysis

The personal and socio-psychological characteristics of the small farmers were considered as the independent variables, while socio-economic status was the dependent variable in the present study. Pearson's correlation coefficients (r) were worked out to find out the degree of relationship between each of the independent variables and dependent variable. The findings pertaining to this aspect are presented in Table 11.

Table 11. Correlation coefficients between characteristics of small farmers and their socio-economic status

Sl. No.	Socio-economic status	Correlation coefficients (r)
1.	Age (X_1)	-0.02765 NS
2.	Farming Experience (X_2)	0.047428 NS
3.	Family Education Status (X_3)	0.310178**
4.	Cropping Pattern (X_4)	0.380268**
5.	Creditworthiness (X_9)	0.559348**
6.	Risk orientation (X_6)	0.495518**
7.	Market orientation (X_7)	0.171203*
8.	Cosmopoliteness (X_8)	0.407162**
9.	Attitude towards improved farm practices (X_9)	0.523599**

NS: Non-significant, *,** : Significant at 0.05 and 0.01 level of probability, respectively

The relationships shown in Table 20 are explained and interpreted hereunder.

4.3.1.1 Age and socio-economic status

The correlation coefficient of age with socio-economic status of small farmers (r = -0.02765) was negative and non significant. It meant that there was nostatistical significant relationship between age and socio-economic status of the small farmers. In other words it can be said that age don't influence the socio-economic status of the small farmers. The non significant relation may suggest that most of the farmers followed farming as a tradition coming from their elders, not considered as an enterprise to make profit.

The findings of the present study are in conformity with the results obtained by Mhamane (1996) and Jadhav (2001). However, the findings are dissimilar to the findings of the study conducted by Hadole (2005).

4.3.1.2 Farming experience and socio-economic status

The relationship between the socio-economic status and farming experience was non-significant for farmers (r = 0.047428). It could be inferred from these findings that farming experience had least bearing on the socio-economic status of the small farmers.

The non-significant relationship suggested that the small farmers having varied farming experience might have been more or less equally distributed in the all categories of socio-economic status. The reason for this might be found in the nature of crops grown by the small farmers. Rice being a non- remunerative crop, the small farmers adopting the farming based on it, might not have been able to accrued

the returns sufficient to elevate their socio-economic status, irrespective of the length of their experience in farming.

The findings of the present study are in conformity with the results obtained by Hadole (2005).

4.3.1.3 Family education status and socio-economic status

The coefficient of correlation of education with socio-economic status of small farmers (r = 0.310178) was positive and highly significant at 0.01 level of probability. Conclusion could be drawn from these findings that as the educational level of the farmers families increased, their socio-economic status also increased significantly. Education widens the horizons of knowledge of an individual. An educated person could understand and comprehend the issues in a better manner than the less educated or uneducated person. This helps him in rationally thinking of the merits and demerits of a particular subject, event or programme. Hence, a significant relationship might have been observed.

The findings of the study are similar to the findings of Thakur and Sinha (1989), Mhamane (1996) and Jadhav (2001).

4.3.1.4 Cropping Pattern and socio-economic status

There was a positive and significant relationship between cropping system and socio-economic status of the small farmers (r = 0.380268). It meant, as the cropping system increased, their socio-economic status also improved remarkably. More crops cultivated in a season or year give more return to farmers and reduces risk in price uncertainty.

The findings of the present study are in conformity with the results obtained by Hadole (2005).

4.3.1.5 Creditworthiness and socio-economic status

The correlation coefficients of creditworthiness with socio-economic status were positive and highly significant at 0.01 level for the small farmers(r = 0.559348). This implied that creditworthiness of the small farmers had substantial influence on their socio-economic status. Creditworthiness shows the wealth and power of farmers and increases the risk bearing ability of the farmers to make profit from new experiments.

4.3.1.6 Risk orientation and socio-economic status

The correlation coefficient of risk orientation with socio-economic status was positive and significant at 0.05 level of probability for the small farmers (r=0.495518). This implied that risk orientation of the small farmers had substantial influence on their socio-economic status.

The risk orientation is the degree to which the farmers areinclined towards risk and uncertainty and have courage to face the problems in farming. The farmers who preferred more risk, are likely to get more returns resulted in improving their status.

The findings of the present study are similar to the findings of Thakur and Sinha (1989), Dusane (1992) and Mhamane (1996). However, the findings are dissimilar with the findings of Bihari *et al.* (1999).

4.3.1.7 Market orientation and socio-economic status

There was a positive and significant relationship between market orientation and socio-economic status of the small farmers (r = 0. 171203). It meant, as the market orientation of the farmers increased, their socio-economic status also improved remarkably.

Market orientation is the inclination of an individual towards marketing of the farm produce. What to produce and how to produce

in the field is one thing, and what to sale and how to sale is the another thing. The farmer is always confronted with these two situations. Farmers must know the prevailing marketing systems at their situations. This helps them to get more returns from the marketed inputs. Thus small farmers with higher market orientation could improve their socio-economic status.

The findings of the present study are similar to the findings of Hadole (2005).

4.3.1.8 Cosmopoliteness and socio-economic status

A positive and significant relationship at 0.05 level was observed between cosmopoliteness and socio-economic status of the small farmers (r = 407162). Inferences can be drawn from these results that cosmopoliteness of the small farmers had significant influence on their socio-economic status.

The information available at the village or outside the village might have helped the small farmers to improve their farming and allied enterprises. The different methods such as trainings, fairs, exhibitions etc. provided the knowledge to the farmers regarding the current happenings in agriculture and allied enterprises. This proved helpful in getting more returns from their farms and enterprises. Due to this, the farmers utilizing more sources of information might have better socio-economic status.

The findings of the present investigation are in conformity with the results obtained by Thakur and Sinha (1989) and Bihari*et al.*(1999).

4.3.1.9 Attitude towards improved farm practices and socio-economic status of the small farmers

A positive and significant relationship at 0.01 level was observed between attitude towards improved farm practicesand socio-economic status of the small farmers (r = 523599). Inferences could be drawn from these results that attitude of the small farmers towards improved farming had significant influence on their socio-economic status.Positive attitude towards new technology permits use of new techniques and trials in farmer's field give more chances to make profit and improve the socio-economic status of small farmers.

The findings of the present study are similar to the findings of Siddu*et al.* (2009).

4.3.2 Stepdown regression analysis of independent variables with socio-economic status of the farmers

Stepdown regression analysis was carried out to know the contribution of selected independent variables in the dependent variable and the observations are presented in Table 12.

Table12Stepdown regression analysis of independent variables with socio-economic status of small farmers

Characteristics	Reg. Coeff.	Standard Error
Age (X_1)	0.0080	0.3777
Farming Experience (X_2)	0.0070	0.3708
Cropping Pattern (X_4)	0.0723	0.36972
Creditworthiness (X_5)	0.3129	0.00000195
Risk orientation (X_6)	0.0302	0.98268
Cosmopoliteness (X_8)	0.5848	0.31361
Attitude towards improved farm practices (X_9)	0.1489	0.42676
Coefficient of determination (R^2)		**0.5848**

For predicting the independent variables influencing the socio-economic status of the respondents, nine independent variables were selected for regression analysis. Only two variables i.e. family education status and market orientation were non-significant to socio-economic status of small farmers and all other seven variables were significantly affecting the socio-economic status of the small farmers. In the final step, Cosmopoliteness contributed more than fifty per cent in the socio-economic status and creditworthiness contributed 31.00 per cent in the variations of socio-economic status of small farmers followed by attitude of small farmers towards improved farm practices which contributed 14.00 percent to socio-economic status and cropping pattern contributed 7.00 per cent in socio-economic status of small farmers. Risk orientation contributed about 3.00 per cent and remaining other variables contributed near about one per cent to the socio-economic status of the small farmers. Coefficient of determination (R^2) was 0.5848 which meant that the contribution of these seven variables in the socio-economic status of the small farmers was 58.00 per cent.

The cosmopoliteness of the small farmers keeps them up to date to the new information regarding researches and technologies in agriculture as well as regarding different schemes and subsidies for the small and marginal farmers. Creditworthiness which showed the strength of small farmers that affected the status strongly. Creditworthiness is the power of farmers makes him capable for taking new risks and follows new technology in modern agriculture. SES was also affected by attitude of small farmers towards improved farm practices which brings them to a progressive path. The small farmers using improved methods on their farms got more returns than those not using improved methods. The improved farm practicesmight have

also reduced the costs on excess use of the inputs such as seeds, fertilizers and pesticides by the small farmers.

CHAPTER V

SUMMARY AND CONCLUSIONS

The importance of agriculture sector in the economy may be seen from the fact that it contributes nearly two-third of national income and offers employment to about 70 per cent of the working population. The pressure exerted by the ever increasing occupancy of land due to growing population had further reduced the per capita available land to 0.15 hectare. Small- holder farmers are vital for India's agriculture and rural economy. Small-holder farmers defined as those marginal and sub-marginal farm households that own or/and cultivate less than 2.0 hectares of land - constitute about 78 per cent of the country's farmers. These small-holders owned only 33 per cent of the total cultivated land; their contribution to national grain production was 41 per cent. Their contribution to household food security and poverty alleviation is thus dis-proportionately high and is increasing. Moreover, as the national population increases, so does the number of small-holdings. Moreover, their marketable surpluses are increasing. In the nation's food-security interest, such increase must be sustained. Those features notwithstanding, small- holder families, together with the families of land- less agricultural workers, constitute the bulk of India's hungry and poor. The income received from agriculture by the small farmer is of seasonal nature and is not enough to maintain the farm family.

Socioeconomic status (SES) is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation. When analyzing a family's SES, the household income, farmers' education, and occupation are examined, as well as combined income, versus with an

individual, when their own attributes are assessed. With this view, the study was undertaken on socio-economic status of the small farmers of Konkan region with the following specific objectives

1. To study the profile of small farmers.
2. To develop a scale to measure socio-economic status of small farmers.
3. To know the Socio-economic status of small farmers.
4. To find out the relationship between personal, socio-economic and communication variables of small farmers with their socio-economic status.

An ex-post-facto research design was used for the present study. Considering the variation observed in Konkan region from each district one coastal and one hilly region Tahsil were selected to study status of small farmers from different locality of Konkan region. Therefore, Vengurle and Vaibhavwadi tahsils from Sindhudurg district and Shrivardhan and Karjat taken from Raigad district were selected purposively. Fifty small farmers from five villages in each tahsil were selected by n^{th} number method of random sampling, making a sample of 200 small farmers. The data were collected with the help of specially designed interview schedule. Personal interview technique was used for data collection. The nine personal and socio-psychological characteristics namely, age, farming experience, family education status, cropping pattern, creditworthiness, risk orientation, market orientation, cosmopoliteness and attitude toward improved farm practices were considered as independent variables, while socio-economic status of small farmers was the dependent variable for the present study. The selected characteristics were quantified by assigning scores. For measuring the socio-economic status of the farmers, a scale consisting 152 sub-items, grouped under twenty-one

main items was specially developed. On the basis of score obtained, the small farmers were grouped into suitable categories by using mean and standard deviation as a measure of check. Correlation analysis and regression analysis were done to meet the needs of the study. The data were presented in tabular and graphic forms.

5.1 Findings

The findings of the study, in the light of objectives set forth, are summarized hereunder.

5.1.1 Socio-economic status of the small farmers in Konkan region

More than fifty per cent (57.50 per cent) of the small farmers had 'middle' socio-economic status followed by 'lower middle' (25.00 per cent) socio-economic status and 12.00 per cent of small farmers had 'upper middle' socio-economic status. While, only 5.00 percent of the small farmers had 'high' socio-economic status and negligible (0.5 per cent) percent of the small farmers had 'low' socio-economic status, respectively. It meant that most of the small farmers had lower middle to upper-middle socio-economic status.

5.1.2 Profile of the small farmers in Konkan region

Socio-economic status category wise result shows that majority of the small farmers of all the categories of socio-economic status belonged to 'middle' age group followed by 'old' age group. In overall majority (64.50 per cent) of the small farmers belonged to 'middle' age category i.e. 38 to 59 years followed by 'old' (21.00 per cent) and 'young' (14.50 per cent) age category. From the finding, it could be inferred that great majority (85.50 per cent) of the small farmers were between middle to old age group. The average age of the small farmers was 48.58 years.

Considering socio-economic status wise distribution of small farmers majority from all the SES categories had farming experience ranging from '13 to 35 years' followed by '36 years and above' and up to 12 years respectively. At overall level majority (68.50 per cent) of the small farmers had farming experience between '13 to 35 years'. Less than one-fifth (16.50 per cent) of the farmers had 'above 36 years' of farming experience, while only 15.00 per cent of the small farmers had farming experience 'upto 12 years'. The mean farming experience score of the small farmers was 23.83 years.

On an average, the family education score of the small farmers was 5.16 and socio-economic status wise distribution pertained that the family education status of sixty per cent small farmers from lower middle and middle category were found between '3.9 to 6.5' followed by education status 'up to 3.8'. While, more than half of small farmers from upper middle and high category had family education status between '3.9 to 6.5' followed by education status '6.6 and above'. And at overall level slightly less than sixty per cent of the small farmers family scored between '3.9 to 6.5' education status, while 21.50 per cent small farmers family felt under 'upto3.8' family education status score and 19.00 per cent of small farmers family had scored '6.6 and above' in education status.

More than half of the small farmers from lower middle (50.00 per cent), middle (54.78 per cent), and upper middle (58.34 per cent) status category scored cropping pattern between '3 to 11'. While majority (60.00 per cent) of the high status small farmers had scored '12 and above' in cropping pattern. At overall level also more than half (53.00 per cent) of small farmers had cropping pattern score in between '3 to 11' followed by score 'upto 2' (27.00 per cent) and only 20 per cent small farmers belonged to the score category of '12 and

above'. The average cropping pattern score of the small farmers was 7.41.

Status wise distribution of the small farmers clearly showed variation regards to their creditworthiness that high majority of the small farmers from lower middle (96.00 per cent) and middle (86.96 per cent) socio-economic status category had creditworthiness ranging between '2 lakh to 22.99 lakh'. On the other hand, three-fifth of the high status small farmers had creditworthiness '23 lakh and above'. While considering at overall level it is observed that high majority of the respondents (83.50 per cent) had creditworthiness between '2 to 22.99 lakh', while 14.00 per cent of the respondents had creditworthiness '23 lakh and above' and only 2.50 per cent of respondents had creditworthiness 'up to 1.99 lakh'. The average creditworthiness of small farmers was Rs.12.31 lakhs.

Majority of the small farmers from lower middle (74.00 per cent), middle (83.47 per cent) and upper middle (83.33 per cent) socio-economic status categories had risk orientation between '10 to 14', while the risk orientation of majority of high status (70.00 per cent) small farmers were '15 and above'. While, at overall level more than three-forth (78.00per cent) of the small farmers scored '10 to 14'in risk orientation followed by 12.50 per cent of small farmers had scored '15 and above' in risk orientation. Only 9.50 per cent of farmers scored 'upto 9' in risk orientation respectively. The average risk orientation score of the small farmers was 11.88.

More than sixty per cent of small farmers from lower middle (64.00 per cent) and middle (62.60 per cent) category and all the small farmers of high category had market orientation score between '11 to 14'. At overall level also more than three-fifth (61.50 per cent) of the small farmers had scored '11 to 14' for market orientation, followed by score 'upto 10' (29.50 per cent) and '15 and above' (9.00 per cent) type

of market orientation respectively. The mean score of small farmers regards to market orientation was 11.69.

Majority of the small farmers from lower middle (66.00 per cent), middle (74.78 per cent) and upper middle (62.50 per cent) socio-economic status categories had cosmopoliteness score in between '17 to 29'. While, sixty per cent of the high category small farmers had scored '30 and above' in cosmopoliteness. At overall level majority of the small farmers (69.00 per cent) had cosmopoliteness score in between '17 to 29' followed by 17.50 per cent of small farmers had 'up to 16' score of cosmopoliteness and 13.50 per cent of small farmers had '30 and above' score for cosmopoliteness respectively. The average score of small farmers for cosmopoliteness was 22.74.

