CHAPTER V
SUMMARY AND CONCLUSIONS

Rural livelihood in Uttar Pradesh is mainly based on agriculture and allied fields. Near about seventy per cent of the population living in rural sectors earns their living from agricultural enterprises covering field crops, horticultural crops, animal husbandry, fishery, forestry and cottage industry etc. The rural population essentially implies the presence of a significant proportion of women. The women equally contribute towards livelihood like men in all the land based enterprises but unfortunately like research and extension component of rural development have passed women in matter of evolving gender based technologies and extension strategy. The present scenario at state as well as national level has emphasized to cover women section, to bring them to the mainstream of development.

During the last decade, research, extension, policy strategy and budgetary provisions have been sensitive to the expansion of agribusiness for women sector. This calls for a scientific method of investigation so as to know the extent of empowerment being created among women owing to their participation in land based agri-enterprises.

There has been no attempt made in Uttar Pradesh to map the potential of respondents to make use of the incentives, created by state and central government. Hence, the present study is a step forward in this direction to measure the empowerment of rural women and their participation in the emerging agri-enterprises. This study will be its first kind in state of Uttar Pradesh.

Therefore keeping in view the above considerations the present study entitled “Empowerment of rural women by participation in agri-based enterprises” was undertaken with the following specific objectives:-

1. To find out the personal profile of rural women involved in agri-based enterprises.
2. To determine the extent of participation of rural women in different agri-based enterprises.
3. To ascertain the extent of knowledge of women about different agri-based enterprises.
4. To find out the training needs of rural women in different enterprises.
5. To measure the socio-economic empowerment of sample farm women and its association with extent of knowledge and participation.

A descriptive survey research design was followed to conduct the present study. Survey Method was used to collect data from the respondents. Allahabad district had been purposively selected for the study. Two Blocks (Jasra and Karchana) were selected purposively for the study because a number of agri-based enterprises are run by the women in these blocks as compared to other parts of Allahabad district. A list of all the women who were involved in different agri-enterprises was obtained from block offices and from the Gram panchayats of the selected blocks of Allahabad. The names were arranged alphabetically and then 200 respondents were selected through random sampling method. An interview schedule was prepared to collect the data from the women involved in agri-enterprises by the researcher herself. It covered various independent and dependent parameters of the study, keeping in view the defined objectives of the present investigation. The interview schedule was pre-tested on twenty women involved in agri-enterprises of the nearby area of the actual study area. On the basis of the responses of the women, the schedule was modified and finalized. The data from the sample women was collected personally with the help of interview schedule by survey method. The scale developed by Trivedi and Pareekh (1963) was used with required modifications to measure socio-economic status of the respondents. The quantitative data obtained was analyzed using SPSS (Statistical Product and Service Solutions) version 20.0. The collected data was analyzed by computing the percentages, mean, weighted mean score, correlation and chi-square test.
Findings

- Maximum percentages of the respondents (56%) were found in the middle age group.
- Majority of rural women (58.5%) were from backward caste group.
- Maximum numbers of rural women (26.5%) belonged to medium educational background (Junior High School).
- Maximum numbers of rural women (47.5%) were having 6-10 members in their family.
- Majority of rural women (52.5%) were having large and joint families. It indicates that in study area there was not much effect of industrialization and modernity.
- Maximum numbers of the respondents (39.0%) seek information from television.
- Maximum numbers of the respondents (32.0%) utilized information from television followed by radio and television in combination (32.0%) and radio (20.0%).
- Less than half of the respondents (46.5%) were having cemented and semi-cemented house.
- Most of the respondents (38.5%) were earning average income i.e., Rs.5001-7500/-.
- Most of the respondents (35.5%) were marginal and small farmers.
- Majority of the respondents were having necessary material possessions like cycle, radio and motorcycle.
- Most of the respondents (37%) possessed buffalo as their livestock followed by cow, goat and poultry birds.
- Majority of the respondents (71.5%) were having canal facility for irrigation where as a reasonable of respondents per cent had tube-well facility for irrigation of their field.
- The maximum percentage of the respondents (44.5%) was members of cooperative society whereas reasonable per cent rural women were members of any other organization.
Most of the respondents (69%) had received training on different agri-based enterprises.

Most of the respondents were from medium socio-economic status followed by an average proportion of rural women who belonged to high socio-economic status while a small proportion of rural women were from low socio-economic status.

More than half (57%) participated in irrigation of crops whereas 18.00 per cent had applied fertilizers in their lands. Nearly half of the respondents (49.50%) had never involved themselves in plant protection and 47 per cent were engaged in harvesting activity.

Nearly half of the respondent had raised seedlings and transplanted their seedlings in the field. More than half (57.5%) of the respondents involved in weeding practices. A meagre percentage (8.50%) had irrigated their field and small per cent applied fertilizers in their field. Majority (63.5%) of the respondents had harvested their vegetables and it is reported that an average proportion of rural women (54.0%) had never involved themselves in marketing of vegetables. Nearly half of the respondents (49.5%) had participated in the floriculture activities.

