CHAPTER VII

SUMMARY OF FINDINGS, CONCLUSIONS AND SUGGESTIONS

This chapter presents overall summary of findings of the study and conclusions drawn therefrom. At appropriate places suggestions are also offered, keeping in view the need for around change in policy, institutions, procedures and programmes related to cooperative joint farming societies. The presentation follows the organisation of thesis.

CHAPTER I

Agrarian Structure and Reforms in India

Agrarian structure is one of the determinants of the rate as well as pattern of agricultural development, along with others namely technical change and population growth. Skewed land ownership distribution impacts adversely agricultural growth and larger segments of rural population that consists of landless and semi-landless.

Land and tenancy reforms are two integral parts of agrarian reform. A holistic land reform aims at provision of land to the land needy by addressing to the land ceilings, re-distribution of surplus land and efficiency use of land through consolidation in organisational form like CJFSs. Regulation and securing rights of agricultural tenants is yet another aspect of agrarian reform.

20 per cent of Indian rural labour households face the problem of unemployment with low, uncertain incomes. Added to this problem is asset poverty,
since they are landless. Hence they are double disadvantaged on counts of income entitlement and asset ownership.

Land ceiling as a measure of land reform had its origin first in the recommendations of the National Congress Committee. Since then it has been pursued in India with different degree of success. It is an unfinished agenda in Indian agrarian reform.

Share cropping has an element of exploiting tenants. Leased out area for share cropping as a percentage of total leased out area declined from 56.5 in 1971-72 to 45.92 in 1982. Commercialisation of agriculture has led to taking back leased out land by the owners.

Increasing detentisation in the wake of commercialisation of agriculture and growing concentration of farmers in marginal category, are forcing the farmers to join the ranks of rural proletariat.

Magnitude of distribution of surplus land made available under land ceiling laws is a measure of success of land reform. Since inception of land reforms in India, 2.97 million hectares were declared surplus, 2.96 million hectare were taken possession of and 1.82 million hectare were distributed benefiting 3.37 million persons. SCs and STs account for 48.61 per cent of surplus land distributed and 54.63 per cent of total beneficiaries of land distribution. The fact that declared surplus land constituted 2 per cent of the total cultivated area, speaks volumes about inefficiency of land ceiling legislation to secure economic and social justice in rural India.
Growth of landless and semi-landless is a disturbing trend. Landless rural house-holds in total households swelled from 11.3 per cent in 1981 to 13.42 per cent in 1992. Similarly number of semi-landless in total farmers increased from 53.9 per cent in 1981 to 61 per cent in 1991. These two trends get reflected in declining self-employment and increasing casualisation of labour in agriculture. Insignificant share of rural non-farm equipment in total assets, shows lack of rural economic diversification.

High incidence of landlessness is observed in SCs and STs, as they account for 43 per cent of 14.55 crore agricultural labourers in 1991. Semi-landlessness is also of higher degree among them as 70 and 65 per cent of SCs and STs land holdings fall below 2 hectare land size group.

There is an increasing pressure on land in Andhra Pradesh. Though share of agriculture income in total state's income was 35.7 per cent in 1966-67, its share in total work force was 72.02 per cent in 1981. Per capita net sown area of 0.22 hectares, per agricultural worker net sown area of 0.6 hectare, and average landholding size of 1.72 hectares in 1986-87, testify conclusively this phenomenon. 11.93 per cent of the families were landless in 1982. Percentage of agricultural labourers in total work force was 52.9 in 1981. 79 and 97 per cent of male and female workers respectively were casual labourers.

Direction for land reforms in Andhra Pradesh in 1990s are unearthing benami holdings to acquire more surplus lands under ceiling law, curbing absentee landlordism, establishment of rights of small tenants and extension of land ceiling legislation to dry lands brought under public irrigation projects.
CHAPTER - II

Literature Review and Research Methodology

Review of literature figures under two sections in this chapter: Section A deals with land reform policy and institutions; and under Section B is presented studies on Cooperative farming in India. Section C of this Chapter is related to research methodology.

