CHAPTER II

REVIEW OF LITERATURE

The main purpose of this chapter is to recapitulate the findings of past studies which are related to the present investigation. A comprehensive review of literature is an essential part of any scientific investigation. The literature reviewed so far clearly indicated that a few studies on some of the aspects under present investigation are available. No such systematic study has so far been conducted in the areas of present investigation.

The review of literature leads the researcher to conclude his finding with reference to past studies. It is also necessary in developing conceptual framework and selection of appropriate design for the study. As the literature having direct bearing on different aspects of the present study was limited and hence, the literatures having indirect bearing were also reviewed. A brief account of such literature reviewed has been presented under the following heads:

2.1 Profile of respondent farmers.
2.2 Attitude of farmers towards avoidance of agriculture as a profession.
2.3 Relationship between farmers of respondents and their attitude towards avoidance of agriculture as a profession.
2.4 Factors related for avoidance of agriculture as a profession.
2.5 Sustainability of agriculture as a profession.
2.6 Suggestions from the respondents to attract new generation toward agriculture as an occupation.

2.1 PROFILE OF THE FARMERS

2.1.1 Age

Joshi (2004) in his study on extent of knowledge and adoption of cotton growers about modern practices of cotton in Bhal area stated that more than half (53.63 per cent) of the cotton growers were of old age group, followed by middle age (32.72 per cent). The respondents in young age group were found to be 13.64 per cent.
Sharnagat (2008) in their study on attitude of beneficiaries towards National Horticulture Mission observed that 58.67 per cent of the beneficiaries of NHM belonged to middle age group; followed by 27.33 per cent and 14.00 per cent respondents were observed in young and old age category respectively.

Mavani (2012) investigated that training needs of groundnut growers of Junagadh district in South Saurashtra agro climatic zone revealed that more than two-fifth (43.33 per cent) of the groundnut growers were in middle age group, whereas 32.50 and 24.16 per cent of them were in young and old age group, respectively.

Hadiya (2013) in his study on knowledge and adoption of recommended practices of *kharif* groundnut growers in South Saurashtra zone of Gujarat state indicated that majority (58.33 per cent) of the respondents were in the middle age group followed by 25.00 and 16.67 per cent of the respondents belonged to the old and young age group, respectively.

Tala (2013) conducted study in Navasari district of Gujarat state on assessment of different farming system adopted by the farmers and reported that majority of the respondents (67.33 per cent) were found in middle age group, followed by 17.33 and 15.33 per cent of the respondents who belonged to old and young age groups, respectively.

Vasava (2013) investigated on cultivation status of hybrid rice in tribal area of south Gujarat revealed that more than half of the hybrid rice growers (60.00 per cent) were in the middle age group, followed by 20.00 per cent who in young age group and 20.00 per cent were in old age group.

Sipai (2014) indicated that more than half (53.34 per cent) of the cotton growers belonged to middle age group, followed by old age (33.33 per cent) and young age (13.33 per cent) groups, respectively.

Patel (2016) studied that more than half (53.33 per cent) of the cotton growers in Saurashtra region with drip irrigation system belonged to middle age group whereas 42.78 per cent of the cotton growers with drip irrigation system belonged to old age group and only 3.89 per cent cotton growers with drip irrigation system belonged to young age group.
2.1.2 Education

Chavda (2007) in his study on knowledge and adoption of post-harvest technology of groundnut crop in south Saurashtra agro climatic zone of Gujarat state revealed that nearly three-fourth (71.00 per cent) of groundnut growers had medium level of education followed by 17.00 per cent of respondents had low and 12.00 per cent had high education respectively.

Dalsaniya (2010) investigated on knowledge and adoption of kharif sesame growers about recommended kharif sesame production technology indicated that more than half (55.83 per cent) of the sesame growers were educated up to primary level, whereas 26.67 per cent of the respondents were illiterate, 13.33 per cent of the sesame grower’s were educated up to higher secondary.

Gohil (2010) revealed that one third (32.50 per cent) of cotton growers were educated up to secondary level, while 27.00 per cent and 26.00 per cent respondents belonged to higher education and primary education level groups respectively, while only 14.50 per cent of the respondents were illiterate.

Gorfad (2012) revealed that 7.78 per cent of the groundnut growers were illiterate (unable to read or write); whereas, 11.67 per cent of them could read only and 18.89 per cent were functionally literate i.e. only read and write. About one fourth (26.67 per cent) of respondents were educated up to primary level followed by secondary school level (20.56 per cent) and higher secondary level (10.56 per cent) respectively. While only 3.89 per cent of them educated up to graduate and above college level of education.

Goswami (2013) inferred that more than two-fifth (42.15 per cent) of the female agricultural who workers had middle school level of education, followed by 13.57 and 7.14 per cent had who high school and graduation level of education, respectively. Almost 37.14 per cent of the female agricultural workers were illiterate.

