CHAPTER VI

SUMMARY OF FINDINGS AND CONCLUSIONS
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It is a universally accepted that the agricultural sector, by itself, is incapable of creating additional opportunities of gainful employment in the wake of burgeoning population. Hence the vital importance of expanding the base of the rural non-farm activities (RNFAs) as a source of employment generation. The rural non-farm activities constitute an important category of income for the poor in the developing countries, which are characterized by problems such as mounting population pressure, diminishing land frontiers, small and fragmental land-holdings due to declining land-man ratio and a high incidence of unemployment. The non-farm activities provide supplementary employment to the small and marginal farmers who constitute a major segment of the total agricultural population of rural India.

The rural non-farm economy has emerged as a major employer of labour in the developing world. In India, the percentage of work-force engaged in agriculture and allied activities declined from 72.1 per cent in 1951 to 65 per cent in 1991, while those engaged in manufacturing and allied activities went up from 9 to 11 per cent during the same period. Employment in the non-farm sector has been growing at the rate of 7.2 per cent per annum during 1977-78 to 1999-2000. Achievement of the goal of full employment was, thus, crucially dependent on growth of employment in the RNFAs. According to NSS data, the percentage share of the rural male workers had increased up to eighties. But between 1987-88 and 1993-94, the share of rural male workers remained almost stagnant. The percentage share of rural female workers recorded an
even lesser growth during the past two decades. In the two decades, the female workers increased only by 3.5 per cent as against a corresponding increase of 9.2 per cent in respect of male workers. During 1987-88 and 1993-94, the share of non-agricultural workers (22 per cent) in the total workforce remained the same and showed a slight increase for the males. On the whole, the difference in the share of non-agricultural sector in the absorption of total workers declined after 1987-88. The decline was more significant in the case of females.

The rate of growth in non-agricultural employment found a declining trend particularly between 1987-88 and 1993-94. The rate of growth of rural non-agricultural workers, which was 5.07 per cent per annum between 1972-73 and 1977-78, decreased to 0.33 per cent between 1987-88 and 1993-94. The decline in the rate of growth was witnessed not only in non-agriculture areas, but also in the agricultural sector too.

It is found that, there are large regional variations in practically every facet to labour utilization. The share of male workers in non-agricultural employment had shown a continuous increase in the States of Haryana, Himachal Pradesh, Karnataka, Maharashtra, Punjab, Tamil Nadu, Uttar Pradesh, and West Bengal. While Andhra Pradesh, Orissa and Rajasthan showed a declining trend and it was observed that there were significant differences between States in terms of the direction and rate of change in the pattern of labour use when both males and females were considered together. Himachal Pradesh, Karnataka, Kerala, Maharashtra, and West Bengal States
showed a continuous rise; whereas, Punjab, Tamil Nadu, Uttar Pradesh and Haryana recorded a fluctuating trend. When all workers in the non-agricultural sector, irrespective of rural and urban sectors, were accounted, only States of Haryana, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Punjab, Uttar Pradesh and West Bengal showed a steady increasing trend. The rest of the major States showed the share of non-farm sector in total employment in 1993-94 was significantly higher than that in 1973-74.

Under broad sectoral distribution of workers in terms of usual status, the share of agricultural seems to have declined by almost 8 per cent points to 65 per cent between 1972-73 and 1993-94. The share of agriculture in the rural workforce in 1993-94 (78 per cent) was higher than in the urban workforce (12 per cent); whereas, the non-agricultural employment among the rural males of India has expanded at an average annual rate of 4.7 per cent; but agricultural employment was expanded at an average annual growth rate of only one per cent. The corresponding were 4.6 and 1.5 per cent respectively.

It appears that the tendency of real wage rates to rise, observed in the mid-seventies to mid-eighties, is not sustained either in the agricultural or non-agricultural sectors. While the real wage rates in agriculture have tended to stagnate, those in the non-agricultural sector have tended to decline in the nineties.
The ratio of real wage earnings of adult males rose from 1.3 to 1.6 in 1964-65 to 1977-78 and fell to 1.3 in 1987-88. The ratio of real wage rates of adult males fell, more or less, consistently thereafter when computed during 1987-1995. The ratio of real wage earnings of adult females declined from 1964-65 onwards and remained stagnant till 1987-88 at the all-India level. It is further found that, the real wage rates in agriculture rose till 1991, and later stagnated. The decline in real wage rates in non-agriculture began earlier.

The pattern of agriculture growth, distribution and size of operational holdings, growth of literacy, urbanization, Government Policies towards the promotion of non-farm activities, internal and external demand conditions of goods and services provided by this sector and markets etc., are among the most important factors/determinants influencing the structure and growth of the non-farm sector.