Study of Cooperative Joint Farming Societies (CJFSs) in Nellore District was prompted by many reasons. Nellore District has high proportion SC and ST population as they account for 31 per cent of district population. They were brought into the fold of CJFSs as beneficiaries in 1970s, but almost all of them became defunct. Later on in mid 1980s DRDA conducted investigation to know the real causes of failure of the programme to revive them. Revival of CJFSs started in 1989. Since then DRDA has been undertaking land development projects on larger blocks of lands under CJFSs. Hence it is of greater interest to study DADA initiated CJFSs whose members are DRDA target groups consisting of mostly poor SCs and STs. In a way this is land-based poverty alleviation programme. Both the Government and society have high stakes in the performance of CJFSs.

The study has the following objectives:

1. To analyse the agrarian structure and reforms in India;
2. To study the cooperative joint farming societies in retrospective and prospective framework;
3. To study the origin and growth of cooperative farming societies in Nellore District;

4. To assess the operational and financial performance of cooperative farming societies in Nellore District; and

5. To measure the employment and income effect of cooperative joint farming societies on beneficiary member households.

The following hypotheses are formulated for testing in the study.

1. There is no significant growth in number of cooperative farming societies, member beneficiaries, extent of land brought under cultivation since the beginning of reorganisation programme in 1989.

2. There is no substantial growth in investment on land development projects under cooperative joint farming societies and there are no substantial differences between investment on land per acre and per member beneficiary.

3. There are no significant differences of cooperative joint farming societies among divisions with respect to cropping intensity, value of produce per acre and surplus per member.

4. There are no significant variations as to the labour status changes of working family members among caste groups after joining cooperative farming society when compared to the before situation.

5. No significant variations can be found among caste-wise beneficiaries as to net income derived from assigned lands.
6. After joining cooperative farming societies no substantial differences can be found as to sources of household incomes from agriculture and allied activities, and wage incomes.

Sample consists of 15 CJFSs drawn randomly at the rate of 5 each from three revenue divisions of the district. These 15 sample societies have total household membership of 967, 10 per cent of which were randomly selected for study. Pretested structured questionnaires were canvassed among sample CJFSs and household members to collect primary data. Secondary data for the study mostly came from DRDA, Nellore. Collected data were analysed using statistical techniques like averages, S.D., C.V., linear regression and 't' tests. Since proper accounts are not maintained by CJFSs, the data about the societies and member households were memory-based, which is a limitation of the study.

CHAPTER - III

Cooperative Farming in India: Retrospect and Prospect

To enlarge the unit of cultivation is to overcome the inherent weakness in non-viable land size units. Four types of cooperative farming societies were experimented. They are cooperative better farming societies, cooperative tenant farming societies, cooperative joint farming societies and collective farming societies. There forms were suggested for India by the Committee on Cooperative Farming in 1946.

Cooperative farming received attention first during plan era when the Government of India issued guidelines for voluntary organisation of small
cultivators or landless labourers as members of cooperative farming and linking consolidation of holdings to cooperative farming.

First Five Year Plan envisaged to bring both medium and small farmers into cooperative fold. Targets set by the plan were achieved due to the policy of leasing out agricultural waste land to the cooperative societies.

During the Second Five Year Plan there was a spurt in the growth of the societies from 2,000 at the beginning to 5,407 in 1960, thanks to 10-year plan drawn by the Second Plan to bring more land under the societies.

Third Five Year Plan drew a detailed programme for organisation of 3,180 societies in 318 pilot project areas at the rate of one project per district and 10 societies per project. 2,485 and 2,527 societies were functioning at the end of 1965 in pilot and non-pilot areas respectively.

Fourth Five Year Plan set a target of promoting 10,000 cooperative farming societies covering 1.5 million hectares.

The results of operation of the societies are mixed blessing. By 1968, 40 per cent of the societies had not been functioning properly.

In the recent years cooperative farming societies are formed with nascent marginal farmers from SCs and STs by assigning Government waste lands and surplus lands under land ceiling laws. CJFSs are land-based development programmes to ameliorate rural poverty for improving socio-economic conditions of SCs and STs are working poor. It is expected CJFSs are the only institutional
mechanisms to arrest the deleterious effects of growing detentisation, marginalisation proletarianization and casualisation of agricultural labour in rural India.

