



Special article

Agro Based (Central) Public Sector Enterprises: Performance Indicators, Capital and Labour Productivity

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Following India's independence, it was widely recognized and accepted that agriculture remains the backbone of the economy. Mainly two types of innovations came into prominence to develop agriculture sector- one, institutional changes and at the second place technological innovations. Among the institutional changes "land to the tiller" was the avowed objective and this led to abolition of Zamindari system in various states, launching of Bhoodan Movement and promoting cooperative farming. This was also supplemented with technological innovations- starting of multipurpose hydropower projects and later on 'Green Revolution' with four major components. India's First Five Year Plan (1951-56) was mainly focused on agriculture sector; its growth would not merely meet the food requirement of the masses but also help in resource mobilisation over the period. Since overall private investment was seemingly reluctant to invest in agriculture and infrastructure sectors, public investment was the main instrument to prop up the farm growth.

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Over the years, surplus generated by public enterprises was considered quite important mechanism for resource mobilization in addition to taxation and public borrowing. The public sector has had embraced the ever increasing activity of multi-nature i.e. social, economic such as, manufacturing and services. Robson (1952) has emphasized the earning of the surplus for building up the reserve fund and thereby for financing the expansion and development of the industry, if not funding the government exchequer.

Florence and Walker (1952) regarded profit as the capitalist test of efficiency of a public undertaking. Brahamanand (1972) was of opinion that every enterprise might reimburse itself over the long run and laid down some criteria for the financing of the enterprise in order to ensure profit earning capacity of such enterprises. Thus the public sector enterprises have produced a variety of products like steel, cement and chemicals; capital goods like pressure vessels, boilers and drilling rigs and intermediate goods like electricity and gas. The PSUs have also been engaged in providing a number of services, such as telecommunications, trading, tourism, warehousing and transportation.

The structure of the PSUs has varied over the time period. For example, many of the public sector enterprises which fall in the category of limited companies were established with the approval of the government under the Companies Act, 1956 and functioned according to the Articles of Association. Further, a number of public sector corporations have been established under the specific central legislations and their objectives and scope defined in the concerned legislation.

Major objectives of setting up of public enterprises was to ensure the rapid economic development and industrialization of the country and create the necessary infrastructure for economic development; promote redistribution of income and wealth; create employment opportunities; promote balanced regional development; assist the development of small-scale and ancillary industries and promote import substitutions, save and earn foreign exchange for the country.

Related to agriculture sector, one of the early major steps taken by the government of India was to establishment of central public sector enterprises on agro-based industries. The agro-based enterprises are mainly engaged in producing and selling of agro-based products including the activities such as forestry, growing of rubber plants, red palm trees. The government established four public sector enterprises in the agro-based industries group, viz. National Seeds Corporation

Limited (1963), State Farms Corporation of India Limited (1969) Andaman and Nicobar Island Forest & Plantation Development Corporation Limited (1977) and North Eastern Regional Agricultural Marketing Corporation Limited (1982) (*Public Enterprises Survey 2007-08*). A brief outline of the four organizations is given below.

Andaman and Nicobar Islands Forest and Plantation Development Corporation Limited (ANIFPDC)

ANIFPDC was established as per the recommendations of the National Commission on Agriculture 1972. ANIFPDC was incorporated on 21st January, 1977 under the Companies Act, 1956. ANIFPDC is a Schedule-‘C’ Public Sector Enterprise under the control of Ministry of Environment and Forests with 100% shareholding by the Government of India. Its Registered and Corporate offices are at Port Blair, Andaman and Nicobar. The objective of ANIFPDC is scientific harvesting, natural regeneration and development of forest resources on the principle of sustained yield.

Main activities of corporation are forestry operation, cultivation and marketing of Red Oil Palm and Rubber Plantation. Forestry Divisions (one each at Little Andaman and North Andaman), Oil Palm Division at Hut Bay, Little Andaman and Rubber Division at Katchal are the operating units of the company. ANIFPDC owns a gross area of 1593 hectares of Red Oil Palm estate at Little Andaman along with a processing unit with a capacity of 4 MT FFB per hour. The production capacity of Crude Palm Oil is around 1400 MT per annum. The gross area of Rubber estate at Katchal is 614 hectares.

