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An Analytical Appraisal of Working Capital and Production in Industrial Units: A Case Study of Agro Based Industries in India

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Abstract

Industrial development, especially, Agro Based Industries (ABIs) has been a pivot of rural development and employment from the past. It has enhanced the level and quality of production by using the raw agricultural output. In the present study, an eclectic approach has been adopted using the relevant statistical tools for comparing the different types of industries on two variables, i.e. working capital and production. The study was focused on secondary data of recent seven years (advocating latest inferences). It has been found that there was significant difference in mean of production as well as working capital of different types of industries. Besides, there was significant relationship between the production and working capital of various ABIs. It inferred that the emphasis which should be given to the ABIs was not given properly, that led to huge difference in their two dealt variables. Now the need arises when appropriate local-level regulative bodies should be framed and they must look at the problems and prospects of such industrial units. High degree of positive and significant relationship between the two variables has also indicated that these should be dealt properly. In levying direct-tax, a provision of 0.1 per cent should be made for rural industrialization, in which ABIs should be focused. Digitization would also help in enhancing the capability of such industries, as they lack advanced technologies and short-term finance (as the requirement is seasonal). Public-participation in the government policies is most essential tool to upgrade the level of different variables in varied field.

Keywords: ABIs, Local-level, Direct-tax, Digitization, Public-participation

Introduction

Industrial development is the pivot of economic development of any economy. It is directly influencing the level of employment, Gross Value Added (GVA), standard of living, per capita income, etc. As industries are necessary for the economic development, in the same way the working capital is also important. Working capital includes the various tentative assets and liabilities which are changing daily or in short period. It acts as nutrition for all industries. In the present study, a comparative appraisal has been performed among working capital and production in the selected industrial units. This help in analyzing the affect of one another. Industries considered are the Agro Based Industries (ABIs)

(which are divided into Agro Based Input Industries {ABIIs} and Agro Based Output Industries {ABOIs}), all other industries as Non Agro Based Industries (NABIs) and total industries. But main focus of the study is upon the ABIs. The term agro-based industry is often misinterpreted by most of the scholars and experts. These units are generally considered small-scale rural industries set up just for processing agricultural produce. But in this e-era, the term has a holistic meaning and has become sunrise industries of the nation. Not only output based but also the input based units are to be considered as agro-based industries. Such small units are collectively considered as agro-based industries.

India is always considered as agrarian economy with more than 70 per cent population engaged in agricultural and other related activities. Agro-based units have given opportunities to most of the village population and contributed a lot in rural development and economic equality. Southern part of India has always an important source of potential for such units including Kerala, Tamil Nadu, Karnataka, Telangana, Maharashtra and Andhra Pradesh as most powerful market expansion strength. In year 2012-13, above mentioned states has covered nearly 57.34 per cent of total agro-based units of the country. These units are having huge electrolytic power to instigate the growth of the nation. Employment level is also increased as such units employ both men and women at large scale from rural India, thereby boycotting menace of migration from rural India. This helps in proper utilization of available man power which was previously migrated to other urban region during non-farming season. A state of continuous income has also enhanced the steady growth opportunities of rural India. States like Punjab, Haryana, Bihar, Uttar Pradesh and Madhya Pradesh have certain positive natural benefit for all type of cereals as these regions enjoy every season. Therefore, people dwelling in such states are highly involved in farming activities as compared to any other states.

Type of ABIs

While segmenting the ABIs into ABIIs and ABOIs, certain classifications have been done. These are mentioned below:

1. Agro Based Input Industries (ABIIs) includes input units like seed manufacturing, fertilizers, pesticides, agricultural machineries, etc.
2. While Agro Based Output Industries (ABOIs) includes food processing units, animal feeds manufacturing units, etc. which are engaged in processing the output of agriculture and allied areas.

Literature review

The work done in the field of agro based industries is comparatively less and limited to particular area. In different studies, distinguished aspects of study have been taken. In the studies, employment and income, profit aspects, labor and capital intensity, organizational setup, problems and prospects and potential for further development have been emphasized. Various research papers, books,

periodicals, press releases, etc. have found, but their scope was very limited. Holistic rural development was not much considered as huge potential for such type of industries. Overall appraisal of such type of industries was not done in any research work found due to various resource limitations. Literature works analyzed during the period of study are given below:

Employment and income based aspects

Verma and Kesavan (1986) opined that there is strong linkage between agricultural output and employment in agro based industries together with growth of this sector, the study was formulated only in certain regions of Haryana.

