CHAPTER 4

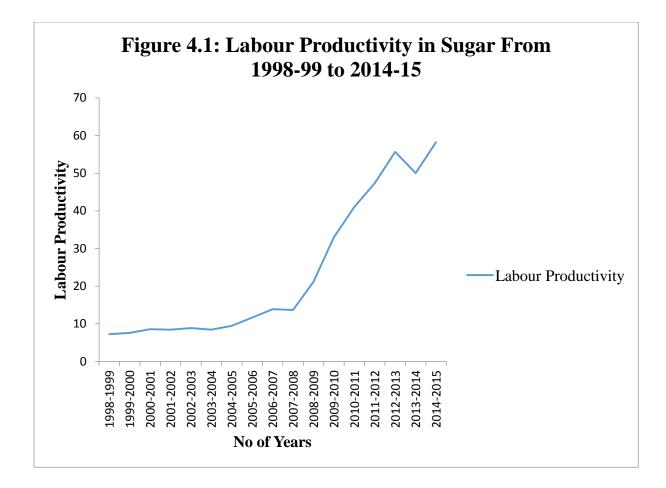
LABOUR PRODUCTIVITY AND CAPITAL PRODUCTIVITY IN SUGAR INDUSTRY OF INDIA

This section of the study estimates the labour and capital productivity in the sugar industry of India. Initially, Labour productivity is considered to be one of the oldest and widely used measures of productivity (Trivedi, *et al.* 2000). "The wide usage of labour productivity is due to the fact that it can be used as proxy for the amount of goods available for consumption per labourer. Hence increase in labour productivity is very often regarded as an end in itself and in such a situation the role of capital gets reduced merely to that of enabling labour productivity to rise." The Labour productivity is the ratio of aggregate total output and total number of labours. Labour Productivity measures the amount of goods and services produced by one hour of labour. Real GDP by an hour of labour has been measured by labour productivity. Capital output ratio is the second measure of productivity which measures real GDP at per unit of capital.

Sr.	Years	Total Outputs	No of Labours	Labour Productivity
No		. .		
1	1998-1999	4012781	553338	7.25
2	1999-2000	4321322	569730	7.58
3	2000-2001	4820613	562026	8.57
4	2001-2002	4623798	547950	8.43
5	2002-2003	4758598	536574	8.86

2003-2004	4544405	538184	8.44
2004-2005	5051133	533508	9.46
2005-2006	6561793	562891	11.65
2006-2007	8147044	585980	13.90
2007-2008	8139956	595029	13.67
2008-2009	3863937	182418	21.18
2009-2010	6008971	182110	32.99
2010-2011	7585384	184758	41.05
2011-2012	8681154	183236	47.37
2012-2013	10016728	179887	55.68
2013-2014	8588392	171620	50.04
2014-2015	9739559	167298	58.21
		CAGR	14%
	2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014	2004-2005 5051133 2005-2006 6561793 2006-2007 8147044 2007-2008 8139956 2008-2009 3863937 2009-2010 6008971 2010-2011 7585384 2011-2012 8681154 2012-2013 10016728 2013-2014 8588392	2004-2005 5051133 533508 2005-2006 6561793 562891 2006-2007 8147044 585980 2007-2008 8139956 595029 2008-2009 3863937 182418 2009-2010 6008971 182110 2010-2011 7585384 184758 2011-2012 8681154 183236 2012-2013 10016728 179887 2013-2014 8588392 171620 2014-2015 9739559 167298

Table 4.1 depicted the Labour productivity in the sugar industry of India during the study period from 1998-99 to 2014-15. During the study years, the labour productivity is gradually increased. In 1998-99 it was 7.25 and it increased up-to 13.90 in 2006-07. In 2007-08 there is little decline shown in the above table. From 2008-09 it again look up at the increasing path which stopped in 2013-14 when a little decline noticed in the labour productivity of labour. In 2014-15 labour productivity is 58.21. The Compound Annual Growth is 14% in the Sugar Industry of India, which is showing increasing trend in the labour productivity of Indian sugar industry.