Expansion of these projects is constrained due to the restriction imposed under the National Forest Policy 1988, on replacement of Natural Forest with monoculture man-made plantation. The forestry operations at both the divisions of ANIFPDC have been completely stopped due to the ban imposed by the Supreme Court of India vide its order dated 10th October, 2001 on felling naturally grown trees from the forests of Andaman & Nicobar.

National Seeds Corporation Limited (NSCL)

NSC is a Schedule-‘C’ CPSE in Agro Based Industries sector under the administrative control of Ministry of Agriculture with 100% shareholding by the Government of India. Its Registered and Corporate offices are at New Delhi. NSC was incorporated on 19 March, 1963 under the Companies Act, 1956 with the objective to promote and develop seed industry in the country and to contribute to the prosperity of

farmers through supply of quality seeds and other agro inputs/services as well as to enhance agricultural productivity.

NSC is engaged in production and marketing of quality seeds, planting materials and sale of biofertilizer through its three farms located at Bangalore (Karnataka), Nandikottur (Andhra Pradesh) and Kullu (Himachal Pradesh) and 12 Regional Offices and 76 Area offices spread all over India.

Advent of NSC was a logical result of the revolution that was taking place in plant breeding and genetics. At the time, when the nation was facing acute shortage of food grains, NSC became harbinger of Green Revolution. As a result, India became a food grain surplus country from one depending on wheat grain shipments from USA under PL-480 Scheme. Starting with production of 30-40 tones of Maize Foundation Seed, NSC today produces more than 80000 tones of Certified / Quality seeds per year covering 800 varieties of 80 crops and Hybrids of cereals, millets, pulses oilseeds, fodder, fiber and vegetables.

North Eastern Regional Agricultural Marketing Corporation Limited (NERAMAC)

NERAMAC is a Schedule "B" / BIFR referred CPSE in Agro Based Industries sector under the administrative control of Ministry of Development of North Eastern Region with 100 % shareholding by the Government of India. Its Registered and Corporate Offices are at Guwahati, Assam. NERAMAC was incorporated in the year 1982 under the Companies Act, 1956. The main objective of NERAMAC is to manufacture, process, market, transport, distribute and promote the horticulture products and other related articles/agro products and to function as agents of the Government Cooperatives, Corporations or any other agencies in the North Eastern Region. NERAMAC is mainly involved in trading and marketing activities along with production of Agro products like fruit juice, cashew nut, ginger etc. through its 3 operating units at Nalkata, Agartala (Tripura) and Byrnihat (Meghalaya). Besides Registered/Head Office, it has 5 Zonal Offices in Assam, Tripura, Meghalaya, Nagaland and Sikkim, 2 sales outlets at Guwahati and Agartala and one Franchise outlet at Guwahati. The corporation owns 1.64 bighas of lands under Kailashahar sub-division, Tripura, 4000 sq.m plot at Byrnihat, Meghalaya and 1.54 Bighas land under district Kamrup, Assam. These were allotted free of cost by the State Governments of Tripura, Maghalaya and Assam respectively. The value of these properties has been taken as 'nil' in the books of the company.

State Farms Corporation of India Limited (SFCIL)

SFCI is a Schedule 'C' CPSE in Agro Based Industries sector under the administrative control of Ministry of Agriculture, Department of Agriculture and Co-operation with 100% shareholding by the Government of India. Its Registered and Corporate offices are in New Delhi.

SFCI was incorporated in May, 1969 under the Companies Act, 1956 with the objective to maintain Central Government's Agriculture Farms in different states for production and distribution of quality seeds of different crops. SFCI is maintaining 6 centre-state farms for production of Test stocks, Breeder, Foundation and certified seeds of different crops. The company also undertakes activities like plantation and maintenance of fruit crops, multiplication of quality seeding of Horticultural crops, production of vegetable seeds, cultivation of Bio-fuel & Medicinal plants and forestry plantations on wastelands. The land under possession at these 6 farms is 25736 hectares out of which cultivable land is 19616 hectares. Central Government owns 4 Farms at Suratgarh, Sardargarh and Jetsur in Rajasthan and one in Raichur, Karnataka; other 2 farms are in Hisar, Haryana and Bahraich in U.P and on lease from respective State Governments.

