CHAPTER-VII
SUMMARY OF FINDINGS, CONCLUSIONS AND SUGGESTIONS

In this chapter, a modest attempt is made to present a summary of findings arrived at in the earlier chapters, conclusions thereon and to make suggestions to overcome the problems encountered by pourers and palamitras in dairying. Besides, issues or hints for further research in future are incorporated.

1. Summary

A brief summary of findings of the theme of research is presented below.

1.1 An overview of dairying and women empowerment

The Indian heritage and culture are interwoven with the cow. The cow was the measure of value and a precious commodity. The economic importance made it a sacred animal and an object of veneration. By the time the Britishers colonized India, the villages were flooded with milch animals and occupied a unique position among the nations in the world. India is one of the largest and fastest growing markets for
milk and milk products in the globe. Cattle and buffaloes were an integral part of livestock for thousands of years. India accounts for nearly 15 per cent of the cattle and 53 per cent of buffalo population in the world. As the agricultural technology improved, the use of cattle for draught power has decreased. This has enabled the cattle to be reared for milk production along with buffaloes. India accounted for 12.5 per cent, 35.87 per cent and 56.40 per cent of milk production in Asian developing countries during 1990, 2000 and 2011 respectively. The yearly growth of milk production exceeds the world average. The white revolution has led to a steady progress of dairy industry in the country.

After the launching of five year plans, dairy industry recorded a remarkable progress. Over the years, crores of rupees were budgeted, released and incurred for the promotion of dairying. A number of schemes/programmes like Operation Flood were designed and implemented through institutions/agencies. The production and per capita availability of milk has grown across the states and union territories in the country. For the promotion of dairy in Andhra Pradesh (AP), the government has incurred a huge amount. An emphasis was laid on districts with some potential for dairy development in the state. Bulk milk chilling units (BMCUs) were set up to support the pourers in the milk rich districts in the state. All this has been taken up to create alternate source of employment and income to drought prone districts in AP. It was felt that dairying as an allied agricultural activity will be suitable to the fair sex in the state.

The empowerment of women has been conceptualized differently by different authors in literature. In the present enquiry, women empowerment is construed as the expansion of capabilities and opportunities of women in economic, social, cultural, psychological, political and personal spheres. There are several approaches such as welfare, equity, anti-poverty, economic development, efficiency and empowerment which have focused their attention on the betterment of women. Empowerment approach is a nascent one. Now gender equality and empowerment of women are globally recognized as the keys to achieve progress in all aspects. Empowerment can be measured through gender empowerment measure, gender parity index etc. There are several dimensions of empowerment. From time to time, the government has set up expert committees, held seminars, workshops, conferences,
conducted special studies and held public enquiries to evolve and implement several schemes/programmes to empower women in all walks of life. A review of government's programmes for women empowerment reveals that little has been done or achieved through these programmes. The discrepancy between the ideology and actual implementation of policy has resulted in continuous social and economic backwardness. The targeted schemes tend to have only a limited impact on women since the basic thrust of development is not reaching common woman, making her life more fragile and vulnerable. The need of the hour is women empowerment through development.

