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POTENTIAL OF THE AGRI-BUSINESS SECTOR TO FOSTER INDIA'S ECONOMIC GROWTH: A REVIEW

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ABSTRACT

India's economy is based on agriculture, which also contributes significantly to the country's domestic economy. The agriculture sector is nonetheless hampered by a number of problems that keep it from realising its full potential. In fact, for thousands of years, agriculture and related sectors have been essential to the socioeconomic development of the country. Agribusinesses are thought to provide about 30% of India's GDP, with the majority of the labour force working in the agriculture sector. Agribusinesses continue to have the ability to propel India's economy forward. There is currently an unprecedented level of interest in this industry as a consequence of the development of the scope and potential of agribusiness as a result of national policy changes, globalisation of commerce and agriculture. The Indian economy's steady growth is most likely being driven by the agriculture sector. India's industrial and service sectors have received accolades from nations all over the world, but the nation's agriculture sector, which has been crucial to the domestic economy, continues to face several challenges that are keeping it from realising its full potential. This paper highlights the breadth of agribusiness opportunities in the Indian context, which may also considerably benefit in its growth. Both potential development areas and problem areas must get attention if India's agricultural sector is to advance. The paper also highlights the important policy changes for the development of India's agri-business sector. The paper's objective is to build on the many initiatives that have been undertaken and the future requirements for the growth of the agribusiness sector as a whole.

Keywords **:** Agri-business, Agriculture, Economic Growth, Challenges, Opportunities

Introduction

The agricultural industry is changing drastically. Agriculture used to be thought of as a farmer's primary source of income, encompassing the production of both crops and cattle. For many years, farming and agriculture were synonymous, and the majority of people lived on farms or close by and were generally self-sufficient. But in recent years, this has changed significantly. Agriculture is already transforming quickly into a technology- and market-driven "industry" that encompasses everything from agricultural production to sophisticated agri science and agribusiness (Gandhi, 2014). It currently has a significant link to both the domestic and international economies. Many individuals who are employed in agriculture don't actually work on farms; instead, they are involved in enterprises related to seed, fertiliser, agrochemicals, agricultural equipment, food processing, marketing, and trading. Numerous people work in the fields of finance, research, distribution, and marketing to assist producing agriculturalists (Gandhi, 2014). Agriculture is become a significant industry.

Farmers generate food, fibre, and by-products with the help of agribusiness' inputs. Farmers receive the materials and machinery they need from input agribusinesses to grow and safeguard their crops. Many offer services including information, insurance, and credit. Agribusiness companies that process, sell, and distribute agricultural goods take the output (see Figure 1). As well as buying and selling, coordination, marketing, advertising, and even lobbying for agricultural products are all done by agribusiness merchants and commodities organisations. A lot of people work in food marketing and services (Gandhi, 2014). The performance of agricultural and agribusinesses may be improved via research, education, and extension. Agribusinesses employ millions of people, and people all over the world depend on them for both their food and non-food needs, as well as for production needs. For a list of agribusiness categories and activities, see Table 1.

