If the ploughed soil dries to the fourth
A fat crop follows without manure

- Thirukkural

“Today the villages are dung heaps. Tomorrow, they will be like
Garden of Eden, where highly intelligent folk will dwell, whom no one
can deceive or exploit”.

- Mahatma Gandhi

CHAPTER VI

Conclusion
CHAPTER VI

CONCLUSION

This is the sixth and final chapter of the thesis. This chapter deals with the summary and findings of the study regarding the role of NABARD in providing refinance for agriculture and rural development in India with special reference to Tamil Nadu. This study mainly focused on the refinancing assistances rendered by NABARD to Tamil Nadu. Besides, suggestions for the improvement in the refinancing activities of NABARD in Tamil Nadu are dealt with. The study covered a period of six years from 1996-97 to 2001-02.

6.1 Restatement of Objectives of the Study

The objectives of the study are restated below:

i. To enquire into the schemes of refinance operated by NABARD.

ii. To examine the trend in refinance assistances rendered by NABARD to Tamil Nadu.

iii. To evaluate the pros and cons of refinancing assistance rendered by NABARD to Tamil Nadu.

6.2 Methodology

The study is mainly based on secondary data. Secondary data on the schemes of refinance and trend therein were collected from the annual reports and unpublished data of the NABARD. Besides, hand books and pamphlets issued by NABARD were also used. Primary data to elicit views of farmers on the terms and conditions of the schemes of assistance extended by NABARD and general and specific benefits reaped etc., were obtained through questionnaires from 252 respondents residing in Tiruchirapalli, Madurai,
Coimbatore and Thanjavur districts. Suitable null hypotheses ($H_0$) and alternate hypothesis ($H_1$) were framed and tested. Mann-Whitney U test, Factor analysis, Stepwise multiple regression analysis and test, ANOVA, T-test and Chi-square test were some of the important tools applied for analysis and interpretation of data.

6.3 Summary of Chapters

A brief summary of each chapter of the dissertation follows now.

Chapter I presented the importance, period, objectives, methodology, sample design and limitations of the study.

Chapter II gave an overall literature review relating to the role of NABARD and its activities. In addition the review related to the importance of rural credit and its needs.

Chapter III gave an account of the schemes of refinancing operated by NABARD and annual disbursement of refinance by NABARD under each schemes at all India level for the period of six years (1996-97 to 2001-02). Besides, institutions-wise disbursement, again at all India level, under each scheme was dealt.

Chapter IV examined the trend in refinance assistances rendered by NABARD to Tamil Nadu. The analyses were based on the number of projects assisted and amount of refinance extended by NABARD to Tamil Nadu. The financial assistance extended by financial institutions to farmers on the strength of NABARD refinance, year-wise and district-wise, were also discussed.
Chapter V was devoted to present the pros and cons of NABARD's refinancing role in Tamil Nadu. This chapter by eliciting opinions from beneficiaries, who availed assistances under NABARD refinanced schemes, makes an assessment of qualitative performance of NABARD. The analyses entirely were based on primary data collected from 252 respondents.

Their opinions were grouped into four categories, namely:

i. The general pros and cons of NABARD schemes.

ii. The personal pros and cons of the beneficiaries concerned.

iii. Overall satisfaction and dissatisfaction levels of the beneficiaries and

iv. Dominating factors contributing to satisfaction and dissatisfaction.

Chapter VI, that is, this chapter, deals with the summary and findings of the study.

6.4 Findings Related to Schemes-wise Financing and Refinancing

A summary of findings related to scheme-wise financing and refinancing is given.

6.4.1 Minor Irrigation Scheme

The cumulative (up to 31st March 2002) refinance disbursement under Minor Irrigation Scheme provided by NABARD stood at Rs.11,68,836 lakhs at all India level, accounting for 20% of total refinance for all the schemes. The cumulative refinance disbursement to Tamil Nadu under this scheme stood at Rs.42,059 lakhs accounting for 10% of total refinance disbursements received
by the State from the NABARD. At all India comparison, the percent share of
this scheme in Tamil Nadu is low. As Tamil Nadu has other irrigation
alternatives, Minor Irrigation scheme is not a major consideration.

The financial assistance provided by different financial institutions in
Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the
scheme, stood at Rs.9,029.29 lakhs. Against this, these institutions got a
refinance totaling Rs.7,808.30 lakhs from NABARD accounting for 86% of
total assistance extended to various beneficiary borrowers by these
institutions. Besides, during the same period, NABARD had sanctioned
24,097 projects under this scheme to Tamil Nadu. The top 5 districts by total
amount of refinance for the 6 year period were: Coimbatore, Vellore,
Cuddalore, Thanjavur and Tiruchirapalli and the amounts of total assistance
were Rs.932.85 lakhs, Rs.883.05 lakhs, 837.40 lakhs, Rs.710.77 lakhs and
Rs.614.86 lakhs, respectively.