CHAPTER - IV

Origin and Growth of Cooperative Joint Farming Societies in Nellore District

Nellore, Southern most coastal district of Andhra Pradesh, has high proportion of SCs and STs population as both account for 31 per cent of total population.

CJFSs are conceived as part of several programmes chalked out for development of rural areas which include development of waste lands and irrigation facilities.

A new thrust is placed on CJFSs when the Government starting distributing waste lands and surplus lands to SCs and STs and bringing them into cooperative fold. Between 1976-90, 796 CJFSs were formed in Nellore District with the objective of prevention of alienation of assigned land, development of community irrigation facilities and procuring adequate institutional finances. With the advent of CJFSs it is possible for the district development administration to prepare comprehensive development programmes by clustering beneficiaries. Unfortunately almost all CJFSs promoted in the first bout became dormant.
DRDA, Nellore, conducted survey of 786 out of 796 societies to know the causes of dormancy before initiating re-organisation (or revival) programme for the societies. The survey had thrown open wealth of information about various dimensions of the societies.

In the total household members of 65,719 covered by the societies, SCs and ST's membership accounted for 73 per cent of the total and the BCs and OCs for the remaining 27 per cent. 47 per cent of the members of these societies were below the poverty line. Poverty ratios of SC and ST household members of these societies were 43.5 and 35.6 per cent respectively. In operation these societies came nearer to cooperative tenant forming societies.

So many commonly held perceptions about the causes of failure of CJFSs - failure of cooperatives in Nellore District as elsewhere in India, theft of assets of the societies, poor loan repayment culture of members of the societies, were proved myths which were exploded by objective empirical data collected and aligned by the study.

The study found inadequate staff who were overburden with works other than CJFSs work, poor organisational design, improper accounting and office records and procedure, lack of supervision of development administration at the revenue division and mandal levels, failure to conduct elections to societies and inadequate institutional finances, were found to be valid causes of dormancy of CJFSs.
Report prepared by DRDA for revival of CJFSs provided for essential parameters like minimum land area and beneficiaries under each minor irrigation unit to be created, setting of nodal agency at the district level as a centralised agency to serve better CJFSs and re-organisation of institutions at the revenue division and mandal levels with well defined duties and responsibilities to deliver adequate technical and administrative support to CJFSs.

DRDA prepared perspective plan to develop large blocks of waste land each of size of 10 or more acres. At the end of 1989, 54 per cent of the land covered under large blocks had already been developed and the remaining 46 per cent was planned to be developed under perspective plan.

Planned progress is achieved with respect to land development projects. By the end of 1996-97, 286 projects had been completed benefitting 19,767 household covering a land area of 23,444 acres and involving an investment of Rs.1272.92 lakhs. SCs and STs account for 78 per cent of beneficiaries. Between 1988-89 and 1996-97, linear annual growth rates of variables like projects, beneficiaries, and extent of land brought under cultivation, when 't' tested are found insignificant. Hence the first hypothesis that there is no significant growth in number of projects, number of beneficiaries and extent of land developed and brought under cultivation, is accepted (see tables 4.7 and 4.7A). No significant differences can be noticed in per acre and per member investment made on land development project during this period. The second hypothesis of the study that there is no significant difference between per acre and per beneficiary investment, is accepted (see tables 4.8 and 4.8A).
Funding pattern of land development projects reveals subsidy accounted for 50.79, loans for 36.66 per cent and margin money 12.55 per cent of the total investment. DRDA is the single most important agency which funded as much as 41.44 per cent of the total investment on development of projects followed by NSFDC with 19.76 per cent share and DCPEs with 16.73 per cent share.

CHAPTER V

Operational and Financial Performance of Sample Cooperative Joint Farming Societies

On an average a land development project benefitted 69 households assigning 1.18 acres of land each with a value of Rs.6,400.

15 sample CJFSs taken from 3 revenue divisions at the rate of 5 each, covered 967 household members and 1,185 acres of land.

88 per cent of membership belong to SCs and STs. Their combined percentage share in total membership is 98 in Nellore, 92 in Gudur and 82 in Kavali.