Vasava (2013) investigated on cultivation status of hybrid rice in tribal area of south Gujarat and observed that slightly lower than half of the hybrid rice growers (46.00 per cent) had primary level of education, followed by 44.00 per cent of them belonged to secondary level of education, and only 10.00 per cent of them had college and above level of education.
2.1.3 Type of family

Zala (2008) in his study on crisis management practices adopted in cotton cultivation by the farmers of Kheda district of Gujarat state concluded that great majority (80.91 per cent) of the cotton growers belonged to joint type of family and 19.09 per cent of them had nuclear type of family.

Trivedi (2010) conducted study on Anand district of Gujarat state revealed that majority (64.50 per cent) of the cumin growers had nuclear type of family and 35.50 per cent of them had joint type of family.

Choudhary (2012) in the study on crisis management by farmers in drought areas of Gujarat state indicated that majority of the respondents (62.67 per cent) belonged to joint families and 37.33 per cent belonged to nuclear families.

Gulkari (2014) revealed that slightly more than half (52.73 per cent) of the drip irrigated banana growers had nuclear type of family and 47.27 per cent of them had joint type of family.

2.1.4 Size of family

Mankar et al. (2000) in the study on trainee’s attitude towards poultry training programme stated that majority (70.00 per cent) of the fish farmers had family members in the range of 5 to 11.

Deshmukh et al. (2009) investigated on participation of youth in rural development revealed that 45.83 per cent of the youths were from family with medium size followed by 26.67 per cent and 24.17 per cent of them who were from the families with big and small size respectively.

Bhosale (2010) conducted a study on participation of rural youth in paddy farming in Anand district of Gujarat found that majority (71.67 percent) of the rural youth had large sized family and rest 28.33 percent of the rural youth belonged to families with small and medium size.

Patel et al. (2016) reported that 52.67 per cent of dairy farmers had medium size of family while 38.66 per cent and 8.67 per cent of them had large and small size family respectively where the average number of members in the respondents family was five.
2.1.5 Occupation

Parvez et al. (2013) in his study on factors affecting knowledge of fish farmers regarding fish production technology observed that majority of the respondents (51.12 per cent) followed farming + fish followed by 38.88 and 10.00 per cent had followed farming + fish + labour and fish farming alone respectively.

Tala (2013) conducted study in Navasari district of Gujarat state on assessment of different farming system adopted by the farmers indicated that 38.66 per cent of the respondents were engaged in agriculture+ horticulture as main occupation for their livelihood, followed by 32.00, 17.33 and 12.00 per cent of them were engaged in agriculture+ animal husbandry, agriculture+ fisheries and agriculture+ poultry as their major occupation respectively.

Vasava (2013) investigated on cultivation status of hybrid rice in tribal area of south Gujarat found majority of the hybrid rice growers belonged to farming occupation followed by 30.00 and 2.00 per cent from farming+ animal and farming+ animal+ service categories respectively.

Gulkari (2014) stated that nearly more than half (53.64 per cent) of the banana growers were dependent on agriculture and animal husbandry, followed by 33.64 per cent and 12.72 per cent of them were depend on agriculture and business or service and only on agriculture, respectively.

2.1.6 Annual income

Joshi (2004) in his study on extent of knowledge and adoption of cotton growers about modern practices of cotton in Bhal area reported that 44.54 per cent of the cotton growers had high annual income (above Rs. 60,000/-), followed by 31.82 per cent and 23.64 per cent of the respondents who had low income (up to Rs. 30,000) and medium income (Rs.30,000 to 60,000) respectively.

Koli (2012) indicated that more than half (52.78 per cent) of the coconut growers in Junagadh were found with medium annual income followed by 33.33 and 13.89 per cent of them with high and low annual income respectively. Thus it can be concluded that majority (86.11 per cent) of coconut growers were found with medium to high level of annual income.
Vasava (2013) investigated on cultivation status of hybrid rice in tribal area of south Gujarat indicated that nearly two-third of the hybrid rice growers (62.00 per cent) had annual income below Rs 50,000 followed by 33.00 and 5.00 per cent had Rs 50,001 to Rs 1,00,000 and above Rs 1,00,001 respectively.

Sangada (2015) conducted that 43.33 per cent of the respondents had medium income (₹ 50,000 to 1,00,000). About one fourth (25.33 per cent) of the respondents were from low income group (below ₹ 50,000) whereas, 30.83 per cent of the respondents were from high income group (above 1,00,000).

Patel (2016) pointed out that, nearly three fifth (59.45 per cent) of the cotton growers with DIS had annual income between ₹ 1,50,001 to ₹ 2,50,000 followed by 16.11 per cent cotton growers of DIS were having annual income between up to ₹ 1,00,000. While, nearly one forth (24.44 per cent) of cotton growers of DIS belonged to annual income above ₹ 2,50,001/-.  

2.1.7 Land holding

Chand (2012) in his study on perception of the farmers towards technical capability of the Public Extension Personal in middle Gujarat reported that 33.33 per cent of the farmers were large farmers followed by 31.68, 21.66 and 13.33 per cent of them were medium, small and marginal farmers respectively.