The difference between top 5 and top 10 districts was significant with
respect to i. mean number of projects assisted in 3 out of 6 years, ii. mean
amount of financial assistance in all the 6 years of study, and iii. mean amount
of refinance assistance in 5 out of 6 years.

Many factors such as irrigation facilities available, methods of
irrigation, rain fall, nature of crops and crops pattern, etc., determine the
borrowing capacity of the farmers. In order to successfully consolidate and
augment the Minor irrigation scheme in the state, NABARD can take the
following measures and steps:
• Advice to the farmers to evolve a method of combined use of surface and groundwater in canal command areas, particularly Thanjavur, Cuddalore, Vellore, Nagapattinam and Trichirapalli districts.

• Implementation of tank modernization and rehabilitation programme in the districts of Pudukottai, Ramanathapuram, Virudhunagar, Sivaganga, Tirunelveli, Toothukudi and Kanyakumari.

• Identification of feasible deep tube well areas in the sedimentary areas and designing a mechanism of development with institutional assistance and farmer participation as Community Work.

• An overall watershed development programme in areas where well irrigation is entrenched but shows signs of dwindling water levels, reduced yields and early drying up of wells, particularly in the districts of Vellore, Tiruvannamalai, Salem, Coimbatore, Madurai, Dharmapuri, Dindigul, Cuddalore and Kancheepuram.

• Identification of groups of rainfed tanks in favorable hydro-meteorologically surplus areas towards conversion into a series of system tanks augmented by mini-storage reservoirs or anicuts across vantage streams, by tapping flash flows that would otherwise go as runoff.
- Introduction of Drip and Sprinkler irrigation in feasible horticultural and vegetable growing areas.

- Enhanced coverage of conservation measures in flood irrigated areas/crops, so that conservation effected can reduce the ill effects of ground water depletion by heavy withdrawals.

The Study shows that the granting of refinance by NABARD for Minor Irrigation is being implemented very successfully in the state. Minor Irrigation scheme is very popular among the farmers; therefore the scheme can continue with encouragement in future also.

6.4.2 Land Development Scheme

The cumulative (up to 31st March 2002) refinance disbursement under Land Development Scheme provided by NABARD stood at Rs. 87,341 lakhs at all India level, accounting for 1.5% of total refinance for all the schemes. The cumulative refinance disbursement to Tamil Nadu under this scheme stood at Rs.1,770 lakhs accounting for 0.4% of total refinance disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is very low. Since land reclamation is a very costly affair, Tamil Nadu farmers are generally unwilling to embark on this.

The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the scheme, stood at Rs.1,114.50 lakhs. Against this, these institutions got a
refinance totaling Rs.815.78 lakhs from NABARD accounting for 73% of total assistance extended to various beneficiary borrowers by these institutions. Besides, during the same period, NABARD had sanctioned 1,575 projects under this scheme to Tamil Nadu. The top 5 districts by total amount of refinance for the 6 year period were: Coimbatore, Madurai, Sivaganga, Erode, and Namakkal and the amounts of total assistance were Rs.234.09 lakhs, Rs.80.82 lakhs, 76.08 lakhs, Rs.70.05 lakhs and Rs. 48.08 lakhs respectively.

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 5 out of 6 years, ii. mean amount of financial assistance in 3 out of 6 years, and iii. mean amount of refinance assistance in 3 out of 6 years.

In order to successfully consolidate the land development scheme in the state, NABARD should take the following measures and steps:

- Instruct the farmers to get advice from agencies such as United Planters' Association of South India (UPASI), Coffee Board, Tea Board, Rubber Board and Spices Board for soil conservation to enable the financial institutions to extend credit for these activities.

- Recommend to the State Government to make necessary budgetary provision for subsidy.

The study revealed that Land Development Scheme is not popular among the farmers, because land development is highly technical and costly. So, NABARD should make it popular in future.
6.4.3 Farm Mechanisation:

The cumulative (up to 31st March 2002) refinance disbursement under Farm Mechanisation Scheme provided by NABARD stood at Rs.13,54,610 lakhs at all India level, accounting for 23% of total refinance for all the scheme. The cumulative refinance disbursement to Tamil Nadu under this scheme stood at Rs.67,257 lakhs accounting for 16% of total refinance disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is low.

The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the scheme, stood at Rs. 53,111.45 lakhs. Against this, these institutions got a refinance totaling Rs. 40,689.83 lakhs from NABARD accounting for 77% of total assistance extended to various beneficiary borrowers by these institutions. Besides, during the same period, NABARD had sanctioned 29,065 projects under this scheme to Tamil Nadu. The top 5 districts by total amount of refinance for the 6 year period were: Cuddalore, Tiruchirapalli, Thanjavur, Villupuram and Dharmapuri and the amounts of total assistance were Rs. 4,199.82 lakhs, Rs. 3,247.38 lakhs, 2,765.81 lakhs, Rs. 2,321.74 lakhs and Rs. 2,244.79 lakhs respectively.