Khanna and Pavate (1990) viewed that agro based industries are having huge potential to generate substantial employment apart from using local resources.

Jain (1975) opined that proper up gradation of rural area through industrialization would help in curbing economic disparities thereby contribution towards economic growth in a balanced manner also. R.Rao (1978) and Venkaih (1987) also have the same view.

Kanthareddy and Kumara (2014) viewed that the agro based industries are having capabilities to remove the problem of rural unemployment. Such units are having huge potentials in upholding the income and employment as comparatively less amount of capital is required to form it.

Profit, labor and capital intensity aspects

Yadav, et. al. (1989) viewed after studying the jaggery and khandasari sugar manufacturing units of two district of Uttar Pradesh. In his opinion, the profit earned by the jaggery manufacturing units are lower than the khandasari sugar units, since the prices for jaggery was kept lower by the wholesaler.

Raghuraman (1989) worked over the two factors, i.e., effect of soil and irrigation facilities on the location of agro based units. He found that these units are found in ample amount in the area where the two factors are easily available.

Agrawal (1989) worked in the state of Rajasthan where he studied the profit earned by oilseeds and grain mill, he found that the processor earns good margin of profit in the processing methods available. Market availability and employment level enhance the profits too.

Namboodri & Gandhi (2003) have view that agro processing industries have high potential of employment opportunities as these units consume very high raw material & working capital intensity.

Khosla (2013) opined that there is huge potential in the agro based industries as it is having large scope in the field of employment, capital formation, productivity and regional development. Proper link must be made between agriculture and industries so that the prevailing problems of Indian agriculture must be removed.

Organization setup and potentiality aspects

Balgit Singh (1961) surveyed in Muradabad and found that 72 per cent of small scale units were sole-proprietorship firm rest are partnership firms.

Gupta, et. al (1971) worked in West Godavari district and found that 77 per cent firms were owned in 78 were partnership, while remaining were cooperatives.

Constraints based aspects

Desai (1979) viewed that due to inadequate encouragement from government, such units are facing huge problem. The legislature is not helping both farmers as well as manufacturers; this has led to fall in growth of agro based units.

Gupta (2017) opined that there is huge need of proper support from government and public participation in any type of development. This could be attained through proper training programs timely.

From the found literature, it has been analyzed that there is no direct research work done in the field of working capital and production. Apart from fixed capital, how the tentative capital is affecting the production of different units are not properly analyzed. This lack of study (prevailing literature) is tried to bridge in the present study.

Objectives of study

The objectives of the study are mentioned below:

- To appraise the working capital and production in various types of industrial units in India.
- To analyze the working capital for different types of industries especially ABIs.
- To analyze the production of different types of industries especially ABIs.
- To interpret the relationship among the working capital, production and ABIs.

Hypotheses

The hypothesis acts as a base for any study. It helps in reaching to the conclusion on the basis of its testing and provides appropriate strength to the conclusion. Following are the hypotheses which are tested in this study:

H_{01}: There is no significant difference in the mean of working capital of selected types of industries

H_{02}: There is no significant difference among the mean of productions of selected types of industries.

H_{03}: There is no significant relationship between the production and working capital of both types of ABIs

Research methodology

In this study, the researcher has used secondary data available from certain mentioned sources for the period of seven years, as NIC-2008 was kept as base for segmentation of ABIs. For proper presentation and processing, appropriate tabulation method is used and where necessary, figures too are inscribed. Statistical methods like indices, ANOVA, Levene's test, partial eta squared, Pearson's correlation matrix, Brown-Forsythe test, standard deviation, etc have been used.

Scope of study

The study is confined to the seven years of data and it has categorized the various industries into three only, it could be further segmented also. The two variables have been taken, which could be increased to more or the combination of compared variables could also be changed. The study is based upon the NIC code of 2008, for segmenting the various types of industries. Due to individual researcher's constraint and resource limitation further detailed study hasn't been done, which could be done in further studies.