Kunchala (2012) denoted that slightly more than one third (34.16 per cent) of the respondents were fell under the category of small land holding, followed by medium(27.50 per cent) and marginal (21.67 per cent) land holding, while 16.67 per cent of the farmers fell under the category of big land holding.

Tala (2013) conducted study in Navasari district of Gujarat state on assessment of different farming system adopted by the farmers observed that nearly half of the respondents (48.00 per cent) belonged to small land holding category, followed by 25.33, 22.66 and 4.00 per cent belonged to semi-medium, marginal and medium land holding categories respectively.

Vasava (2013) investigated on cultivation status of hybrid rice in tribal area of south Gujarat found that more than half of the hybrid rice growers (55.00 per cent) possessed medium size of land holding followed by, 28.00 and 17.00 per cent of them had small and big size land holding.
Patel (2016) reported that two-fifth (40.00 per cent) of the cotton growers with DIS were found having small size of land holding (1.01 to 2.0 ha) followed by medium size land holding (35.00 per cent) and large size of land holding (15.00 per cent). Only 10.00 per cent of the beneficiary farmers were found having marginal size of land holding.

2.1.8 Social Participation

Joshi (2004) in his study on extent of knowledge and adoption of cotton growers about modern practices of cotton in Bhal area revealed that majority (55.45 per cent) of the respondents had membership in any organization, whereas 24.55 per cent of them had no membership in any organization, while 19.09 per cent of them had holding position in any organization. Only 12.73 per cent of the respondents had membership in more than one organization.

Dalsaniya (2010) investigated on knowledge and adoption of kharif sesame growers about recommended kharif sesame production technology concluded that more than half (53.33 per cent) of the sesame growers had medium level of social participation, followed by high (11.67 per cent) and low (11.67 per cent) social participation.

Gohil (2010) revealed that more than two-third (69.50 per cent) of the cotton growers had medium social participation, whereas 16.00 and 14.50 per cent of the respondents had high and low social participation, respectively.

Humbal (2012) in his study on knowledge and adoption of castor as intercrop with groundnut in south Saurashtra agro climatic zone of Gujarat revealed that more than half (52.50 per cent) of the respondents had medium level of social participation, followed by low (33.33 per cent) and high (14.16 per cent) social participation.

Hadiya (2013) observed that nearly three-fifth (59.17 per cent) of the groundnut growers had medium level of social participation followed by 29.17 and 11.66 per cent of them had low and high level of social participation respectively.

Patel (2013) concluded that more than half of respondents (56.66 per cent) had membership in more than one organization followed by 23.34 per cent and 12.00 per cent of them who had membership in one organization and no membership respectively. While only 08.00 per cent of the respondents had membership along with position holding in one organization.
Vasava (2013) investigated on cultivation status of hybrid rice in tribal area of south Gujarat denoted that 61.00 per cent of the hybrid rice growers had membership in one organisation, followed by 13.00 per cent had membership in more than one organisation; while only 24.00 and 2.00 per cent had no membership and position holding in organization respectively.

2.1.9 Mass media exposure

Joshi (2004) in his study on extent of knowledge and adoption of cotton growers about modern practices of cotton in Bhal area found that two fifth (40.00 per cent) of the respondents had medium level of mass media exposure, while 34.55 per cent and 25.45 per cent had low and high level of mass media exposure respectively.

Gulkari (2014) stated that slightly less than majority (59.09 per cent) of the banana growers had high level of mass media exposure followed by 24.55 of them were with very high level of mass media exposure while, 13.64 per cent and 2.73 per cent were with medium and low level of mass media exposure respectively.

Parmar (2014) investigated on comprehensive awareness among the farmers about the application of bio-fertilizers in Anand district and concluded that majority (50.84 per cent) of the respondents had medium level of mass media exposure whereas 23.34 per cent of respondents had high level of mass media exposure, while 18.33 per cent of respondents had low mass media exposure. Only 5.83 per cent and 1.66 per cent respondents had very high and low mass media exposure respectively.

Sipai (2014) disclosed that slightly more than two-fifth (41.67 per cent) of cotton growers had medium level of mass media exposure followed by high, very high, and low level of mass media exposure with 32.50 per cent, 19.16 per cent and 6.67 per cent respectively.

Borate (2015) observed that little less than one half (45.50 per cent) of the banana growers had very high level of mass media exposure, followed by of them were with high level of mass media exposure (44.50 per cent), only 6.50 per cent and 3.00 per cent of them were having medium and low level of mass media exposure respectively. Average mass media exposure score was 12, which also proved that the banana growers had high mass media exposure.
2.1.10 Risk orientation

Thorat (2005) study on adoption of floriculture in Anand district of Gujarat state indicated that majority (67.27 per cent) of the respondents had medium level of risk orientation, followed by 22.73 per cent with high and 10.00 per cent with low level of risk orientation.