Notwithstanding the important role assigned to the non-farm sector in development process of the country, this sector is facing several problems like dominance of traditional units, low productivity, absence of linkages and integration with the local resources, training, credit etc. To overcome these problems, various types of direct assistance have been suggested and tried viz., credit, training, technical assistance and infrastructure-common facilities etc.
If such a comprehensive planning approach can be evolved, it could provided the solution to the problems of rural areas such as poverty, unemployment and out-migration of the rural work-force.

The significance of the non-farm sector is even more pronounced in the drought-prone region. The present humble attempt to make a micro-level study in Chittoor District of the drought-prone Rayalaseema region in the State of Andhra Pradesh, it is hoped, with throw light on the dynamics of rural non-farm activities in the rural economy.

The Census data indicates that there is a change in the occupational mobility in the drought-prone region of Rayalaseema in the State of Andhra Pradesh. Rayalaseema comprises four districts viz., Chittoor, Cuddapah, Anantapur and Kurnool. Among the four districts, the mobility of rural workers in agriculture and a corresponding increase in the non-agricultural activities between 1981 and 1991. The percentage of workers in agriculture and allied activities decreased from 83.11 per cent (male) and 92.48 per cent (female), to 80.06 per cent (male) and 92.04 per cent (female) respectively, while those engaged in non-agricultural sector increased from 16.89 per cent (male) and 7.51 per cent (female) respectively. But in the secondary sector, the labour force decreased. The traditional house-hold activities were not able to face the competition from the urban modern units; whereas, in the tertiary sector, an increasing trend was noticed.
Keeping in view the growing contribution of non-farm sector in the overall process of rural employment as experience in various States of India, the main focus of the present study centered around in examining the structure, growth, developmental potential and kinds of problems existing in the functioning of a few selected seven non-form activities and finally to investigate about the possibility and measures to be initiated for developing such non-farm activities so that the persistent serious problems of unemployment and poverty in the rural areas, more particularly in the drought-prone regions, may be reduced to a considerable extent. The study also attempts to examine the existing structure, trends in growth and the nature of participation of different communities in non-farm employment available in these selected Mandals of the Chittoor District.

In the drought affected Chittoor District of Andhra Pradesh, three sample Mandals viz., Madanapalli Mandal from Madanapalli Revenue Division, Nagiri Mandal from Chittoor Revenue Division and Renigunta Mandal from Tirupathi Revenue Division were selected purposively to study the existing income-generating activities and more especially to suggest a few profitable/popular income-generating activities for replication in other sub-regions of the District.

Based on the records from the Director of Small-Scale Industries, Government of India and Government of Andhra Pradesh, some of the most popular (more in number) activities are short-listed. They are viz., Dairy (54), Weaving (29), Timber (54), Repair/Services (32), Rice Mills (54), Oil Mills (54)
and Stone-crushers (32). Though there are other varieties of enterprises, they are very small in number and may not be suitable for replication elsewhere, for more than one reason. The sample respondents / enterprises were drawn by using probability proportional sampling procedure (PPSP). The total sample size is 306.

Primary data were collected from the sample RNFA house-holds. The survey of the sample house-holds through a well-structured questionnaire, whereas, secondary data relating to the structure of employment in India, in the State of Andhra Pradesh, Districts of Rayalaseema Region i.e., Chittoor, Cuddapah, Anathapur and Kurnool and sample Mandalas of the Chittoor District were collected from Census data of India (1961, 1971, 1981 and 1991), NSS data, District Hand-books and other related records maintained by Government and other non-governmental institutions.

Apart from simple statistical tools such as averages and percentages, tools such as composite index and discriminant analysis were made use of.

Owing to time and resource constraint, the present in-depth study was confined to the working of seven sample non-farm economic activities in the selected Mandalas of the Chittoor District in the drought-prone Rayalaseema region of the State of Andhra Pradesh. Further, it is a one point of study, which was considered for one time.
Chittoor District is one of the four districts of the drought-prone Rayalaseema Region in the State of Andhra Pradesh. Agriculture is mainstay of the people. It is reorganized into 66 revenue Mandals. The District comprises 1886 inhabited villages. The climate of this District is moderate. The District derives rainfall mostly from the southwest and northeast monsoons and the average annual rainfall is 1235.1 mm in 1991-92. The District is not rich in mineral resources and there are no permanent rivers flowing in the District.