Average membership of the society is highest at 182 in Kavali division, 64 in Nellore division and 37 in Gudur division.

Average land size of societies is 102 acres in Kavali division, 74 acres in Nellore division and 60 acres in Gudur division. Similarly average size of land holding of household member is 1.36 acres in Gudur division, 1.30 acres in Nellore division and 1 acre in Kavali division. In all the divisions the average
land holding size of households is below the upper limit of a marginal farm i.e., 2.47 acres. In practice the land assigned is being cultivated on individual basis. There is need to supplement members' income from land by diversifying into agriculture allied activities and non-farm activities.

90 per cent of the land assigned was government waste land and 70 per cent of the land is of poor quality belonging to red soil and sandy soil types. Only 30 per cent of the land covered by black soils is fertile. High rate of investment than what was made for reclamation of waste land is required.

90 per cent of land holdings of beneficiary households fall in the marginal category and the rest in small farm size category, accounting for 83 and 17 per cent of land area respectively. They are faced with inherent disadvantages in marginal and small holdings. These households should be specially targeted in subsidy dispensation in the supply of financial and non-financial inputs.

38, 33 and 29 per cent of the land of the sample CJFSs in the district is irrigated by filter points, open wells and lift irrigation respectively. Filter points is the major source of irrigation in Gudur division with 57 percentage share of irrigated area, lift irrigation in Nellore division with 50 percentage share and open wells in Kavali division with 39 percentage share.

Land assets and irrigation assets account for 77 and 23 per cent of total value of assets of the CJFSs. Average value of assets per household member is Rs. 30,000 in Nellore division, Rs.46,000 in Gudur division and Rs.21,000 in Kavali division. Asset base of member household needs immediate improvement.
by widening through diversification into non-farm activities and depending through more investment on farm assets.

SCs, STs and BCs financial societies provided 44 per cent of the total invested fund in the form of subsidy and margin money. Major loan givers are NSFDc and DCF/s state federation with percentage shares of 20.41 and 16.5 respectively. Average acre minimum and maximum investments made were Rs.1,000 and Rs.9,000 respectively in Nellore division, Rs.2,000 and Rs.9,000 in Gudur division and Rs.1,000 and 8000 in Kavali division.

Combined share of commercial banks in provision of short-term finance is 78 per cent. No significant differences can be found per acre and per member short-term investment when they are ‘t’ tested.

Since most of the beneficiaries are down trodden marginal farmers, CJFSs should avail of concessional finances available for small accounts under priority sector lending by commercial banks.

Cooperativisation is weak in procuring inputs. Tilling of land is jointly undertaken. Sale of agricultural and horticultural produce is cooperativised. Cooperativisation should be extended by CJFS to procure of inputs so as to get scale economies and non-farm activities should be initiated to derive scope economies.

Net sown area is 73.16 for all three division. Average net sown area for members is highest in Nellore at 1.07 acres followed by 1 acre in Gudur division
and 0.76 acre in Kavali division. Gaps between average land holding and net area sown, indicates under utilisation of land asset which needs to be improved.

Cropping intensity is 126.52 per cent for all divisions. Gudur division has highest cropping intensity of 147.28 per cent followed by Kavali division at 128.9 and Nellore at 110.27 per cent. Part of the Third hypothesis that there are no significant differences in cooperative farming societies among divisions with respect to cropping intensity, is accepted (see tables 5.17 and 5.17A).