Bhosale (2010) observed that majority (62.50 per cent) of the respondents had medium risk orientation, whereas 30.84 percent and 06.66 per cent of the respondents belonged to low and high category of risk orientation respectively.

Tala (2013) conducted study in Navasari district of Gujarat state on assessment of different farming system adopted by the farmers and indicated that majority of respondents (64.00 per cent) had moderate level of risk orientation, followed by 18.66 per cent had higher level of risk orientation and 17.33 per cent of them had lower level of risk orientation.

Vasava (2013) investigated on cultivation status of hybrid rice in tribal area of south Gujarat revealed that more than half of the hybrid rice growers (54.00 per cent) had medium risk orientation, followed by 39.00 and 7.00 per cent had low and high level of risk orientation respectively.

2.1.11 Achievement motivation

Patel (2005) revealed that majority (68.75 per cent) of the respondents had medium level of achievement motivation, followed by 16.67 per cent and 14.58 per cent of them were with high and low level of achievement motivation, respectively.

Zala (2008) in his study on crisis management practices adopted in cotton cultivation by the farmers of Kheda district of Gujarat State concluded that majority (84.54 per cent) of the cotton growers had medium level of achievement motivation, followed by 8.64 per cent and 6.82 per cent of them were with high and low level of achievement motivation, respectively.

Aher (2010) investigated on entrepreneurial attitude of agricultural students revealed that majority (67.50 per cent) of respondents had medium degree of achievement motivation, followed by 21.67 per cent and 10.83 per cent of them were with low and high level of achievement motivation, respectively.
Gulkari (2014) reported that two third (66.36 per cent) of the drip irrigated banana growers had medium level of achievement motivation, while 31.82 per cent and 1.82 per cent of them had high and very high level of achievement motivation respectively.

Parmar (2014) indicated that less than half (46.67 per cent) of the respondents had medium level and same per cent of the respondents had high level of achievement motivation. About 3.33 per cent of the respondents had low level and also 3.33 per cent of the respondents had very high level of achievement motivation.

2.1.12 Economic motivation

Christian (2001) had taken survey on extent of adoption of IPM strategy by cotton growers of Vadodara district of Gujarat state and observed that 38.33 per cent of the cotton growers had medium level of economic motivation followed by 34.17 per cent and 27.50 per cent of the respondents had low and high level of economic motivation, respectively.

Bhosale (2010) stated that more than half (55.84 percent) of the rural youth belonged to medium economic motivation category, whereas 24.16 percent and 20.00 percent of the rural youth had high and low economic motivation respectively.

Tala (2013) conducted study in Navsari district of Gujarat state on assessment of different farming system adopted by the farmers indicated that majority of the respondents (60.00 per cent) had moderate level of economic motivation, followed by 29.33 per cent and 10.66 per cent had higher and lower level of economic motivation.

Vasava (2013) investigated on cultivation status of hybrid rice in tribal area of south Gujarat found that 61.00 per cent of the hybrid rice growers had medium level of economic motivation, followed by 35.00 per cent had low level of economic motivation and only 4.00 per cent of them had high level of economic motivation.

Sipai (2014) denoted that slightly more than half (52.50 per cent) of the cotton growers had very high degree of economic motivation, followed by high and medium with 43.33 per cent and 04.17 per cent, respectively. No cotton growers found place in the categories of low and very low level of economic motivation.
2.1.13 Self confidence

Madhushree (2014) investigated on decision making pattern and achievement motivation of farm women under dry land condition in Tumkur district observed that 77.50 per cent of the farm women had high level of self confidence followed by 13.33 per cent had low and 9.16 per cent had medium level of self confidence.

Bariya (2016) reported that more than three-fifth (63.33 per cent) of the SHG members had medium level of self confidence followed by 28.89 per cent and 7.78 per cent had high and low level of self confidence, respectively and no one had very high level of self confidence while in case of Non SHG members nearly three-fourth (73.33 per cent) of the women were having low level of self confidence followed by 18.89 per cent and 7.78 per cent had low and medium level of self confidence respectively.

2.2. ATTITUDE OF THE FARMERS TOWARDS AVOIDANCE OF AGRICULTURE AS A PROFESSION

Kanani (1998) in his study on indigenous practices of groundnut cultivation followed by the farmers of south Saurashtra zone in Gujarat state observed that majority of the farmers (61.67 per cent), extension personnel (76.66 per cent) and research personnel (50.00 per cent) had favourable attitude towards indigenous practices of groundnut crop.

Rahman (2000) investigated on farmers attitude towards organic farming in Bangladesh and reported that an overwhelming majority (84.00 per cent) of the farmers were found to have favourable and moderately favourable attitude while only 16.00 per cent of the farmers were found to have unfavourable attitude towards organic farming.

Patel (2005) in his study indicated that 61.00 per cent of the farmers had moderately favourable attitude towards organic farming practices, whereas 22.00 per cent and 17.00 per cent had less and highly favourable attitude towards organic farming practices respectively.