More than three-forth of the small farmers from lower middle (76.00 per cent) and middle (78.26 per cent) socio-economic status categories had scored '42 to 50' regarding their attitude towards improved farm practices. More than half (54.17 per cent) of the small farmers of upper middle category also scored '42 to 50' closely followed by (45.83 per cent) score '51 and above'. And exactly same i.e. fifty per cent of the small farmers of high category had scored '51 and above' and fifty percent of small farmers had scored '42 to 5o' in attitude towards improved farm practices. Whereas at overall level slightly less than three-fourth (73.00 per cent) of the small farmers had scored in between '42 to 50' for attitude towards improved farm practices followed by quite similar 14.00 percent and 13.00 per cent of small farmers felt into score category of '51 and above' and 'up to 41' for attitude towards improved farm practices respectively. The average score of small farmers for their attitude towards improved farm practices was 45.78.

5.1.3 Relationship between selected characteristics of the small farmers and their socio-economic status

Among the selected independent variables, family education status, cropping pattern, creditworthiness, risk orientation, market orientation, cosmopoliteness and attitude toward improved farm practices had positive and significant relationship with socio-economic status of small farmers.

Only two variables i.e. age and farming experience showed no statistical relationship with the socio-economic status of small farmers.

Out of nine selected independent variables under study, seven variables exerted positive direct effect and two independent variables exerted no effect on socio-economic status of small farmers. The highest positive direct effect was exhibited by the variable cosmopoliteness (0.5848) followed by creditworthiness (0.3129), while lowest direct effect was exhibited by the variable farming experience (0.0070). The overall effect of all independent variables explained 58.48 per cent variation in socio-economic status of small farmers.

CHAPTER VI

IMPLICATIONS

The present investigation has brought out some important findings. These findings point out certain implications that are given below.

1. The scale developed for measuring the socio-economic status of the small farmers in Konkan region is reliable, valid and internally consistent. Therefore, same could be used elsewhere for measuring the socio-economic status of the small farmers in other regions.
2. Family education of lower middle SES and middle SES small farmers was low as compared to upper middle SES and high SES small farmers. This calls for suitable measures to improve the education of farm families which will help to widen their mental horizon.
3. Cropping pattern followed by lower middle SES, middle SES and upper middle SES was relatively low than that of high SES farmers. Therefore, special efforts need to be made to improve the cropping pattern followed by small farmers. This could be done by helping them to make maximum use of available resources and improved technology.
4. Most of the area in Konkan region is under mono cropping i.e. rice farming. Therefore, there is a need to motivate small farmers to take other crops suitable for their region and help them for their economic betterment. It should be done by providing adequate protection in terms of procurement and minimum support prices to fruits and vegetables crops. Since the production and prices of these commodities fluctuate widely, small farmers would find it difficult to grow these crops, unless the price protection is

available. Motivating farmers to go for second crop during rabi/summer wherever possible can be the other alternative.

5. Market orientation of small farmers was relatively low. Small farmers particularly in backward regions do not have access to cold storage, market and transportation facilities. Similarly, in the absence of stable power supply, the promotion of non-farm activities like agro-processing would be unthinkable. Primarily, there is urgent need to develop these infrastructure facilities, although private entrepreneurs could also be involved.

6. In a view to high variability of production, prices and income, the possibility of crop insurance coverage for some agricultural commodities which are perishable but of great social value and foreign exchange earning capacity *like* 'Alphonso' may be considered.

7. Attitude of small farmers from lower middle SES, middle SES and upper middle SES categories towards improved farm practices was not so favourable. Efforts should be made to create awareness about new and improved practices among the small farmers at village level through demonstrations, field tour or exhibitions.

8. The relationship between the characteristics namely, family education status, cropping pattern, creditworthiness, risk orientation, market orientation, cosmopoliteness and attitude towards improved farm practices and socio-economic status of small farmers was significant. Therefore, these characteristics should be suitably manipulated to elevate the socio-economic status of the small farmers.

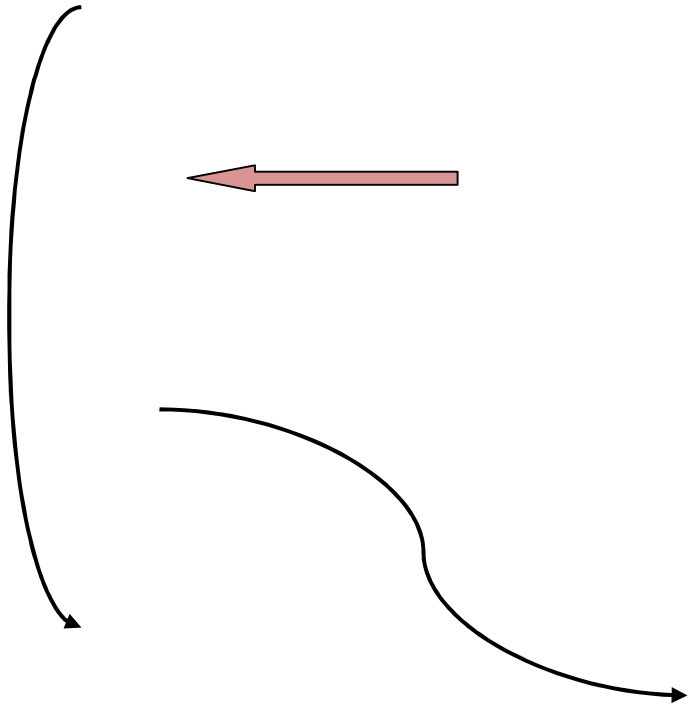
9. The independent variables selected for the study have explained the variations in socio-economic status of the small farmers to a fairly good extent. However, the future researchers may try to

identify the characteristics that could explain the remaining variation in the socio-economic status of the small farmers.

10. Under the conditions like Konkan region, it is difficult for the small farmers to get enough income for their survival from agriculture alone. Hence, they ought to have other components of farming systems. So, appropriate extension efforts may be strengthened to popularize the farming system approach in the region.

11. In the present study, the researcher has made an attempt to know the socio-economic status of the small farmers. However, the study was limited to only two district of Konkan region. Therefore, it is suggested that further investigations may be taken up in different regions of the state and country, so as to draw generalized conclusions.

Fig. No.1 Map of selected Districts



IMPORTANT CHARACTERISTICS

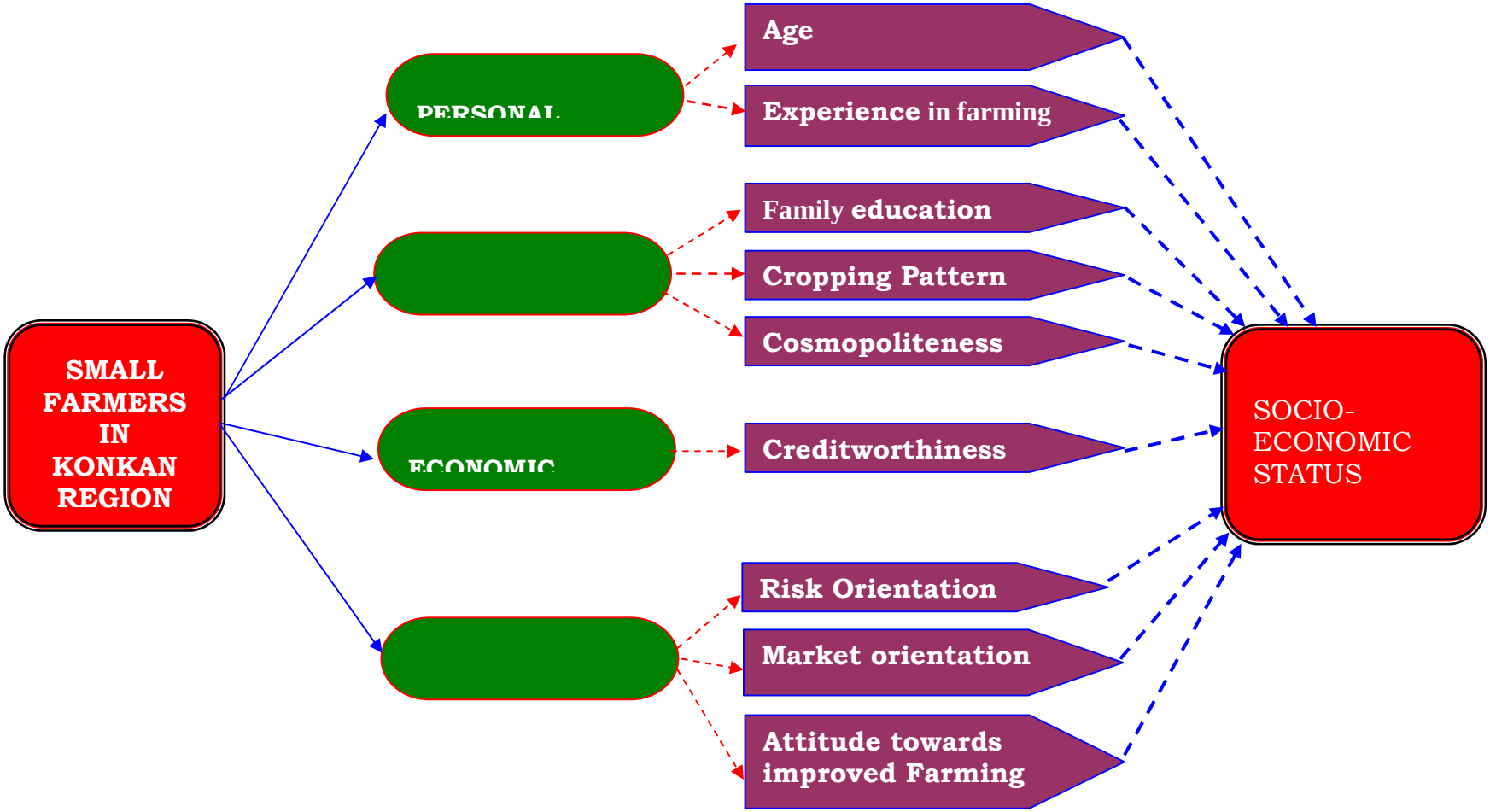


Fig.2 : THE CONCEPTUAL MODEL OF THE STUDY

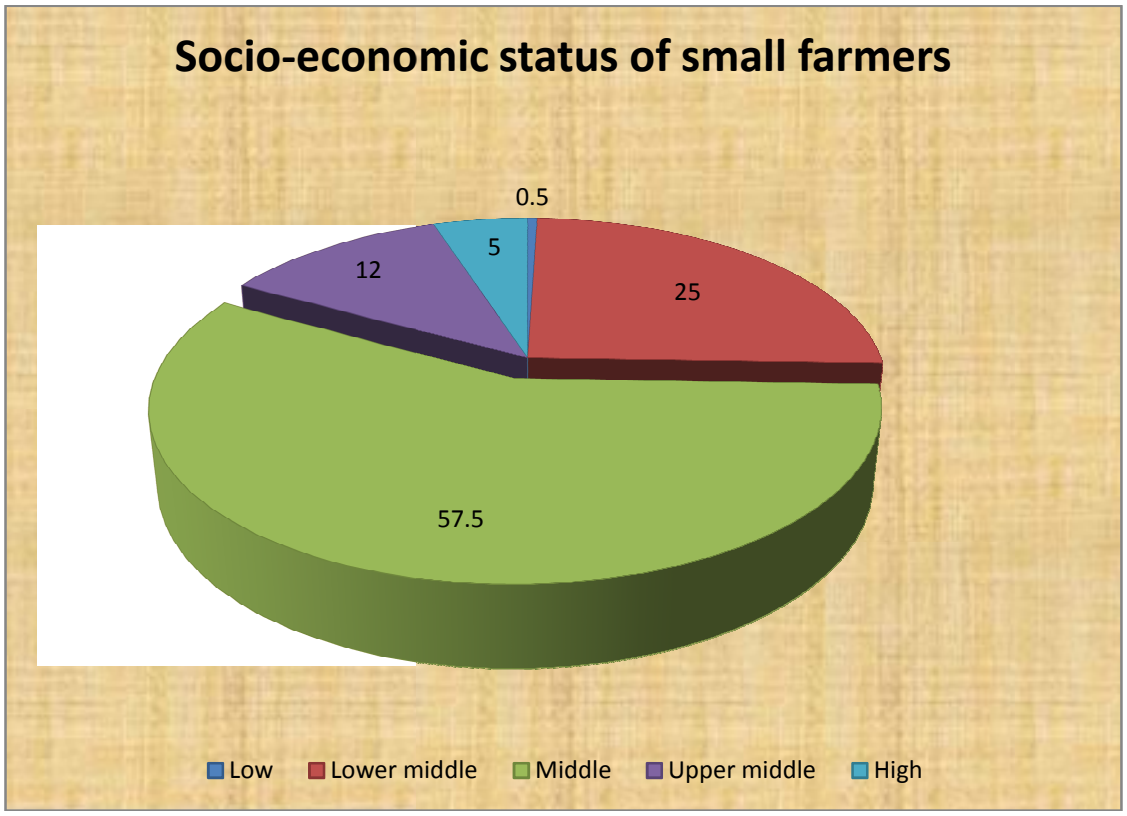


Fig. 3 Distribution of the respondents according to their socio-economic status

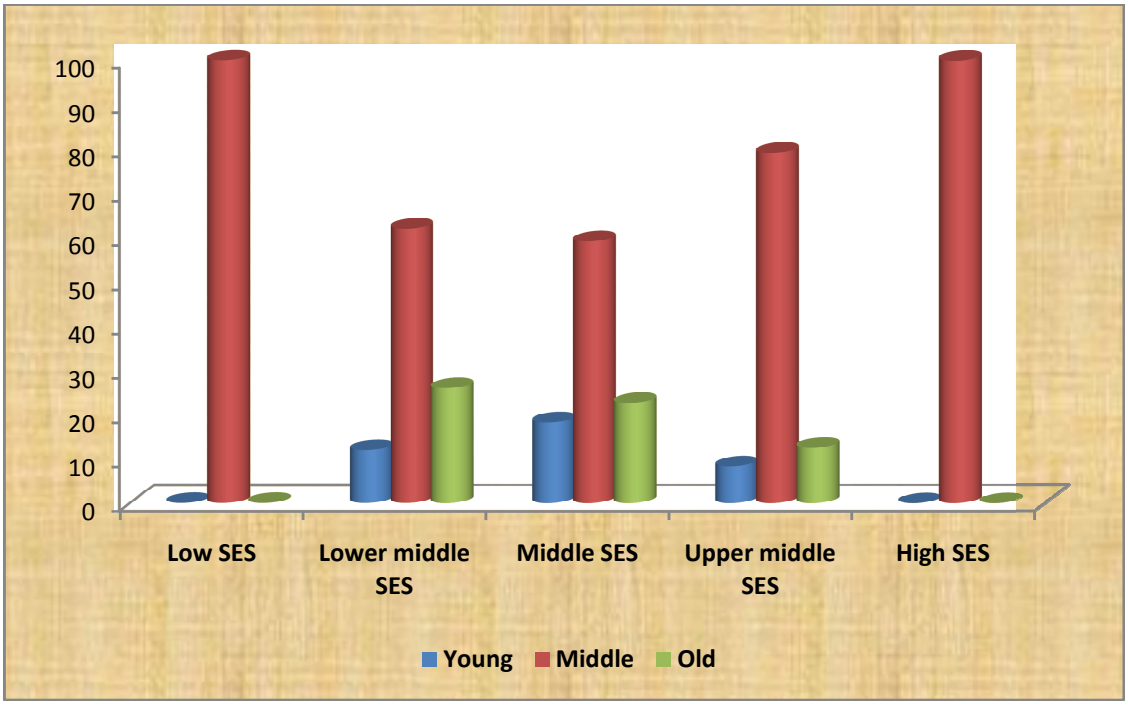


Fig. 4 Socio-economic status wise distribution of the respondents according to their age