SFCI has been appointed by the Government of India (GOI) as a Nodal Agency to maintain the Foundation Seed Bank. It has also been assigned the job of popularising new high yielding varieties of seeds for distributing the same among farmers. Growers Seed Production programme is being taken up in new areas of the country mainly where company's Farms are not located.

The company was referred to BRPSE which recommended a revival plan comprising capital investment of Rs.37.63 crore and concessions like conversion of loan into equity and waiver of penal charges. The revival plan was approved by the Government of India on 3 January 2008, and is under implementation.

Agro Based Public Sector Enterprises: Performance

India's Gross Domestic Product at market price (at current prices) grew at the rate of 13.7 per cent in 2007- 08 over 2006-07. In comparison, the gross value addition contributed by public sector enterprises in comparable terms grew by 11.12 percent during the corresponding period.

While turnover of agro-based public sector enterprises have shown volatility from 2002 to 2004, since 2005 the turnover has shown consistently upward movement (Figure 1). National Seeds Corporation Ltd. (NSCL), State Farms Corporation of India Ltd. (SFCIL) and North Eastern Regional Agricultural Marketing Corporation Limited (NERAMAC) witnessed increase in their respective sales over the period 2002-07. For example, the turnover of these enterprises, at the aggregate level, grew by 18 % in 2005 over the previous year, further rose to 41. % in 2006 and finally registered 48.7% increase in 2007 (Table 1). The enterprises like NSCL with the rise of 44.6%; SFC with 47.2%; and NERAMAC with 97.6% performed extremely well during 2007-08 (Table 1).

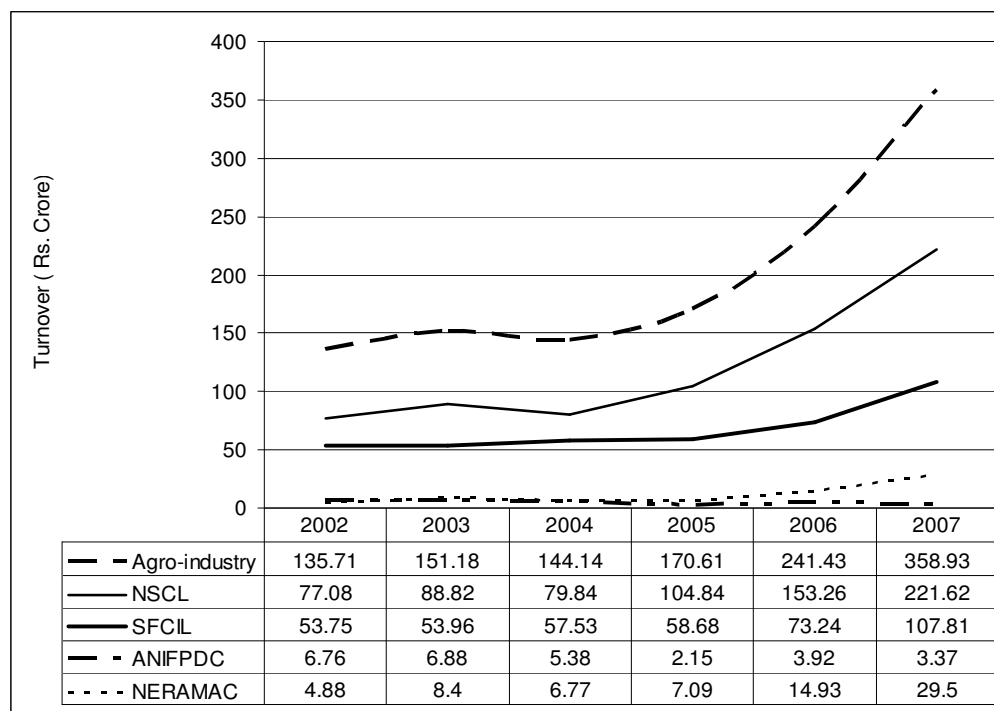


Figure 1: Turn over of agro based public sector enterprises for the period 2002-07 (in Rs. crore)

Figure 2 present net profit / loss (-) of agro-industry sector and four enterprises i.e. NSCL, SFCIL, NERAMAC and ANIFPDC respectively. NSCL and SFCIL ranked first and second amongst the profit making agro based public enterprises in the year 2007. ANIFPDC is the loss making company among four agro based public sector enterprises in the same year.