Pise (2006) revealed that majority (68.66 percent) of the respondents had moderately favourable attitude towards banana cultivation technology, whereas 16.67 per cent and 14.67 per cent of the respondents had highly favourable and less favourable attitude towards banana cultivation, respectively.
Sajjan (2006) revealed that slightly more than three-fifth of the respondents in (61.66 per cent) had moderately favourable attitude towards agriculture, while 21.66 per cent of were with more favourable attitude towards agriculture, only 16.66 per cent of them were found with favourable attitude towards agriculture in Bagalkot district.

Zala (2008) in his study on crisis management practices adopted in cotton cultivation by the farmers of Kheda district of Gujarat state and revealed that majority (77.73 per cent) of the crisis management adopter cotton growers had moderate attitude towards adoption of cotton cultivation, which was followed by 14.54 and 7.73 per cent of them with favourable and not favourable attitude towards the adoption of cotton cultivation respectively.

Uddin et al. (2008) traced out that majority (71.43 per cent) of the coastal youths had moderately favorable attitude toward the selected agricultural technologies, followed by 17.58 per cent and 10.99 per cent of them were with favourable and unfavourable attitude toward the selected agricultural technologies respectively.

Ramjiyani (2013) found that more than half (55.00 per cent) of the rural youth had moderately favorable attitude towards agriculture as an occupation, while 23.00 per cent and 13.00 per cent of them had more favorable and most favorable attitude towards agriculture as an occupation, respectively. Only 6.00 per cent and 3.00 per cent of the rural youth had less favorable and least favorable attitude towards agriculture as an occupation, respectively.

2.3 RELATIONSHIP BETWEEN ATTITUDE VARIABLE AND PROFILE OF THE FARMERS

2.3.1 Age and attitude

Maharana (1998) investigated on trainee’s attitude towards poultry training programme observed negative and significant relationship between age and attitude of the trainers towards the poultry-training programme.

Ajit (2004) in his study on determination of attitude, occupation aspiration and preference for placement of B. Sc. agriculture students of Gujarat state worked out that there was no significant relationship between age and attitude towards agricultural education.
Zala (2008) in his study on crisis management practices adopted in cotton cultivation by the farmers of Kheda district of Gujarat State revealed that age of cotton growers had negative and non-significant correlation with their attitude towards cotton cultivation.

Darandale (2010) conducted study on attitude of maize growers towards organic farming in Vadodara district of Gujarat state indicated that age of maize growers had negative and non-significant correlation with their attitude towards organic farming.

Smitha (2013) study on development of scale to measure attitude of the farmers towards greenhouse technology indicated that age had negative and significant relation with attitude of farmers towards greenhouse technology.

2.3.2 Education and attitude

Sai (2002) in his study on gain in knowledge and attitude of trained women towards fruit and vegetable preservation training of Anand district reported that education had positive and significant association with attitude of the respondents towards fruit and vegetable preservation training.

Darandale (2010) conducted study on attitude of maize growers towards organic farming in Vadodara district of Gujarat state revealed that attitude of the respondents towards organic farming practices in maize crop had highly significant relationship with education.

Patel (2013) observed that education had positive and non-significant relationship with attitude of farmers towards green manuring for sustainable agriculture.

Smitha (2013) conducted a study on development of scale to measure attitude of the farmers towards greenhouse technology indicated that education had positive and significant relation with attitude of farmers towards greenhouse technology.

2.3.3 Type of family and attitude

Rani (2005) concluded that there was no significant relationship between type of family of the respondents and their attitude towards fruit and vegetable training.
Meshram et al. (2006) in their study on attitude of beneficiaries to Swarna Jayanti Swarojgar Yojana observed that there was no significant relationship between type of family of the beneficiaries and their attitude towards SGSY.

Badoriya et al. (2012) in his study on impact of Swarnajayanti Gram Swarojgar Yojana on poverty alleviation revealed non-significant relationship between type of family of the beneficiaries and their attitude towards SGSY programme.

2.3.4 Size of the family and attitude

Mishra et al. (1996) investigated on factor affecting the attitude of the employees of NGO’s towards their organization and observed that family size had non-significant relationship with attitude of the employees of NGO’s towards their organizations.

Sai (2002) in his study on gain in knowledge and attitude of trained women towards fruit and vegetable preservation training of Anand district found negative and non-significant relationship between size of family and attitude of the respondents towards fruit and vegetable preservation training.

Patel and Chauhan (2004) in his study on corollary of the profile of farmers on their attitude towards integrated pest management strategy observed that there was no significant relationship between size of family and attitude of the respondents towards IPM strategy.

2.3.5 Occupation and attitude

Pise (2006) in his study on attitude of banana growers towards banana cultivation technology revealed that occupation of the respondents had significant correlation with their attitude towards banana cultivation technology.