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in all the 6 years of study, ii. mean amount of financial assistance in all the 6 years of study, and iii. Mean amount of refinance assistance in all the 6 years of study.
NABARD may take the following actions to improve the Farm Mechanisation scheme in Tamil Nadu:

- Agri-clinics and Agri-business centers need to be popularized.
- Impart training to rural youth for setting up qualitative service centers for tractors and other farm machinery.

The study shows that granting of refinancing by NABARD for Farm Mechanisation is being implemented very successfully in the state.

**6.4.4. Plantation and Horticulture**

The cumulative (up to 31\textsuperscript{st} March 2002) refinancing disbursement under Plantation and Horticulture Scheme provided by NABARD stood at Rs. 2,52,472 lakhs at all India level, accounting for 4\% of total refinancing for all the schemes. The cumulative refinancing disbursement to Tamil Nadu under this scheme stood at Rs.13,783 lakhs accounting for 3\% of total refinancing disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is slightly on the lower side.

The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the scheme, stood at Rs. 6,291.87 lakhs. Against this, these institutions got a refinancing totaling Rs. 4,179.37 lakhs from NABARD accounting for 66\% of total assistance extended to various beneficiary borrowers by these institutions. Besides, during the same period, NABARD had sanctioned 8,569 projects under this scheme to Tamil Nadu. The top 5 districts by total amount
of refinance for the 6 year period were: Dharmapuri, Coimbatore, Madurai, Nilgiris, and Theni and the amounts of total assistance were Rs. 876.77 lakhs, Rs. 493.58 lakhs, 451.45 lakhs, Rs. 434 lakhs and Rs. 292.72 lakhs, respectively.

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 5 out of 6 years, ii. mean amount of financial assistance in 3 out of 6 years, and iii. mean amount of refinance assistance in all the 6 years of study.

Mainly, only one factor namely, nature of crops determines the borrowing capacity of the farmers. In order to successfully consolidate and augment the Plantation and Horticulture scheme in the state, NABARD can take the following measures and steps:

- Promote more agro-based small industries for food processing in all the 385 blocks in the state, especially Madurai, Theni, Dindigul, Virudhunagar, Tirunelveli and Kanyakumari districts for Mango fruits. Tiruchirapalli district for banana, Cuddalore for cashew nut and Dharmapuri district for flowers.

- Promotion of nursery units and ensuring quality standards for plant material.

- Requisition to Government of India to provide capital investment subsidy to establish cold storage units avoiding post-harvest loss of fruits and vegetables and ensure availability of fruits and vegetables throughout the year.

Plantation and Horticulture scheme is one of the promotable schemes of NABARD.
6.4.5 Animal Husbandry

NABARD refinance under Animal Husbandry scheme has been classified into Dairy Farming, Poultry/Sheep/Goat/Pig and Other Animals farming schemes. The refinancing position of NABARD for each scheme is described below.

6.4.5.1 Dairy Farming Scheme

The cumulative (up to 31st March 2002) refinance disbursement under Dairy Farming Scheme provided by NABARD stood at Rs. 4,35,022 lakhs at all India level, accounting for 7% of total refinance for all the schemes. The cumulative refinance disbursement to Tamil Nadu under this scheme stood at Rs.53,113 lakhs accounting for 12% of total refinance disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is high, and this shows a good deal of diversification of farm activities.

The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the scheme, stood at Rs. 49,114.92 lakhs. Against this, these institutions got a refinance totaling Rs. 39,562.76 lakhs from NABARD accounting for 80% of total assistance extended to various beneficiary borrowers by these institutions. Besides, during the same period, NABARD had sanctioned 2,34,121 projects under this scheme to Tamil Nadu. The top 5 districts by total amount of refinance for the 6 year period were: Dharmapuri, Salem, Erode, Coimbatore, and Tiruchirapalli and the amounts of total assistance were
Rs. 9258.58 lakhs, Rs. 3939.13 lakhs, 3,610.20 lakhs, Rs. 2,888.17 lakhs and Rs. 2,593.73 lakhs, respectively.

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 5 out of 6 years, ii. mean amount of financial assistance in 3 out of 6 years, and iii. mean amount of reinance assistance in 3 out of 6 years.

NABARD reinance under Dairy Farming Scheme is promotable one, because cattle production is more in Tamil Nadu. In following ways NABARD can increase the reinance assistance under Dairy Farming Scheme.

- Insistence on improving the quality of cattle
- Establishing mini processing units at the village level so that the producer is able to convert the surplus milk into value-added products.
- Improve the veterinary infrastructure in the state.