1.2 Research design and methodology

In India, the plight of women is no better than that of those in other developing countries. In the country, at the end of March 2011, it was provisionally reported that, in the total population, men constitute 51.54 per cent while women, 48.46 per cent. Therefore, there can be no progress unless the needs and interests of women are fully met. Dairying helps women to become economically independent and self-confident with improved prestige in the community. Then they may be able to organize themselves, identify their needs, build a positive image and be aware of their rights and responsibilities. Dairying operations are amenable to women and, therefore, most of them are undertaken by women. The governments have initiated and implemented a number of programmes and schemes for the growth and development of dairy industry since it mostly enables poor below the poverty line, especially women, to increase their household income and improve their status in the society and standard of living. Since women dominate dairy industry, there is a need to know how far women are empowered economically, socially, culturally, politically, psychologically and personally. Hence, the present study focuses on empowerment of dairy women in all spheres of life. It is hoped that dairying would drive women to be self-reliant, self-employed and empowered. Therefore, empowerment of women through dairying has attracted the attention of Government, policy makers and all those who have interest in rural development in the recent decade.
There are many studies on dairying in the country at the macro level including nation, state, region, district and so on. A few studies at the micro level are also found in the literature. These studies have made an attempt to highlight the significance of dairying, organizational set up and financial assistance provided over the years for the growth of dairying; trend in the livestock production including bovine; working of cooperative dairies; income and employment; economics of dairying; programmes and schemes for the spread of dairying as an alternative to agriculture; production and procurement of milk; consumption pattern and marketing of milk etc. There are quite a few studies on the growth and structure of dairy industry in AP, the efficiency of production, marketing of milk and milk products by district level unions and views of the members of cooperative societies. There are also studies on dairy industry in Chittoor district covering the aforesaid aspects. There are several studies on the empowerment of women who have participated in several vocations such as industry / trade / services / SHGs etc. There are very few studies on the empowerment of dairy women at the national/ state levels touching up on general issues. There is no specific study focusing its attention on the empowerment of dairy women at regional/district/firm/households/individual levels in terms of economic, social, cultural, psychological, political and personal spheres. Further, it is relevant to point out that the researcher hails from an agricultural family; knows women, matters and materials as she belongs to a family with fair sex and was involved in the operations of dairying along with her parents for quite a long time. The researcher was born and brought up and grown in Chittoor district. Researcher is familiar with the district and dairying. Therefore, an attempt is made to emphasize the void identified in the existing available literature relating to the present theme of research. Mostly, the present study may be the first of its kind in the state as well as district at the level of pourers and palamitrás. In this context, it may also be remembered that the concept of palamitrás emerged from 2005 along with genesis of BMCUs.

The specific objectives of the study include: to review the progress of dairying in Chittoor district; identify the motivational factors that influence women to take up dairying; analyse the extent and magnitude of economic, social, psychological, political and personal empowerment attained by women through dairying; evaluate the participation of women in decision-making; and examine the relationship between socio economic factors like age, nature of family, caste, range of income
and educational status and women empowerment. For the present investigation, women in dairying in Chittoor district alone constitute the universe. The sample respondents are selected from among milk pourers and palamitras in the district. An aggregate of 300 women are purposely selected through stratified random sampling technique. Of them, 250 are pourers and the rest, 50 palamitras. This study makes use of both the primary and secondary sources of data. The primary data has been collected through a schedule specially designed for the purpose by personal interview method. The collected data has been processed, synthesized, synchronized, classified, codified, tabulated, analyzed and interpreted with the help of appropriate statistical tools like percentage, 't' test, $\chi^2$ test, Likert's three point scale, and Karl Pearson's coefficient of correlation. The study suffers from certain limitations, that is recall lapses. Further, pre dairying and post dairying methodology is employed. The controlled group, constituting non-dairying women who could have undertaken dairying, are not covered. Hence, the empowerment of women in the post dairying period could not be compared with non-dairying women. In other words, the natural increase in the empowerment of women due to other than dairying factors/forces is ignored. The report has been divided into seven chapters.

1.3 Dairy profile of chittoor district

Chittoor, the second largest milk producing district after Anand in Gujarat state, is the fountainhead of the white revolution in AP. The district is known for its impressive livestock population and milk yield. The rural population is largely dependent on dairy sector. Small and marginal farmers turned to dairying since it ensures decent income periodically and, thereby, stable livelihood. With increased fodder availability, the number of milch animals rose due to the initiatives of the District Rural Development Agency and the District Poverty Initiatives Programme (DPIP). A number of jersey crossbred cows and graded Murrah buffaloes were brought to Chittoor district. There are 87 BMCUs with a network of 2818 (MPIs) and 32,186 pourers during 2012. This has helped to achieve milestones in the production and per capita availability of milk in the district. The novel initiatives put dairying in a win-win situation in the district. The livestock-raisers get remunerative prices. In south India, dairying has put the Chittoor district at the forefront of white revolution. To promote dairying in the district, the government has initiated certain measures for
the growth of livestock population. There are 15 veterinary hospitals, 135 veterinary dispensaries, 171 rural livestock units and 412 gopala mitra centers.