A unit is termed sick if at the end of any financial year, it has accumulated net losses equal to or exceeding its entire net worth. Such industrial unit is required to be referred to BIFR for formulation of rehabilitation/ revival plan. The problem of sickness in CPSEs is addressed ultimately by the administrative Ministries/ Departments in the Government by evolving appropriate need based strategy concerning a particular PSE. BIFR declared NERAMAC 'no longer sick'; on its net worth becoming positive. The net worth of all agro based PSEs which was - Rs. 33.55 crore in 2006-07 was reduced to - Rs. 5.45 crore in 2007-08 (Figure 3). ANIFPDC and SFCIL recorded negative net-worth (i.e. -52.71 and -30.58) in 2007-08. Net worth of NSCL was positive while that of SFICL was negative during 2002-2007.

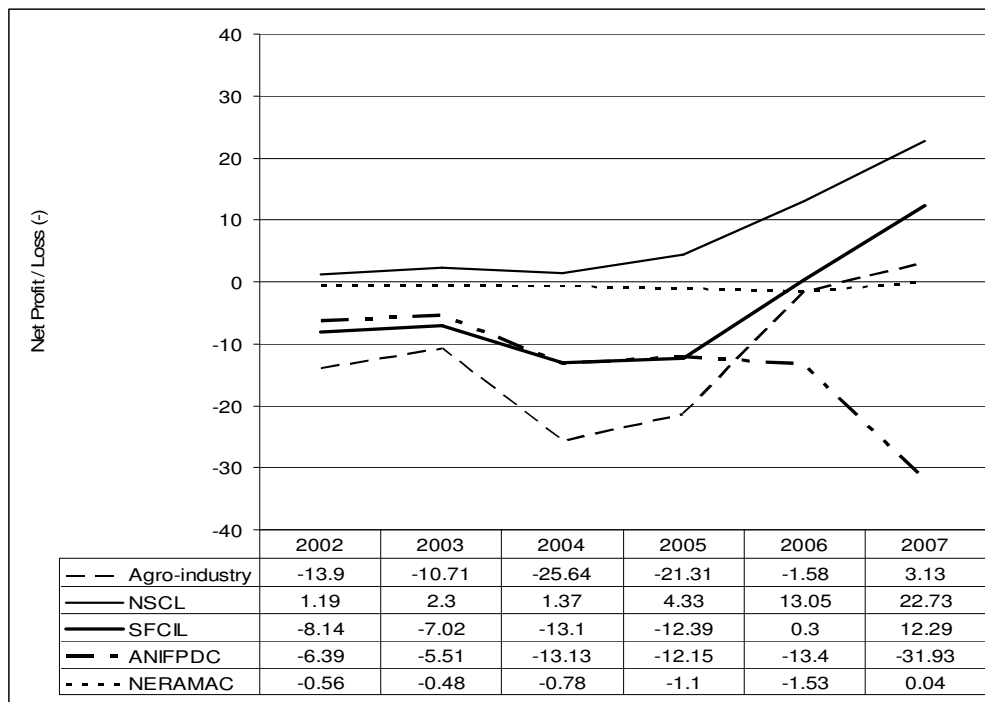


Figure 2: Net Profit / Loss (-) of Agro based public sector enterprises for the period 2002-07 (in Rs. crore)

