

Performance of Agro-based Industries in Kadapa and Kurnool districts: A Comparative Analysis

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Abstract:

Indian economy is an agrarian economy. In an agrarian economy that of India, agriculture sector is the central pillar. Agriculture provides livelihood for a majority of the people living in India. Agriculture sector provides raw materials for many of the large scale industries in India such as sugar industry, paper industry, cotton industry, marine industry, edible oil industry and the like. The role of agriculture sector is very significant in the international trade. Agriculture sector provides day-to-day employment to farm and non-farm labour. But Agriculture sector could not provide regular employment to the people of this country.

Key words: agriculture, Indian, economy, sugar industry, oil industry,

I. INTRODUCTION:

Indian economy is an agrarian economy. In an agrarian economy that of India, agriculture sector is the central pillar. Agriculture provides livelihood for a majority of the people living in India. Agriculture sector provides raw materials for many of the large scale industries in India such as sugar industry, paper industry, cotton industry, marine industry, edible oil industry and the like. The role of agriculture sector is very significant in the international trade. Agriculture sector provides day-to-day employment to farm and non-farm labour. But Agriculture sector could not provide regular employment to the people of this country. The unemployment and underemployment are at rampant rate in India. The contribution of agriculture in India towards its national income is significant but it is very less when compared to the contribution of income of the agriculture sector to the national income of developed countries. The yield from each of the sector is very less in India compared to the yield from each of the sectors in China and Brazil. The said two things are occurring in India because India is solely depending upon agriculture. The reasons for low yield from the

agriculture sector and its contribution to the national income are the untimely rains and the small land holdings of the farmers, inadequate rainfall and the like.¹

The government of India in the post-independence period thought of promoting and developing agro-based industries which are running in India on traditional lines. The growth of the labour intensive agro-based non-farm sector has become a critical component of rural industrialization. The government of India has been launching several programmes from time to time to establish agro-based industries in rural areas for economic development. To reduce total dependence on agriculture, there is need to provide employment to the people of this country, improve product choice to customers, increase income of the people in the rural India. In order to remove regional imbalances, rural industries based on agriculture are quite essential.²

II. CONCEPTS AND DEFINITIONS OF AGRO-BASED INDUSTRIES:

Agro-based industries are the industries which carry out a variety of manufacturing, processing and service activities for the supply of sugar, rice and rendering services. Industries dealing with the supply processed products which are mainly dependent upon the raw materials coming from the agriculture are called agro- 2 based industries. Agro-based industry may be defined as an industry which adds value to the raw materials of agro-based industries in the process of producing marketable and usable products. Agro-based industries are those industries for which the raw materials are come from plants, animals and water.³

III. REVIEW OF LITERATURE AND METHODOLOGY:

Kavita Vijay Shinde (2022)⁴ in her article entitled, “Endurance of Agro-based industry during Covid-19”, stated that during COVID-19 in India, the farmers capacity to sell their crops and dairy products was hampered, and their revenue was decreased, negative effects were linked on the production, sales, and income of agro-based industries. There was a significant decline in the production of agro-based industries during the early days of the lockdown due to heavy shortage of crucial inputs and labor. This unique corona virus pandemic had long-term effects on global and national economies. The total operations of agro-based industries have implications as well as significant impact on pricing strategies for agro-based food products and the export policies.

Soonity Goswami (2023)⁵ said that it is a joint process for achieving economic development of India having a quite strong agricultural base. Potential for agroindustrial development in India is largely linked to the relative abundance of agricultural raw materials and availability of low-cost labour. Agro-based industries of India showed that they are in the crisis, in spite of having undoubtedly high prospects for their development. The agro-based industries are facing various problems such as lack of technology, non-availability of research lab for quality control, inadequate financial assistance and improper marketing channel.

IV. THE PRIMARY AIM OF THE PRESENT STUDY:

The primary aim of the present study is to evaluate the economic viability for the growth and development of agro-based industries in Kurnool and Kadapa districts. The specific objectives deduced out for the primary aim are:

1. To analyze the socio-economic characteristics of entrepreneurs of agrobased industries in Kurnool and Kadapa districts.
2. To evaluate the economic viability of agro-based industries in Kadapa and Kurnool districts.
3. To examine the intensity of the constraints that the entrepreneurs of agrobased industries usually come across under the study area.