To develop livestock, increase milk production, create employment, enhance income, reduce poverty and empower the poorest of the poor in the district, several schemes such as Kamadhenu, Rashtriya Krishi Vikas Yojana, Pasukranti Patham, Chief Minister's package and Prime Minister's Package and mini dairies were set up over the years. In addition, centrally sponsored schemes were also launched in the district. Indira kranthi patham (IKP) is a women oriented programme. The name of the erstwhile velugu scheme has been changed as IKP. The IKP members maintain BMCUs. There is a specific scheme to develop BMCUs. Pala Pragati Kendralu is a small dairy. The total number of cows and buffaloes put together was 10 lakhs in 1999 while it was 10.08 lakhs in 2012. The milk produced, in aggregate, was 5.34 thousand MTs in 2001 vis-à-vis 9.38 thousand MTs in 2012. Of the total milk production, the share of cattle is higher than that of buffaloes. The per capita availability of milk per day was 398 grams in 2001 as compared to 612 grams in 2012. The share of milk from crossbreed cattle is more than that of the milk from indigenous cattle. In the case of buffalo milk, the proportion of graded murrah is more than that of the descriptive ones. There are four dairies in cooperative sector while there are twenty two in private sector with varying licensed and procurement capacities of milk per day. Milk procurement, by BMCUs has gradually risen to 1332.25 lakh liters in 2012. The turnover was Rs. 14653.42 lakhs in the same period. Thus the growth of dairy industry in Chittoor district has been making steady progress.

1.4 Features of respondents and motivational factors

Of the respondents, those in the age group of 30-39 years rank first in among pourers and palamitras. Palamitras are more educated than pourers. Among educated respondents, those with below SSC qualification occupy the first place. Married women account for a lion's share constituting 90 per cent among the respondents. More than 90 per cent of respondents are Hindus. Out of palamitras and pourers, BCs and SCs put together constitute a little over 71 per cent. Nuclear family system is predominant in pourers as compared to palamitras. The typical family size among the respondents is in the order of 4-8 members. More than 50 per cent of the respondents earlier occupation was housewives. Among the family members of
respondents, earners are overwhelming in number. Agriculture is the popular activity among the family members of respondents. Nearly 84 per cent of respondents have been involved in land based activities. More than four fifths of respondents are involved in farm activities in their own land. Respondents with less than 0.5 acre of own land are relatively more significant than those with leased land.

Out of the respondents, around 93 per cent employ family labour. A little over 90 per cent have availed financial assistance from the government/ governmental agencies. More than 90 per cent of the respondents were partially benefited. The fully assisted pourers are meager as compared to palamitras. Banks are in the forefront in providing financial assistance to pourers and palamitras. Nearly 85 per cent of respondents have availed subsidy. The proportion of respondents with two animals ranks first. The relationship between number of animals and milk produced per day is positive and highly significant. It is gratifying to note that, 98 per cent of palamitras and 80.80 per cent of pourers have availed cattle feed/fodder and medical services from the government. Like crop insurance, cattle insurance is popular since 88.67 per cent of respondents have insured their animals. The more the number of animals, the more are the expenses and the lower the number of animals, the lower are the expenses incurred on them. Of the total respondents, 71.67 per cent have attended the training programmes meant for those involved in dairying. Palamitras produce higher quantity of milk per day as compared to pourers. Those who have consumed and sold milk account for 92 per cent and 8 per cent sequentially. A majority of respondents consume 0.5-1 liter per day.

Of the advisors, that is, officials, parents, husband friends and relatives etc., who have suggested taking up dairying to the respondents, officials came first. Out of the purposes viz., earn supplementary income to family, attain economic independence, gain prestige and social status in the society and profitably utilize the leisure time available during slack and lean season in the year for undertaking dairying, urge to earn supplementary income is the main purpose behind the respondents entering dairying activity. Among the pourers and palamitras, 46 per cent and 58 per cent have respectively entered into dairying due to the reason that it is an allied agricultural activity. Respondents have the required internal locus of control after entering into dairying. Women respondents have low level of independence as
the average score is 0.84. It infers that necessary support should be extended to develop a spirit of independence among the respondents. Further, the willingness of women to take risk is between low and medium since the average score is 1.93. It means that it is more than one and less than two.

1.5 Economic and social empowerment

A little over 86 per cent of respondents use the by-product of dairying, that is, dung for their farm activities. For most of the respondents, price of milk is reasonable. A greater proportion of palamitas have made a complaint about differential payment between them and pourers. About 94 per cent of respondents have expressed the view that there is no delay in the payment for milk. The income of respondents has gone up due to increase in the number of animals. The higher the literacy rate among the respondents, the higher is the income and vice-versa. The share of respondents in the income range of Rs. 4000-8000 and Rs.12000-16000 ranks first among the pourers and palamitas respectively. The freedom of respondents in spending their income had greatly increased among pourers and palamitas. A good percentage of respondents have declined in the lower option, moved up in the middle option and formed afresh in the higher option in the post dairying period. The number of respondents with no control over income and their classifications on the basis of age, education, caste affiliation, nature of family and level of monthly income has decreased in the post-period. A contrary situation prevails in the case of respondents who have control over income to some extent. Further, none of the respondents have enjoyed control over income to a great extent in the pre-period but they are found afresh across all the variables in the post-period.