Trivedi (2010) reflected that involvement in various occupations by the cumin growers was observed to have non-significant correlation with their degree of attitude and adoption of crisis management practices in cumin cultivation.

Ramjiyani (2013) found that more than half (55.00 per cent) of the rural youth had moderately favorable attitude towards agriculture as an occupation, while 23.00 per cent and 13.00 per cent of them had more favorable and most favorable attitude towards agriculture as an occupation, respectively. Only 6.00 per cent and 3.00 per
cent of the rural youth had less favorable and least favorable attitude towards agriculture as an occupation, respectively.

2.3.6 Annual income and attitude

Choudhry *et al.* (1991) conducted on a study correlates of attitude of farmers towards chemical fertilizers and HYV of paddy reported that annual income had not significantly association with their attitude towards chemical fertilizers.

Mohanty (1998) reported that annual income of the family had non-significant relationship with attitude of agricultural students towards vocational education.

Singh (1998) pointed out that annual income of the family had non-significant relationship with attitude of the respondents towards vocational bakery training.

Sai (2002) in his study on gain in knowledge and attitude of trained women towards fruit and vegetable preservation training of Anand district found that annual income of the family had significant relationship with the attitude of the respondents towards fruit and vegetable preservation training.

Ajit (2004) surveyed on determination of attitude, occupation, aspiration and preference for placement of B. Sc. agriculture students of Gujarat state revealed that family income was positively and significantly related with attitude towards agricultural education.

Patel (2005) found that family income was positively and significantly related with the attitude of the respondents towards organic farming practices in Saurashtra region.

2.3.7 Land holding and attitude

Temkar (2000) conducted study on Anand district observed that family land holding was significantly and positively related with attitude of the respondents towards agriculture education.

Ajit (2004) surveyed on determination of attitude, occupation aspiration and preference for placement of B. Sc. agriculture students of Gujarat state revealed that the family Land holding was significantly and positively related to the attitude of the respondents towards agriculture education.
Zala (2008) in his study on crisis management practices adopted in cotton cultivation by the farmers of Kheda district of Gujarat state indicated that attitude of cotton growers towards the cotton cultivation technology with the size of land holding had non-significant relationship.

Darandale (2010) reported that attitude of the respondents towards organic farming practices in maize crop with the size of land holding had highly significant relationship.

2.3.8 Social participation and attitude

Choudhry et al. (1991) study conducted on correlates of attitude of farmers towards chemical fertilizers and HYV of paddy reported that social participation had positive and significant relationship with their attitude towards chemical fertilizers.

Kanani (1998) in his study on indigenous practices of groundnut cultivation followed by the farmers of south Saurashtra zone in Gujarat state observed that level of attitude of groundnut growers was negative and non significantly associated with their social participation.

Patel (2005) in his study on knowledge and attitude of farmers towards organic farming practices in south Saurashtra zone of Gujarat state indicated that there was positive and significant association between level of attitude of respondents towards organic farming and their social participation.

Patel (2006) investigated on attitude of paddy growers towards the use of pesticide in Tarapur, Sojitra and Petlad taluka of Anand district of Gujarat state indicated that attitude towards the use of pesticides in paddy crop has significant relationship with social participation.

Smitha (2013) study on development of scale to measure attitude of the farmers towards greenhouse technology revealed that social participation had positive and non-significant relation with attitude of farmers towards greenhouse technology.

2.3.9 Mass media exposure and attitude

Zala (2008) in his study on crisis management practices adopted in cotton cultivation by the farmers of Kheda district of Gujarat state observed that mass media exposure of cotton growers had highly significant relation with their attitude towards scientific cotton cultivation.
Borole (2010) reported that mass media exposure had positive and highly significant correlation with attitude of demonstrated paddy growers towards SRI technique.

Jat (2010) concluded that there was non-significant relationship between mass media exposure of AAU teachers and their attitude towards multimedia application in higher agricultural education.

Kunchala (2012) in his study on attitude of farmers towards private extension services indicated that mass media exposure of the respondents had positive and significant relationship with their attitude towards private extension.

2.3.10 Risk orientation and attitude

Temkar (2000) conducted study on Anand district reported significant relationship between risk orientation of dairy farmers and attitude towards artificial insemination.

Patel (2005) in his study on knowledge and attitude of farmers towards organic farming practices in south Saurashtra zone of Gujarat state indicated that the risk orientation of the respondents had non-significant association with their level of attitude.

Aski et al. (2010) investigated on knowledge and its relationship with personal, socio-economic and psychological characteristics of sunflower growers of Bijapur district reported that risk orientation of respondents had positive and significant relationship with sunflower growers of Bijapur district.

Dighe and Rajput (2010) reported that risk preference of respondents had positive and significant relationship with knowledge of soil and water conservation practices by farmers in Vidarbha (Maharastra).

2.3.11 Achievement motivation and attitude

Sai (2002) in his study on gain in knowledge and attitude of trained women towards fruit and vegetable preservation training of Anand district found that achievement motivation of the respondents had significant association with their attitude towards vocational agricultural training.