6.4.5.2 Poultry / Sheep / Goat / Piggery and Other Animals Scheme.

The cumulative (up to 31st March 2002) reinance disbursement under Poultry/Sheep/Goat/Piggery and Other Animals Scheme provided by NABARD stood at Rs. 2,26,096 lakhs at all India level, accounting for 4% of total reinance for all the schemes. The cumulative reinance disbursement to Tamil Nadu under this scheme stood at Rs.34,230 lakhs accounting for 8% of total reinance disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is very high.
The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the scheme, stood at Rs. 33,249.90 lakhs. Against this, these institutions got a refinance totaling Rs. 25,137.80 lakhs from NABARD accounting for 76% of total assistance extended to various beneficiary borrowers by these institutions. Besides, during the same period, NABARD had sanctioned 7,491 projects under this scheme to Tamil Nadu. The top 5 districts by total amount of refinance for the 6 year period for poultry farming scheme were: Coimbatore, Salem, Dharmapuri, Erode, and Dindugal and the amounts of total assistance were Rs.1,718.42 lakhs, Rs. 906.94 lakhs, 645.85 lakhs, Rs. 530.61 lakhs and Rs.321.44 lakhs, respectively.

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 2 out of 6 years, ii. mean amount of financial assistance in 3 out of 6 years, and iii. mean amount of refinance assistance in 3 out of 6 years.

The top 5 districts by total amount of refinance for the 6 year period for S/G/P Scheme were: Erode, Salem, Dharmapuri, Erode, Vellore, and Thiruchrapalli and the amounts of total assistance were Rs. 1,938.58 lakhs, Rs. 1,738.05 lakhs, 1,730.30 lakhs, Rs. 1,469.74 lakhs and Rs. 1,278.63 lakhs respectively. Besides, during the same period, NABARD had sanctioned 60,764 projects under this scheme to Tamil Nadu. The difference between top 5 and top 10 districts was significant with a respect to i. mean number of projects assisted in 5 out of 6 years, ii. mean amount of financial assistance in
all the 6 years of the study and iii. mean amount of refinance assistance in all the 6 years of the study.

The top 5 districts by total amount of refinance for the 6 year period for Other Animals Scheme were: Tiruchirapalli, Salem, Erode, Villupuram, and Tiruvannamalai and the amounts of total assistance were Rs. 1,449.06 lakhs, Rs. 875.24 lakhs, 796.12 lakhs, Rs. 689.41 lakhs and Rs. 569.69 lakhs respectively. Besides, during the same period, NABARD had sanctioned 53,396 projects under this scheme to Tamil Nadu. The difference between top 5 and top 10 districts was significant with a respect to i. mean number of projects assisted in 4 out of 6 year, ii. mean amount of financial assistance in all the 6 years of study and iii. mean amount of refinance assistance in all the 6 years of study.

NABARD may adopt the following suggestion for improving refinance for the scheme:

- Suitable infrastructure for feed analysis and disease investigation and packing standards of poultry products will help the industry grow in the coming years.

- Evolving superior and fast growing breeds of sheep, goat and other animals like rabbit by research organizations will benefit the farmers.

The study shows that the granting of refinance by NABARD for Animal Husbandry scheme is being implemented very successfully in the
state. Animal husbandry scheme is very popular among the farmers; therefore the scheme can be continued with encouragement in future also.

6.4.6 Fisheries Scheme

The cumulative (up to 31st March 2002) refinance disbursement under Fisheries Scheme provided by NABARD stood at Rs.71,066 lakhs at all India level, accounting for 1.2% of total refinance for all the schemes. The cumulative refinance disbursement to Tamil Nadu under this scheme stood at Rs.4952 lakhs accounting for 1.1% of total refinance disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is almost same.

The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the scheme, stood at Rs.613.95 lakhs. Against this, these institutions got a refinance totaling Rs.383.24 lakhs from NABARD accounting for 62% of total assistance extended to various beneficiary borrowers by these institutions. Besides, during the same period, NABARD had sanctioned 1,309 projects under this scheme to Tamil Nadu. The top 5 districts by total amount of refinance for the 6 year period were: Cuddalore, Kancheepuram, Kanyakumari, and Nagapattinam and the amounts of total assistance were Rs.74.64 lakhs, Rs.13.29 lakhs, Rs.70.92 lakhs, Rs.65.90 lakhs and Rs.38.45 lakhs, respectively.

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 3 out of 6 years, ii. mean
amount of financial assistance in 3 out of 6 years, and iii. mean amount of refinance assistance in 4 out of 6 years.

Fisheries scheme got very less amount of refinance compared to refinance to other schemes. Hence NABARD may consider the following necessary steps to improve refinancing amount to the scheme:

- Recommend to the Government to establish more number of landing centers / harbours in the state.
- Establish infrastructure facilities in the existing harbours for hygienic handling of fish and to prevent loss of quality and value.
- Encouragement through more credit support; propagate innovative activities like ornamental fish breeding, rearing on a commercial basis, etc.

The study reveals that the continuous observation by NABARD is very important for the scheme.