More than 60 per cent of respondents have saved less than Rs. 3000 per month in the post dairying period. The proportion of savers is higher among palamitas when compared to pourers. The share of respondents who believe that there was no control over family resources became negligible in the post-period across pourers and palamitas. On the other hand, there is an increase in the number of respondents with control over family resources in the post dairying period. The respondents with control over family resources to a great extent have formed in the after period only. The respondents with different characteristic features who had enjoyed no control over resources has decreased while it increased in the case of respondents who had
exercised control over resources to some extent in the post-period. Despite non-existence of respondents who had enjoyed control over resources to a great extent in the pre-period, such respondents emerged in the post-period.

The proportion of pourers with no decision-making power over small purchases had declined in the post-period. As against this, the share of respondents with power to some extent has increased in the post-period. The respondents who had enjoyed the decision-making power to a great extent were absent in the pre-period while they formed afresh in the post-period. Among palamitras, the share of respondents with no power as well as those with power to some extent had declined in the post-period. The percentage of palamitras who have exercised power to a great extent rose in the post-period whereas their representation in the pre-period was zero. The respondents marked with no decision-making power on small purchases had declined, respondents marked with decision-making power to some extent had increased and those marked with decision-making power to a great extent have formed across all the age groups, income levels, educational status, nature of family and caste affiliation in the post-period without any exception. Among the pourers and palamitras, there is a growth in the share of respondents with decision-making power on big purchases to some extent and power to a great extent while there is decline in the proportion of respondents with no decision-making power in the post-period. The respondents in the lower option have declined, those in the middle option increased and those in the higher option either increased or formed afresh among the respondents across all the categories like age groups, income ranges, caste groups and nature of family.

There is a positive change in the views of pourers and palamitras on the extent of decision-making power on the education of their children in the post-period over the pre-period. This is based on the fact that, the proportion of respondents with a feeling of no decision-making power on the education of their children has declined perceptibly vis-à-vis an increase in the share of those with power to some extent and power to a great extent in the post-period. The classification of respondents according to age, income, nature of family, education and caste and their opinions on the extent of decision-making power in the education of their children shows that there is a decline in the percentage of respondents in the lower option vis-à-vis increase in the
proportion of those in the middle option. In the higher option, there is either an increase or respondents formed afresh in the post-period. There is a downward trend in the proportion of pourers and palamitras with no power on the marriage of their children in the post period. A contrary situation prevails in the share of respondents with decision-making power to some extent and those with decision-making power to a great extent. The number of respondents with no decision-making power on the marriage of their children had declined, those with decision-making power to some extent had shot up and those with decision-making power to a great extent have either increased or formed afresh in all the categories of respondents across the variables in the post-dairying period.

The proportion of pourers and palamitras with no right of mobility has declined, that of those with freedom of mobility to some extent rose and those who had enjoyed freedom of mobility to a great extent had increased in the post period. There is a decline in the number of respondents in the lower option, increase in the middle option and either increased or formed in the higher option across respondents of all categories like age, caste, income, nature of family and level of education. The pourers and palamitras who are not aware of need for better health and social status have declined and those who are partly/fully aware of it had increased in the post-period. The classification of respondents in terms of age, education, caste, monthly income and nature of family and their views on extent of awareness about better health and social status shows that those who are not aware of it either declined or disappeared, those who are partly aware of it increased and those who are fully aware of it have either increased or formed afresh after entering into dairying. The percentage of pourers and palamitras who needed gender equality declined, those who did not need and those who did not need it highly either increased or formed afresh in the post-period. Their husbands might have given them freedom to do so respecting gender equality. In the categorization of respondents across the features, there is a decrease in the proportion of those who have not needed gender equality, those who have needed it increased and those who have not highly needed it formed afresh in the post-period.
1.6 Psychological, political and personal empowerment