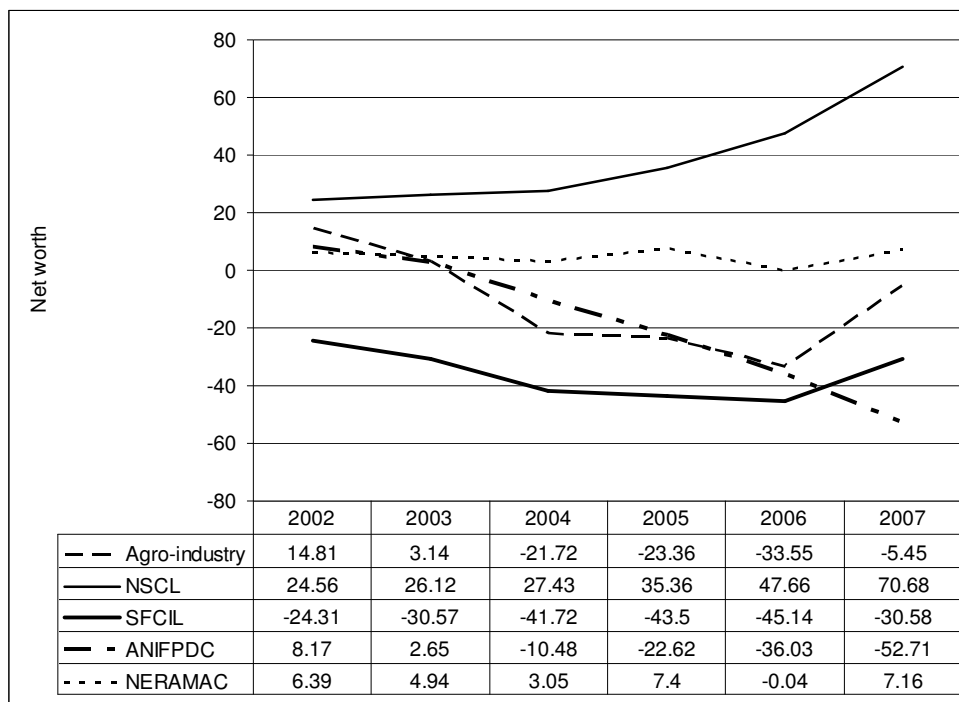


Figure 3: Net worth of Agro based public sector enterprises for the period 2002-07 (in Rs. crore).

Estimation of average annual growth (in term of sales volume, capital employed, labour and its payment):

In order to estimate average annual growth in the present study, semi log model (Gujrati 2003, Jhonston and Di Nardo, 1997) has been applied. The following regression equation has been used:

$$\ln Y_t = \alpha + \beta t + u_i \quad \dots\dots\dots(1)$$

$\ln Y$ = Value of the variable concerned in natural log form,

t = time trend; α = constant term; β = intercept term and u_i = random disturbance term.

In equation 2.1 average annual growth rate is measured by $(\beta \times 100)$. Regression results for the agro based enterprises are given in Appendix 1. Average annual growth during 2002-07 related to total sales, capital employed, employment in number and payment to employee of these enterprises are given in table 3.

It is obvious from the table that average annual growth of these enterprises registered 17.51 percent in sales, while average annual growth in capital employed, employment and payment to employee registered 7.19, -6.45 and 0.49 per cent respectively during the period under study. It is observed that these enterprises have been displacing labour and resorting to capital deployment increasingly. Individual enterprises however have shown variations in respect of average annual growth rate. For example ANIFPDC shows negative growth i.e. -17.39 percent per annum in its sales volume, while SFCIL recorded negative growth in employee payments during the same period. Exceptionally well has been the performance of the NSCL and NERAMAC in terms of sales volume and capital employed. NERAMAC recorded maximum average growth in employee payment and also registered minimum negative growth in labor employed compared to other units. *A priori* NERAMAC seems to have shown relatively high labour productivity.

Productivity of Labour and Capital in Agro based Public Sector Enterprises:

Apart from other factors, it has now been established that productivity of capital and labour play vital role in the process of production. This is the reason that much emphasis has been given by the earlier economists (Lewis 1954, Nurkse 1953, Rodan 1957, Schultz 1964, 1967) on productivity of capital as well as labour in the process of production. Apart from other factors like technology, foreign capital, fiscal as well as monetary policies of the government much depend on the productivity of primary inputs like capital and labour on production. Further productivity of these inputs is basically shown by their marginal productivity. Thus marginal productivity of key factor inputs plays vital role in determining the overall performance of any production unit.

In the light of this, the present paper attempts to measure the marginal productivity of capital and labour for Agro based public sector enterprises.