6.4.7. Storage and Market Yard Scheme

The cumulative (up to 31st March 2002) refinance disbursement under Storage and Market Yard Scheme provided by NABARD stood at Rs.74,970 lakhs at all India level, accounting for 1.3% of total refinance for all the schemes. The cumulative refinance disbursement to Tamil Nadu under this scheme stood at Rs.1,434 lakhs accounting for 0.3% of total refinance disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is very low. As farmers in Tamil Nadu are reluctant to establish storage and market yards,
this scheme’s popularity is low in Tamil Nadu as against the all India position.

The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the scheme, stood at Rs.1009.87 lakhs. Against this, these institutions got a refinance totaling Rs.815.45 lakhs from NABARD accounting for 81% of total assistance extended to various beneficiary borrowers by these institutions. Besides, during the same period, NABARD had sanctioned 25 projects under this scheme to Tamil Nadu. The top 5 districts by total amount of refinance for the 6 year period were: Coimbatore, Dharmapuri, Thiruvallur, Madurai and Chennai and the amounts of total assistance were Rs.259.30 lakhs, Rs.154.62 lakhs, Rs.167.70 lakhs, Rs.87.80 lakhs and Rs.11.72 lakhs, respectively.

NABARD may recommend to the state government to issue more subsidy for establishing Storage and Market Yards.

6.4.8 Forestry Scheme

The cumulative (up to 31st March 2002) refinance disbursement under Forestry Scheme provided by NABARD stood at Rs.27,641 lakhs at all India level, accounting for 0.5% of total refinance for all the schemes. The cumulative refinance disbursement to Tamil Nadu under this scheme stood at Rs.1264 lakhs accounting for 0.3% of total refinance disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is low.
The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the scheme, stood at Rs.708.56 lakhs. Against this, these institutions got a refinance totaling Rs.542.83 lakhs from NABARD accounting for 77% of total assistance extended to various beneficiary borrowers by these institutions. Besides, during the same period, NABARD had sanctioned 464 projects under this scheme to Tamil Nadu. The top 5 districts by total amount of refinance for the 6 year period were: Tiruchirapalli, Coimbatore, Toothukkudi, Tirunelveli and Salem and the amounts of total assistance were Rs.118.48 lakhs, Rs.109.25 lakhs, Rs.62.10 lakhs, Rs.29.30 lakhs and Rs.28.97 lakhs, respectively.

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 1 out of 6 years, ii. mean amount of financial assistance in 4 out of 6 years, and iii. mean amount of refinance assistance in 5 out of 6 years.

NABARD should take the following action points for further improvement of refinance:

- Motivating farmers with small land holdings by providing necessary technical advice on various aspects relating to raising of tree crops.

- Provide more refinance to small farmers, marginal farmers for raising forestry crops, especially for non-forest tree produce which will generate income within a few years.
The study shows that disbursement of refinance for forestry scheme is being implemented very successfully in the state.

6.4.9. Integrated Rural Development Programme (IRDP)

The cumulative (up to 31st March 2002) refinance disbursement under Integrated Rural Development Programme (IRDP) provided by NABARD stood at Rs.10,32,488 lakhs at all India level, accounting for 18% of total refinance for all the schemes. The cumulative refinance disbursement to Tamil Nadu under this scheme stood at Rs.70,196 lakhs accounting for 16% of total refinance disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is almost same.

The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the scheme, stood at Rs.23,318.41 lakhs. Against this, these institutions got a refinance totaling Rs.17,255.91 lakhs from NABARD accounting for 74% of total assistance extended to various beneficiary borrowers by these institutions. Besides, during the same period, NABARD had sanctioned 2,41,110 projects under this scheme to Tamil Nadu. The top 5 districts by total amount of refinance for the 6 year period were: Tiruchirapalli, Salem, Tirunelveli, Tiruvannamalai and Villupuram and the amounts of total assistance were Rs.1,614.93 lakhs, Rs.1,512.79 lakhs, Rs.1,179.27 lakhs, Rs.995.57 lakhs and Rs.955.53 lakhs, respectively.
The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 6 out of 6 years, ii. mean amount of financial assistance in all the 6 years of study, and iii. mean amount of refinance assistance in all the 6 years of study.

Refinance by NABARD for IRDP is being implemented very successfully in the state.

6.4.10 Non Farm Sector (NFS Integrated/NFS Composite/NFS Other Scheme)

The cumulative (up to 31st March 2002) refinance disbursement under Non Farm Sector provided by NABARD stood at Rs.7,13,905 lakhs at all India level, accounting for 12% of total refinance for all the schemes. The cumulative refinance disbursement to Tamil Nadu under this scheme stood at Rs.98,592 lakhs accounting for 23% of total refinance disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is very high. Significantly rural development in Tamil Nadu is adequately diversified into non-farm activities as well.