Table 1: Working capital in various industries

(Amount in INR)

Sr. no.	Type of Industries	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	Per cent share	Indices
1	ABIs	3565012	6172293	9246570	8756849	9732502	10519056	10912936	17.03	306.11
i.	ABIIs	1282585	1460496	2761912	3354884	3344558	4400826	4010280	6.26	312.67
ii.	ABOIs	2282427	4711797	6484658	5401965	6387944	6118230	6902656	10.77	302.43
2	NABIs	27558286	32602160	52789715	50351010	50608605	55749521	53171095	82.97	192.94
3	Total units	31123298	38774453	62036285	59107859	60341107	66268577	64084031	100.00	205.90

Source: Publication of various issues from Central Statistics Offices (CSO) and Ministry of Food Processing Industries (FPI)

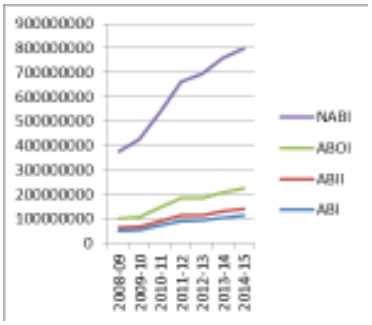

Figure-1: Graphical Representation of Table-1

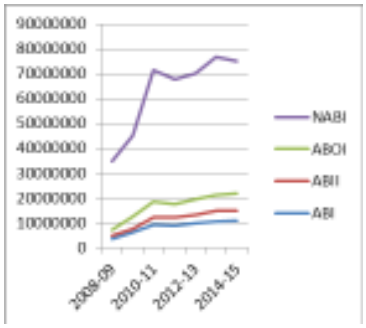

Figure-2: Graphical Representation of Table-2

Table-1 and figure1, shows the working capital of different types of industries in India. It is further divided into ABIs, Non-ABIs and total units. There is highest growth in comparison to base year of 2008-09 is in ABIIs (312.67), which is a type

of ABIs. Further there is huge deviation in standard deviation of ABIIs if compared with its mean. ABIs are covering only 17 per cent of the total working capital in different type of industries prevailing.

Table 2: Production in various industries

(Amount in INR)

Sr. no	Type of Industries	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	Per cent share	Indices
1	**ABIs**	50628833	54230467	73244304	91906185	92769800	104667276	112877880	16.40	222.95
i.	**ABIIs**	13404427	13401728	18872287	23802313	22949020	27316542	26650319	3.87	198.82
ii.	**ABOIs**	37224406	40828739	54372017	68103872	69820780	77350734	86227561	12.53	231.64
2	**NABIs**	276650953	319073126	394377392	478460747	509824736	550857840	575503325	83.60	208.03
3	**Total units**	327279786	373303593	467621696	570366932	602594536	655525116	688381205	100	210.33

Source: Publication of various issues from CSO and Ministry of FPI

Table-2 and figure-2, shows the production of various industries in the selected period. It has been seen that there is consistent growth in all the sectors with ABOIs as highest (231.64) when compared to base year of 2008-09. Only 16.4 per cent of total production is done by ABIs, with 12.53 per cent alone by ABOIs. It is concluded that there is huge gap between the ABIs and NABIs in the economy.

Testing of hypotheses

The hypotheses which were framed previously are analyzed in this section. There are three major hypotheses which are to be tested using Univariate ANOVA, Levene's test of equality of means, test of homogeneity, Brown-Forsythe test of equality of means, correlation matrix and partial eta squared. Following are the testing of hypothesis with its relevant explanation:

H_{01}: There is no significant difference in the mean of working capital of selected types of industries

In the hypothesis-2, it has been assumed that there is no significant difference in the mean of working capital of different types of industries i.e. ABIs, agro based input industries (ABII), agro based output industries (ABOI), NABIs and total industries. For testing this hypothesis, Univariate ANOVA, test of homogeneity and other relevant statistical tools have been used. Following are the tabulated output found:

Table 1.1 : Descriptive statistics for working capital

Type of Industries	N	Mean	Standard deviation	SD/Mean*100 (in percentage)
ABI	7	8415031.14	2638277.061	31.35
ABII	7	2945077.29	1196021.129	40.61
ABOI	7	5469953.86	1585611.320	28.99
NABI	7	46118627.42	11197089.992	24.28
Total industries	35	54533658.57	13761387.021	25.23

Source: Author's calculation

The tables from 1.1 to 1.5 are showing statistical calculation for testing the H_{02}. In the table-2.1, descriptive statistics are shown for 7 years of given data. It has been found that in the year 2014-15, the maximum working capital investment was done by all the industries except ABIIs, NABIs and total industries, which attained its maximum in 2013-14. The standard deviation is of 1196021.129 for ABIIs and 1585611.32 for ABOIs, with respective mean of 2945077.29 and 5469953.86. The standard deviation accounts for approx 41 per cent and 29 per cent from respective mean for ABIIs and ABOIs respectively, which is a huge one.