It is astonishing to find that all the respondents (100.0%) were involved in dahi and ghee making. Majority of the respondents (83.5%) were involved themselves in storage of milk and milk products whereas more than half of the respondents (61.5%) participated in management of the milk products.

Most of the women (95.5%) were involved in food processing and preservation. A high percentage of the respondents (78.5%) used to select the raw materials for food processing and involved themselves in storage (86%) simultaneously. More than half of the respondents (61.5%) had packed their prepared products.

Poultry farming as a traditional activity, a small per cent of the respondents (21%) had participated in egg hatching and rearing the chicks. Only a small per cent of
the respondents (12%) were involved themselves in health care of poultry birds, management of birds and their marketing respectively.

- As basket weaving is a major handicraft followed in the study area, the majority of the respondents were involved in basket weaving. A maximum number of respondents (83%) procure raw material i.e., bamboo for the baskets and 86 per cent were involved in preparation of baskets and other handicraft materials for their income generation. Marketing of the handicraft materials were done by 66 per cent of the respondents. Majority of the respondents (86%) manage their basket weaving by proper preparation, storage and management of required activities.

- Masala making is an agri-based enterprise helping respondents to earn an income. Thirty six per cent respondents procure ingredients for the preparation of masala. Masala making process was being performed by 44 per cent women by hand grinding or dhal mills.

- Vermi-composting is an income generating agri-based enterprise which helps to promote organic farming. Earthworms were being collected by 28 per cent women from cooperatives and 21 per cent had prepared the vermi-compost. In their backyards, marketing and management of vermi-composting was being done by 6 per cent and 9 per cent women respectively.

- More than half of the respondents (65%) knew about seed rate of potato whereas a reasonable 45 per cent people were having knowledge about the types of fertilizers used in potato cultivation. A maximum number of respondents (62%) were also having knowledge in harvesting time for potato and 70 per cent people knew about the quantity of irrigation required for potato whereas 75 per cent respondents had proper knowledge of marketing facilities available in their area. Eighty per cent respondents had knowledge about the main flowering plants
grown in their area and more than half of the respondents knew about marketing facilities available for floriculture.

- It was found that a small percentage of respondents (40%) had knowledge of size of seed bed for raising a vegetable nursery and protection measures to be taken for regular nursery. A maximum of 75% per cent respondents knew about the frequency of watering in vegetable production whereas 55 per cent of the respondents had knowledge in the plant to plant distance for tomato followed by the days required for transplanting of tomato and the time of sowing potato.

- A majority of 73% per cent respondents had knowledge about the types of fruits to be selected for jam/jelly/squash/ketchup whereas 76 per cent people knew about the chemicals used for squash and 79 per cent respondents knew about the chemicals used for puree whereas 53 per cent had knowledge that sugar used as a preservative 46 per cent respondent had known about the fact that proper packaging helps for a longer self-life. Moreover 40 per cent were having knowledge about sterilization of bottles is good for food preservation whereas 42 per cent knew about the marketing facilities available in their area.

- Majority of the respondents (63.5%) feed their animals whereas 94 per cent of them were not involved in breeding of cattle. Health of the animals were taken care by 42.5 per cent respondents and 61 per cent were engaged in management of dairy animals.

- More than half of the respondents (60%) had knowledge about the different methods of milking while a maximum per cent of respondents 90 per cent knew about the method of curd preparation and methods of ghee preparation respectively. Sixty five per cent respondents were having knowledge about the quantity of paneer prepared from 1 litre milk. Seventy two per cent people knew about the products of khoa and less than half (40%) people knew about the
process of *chhanna* preparation whereas 85 per cent people were having knowledge of the products prepared by *chhanna*. Forty per cent respondents knew about the number of days required for *chhanna* preparation while 48 per cent had known about temperature required for keeping milk products. Eighty per cent people were having a good knowledge about the marketing facilities available in their area.

- A maximum number of respondents (68 %) had properly known about the sources of raw material for markets whereas 57 per cent people knew about the methods used for preparing baskets and 96 per cent respondents also had knowledge in the marketing facilities available in their area whereas 43 per cent respondents knew about how to store the baskets.

- A maximum number of respondents 64 per cent respondents had knowledge about different types of masalas whereas 48 per cent people had known about the source of grinding masala and 43 per cent respondents were having knowledge about the sources of storage and also 35 per cent respondents knew about the marketing facilities available in their area.