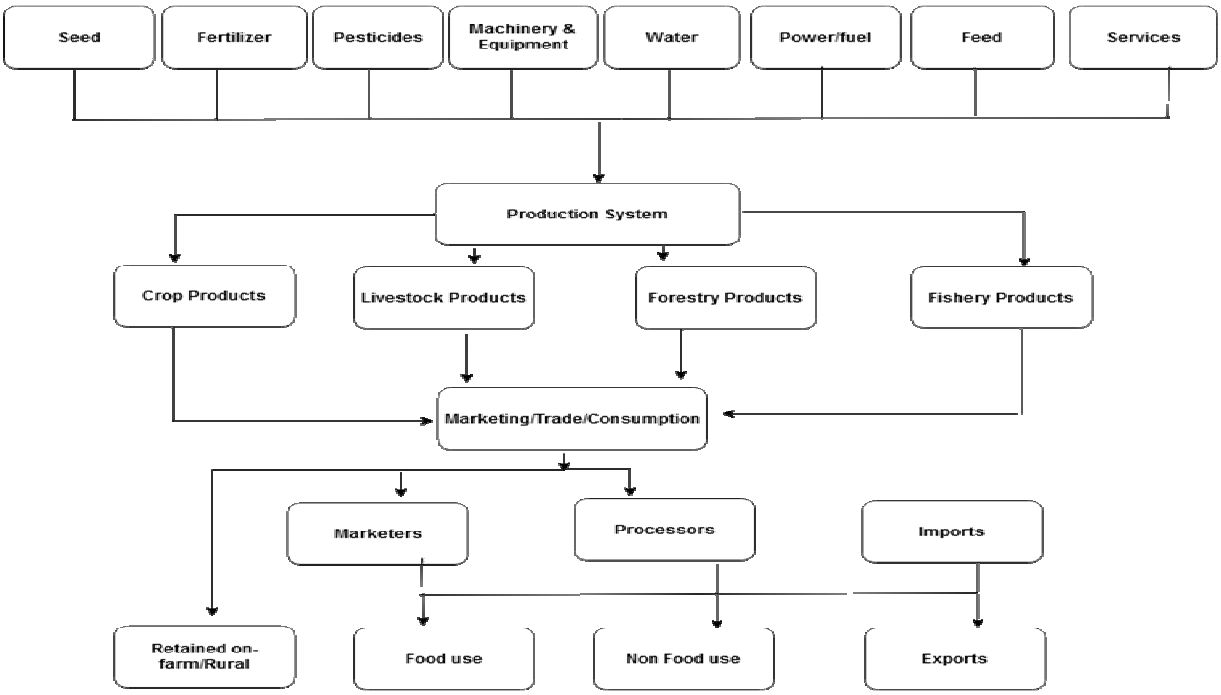

Fig. 1 : An Overview of the Agribusiness System (Source: Adapted from *Gandhi, V. P., 2014*)

Table 1: Examples of Types of Agribusinesses (Source: *Gandhi, V. P., 2014*)

1	2
○ Seeds ○ Fertilisers ○ Agro-Chemicals/pesticides ○ Organics and manures ○ Farm machinery and equipment ○ Animal Feeds ○ Veterinary products ○ Agricultural Research/Biotechnology ○ Crop, Livestock, Fishery and Forestry Productions	○ Raw Material Procurement ○ Food and agro Processing ○ Food and Agro Marketing ○ Agricultural Trade/Import and Export Marketing ○ Forest-based industries ○ Food Supply Chain Management ○ Inspection, Grading, Quality Certification/Control ○ Agricultural Finance/banking ○ Agricultural/Rural development ○ Agri Information ○ Agri Consulting

The agricultural industry in India has undergone significant expansion and transformation in recent decades. What causes this shift and what propels the growth of the agriculture industry? As economies continue to expand, there appear to be substantial restrictions, needs, and shifts that are driving the evolution of agriculture in developing nations like India.

Phases in The development of agro-industries in India

In India, the growth of agro-industries has occurred in three stages (see Table 2). The first was Mahatma Gandhi's strategy of establishing agricultural businesses in rural areas, which was based on a solid social, political, and economic worldview (Goyal, 1994). The goal of the "swadeshi" philosophy was to lessen reliance on British imports while uplifting and integrating rural populations into the economy and independence struggle. But it later fell short because nationalists used it as a rallying cry to support inefficient production methods, reject modern industry, and claim that it is incompatible with consumer demands and preferences (Gandhi and Jain, 2011).

In the second phase, following India's independence and up until the early 1980s, Mahanalobis and Nehru's ideas dominated industrial policy. They argued that India needed a small number of large-scale public industries for the capital goods sector, while the consumer goods sector should be reserved for small-scale and rural industries that required less capital and employed more labour. Regulations were created in accordance with this, which was compatible with the necessity to boost employment at the time and the lack of money. However, these small-scale companies were ultimately unable to supply the expanding demand for quality goods from a growing population with increasing incomes as a result of their comparatively inefficient technology, rendering India a nation of shortages and deficient in competitiveness. This compelled the third phase, which focused on deregulation, modernization, and opening up to competition, beginning in the middle of the 1980s and especially following liberalisation in the early 1990s. Through the use of cutting-edge technology, effective management, and competition, the industry made progress in satisfying the market's need for both quantity and quality. However, this pattern gave rise to a system of sizable, privately owned, capital-intensive businesses that frequently had extremely tenuous ties to rural regions. This has a detrimental impact on rural employment and weakens the development nexus why India gave agro-industries great importance in the first place.

