Chapter - 7

Conclusion

7.1 Introduction

As the study has mentioned in the earlier that one of the most important challenges facing by the India 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. FPI has provided linkages to agricultural sector food and industries. It becomes important to study the linkages between the FPI and agriculture sector of the India. The present study has examined 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 co-integration test.

The results of this 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. AAS has used more inputs from other than FPI in compare to four other sectors of the study. The coefficient of inputs purchased by agriculture from other than FPI is 0.0933 followed by the inputs purchased from the service sector (0.0749). The coefficient of inputs purchased by AAS from FPI is 0.0037 which are very less in comparison to the other four sectors. This shows that AAS has the least inputs requirement from FPI in comparison to others than FPI and services sector.

The FPI use more inputs (0.3602) from the AAS in comparison to all other sectors of the study. This indicates that the dependency of the FPI on the AAS for their raw materials/inputs is highest in comparison to other sectors of the Indian economy in the present study. So it has proved that if the development of FPI will increase than the development of agricultural sector will be increased. If we develop FPI, automatically, interdependency of FPI on agriculture sector will be increased and BL of these industries will be developed, which is helpful to agricultural development of India. 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 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 study has already discussed about BL which identifies how; a sector depends on other sectors for their inputs. The FPI is having highest BL (1.29468) in comparison to other four sectors of Indian economy in the present study, which shows that FPI is highly dependent on AAS for its raw materials/inputs. So we can say if the BL of FPI increased then utilization of agricultural production will be increased than the wastage of agricultural sector will be declined. This BL will also increase level of food processing and enhances self-life and value addition of the agricultural produces. By these linkages we can provide remunerative prices to the farmer for their produce and consumer without incurring the additional burden of subsidies.

The other than FPI is getting second position in BL 1.2758. AAS has got third position in BL. It means this sector has the least input requirements from other sectors in comparison to FPI

and others than FPI. The other sectors like mining and service sectors are having low BL whose coefficients are less than 1. Again the AAS is having high FL; this sector's coefficient is 0.9333 in compression to FPI and mining sector. FPI coefficient is 0.6067 which has occupied last place in all five sectors of the study. AS study has discussed FL means how a sector distributes its outputs to the remaining economy. So if the FL of this sector will increase than the post harvest management and utilisation of AAS production will be increased then wastage may be reduces which is first and for most requirement of the present era for the agricultural development. In income effect FPI has also weak direct as well as direct and indirect income effect in comparison to all other sectors. AAS has 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 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 food security point of view.

The study has examined the existence of a long-run relationship between agriculture sector and FPI. In other words we can say whether, the development of agriculture is linked with the development of FPI or not. In order to check whether the variables of AAS and FPI are co integrated or not, Jonson co integration has been used. The co integration result revealed that the residual of AAS and FPI are stationary. It means, long run relationship exists between these two variables. Since the result of Jonson co integration confirms the existence of long run

relationship between two variables. ECM model is applied to check the short run adjustment in these 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 AAS is 26 percent. It conveys that 26 percent of disequilibrium in AAS is adjusted by FPI in each period. The result shows there is long-run relationship between both sectors and if growth of one sector is increased then it affects the other sector. Which shows that agriculture and FPI being integral component of development process due to their mutual interdependence and symbiotic relationship. However, the degree of interdependence may vary and also change over time.

7.2 Suggestion

Industrialization of the Indian FPI has fundamentally changed the relationship between agricultural producers and food manufacturers. The strategic actions of FPI now have a direct effect on agriculture sector. Therefore, the strategies of agricultural producers are dictated in large part by the actions of food manufacturing sector. Understanding the motivations that force food processing firms is than crucial to farm managers. Some suggestion to agricultural development as well as FPI because agriculture and FPI cannot exist without each other and hope that food processing will make our agriculture economically viable.

 The problem of agricultural development needs to increase production, productivity of agriculture sector and delivery system and to increase the farmer's earning through efficient, effective value addition and processing of agricultural commodities.

- Provide better infrastructure facilities, especially cold storage and transport faculties because during the peak season huge wastage of F&V due to perusable nature of the commodities. According to the Saumitra Chaudhuri Committee¹ in 2012 indicated 61.3 million tonnes of cold storage requirement in the country against the present capacity of around 29 million tonnes². So for the sake of minimize this wastage the government should try to achieve 61.3 million tonnes of cold storage as soon as possible and transport facilities requirement are must.
- Contract farming where businesses sign contracts with farmers to grow a specific crop and guarantee buy-back of the produce at an agreed price range could be next wave of improvement efforts from the private sector.
- Strength food supply chain from farmer to consumers.
- The study also stresses that these industries directly dependent on agricultural and its sustain development is vital to their performance and for strengthening backward and forward linkages for transfer of a new technology by institutional system for agricultural development is essential.

¹ http://planningcomission.nic

² http://articals.economictimes