Cropping mix of the societies reveals the cultivation of commercial and food crops and horticultural produce. Area-wise paddy accounts for 41.34 per cent of gross sown area, groundnut 38.10 per cent, citrus 11.48 per cent and chillies 5.10 per cent. In value terms, paddy has the highest share of 43 per cent in total value followed by groundnut with 25 per cent and citrus with 15 per cent. Per acre value of produce is highest with mangoes at Rs.15,000 followed by citrus at Rs.10,452, paddy at Rs.8,549, groundnut at Rs.7,351, chillies at Rs.6,484 and vegetables at Rs.5,000. Value of produce grown per society is Rs.6.04 lakh and per household member is Rs.9.36 thousand. Per acre produce value is Rs.10,000 in Nellore division, Rs.8,000 in Gudur division and Rs.6,000 in Kavali division. Plantation crops are highest generators of value per acre both in Nellore and Gudur divisions with Rs.18,000 and Rs.10,000 respectively. It is commercial crops in Kavali division with Rs.9,000. Change of cropping mix to either plantation crops or commercial crops should be attempted by CJFSs so as to maximise revenue from per acre crop grown.
No significant differences can be found in per acre produce values between divisions (Part of Third hypothesis is accepted). With respect to per member produce value significant differences can be observed between Kavali and Gudur divisions, but no significant differences can be noticed between Nellore and Gudur divisions, and Nellore and Kavali divisions. Part of the Third hypothesis is accepted for Nellore-Gudur and Nellore-Kavali, and is rejected for Kavali-Gudur. With regard to per member value of surplus there is no significant difference between Nellore and Gudur divisions, but significant differences can be found out between Nellore and Kavali, and Kavali and Gudur. Part of the third hypothesis is accepted for Nellore-Gudur, and rejected for other two division combinations. (See tables 5.23 and 5.23A, 5.23B and 5.23C).

Shortest and longest pay-back periods are 2.82 years and 5.72 years for Devarapalem and Siddavarapadu projects respectively in Nellore division. In Gudur division shortest and longest pay-back periods of 3.62 years and 9.85 years are associated with Divipalem and Vakyum projects respectively. Shortest and longest pay-back periods of 2.88 years and 8.66 years are associated with Gopalakrishna and Kotadivi projects in Kavali divisions.

The average cost of capital to the project is 10 per cent. 4 projects in Nellore division, 2 projects in Gudur division and 3 projects in Kavali divisions have average rate of returns exceeding 10 per cent.
CHAPTER VI

Socio-Economic Impact of Cooperative Joint Farming Societies on Beneficiary Households

97 household members were randomly selected from 967 households members of 15 sample CJFSs to study the socio-economic impact on the former by the latter.

Combined share of SCs and STs in total sample is 89. Revenue division-wise their proportion is 96 per cent in Nellore division, 95 per cent in Gudur division and 82 per cent in Kavali division.

In total lands assigned, black, red and sandy soils account for 45, 28, 27 per cent respectively in the district. Combined share of last two soil types, poor quality soils, come to 55 per cent of total land assigned to sample families in the district.

The average landholding size of sample households is 1.18 acres. So all of them fall in marginal farm category.

61 per cent of the land assigned to households is under fragmented holdings and the remaining 39 per cent under consolidated holdings. 85, 50, 40 and 20 per cent of land assigned to SCs, STs, BCs and OCs respectively are under fragmented holdings. Fragmentation of holdings cuts across all soil types. Small parcels of fragmented land holdings is inevitable consequence of public policy of land distribution to landless poor agricultural rural households mainly of SCs and STs, down-trodden castes.
Analysis of investment on land development activities reveals that per sample household investment was highest at Rs. 18,815 on plantations, Rs. 11,400 on irrigation, Rs. 2,133 on reclamation, Rs. 1,547 on soil conservation, Rs. 1,479 on jungle clearance. Per acre investment analysis shows the highest amount of expenditure on plantations at Rs. 11,974 followed by irrigation at Rs. 9,500, reclamation at Rs. 1,600, jungle clearance at Rs. 1,194, soil conservation at Rs. 1,381. Since almost all of the land development projects undertaken on assigned lands created minor irrigation assets, it is but natural irrigation investment is one of the major land developmental activities ranking below investment on plantation activity both in terms of per household and per member investments.

Sex ratio of 1012 : 1000 for sample households is favourable to females. 12 per cent of household population are aged above 60 years, 12 per cent children below 14 years and 76 per cent in active age group between 15 and 60 years.

Castes differ in literacy rates. 90, 80, 26 and 6 per cent of STs, SCs, BCs and OCs respectively are illiterates.

Of the total sample households population, 35.36 per cent are employed and 41 per cent unemployed. The corresponding percentages for SCs are 22 and 45, STs 49 and 27, BCs 43 and 17 and OCs 31 and 78.