The number of pourers and palamitras marked with no self-confidence have declined, those with self-confidence to some extent increased and those with self-confidence to a great extent formed afresh in the post-period. The classification of respondents on the basis of age, caste, income, education and nature of family and their perceptions on the extent of self-confidence shows that there is a decline in the lower option, increase in the middle option and newly formed in the higher option. Among pourers and palamitras, there is a decrease in those marked with no self-esteem as against an increase in those with self-esteem to some extent and to a great extent after entering into dairying. The number of respondents with no self-esteem have either declined or disappeared. Those with self-esteem to some extent increased and those with self-esteem to a great extent have either increased or formed afresh in the post-period in all the classifications over the select features. There is a decline in the share of pourers and palamitras with no motivation while there is increase in the number of those with motivation to some extent and to a great extent in the post-period. The distribution of respondents according to several bases and their views on the extent of motivation shows that there is a decline in the lower option and increase in the middle option. It either increased or newly formed in the higher option in all the classes.

In the case of pourers, those who never cast their vote in elections declined and a contrary trend prevails with regard to those who cast their votes irregularly and regularly in elections after entering into dairying. Among palamitras, those who never cast votes and cast irregularly in elections have declined as against an increase in the case of those who cast their votes in elections regularly. The segregation of respondents on the basis of age, caste, income, nature of family and level of income and their views on casting votes in elections shows that those who never cast their vote in elections have either declined or increased and those who either irregularly or regularly cast their votes in elections increased after undertaking dairying. Consequent on entering dairying, the proportion of pourers and palamitras with no interest in political matters had declined whilst that of those with interest in political matters to some extent and to a great extent increased in the post-period. It is surprising to note that the palamitras who are considered to be richer are slightly more
as compared to pourers in the first option. It infers that the rich are not interested in political matters relative to the poor. Hence influence of dairying on political affairs is greater in the poor when compared to the rich. The rich may be away from political issues to safeguard their income and wealth. The respondents with no interest in political affairs have declined while those who had interest to some extent increased and those with interest to a great extent have either increased or formed afresh in all the classifications based on income, age, nature of family, caste and education in the post-period. It can be observed that in both the pourers and palamitras, there is a decline in the number of those who did not participate in the democratic process/institutions in any form while those who participated to some extent and to a great extent have increased in the post-period. There is a decline in the share of respondents with no participation in democratic institutions as against an increase in those who participate to some extent and those who participate to a great extent this can be noticed among respondents across all categories such as age, education, caste, income and family type.

With regard to pourers, those marked with no leadership skills have declined, those with leadership skills to some extent increased and those having leadership skills to a great extent formed afresh in the post-period. In the case of palamitras, those with no leadership skills and leadership skills to some extent have declined and those with leadership skills to a great extent were absent in the pre-period whilst they constituted afresh in the post-period. The classification of respondents on the basis of select variables and their perceptions on the extent of leadership skills reveals that the respondents with no leadership skills had declined, those with leadership skills to some extent rose and those with leadership skills to a great extent formed afresh in the post-period. None of the pourers and palamitras, marked with any communication skills exist in the post-period. Such respondents were found in the former and the latter respectively. A quite converse situation prevails in the case of respondents with communication skills to a great extent. In other words, they were absent in the pre period while they constituted afresh in the post-period. The pourers with communication skills to some extent have increased while a contrary situation is obtained in palamitras in the same option. The respondents in all the classifications
across age, caste, income, nature of family and education and their views on the extent of communication skills reveals that those with no communication skills have completely disappeared, those with communication skills to a great extent have emerged afresh in the post-period and those with communication skills to some extent increased/decreased/remained without any change in the post-period.

Among pourers and palamitras, those who could not speak in public meetings have decreased and those who speak to some extent and to a great extent have increased in the post-period. Across the variable-wise segregation of respondents, those with no ability to speak in public meetings either declined or disappeared, with those who have the ability to speak to some extent have increased and with those who speak in public meetings to a great extent have either increased or constituted afresh in the post-period. The percentage of pourers and palamitras who were unable to go to public offices had decreased, those who were marked with ability go to public offices to some extent and to a great extent had increased in the post-period. The classification of respondents according to age, educational qualification, caste affiliation, nature of family and monthly income and their confidence to go to public offices reveals that there is decline in the lower option as against an increase in the middle option in the post-period. Further, in the higher option, the proportion of respondents has either gone up or constituted afresh. The relationship between distribution of respondents into pourers and palamitras and their feelings on the extent of involvement in social gatherings/protests shows that there is a decline in the proportion of respondents in the first option whereas there is an increase in the number of those in the middle options in the post-period. The segregation of respondents according to caste, age, nature of family, educational qualification and monthly income and their responses on the extent of involvement in social gatherings/protests shows that there is a decline in the number of those in the first option and increase in the number of those in the middle option. They either increased or emerged with those in the higher option. There is an increase in the standard of living in terms of food, clothing, housing, drinking water and sanitation of women after entering into dairying. Of the pourers and palamitras, its impact is greater on the latter as compared to the former.
2. Conclusions