For measuring marginal productivity we have employed the production function of Cobb Douglas type (Sadhu and Mahajan 1982, Pandey and Gaur 2004 and Dixit and Pandey 2009) which is given as under;

$$V_i = A C^\alpha L^\beta U_i \dots\dots\dots (2)$$

Where V_i is the dependent variable i.e. output. C stands for capital and L for labour. α stands for the proportion of the capital employed in the process of production. β stands for the proportion of labour employed. And U_i is the random disturbance term.

Marginal productivity of capital and labour are estimated in the double log model i.e.,

$$\ln V = \ln A + \alpha \ln C + \beta \ln L \dots\dots\dots (3)$$

From equation (3), α and β denotes elasticities of capital and labour in the production function.

If $\alpha + \beta = 1$, it denotes constant return to scale. Contrary to it, if $\alpha + \beta > 1$, it denotes increasing return to scale and if $\alpha + \beta < 1$, it denotes decreasing return to scale.

Marginal productivity of capital and labour is estimated through the following formula;

$$MVP (\text{Capital}) = \alpha * GM(\text{Output}) / GM(\text{Capital}) \dots(4)$$

And,

$$MVP (\text{Labour}) = \beta * GM(\text{Output}) / GM(\text{Capital}) \dots(5)$$

For estimating marginal productivity of capital and labour for the period 2002-07, we have taken Agro based enterprises (four central public sector enterprises) involve in agro business i.e. National Seeds Corporation Limited, State Farms Corporation of India Limited, Andaman and Nicobar Island Forest and Plantation Development Corporation Limited, and North Eastern Regional Agriculture Marketing Corporation Limited. Data pertaining to labour employed, capital as well as, sales for these industries for above mentioned period have been collected from various issues of Public Enterprises Survey, Govt. of India.

Marginal productivity as well as elasticity of labour and capital for agro industry as well central public sector enterprises has been calculated. For this purpose we have estimated the regression equation of type equation 3 and results are presented in Appendix 2.

Based on regression results as given in Appendix 2 as well as equation 4 and 5, elasticities as well as Marginal Value Product (MVP) for capital and labour related to CPSE agro industries of India have been calculated and results are presented in table 4.

It is obvious from table 4 that coefficient of elasticity of capital were found greater than one in case of enterprises like NSCL and SFCIL. While, the elasticities registered less than unity in case of enterprises like ANIFPDC and NERAMAC. It is significant to observed that coefficient of capital elasticity for agro industry was found positive and greater than one i.e. 1.12. This result indicates that capital contribution was significantly towards the sales of agro industries and enterprise like NSCL and SFCIL, while its contribution was less significant towards the sales of enterprises like ANIFPDC and NERAMAC.

It is significant to note that elasticity of labour was found negative in case of agro industry as well as ANIFPDC, NSCL and SFCIL i.e. -0.25, -0.23, and -5.33 respectively. In case of labour, its elasticity relating to NERAMAC was recorded at more than unity. Facts reveal that only in case of NERAMAC, labour contributed towards output more than in the proportion in which it was employed in the production process. Interestingly, in case of agro enterprises as well as ANIFPDC, NSCL and SFCIL, labour has played negative impact on output of these industries during the period under study. In other words, increasing number of labour force in these industries has resulted in reduction the output of these industries.

In case of overall agro enterprises, NERAMAC and NSCL, Marginal Value of Productivity of capital was found greater than one, showing the significant contribution of capital towards the output of these industries. The MVP of capital for ANIFPDC and SFCIL were found less than unity showing less significant contribution of capital on output for these industries.

Marginal value of productivity of labour was greater than one in case of NERAMAC, while The MVP of labour was found negative in case overall agro enterprises ANIFPDC, NSCL and SFCIL. Technically speaking, negative MVP of labour reveals that labour is disguisedly unemployed in these industries.

IV. Findings and Future Outlook:

Measuring the productivity of labour and capital has always being an interesting and fruitful from view point of estimating the ultimate contribution of these two inputs in

the process of production, especially in industrial sphere. The present paper has attempted to estimate marginal productivity of labour and capital for agro based central public sector enterprises in Indian industry for the period 2002-2007, and the results are quite mixed. The empirical evidence of the present paper has established the fact that elasticity as well as marginal productivity of labour was highly insignificant in case of public sector agro enterprises. Not only this, marginal productivity of labour was found negative for the most of the CPSE in this study. This shows the existence of surplus labour force in PSE, which has compelled the union government to introduce the schemes like VRS for CPSE.