V. HYPOTHESES:

1. There is no significant difference among the socio-economic characteristics of the entrepreneurs of agro-based industries in Kurnool and Kadapa districts.
2. There is no significant difference in the economic viability available for the development of agro-based industries in Kadapa and Kurnool districts.
3. There is no much intensity in the problems faced by the entrepreneurs of agrobased industries in Kadapa and Kurnool districts.

VI. PERIOD OF THE STUDY:

The period chosen for collecting secondary data for the present study is ten years i.e., from 2008-09 to 2017-18 and one year i.e., 2012-13 for the collection of primary data from the respondent entrepreneurs of agro-based industries both in Kadapa and Kurnool districts.

VII. SAMPLE DESIGN:

As per the official records available in the District Industries Centres of kadapa and Kurnool districts, there are 316 agro-based industries functioning in kadapa and Kurnool districts (160 in Kadapa and 156 in Kurnool). All the 316 agro-based industries were selected for the present study. To collect data census survey method was used and the data was collected from each of the agro-based industries.

VIII. RESEARCH METHODOLOGY:

Under this head the researcher deals with the research methodology. Research methodology comprises sources of data, selection of units and the like. Both primary and secondary sources of data have been collected for the present

study. Primary sources of information have been elicited from the respondent entrepreneurs of agro-based industries in Kadapa and Kurnool districts by deploying a schedule prepared and pre-tested for the purpose and the secondary data have been compiled from the official records of the District Industries Centers (DIC) of Kadapa and Kurnool districts.

Table No: 1

Nature and number of agro-based industries functioning in Kadapa and Kurnool Districts

Type of industrial activities	Kadapa	Kurnool	Grand Total
Rice mill	7(41.18) (4.38)	10(58.82) (6.41)	17(100.00) (5.38)
Flour mill	9(47.37) (5.62)	10(52.63) (6.41)	19(100.00) (6.01)
Oil mill	4(57.14) (2.50)	3(42.86) (1.92)	7(100.00) (2.22)
Coffee blenders	5(55.56) (3.12)	4(44.44) (2.56)	9(100.00) (2.85)
Agriculture implements	10(24.39) (6.25)	31(75.61) (19.87)	41(100.00) (12.97)
Miscellaneous	125(56.05) (78.13)	98(43.95) (62.83)	223(100.00) (70.57)
Total	160(50.63) (100.00)	156(49.37) (100.00)	316(100.00) (100.00)
Chi-square	$\chi^2 = 14.813^*$; (p = 0.011) ; df= 5; Significant		

Source: Field survey

Table 1 shows the distribution of entrepreneurs of agro-based industries over their respective industrial activities in Kadapa and Kurnool district. It is clearly understood from table 1 that relatively a large number of agro-based industries are working in Kadapa district than the agro-based industries working in Kurnool district. Industrial activities of agro-based in nature such as agricultural implements, flour mills, and rice mills are more in Kurnool

district. Whereas in Kadapa district miscellaneous industrial activities, coffee blenders and oil mills are more.

From the foregoing analysis one can infer that the number of agro-based industries in Kadapa is more than the number of agro based industries in Kurnool district. Rice mill owners, flour mill owners and the owners of agriculture implements are more in number in Kurnool district than the rice mill owners, flour mill owners and the owners of agriculture implements in Kadapa district. Oil mill owners, owners of coffee blenders and the owners of Miscellaneous industrial units of agro-based industries are more in Kadapa district than the oil mill owners, owners of coffee blenders and the owners of Miscellaneous industrial activities of agro-based industries in Kurnool district. With this the researcher predicts that there is a much economic viability for the growth and development of rice mills, flour mills, and agriculture implements in Kurnool district. Whereas in Kadapa district there is a much economic viability for the growth and development of oil mills and miscellaneous industrial undertakings.

From the Chi-square out-put we see that significance level at 95% has been achieved. This means that chi-square table is showing systematic association between the type of industrial activity and two districts. Hence it conclude that there is a significant relationship between the above two variables at 95% level of confidence.

