Abstract of thesis

One of the most important challenges facing by the country is providing remunerative prices to the farmer for their produce and consumer without incurring the additional burden of subsidies. This challenge could be addressed if processing level and value addition of the row produce can be enhanced to meet the growing demand for processed foods. Food Processing Industry (FPI) has an important role to play in linking the Indian agriculture to consumers in the domestic and international markets. It becomes important to study inter-linkages between the FPI and agriculture sector of the India. So that positive growth impulses on the rise between these two sectors could be identified and fostered to sustain the development of agriculture sector. The present study has examined and analyses inter-sectoral linkages between the FPI and Agriculture and Allied Sector (AAS) of the India by using both the I-O approach and the econometric exercises Johnson co-integration test. The thesis has examines the inter-dependency and Backward and Forward Linkages (BFL) among five sectors of Indian economy such as: AAS, FPI, other than FPI, Mining and Service Sectors**.** The study also compute income effect, direct income effect as well as direct and indirect effect for all sectors. However, according to, research objectives main focus to examine the interdependence and BFL between AAS and FPI.

The results of the study are that the coefficient of internal inputs of the agriculture sector is having highest intermediate linkages 0.1556 and by the FPI coefficients is 0.1274. Other than FPI, mining and service sector use their outputs as inputs followed by 0.4224, 0.0092 and 0.1318 respectively. The total inter-industry linkage effects of each sector are shown by increase one lakh in the final demand for agricultural goods would require an increase of about 0.6724 lakh in aggregate output of the economy. Whereas, an increase of one lakh in the final demand for the output of FPI and other than FPI would require an increase of 0.1786 and 0.1314 lakh in aggregate output respectively. An increase of 1 Lakh in the final demand for the output of Mining and Service Sector would require an increase of 0.7604 and 0.7074 lakh in total output respectively. The FPI is having highest Backward Linkages (BL) with agricultural sector in comparison to other four sectors of the Indian economy in the present study which shows that FPI is highly depend on AAS for their raw materials/inputs, while the other than FPI is getting second position in BL 1.2758. AAS has got third position in BL means this sector has the least input requirements in compared to FPI and others than FPI. The other industries like mining and service sectors are having low BL

whose coefficients are less than 1. Again the agriculture sector is having high Forward Linkages (FL) also; this sector's coefficient is 0.9333. However, FPI's coefficient is 0.6067 which has occupied last place in all five sectors. In income effect FPI have also weak direct as well as direct and indirect income effect in comparison to all other sectors. AAS have also better direct and indirect income effect 0.9518 in comparison to the FPI but less than service, other than FPI and the mining sector.

The study has examined the existence of a long-run relationship between agriculture sector and FPI. To check whether the variables AAS and FPI are co integrated or not, Jonson co integration is employed In other worlds whether, the development of agriculture is linked with the development of FPI or not. The performance of agriculture sector has been measured by the output of AAS, while the performance of FPI has been measuring by Net Value Added (NAV) of the FPI at constant prices with base year 200-05. The co integration result revealed that the residual of AAS and FPI are stationary. It means, there is a long run relationship exists between these two variables. Since the result of Jonson co integration confirm the existence of long run relationship between two variables, ECM model is applied to check the short run adjustment in this two variables. The ECM coefficient of the variable AAS is negative and of FPI is positive. The opposite sign of the two variables explain that the equilibrium might be restored when FPI variable will more rapidly increase than AAS variable. Moreover, the speed of adjustment in the variable AASt is 26 per cent. It conveys that 26 per cent of disequilibrium in At is adjusted by Ft in each period.

The study has also discussed the relevance of FPI in the different fields such as: Employment Generation, Post-harvest Management of Fruits &Vegetables (F&V), Food Security and Women Empowerment through FPI. The study has also examined that on the base of production of F&V, India is able to achieve the recommended level of 120 gram fruits and 300 gram of vegetables per capita per day by now. But due to this 35 % wastage of total production of F&V we are able achieved recommended F&V per capita per day. So if FL of agriculture sector and BL of FPI will increased, we can minimized this wastage and achieve recommended at 120 gram of fruits and 300 gram of vegetables per capita per day which is very important from the food security point of view.