75 out of 97 sample households are labour non-hiring families and the remaining 22 are labour hiring families. Size of working family members and
proportion of labour hiring families are inversely related. Large families in terms of working household members find no scope for fuller utilisation of labour on small pieces of land assigned to them. Hence wage labour persists with these families. It is high time that the societies should diversify into rural non-farm activities to optimum utilise the labour of their household members.

Before joining CJFSs, 31.17, 31.76 and 37.07 per cent of 340 working household members were casual, semi-attached and attached labour respectively. Their labour status had undergone substantial change after joining CJFSs as 32.35, 35.29, 14.70 and 17.66 per cent are self-employed, casual, semi-attached and attached labour respectively. Caste-wise employment status changes exhibit universal improvements across caste categories. Fourth hypothesis that there are no significant variations in labour status changes across caste categories, is accepted except for RCs and OCs (see tables 6.14 and 6.14A).

Finding employment in the native village is preferred to employment outside it. After joining CJFSs 78 per cent of working family members of the sample households secured employment in their native villages compared to 58 per cent in the before situation. This observation holds good for all caste groups.

Incidence of owning draught animals is positively related to land holding size. Caste-wise 41, 22 and 64 per cent of SCs, STs and BCs and OCs respectively own draught animals. It is uneconomical to own a pair of bullocks with marginal holding.
Fodder, commercial and plantation crops account for 39, 37 and 24 per cent of total market value of produce grown in 1995-96. Average produce value per acre was highest for citrus at Rs.22,000 followed by groundnut and mangoes at Rs.16,000 and paddy at Rs.10,565. Since per acre produce value realised is high with plantation and commercial crops, CJFSs should shift to cultivation of these crops.

Total cost was 36 per cent of the market value leaving the remaining 64 per cent as surplus. The important cost components expressed as percentages of total market value of produce, were seed (7.37), manure (6.96), labour (4.34), interest (3.93), ploughing (3.9) and diesel and oil electricity (3.64). Total cost and net income ratios are almost of the same magnitude to all caste groups. Average value of production per acre works out to Rs.12,401 for SCs, Rs.12,429 for STs, Rs.10,169 for BCs and Rs.12,635 for OCs and Rs.12,200 for all castes put together. Net income per acre works out to Rs.7,961 for SCs, Rs.7,979 for STs, Rs.6,529 for BCs, Rs.6,112 for OCs and Rs.7,632 for all castes. Fifth hypothesis of the study that there are no significant variations between caste groups as to net income per acre derived from the assigned lands, is accepted (see tables 6.21 and 6.21A).

55,42 and 3 per cent of the annual income of the sample households were sourced from wages, agriculture, and agriculture allied activities respectively in the year 1995-96. Sixth hypothesis that after joining cooperative joint farming societies no substantial differences can be found as to source of income from agriculture and allied activities, and wage income, is rejected for SCs and BCs and others, and is accepted for STs (see tables 6.23 and 6.23A). There was
conspicuous absence of income from non-farm activities. Diversification into rural non-farm activities should be thought of to widen income base of sample families. All the sample households continue to be rural labour house holds since more than 50 per cent of their annual incomes was sourced from wages. Hence self-employment ventures by promoting rural industries is the need of the hour to improve the economic status of the sample households.

One heartening fact is 42 per cent of the family income was derived from agriculture which could not have been accrued to the sample households had they not been assigned land and brought under CJFSs.

Land development programme clustering beneficiaries of land assignments, is land-based development programme undertaken by DRDA targeting poor, landless agricultural rural labour households to alleviate rural poverty. All the beneficiary households were lifted above poverty line when Rs 6,400 was adopted as cut-off annual household income. If agriculture income from assigned land is excluded from annual income, considerable proportion of households fall below the poverty line. In the latter situation incidence of poverty would be 24, 18, 14 and 20 per cent in SCs, STs, BCs and OCs. In other words these families were solidly benefitted by CJFSs to cross the poverty line. This conclusively supports the positive economic impact of land development programmes of DRDA for the benefit of poor rural households brought under CJFSs. More of these programmes are answer to the Indian rural poverty alleviation in future.