- More than half of the respondents (55 %) had knowledge in days are required for egg hatching whereas 45 per cent people know about precaution for chick rearing and 52 per cent having a good knowledge in feeding materials for poultry birds and less than half ( 35%) had knowledge about the common diseases in poultry birds whereas 45 per cent respondents having a knowledge in the room temperature required for poultry birds and also 47 per cent had good knowledge in the type of housing required for poultry birds whereas 80 per cent knew about the rate of a dozen of eggs.

- Less than half of the respondents (39%) had knowledge of the materials required for vermi-compost whereas 46 per cent were having knowledge about the size of pit required for vermi-compost and 47 per cent knew about the days required for
vermi-compost. Thirty nine per cent people had knowledge about the source of procurement of vermi compost and also 30 per cent knew about the precautions taken during preparation of vermi-compost. Less than half (45%) respondents knew about the place of storage of vermi-compost and 42 per cent had knowledge about the marketing facilities available in their area.

- Training in rainy season was preferred by more than half (52.5%) respondents while 34.5 per cent respondents preferred training during summer season whereas only 13 per cent preferred during winter season training in enterprise related aspects.

- Three days training was preferred by majority (81.5%) of respondents and one week training was preferred by 10.50 per cent respondents while only 8 per cent demanded training of 10-15 days of duration. Preference for three days training by majority of respondents shows their keen interest in learning the latest techniques extensively.

- In regard to methods of training in different aspects, 57 per cent wanted lecture and field visit and 20 per cent demanded for method demonstration while 11.50 per cent demanded for study tour. Few of them (7.5%) demanded for group discussion and demonstration method (4%) for their training. Majority of respondents are eager to gather information through firsthand experience by field visits along with lecture for their upliftment in society.

- As regard to the size of group for training, 37 per cent wanted group of 16-20 individuals whereas 32.5 per cent wanted group of 10-15 individuals, while 30.5 per cent wanted group of 21-25 individuals. Less preference for large group participation also showed their awareness to get the exposure though proper and organized setup.
Majority of respondents (66.5%) had told that the training should be held at different plants while 13 per cent wanted it at Agricultural University where as 10 per cent of them wanted the venue of training at village level centre. Some of the respondents (8%) wanted the venue of training should be at Krishi Vigyan Kendra and 2.5 per cent respondents wanted it at Block / Tehsil level. Attraction towards the training at the plant itself showed their in depth interest and awareness about the ready reference of their practical knowledge.

Regarding crop production, the training need of respondents in marketing was ranked as first (W.S. =2.57) followed by seed treatment (W.S. =2.55), plant protection (W.S. = 2.33). The respondents also expressed training need in storage facilities for crop which was ranked fourth (W.S. =2.32), irrigation facilities ranked fifth with W.S. 1.89, harvesting of crops ranked sixth (W.S. = 1.79) followed by fertilizer broadcasting (W.S.=1.73).

In vegetable production aspects, training need in marketing ranked first (W.S.=2.4) followed by harvesting(W.S.=2.37),raising seedling(W.S.=2.21). The respondents also expressed training need in floriculture (W.S.=2.15), which ranked fourth followed by transplanting (W.S.=2.02) and weeding (W.S.=2.04). The need for fertilization (W.S.=1.80) and irrigation(W.S.=1.80), was very negligible.

In milk and milk products preparation, the training need in storage ranked first (W.S.=2.67) followed by marketing (W.S.=2.57), management (W.S.=2.40). The respondents also expressed training need in khoa making (W.S. =2.39), which ranked fourth followed by paneer making (W.S.=2.37) and chhanna making (W.S.=2.04). The need for ghee making (W.S. =1.91) and dahi making (W.S.=1.80) was very negligible as far as training need is concerned.

In food preservation and processing, the training need of respondents in food processing was ranked first (W.S. =2.96) followed by marketing (W.S. = 2.86) as
second and packaging (Bottling/ Canning) ranked as third (W.S. = 2.60). It was also clear from the table that training need of respondents in storage ranked as fourth (W.S. =2.44) followed by management which ranked as fifth (W.S. =2.43) and selection of raw material (fruit) as sixth rank (W.S. = 1.95).

- In poultry, the training need of respondents in health related issues of poultry birds was ranked first (W.S. =2.68) followed by marketing of the chicks and eggs ranked second (W.S. =2.46), the management of chicks ranked third (W.S. =2.36). The respondents also expressed chick rearing which was ranked fourth (W.S. =1.92) feeding ranked fifth (W.S. =1.82) and egg hatching ranked sixth (W.S. =1.44).

- The training need of respondents in basket weaving, preparation of handicraft materials (baskets) ranked as first (W.S. = 2.63), the procedure of masala making ranked second (W.S.= 2.48), the third is management which includes packaging and storage (W.S.=2.11), followed by procurement of ingredients (W.S.=1.98).

- In masala making, the training need of respondents in marketing ranked as first (W.S.= 2.63), the procedure of masala making ranked second (W.S.= 2.48), the third is management which includes packaging and storage (W.S.=2.11), followed by procurement of ingredients (W.S.=1.98).