Table No: 2
Distribution of respondent entrepreneurs of agro-based industries over the type of their ownership in Kadapa and Kurnool districts

Name of the industrial activity	Kadapa							Total
	Sole trading	Joint venture	Partnership	Co-operative society	Pvt. Ltd.	Public Ltd.	Others	
Rice mill	3(42.85) (11.11)	2(28.57) (7.14)	-	1(14.29) (7.14)	-	-	1(14.29)) (7.69)	7(100.00) (4.37)
Flour mill	1(11.11) (3.70)	5(55.56) (17.86)	2(22.22) (11.11)	-	1(11.11) (2.38)	-	-	9(100.00) (5.63)
Oil mill	-	-	3(75.00) (16.67)	-	1(25.00) (2.38)	-	-	4(100.00) (2.50)

Coffee blenders	3(60.00) (11.11)	2(40.00) (7.14)	-	-	-	-	-	5(100.00) (3.12)
Agriculture implements	8(80.00) (29.63)	1(10.00) (3.57)	1(10.00) (5.55)	-	-	-	-	10(100.00) (6.25)
Miscellaneous	12(9.60) (44.45)	18(14.40)) (64.29)	12(9.60) (66.67)	13(10.40) (92.86)	40(32.00)) (95.24)	18(14.40)) (100.00)	12(9.60)) (92.31)	125(100.00)) (78.12)
Total	27(16.87)) (100.00)	28(17.50)) (100.00)	18(11.25) (100.00)	14(8.75) (100.00)	42(26.25)) (100.00)	18(11.25)) (100.00)	13(8.13)) (100.00))	160(100.00)) (100.00)

Conti.....

Kurnool								Sub total		Grand total
Sole trading	Joint venture	partnership	Co-operative society	Pvt. Ltd.	Public Ltd.	Others	Total	KDP	KNL	
3(30.00) (3.53)	-	3(30.00) (17.65)	-	1(10.00) (6.67)	-	3(30.00) (23.07)	10(100.00) (6.41)	7(41.18) (4.38)	10(58.82) (6.41)	17(100.00) (5.38)
8(80.00) (9.41)	-	2(20.00) (11.76)	-	-	-	-	10(100.00) (6.41)	9(47.37) (5.63)	10(52.63) (6.41)	19(100.00) (6.01)
1(33.33) (1.18)	-	1(33.33) (5.88)	1(33.34) (16.67)	-	-	-	3(100.00) (1.92)	4(57.14) (2.50)	3(42.86) (1.92)	7(100.00) (2.22)
3(75.00) (3.53)	1(25.00) (16.67)	-	-	-	-	-	4(100.00) (2.57)	5(55.56) (3.12)	4(44.44) (2.57)	9(100.00) (2.85)
28(90.32) (32.94)	-	3(9.68) (17.65)	-	-	-	-	31(100.00) (19.87)	10(24.39) (6.25)	31(75.61) (19.87)	41(100.00) (12.97)
42(42.87) (49.41)	5(5.10) (83.33)	8(8.17) (47.06)	5(5.10) (83.33)	14(14.28) (93.33)	14(14.28) (100.00)	10(10.20) (76.93)	98(100.00) (62.82)	125(56.05) (78.12)	98(43.95) (62.82)	223(100.00) (70.57)
85(54.49) (100.00)	6(3.85) (100.00)	17(10.90) (100.00)	6(3.85) (100.00)	15(9.61) (100.00)	14(8.97) (100.00)	13(8.33) (100.00)	156(100.00) (100.00)	160(50.63) (100.00)	156(49.37) (100.00)	316(100.00) (100.00)

Source: Field survey

.Table No. 2 A Paired sample t-test between type of Industrial activities and Districts

Between Districts	t-value	Degrees of freedom	p-value	Level of Significance
Sole Trading(Kadapa) and Sole trading (Kurnool)	2.0795	5	0.046*	Significant at 0.05 level
Joint Venture (Kadapa) and Joint Venture (Kurnool)	1.337	5	0.119	Not Significant
Partnership Kadapa and Partnership Kurnool	0.797	5	0.231	Not significant

Table: 2 reveals the distribution of respondent entrepreneurs of agro based industries over their respective industrial activities and the type of ownership of the industries that they own. It is understood from table 2 that 26.25 per cent of the agro based industries are private limited firms followed by 17.50 per cent of the agro based industries joint ventures, 16.87 per cent of the agro enterprises sole trading concerns, and 11.25 per cent of each of the agro based industries are partnership firms and public limited firms respectively. 8.75 per cent of the agro based enterprises are cooperative firms and 8.13 per cent of agro based industries are of other types of organization. Majority of the respondent entrepreneurs of the agro based industries in Kadapa district of those who said that the type of the organization of their industrial activity falling under private limited category own miscellaneous industrial undertakings which are agro-based in nature and the least/equal number of respondent entrepreneurs of agro-based industries in the same district of those who said that the type of organization of their industries fall under the category private limited, own flour mills and oil mills. Majority of the respondent entrepreneurs of agro-based industries of those who said that the type of the organization of the industrial activities that they own now is categorized under others and the least number of respondent entrepreneurs of agro-based industries of those who said that the type of organization of the industrial activity that fall under others, own rice mills.