Table 1: Annual growth in turn over, net profit / loss (-), net worth and Descriptive Statistics of agro based public sector enterprises for the period 2002-07

Turn over (in percent)					
Year	Agro-industry	NSCL	SFC	ANIFPP	NERMC
2002	-	-	-	-	-
2003	11.4	15.2	0.4	1.8	72.1
2004	-4.7	-10.1	6.6	-21.8	-19.4
2005	18.4	31.3	2.0	-60.0	4.7
2006	41.5	46.2	24.8	82.3	110.6
2007	48.7	44.6	47.2	-14.0	97.6
Net Profit / Loss (-) (in percent)					
2002	-	-	-	-	-
2003	-22.9	93.3	-13.8	-13.8	-14.3
2004	139.4	-40.4	86.6	138.3	62.5
2005	-16.9	216.1	-5.4	-7.5	41.0
2006	-92.6	201.4	-102.4	10.3	39.1
2007	-298.1	74.2	3996.7	138.3	-102.6
Net worth (in percent)					
2002	-	-	-	-	-
2003	-78.8	6.4	25.8	-67.6	-22.7

2004	-791.7	5.0	36.5	-495.5	-38.3
2005	7.6	28.9	4.3	115.8	142.6
2006	43.6	34.8	3.8	59.3	-100.5
2007	-83.8	48.3	-32.3	46.3	-18000.0
Descriptive Statistics (Sales in lakh)					
Geometric Mean	19301	16402	6527	438	976
Mean	20507.17	35091.00	6749.50	474.33	1192.33
Median	16539.5	9683	5810.5	465	773
Maximum	36230	153326	10781	688	2950
Minimum	14247	7708	5375	215	488
Std. Dev.	8556.18	58178.53	2101.16	191.45	927.59
Descriptive Statistics (Capital in lakh)					
Geometric Mean	12238	3353	7783	288	447
Mean	12637.67	3540.00	7895.50	678.33	526.17
Median	12533.5	3334	7780	734	382
Maximum	18803	5990	10300	1269	1244
Minimum	8543	2138	6011	7	243
Std. Dev.	3590.32	1346.87	1477.20	537.69	373.39
Descriptive Statistics (Employment in number)					
Geometric Mean	4798	771	2285	1685	48
Mean	4830.67	774.67	2320.50	1687.17	48.33
Median	4582	768	2076.5	1689.5	48
Maximum	5711	901	2943	1817	50
Minimum	4226	664	1965	1549	48
Std. Dev.	632.11	85.93	460.23	101.64	0.82

Note: Data have been taken from various issues of Public Enterprises Survey, Govt. of India

Table 3: Average Annual Growth for the agro based industry for the period 2002-07.
(in percent)

Industry	Sales	Capital	Employment	Payment to Employee
Agro-industry	17.5147	7.1967	-6.4487	0.4953
ANIFPDC	-17.3867	4.538	-3.2259	3.0928
NERAMAC	30.7531	9.8411	-0.5832	6.5258
NSCL	40.2818	10.4895	-5.8974	4.9674
SFCIL	12.6183	4.7351	-8.9979	-4.0109

Note: Data have been taken from various issues of Public Enterprises Survey, Govt. of India. Growth rate has been calculated on the basis of regression results given in appendix 1 and $\beta \times 100$.

Table 4: Estimates of Elasticities and MVP of Capital and Labour for Agro based Central Public Sector Enterprises in India.

Industry	Elasticity of Capital	Elasticity of Labor	MVP of Capital	MVP of Labor
Agro-industry	1.12	-0.25	1.76	-0.74
ANIFPDC	0.13	-0.23	0.20	-0.08
NERAMAC	0.72	3.56	1.57	31.24
NSCL	3.28	-5.33	16.04	-40.52
SFCIL	1.16	-0.72	0.97	-1.59

Note: Elasticities as well as Marginal Value of Productivities (MVP) of Capital and Labour have been derived from the regression results as given in Appendix 2 and equation 4 and 5;

Table: Regression results: Average annual growth rate for sales capital and labour employed for the period 2002-07.