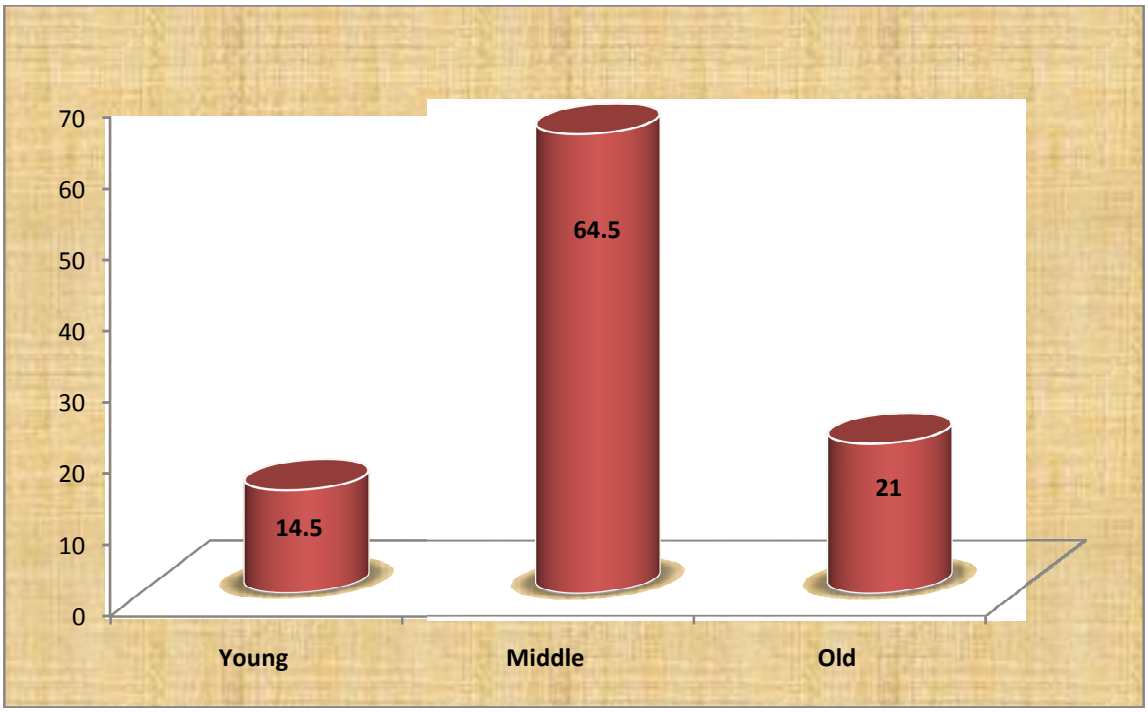


Fig. 5 Distribution of the respondents according to their age

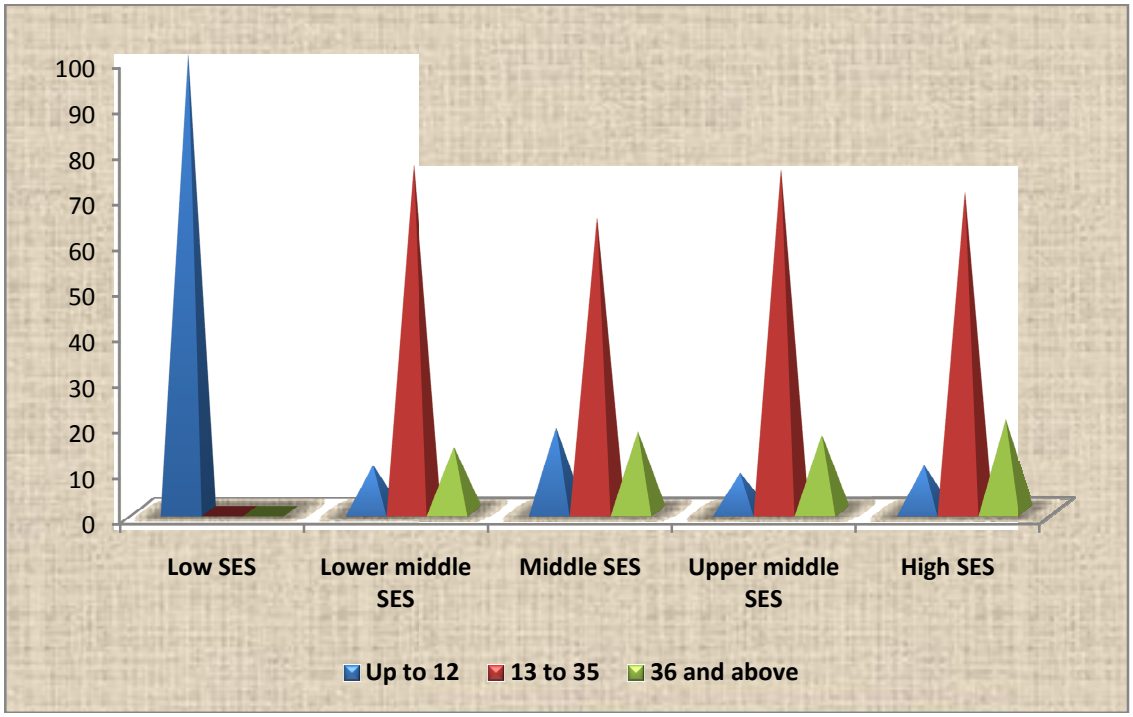


Fig. 6 Socio-economic status wise distribution of the respondents according to their farming experience

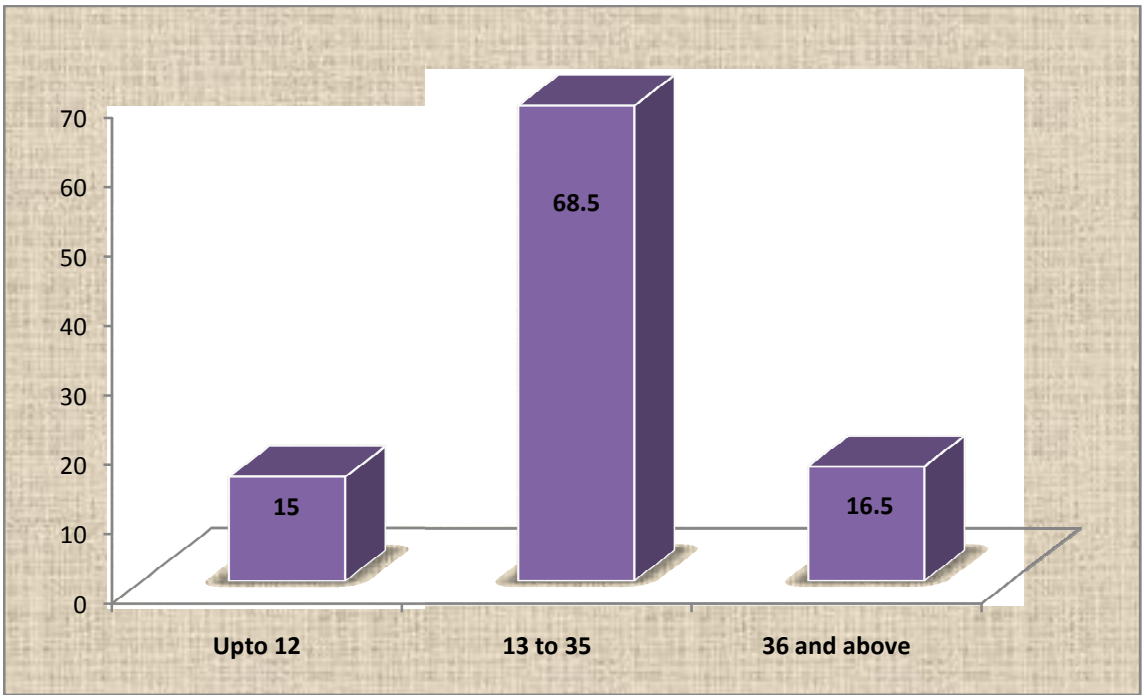


Fig. 7 Distribution of the respondents according to their farming experience

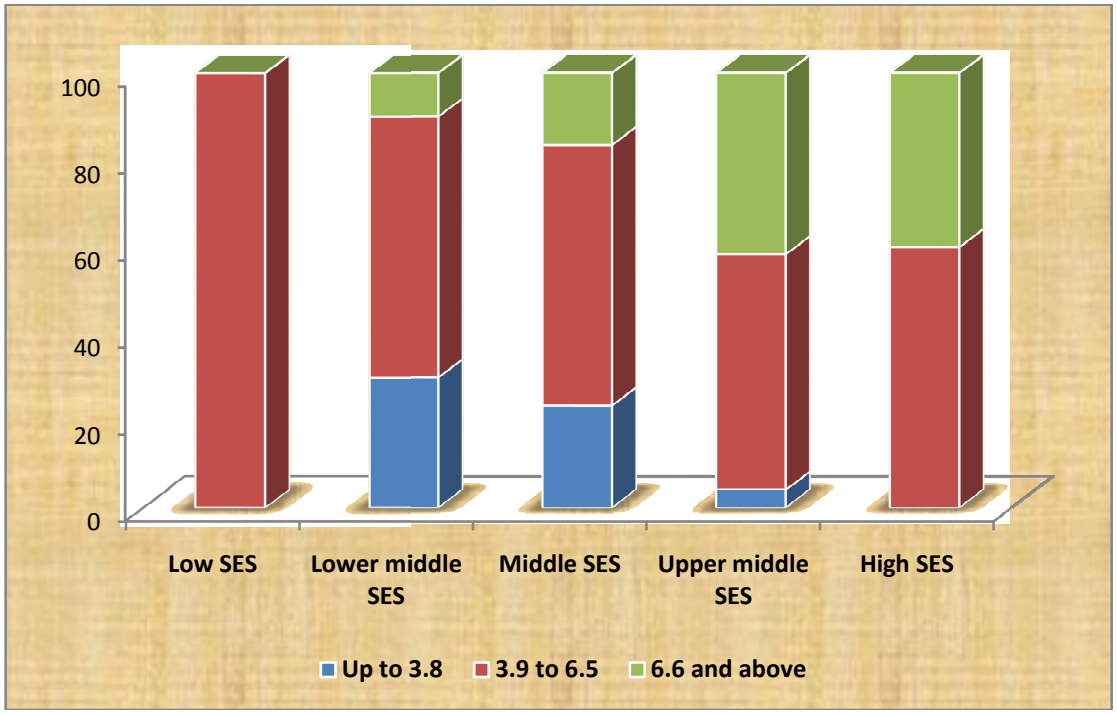


Fig. 8 Socio-economic status wise distribution of the respondents according to their family education status

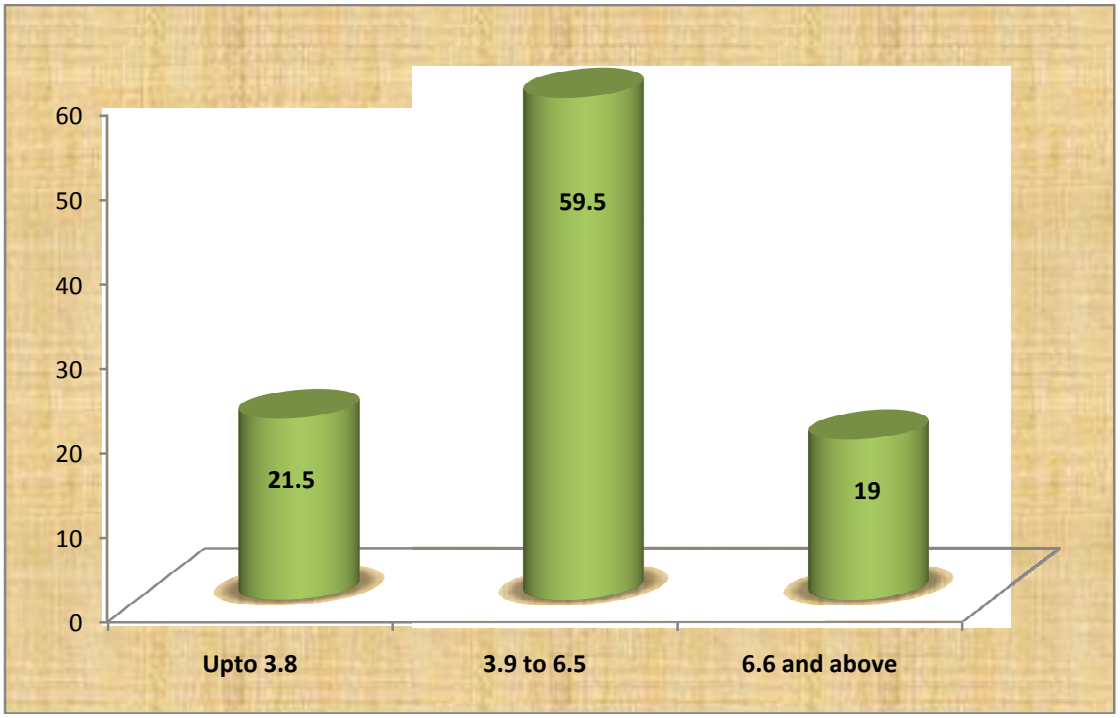


Fig. 9 Distribution of the respondents according to their family education status

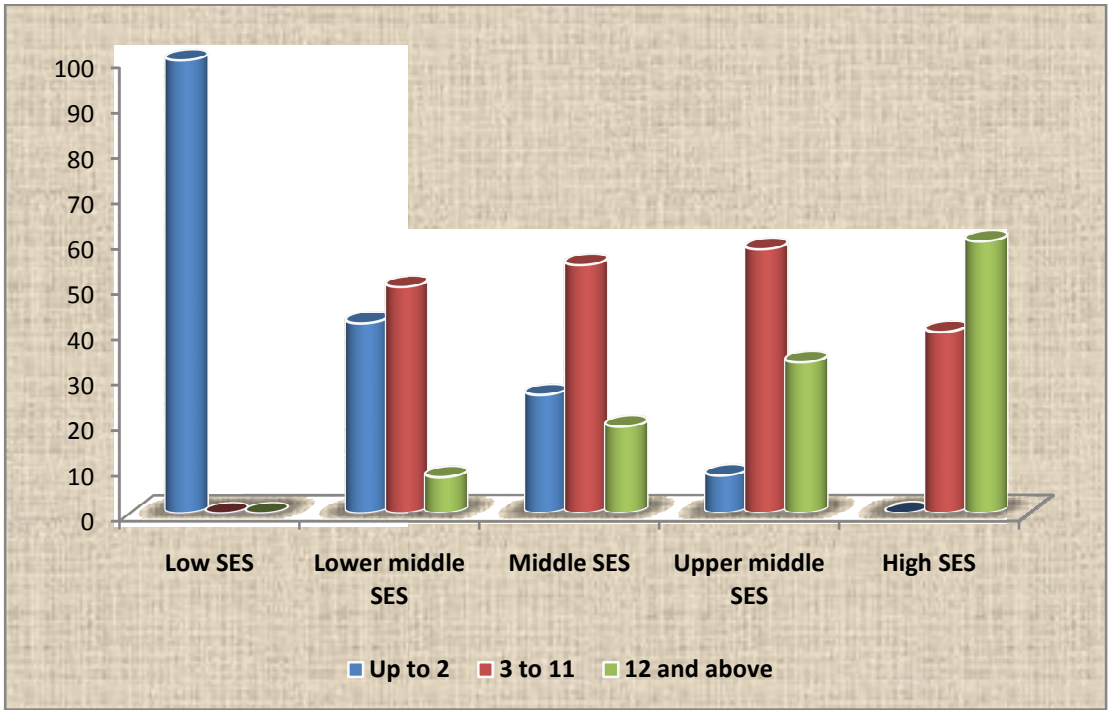


Fig. 10 Socio-economic status wise distribution of the respondents according to their cropping pattern