The total population of the District, according to 1991, Census, 32,61,118; of which males constituted 50.85 per cent and females constituted 49.15 per cent. Of the total population 80.20 per cent live in the rural areas. The main workers constituted 43.14 per cent of the total population in the District, which marginal workers constituted 3.10 per cent and non-workers 53.76 per cent of the total population. The Census data indicates that there had been changes in the occupational mobility since 1970. The mobility of workers had been high in the District. There was a decline in the percentage of workers in agriculture and a corresponding increase in the non-agriculture activities. In the primary sector, the work-force declined between 1981 and 1991 i.e., 83.06 per cent (male) and 92.04 per cent (female) while those engaged in the non-agricultural sector increased from 16.89 per cent (male) and 7.51 per cent (female) to 19.94 per cent (male) and 7.94 per cent (females). From the Census data, it can be concluded that, the male work-force moved from the agriculture to the tertiary sector, while the female work-force from agriculture to secondary and tertiary sectors.
The net area sown accounted for 33.0 per cent of the total geographical area and land put to non-agricultural uses for 9.33 per cent. Forest covered 30.13 per cent of the total area in the District. The distribution of land-holdings in the District is highly skewed. The average size of the holdings in the District is 1.37 hectares. Mostly, the rainfall influences the cropping in the District. Groundnut and paddy are the major crops grown in the District and ragi, baira and sugarcane are the other important crops.

The District is industrially backward. Of late, the State Government has taken the initiative to set up industrial estates, craftsmen guild, raw-material depots, marketing societies, providing power tariff concessions etc.

Renigunta Mandal comes under Tirupathi Revenue Division. The percentage of workforce in the total population accounted for 21086 (38.13%). of which, 93.47 per cent were main workers, 6.53 per cent were marginal workers, 49.13 per cent were agricultural sector workers, of which, 34.03 per cent were male, 15.10 per cent were female, whereas, of which, 17.14 per cent were male, and 2.11 per cent were female and 25.09 per cent were territory sector / service sector workers; of which, 21.98 per cent were male and 3.11 per cent were female. The percentage of non-workers in the total population accounted for 61.87; of which, 23.06 per cent were male and 38.81 per cent were female. The main principal crops were paddy, sugarcane, groundnut, cereals and millets, fruits and vegetables. This Mandal is very near to Tirupathi.
Mandal comes under Chittoor Revenue Division. The percentage of workforce in the total population accounted for 32689, of which 94.73 per cent were main workers, 5.27 per cent were marginal workers, 51.21 per cent were agricultural sector workers, of which 31.71 per cent were male and 19.5 per cent were female, whereas, 29.86 per cent were non-agricultural sector workers, of which 24.50 per cent were male, 5.36 per cent were female and 13.66 per cent were territory / service sector workers, of which 11.63 per cent were male and 2.03 per cent were female. The percentage of non-workers in the total population accounted for 57.10, of which 21.43 per cent were male and 35.67 per cent were female. The main principal crops were paddy, cereals and millets, groundnut, fruits and vegetables, sugar cane and also chilies. This Mandal is very near to Madras city.

Madanapalli Mandal comes under Madanapalli Revenue Division. The percentage of workforce in the total population accounted for 32689 (excluding Madanapalli Municipality), of which 95.59 were main workers and 4.41 per cent were total marginal workers, 70.94 per cent were agricultural workers, 12.66 per cent were non-agricultural workers, and 9.91 per cent were territory sector workers. The percentage of non-workers in the total population accounted for 49.99 of which 20.99 per cent were male and 29.20 per cent were female. The main principal crops were paddy, ragi, cereals and millets, sugarcane, fruits and vegetables, groundnut and sericulture. The Mandal is very near to Bangalore city.
In the following pages summary of the major findings and conclusions drawn are presented.

The average age of each entrepreneur in the sample units was found to be 39.6 years in rice mill, followed by weaving (38.7), oil mill (37.9), timber (53.9), dairy (33.6), stone-crushing units (33.3) and repair/services units (25). Except in 'rice mill', 'oil mills' and 'weaving' units, majority of the respondents of sample units constituted youth with age of 35 years.

It was observed that a good majority (i.e., 36 per cent) was educated upto primary level, followed by another 28 per cent educated upto metric level. It is gratifying to note that 15 per cent were graduates; majority of the illiterates were found in the 'weaving', 'oil mill' units, followed by 'rice mills'. A good number of the rice mill operators were educated upto primary level.

Evidently, one out of the four sample respondents were from the Schedule Caste/Schedule Tribe (SC/ST) categories. Together, 67 per cent of the respondents were from Backward Caste (BC) and SC/ST castes, categorized as the 'weaker sections' of the society and they need to be institutionally supported to motivate them to undertake enterprises of self-employment nature. Apparently, a predominant number of respondents of the BC category seem to own and operate weaving, repair/services, oil mill and rice mill, besides stone-crushing units. It was respondents of rice and oil mills, repair/services units and stone-crushing units who dwell in traditional units.
In respect of ownership of land, we found that 64 per cent of the respondents owned land below one hectare, followed by 36 per cent owned land above one hectare. Evidently, ownership of dry land without any assured irrigation drove respondents to undertake income-generating activities as an alternative source of self-employment. On the whole, the average land (both dry and wet) owned by respondents of dairy units was high (i.e., 2.37 hectares), for the obvious reason that the supply of fodder is an essential input in the dairy enterprise.