The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under NFS integrated scheme, stood at Rs.86,508.77 lakhs. Against this, these institutions got a refinance totaling Rs.79,868.03 lakhs from NABARD accounting for 92% of total assistance extended to various beneficiary borrowers by these institutions. Besides, during the same period, NABARD had sanctioned 4,09,074 projects under this scheme to Tamil Nadu. The top 5 districts by total amount of refinance for the 6 year period for NFS integrated were:
Coimbatore, Salem, Kanyakumari, Vellore and Erode and the amounts of total assistance were Rs.4,604.70 lakhs, Rs.4,014.14 lakhs Rs.4,147.18 lakhs and Rs.2,994.96 lakhs and Rs.2,665.05 lakhs, respectively.

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 1 out of 6 years, ii. mean amount of financial assistance in all the 6 years of study, and iii. mean amount of refinance assistance in all the 6 years of study.

The top 5 districts by total amount of refinance for the 6 year period for NFS Composite Scheme were: Erode, Tirunelveli, Vellore, Tiruchirapalli, Kanyakumari and the amounts of total assistance were Rs.1,649.97 lakhs, Rs.1,255.46 lakhs Rs.1,239.89 lakhs and Rs.1,235.33 lakhs and Rs.1,158.53 lakhs, respectively. Besides, during the same period, NABARD had sanctioned 1,86,660 projects under this scheme to Tamil Nadu. (The scheme was not operated in 1998-99)

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 4 out of 5 years, ii. mean amount of financial assistance in 3 out of 5 years, and iii. mean amount of refinance assistance in 4 out of 5 years.

The top 5 districts by total amount of refinance for the 6 year period for NFS Others Scheme were: Madurai, Dharmapuri, Coimbatore, Thiruvallur, and Tirunelveli and the amounts of total assistance were Rs.1,337.94 lakhs, Rs.1,323.22 lakhs Rs.1,181.05 lakhs and Rs.1,099.26 lakhs and Rs.1,045.38 lakhs, respectively. Besides, during the same period,
NABARD had sanctioned 9,582 projects under this scheme to Tamil Nadu. (The scheme was not operated during 1996-97 and 2001-02)

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 3 out of 4 years, ii. mean amount of financial assistance in 3 out of 4 years, and iii. mean amount of refinance assistance in 3 out of 4 years.

Non Farm Sector is a successful scheme of NABARD. NABARD has to consider the following suggestions for further increasing refinance disbursements:

- Recommend to the Government to establish direct-level market center to provide marketing infrastructure for rural NFS products.
- Technology transfer centers may be established in each district for providing guidance, technical know-how, etc., to the entrepreneurs.
- In select blocks/district, rural artisan complexes/common work sheds may be established.
- Provision of adequate water facilities and uninterrupted power supply to be ensured.

The study shows that the NABARD refinance disbursement for this scheme is successful.

6.4.11. Self Help Groups (SHGs)

The cumulative (up to 31st March 2002) refinance disbursement under Self Help Groups (SHGs) Scheme provided by NABARD stood at Rs.79,024 lakhs at all India level, accounting for 1.4% of total refinance for all the
schemes. The cumulative refinance disbursement to Tamil Nadu under this scheme stood at Rs.18,225 lakhs accounting for 4% of total refinance disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is very high, signifying that the SHGs scheme is well executed in the state.

The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the scheme, stood at Rs.10,853.44 lakhs. Against this, these institutions got a refinance totaling Rs.10,704.28 lakhs from NABARD accounting for 98% of total assistance extended to various beneficiary borrowers by these institutions. Besides, during the same period, NABARD had sanctioned 29,573 projects under this scheme to Tamil Nadu. The top 5 districts by total amount of refinance for the 6 year period were: Dharmapuri, Tirunelveli, Ramanathapuram, Sivanganga, Virudhunagar and the amounts of total assistance were Rs.2675.06 lakhs, Rs.681.98 lakhs, Rs.647.12 lakhs, Rs.642.50 lakhs and Rs.624.06 lakhs, respectively.

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 3 out of 6 years, ii. mean amount of financial assistance in 2 out of 6 years, and iii. mean amount of refinance assistance in 2 out of 6 years.

The following actions should be taken by NABARD for promotion of the scheme:

- Incentives introduced for Non-Government organization those who introduced more number of SHGs.
Financial institutions may be advised by the NABARD that they should function like NGOs promoting SHGs.

6.4.12 SC/ST Action Plan Scheme

The cumulative (up to 31st March 2002) refinance disbursement under SC/ST Action Plan Scheme provided by NABARD stood at Rs.65,394 lakhs at all India level, accounting for 1.1% of total refinance for all the schemes. The cumulative refinance disbursement to Tamil Nadu under this scheme stood at Rs.3,886 lakhs accounting for 0.9% of total refinance disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is almost same.