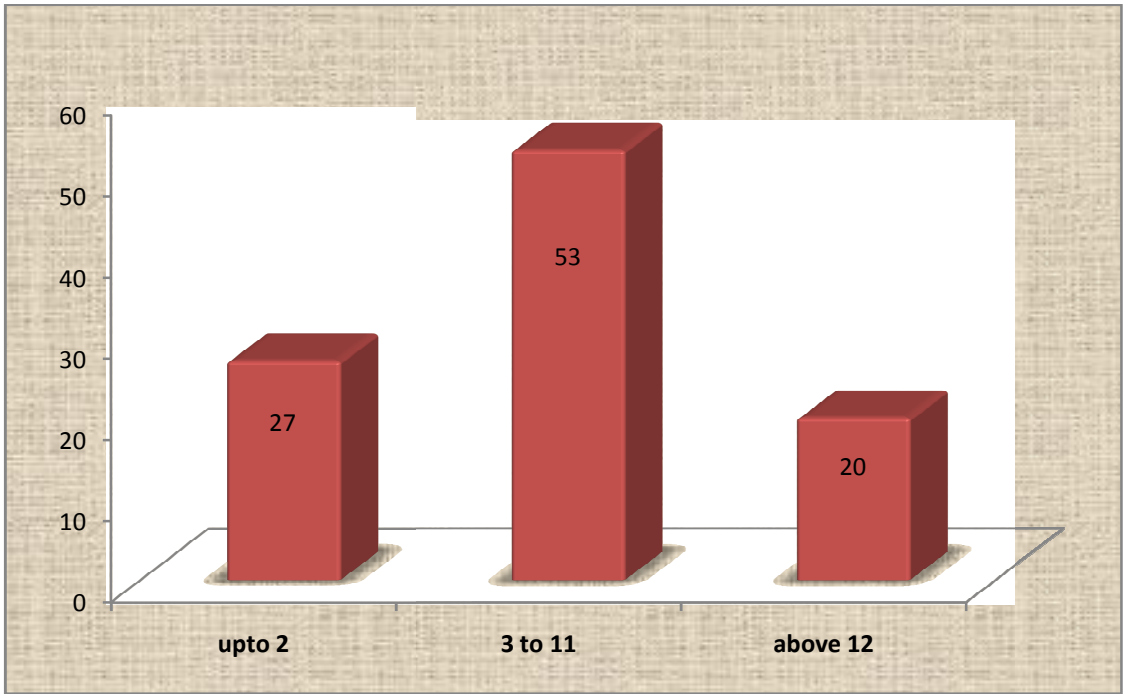


Fig. 11 Distribution of the respondents according to their cropping pattern

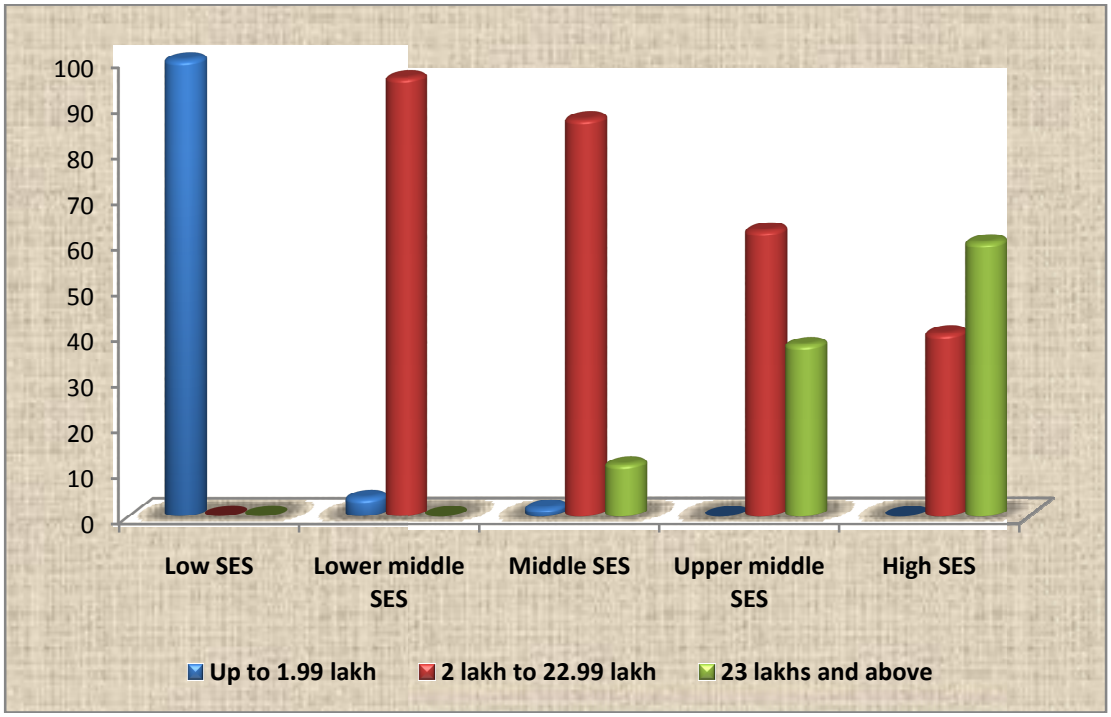


Fig. 12 Socio-economic status wise distribution of the respondents according to their creditworthiness

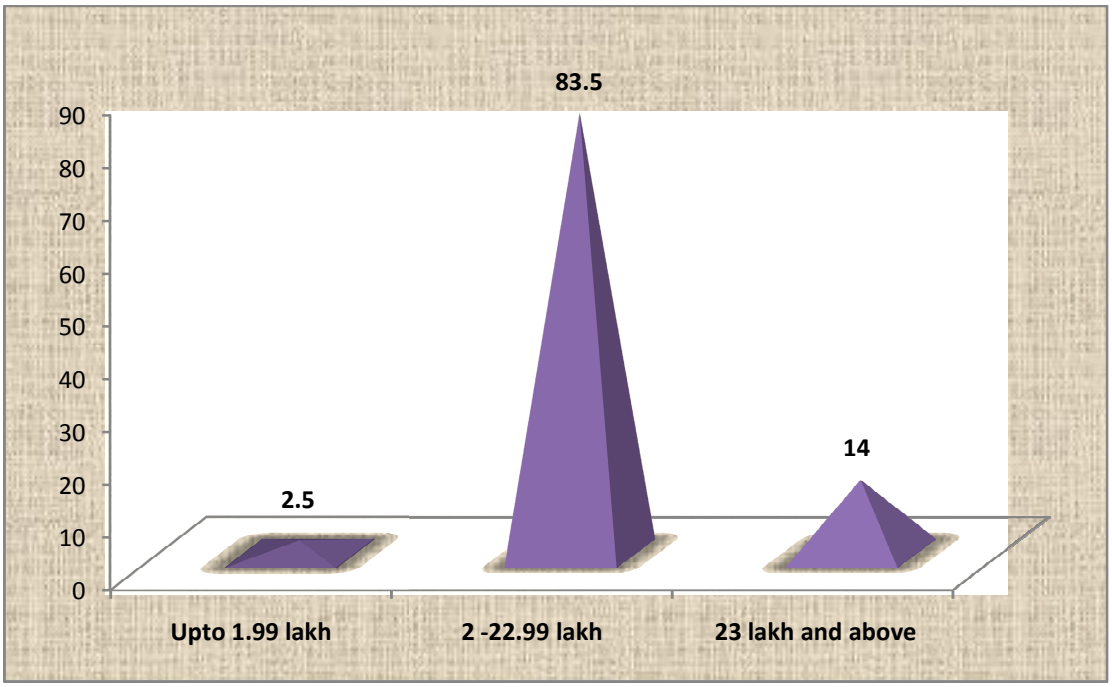


Fig. 13 Distribution of the respondents according to their creditworthiness

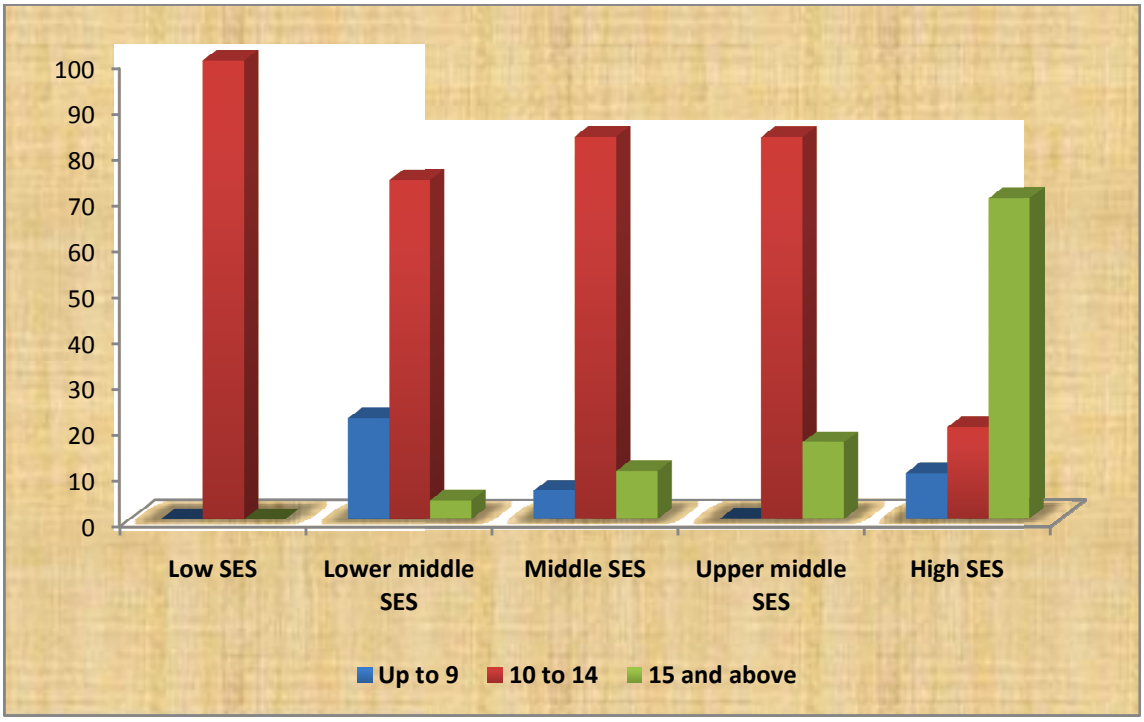


Fig. 14 Socio-economic status wise distribution of the respondents according to their risk orientation

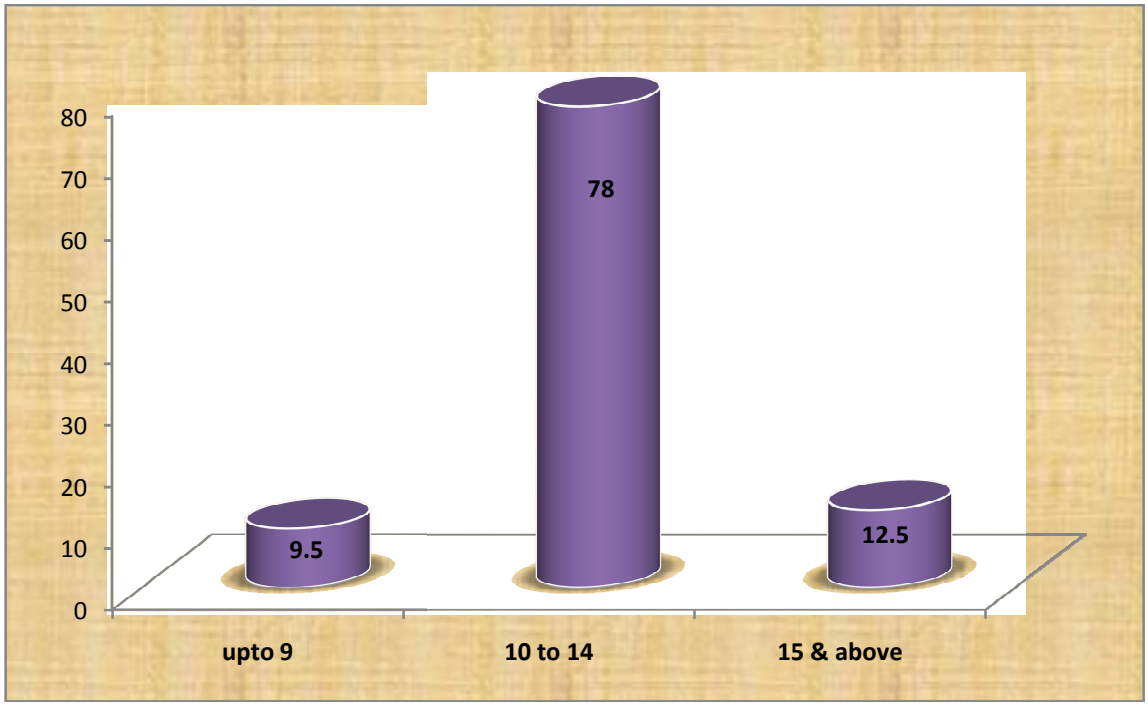


Fig. 15 Distribution of the respondents according to their risk orientation

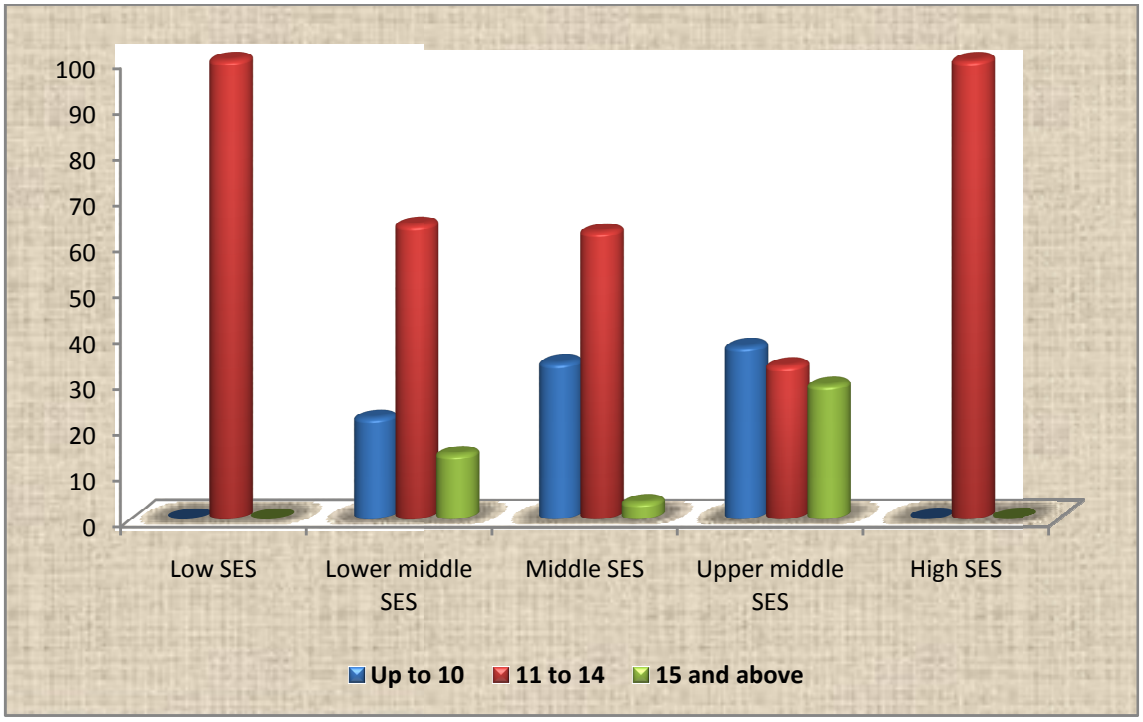


Fig. 16 Socio-economic status wise distribution of the respondents according to their market orientation