Table 2: History of Development of Agro-processing industry and Agribusiness in India.

Phases (1)	Features (2)
Pre-independence: Gandhian-Swadeshi Phase–up to 1950	• Encourage the use of own rural products • Discourage Imports • Generate rural employment and incomes, uplift and bring rural masses to mainstream • Fight against colonial rule
After-Independence: Nehru-Mahalanobis Phase: 1950-1984	• Industrialisation strategy • Capital goods reserved for large scale • Consumer goods reserved for agroindustries/small scale • Logic of capital scarcity – low capital requirement of rural/small scale • Labour intensive, generate more employment
Modernisation phase: 1984 – onwards (1991 – onwards)	• Liberalisation • Focus on efficiency-modernisation, competitiveness • Focus on quality – use good technology • Focus on meeting consumer demand • Attract foreign investment

(Source: *Gandhi, V. P., 2014*)

Agribusiness Opportunities in India

If India could close the productivity and investment disparities compared to comparators with middle-income levels, the agricultural industry would become a significant source of employment and employ 17–40% more people (World Bank Group, 2017). And as we know that 21st century brings challenges which make entrepreneurial skills inevitable for the agribusiness sector. The responsibility lies with the entrepreneurs themselves as well as on the policy makers, administrative agencies and institutions of higher education to facilitate the process of skill acquisition by the present and aspiring agri-entrepreneurs (Pattanayak, K.P. and Padhy, C., 2020). If India could close the productivity and investment deficits compared to middle-income nations, the agricultural industry would employ 17 percent more people. And the number of people employed in the agricultural industry will increase by 40% when India surpasses China in terms of productivity and investment. In addition to generating jobs, closing these gaps raises the GDP contribution of agriculture, broadens the economy as a whole, and improves welfare. India's trade balance would improve as a result of rising exports and falling imports.

The overall demand for food has grown, and consumption trends are changing toward processed foods, ready-to-eat meals, and fresh fruits and vegetables (World Bank Group, 2017). Although the percentage of food in the average family consumption expenditures in India has decreased from around 47% in 2004/05 to 41% in 2011/12, spending on food has grown in absolute terms and climbed by roughly 4% between 2004/05 and 2011/12. Urbanization and higher household incomes are linked to a change in eating habits toward more varied and processed meals. These patterns may be seen in Figure 2 and Table 3. The fastest growth in demand is for processed foods, with a sizable shift toward highly processed meals. Looking at growth rates from 1993 to 2011, demand patterns show a shift away from primary processed foods like grains and cereals toward (1) fresh fruits and vegetables, which is driving demand for investments to maintain freshness and for value chains to deliver fresh produce; and (2) more processed foods, which is driving demand for agro processing. These trends are consistent with rising demand for animal products that are responsive to income levels and rising consumer desire for meals that are ready to eat or simple to prepare.