42.85 per cent of the respondent owners of rice mills, 60.00 per cent of the respondent owners of coffee blenders and 80.00 per cent of the respondent owners of agriculture implements are under the concerns of sole trading. 55.56 per cent of the respondent owners of flour mills owned by the the joint ventures 75.00 per cent of the oil mills are partnership firms and 32.00 per cent of the miscellaneous industrial undertakings are private limited firms and the least and equal number of rice mills are under the concerns of cooperative society and

others. An equal number of flour mills (one each) are under the control and ownership of sole trading and private limited type of organization. One oil mill is under the control of private limited. Two coffee blenders are under the ownership and control of joint venture category. One each of agriculture implements are under the control and ownership of private limited and public limited and 12 each of miscellaneous industrial undertaking which are agro-based in nature are under the ownership and control of partnership and others respectively.

Majority of the respondent entrepreneurs of agro-based industries in Kurnool district (54.49 per cent), irrespective of the industrial category/business activities to which they belong to, are under the ownership and control of sole trading type followed by 10.90 per cent of the agro-based industries are partnerships firms, 9.61 per cent of the agro-based industries are under the ownership and control of private limited, 8.97 per cent of the agro based industries belong to public limited, 8.33 per cent of the agro-based industries are under the ownership of others and 3.85 per cent each of the agro based industries belong to cooperative type of organizations and joint venture respectively. Majority of the respondent entrepreneurs of agro-based in Kurnool district of those who said that their industrial activities fall under the category of sole trading concern own miscellaneous industrial undertakings and the least number of respondent entrepreneurs of agro based industries of those who said that they fall under the category sole trading concern own oil mills in Kurnool district. Majority of the Respondent entrepreneurs of agro based industries of those who said that they fall under the joint venture type of organization own miscellaneous industrial undertakings and the least number of respondent entrepreneurs of agro-based industries of those who said that they fall under the category of joint venture type of organization own oil mills.

80.00 per cent of the respondent entrepreneurs of flour mills, 75.00 per cent of the entrepreneurs of coffee blenders, 90.32 per cent of the respondent entrepreneurs of agriculture implements and 42.87 per cent of the respondent entrepreneurs of miscellaneous industrial undertakings in Kurnool district are the sole trading concerns. 30.00 per cent each of the respondent entrepreneurs of rice mills are sole trading concerns and partnership firms respectively and 33.33 per cent of the respondent entrepreneurs of oil mills have sole trading concern, partnership firms and the type of cooperative society and the least /equal number of respondent entrepreneurs of oil mills, flour mills, oil mills, coffee blenders, agriculture implements and miscellaneous industrial undertakings which are agro based in nature have private limited, public limited firms, joint ventures and cooperative society form of organization.

From the foregoing analysis one can infer that the number of agro-based industries which fall under the sole trading concern in Kurnool district is more than the number of agro-based industries which fall under the sole trading concerns in Kadapa district. The number of agro-based industries which fall under the private limited type of organization in Kadapa district is more than the number of agro based industries which fall under the private limited type of organization in Kurnool district. The number of agricultural implements which fall under the sole trading concern in Kurnool district is more than the number of agricultural implements which fall under sole trading concern in Kadapa district.

To analyse the differences in a type of industrial activities like rice mill, flour mill oil mill, Agriculture implements and some miscellaneous as a dimension of two districts, paired sample t-test has applied. Since t-value is 2.0795 and sig = 0.046 which is less than 0.05 (at 95% level of confidence) which indicates that there is significant difference sole trading Kadapa and Kurnool district. Remaining all variable are not statistically significant difference ($P > 0.05$).

IX. CONCLUSION: This article can be concluded that during the reign of Mouryans, Y S R Kadapa District had 4954 habitations. The working population of the district is more sizeable. Adequate live stock is available. More quantum of beedi leaves are available in the forests, and the major irrigation source of the farmers for undertaking irrigation activity in the Kurnool district is the canals. Educational facilities, transport facilities, tourism centers in Kurnool district are abundantly available. The industrial estates and industrial area are involved with more manufacturing units pertaining to Basic Metals, Fibre, Poltry, Textiles and the like. The number of micro industries number is more in the district than the number of small industries. A great number of micro industries are owned, managed and controlled by men entrepreneurs in Kurnool district. Similarly a large number of micro and small scale industries are owned, managed and controlled by OC category entrepreneurs in Kurnool district.

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