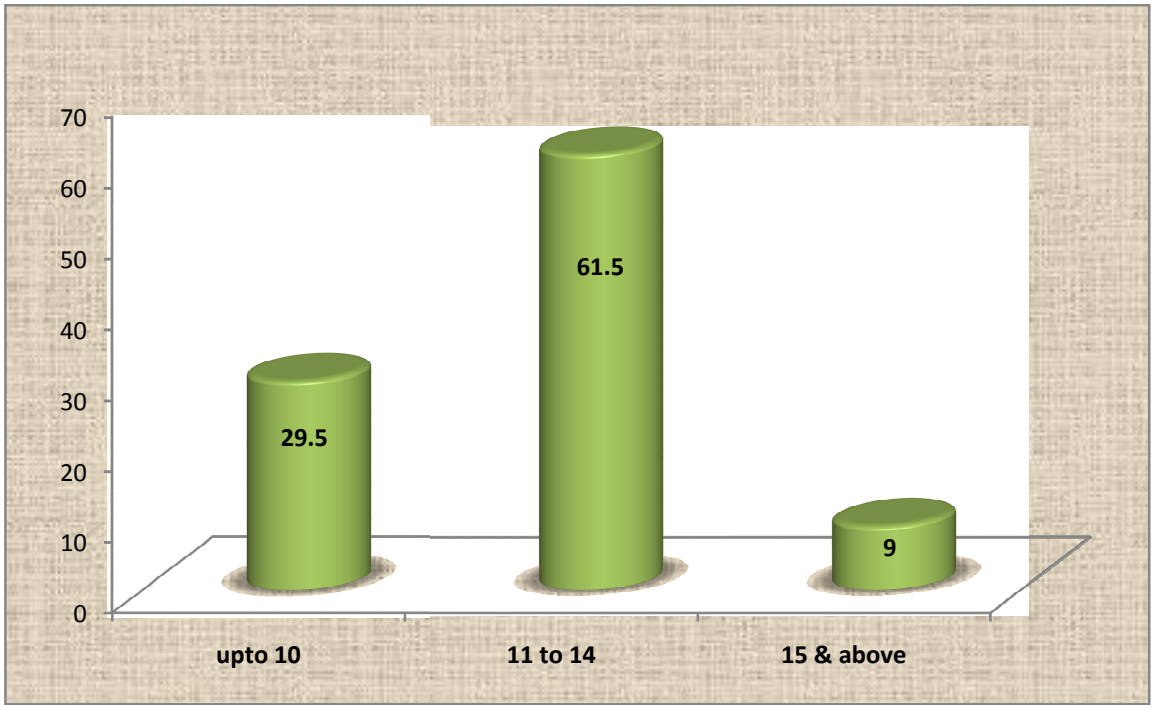


Fig. 17 Distribution of the respondents according to their market orientation

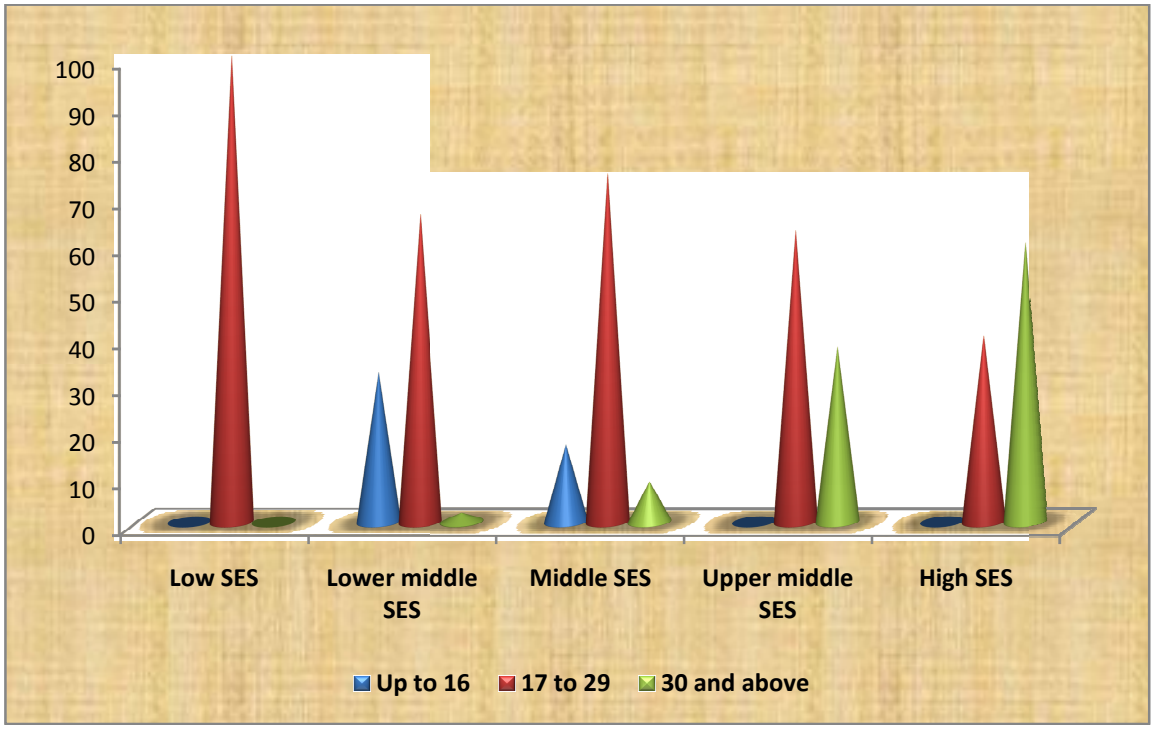


Fig. 18 Socio-economic status wise distribution of the respondents according to their cosmopoliteness

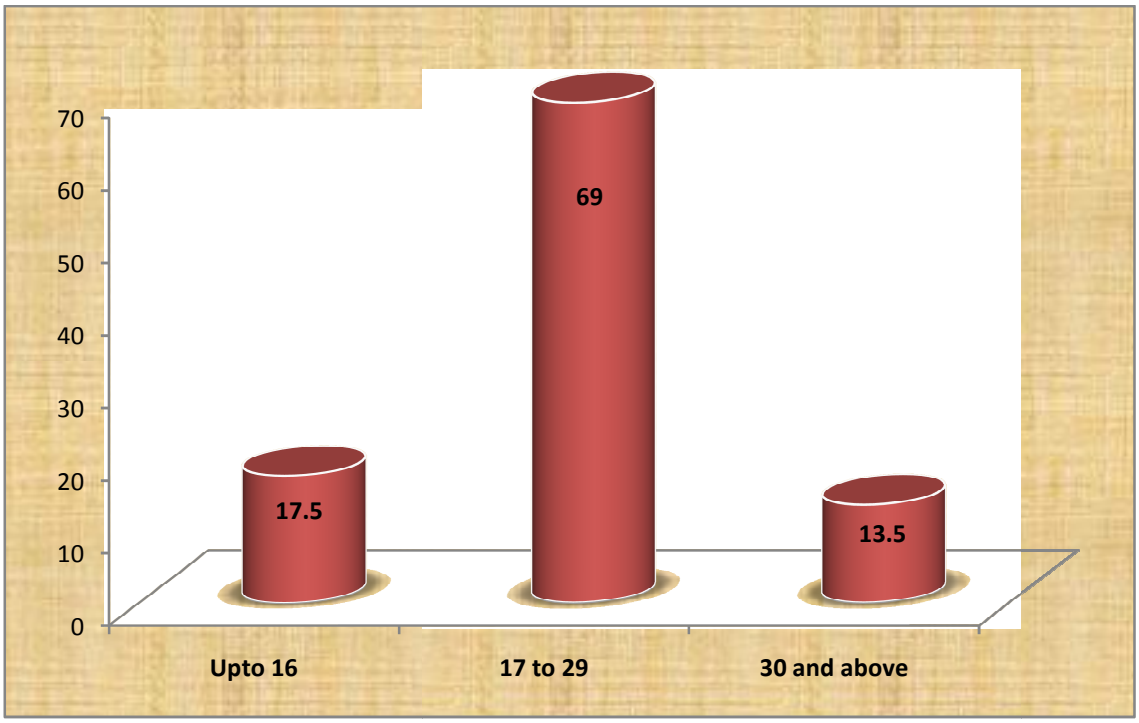


Fig. 19 Distribution of the respondents according to their cosmopoliteness

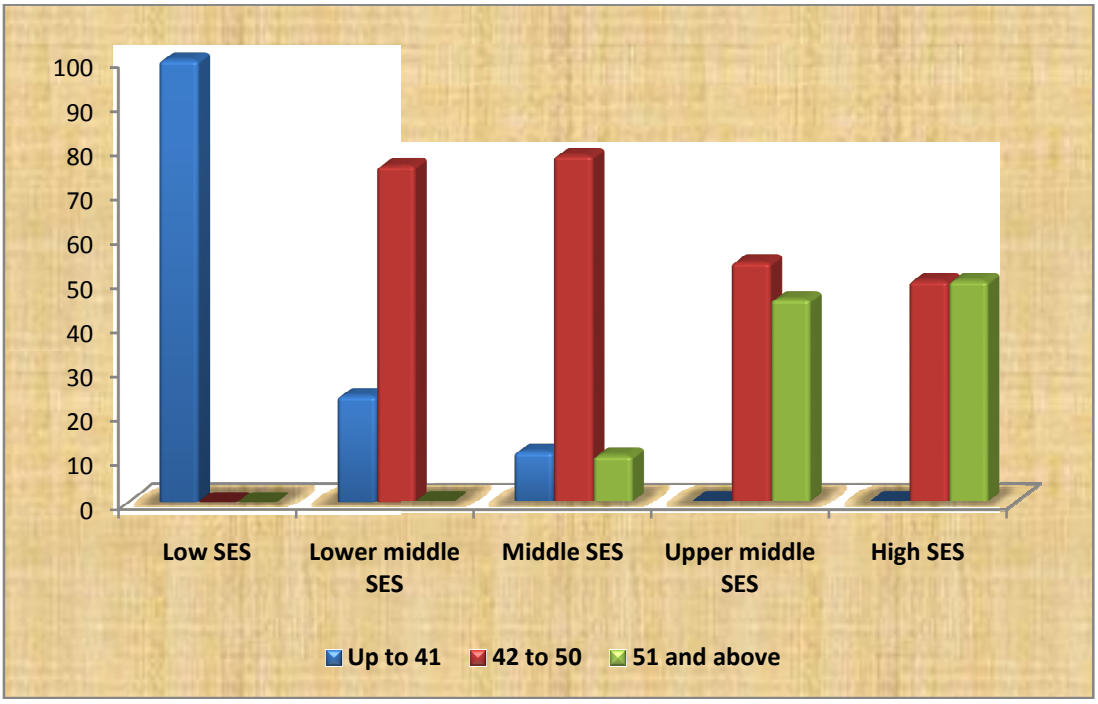


Fig. 20 Socio-economic status wise distribution of the respondents according to their attitude toward improved farm practices

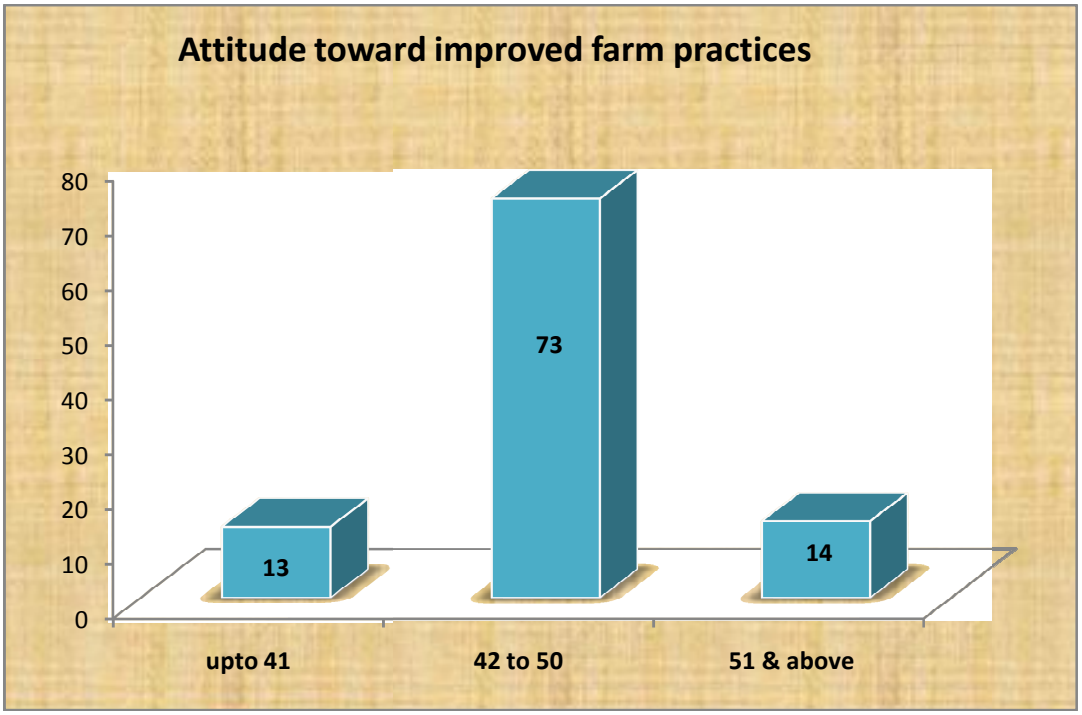


Fig. 21 Distribution of the respondents according to their attitude toward improved farm practices

IMPORTANT CHARACTERISTICS

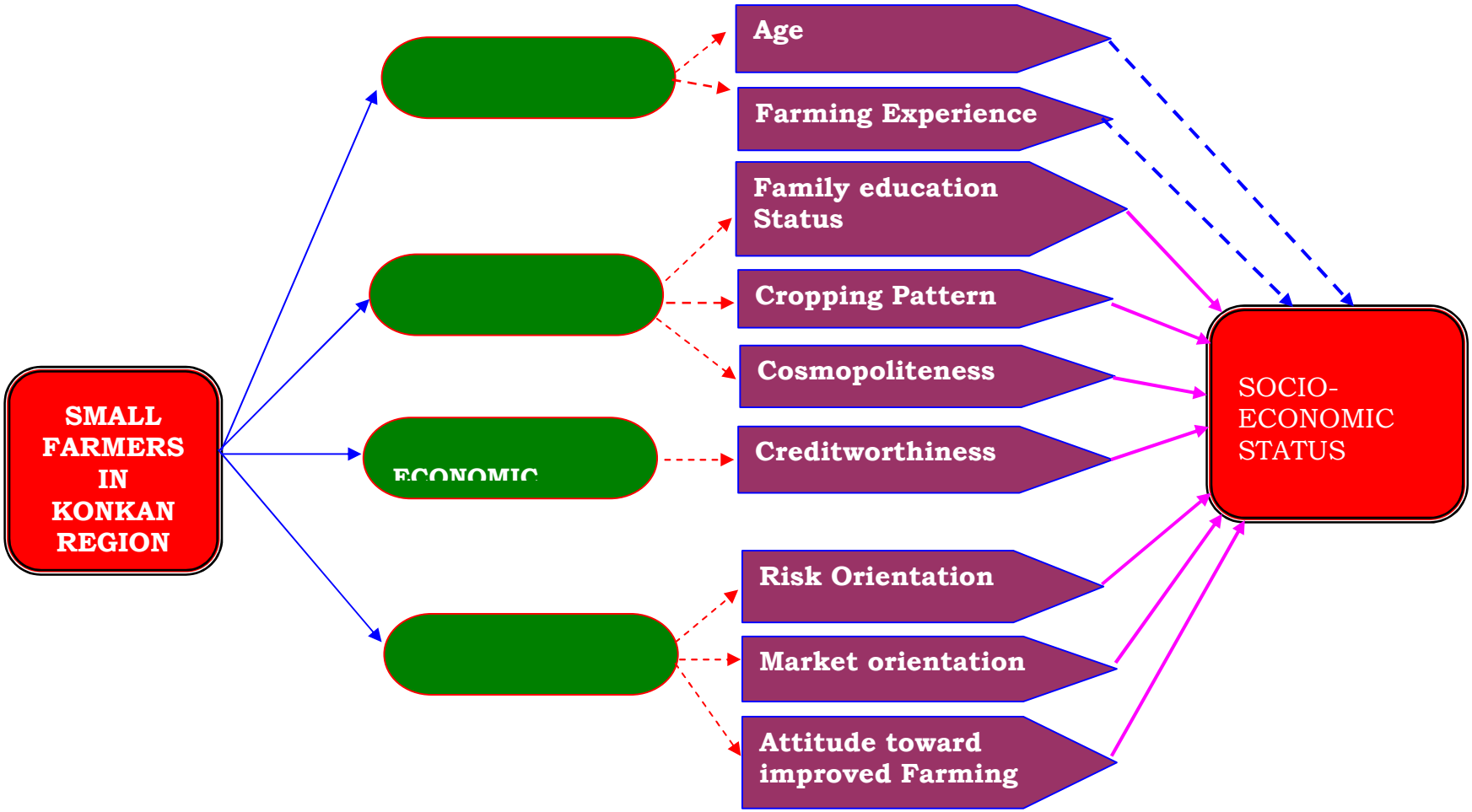


Fig. 22 : THE IMPIRICAL MODEL OF THE STUDY








Plate 1. Researcher Interviewing Respondents

Plate 2. Researcher Interviewing Respondents

Plate 3. Researcher Interviewing Respondents

APPENDIX-I

LIST OF SELECTED DISTRICTS, TAHSILS, VILLAGES AND NUMBER OF SMALL FARMERS

Name of District	Name of tahsil	Name of villages	Number of small farmers
Raigad	Karjat	Gaurkamath	10
		Posari	10
		Bhoirwadi	10
		Vadap	10
		Jambhivali	10
	Shrivardhan	Diveagar	10
		Jasavali	10
		Ranvali	10
		Galsure	10
		Jasavali	10
Sindhudurg	Vaibhavwadi	Karul	10
		Kususr	10
		Tithavali	10
		Sangulwadi	10
		Edgoan	10
	Vengurla	Vetore	10
		Khanoli	10
		Dabholi	10
		Tulas	10
		Hodavade	10
Two Districts	Four Tehsils	20 villages	200