Rani (2005) reveled that achievement motivation of the women had significant correlation with their attitude towards fruits and vegetables preservation training.
Zala (2008) in his study on crisis management practices adopted in cotton cultivation by the farmers of Kheda district of Gujarat state (2008) reported that achievement motivation of cotton growers had positive and non-significant relationship with their attitude toward scientific cotton cultivation.

Christian (2010) concluded that achievement motivation of the women research scholars was found positively and significantly related with their level of attitude towards the use of computer.

Patter and Sanjeevkumar (2011) concluded that achievement motivation of agricultural graduates had positive and non-significant correlation with their attitude towards agro tourism as an enterprise.

2.3.12 Economic motivation and attitude

Temkar (2000) conducted study on Anand district reported that economic motivation had no significant relationship with the attitude of the respondents toward artificial Insemination.

Zala (2008) in his study on crisis management practices adopted in cotton cultivation by the farmers of Kheda district of Gujarat state indicated that economic motivation of cotton growers had non-significant relationship with their attitude towards scientific cotton cultivation.

Darandale (2010) conducted study on attitude of maize growers towards organic farming in Vadodara district of Gujarat state observed that economic motivation of maize growers had highly significant relationship with their attitude towards organic farming.

Gulkari (2011) revealed that economic motivation had positive and non-significant correlation with attitude of beneficiaries towards National Horticulture Mission.

Smitha (2013) research on development of scale to measure attitude of the farmers towards greenhouse technology stated that economic motivation of the farmers had positive and significant relation with their attitude towards greenhouse technology.
2.3.13 Self confidence and attitude

Madhushree (2014) investigated on decision making pattern and achievement motivation of farm women under dry land condition in Tumkur district reported that there was a positive and highly significant relationship between the self confidence and decision making pattern of farm women.

Batra (2016) conducted study on participation and role performance of Elected Women Representatives (EWRs) in Gram Panchayat concluded that there was a significant relationship with level of confidence and participation in Gram Panchayat.

2.4 FACTORS RELATED FOR AVOIDANCE OF AGRICULTURE AS A PROFESSION BY FARMER

Kurmanath (2010) reported that for different reasons more and more farmers have been moving out of farming activity. The shift in land use patterns from agriculture to non-agriculture has caused a serious concern. He reported that about 45.00 per cent of farmers interviewed by National Sample Survey Organisation wanted to quit farming. The pressure on land has been increasing and average size of land holdings has been declining gradually. Farmers indebted and temptation to sell prime farm land for non-farm purpose have been growing as land prices go up steeply.

Chaudhary and Chaudhary (2013) revealed that major reasons behind farmers moving out from farming and youth not interested in farming were high risk, low remuneration, uncertainty of output, poor marketing and emerging soil and water problems.

Singh and Gupta (2013) denoted that difficulties expressed by male adolescents in farming occupation were shortage of inputs such as high quality seeds, fertilizers, and water, ever increasing cost of inputs, problem of electricity in rural areas, insufficient remuneration for their outputs, low quality rural infrastructure and lack of technology for hi-tech farming.

Singh and Bhogal (2014) observed that the shift of workforce from farming to non-farming sector can be divided into two categories namely; growth-led shift and distress-induced shift. The growth-led shift is related to developmental factors like mechanization of agriculture, increasing employment and income, high education level, urbanization, development of secondary and tertiary sectors and state
intervention for generating employment opportunities. These factors have attracted the workforce from farming to more lucrative non-farm activities. On the other hand, distress-induced transformation was based on hardship or crisis-driven factors like falling productivity, increasing costs, decreasing returns, unemployment, under employment, indebtedness and even suicides. These factors are known as ‘push factors’, which force the agriculture workforce from farming towards non-farm activities to make out their livelihood. Which is known as depeasantization. They further reported that one of the most common reasons for which farmers (30.56 per cent) left farming was its non-profitable nature, joined other professions (18.75 per cent), land leased out due to high rent (17.36 per cent), less family labour due to old age/death/disease/drug addiction (12.15 per cent), emigration (10.07 per cent), land sold out due to high debt burden (9.00 per cent), due to price differentiation (2.08 per cent).

Deshmukh (2015) disclosed that as per the agriculture Census of 2005-06, there were 137 lakh farmers' families in Maharashtra. According to the agriculture Census of 2010-11, there were 136 lakh agricultural land holdings in the state. It means that the number of farmers quitting agricultural activities between 2005-6 and 2010-11 reduced by one lakh. State agriculture and revenue minister said the figure has now shrunk to 135 lakh. The land acquisition for industrialization; road widening and creation of new roads have eaten up the agricultural land.

Agarwal and Agrawal (2016) studied farmers views on why they dislike farming and concluded that low profitability was major reason for disliking farming for those farmers who cultivated 1 ha or less rather than for those cultivating over 2 ha (66.00 per cent) and other reason was high level of risk involved farming (10.00 per cent), other minor reasons experienced by farmers were low social status, and substantial land size.