Table 1.2 : Test of homogeneity of variances

Statistics	Value	df1	df2	Sig.
Levene Statistic	11.292	4	30	.000

Source: Author's calculation

Table 1.2 shows test of homogeneity of variances, which is a necessary test for deciding equal or unequal variances p-value. The test of homogeneity of variances stands against the homogeneity of variances between the working capital of all types of industries. The Levene's test has a value of 11.292, at df1=4 and df2=30, with p-value of 0.000 (alpha= 0.05), which stands significant thereby not accepting the assumption of homogeneity of variances. Hence, it is found that there is no homogeneity in the variances of working capital of different types of industries.

Table 1.3 : Robust tests of equality of mean

Name of Test	Statistic[a]	df1	df2	Sig.
Brown-Forsythe	65.824	4	12.322	.000

Source: Author's calculation a- Asymptotically F distributed

Table-1.3 shows the robust test of equality of means. This is further including the Brown-Forsythe which posses F-statistic of 65.824 at df2=12.32, with p-value (0.000) less than significance level at 5 per cent. This shows that there is significant difference among the mean of the working capital of all the industries.

Table 1.4 : ANNOVA

Items	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.715E16	4	4.287E15	65.824	.000
Within Groups	1.954E15	30	6.513E13		
Total	1.910E16	34			

Source: Author's calculation

Table-1.4 shows the ANOVA statistics including the between group and within group sum of squares. The F-value is 65.824 at 4 degree of freedom. The p-value (0.000) is significant at 5 per cent level of significance thereby not accepting the

null hypothesis that there is no significant difference in the working capital of different industries. The p-value is highly significant and states that there is huge difference in the working capital of the all types of industries.

Table 1.5 : Test of between-subjects effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1.715E16	4	4.287E15	65.824	.000	.898
Intercept	1.932E16	1	1.932E16	296.677	.000	.908
Type of Industries	1.715E16	4	4.287E15	65.824	.000	.898
Error	1.954E15	30	6.513E13			
Total	3.843E16	35				
Corrected Total	1.910E16	34				

Source: Author's calculation

Further in table-1.5 the test of between subjects-effects is displayed. The test helps in understanding how much the variable type of industries is explaining the working capital. The partial Eta squared value of 0.898 shows that there is 89.8 per cent explanation in the working capital is just because of types of industries. In all the cases, the p-value (0.000) is less than significant level (at 5 per cent), it is asserted that there is high between subject effects, type of industries and working capital is highly affecting each other.

Table 1.6: Pearson correlation coefficient

Variables	Pearson Correlation Coefficient	P-Value (at 0.01 alpha)
Type of Industries and Production	0.820	0.000

Source: Author's calculation

Table 1.6 deals with coefficient of correlation given by Karl Pearson. The two variables in this bivariate correlation are type of industries and working capital. The coefficient value calculated is 0.82 which signifies a high degree of positive correlation. Further, this correlation value is found significant at 0.01 level of significance affirming there is significant relationship between the two variables.

After the eclectic approach, it is concluded that the null hypothesis is not accepted as p-value is less than the 5 per cent level of significance. Therefore, it is affirmed that there is significant difference between the mean of productions of different types of industries.

H_{02}: There is no significant difference among the mean of productions of selected types of industries.

In the hypothesis-2, it has been assumed that there is no significant difference in the mean of productions (output) of different types of industries i.e. ABIs, agro based input industries (ABII), agro based output industries (ABOI), NABIs and total industries. For testing this hypothesis, Univariate ANOVA, test of

homogeneity and other relevant statistical tools have been used. Following are the tabulated output found:

Table 2.1: Descriptive statistics

Type of Industries	N	Mean	Standard Deviation	SD/Mean*100 (in Percentage)
ABI	7	82903535	24178553.29	29.16
ABII	7	20913805.14	5822056.72	27.83
ABOI	7	61989719.86	18444869.42	29.75
NABI	7	443535445.6	121412442.6	27.37
Total Industries	35	526438980.6	249496830.2	47.39

Source: Author's calculation

The tables from 2.1 to 2.5 are showing statistical calculation for testing the H_{02}. In the table-2.1, descriptive statistics are shown for 7 years of given data. It has been found that in the year 2014-15, the maximum production was done by all the industries except ABIIs, which attains its maximum in 2013-14. The standard deviation is of 5822056.72 for ABIIs and 18444869.42 for ABOIs, with respective mean of 20913805.14 and 61989719.86. The standard deviation accounts for approx 28% and 30% from respective mean for ABIIs and ABOIs respectively, which is a huge one.