The above figure 4.1 revealed the Labour Productivity trend in the Sugar Industry of India during the study period. In this diagram on the Horizontal-Axis shows number of Years and on Vertical-Axis shows labour productivity. We can analyzed that it predicted the increasing trend in the labour productivity of sugar industry during the study period excepted it shows little decline in 2007-08 and 2012-13.

Table 4.2: Capital Productivity in Sugar Industry of India				
Sr. No	Years	Total Outputs	Productive Capital	Capital Productivity
1	1998-1999	4012781	1544263	2.59
2	1999-2000	4321322	1673673	2.58

Calculated by Researcher				
			CAGR	-1%
17	2014-2015	9739559	4618134	2.10
16	2013-2014	8588392	4753911	1.80
15	2012-2013	10016728	4984284	2.00
14	2011-2012	8681154	4895754	1.77
13	2010-2011	7585384	4516943	1.67
12	2009-2010	6008971	3904003	1.53
11	2008-2009	3863937	3257294	1.18
10	2007-2008	8139956	3799520	2.14
9	2006-2007	8147044	3168931	2.57
8	2005-2006	6561793	2695787	2.43
7	2004-2005	5051133	2284461	2.21
6	2003-2004	4544405	2101437	2.16
5	2002-2003	4758598	1960585	2.42
4	2001-2002	4623798	1947399	2.37
3	2000-2001	4820613	1899301	2.53

The Table 4.2 revealed the capital productivity growth in the sugar industry of India. The capital productivity was highest in 1998-99 with the value of 2.59. Then capital productivity continuously declined from 1998-99 to 2004-05. In 2005-06 there is little increment shown in capital productivity (2.43) and again it was declined after 2006-07. In 2008-09 capital productivity is the lowest during the study period and reached at the 1.18. Capital productivity increased up-to 2.00 in 2012-13. Again it is declined in 2013-14, capital productivity comes at 1.80. In 2014-15 capital productivity reached at 2.10. The compound annual growth rate is -1%, which shown negative growth rate of capital productivity.

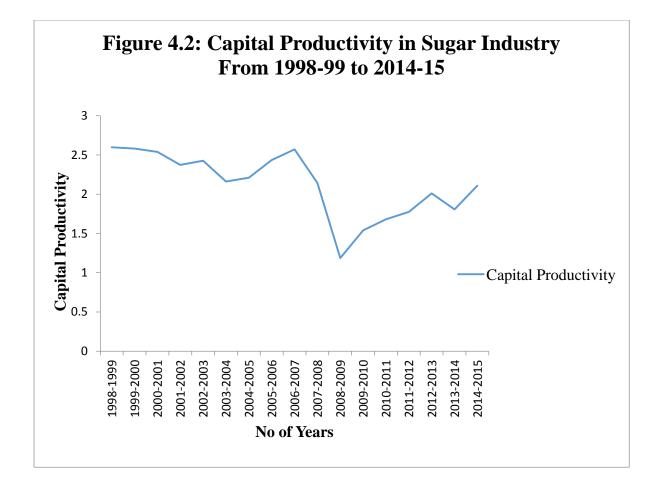


Figure 4.2 revealed the capital productivity in sugar industry of India during the study period. Horizontal axis shown number of years and vertical axis told the capital productivity line. The Fig predicted the decreasing growth in the Capital output ratio of sugar industry of India. In 2008-2009 capital productivity is at its lowest point. Again it is increasing after 2008-09. The highest point is of capital productivity is 2.59 in the 1998-99.

Conclusion

labour productivity showed increasing trend and compound annual growth is about 14%. Capital productivity showing decreasing trend and compound annual growth is negative one. Labour productivity and employment generated in the industry has negative relation. Generally there is negative relation between the Capital productivity and invested capital if the output is constant. So as per the results, there is increasing investment in the sugar industry of India. It is followed by labour productivity. Profitability and efficiency should increase in the industry.