Income earned from the agricultural sector was high among the sample rice mill and oil mill unit operators (i.e., nearly Rs 1.00,000/-); whereas, in the case of sample ‘stone-crushing’, ‘dairy’ unit operators, it was about Rs.80,000/-. The lowest income recorded was in the case of ‘repair/services’ unit operators and the sample ‘timber’ unit operators accounted for Rs. 48,000/- and ‘weaving’ operators Rs. 34,000/-.

In order to assess the occupational mobility among the sample unit-operators, the occupation pursued by them prior to the undertaking of the present sample enterprise/unit was examined and it was found that a high percentage (i.e., 46 per cent) of the respondents were ‘agricultural labourers’, followed by 30 per cent of them ‘cultivators’ and a few of them were employed in the ‘repair/service’ units. Among the respondents, who were cultivators, nearly 39 per cent of them set up ‘dairy’ units, followed by 20 per cent ‘rice mill’ units and 21 per cent ‘timber’ units. Those who were in the category of ‘agricultural labour’ undertook ‘oil mill’ (24 per cent) and ‘rice mill’ (21 per cent)
enterprises. Respondents who were engaged in 'repair/service' units previously chose to set up 'timber' units (31 per cent) and, again, 21 per cent of them continued their previous occupation of 'repair/service' as independent units.

An attempt was made to probe into the factors, which predominantly motivated them to shift from the previous occupation to the present enterprise. It was found that motivational factors such as 'to earn more money', 'to satisfy the members of their families', 'work satisfaction', and 'to get employed' seem to have predominantly influenced their decision to shift to the present enterprises/units set up by them. Next in order, motivational factors like 'rise in social hierarchy', 'bank support', 'to put funds to productive purpose' seem to have influenced their decision. Evidently, major factors like augmenting their incomes by undertaking income-generating enterprises, stabilizing their income flow and becoming economically self-reliant and independent seem to have motivated them to undertake the present enterprises. Twenty one per cent of sample 'oil mill' operators, followed by 17 per cent of 'rice mill' and 'dairy' unit-operators avowed that 'unemployment' induced them to venture to set up the enterprises; whereas, 32 per cent of the respondents of sample 'oil mill', 'timber' and 'dairy' units avowed that 'rising high in social hierarchy' induced them to shift to the present enterprises. Nearly 93 per cent of sample unit-operators admitted that 'dissatisfaction with the previous occupation' was a major factor that impelled them to set up the present units.
Capital is critical input in venturing into any new enterprise. We found that 81 per cent of the respondents secured finance from institutional and non-institutional credit agencies; of which, 'repair/services', 'timber' and 'dairy' were the major units, followed by 'stone-crushing', 'rice mill' and 'oil mill' units. Out of the total respondents, 64 per cent did not take any loan from institutional credit agencies. Eighteen per cent of them secured loan upto Rs. 25,000/- and another 18.6 per cent secured loan to the tune of about one lakh of rupees. Prominent among them were: 'timber' (31 per cent), 'oil mill' (29 per cent) and 'rice mill' (27 per cent) unit-operators, constituting 73 per cent, secured loan upto Rs.25,000/-. Interestingly, none of the respondents of repair/service units raised any loan.

Further, we found that 26 per cent of respondents did not borrow funds from the private agencies. A maximum of 31 per cent secured credit in range of upto Rs. 5,000/-; of which, 'timber' merchants constituted 20 per cent, followed by 'dairy', 'oil mill', 'repair/service' (16 per cent) units. Respondents of 'rice mill' and 'dairy' units, constituting 29 per cent, secured credit in the range of Rs. 10,000/- to 20,000/-. 'Timber unit-operators were found in the range of Rs. 20,000/- to 40,000/- and Rs. 40,000/- to 1 lakh. Evidently, the non-institutional credit agencies seem to be the major purveyors of credit to the respondents.

One of the important factors that determines the success of any enterprise is the employment generation. In respect of male family labour, we found that, on an average, 1.66 additional male family labour per week was created in each of the sample units. The detailed break-up showed that in 44
per cent of the units, one man-day, in 32 per cent of sample units two
days and in 14 per cent of sample units three man-days per week of
employment were generated; whereas, in respect of female family labour, on
an average, 1.64 man/women-days per week of employment was generated
in each of the sample units. It was relatively high in ‘dairy’, ‘weaving’, and
‘stone-crushing’ units. In respect of hired labour, 2.97 man-days per week of
employment was created, of which, in 25 per cent of sample units, one
additional man-day; in 39 per cent of sample units three man-days; in 18.3 per
cent of sample units five man-days of employment were created. In ‘dairy’ and
‘weaving’ units, three man-days of employment were generated, which was
found to be relatively high. And in the case of sample timber units, one and
three additional man-days of employment in equal proportion (i.e., 33 per
cent) was generated. In ‘rice and oil mill’ units, which are, more or less,
seasonal in nature, the number of man-days of employment generated was
appreciable. In the sample stone-crushing units, maximum employment of five
man-days per week was generated.