Table 2.2: Test of homogeneity of variances

Statistics	Value	df1	df2	Sig.
Levene Statistic	16.018	4	30	.000

Source: Author's calculation

Table-2.2 shows test of homogeneity of variances, which is a necessary test for deciding equal or unequal variances p-value. The test of homogeneity of variances stands against the homogeneity of variances between the productions of all types of industries. The Levene's test has a value of 16.018 with p-value of 0.000 (alpha= 0.05), which stands significant thereby not accepting the assumption of equal variances. Hence, it is found that there is no homogeneity in the variances of production of different types of industries.

Table 2.3: Robust tests of equality of mean

Name of Test	Statistic[a]	df1	df2	Sig.
Welch	53.886	4	12.798	.000
Brown-Forsythe	58.639	4	12.271	.000

Source: Author's calculation a- Asymptotically F distributed

Table-2.3 shows the robust test of equality of means. This is further including the Welch test and Brown-Forsythe which posses F-statistic of 53.89 and 58.64

respectively, with p-value (0.000) less than significant level at 5 per cent. This shows that there is highly significant difference between the mean of the all the industries productions.

Table 2.4: ANNOVA

Items	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.589E18	4	3.973E17	58.639	.000
Within Groups	2.032E17	30	6.775E15		
Total	1.792E18	34			

Source: Author's calculation

Table-2.4 shows the ANOVA statistics including the between group and within group sum of squares. The F-value is 58.639 at 4 degree of freedom. The p-value (0.000) is significant at 5 per cent level of significance thereby not accepting the hypothesis that there is no significant difference between the productions of different industries. The p-value is highly significant and states that there is huge difference between the productions of the all types of industries.

Table 2.5: Test of between-subjects effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1.589e18a	4	3.973E17	58.639	.000	.887
Intercept	1.806E18	1	1.806E18	266.568	.000	.899
Type of Industries	1.589E18	4	3.973E17	58.639	.000	.887
Error	2.032E17	30	6.775E15			
Total	3.598E18	35				
Corrected Total	1.792E18	34				

Source: Author's calculation

Further in table-2.5 the test of between subjects-effects is displayed. The test shows that how much a variable is explaining other. The partial Eta squared value of 0.887 at type of industries shows that there is 88.7 per cent variation in the production just because of types of industries. In all the cases, the p-value (0.000) is less than significant level (at 5 per cent), it is asserted that there is high between subject effects; type of industries and production is highly affecting each other.

Table 2.6: Pearson correlation coefficient

Variables	Pearson Correlation Coefficient	p-value (at 0.01 alpha)
Type of Industries and Production	0.818	0.000

Source: Author's calculation

Table-2.6 deals with coefficient of correlation given by Karl Pearson. The two variables in this bivariate correlation are type of industries and production. The coefficient value calculated is 0.818 which signifies a high degree of positive correlation. Further, this correlation value is found significant at 0.01 level of significance affirming there is significant relationship between the two variables.

After the analytical approach, it is concluded that the null hypothesis is not accepted as p-value is less than the 5 per cent level of significance. Therefore, it is affirmed that there is significant difference between the mean of productions of different types of industries.

H_{03}: There is no significant relationship between the production and working capital of both types of ABIs

In the hypothesis-3, it has been assumed that there is no significant relationship between the production and working capital of both types of ABIs i.e. agro based input industries (ABII) and agro based output industries (ABOI). For testing this hypothesis, correlation matrix has been used. The significance level is kept at 1 per cent. Following tabulations have helped in testing the mentioned H_{03}:

Table 3.1: Pearson correlation coefficient matrix among all industries, production and WC

Variable	Findings	Type Industries	Production	Working Capital
Type Industries	Pearson Correlation	1	.818**	.820**
	Sig. (2-tailed)	N/A	.000	.000
	N	35	35	35
Production	Pearson Correlation	.818**	1	.988**
	Sig. (2-tailed)	.000	N/A	.000
	N	35	35	35
Working capital	Pearson Correlation	.820**	.988**	1
	Sig. (2-tailed)	.000	.000	N/A
	N	35	35	35

Source: Author's calculation **Correlation is significant at the 0.01 level (2-tail)

In table-3.1, the correlation matrix among the different types of industries, production and working capital is shown. It has been interpreted that there is significant relationship among all the three variables. There is a high degree (0.988) of significant positive relationship between working capital and production of different types of industries. While type of industries is also

significantly related to production (0.818) and working capital (0.820). It is therefore concluded that any increase in working capital will automatically influence positively the concerned production, vice-versa.