➢ The formation of self help groups and pavala vaddi scheme during 2000 and 2005 respectively has resulted in an higher number of respondents with the age group of 30-39 years than those in the age group of 60 and more years. The dominance of married women in dairying infers that it requires assistance from family members. The greater number of educated palamitras is due to the fact that they have to maintain accounts about purchase and sale of milk.

➢ The outweigh of the weakest of the weak in dairying shows the extent of percolation of government policy and programme among women in the district. The nuclear family system is more prevalent among pourers than palamitras. The former have to undertake several activities relating to dairying. The disguised unemployment among women has been effectively curbed to some extent as more than half of the respondents are housewives.

➢ Dairying is one of the priority areas of government. This is based on the fact that 90 per cent of respondents availed financial assistance. Cattle insurance gained momentum like crop insurance as majority of the animals are insured. Majority of SCs/STs do not consume milk which reveals that either they are ignorant of the nutritious value of milk or economic necessity might have prevented. The officials have put in effort to spread dairying among women as more than half of the respondents took to dairying on their advice.

➢ The low level of independence of women suggests that there is need to develop it among them. Dairying has enhanced the economic empowerment measured in terms of control over income and family resources and development of savings habit in the post dairying period. This is based on the fact that there is a decrease in the number of those in the lower option, increase in the number of those in the middle option and either increase or existence with those in the higher option. An identical trend is found in the association between the segregation of respondents and their views on it between pre and post dairying periods.

➢ A fall in the number of pourers and palamitras in the lower option, progress in the middle option and either increase or emergence afresh in the higher option in the decision-making power of women on small and big purchases, education and marriage of children, mobility, better health and social status and gender equality clearly demonstrate the fact that women have been
socially empowered after entering dairying. A similar situation prevails when
the respondents are classified into several groups and their opinions are sought
on it.

- The drop in the lower option and an increase in the middle or higher options is
  a proof that dairying has facilitated psychological empowerment in terms of
  self-confidence, self-esteem and motivation in the post-period. The
  relationship between the distributions of respondents into several categories on
  the basis of select variables and opinions confirm the same.

- A drop in the number of those who never cast their votes in elections, had no
  interest in political affairs and did not participate in democratic
  process/institutions; an increase in those, who vote irregularly/regularly in
  elections, interest in political matters and participation in democratic
  institutions to some extent and to a great extent among pourers and palamitras
  across different classifications in terms of age, income, caste, education and
  nature of family testifies to the fact that there is political empowerment in the
  post-period.

- The decrease in the number of those with no leadership skills, those unabile to
  speak in public meetings and to go to public offices, to participate in social
  gatherings and protests and in those with no communications skills
demonstrates the fact that there is personal empowerment among the pourers
  and palamitras. The same is the case with regard to respondents across the
  select variables and their feelings on it. Further, increase in the number of
  those with power to some extent and either increase or existence afresh to a
  great extent in the aforesaid is evident that the empowerment of respondents
  has increased after their entry into dairying.

- The empowerment has caused an improvement in the standard of living and
  wellbeing of respondents.

- The foregoing analysis clearly speaks about the attainment of empowerment in
  terms of economic, social, psychological, political and personal spheres after
  entering into dairying. Finally, all these have enhanced the well being of
  women in all walks of life.
3. Suggestions

1. Technical methods

The pourers and palamitras may be taught about the significance of use of technical or innovative methods to enhance the quality, quantity and yield of milk from cattle/buffalo. These include: milking through machines instead of manually; cutting of grass with chaff cutters in the place of providing grass without making pieces. It helps animals to take grass easily and reduces wastage of grass. The use of milking machine increases the SNF and fat content of milk. As a result, price of milk may go up and thereon income of pourers and palamitras improves.

2. Azolla grass

It is said that the use of azolla grass may enhance the milk yield from animals. Then respondents may be taught to provide good quality grass to animals without any discontinuation/disruption throughout the year. Therefore, women should be made to go for azolla grass.