The perception of the sample unit-owners on the impact of the
present enterprise, in terms of certain social-economic parameters, was
examined and it was found that the economic position of the respondents, in
general, had perceptibly improved. Of the total respondents of the sample
units, 95 per cent of them averred that they could attain ‘economic
independence/self-reliance’ and put their free time to productive purpose,
whereas, 61 per cent of sample unit-owners admitted that they gained self-
confidence as a result of the management of units. Further, it is gratifying to
note that, 100 per cent of the respondents agreed that, their 'food intakes' had increased; could afford 'buy good clothing' and could 'purchase household assets'. Besides, they could get their children educated and take care of the health of their children. Moreover, we found that 79 per cent of the sample unit-owners could increase their savings and more so in the case of 'rice and oil mills' and 'dairy' unit-owners. The impact of the sample units in raising the standard of living of the respondents of sample stone-crushing, repair/service and weaving units, it was not perceptible as the income earned by them was not adequate.

It is gratifying to note that the rank correlation between the previous and present enterprises proved to be statistically highly significant, which indicates a significant increase in the marginal income of the respondents of the sample units.

Absolute figures of consumption expenditure as a ratio of income calculated revealed that it was high in the sample 'timber' (Rs 38,000/- in absolute terms) units constituting 45 per cent. Further, it was found that the proportion of consumption expenditure to total income was around 35 per cent and was uniformly same in dairy, rice mill and oil mill units, which was comparatively low (i.e., Rs. 25,000/- in each of the units in absolute terms). In the lowest order, we found stone-crushing and weaving units (23 per cent), followed by repair/service units where the proportion of consumption expenditure to total income constituted 15 per cent. Respondents who operate sample units in stone-crushing, weaving and repair/service need to
be institutionally supported by banks and Government through programmes such as SITRA (Supply of Improved Tool-kits to Rural Artisans) and 'Adarana' in order to upgrade their skills and raise their personal productivity so that they can operate their units profitably and improve their economic conditions.

It was found that, in absolute terms highest investment to the tune of Rs. 56,000/- was made in the timber units, followed by Rs.46,000/- in dairy, rice and oil mill units. Investment made in the rest of the sample units was low to the tune of Rs. 30,000/- Evidently, the sample units, under study, are promising in terms of average income earned and savings made by the respondents. Given an additional institutional support in terms of credit supply, skill upgradation and assured marketing services, the sample units can become viable and their model may be replicated in the other sub-regions of the District.

In addition to this, an attempt is made to study the sample entrepreneurs and the organizational set up capital structure and infra-structural support to the sample units, problems confronted in the operation of sample units by the owner/respondents.

The gender-specific activities are mainly 'dairy' and 'weaving' to some extent and in other activities also women are taking a lead, but to lesser extent. This itself shows the increasing role-played by women in setting up and managing some of the traditional (home-based) enterprises. Thus, for replication elsewhere, it would be of great importance to select those activities that are gender-specific so that they can sustain on their own.

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The trend showed that 'dairy' units were present in all the years while traditional units were set up long back. But the demand-based units have sprung up only in the late 90s. Such units can be set up elsewhere also depending on their local demand.

The labour requirement varied between enterprises. A few units have employed skilled labour depending on their need. The labour is classified gender-wise and also skill-wise. On the whole, male labours were hired more in all the activities, depending on their skill. But among the female labour, only the unskilled were employed in the sample units. Women are employed more in dairy, rice mill, oil mill and, to a lesser extent, in stone-crushing and weaving units. Temporary services of labour are hired unless the work in the enterprise is carried on a continuous basis and it is time-bounded. Their wage rate is also relatively less.

Government should discourage the present system of contracting the areas to some middle-men; instead, they should encourage co-operative or self-help groups to directly get involved in payment of lease charges on installment basis (with soft loan) so that the worker will get the benefit.

All the sample units studied are proprietary concerns. There are no partnership or joint units owing to the low capital turn-over. Most of the sample enterprises have fixed location. Some of the units such as dairy, weaving, timber, rice and oil mills can be set up in the residential areas, without incurring any additional investment expenditure in setting up in a separate building.
Majority of sample respondents (i.e., 86 per cent) operated their sample units on their own premises. Only a couple of timber merchants operated from rented premises. This point needs to be borne in mind, before recommending any activity elsewhere because own premises means no extra dose of capital incurred to the unit operators. Proper upgradation of skills of the entrepreneur and equipping the units with modern technology can help increase productivity of the units.