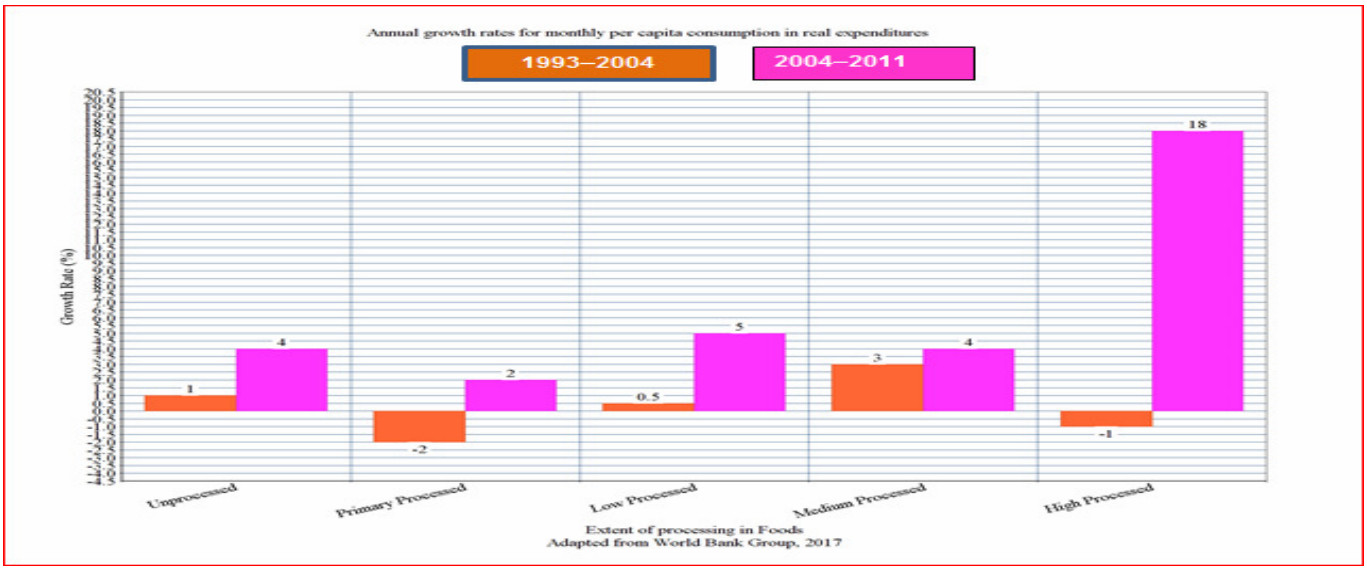

Fig. 2 : Annual growth rates for monthly per capita consumption in real expenditures.

Table 3: Changes in food consumption pattern in India(Source: World Bank Group, 2017)

Level of Food Processing	Share of total MPCE (%)			Annual rate of growth (2004/05 prices)		
	1993/94	2004/05	2011/12	1993-2004	2004-11	1993-2011
Unprocessed	13.7	15.6	14.8	0.48	3.28	1.6
Primary Processed	43.9	38.8	32.9	-1.77	1.58	-0.5
Low Secondary Processed	34.2	35.8	37.8	-0.26	4.84	1.7
Medium Secondary Processed	4.44	6.04	5.59	2.14	2.89	2.4
High Secondary Processed	3.72	3.71	8.87	-0.72	17.83	6.1
Total Mpce (2004/05 Rs.)	369.3	342.8	451.9	-0.68	4.03	1.1

Note: MPCE = Monthly Per Capita Expenditures

Farmers must adapt to rising demand by not only diversifying their crop output to fulfil consumer demand for foods, but also by practising post-harvest management to maintain the desirable qualities (World Bank Group, 2017). However, diversity is subject to significant limitations. For instance, despite the fact that fruit and vegetable yields have grown far faster than cereal yields, land allocation still favours food grains greatly. Fruit and vegetable yields grew between 2005 and 2011 by almost 45% and 48%, respectively, compared to a 22% increase in grain yields (figure 3). In comparison to their 27 percent contribution to the value of the agricultural industry, fruits and vegetables only make up roughly 7% of the overall planted land.

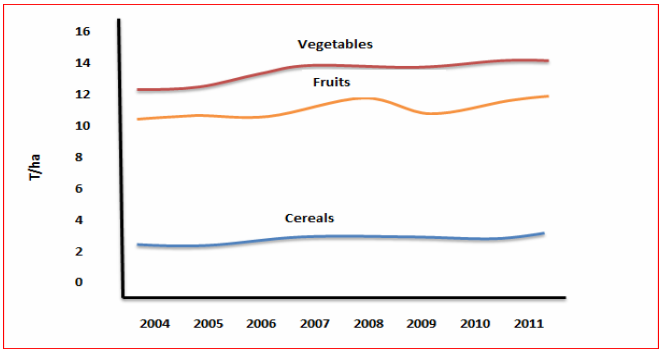

Fig. 3 : Trends in Crop Yields (Source: Adapted from World Bank Group, 2017)