APPENDIX-II
LIST OF SELECTED SMALL FARMERS WITH THEIR ADDRESSES

Sl. no	Name of the Farmer	Village	Taluka	District
1.	Prafful M. Khot	Maral	Shrivardhan	Raigad
2.	Shrikrishna D. Joshi	Maral	Shrivardhan	Raigad
3.	Dattatraya P. Joshi	Maral	Shrivardhan	Raigad
4.	Kiran M. Wakankar	Maral	Shrivardhan	Raigad
5.	Sakharam J. Bhovale	Maral	Shrivardhan	Raigad
6.	JairamPatil	Maral	Shrivardhan	Raigad
7.	Ramesh Wakankar	Maral	Shrivardhan	Raigad
8.	Makarand Joshi	Maral	Shrivardhan	Raigad
9.	Pitambar Joshi	Maral	Shrivardhan	Raigad
10.	DigambarPatil	Maral	Shrivardhan	Raigad
11.	Husen A. Darvesh	Diveagar	Shrivardhan	Raigad
12.	Mohmadalichaus	Diveagar	Shrivardhan	Raigad
13.	AhamadH.Chaus	Diveagar	Shrivardhan	Raigad
14.	Mohan R. Kutumbe	Diveagar	Shrivardhan	Raigad
15.	AatmaramS.Parker	Diveagar	Shrivardhan	Raigad
16.	AbhayS.Parker	Diveagar	Shrivardhan	Raigad
17.	Jayant S. Aavalskar	Diveagar	Shrivardhan	Raigad
18.	Bashir Ahmad Tambade	Diveagar	Shrivardhan	Raigad
19.	Sanjay R. Bapat	Diveagar	Shrivardhan	Raigad
20.	Lalabhai Joshi	Diveagar	Shrivardhan	Raigad
21.	TukaramS.Mashelkar	Jasvali	Shrivardhan	Raigad
22.	SubhashS.Katkar	Jasvali	Shrivardhan	Raigad
23.	TukaramG.Khopatkar	Jasvali	Shrivardhan	Raigad
24.	RohanR.Chougale	Jasvali	Shrivardhan	Raigad
25.	VasantK.Chougale	Jasvali	Shrivardhan	Raigad
26.	Jairam Y. Chaugule	Jasvali	Shrivardhan	Raigad
27.	Suresh Khopatkar	Jasvali	Shrivardhan	Raigad
28.	DnyaneshwarYadav	Jasvali	Shrivardhan	Raigad
29.	Suresh M. Katkar	Jasvali	Shrivardhan	Raigad
30.	Shriram Joshi	Jasvali	Shrivardhan	Raigad
31.	BalkrishnaS.Shigvan	Ranvali	Shrivardhan	Raigad
32.	VithobaR.Havare	Ranvali	Shrivardhan	Raigad
33.	Suresh Mandavkar	Ranvali	Shrivardhan	Raigad

34.	ChandrakantS.Shipurkar	Ranvali	Shrivardhan	Raigad
35.	ChandrakantM.Adkhale	Ranvali	Shrivardhan	Raigad
36.	Sharad D. Bharati	Ranvali	Shrivardhan	Raigad
37.	Ankur S. Jabare	Ranvali	Shrivardhan	Raigad
38.	Ramdas K. Havre	Ranvali	Shrivardhan	Raigad
39.	Devidas Havre	Ranvali	Shrivardhan	Raigad
40.	Mohan Bharati	Ranvali	Shrivardhan	Raigad
41.	PandurangD.Lanjikar	Galsure	Shrivardhan	Raigad
42.	AsafaliDhanse	Galsure	Shrivardhan	Raigad
43.	VithobaS.Deokar	Galsure	Shrivardhan	Raigad
44.	MotiramG.Shinde	Galsure	Shrivardhan	Raigad
45.	RamchadraManjarekar	Galsure	Shrivardhan	Raigad
46.	Ram Kelaskar	Galsure	Shrivardhan	Raigad
47.	Eknath J. Shinde	Galsure	Shrivardhan	Raigad
48.	ShaileshKelaskar	Galsure	Shrivardhan	Raigad
49.	Sitaram M. Shinde	Galsure	Shrivardhan	Raigad
50.	RatnakarDeokar	Galsure	Shrivardhan	Raigad
51.	Ashok R.Deshmukh	Gaurkamath	Karjat	Raigad
52.	SadashivT.Misal	Gaurkamath	Karjat	Raigad
53.	ManoharP.Deshmukh	Gaurkamath	Karjat	Raigad
54.	KashinathDeshmukh	Gaurkamath	Karjat	Raigad
55.	NamdevN.Deshmukh	Gaurkamath	Karjat	Raigad
56.	HarishchandraMisal	Gaurkamath	Karjat	Raigad
57.	SudhakarK.Deshmukh	Gaurkamath	Karjat	Raigad
58.	Prakash D. Thakekar	Gaurkamath	Karjat	Raigad
59.	Prashant K. Joshi	Gaurkamath	Karjat	Raigad
60.	Kashinath R. Misal	Gaurkamath	Karjat	Raigad
61.	PandurangM.Thorve	Posari	Karjat	Raigad
62.	TanajiM.Khanvilkar	Posari	Karjat	Raigad
63.	Deepak B.Mogare	Posari	Karjat	Raigad
64.	BaluP.Thorve	Posari	Karjat	Raigad
65.	SambhajiKhanvilkar	Posari	Karjat	Raigad
66.	SudhakarThorve	Posari	Karjat	Raigad
67.	Shankar P. Thorve	Posari	Karjat	Raigad
68.	Shivaji B. Badekar	Posari	Karjat	Raigad
69.	Krishna B. Badekar	Posari	Karjat	Raigad
70.	Dnyaneshwar N. Thorve	Posari	Karjat	Raigad

71.	PrakashK.Bhoir	Bhoirwadi	Karjat	Raigad
72.	Ganesh R. Bhoir	Bhoirwadi	Karjat	Raigad
73.	Naresh K. Bhoir	Bhoirwadi	Karjat	Raigad
74.	Sanjay K.Kor	Bhoirwadi	Karjat	Raigad
75.	Shivram H. Bhoir	Bhoirwadi	Karjat	Raigad
76.	Dattatraya P. Bhoir	Bhoirwadi	Karjat	Raigad
77.	Rajaram N. Bhoir	Bhoirwadi	Karjat	Raigad
78.	PandurangBhoir	Bhoirwadi	Karjat	Raigad
79.	Janardan N. Bhoir	Bhoirwadi	Karjat	Raigad
80.	Atmaram J. Bhoir	Bhoirwadi	Karjat	Raigad
81.	Waman R. Mule	Vadap	Karjat	Raigad
82.	Eknath K. Korde	Vadap	Karjat	Raigad
83.	Jagdish J. Patil	Vadap	Karjat	Raigad
84.	Pralhad N. Patil	Vadap	Karjat	Raigad
85.	Ashok B. Patil	Vadap	Karjat	Raigad
86.	Ramesh V. Chaudhari	Vadap	Karjat	Raigad
87.	PrakashT.Patil	Vadap	Karjat	Raigad
88.	ShivajiS.Patil	Vadap	Karjat	Raigad
89.	VishwasK.Chaudhari	Vadap	Karjat	Raigad
90.	DattatrayP.Patil	Vadap	Karjat	Raigad
91.	Vishnu P.Gangal	Jambhivali	Karjat	Raigad
92.	MadhukarN.Bodake	Jambhivali	Karjat	Raigad
93.	Suresh P.Bhoir	Jambhivali	Karjat	Raigad
94.	Ramesh P.Chavan	Jambhivali	Karjat	Raigad
95.	RavindraM.Gangal	Jambhivali	Karjat	Raigad
96.	NanduGangal	Jambhivali	Karjat	Raigad
97.	VivekK.Gangal	Jambhivali	Karjat	Raigad
98.	SudamT.Bhoir	Jambhivali	Karjat	Raigad
99.	Mahesh K.Chavan	Jambhivali	Karjat	Raigad
100.	SandipB.Tupe	Jambhivali	Karjat	Raigad
101.	Rasika R. Kadam	Karul	Vaibhavwadi	Sindhudurg
102.	Aatmaram G. Shinde	Karul	Vaibhavwadi	Sindhudurg
103.	Gangaram S. Shinde	Karul	Vaibhavwadi	Sindhudurg
104.	Vishwas S. Sawant	Karul	Vaibhavwadi	Sindhudurg
105.	Dipak D. Rashivate	Karul	Vaibhavwadi	Sindhudurg
106.	Baliram S. Jamdar	Karul	Vaibhavwadi	Sindhudurg
107.	Sunil More	Karul	Vaibhavwadi	Sindhudurg

108.	Ramdas B. Panchal	Karul	Vaibhavwadi	Sindhudurg
109.	Ramsh B. Panchal	Karul	Vaibhavwadi	Sindhudurg
110.	Ravindra S. Sarphale	Karul	Vaibhavwadi	Sindhudurg
111.	Shrirang N. Patil	Kusur	Vaibhavwadi	Sindhudurg
112.	Sunil R. Salunkhe	Kusur	Vaibhavwadi	Sindhudurg
113.	Ramesh N. Patil	Kusur	Vaibhavwadi	Sindhudurg
114.	Gunaji S. Salunkhe	Kusur	Vaibhavwadi	Sindhudurg
115.	Pundlik S. Salunkhe	Kusur	Vaibhavwadi	Sindhudurg
116.	SantoshPatil	Kusur	Vaibhavwadi	Sindhudurg
117.	DamuPatil	Kusur	Vaibhavwadi	Sindhudurg
118.	Jayram R. Salunkhe	Kusur	Vaibhavwadi	Sindhudurg
119.	AnnasahebPatil	Kusur	Vaibhavwadi	Sindhudurg
120.	Sandip S. Salunkhe	Kusur	Vaibhavwadi	Sindhudurg
121.	GiframKazi	Tithavali	Vaibhavwadi	Sindhudurg
122.	Mahadev G. Harayan	Tithavali	Vaibhavwadi	Sindhudurg
123.	Ramesh V. Gandhi	Tithavali	Vaibhavwadi	Sindhudurg
124.	Dinkar T. Kadge	Tithavali	Vaibhavwadi	Sindhudurg
125.	Bramha A. Harayan	Tithavali	Vaibhavwadi	Sindhudurg
126.	Salim S. Kazi	Tithavali	Vaibhavwadi	Sindhudurg
127.	RajaramKadge	Tithavali	Vaibhavwadi	Sindhudurg
128.	Vishnu Harayan	Tithavali	Vaibhavwadi	Sindhudurg
129.	RamzanKazi	Tithavali	Vaibhavwadi	Sindhudurg
130.	Dinesh V. Gandhi	Tithavali	Vaibhavwadi	Sindhudurg
131.	Rajaram V. Patil	Sangulwadi	Vaibhavwadi	Sindhudurg
132.	Arun N. Patil	Sangulwadi	Vaibhavwadi	Sindhudurg
133.	Ragova M. Patil	Sangulwadi	Vaibhavwadi	Sindhudurg
134.	Girish S. Patil	Sangulwadi	Vaibhavwadi	Sindhudurg
135.	Sandeep D. Patil	Sangulwadi	Vaibhavwadi	Sindhudurg
136.	Jaydeo M. Patil	Sangulwadi	Vaibhavwadi	Sindhudurg
137.	Rakesh H. Patil	Sangulwadi	Vaibhavwadi	Sindhudurg
138.	Ramesh E. Patil	Sangulwadi	Vaibhavwadi	Sindhudurg
139.	Rajaram S. Patil	Sangulwadi	Vaibhavwadi	Sindhudurg
140.	Arjun S. Patil	Sangulwadi	Vaibhavwadi	Sindhudurg
141.	Vishwas S. Raorane	Edgoan	Vaibhavwadi	Sindhudurg
142.	Raman A. Pawar	Edgoan	Vaibhavwadi	Sindhudurg
143.	Govind B. Raorane	Edgoan	Vaibhavwadi	Sindhudurg
144.	Ganpat G. Pawar	Edgoan	Vaibhavwadi	Sindhudurg

145.	Pandurang S. Pawar	Edgoan	Vaibhavwadi	Sindhudurg
146.	Sagaji M. Raorane	Edgoan	Vaibhavwadi	Sindhudurg
147.	Pramod A. Pawar	Edgoan	Vaibhavwadi	Sindhudurg
148.	Gangaram B. Madulkar	Edgoan	Vaibhavwadi	Sindhudurg
149.	Indrasen B. Raorane	Edgoan	Vaibhavwadi	Sindhudurg
150.	Jayant D. Raorane	Edgoan	Vaibhavwadi	Sindhudurg
151.	Vishnu H. Sarmarkar	Vetore	Vengurle	Sindhudurg
152.	Eknath G. Naik	Vetore	Vengurle	Sindhudurg
153.	Narayan D. Sawant	Vetore	Vengurle	Sindhudurg
154.	Vitthal G. Raul	Vetore	Vengurle	Sindhudurg
155.	Mahadev R. Raul	Vetore	Vengurle	Sindhudurg
156.	GajananNaik	Vetore	Vengurle	Sindhudurg
157.	Sudhir R. Naik	Vetore	Vengurle	Sindhudurg
158.	Sachin R. Naik	Vetore	Vengurle	Sindhudurg
159.	Subhash C. Naik	Vetore	Vengurle	Sindhudurg
160.	SatyawanNaik	Vetore	Vengurle	Sindhudurg
161.	Vishnu B. Khanolkar	Khanoli	Vengurle	Sindhudurg
162.	Bhikaji Raul	Khanoli	Vengurle	Sindhudurg
163.	Narsinh D. Kelkar	Khanoli	Vengurle	Sindhudurg
164.	Vishnu S. Khanolkar	Khanoli	Vengurle	Sindhudurg
165.	GajananNaik	Khanoli	Vengurle	Sindhudurg
166.	Bharat Waram	Khanoli	Vengurle	Sindhudurg
167.	HariKhanolkar	Khanoli	Vengurle	Sindhudurg
168.	AnantPrabhu	Khanoli	Vengurle	Sindhudurg
169.	Vijay Khanolkar	Khanoli	Vengurle	Sindhudurg
170.	RadhakrushnaKhanolkar	Khanoli	Vengurle	Sindhudurg
171.	Sadashiv K. Karungathkar	Dabholi	Vengurle	Sindhudurg
172.	PrakashGodalkar	Dabholi	Vengurle	Sindhudurg
173.	RamdasDabholkar	Dabholi	Vengurle	Sindhudurg
174.	Deepak Rashivate	Dabholi	Vengurle	Sindhudurg
175.	Mahesh C. Kadam	Dabholi	Vengurle	Sindhudurg
176.	Sharad D. Dabholkar	Dabholi	Vengurle	Sindhudurg
177.	Ratnakar J. Dabholkar	Dabholi	Vengurle	Sindhudurg
178.	Shankar R. Sarphale	Dabholi	Vengurle	Sindhudurg
179.	MakarandGaybhije	Dabholi	Vengurle	Sindhudurg
180.	BaliramMahadu	Dabholi	Vengurle	Sindhudurg
181.	Subhash M. Parab	Tulas	Vengurle	Sindhudurg