Equations	Constant	t	R2	Adj R2	SER	SSR	DW	AIC
Agro-industry_S	9.255 (55.816)*	0.175 (4.114)	0.809	0.761	0.178	0.127	1.074	-0.352
Agro-industry_C	9.160 (36.626)*	0.072 (1.121)	0.239	0.049	0.269	0.289	1.338	0.470
Agro-industry_E	8.702 (205.043)*	-0.064 (-5.918)*	0.897	0.872	0.046	0.008	1.958	-3.077
Agro-industry_R	6.279 (63.600)*	0.005 (0.195)	0.009	-0.238	0.106	0.045	1.739	-1.389
ANIFPDC_S	6.692 (20.478)*	-0.174 (-2.072)	0.518	0.397	0.351	0.493	2.424	1.005
ANIFPDC_C	5.506 (2.581)	0.045 (0.083)	0.002	-0.248	2.291	20.995	1.789	4.757
ANIFPDC_E	7.542 (1791.357)*	-0.032 (-29.839)*	0.996	0.994	0.005	0.000	1.792	-7.698
ANIFPDC_R	4.539 (34.298)*	0.031 (0.910)	0.172	-0.036	0.142	0.081	2.764	-0.803
NERAMAC_S	5.807 (17.808)*	0.308 (3.673)	0.771	0.714	0.350	0.491	1.496	1.001
NERAMAC_C	5.758 (9.885)*	0.098 (0.658)	0.098	-0.128	0.626	1.566	1.160	2.161
NERAMAC_E	3.898 (297.309)*	-0.006 (-1.732)	0.429	0.286	0.014	0.001	1.714	-5.426
NERAMAC_R	1.998 (34.516)*	0.065 (4.390)	0.828	0.785	0.062	0.015	1.426	-2.456

NSCL_S	8.295 (9.010)*	0.403 (1.704)	0.421	0.276	0.989	3.912	2.813	3.077
NSCL_C	7.750 (25.294)*	0.105 (1.333)	0.308	0.135	0.329	0.433	1.309	0.877
NSCL_E	6.854 (902.901)*	-0.059 (-30.256)*	0.996	0.995	0.008	0.000	2.334	-6.519
NSCL_R	5.019 (39.732)*	0.050 (1.532)	0.370	0.212	0.136	0.074	1.764	-0.896
SFCIL_S	8.342 (60.532)*	0.126 (3.566)	0.761	0.701	0.148	0.088	1.222	-0.722
SFCIL_C	8.794 (52.112)*	0.047 (1.093)	0.230	0.037	0.181	0.131	1.706	-0.316
SFCIL_E	8.049 (89.911)*	-0.090 (-3.914)	0.793	0.741	0.096	0.037	1.982	-1.584
SFCIL_R	5.649 (54.823)*	-0.040 (-1.516)	0.365	0.206	0.111	0.049	1.525	-1.303

Note: * Shows .01 level of significance, Values are given in parenthesis are t values.

Table: Regression Result: Measuring Marginal Productivity of Capital & Labour in Public Sector Industries in India for the period (2002-07)

Industry	Intercept	Ln C	Ln L	R ²	Adj R ²	SER	SSS	DW	AIC
Agro-industry	0.935 (0.115)	1.116 (2.105)	-0.249 (-0.163)	0.657	0.428	0.276	0.228	0.844	0.567
ANIFPDC	6.408 (0.907)	0.128 (1.245)	-0.226 (-0.149)	0.344	-0.093	0.473	0.670	0.659	1.646
NERAMAC	-5.419 (-2.905)	0.717 (4.456)	3.560 (5.039)	0.937	0.895	0.212	0.135	2.888	0.042

NSCL	10.779 (0.600)	3.279 (1.392)	-5.333 (-0.978)	0.396	-0.006	1.166	4.077	1.603	3.451
SFCIL	2.356 (0.416)	1.162 (2.241)	-0.723 (-0.937)	0.638	0.397	0.210	0.133	2.543	0.025

Note: Values are given in parenthesis are t values.

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