Agribusiness Challenges in India

In many middle-income nations, agribusiness outpaces basic agriculture, but this is not the case in India. Using statistics from the Global Trade Analysis Project, it is estimated that agribusiness contributes to GDP at a ratio of 0.64, meaning primary agriculture in India is greater than agribusiness by more than 50% (World Bank Group, 2017). Because India's national accounts are not designed to quantify the size of agribusiness, there has been much discussion over both the overall size of agribusiness and the sizes of its various components. Assessing whether the policies, institutions, and enabling investments currently in place are adequate to the challenge and, if not, what changes may be required to make this process more rewarding for farmers and other participants in agriculture produce value chains, requires a thorough understanding of the size and nature of the agribusiness sector. Andin relation to this the agribusiness entrepreneurs must also be ready to withstand, handle, and overcome major and unique work-related problems of agribusiness sector, in order to keep their enterprises afloat (Pattanayak *et al*., 2022).

According to CII-McKinsey (1997), India has enormous potential for the growth of the food processing and agricultural industries. But it faces various obstacles to development and expansion. Boer and Pandey (1997), Gulati et al. (1994), Kejriwal (1989), and Srivastava and Patel have all shown these (1989). They consist of the following:

- Constraints on the availability of raw materials include low-quality, incorrect kinds, and residues. They are only available for a little time (seasonality). There are sporadic supplies of perishable goods as well as new, rival marketplaces.
- Processing Restrictions - Out-dated technology is resulting in low productivity and quality. Due to seasonality, there is a poor capacity utilisation. They are not appropriate for high-end or export markets.
- Marketing restrictions - There are small or emerging markets. Additionally, consumer preferences are evolving. The price of developing a product or brand is considerable. The supply chain is cumbersome and ineffective. Financial limitations and tiny retail establishments are also prevalent.
- Foods that have been processed or packed are viewed as luxury items by the government. They pay high taxes as well. Numerous unique laws, including MPO, place restrictions on it. Between input price assistance and output price control, farmers are confined. Additionally, import and export regulations are always changing.

On the retail level, laws that have successfully prevented foreign direct investment (FDI) in contemporary food retailing and barred crucial information on structuring value chains have hampered the industry (World Bank Group, 2017). Global corporations with vast experience and understanding in developing specialised contemporary retail value chains are unable to apply that expertise to India's agriculture industry due to the absence of FDI. India is passing up the chance to make use of this information, which would be advantageous to anyone involved in the specific supply chain. Due to the fact that the contemporary front-end establishments might take the place of the little, mostly family-owned kirana shops, there would be trade-offs from FDI. The main obstacle is figuring out how to incorporate these kirana stores into a contemporary retail value chain. Because borrowing rates are higher in India than in other industrialised nations, India is losing out on inexpensive cash to invest in modern food retailing as a result of the absence of FDI. This is significant since contemporary food commerce is hazardous and capital-intensive. When compared to other, less hazardous, retail development categories like non-food retail, this combination does not offer the proper incentives for domestic investors.Many aspects of farming are unpredictable and out of farmers' control, including the

market, business, extreme weather, excessive rain, recurrent droughts and low crop output (Padhy *et al*., 2020).

Policy Interventions

Through food fortification, the agricultural industry can aid in reducing malnutrition (World Bank Group, 2017). The most successful rules for obtaining long-lasting nutritional results, according to lessons learned from other nations, are those that mandate the fortification of specific foods. Fortification that is required is effective because it creates a level playing field for businesses in terms of cost structures, promotes competitive pricing for fortified goods, reduces the need for expensive marketing, increases access for all, and has a better chance of reaching the vast majority of people. If food fortification is widely implemented, especially among populations with high rates of deficiency, it can have the intended public health effects. Therefore, whether forced fortification, voluntary fortification, or a hybrid strategy, the choice of an acceptable delivery option should be carefully addressed.