182.	Ladu G. Parab	Tulas	Vengurle	Sindhudurg
183.	Shashikant R. Parab	Tulas	Vengurle	Sindhudurg
184.	Jayram G. Ghogale	Tulas	Vengurle	Sindhudurg
185.	Jaidev B. Parab	Tulas	Vengurle	Sindhudurg
186.	Subhash Y. Parab	Tulas	Vengurle	Sindhudurg
187.	Harish Tambuskar	Tulas	Vengurle	Sindhudurg
188.	Prabhakar Sawant	Tulas	Vengurle	Sindhudurg
189.	RamakantTandel	Tulas	Vengurle	Sindhudurg
190.	NandkishorParab	Tulas	Vengurle	Sindhudurg
191.	Manohar G. Naik	Hodavade	Vengurle	Sindhudurg
192.	Ramkrishna G. Parab	Hodavade	Vengurle	Sindhudurg
193.	Ramchandra N. Naik	Hodavade	Vengurle	Sindhudurg
194.	Balkrishna S. Naik	Hodavade	Vengurle	Sindhudurg
195.	Shantaram M. Kerkar	Hodavade	Vengurle	Sindhudurg
196.	ArunNaik	Hodavade	Vengurle	Sindhudurg
197.	Madhukar S. Dalavi	Hodavade	Vengurle	Sindhudurg
198.	Jagganath A. Dalavi	Hodavade	Vengurle	Sindhudurg
199.	Arvind Gopal Naik	Hodavade	Vengurle	Sindhudurg
200.	Ramesh B. Salgavkar	Hodavade	Vengurle	Sindhudurg

APPENDIX-II

APPEAL TO JUDGES

Dr. D.P.Hardikar
M.Sc.(Agri.), Ph.D.
Manager

AGRICULTURAL TECHNOLOGY INFORMATION CENTRE

Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth**,**Dapoli - 415 712,

Dist: Ratnagiri, Maharashtra State
Tel. No. (02358) 280238

Email- atickkv@gmail.com

Dated: 04/09/2012

Subject: Development of Socio-Economic Status (SES) scale to measure the SES of small farmers

Sir/Madam,

This is in connection with the Ph.D. research project being

conducted by one of my research scholars Miss Vaishali D. Pagar.

She is trying to develop a scale to measure the Socio-Economic Status of the small in Konkan region.

We require your specific judgment on each of the item listed in the appendix as its relevancy to SES of farmers. A schedule comprising of the main items and sub-items is distributed to you, so as to assign score for the sub-items under each main item, based on their importance in contributing to the determination of SES. After having done this for all items, you are requested to suggest any other item, which you consider should be included as item of SES of farmer along with the score.

Considering your vast experience in the field of Extension Research, you have been selected as one of the judges for seeking your valuable judgment on the subject. I, therefore, request you to spare some of your valuable time from your busy schedule and assist to our research work. Same will be duly acknowledged by her in her Ph. D. thesis please.

The completed appendix may please be mailed to Ms. VaishaliPagar, for which purpose a self addressed stamped envelope is enclosed.

With regards.

Yours sincerely,

(**D.P.Hardikar**)

DRAFT FOR SOCIO- ECONOMIC STATUS SCALE

Sl. No.	*Items / Sub-items*	Relevancy			Scoringas per importance
		Most Relevant	Relevant	Not Relevant	
1	2	3	4	5	6
I.	**Education:**				
	1. Illiterate				

	2. Can read only				
	3. Can write only				
	4. Can read and write				
	5. Primary education				
	6. Secondary education				
	7. Higher secondary education				
	8. Diploma				
	9. Graduate				
	10. Post Graduate				
II.	**Family:**				
	a) Type:				
	1. Joint family				
	2. Nuclear family				
	b) Size:				
	1. Small (1to 3 member)				
	2. Medium (4 to 6 member)				
	3. Large (7 to 9 member)				
	4. Very large (10 and above)				
III.	**Annual income/year:**				
	1. Below Poverty line (BPL)				
	2. Rs. 26,000 to Rs. 50,000				
	3. Rs. 50,000 to Rs. 1,00,000/-				
	4. Rs. 1,00,000/- to 2,50,000/-				
	5. Rs.2,50,000/- and above				
IV.	**No. of earning members in the family**				
	1. 3 or more members earning and income pooled				
	2. 2 or both husband and wife earning				

	3. Only 1 family member earning				
	4. No earning member				
V.	**Type of land holding**				
	1. Rainfed				
	2. Irrigated				
VI.	**Land holding:**				
	1. Marginal (Up to 1ha.)				
	2. Small (1.01 to 2.00 ha.)				
	3. Semi-medium (2.01 to 4.00ha.)				
	4. Medium (4.01 to 10.00 ha).				
	5. Large (Above10.01 ha)				
VII.	**Cropping intensity**				
	1. Up to 100%				
	2. 101 to 200%				
	3. 201 to 300%				
VIII.	**Ownership of cultivated land**				
	1. Land owner without tenant				
	2. Land owner who lease out to share tenant				
	3. Land owner who lease out part of his land				
	4. Land owner who lease out most of his land				
	5. Tenants				
IX.	**a) Sources of irrigation**				
	1. Many sources (more than 2)				
	2. Canal irrigation				
	3. Well / Tube well				
	4. Lake / Ponds				
	5. River				
	b) Methods of water lifting				

	1. *Okti* or *mot*				
	2. Persian wheel				
	3. Diesel/petrol pump				
	4. Electric motor				
	c) Methods of Irrigation				
	1. Flood				
	2. Ridges and furrow				
	3. Sprinkler irrigation				
	4. Drip irrigation				
X.	**Major Occupation of Family Head**				
	1. Agriculture + Wage earner				
	2. Agriculture (Farming)				
	3. Agriculture + allied occupation (Goat farm/ Poultry/ Apiculture/ Sericulture/Fishing)				
	4. Agriculture + Business / Independent profession				
	5. Agriculture + Service				
XI.	**House**				
	a) Type of house				
	1. Shed Thatched (Stalk farmers)				
	2. Mudwalls and thatches				
	3. Brick wall and tiled				
	4. Concrete House				
	5. Double storied				
	6. Bungalow				
	b) Ownership of house				
	1. Own house				
	2. House on rent				
	c) Other facilities				
	1. Toilet/soak pit available				
	2. Well inside the yard				

	3. Biogas Connection				
	4. LPG connection				
XII.	**Subscription to publications**				
	1. No subscription				
	2. Subscription to newspapers				
	3. Subscription to magazines				
	4. Subscription to farm magazines				
	5. Other				
XIII.	**Material Possession**				
	a) Furniture				
	1. Chair				
	2. Table				
	3. Tea-poy				
	4. Dining table				
	5. Cupboard				
	6. Cot				
	7. *Diwan*				
	8. Sofa				
	9. Bench				
	10. Easy Chair				
	Others (if any)				
	b) Transport				
	1. Bullock cart				
	2. Bicycle				
	3. Motorcycle				
	4. Rickshaw				
	5. Jeep/Car				
	6. Tempo/Truck				
	7. Tractor trolly				
	8. Other				
	c) Recreational / Communicational material				
	1. Radio				

	2. Tape recorder				
	3. VCR/VCP /DVD/CD player				
	4. Television/ Dish				
	5. Computer				
	6. Telephone				
	7. Mobile phone				
	8. Internet				
	9. Camera				
	10. Other				
	d) Kitchen material				
	1. Utensils				
	a. Aluminum				
	b. Brass				
	c. Steel				
	d. Stainlesssteel made utensils				
	e. Non-sticky pan				
	2. Cooker				
	3. Mixer-Grinder				
	4. Refrigerator				
	5. Stove				
	6. Other				
	e) Storage structures				
	1. Indigenous				
	a) *Kothar*				
	b) *Kangi*				
	2. Improved				
	a) Iron beans				
	b) M.A.I.D.C. storage structure				
	c) Hopper bottom type storage structure				
	d) Any other improved storage structure				
	f) Other material				
	1. Fan				
	2. Air cooler				
	3. Air conditioner				

	4. Other				
XIV.	**Farm power implements and equipments**				
	a) Farm power				
	1. No farm power				
	2. One or more than one bullock				
	3. Oil engine				
	4. Electric motor				
	5. Tractor				
	6.Power tiller and trolly				
	7. Other				
	b) Farm implements				
	1) Traditional				
	a. Implements for preparatory tillage				
	b. Implements for interculturing				
	2) Improved				
	a**.** Implements for preparatory tillage				
	b. Implements for interculturing				
	c. Implements for harvesting, threshing and picking				
	c) Ownership of farm implements				
	1. Own implements				
	2. Implements on rent				
	d) Farm structures				
	1. Cattle shed - *Kaccha* / *Pucca*				
	2. Implement storage room- *Kaccha* / *Pucca*				
	3. Pump house - *Kaccha* / *Pucca*				
	e) Equipments				
	1. Sprayer				

	2. Duster				
	3. Other				
	f) Employment of labor at farm				
	1. Employ more than 2 annual labor				
	2. Employ only one annual labor				
	3. Employ >3 seasonal labor				
	4. Employ one seasonal labor				
	5. Employ family labor only				
XV.	**Livestock possession**				
	1. Cow				
	a. local				
	b. Improved (cross bred)				
	2. Buffaloes				
	a. local				
	b. Improved (cross bred)				
	3. Goat/Sheep				
	a. local				
	b. Improved (cross bred)				
	4. Fishery				
	5. Piggry				
	6. Poultry				
	7. Other				
XVI.	**a) Indebtness**				
	1. Borrower				
	2. Non-borrower				
	b) Loan repayment behaviour				
	1. Regular payer of the loan				
	2. Defaulter of the loan				

XVII.	**Special position held**				
	1. Progressive farmer				
	2. Prize winner				
	3. Contact farmer				
	4. *KrishiPandit*				
	5. Opinion leader				
	6. Other				
XVIII	**Social Participation**				
	1. Without any position in socialorganization				
	2. Membership of one social organization				
	3. Involved in community work though not having membership or official position in any socialorganization				
	4. Financial contribution / Raising common funds				
	5.Office bearer in social organization				
	6. Village leader/opinion leader				
	7. Wide public leader				
	8. Other				

XIX.	**Farm visits/Exhibitions/Extension activities**				
	1. Always				
	2. Sometimes				
	3. Never				
XX.	**Personal achievement**				
	1. Award in Agriculture				
	2. Award in Society				
	3. Award in Education				
	4. Award in Sports				
	5. Award in bravery				
	6. No award				
XXI.	**Marketing pattern**				
	1. In local market				
	2. In Tehsil market				
	3. In District market				
	4. APMC				
	5. In metropolitan city				
	6. In State Level				
	7. Out of State				
	8. Outside the country				
	9. Government Purchase Center				
	10. Other				

SCORED SOCIO-ECONOMIC STATUS SCALE

Sl. No.	Items/Sub-items	Score
I)	**Education:**	
	1. Illiterate	1
	2. Can read and write	4
	3. Primary education	5
	4. Secondary education	6
	5. Higher secondary education	7
	6. Diploma	8
	7. Graduate	9
	8. Post Graduate	10
II)	**Family:**	
	a) Type:	
	1. Joint family	1
	2. Nuclear family	2
	b) Size:	
	1. Small (up to 3 members)	1
	2. Medium (4 to 6 members)	4
	3. Large (7 to 9 members)	3
	4. Very large (10 & above)	2
III)	**Annual income/year:**	
	1. Below poverty line (Up to Rs. 25,000)	1
	2. Rs. 25,001 to 50,000/-	
	2. Rs. 50,001 to Rs. 1,00,000/-	2
	3. Rs. 1,00,001 to 2,50,000/- (Below creamy layer)	3
	4. Rs.2,50,001/- and above (above creamy layer)	4
IV)	**Number of earning members in family**	1/person
V)	**Type of land holding**	
	3. Rainfed	1
	4. Irrigated	2
VI)	**Size of Land holding:**	
	1. Marginal (0.01 to 1.00 ha.)	1
	2. Small (1.01 to 2.00 ha.)	2
	3. Semi medium (2.01 to 4.00 ha.)	3
	4. Medium (4.01 to 10.00 ha.)	4
	5. Large (10.01 ha and above)	5

Sl. No.	Items/Sub-items	Score
VII)	**Ownership of cultivated land**	
	1. Land owner without tenant	4
	2. Land owner who lease out to share tenant	3
	3. Land owner who lease out some part of his land	2
	4. Land owner who lease out most of his land	1
VIII)	**Cropping intensity**	
	1. Upto 100%	1
	2. 101 to 200%	2
	3. 201 to 300 %	3
	Sources of irrigation	
	1. Canal irrigation	1
	2. Well	4
	3. Lake / Ponds	3
	4. River	2
IX)	**Major Occupation of Family:**	
	1. Agriculture +Wage earner	1
	2. Agriculture (Farming)	2
	3. Agriculture + Allied occupation (Goat farm/Poultry/Apiculture/Fishing, etc)	5
	4. Agriculture +Business / Independent profession	6
	5. Agriculture +Service	4
X)	**Employment of labor at farm**	
	6. Employ more than 2 annual labor	4
	7. Employ only one annual labor	3
	8. Employ >3 seasonal labor	3
	9. Employ one seasonal labor	2
	10. Employ family labor only	1
XI)	**House**	
	a) Type of house	
	1. Shed Thatched (Stalk farmers)	1
	2. Mudwalls and thatches	2
	3. Brick wall and tiled	3
	4. Concrete House	4
	5. Double storied	5
	6. Bungalow	6

	b) Ownership of house	
	1. Own house	2
	2. House on rent	1
	c) Electrification of house	
	1. Electrified	2
	2. Non-electrified	1
	d) Other facilities	
	1. Toilet/soak pit available	2
	2. Biogas Connection	2
	3. LPG connection	3
XII)	Subscription	
	1. No subscription	1
	2. Subscription to newspapers	2
	3. Subscription to magazines	3
	4. Subscription to farm magazines	4
	5. Other (if any, specify)	
XIII)	**Material Possession:**	
	a) Furniture	
	1. Chair	1
	2. Table	3
	3. Tea-poy	2
	4. Dining table	4
	5. Cupboard	6
	6. Cot	5
	7. *Diwan*	8
	8. Sofa	8
	9. Bench	4
	10.Easy chair	2
	b) Transportation	
	1. Bullock cart	2
	2. Bicycle	1
	3. Motorcycle	3
	4. Rickshaw	4
	5. Jeep/Car	5
	6. Tempo/Truck	6
	7. Tractor trolley	3