Sainath (2016) denoted that on an average, 2,035 farmers have been losing ‘Main Cultivator’ status every single day for the last 20 years. As per the latest census report of 2011, main cultivators have been 15 million less than census report of 1991 and they have been over 7.7 million less than census report of 2001.

Sonawane (2016) pointed out that drought; natural calamities, total dependence on agriculture, lack of supplementary business, bad habits amongst
farmers, laziness and preference of young generation to live modern life style were the major social problems, while problems experienced in agriculture were small farm land, literacy, lack of irrigation, climatic change and unemployment, conflict due to generation gap.

2.5 SUSTAINABILITY OF AGRICULTURE AS A PROFESSION

Altieri (1992) opined that the goal of sustainable agriculture was to maintain agricultural productivity with minimal environmental impact, assuming adequate returns while providing for the social needs of the entire population.

Dunlap et al. (1992) revealed ecological, socio-economic and ethical as the three major dimensions of sustainable agriculture from a study on both agricultural faculty members and farmers.

Krishnankutty (1995) identified a moderate level of favorable attitude to sustainable agriculture among both farmers and development of Kerala.

Campbell et al. (1997) identified their three key features that were essential for the analysis of sustainability: indicator of performance and the spatial and temporal scale of measurement. The recognized that selection of indicator was a value laden process and chose to select three simple biophysical indicator. The three indicator, each of which falls in the stability category which were soil organic matter, soil erosion and crop yield. In each case, they emphasized the technical problem and limitation associated with using these indicators.

2.6 SUGGESTIONS MADE BY RESPONDENTS TO ATTRACT NEW GENERATION TOWARDS AGRICULTURE AS AN OCCUPATION

Patel (1995) reported that major suggestions pointed out by the paddy growers to overcome constraints were, ‘reasonable price of plant protection chemicals’, ‘technical guidance should be given before start of paddy season’ and ‘paddy price should be fixed on the basis of net profit’.

Christian (2001) revealed that major suggestions given by the cotton growers in descending order were; training should be available in time, training should be imparted to agricultural laborers on spraying/dusting or using bio-agents and quality of plant protection appliances and bio-agents should be maintained.
Zala (2008) noted that major suggestions given by the cotton grower farmers to overcome constraints in the management of crises during cultivation of cotton crop in descending order of rank were; crop insurance scheme should be modified in favor of loss occurred to an individual farmer or mass of farmers (1.90 mean), followed by farmers should not be forced by bank to take insurance while taking loan because it increases financial burden on the farmers (1.86 mean), rate of interest of loan should be decreased (1.84 mean), in case of 100.00 per cent crop failure, rate of interest on loan should be minimum (1.82 mean), some mechanism should be developed to restrict transaction of duplicate seed (1.78 mean), limit of withdrawing money by Kisan card should be increased (1.77 mean) and some mechanism should be developed to accelerate use of Kisan card for loan (1.74 mean).

Bhosale (2010) found that major suggestions offered by the rural youth to increase participation of youth in farming were: training on new technologies should be imparted to the rural youth (93.33 per cent), technical guidance should be provided well in advance before start of paddy season (90.00 per cent), regular and timely visit of VLW (61.66 per cent), seeds of resistant variety should be available to the farmer at the local level (81.66 per cent) training should be provided regarding use of agricultural chemicals (60.00 per cent) guidance should be provided to raise nursery (58.00 per cent) and sufficient electric power should be made available (37.50 per cent).

Darandale (2010) pointed out that the major suggestions given by the tribal maize growers to overcome constraints in adoption of organic farming were information regarding organic farming should be provided by extension workers (52.50 per cent), agricultural inputs should be provided timely (50.83 per cent), adequate agricultural inputs should be provided (48.33 per cent), marketing network on organic farm products should be made available (46.67 per cent), special administrative setup should be there to promote organic farming (43.33 per cent), publications on proven organic farming practices should be made available (39.17 per cent), market facility for organically produced commodity should be made available (38.33 per cent), awareness about organic food should be created (27.50 per cent) and special incentives or awards for adopters of organic farming should be given (16.67 per cent).
Ramjiyani (2013) found that major suggestions given by the rural youth in adopting agriculture as an occupation were *vìz.*, price of seed should be minimized, low labour consuming technology should be developed and chemical fertilizers should be made available in time.

Smitha (2013) concluded that the major suggestions given by the farmers for the betterment of present condition of greenhouse technology were regular and timely visit of the farm by agriculture officer or horticulture officer should be arranged, remunerative market price of the farm produce should be given, crop insurance scheme in favor of loss occurred to an individual farmer in greenhouse technology should be made available, recent advances in greenhouse technology should be made available to the farmers, inputs at reasonable prices should be made available, regular marketing facility should be maintained, low cost greenhouse technology should be popularized among average farmers and timely technical advice should be provided to the farmers.