The food business has the choice to fortify through voluntary fortification, and the resulting products are promoted as value-added goods rather than plain goods. This is in accordance to UN Sustainable goal 8 of achieving greater levels of economic output through divergence, technological upgrading and innovation, plus through a focus on high-value added and labour-intensive segments (Envision 2030, Goal 8: Decent Work and Economic Growth). Since voluntary fortification depends on business interest and adoption, consumer knowledge, demand and price sensitivity, and other factors, it has a substantially lesser potential to have an influence on public health. Its reach among the most helpless is constrained. The majority of stakeholders advise India to eventually make fortification of goods like milk, wheat, and oil obligatory, much as it has done with salt iodization. However, mandated fortification necessitates legislation, and it might take years to pass. A plan to encourage voluntary fortification will be essential in the meantime, as will complementing measures to supply fortified foods through social safety nets including the Public Distribution System, the School Mid-Day Meal Program, and the Integrated Child Development Services Program. Targeting individuals who are most at risk of micronutrient deficiencies through already-existing social safety net programmes has enormous promise, but this can only be viewed as a temporary solution. It is necessary to create a plan for the required fortification of foods like milk, wheat, and oil, maybe by requiring that each processor have at least one fortified product in each category of product.

The difficulties and complexities brought on by these limitations, on the one hand, and the necessity for their continued expansion with a range of goals, including profitability and support for the development of rural and small farmers, on the other, necessitate the use of creative strategies and institutional models for the management of this agribusiness activity in India. Thankfully, varieties of models and strategies have surfaced and may be assessed to give lessons for what is best needed. A number of important success variables or objectives have been established based on the research and experiences that may be utilised to investigate these aspects (Gandhi and Jain 2011, and Gandhi *et al*., 2001):

(1) The efficiency with which production and purchase from numerous small farmers are organised, resulting in quantity, cost effectiveness, and an effect on rural employment and incomes.

(2) The capacity to encourage farmers to embrace new technology and methods in order to modernise agriculture and provide the needed quality and quantity of raw goods at an affordable price.

(3) The capacity to invest in cutting-edge processing technologies to make high-quality products while also meeting the high fixed capital need and the working capital requirement of a firm with a seasonal and erratic revenue stream.

(4) The capability and aptitude to create an effective marketing strategy to satisfy customer demand, compete, and open up emerging product markets in processed agri-foods.

(5) Create a company with the proper ownership, management, and control structures that will inspire loyalty, sustain success, and benefit the key constituencies, such as farmers, customers, investors, supply-chain participants, and the country.

So, what is important to understand here is that rather than a bureaucratic method, the dynamic nature of the agribusiness challenges demands a quicker approach. In case of uncertainties, what is required is a direct approach (Pattanayak, and Padhy, 2021). It implies that action must be taken immediately as per the current data and statistics rather than follow a wait and watch approach. It will mean taking arealistic view of the things and understanding the consequences of inaction. Digital advancements can help emerging nations fight hunger and poverty more quickly in rural areas. Major technological breakthroughs include indoor vertical farming, automation and robotics, livestock technology, modern greenhouse techniques, precision agriculture, artificial intelligence, and block chain (Padhy *et al*., 2022). 21st century leaders are managers and leaders who adopt a modern mindset to address certain difficulties. Purposeful trainings can be used to develop leadership behaviour, talents, and qualities to overcome these obstacles (Padhy *et al*., 2022).

Conclusion

From being a means of sustenance to a massive industry driven by technology and the market, agriculture has undergone significant transformation. In recent decades, India's agribusiness industry, which supports producing agriculture, has experienced tremendous expansion. Its growth in nations like India is largely influenced by significant adjustments, shifts, and limitations brought about by global and national economic development. These include the need to increase productivity, the commercialization of agriculture, the scaling up and reorganisation of production and marketing, the reduction of government involvement in agriculture due to economic liberalisation, the shift in food consumption patterns, the growth of the rural economy, infrastructure development, rural-urban migration, and the revolution in communication and information technology. Agribusinesses have experienced tremendous development as a result of these changes, especially input agribusinesses like those that produce seeds, fertiliser, agrochemicals, irrigation equipment, and agricultural machinery. Addressing the

numerous opportunities and restrictions within a framework, such as the agronomic and agro-economic potential, development of effective demand, creating enough supply, and managing distribution, will be necessary for these input agribusinesses to continue growing. In India, agro-processing and marketing agribusinesses have received great attention due to their enormous potential to support economic growth. To elevate rural populations and link them to the independence struggle and the national economy, Mahatma Gandhi stressed the importance of developing village-based agro-industries.