- The training need of respondents in preparation of vermi-composting ranked first followed by management (W.S. =2.00), the marketing ranked third (W.S.1.75) procurement of material ranked fourth (W.S. 1.40).

- It was found that there exist a significant association between the socio- economic status and knowledge about milk processing practices of the rural women.
It was found that there exist a non-significant correlation between the rate of participation and knowledge of respondents in crop production, vegetable production, food processing and preservation, handicrafts and masala making.

It was observed from the table that there exist a significant correlation between the rate of participation and knowledge of respondents in milk and milks products, poultry and vermi-composting.

There is a positive association between socio-economic status and participation of the respondents.

There was a positive association between the socio-economic status of respondents and their knowledge level. The respondents with higher socio-economic status possess better knowledge regarding agri-entreprises than the respondents with lower socio-economic status.

A cursory look at the frequency distribution on five categories of levels of empowerment clearly brought out the fact that the frequencies fell into a normal distribution were slightly skewed towards the higher side of empowerment. Thus it can be concluded that the women have benefited quite well from their agro-based enterprises and got themselves highly empowered on social and economic spheres of their lives.

There is a strong and positive association between the participation, knowledge and empowerment of different activities undertook by the respondents of agri-based enterprises.
CONCLUSIONS

It is concluded from the study that majority of the respondents were found in the middle age group, backward caste, medium educational background, large and joint families and average income. The respondents belonged to medium socio-economic status and were participating in different agri-based enterprises (crop production, vegetable production, milk and milk products, food processing and preservation, poultry, handicrafts (basket weaving) masala making, vermi-composting). In crop production, most of the respondents were involved in storage practices, irrigation and harvesting of crops whereas in vegetable production most of the respondents were involved in harvesting and transplanting of vegetables. Majority of the respondents were involved in dahi and ghee making, storage of milk whereas in food processing, the sample women were involved in the raw material selection, processing and preservation of prepared products. The respondents were having lesser participation in poultry farming but having more participation in basket weaving activities. The level of participation in masala making and vermi-composting was average. The respondents were having average knowledge in all the enterprises but knowledge level was high in the activities related to milk and milk products. Training needs in marketing to run the effective enterprises in crop and vegetable production, storage of milk and milk products, food processing in food preservation, health care in poultry farming, preparation of handicraft materials, marketing in masala making, preparation of vermi-compost were found. Training in rainy season, three days training duration, lecture, method demonstration, group discussion and firsthand experience by field visits were the main issues of training needs of the respondents, methods of training and small group trainings were preferred by the respondents. There is a significant association between the socio-economic status and knowledge about milk processing practices was found from the study. There is a positive association between socio-economic status and participation of the respondents. The respondents with medium socio-economic status had more participation regarding agri-enterprises than the respondents with lower socio-economic status. The results also revealed a
significant correlation between the rate of participation and knowledge of respondents in milk and milks products, poultry and vermi-composting. There is a strong and positive association between the participation, knowledge and empowerment of different activities undertook by the respondents of agri-based enterprises. The women have benefited quite well from their agri-based enterprises and got themselves highly empowered in social and economic spheres of their lives.
RECOMMENDATIONS

➢ To enhance the extent of participation, knowledge level should be improved so there is a need to conduct camps, workshops, demonstrations and training programmes at village, block and district levels for the members of the whole family and intensified educational efforts by local extension agents must be made.

➢ The entry of rural women particularly in agri-based enterprises should be encouraged and motivated and also Government should take steps to develop women entrepreneur networks to deliver lectures on processing, procurement, management and marketing among the rural women.

➢ To empower women, case studies/ stories of successful women can be highlighted and publicized by effective use of Information and Communication Technologies.

➢ Policy should be framed to train rural women particularly engaged in agri-based enterprises and bring them into mainstream of the society.

➢ Agri-based enterprises should be promoted in the rural area for motivating rural women to engage themselves in different agri-based enterprises with the right assistance and strengthening their capacities besides adding to the family income and national productivity.
LIMITATIONS

All the researches are carried out with some limitation to make the data more scientific and applicable. Since this study is a part of Ph.D, degree programme, it was difficult to carry out extensive research with the limited time, money and other resources. Also there exists a variation in language and culture of the respondents which altogether compelled the researcher to keep the purview of the study to a limited area. Relative acquaintance of researcher with the Allahabad women farmers was greater but illiteracy of most of the farmers and their reluctances to keep records of operations, their timings, inputs used and output posed problems in collecting primary data with accuracy. This is why data were collected from their memory and its reliability was assured by cross-questioning. As far as secondary data were concerned there existed an inter source variation. That is why some of the important variables were dropped. In case of monetary data at the time of their averaging and other statistical analysis paisa portions of the result were rounded up to nearest rupee.