The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the scheme, stood at Rs.4,120.13 lakhs. Against this, these institutions got a refinance totaling Rs.3,900.84 lakhs from NABARD accounting for 95% of total assistance extended to various beneficiary borrowers by these institutions. Besides, during the same period, NABARD had sanctioned 47,482 projects under this scheme to Tamil Nadu. The top 5 districts by total amount of refinance for the 6 year period were: Coimbatore, Nagapattinam, Madurai, Villupuram and Tirunelveli and the amounts of total assistance were Rs.305.61 lakhs, Rs.274.97 lakhs, Rs.261.94 lakhs, Rs.239.36 lakhs and Rs.231.20 lakhs, respectively.

The difference between top 5 and top 10 districts was significant with a respect to i. mean number of projects assisted in all the 6 years of study, ii.
mean amount of financial assistance in all the 6 years of study, and iii. mean amount of refinance assistance in all the 6 years of study.

NABARD's support to SC/STs for refinances extended by financial institutions under the SC/ST Action Plans was a satisfactory one.

6.4.13 Other Schemes (Bio-Gas, Sericulture, Dry Land and Agro-Processing)

The cumulative (up to 31st March 2002) refinance disbursement under Other Schemes provided by NABARD stood at Rs.32,864 lakhs at all India level, accounting for 0.6% of total refinance for all the schemes. The cumulative refinance disbursement to Tamil Nadu under this scheme stood at Rs.17,772 lakhs accounting for 4% of total refinance disbursements received by the State from the NABARD. At all India comparison, the percent share of this scheme in Tamil Nadu is very high. This underlies the fact that rural development financing in Tamil Nadu is fairly diversified.

The financial assistance provided by different financial institutions in Tamil Nadu during the 6 year period of study (1996-97 to 2001-02) under the scheme, stood at Rs.3,369.38 lakhs. Against this, these institutions got a refinance totaling Rs.2,410.15 lakhs from NABARD accounting for 71% of total assistance extended to various beneficiary borrowers by these institutions.

The top 5 districts by total amount of refinance for the 6 year period for Bio Gas Scheme were: Tiruchirapalli, Coimbatore, Erode, Salem and Vellore and the amounts of total assistance were Rs.78.98 lakhs, Rs.51.29 lakhs, Rs.44.47 lakhs, Rs.27.22 lakhs and Rs.5.99 lakhs, respectively. Besides, during
the same period, NABARD had sanctioned 2,511 projects under this scheme to Tamil Nadu.

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 4 out of 6 years, ii. mean amount of financial assistance in 4 out of 6 years, and iii. mean amount of refinance assistance in 4 out of 6 years.

The top 5 districts by total amount of refinance for the 6 year period for Sericulture Scheme were: Dharmapuri, Salem, Vellore, Coimbatore and Tiruvannamalai and the amounts of total assistance were Rs.424.26 lakhs, Rs.59.89 lakhs, Rs.55.97 lakhs, Rs.47.54 lakhs and Rs.12.27 lakhs, respectively. Besides, during the same period, NABARD had sanctioned 6,669 projects under this scheme to Tamil Nadu.

The difference between top 5 and top 10 districts was significant with respect to i. mean number of projects assisted in 1 out of 6 years, ii. mean amount of financial assistance in 1 out of 6 years, and iii. mean amount of refinance assistance in none out of 6 years.

The top 5 districts by total amount of refinance for the 6 year period for Dry land were: Dharmapuri, Tiruchirapalli, Dindigul, Coimbatore, and Salem and the amounts of total assistance were Rs.173.95 lakhs, Rs.100.47 lakhs, Rs.64.06 lakhs, Rs.63.22 lakhs and Rs.41.64 lakhs respectively. Besides, during the same period, NABARD had sanctioned 1,362 projects under this scheme to Tamil Nadu.
The top 5 districts by total amount of refinance for the 6 year period for Agro Processing Scheme were: Coimbatore, Dharmapuri, Villupuram, Erode, and Tirunelveli and the amounts of total assistance were Rs.349.92 lakhs, Rs.152.32 lakhs, Rs.117.96 lakhs, Rs.63.51 lakhs and Rs.28.64 lakhs, respectively. Besides, during the same period, NABARD had sanctioned 519 projects under this scheme to Tamil Nadu.

NABARD's support to Other Schemes for refinances extended by financial institutions under Other Schemes was a satisfactory one.

6.4.14. Scheme-wise Per cent Share to Total Disbursement at All-India Level and in Tamil Nadu

Mann-Whitney U test revealed that the all India and Tamil Nadu positions did not differ significantly at 5% level of significance.

6.5. Findings related to Satisfaction Level of Beneficiaries as to impact of NABARD

The findings are presented in respect of i. Respondents' satisfaction level on general impact of NABARD assistance, ii. Respondents' satisfaction level on personal impact of NABARD assistance and iii. Respondents' satisfaction level on overall impact of NABARD assistance.