In timber and oil mill activities, a good number of respondents reported to have undergone training. But, in some of the old/traditional activities like dairy/stone-crushing, no training was reported. Sample unit-operators of weaving, oil mills, rice mills and timber agreed to the need for innovation and those in dairy and stone-crushing units did not undertake experimentation as they thought the scope for it was limited.

Unit-specific problems confronted by the respondents were examined. A good number of dairy and weaving unit-operators complained of congested premises in which they had to operate their units. Most of them are still using traditional equipment. An enquiry revealed that only a few units faced problems with tools/equipment. The entrepreneurs pursuing the same activity can form into a cluster and maintain a ‘tool bank’ for their common use on rental charges. Another common complaint heard from the sample entrepreneurs was about ‘frequent repairs’ of tools and the absence of adequate facilities to service the equipment in the rural area. A major problem
confronted by the sample entrepreneurs was the supply of raw-materials. Supply of poor quality of raw-materials, high transport costs were the other problems faced by the entrepreneurs.

It is evident that the family labour has shown a gradual increase with an increase in the working capital. At the lower levels of working capital, the income generated was found to be low (in absolute terms); whereas, at higher levels of working capital, higher incomes were reported. But as a ratio (i.e., income/working capital), there is a reverse trend.

Besides, an attempt was made to study the socio-economic variables and locational factors, which influenced the non-farm, income-generating activities in the study area. The age of an entrepreneur is a very important factor, which influences his decision to set up a unit. There is not much of variance and the average age is around 39 years which is reasonable, because the type of economic activities studied need some work experience in the relevant field, before they could be operated independently, as one's own enterprise.

Government should bear this fact in mind at the time of selecting the beneficiaries. If a beneficiary is educated or qualified, he will run an enterprise effectively, get benefit out of it, will repay the installments of bank loan regularly and pay a productive role in creating employment opportunities to the local people. In the sample Nagiri and Madanapalli Mandals, we found 34 per cent of respondents in the Backward Caste (BC); whereas, it
was in the Madanapalli Mandal, 35.6 per cent of respondents belong to the
Schedule Caste/Schedule Tribe (SC/ST) category and the Renigunta Mandal
registered 39.2 per cent of the respondents in the 'Other Caste' (OC)
category. On the whole, compared to the percentage of respondents in the
'OC' category, a high percentage of them were found in the 'BC' and 'SC/ST'
categories. Those economically vulnerable and socially disadvantaged people
need institutional/governmental support to become economically self-reliant
and make their humble contribution to the agro-industrial development of the
back-ward region.

It is clear that 99 per cent of the houses were reported to be 'owned' by
the sample entrepreneurs. The type of house in which they dwell is very
important. There are 34 per cent of pucca houses; of which, a high
percentage of them were found in Renigunta Mandal. Only 12 per cent of the
respondents owned huts and 54 per cent of the respondents of the Nagiri
Mandal owned huts. Next in order, 74 per cent of the sample house-holds of
Madanapalli Mandal owned kutcha and semi-pucca houses.

Apart from the dwelling, land is an important asset property in the rural
areas. It was found that the average dry land owned by a sample unit operator
worked out to be 1.10 hectares in the Madanapalli Mandal, followed by 1.02
hectares in the Renigunta and 0.84 hectares in the Nagiri Mandal. And also
found that the average wet land owned by the respondents in all the three
sample Mandals was 0.73 hectares, which was comparatively less than that
of the average dry land owned by them. Majority of the respondents may be
categorized as small farmers.
The average gross annual income, both from the wet and dry lands added together, accounted to Rs. 65,000/- in Nagiri, Rs.60,000/- in Madanapalli and Rs. 54,000/- in Renigunta Mandal. From the observation of the amount of money ear-marked for agricultural expenditure, we may conjecture that the average gross annual income does sustain the respondents of the sample units.

We found that 57 per cent of the present sample unit-operators were cultivators prior to undertaking the present venture and 12.4 per cent of them were agricultural labourers and 4.9 per cent were engaged in repair/services and other units. Further, it was noticed that 60 per cent of the respondents of sample Madanapalli and Nagiri Mandal were ‘cultivators’ and 19 per cent of respondents of the Renigunta Mandal were ‘agricultural labourers’. A highest 9 per cent of respondents of Madanapalli Mandal were engaged in ‘repair/service’ units in the past. Apparently, the experience gained in the previous occupation seems to have influenced the decision of the respondents to set up the present sample units.