3. Silage making units

During summer, maintenance of quality grass and its continuous availability is a difficult one. The silage making units preserve green fodder, which can be used throughout the year. Then there may not be any fluctuations in the yield and the quality of milk. Consequently, dairying generates stable income continuously at expected levels in the whole of the year.

4. Training programmes

Instead of organizing training programmes at the district and mandal levels these may be held during evenings at the village level. The scheduled dates about the training programmes should be brought to the notice of household/pourer levels well in advance. Then they may reschedule their daily activities so that they may be able to attend and learn from them. Incentives may be provided for those women to come out of the household and personally attend/observe the demonstration of use of chaff cutters and milking machines. Further, compensation may be paid those women who attended the programmes for the loss they suffer in not getting wage for labour elsewhere. This may drive non-dairying women to enter into dairying. This may be extended to those who are below poverty line.
5. Breed awareness

The ignorant women and their family members may be educated about the benefits of cross breed cattle and graded murrah buffaloes instead of indigenous ones. Some model centers may be set up. Thereby women may experience the hike in the quantity, quality and yield of milk. It results in an increase in income, which may have salutary impact on non-dairy women. They may tempted to undertake dairying on seeing the rich dividends enjoyed by the existing dairy women.

6. Washing and cleaning of animals

It is reported while interacting with the respondent women that they wash and clean the animals once a week. Even this, is not regularly followed due to non-availability of water in summer. This has dual effect on the longevity of animals and milk yield. If the animals are not washed and cleaned once a day, it may result in lesser yield of milk. The reason being that the climate may have adverse effects on the body and, therefore, unhealthy symptoms may develop leading to low yield. On the other hand, the life span of the animal gets reduced. Therefore, it is suggested that the pourers and palamitras have to be educated about the losses they are subjected to due to non washing and cleaning of animals every day. Particularly, in summer special camps may be conducted and women in dairying explained the need for and the importance of the aforesaid. If necessary, water may be supplied at concessional rate to the these through through tankers or bore wells for this purpose.

7. Financial assistance

Now-a-days, the existing financial assistance including loan component and subsidy are inadequate to acquire cross breed cattle and graded murrah buffaloes. Therefore, keeping in view the inflationary trend in the economy and to attract women from non-dairying activities, financial assistance may be increased from the existing level.

8. Milking:

Respondents undertake milking from animals at the beginning and leave the milk to calf at the end. They do not know that the SNF and fat contents are higher in the last yield instead of beginning yield. It is an economic loss for them and also it is not good for the calf since that is relatively more. Hence, pourers and palamitras may
be educated about it. On the one hand, income increases as the milk price is based on SNF and fat content. On the other hand, calf may not be subjected to ill-health. The unnecessary expenses on medicines for curing the calf.

9. Mini dairies

The Animal Husbandry Department has introduced mini dairies programme for both men and women. The existing practices of reservation of 30 per cent to women may be dispensed with by organizing mini dairies exclusively for women like DRDA.

If all the aforesaid suggestions are implemented in toto in letter and spirit, then more women may enter into in dairying particularly in the rural areas in the years to come. This may result in improvement in the quality of milk, increase in quantity, yield, better prices and, thereby, more income. That way, women folk may be involved in nation building activities. The results of white revolution of Chittoor district may become an eye opener and model to other districts in AP and other states in the country. Then only, it is possible to attain the avowed objective of rural development addressing the target groups (women), who are below poverty line, especially scheduled castes, scheduled tribes, backward castes, minority communities and even weakest of the weak among the forward castes. Thus, empowerment can be promoted further and living standards improved in future.

4. Hints for further research in future

As already pointed out in the review of literature, there is no dearth of studies on dairying and women empowerment at national/regional/firm/household levels. Since the literature is scanty on the empowerment of the women through dairying, the following themes/areas/concerns may be taken up as research projects/proposals by the would be researchers and all those who are interested in the matter of women development. A comparative study may be made between pourers and palamitras; between scheduled castes, scheduled tribes, backward castes and minority communities; the status of women in the post dairying period may be compared with those of non-dairying women keeping in view the similar/identical /socio-economic/cultural/political/psychological/personal issues. Specific studies may be organized on each aspect of empowerment such as economic, social, cultural,
psychological, political and personal spheres by considering the several dimensions in detail as case studies may be organized on pala pragati kendralu where women constituted 100 per cent. Studies may be taken up on the impact of specific schemes/programmes meant for women in dairying only. Since the concept of palamitra is a recent one, particularly studies may be undertaken on them also.