	8. Other	
	c) Recreational/ Communicational material	
	1. Radio	2
	2. Tape recorder	1
	3. VCR/VCP /DVD/CD player	3
	4. Television/Dish	5
	5. Computer	7
	6. Telephone	4
	7. Mobile phone	6
	8. Internet	8
	9. Camera	5
	d) Kitchen material	
	1. Utensils	
	a. Aluminum	1
	b. Brass	2
	c. Steel	3
	2. Cooker	2
	3. Mixer-Grinder	3
	4. Refrigerator	4
	5. Stove	2
	6. Other	
	e)Storage structures	
	1. Indigenous	
	a) *Kothar*	2
	b) *Kangi*	1
	2. Improved	
	a) Iron beans	1
	b) M.A.I.D.C. storage structure	3
	c) Hopper bottom type storage structure	4
	d) Any other improved storage structure	2
	f) Other material	
	1. Fan	1
	2. Air Cooler	2
	3. Air conditioner	3
	4. Other	1

XIV)	**Farm power implements and equipments**	
	a) Farm power	
	1. No farm power	1
	2. One or more bullock	2
	3. Oil engine	3
	4. Electric motor	4
	5. Tractor and or trolly	5
	6. Power tiller	6
	b) Farm implements	
	1) Traditional	
	a. Implements for preparatory tillage	1
	b. Implements for interculturing	2
	c. Implements for harvesting threshing and picking	3
	2) Improved	
	a. Implements for preparatory tillage	1
	b. Implements for interculturing	2
	c. Implements for harvesting threshing and picking	3
	c) Equipments	
	1. Sprayer	1
	2. Duster	2
	d) Farm structure	
	1. Cattle shed	1
	2. Implement storage room	2
	3. Pump house	3
XV)	**Livestock possession**	
	1. Cow (local/cross bred)	2/3
	2. Buffaloes	5
	3. Goat/Sheep	1
	4. Fishery	4
	5. Piggery	1
	6. Poultry	6

XVI)	**a) Indebtness**	
	1.Borrower	1
	2.Non-borrower	2
	b) Loan repayment behaviour	
	1. Regular payer of the loan	2
	2. Defaulter of the loan	1
XVI)	**Special position held**	
	1. Progressive farmer	1
	2. Prize winner	3
	3. Contact farmer	2
	4. *Krishi Pandit*	5
	5. Opinion leader	4
XVII)	**Social Participation**	
	1. No membership	1
	2. Member of one organization	2
	3. Member of more than one organization	3
	4. Office bearer in one organization	3
	5. Office bearer in more than one organization	4
	11. Involved in community work though not having membership or official position in any social organization	2
	12. Financial contribution / Raising common funds	2
XVIII)	**Farm visits/Exhibitions/Extension activities**	
	4. Always	3
	5. Sometimes	2
	6. Never	1
XIX)	**Personal achievement**	
	7. Award in Agriculture	3
	8. Award in Society	2
	9. Award in Education	2
	10. Award in Sports	2
	11. Award in bravery	2
	12. No award	1

XX)	**Marketing pattern**	
	1. In local market	1
	2. In Tehsil market	2
	3. In District market	3
	4. APMC	4
	5. In metropolitan city	5
	6. In State Level	6
	7. Out of State	7
	8. Outside the country	8
	9. Government Purchase Center	5
	10. Other (if any)	

APPENDIX-V

DEPARTMENT OF EXTENSION EDUCATION
COLLEGE OF AGRICULTURE, DAPOLI

Socio-economic status of the Small farmers in Konkan region.

INTERVIEW SCHEDULE

(Part I)

1) **Name of the small farmer**:
……

2) **Village**: ……**3) Taluka**: ……

4) **Age**: …… years

5) **Farming experience**:…… years

6) **Family Education status:** (Details of family members)

Sl. No.	Name	Relation with family head	Age	Education	Occupation	Annual Income (Rs.)

7) **Cropping pattern**

Sl. No.	Crop	Variety	Area (ha)			Production (Qt.)	Income (Rs)
			Rainfed	Irrigated	Total		
A)	Kharif crops						
1							
2							
Total (A)							

B)	Rabi Crops						
1							
2							
Total (B)							
C)	Summer crops						
1							
2							
Total (C)							
D)	Perennial/Annual Crops						
1							
2							
Total (D)							
Grand Total (A+B+C+D)							

8) Credit Worthiness

A. Please give details about your possession

Sl. No.	Possession	Number	Recent value (Rs.)
1.	**Own House**		
	a) Kachha		
	b) Pakka		
2.	**Land holding (ha./Acre)**		
3.	**Farm implements and machinery**		
	a) For prepatory		
	b) For Storage		

	c) For irrigation		
	d) For plant protection		
	e) Other (if any)		
4.	**Livestock possession**		
	a) Bullock pair		
	b) Cow/ buffalo		
	c) Goat/sheep		
	d) Other (if any)		
5.	**Other (if any)**		

B. Do you save some amount monthly? Yes/No

If yes, give following details

Sl. No.	Place	Saving amount (Rs.)	Sl. No.	Place	Saving amount (Rs.)
1.	**Home**		**6.**	**In cash**	
2.	**Post office**		**7.**	***Bhishi***	
3.	**Bank**		**8.**	**Co-operative society**	
4.	**Insurance**		**9.**	**Other**	
5.	**SHG**				

C. Do you have taken any type of loan?
Yes/No

If yes, give following details

Sl. No.	Source of loan	Year	Purpose of loan	Amount (Rs.)	Type of loan			Interest rate	Amount repaid (Rs.)	Remaining (Rs.)
					Short term	Medium term	Long term			
1.	**Co-operative bank**									
2.	**Land Development Bank**									

3.	**Nationalized bank**									
4.	**Dairy co-operatives**									
5.	**Money lender**									
6.	**Friend/ Relative**									
7.	**Other**									

9) Risk Orientation

Here are some statements that explain your orientation towards risk and uncertainties. Kindly indicate your degree of agreement or disagreement to those statements.

Sl. No.	Statement	SA	A	UD	D	SD
1.	A farmer should grow more crops to avoid greater risk involved in growing one or two crops.					
2.	A farmer should rather take mere of a chance in making a big profit than to be content with a smaller but less risky profit.					
3.	A farmer who is willing to take greater risk than the average farmers, usually does better financially.					
4.	It is good for a farmer to take risk, when he knows his chance of success is fairly high.					
5.	It is better for a farmer not to try new farming methods unless most others have used it with success					

6.	Trying an entirely new method in farming by a farmer involves risk, but it is worth it.					

10) Market Orientation

Here are some statements that explain your orientation towards market. Kindly indicate your degree of agreement or disagreement to these statements.

Sl. No.	Statement	SA	A	UD	D	SD
1.	Market news is not so useful to a farmer.					
2.	A farmer can get good price by grading his produce.					
3.	Storage facilities can ensure the better return of his produce.					
4.	One should sell his produce to the nearest market irrespective of price.					
5.	One should purchase his inputs from the shop, where his other relatives purchase.					
6.	One should raise crop or livestock products, which have more market demand.					

11) Cosmopoliteness:

1. Have you lived for sometime in the past in larger town/cities for any purpose? Yes/ No.
   If yes, please state: .....
2. Have you visited the following places during last three months?
   Yes/ No
   If yes, please give following details,

Sl. No.	Place	No. of times	Purpose of visit
1	Taluka		
2	District Place		
3	Metropolitan city		

3. Have you visited the Subject Matter Specialists during last season?
   Yes/No

   If yes, please give following details,

Sl. No.	Subject Matter Specialist	No. of times	Purpose of visit
1	District Veterinary Officer		
2	Extension Officer		
3	Supervisor of Co-operative Society		
4	SFDA		
5	Agricultural University		

4. Are you a member of any organization outside your village?
   Yes/No
   If yes, please state: .....
5. Have you visited any agricultural exhibition outside your village during last year?

   Yes/No

12) Attitude towards improved farm practices:

Sl. No.	Statements	Response				
		SA	A	UD	DA	SDA
1.	Handling of fertilizer and Pesticides results in health hazards for farmers					
2.	Improved farm practices encroach the time meant for domestic works					
3.	The introduction of improved farm practices has created more job opportunities for labourers					
4.	The improved farm practices have nothing new to offer to labourers					
5.	The introduction of improved farm practices is a blessing for farmers					
6.	The improved farm practices are mainly suited to women farmers					
7.	Working in the farm with improved practices is the best and I would not change my job for another					
8.	The improved farm practices make each and every farmer independent and self –reliant					
9.	There is no change in the wage rate of labourers due to the introduction of improved farm practices					
10.	All farmers/labourers cannot perform					

	improved farm practices as it requires skill					
11.	Agricultural production can be increased only by following improved farm practices					
12.	The use of chemicals makes farmers work risky					
13.	It is a sin on the part of farmers to do away with traditional practices					
14.	Improved farm practices provide lots of employment avenues of educated unemployed youths also.					

(Part II)
Socio-economic status of small farmer

Sl. No.	*Items / Sub-items*	
I.	**Education:**	
	1. Illiterate	
	2. Can read only	
	3. Can write only	
	4. Can read and write	
	5. Primary education	
	6. Secondary education	
	7. Higher secondary education	
	8. Diploma	
	9. Graduate	
	10. Post Graduate	
II.	**Family**	
	a) Type	
	1. Joint family	
	2. Nuclear family	
	b) Size	
	1. Small (1to 3 member)	
	2. Medium (4 to 6 member)	
	3. Large (7 to 9 member)	
	4. Very large (10 and above)	

III.	**Annual income/year**	
	2. Below Poverty line (BPL)	
	2. Rs. 26,000 to Rs. 50,000	
	3. Rs. 50,000 to Rs. 1,00,000/-	
	4. Rs. 1,00,000/- to 2,50,000/-	
	5. Rs.2,50,000/- and above	
IV.	**No. of earning members in the family**	
V.	**Type of land holding**	
	5. Rainfed	
	6. Irrigated	
VI.	**Land holding**	
	1. Marginal (Up to 1ha.)	
	2. Small (1.01 to 2.00 ha.)	
	3. Semi-medium (2.01 to 4.00ha.)	
	4. Medium (4.01 to 10.00 ha).	
	5. Large (Above10.01 ha)	
VII.	**Cropping intensity**	
	1. Up to 100%	
	2. 101 to 200%	
	3. 201 to 300%	
VIII.	**Ownership of cultivated land**	
	1. Land owner without tenant	
	2. Land owner who lease out to share tenant	
	3. Land owner who lease out part of his land	
	4. Land owner who lease out most of his land	
	5. Tenants	
IX.	**a) Sources of irrigation**	
	2. Many sources (more than 2)	
	2. Canal irrigation	
	3. Well / Tube well	
	4. Lake / Ponds	
	5. River	
	b) Method of water lifting	
	5. *Okti* or *mot*	

	6. Persian wheel	
	7. Diesel/petrol pump	
	8. Electric motor	
	c) Methods of irrigation	
	5. Flood	
	6. Ridges and furrow	
	7. Sprinkler irrigation	
	8. Drip irrigation	
X.	**Major Occupation of Family Head**	
	1. Agriculture + Wage earner	
	2. Agriculture (Farming)	
	3. Agriculture + allied occupation (Goat farm/ Poultry/ Apiculture/ Sericulture/Fishing)	
	4. Agriculture + Business / Independent profession	
	5. Agriculture + Service	
XI.	**House**	
	a) Type of house	
	1. Shed Thatched (Stalk farmers)	
	2. Mudwalls and thatches	
	3. Brick wall and tiled	
	4. Concrete House	
	5. Double storied	
	6. Bungalow	
	b) Ownership of house	
	1. Own house	
	2. House on rent	
	c) Other facilities	
	1. Toilet/soak pit available	
	2. Biogas Connection	
	3. LPG connection	
XII.	**Subscription to publications**	
	1. No subscription	
	2. Subscription to newspapers	
	3. Subscription to magazines	

	4. Subscription to farm magazines	
	5. Other (if any)	
XIII.	**Material Possession**	
	a) Furniture	
	1. Chair	
	2. Table	
	3. Tea-poy	
	4. Dining table	
	5. Cupboard	
	6. Cot	
	7. *Diwan*	
	8. Sofa	
	9. Bench	
	10. Easy Chair	
	Others (if any)	
	b) Transport	
	1. Bullock cart	
	2. Bicycle	
	3. Motorcycle	
	4. Rickshaw	
	5. Jeep/Car	
	6. Tempo/Truck	
	7. Tractor trolley	
	8. Other	
	c) Recreational / Communicational material	
	1. Radio	
	2. Tape recorder	
	3. VCR/VCP /DVD/CD player	
	4. Television/ Dish	
	5. Computer	
	6. Telephone	
	7. Mobile phone	
	8. Internet	
	9. Camera	
	10. Other	
	d) Kitchen material	
	1. Utensils	

	a. Aluminum	
	b. Brass	
	c. Steel	
	d. Stainlesssteel made utensils	
	e. Non-sticky pan	
	2. Cooker	
	3. Mixer-Grinder	
	4. Refrigerator	
	5. Stove	
	6. Other	
	e) Storage structures	
	1. Indigenous	
	a) *Kothar*	
	b) *Kangi*	
	2. Improved	
	a) Iron beans	
	b) M.A.I.D.C. storage structure	
	c) Hopper bottom type storage structure	
	d) Any other improved storage structure	
	f) Other material	
	1. Fan	
	2. Air cooler	
	3. Air conditioner	
	4. Other	
XIV.	**Farm power implements and equipments**	
	a) Farm power	
	1. No farm power	
	2. One or more than one bullock	
	3. Oil engine	
	4. Electric motor	
	5. Tractor	
	6.Power tiller and trolly	
	7. Other	
	b) Farm implements	
	1) Traditional	
	a. Implements for preparatory tillage	
	b. Implements for interculturing	

	2) Improved	
	a**.** Implements for preparatory tillage	
	b. Implements for interculturing	
	c. Implements for harvesting, threshing and picking	
	c) ownership of farm implements	
	1. Own implements	
	2. Implements on rent	
	d) Farm structures	
	1. Cattle shed - *Kaccha / Pucca*	
	2. Implement storage room- *Kaccha / Pucca*	
	3. Pump house - *Kaccha / Pucca*	
	e) Equipments	
	1. Sprayer	
	2. Duster	
	3. Other	
	f) Employment of labor at farm	
	13. Employ more than 2 annual labour	
	14. Employ only one annual labour	
	15. Employ >3 seasonal labour	
	16. Employ one seasonal labour	
	17. Employ family labour only	
XV.	**Livestock possession**	
	1. Cow	
	a. local	
	b. Improved (cross bred)	
	2. Buffaloes	
	a. local	
	b. Improved (cross bred)	
	3. Goat/Sheep	
	a. local	
	b. Improved (cross bred)	
	4. Fishery	
	5. Piggery	
	6. Poultry	

	7. Other	
XVI.	**a) Indebtness**	
	3. Borrower	
	4. Non-borrower	
	b) Loan repayment behavior	
	1. Regular payer of the loan	
	2. Defaulter of the loan	
XVII.	**Special position held**	
	1. Progressive farmer	
	2. Prize winner	
	3. Contact farmer	
	4. *KrishiPandit*	
	5. Opinion leader	
	6. Other	
XVIII.	**Social Participation**	
	1. Without any position in socialorganization	
	2. Membership of one social organization	
	3. Involved in community work though not having membership or official position in any socialorganization	
	4. Financial contribution / Raising common funds	
	5. Office bearer in social organization	
	6. Village leader/opinion leader	
	7. Wide public leader	
	8. Other	
XIX.	**Farm visits/Exhibitions/Extension activities**	
	7. Always	
	8. Sometimes	
	9. Never	
XX.	**Personal achievement**	
	13. Award in Agriculture	
	14. Award in Society	
	15. Award in Education	

	16. Award in Sports	
	17. Award in bravery	
	18. No award	
XXI.	**Marketing pattern**	
	1. In local market	
	2. In Tehsil market	
	3. In District market	
	4. APMC	
	5. In metropolitan city	
	6. In State Level	
	7. Out of State	
	8. Outside the country	
	9. Government Purchase Center	
	10. Other	

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