Further, an attempt was made to examine which of the major factors that motivated the respondents to set up the present sample enterprises. Majority of the respondents were pressurized by unemployment to seek alternative avenues of employment. However, we found that the respondents were motivated to set up the present sample units urged by the desire ‘to earn more money’ (100 per cent), ‘dissatisfied by the previous occupation’ (93.1 per cent), ‘become economically self-reliant’ (84.0 per cent) and ‘rise in
social hierarchy' (40.8 per cent). Further, it is gratifying to note that the 'urge to attain economic self-reliance' and 'improve one's social-economic status' motivated the respondents to venture into the present enterprises. It augurs well for them to strive hard to earn more, repay the bank loans and plough back the net profits onto their enterprises to make them viable, and profitable.

Out of the total sample respondents, 64 per cent could not that avail credit from the banks because of the iron-clad rules and protracted procedures. And those who raised institutional finance constituted 18 per cent; whereas, it was only 16 per cent who could secure institutional credit of one lack of rupees and above. It was found that the average debt incurred to non-institutional credit agencies was Rs. 17,000/- in the sample Renigunta and Madanapalli Mandals, while it was Rs. 13,000/- in the Nagiri Mandal.

The man-days of work per week generated differed in the sample units located in the sample Mandals. It was found that the man-days of employment generated per week was, more or less, the same both among the male and female members of the family. On the whole, it is evident that the sample units could generate additional man-days of employment to the locally available idle labour, and such enterprises may be replicated in other sub-regions of the District.

The perception of respondents about the impact of the sample units (operated by them) on their economic conditions and family life was examined and the data reveal that 96.5 per cent of the respondents averred that they
could attain economic self-reliance and put their leisure time to productive propose as a result of the sample units operated by them. However, they could provide better clothing and health care to the members of their family, besides getting their children educated. Their economic condition too improved as they could buy house-hold articles and milch-cattle (to supplement house-hold income) and could increase their personal savings. Evidently, income generated by the sample units had had a positive and visible impact on the socio-economic conditions.

The type of units selected/operated in the sample Mandals, by equally qualified/experience people, have brought the same level of satisfaction to the entrepreneur. The other parameter, namely 'social satisfaction' is very significant in giving long-lasting job satisfaction to the entrepreneur. Nearly 90 per cent of the respondents admitted that, due to the enterprise, they could provide good health care and education to their children. This may be treated as an investment in human resource development. The present unit-owner/operators could not have set up a new enterprise with their inadequate earnings in the previous occupation, but for the financial support, they received both from the institutional and non-institutional sources of credit.

It is found that, there had been an increase in the earnings of the respondents in their present enterprise/activities, as compared to their earnings in the previous occupation, as it is evident from the fact that the percentage of respondents with earnings in the range of Rs. 40,000/- - 60,000/- increased from 18.6 per cent in previous occupation to 21.6 per cent.
in the present occupation; whereas, there had been an increase by 13.7 per cent of respondent with earnings in the range of Rs. 60,000/- - 80,000/- in the present enterprise as compared to 12.4 per cent in the same income range in the previous occupations. Moreover, there had been a significant increase by 15.4 per cent of respondents with earnings in the range of Rs. 80,000/- to one lakh of rupees in the present enterprise as compared to 2.9 per cent of respondents in the same range in the previous occupation. On the whole, it is apparent that the earnings of the sample respondents in the present enterprise/economic activity have been, appreciably, steadily increasing.

The considerable increase in the average annual income of the respondents in their present enterprises/economic activities, as compared to the occupation pursued by them earlier, point to the fact that some of the models of successful small-scale enterprises may be replicated in the other sub-regions of the District in the non-farm enterprises which proved to be not only income-generators but also employment-creators.

The percentage of consumption expenditure incurred by the respondents of the sample Nagiri Mandal was high i.e., 50 per cent, followed by Madanapalli (i.e., 45 per cent) and Renigunta (i.e., 44 per cent) Mandals.

It is found that 52.3 per cent of the respondents of the three sample Mandals made investment expenditure in the range of Rs.20,000/- - 40,000/-, followed by 21.9 per cent in the range of Rs. 40,000/- -1 lakh of rupees. It seems that the significant increase in the average amount of savings made by
the sample unit-holders is a good sign of the positive impact of the sample units operated by the respondents.

We use 'composite index' to capture the total situation in qualitative terms also. All the respondents unanimously agreed to the fact that the 'urge to earn more money' was the driving factor. Regarding all motivational factors, dairy and oil mill units got the highest average score of 22.2 (each). In the case of oil millers, the motivational factor 'to enhance social prestige' got the highest individual score, while in the case of dairy, it was influenced by 'bank support' and got the highest score. In all other factors, they scored, more or less, the same high scores. Next in order: 'timber' and 'rice mill' (16.5 and 17.0), 'stone-crushing' (7.3), 'weaving' (8.5) stand in the last row. 'Repair/services' (6.3) did not record any significant factor that motivated them to start the present activity. On the whole, 'independent living' appears to be the single largest motivational factor, which is, no doubt, positive in tone.