6.5.1. Respondents' Satisfaction Level on General impact of NABARD assistance

Respondents' satisfaction level on general impact of NABARD assistance was analysed from the opinions expressed by the beneficiary respondents on the following factors: services are highly reliable and useful, technology improvement in agricultural field, impartial treatment to all borrowers, conditions and procedures for getting loans are not easily understandable, fulfills needs of agriculture and rural development, rural
development through agriculture, improvement in flow of capital and technology, there is no direct linkage between NABARD and borrowers, implements schemes purposefully, integrates urban and rural areas, establishing cordial relationship between financial institution and rural people, improves the standard of living of rural people, continuous care on agriculture and rural business, and zealous service of NABARD develops confidence in agriculture field and rural business.

Out of 252 respondents, 66 were highly satisfied, 135 were moderately satisfied and 51 were lowly satisfied.

The non-parametric chi-square test was used to explore the association between the personal profile factors and level of satisfaction on the general impact of NABARD. It was found that gender, age and education were not associated, while community, place of domicile, occupation and income of the respondents were found associated.

6.5.2. Respondents' Satisfaction Level on Personal Impact of NABARD's Assistance.

Respondents' satisfaction level on personal impact of NABARD assistance were analysed from the opinions expressed by the beneficiary respondents on the following factors: Increase in area of agriculture and business, improvements in economic condition and standard of living, increase in liquidity position, freedom from money lenders, increase in production and productivity, shows sincere interest to solve borrowers' problems, improvement in agricultural knowledge, there is no clear awareness of various schemes offered, cost on loan procedure is high, interest
and other service charges are high, lesser repayment period and delay in getting bank loans.

Out of 252 respondents, 138 were highly satisfied, 99 were moderately satisfied and 51 were lowly satisfied.

The non-parametric chi-square test was used to explore the association between the personal profile factors and level of satisfaction on the personal impact of NABARD. It was found that gender, age, education, occupation and place of living were not associated, while community and income of the respondents were found associated.

6.6.3. Respondents' Satisfaction Level on Overall Impact of NABARD Assistance

Combining the general impact and personal impact of NABARD, the overall level of satisfaction of the respondents was studied. The significance of difference between group-means was tested. Inter groups by gender, by age, by education, by occupation and by place of domicile were not exhibiting any variance on the general level of satisfaction. But community and income exhibited variance as to the level of satisfaction.

The Factor analysis using principal component method revealed that 8 out of the 19 factors positively contributed to satisfaction. The factors that positively contributed were:

- Improvement in the standard of living of rural people
- Zealous service of NABARD develops the confidence in agriculture field and small business.
- Increase in the area of agriculture and business
- Increase in liquidity position
- Improvements in the economic condition and standard of living
- Fulfills needs of agriculture and rural development. Impartial treatment of all class of borrowers.
- Impartial treatment of all borrowers.
- Rural area development through agricultural development.

5 out of the 7 factors negatively contributed to the satisfaction level.

The factors contributing negatively to satisfaction were:

- Interest and other service charges are high
- Cost on loan procedure is high
- Delay in getting bank loan
- There was no clear awareness of the various schemes offered
- Not enough loan repayment period

6.6. Suggestions

NABARD should take the following suggestions for further improvement of refinancing activities in Tamil Nadu. These suggestions are purely based on responses of the respondents.

- Procedure for disbursement of refinance through financial institutions should be made simple and easy for the farmers to understand.
- The prevailing rate of interest on refinance should be reduced so that financial institutions can charge lower interest rates to farmers in turn.
• Set up more number of branches for increasing the refinancing operation in rural areas, especially in Thanjavur, Madurai, Tiruchirapalli, Dindigul, Namakkal, Coimbatore and Salem Districts.
• Making available cold storage and rural godowns facilities in Cuddalore and Namakkal districts.
• Establishing regulated market in Nilgiris district
• More awareness camps may be conducted in agriculture based districts.
• In Erode district the pollution of Lower Bhavani Project (LBP) canals has affected crop production. Setting up of effluent treatment plants by industrial units may be insisted. There is an urgent need to carry out repairs to the sluice gates in the canal in the district, lining of the canal and maintenance works to avoid seepage losses.
• Electricity power connections to farmers be given without delay.
• Introduce demonstration program for innovative farming operation, new technology in agriculture, etc.
• Take initiatives to extend the insurance cover like personal accident insurance scheme available under Kisan Credit Card (KCC).
6.7 Scope for Further Research

Further research work on refinance of NABARD on state-wise and scheme-wise can be undertaken separately.

Research work on the role of financial institutions like Commercial Banks, State Co-operative Banks, Regional Rural Banks, etc., in the promotion of refinance of NABARD or contribution to overall development of agriculture can be done. Research on study of Indian agricultural development in the post period of NABARD can also be undertaken. The refinance of NABARD identified through a particular research study would not be static. Due to various reasons, the refinance of NABARD may need revision. So, it is suggested that evaluation of the refinance of NABARD can be carried out after some time, or periodically on the similar lines of this research work.