Table 3.2: Pearson correlation coefficient matrix among both agro based industries, production and WC

Variable	Findings	Type OI	WC OI	Production OI
	Pearson Correlation	1	.697**	.851**
	Sig. (2-tailed)	N/A	.006	.000
Type OI	N	14	14	14
	Pearson Correlation	.697**	1	.887**
	Sig. (2-tailed)	.006	N/A	.000
WC OI	N	14	14	14
	Pearson Correlation	.851**	.887**	1
	Sig. (2-tailed)	.000	.000	N/A
Production OI	N	14	14	14

Source: Author's calculation

**Correlation is significant at the 0.01 level (2-tail)

*OI= Output-Input industries

+WC= Working Capital

In table-3.2, the correlation matrix among the both types of agro based industries (ABIIs and ABOIs), production and working capital has been shown. It has been interpreted that there is significant relationship among all the three variables. There is a high degree (0.887) of significant positive relationship between working capital and production of both types of agro based industries. While these type of industries is also significantly related to production (0.851) and working capital (0.697). It is therefore concluded that any increase in working capital will automatically influence positively the concerned production, vice-versa. Hence, the null hypothesis of no significant relationship among the mentioned variable, stands not accepted. Further an intra-agro based industries table is also framed to have clear cut picture.

Table 3.3: Pearson coefficient correlation between two variables (Intra-agro based industries)

Sr. No.	Type Of Industries	Pearson Coefficient	P-value
1.	Seed Units	0.974	0.000
2.	Pesticides Units	0.884	0.008
3.	Agricultural Machinery Units	0.897	0.006
4.	Fertilizer Units	0.843	0.02*
5.	Food Processing Units**	0.761	0.047*
6.	Animal Feeder Units	0.978	0.000
7.	Prepared Meals & Dishes Manufacturing Units	0.711	0.073*

Source: Author's calculation

*Correlation is not significant at 0.01 alpha level (2-tail)

**13 type of units are clubbed together

In table-3.3, the coefficient correlation between the working capital and production of intra-agro based units has been shown. In this, the ABIs has been further divided into seven broad categories out of which three types of units were against the significant relationship between their working capital and production. Fertilizer manufacturing concerns were the only ABIIs which was having somehow insignificant relationship between the working capital and production. While the clubbed food processing units and prepared meals manufacturing units were the two ABOIs, which were facing the same situation. Since, the null hypothesis is based upon the aggregate ABIs' working capital and production (as for aggregate its p-value is less than 0.01 alpha-level, table 3.2), therefore we doesn't accept it (as majority {4 out of 7} is in favor of not accepting it). The widely accepted phenomenon of significant relationship between the two variables is accepted in the above mentioned cases.

Further scope of study

The study is performed on the agro based units in India for the mentioned period and is confined only with the working capital and production appraisal. Further study could be done in the field taking other variables like gross value added, profit, total input, registered units, etc. In total seven years data has been taken in this study, taking NIC-2008 as base. In the further research, a comparative analysis of other type of industries taking the same variables could also be done together with more yearly data.

Conclusion

It has been seen from the above analysis that there has been huge deviation in working capital and production of different types of industries. Both the variables are highly concentrated in the NABIs with more than 80 per cent. Further, all the hypotheses stood rejected at 5 per cent and 1 per cent significance level, wherever necessary. It is concluded that there is significant difference in the mean of working capital of different types of industries. It is also found that there is significant difference in the mean of production of different type of industries. Lastly, it has been found that there is high level of positive and significant (at 1 per cent alpha) relationship between the working capital and production of different type of industries. Therefore, it is inferred that if the production has to be enhanced then the concerned working capital must also be increased. But in case of three types of units (fertilizers, clubbed food processing and prepared meals units) the hypothesis of significant relationship fails. It is also concluded that the ABIs are not focused by the government bodies as a whole, due to this rural employment and development is negatively affected. Policies should be framed by the regulating bodies to administer the issues related to the problems faced by such industries at local level, for rapid action. It is also suggested that if a rural development cess of 0.01 per cent should be levied over the income tax payer and the outcome should be invested in the uplift of ABIs, then it may be easy to tackle such situation.

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