Further, we used 'discriminant analysis' to understand the situations where one wants to build a predictive model of group membership based on observed characteristic of each case. The analysis found that there is a large variation in discriminant for coefficient for each group. The overall results showed statistically significant distance between the two activities. Between 'dairy' and 'weaving' units, the distance is limited. But between 'oil' and 'rice' mills it is quite high. Between 'stone-crushing' and 'timber' the distance is relatively low. However, these variables that have shown positive relation can be considered, for further consideration in case of replication or viability of the
unit. Thus, the multi-variate analysis has given a clear and full insight into each activity, in its full ramifications.

On the light of the major findings of the empirical study, we find that sample units such as 'rice mill' and 'oil mill', in the wake of institutional support to raise the productivity of paddy and oil-seeds which ensure sustained and adequate supply of raw-materials, will assure of generating employment opportunities in the non-formal sector of the District. Besides, the two units, saw-mill/timber and stone-crushing units, with assured supply of timber and electric power supply, have the potential for employment generation as they are demand-based, especially in the context of the boost given to the construction activities. Further, dairy enterprise, which proved to be a major source of supplementary employment, need to be institutionally supported and promoted. With location-specific variations, the rice mill, oil mill, timber, stone-crushing and dairy enterprises may be replicated as models of additional employment generation in the rural non-farm sector of the region.

Further, we suggest in the light of the major findings of the study, the following measures, which may help promote rural non-farm activities in the region.

The Government should assume the role of strategic intervention in the promotion of RNFAs in drought-prone region. Appropriate, location-specific enterprises/economic activities may be identified, developed and promoted so that they would (i.e., the tiny/small-scale enterprises in the
rural sector) not only become technically feasible, economically viable and commercially profitable but also help augment incomes of the small-scale entrepreneurs and ensure them a reasonably good standard of living.

Government should ensure that the identified, promising youth, especially among the Schedule Caste and Schedule Tribe categories, should be trained in entrepreneurial development and must be motivated and institutionally supported (by way of supply of credit, raw-materials, marketing services etc.) so that they can undertake income-generating rural non-farm activities.

Further, Government should bear in mind, while selecting the potential entrepreneur, that qualified or educated youth would run an enterprise effectively, repay the bank loan regularly and play a productive role in generating employment opportunities to the local people.

Adequate infra-structural support is an essential pre-requisite to make any rural non-farm enterprise/activity a success. Government may provide adequate space at consiontional rate for the setting up of RNFAs. Artisan complexes and industrial estates at rural growth centres may be set up.

Season-based units such as rice mills, oil mills, weaving and timber need to have easy access to adequate supply of raw materials so that they can put the installed capacity of their units to optimum use and reap profits. We suggest that sufficient supply of required raw materials should be
procured in advance and stored (especially, during the slack season) or arrangement must be made to ensure regular supply of raw-materials from the producers at reasonable rates. The matter merits utmost attention.

Uninterrupted supply of electric power is a pre-requisite for the successful operation of any enterprise. Government should ensure that the units are assured of supply of power for eight hours per day.

Supply of improved tools and equipment, under the Governmentally supported programmes such as SITRA (Supply of Improved Tool-Kits to Rural Artisans) and Adarana, the training imparted to the rural entrepreneur in the effective operation and maintenance will help raise the operational efficiency of the small-scale enterprises.

Season-based units cannot operate effectively unless frequent breakdown of equipment and their consequent repairs are averted. Hence the need for timely and precautionary measures to ensure the sustained maintenance of the machinery.

In the contest of changing trends in the tastes and preferences of consumers and market demand for rural products, there is need for upgradation of the skills of the rural entrepreneurs so that they can innovate changes in the production process to turn out products, which cater to the changing market demand.
The involvement of women in RNFA's may be increased if cottage industries and micro-enterprises are set up in rural areas and by providing institutional and infra-structural support and services.

Promotion of the rural non-farm sector, especially setting up of viable, agro-processing enterprises holds the promise of absorbing the idle rural human resources. The sample units studied in the area revealed that they were promising and given institutional support, by way of timely and adequate supply of credit at differential rate of interest, setting up of sub-regional (i.e., at Mandal) local centres to train up the rural entrepreneurs in entrepreneurship development and skill upgradation and promotion of cooperatives for the purchase and sale of raw-materials and finished goods in bulk, the small entrepreneurs of the tiny sector, motivated by an urge to become 'economically self-reliant' and rise high in 'social hierarchy' will not only improve their socio-economic status but help create alternative employment opportunities to the idle rural labour and help accelerate the pace of rural development.

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