References

Boer, K. de and Pandey, A. (1997). India's Sleeping Giant: Food, The McKinsey Quarterly, No.1.

CII-McKinsey and Co. (1997). *Modernising the Indian Food Chain: Food and Agriculture Integrated Development Action Plan (FAIDA),* CII and McKinsey and Co., New Delhi.

Gandhi, V.P.; Kumar, G. and Marsh, R. (2001). Agro-Industry for Rural and Small Farmer Development: Issues and Lessons from India, *International Food and Agribusiness Management Review,* 2(3/4): 331–344.

Gandhi, V.P. (2014). Presidential address: Growth and transformation of the agribusiness sector: Drivers, models and challenges. *INDIAN Journal of agricultural economics*, 69(902-2016-67971): 44-74.

Gandhi, V.P. and Jain (2011). Institutional Innovations and Models in the Development of Agro-(Industries in India: Strengths, Weaknesses and Lessons, 203-257, in Innovative Policies and Institutions to Support Agro-Industries Development, Carlos A. da Silva (Ed.), FAO, Rome.

Goyal, S.K. (1994). Policies Towards Development of Agro-industries in India. In Bhalla, G.S. (Ed.), Economic Liberalisation and Indian Agriculture, Chapter VII, Institute for Studies in Industrial Development, New Delhi, pp. 241–286.

Gulati, A.; Sharma, A.; Sharma, K.; Das, S. and Chhabra, V. (1994). Export Competitiveness of Selected Agricultural Commodities, National Council of Applied Economic Research, New Delhi.

Kejriwal, N.M. (1989). Performance and Constraints in Accelerating Production and Export of Fruits and Vegetables. In Srivastava, U.K. and S. Vathsala (Eds.) Agro-Processing: Strategy for Acceleration and Exports, New Delhi and Oxford, IBH Publishing Co. Pvt. Ltd.

Padhy, C.; Raju, P.S. and Pattanayak, K.P. (2020). Assessment of Mental Health and Psychological Counseling for Farmers, *International Journal of Advances in Agricultural Science and Technology,* 7(11): 55-59.

Padhy, C.; Reddy, M.D.; Raj, R.K. and Pattanayak, K.P. (2022). Role of Digital Technology in Agriculture, Indian Journal of Natural Sciences, 13(71): 40287-40290.

Padhy, C.; Reddy, M.D.; Raj, R.K. and Pattanayak, K.P. (2022). Challenges and Strategies for Effective Leadership in 21st Century, *Indian Journal of Natural Sciences*, 13(72): 42762- 42766.

Pattanayak, K.P. and Padhy, C. (2020). Entrepreneurial Skills and Competencies in the 21st Century for Business Growth – A Review, ShodhSarita, 7(28): 84-89.

Pattanayak, K.P. and Padhy, C. (2021). A Review on Entrepreneurial Crisis Management during Coronavirus (Covid-19) Pandemic, *Indian Journal of Natural Sciences*, 12(67): 32863-32867.

Pattanayak, K.P.; Mallik, B. and Padhy, C. (2022). The Requirement for Resilience in Order to Deal with the Stress that Comes with Entrepreneurship, *Indian Journal of Natural Sciences,* 13(72): 43421-43426.

Srivastava, U.K. (1989). Agro-Processing Industries: Potential, Constraints and Tasks Ahead, *Indian Journal of Agricultural Economics*, 44(3): July-September, pp. 242–256. The Fertiliser Association of India (2012), Fertiliser Statistics 2010-11, New Delhi.

United Nations, The 2030 Agenda and the Sustainable Development Goals: An opportunity for Latin America and the Caribbean (LC/G.2681-P/Rev.3), Santiago, 2018.

World Bank Group. (2017). India-Unlocking Agribusiness for Inclusive Growth, Jobs, and More: Policy and Investment Priorities. World Bank.