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Role of Fintech in Rising Food Outlets in India

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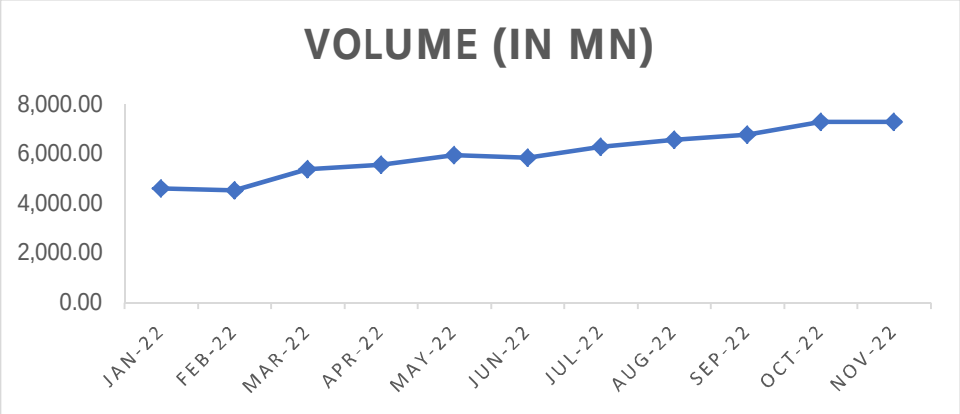
Abstract: ***As we all know that today's world is moving fast and it is very necessary to use financial technology to keep pace with the today's world as today's time is fully based on technology and due to change in taste and preference and life style of the people the food industry is also growing rapidly so the aim of this study is to know the role of financial technology in increasing the number of food outlets in India. To fulfil the purpose of this paper secondary data is collected from different sources for the variables i.e., Gross Domestic Product (GDP) as growth driver, Foreign Direct Investment (FDI), Financial and technological innovation and ease of doing business in India. To analyse the data regression analysis is applied. The findings of the study shows that GDP and FDI positively effects the number of food outlets in India whereas digital lending and information technology does not lead to the increase in number of food outlets in India.***
Keywords: Digital Lending, FDI, Fintech, Food Industry, Information Technology, GDP, Technological Innovation

I. INTRODUCTION

The services that a traditional financial service provider cannot offer, such as digital financing, instant seed money, appropriate financial advice, digital financial solutions, digital transactions, etc., are all provided by fintech's to businesses, whether they are small, medium-sized, or large. Innovation and a significant revolution in financial services are at the heart of fintech. The financial sector's sole "digital transformation" is responsible for a larger portion of all these altered features for the industry. Why is India leading the world in digital transformation with fintech? Why aren't other industries using it in the same way? Financial services cover all other businesses due to the extreme urgency, but the reverse is not true. You could say that necessity is now the mother of adoption in addition to innovation. the traditional. The previous financial services sector had a conventional outlook, but the present epidemic has completely altered this. It has effectively sped up a significant shift by essentializing a significant movement from the physical to the digital realm. This has forced the Indian fintech sector to excel by enabling companies through digitalization initiatives. It's important to note that this significant shift can be in large part due to fast evolving customer behaviors, novel patterns necessitated by cashless & contactless operations, and so on. *(Fusion Informatics limited)* So, the term "fintech "basically refers to new technology that aims to enhance and automate the delivery and usage of financial services. Fintech, at its most basic level, is used to assist organizations, company owners, and individuals better manage their financial operations, procedures, and lifestyles via the use of specialized software and algorithms that run on computers and, increasingly, smartphones. The term "fintech" is a mix of "financial technology" and "financial innovation."*(Investopedia).*

The most well-known (and well-funded) fintech start-ups all have one thing in common: they're built to pose a threat to, challenge, and eventually usurp established traditional financial services providers by being nimbler, serving an underserved segment, or providing faster and/or better service.



Graph no. 1 (UPI Transactions)

Undoubtedly, the above graph shows that UPI quickly rose to become everyone's preferred method of transaction. UPI-based transactions make up over half of all e-commerce transactions. Credit and debit cards come in second place *(NPCI).*

The Indian FinTech market is expanding quickly. In various areas of the financial services industry, FinTech businesses are updating their business models. They also contribute to the expansion of digital financial inclusion and the enhancement of service delivery. More than 2100 FinTech's make up India's vibrant FinTech sector, and 67% of them were founded in the past five years. The industry is worth 60 billion dollars overall. The epidemic has not impeded the industry's expansion. Since January 2020, the industry has noted the development of 3 new Unicorns and 5 new Soon corns amid the epidemic. Because of ingrained consumer demand, excellent technical expertise, a variety of funding flows, and supportive policy environment in India, the fintech sector is expanding rapidly. The topic of Indian FinTech's going global is also covered in the report. The "BCG-FICCI FinTech Survey 2021" was carried out by the BCG-FICCI in an effort to better understand the global aspirations of the FinTech industry. According to the poll, 39% of Indian fintech companies have operations outside of India, while 73% are looking at potential for global expansion. The research emphasises that North America and South-East Asia were the most desired locations for global expansion. Fintech and related digital technologies are playing a significant role in designing more sustainable business practises for food management, while also presenting appealing revenue opportunities for businesses and consumers. These include optimising food production and distribution, educating consumers, and connecting buyers and sellers *(FICCI-BCG Report).*

Indian food industry: The country's food business makes for roughly two thirds of all retail sales. By 2025, India's retail food market, which was worth $70 billion in 2008, is projected to reach $150 billion. Additionally, it is anticipated that between 2008 and 2012, India's agricultural exports will more than double, rising from $10 billion to $20 billion. India leads the world in the production of tea, sugarcane, milk, and pulses (lentils). It ranks second in the world for producing fruits, vegetables, rice, wheat, and other crops. India is one of the world's largest food producers and consumers, but it only represents less than 1.5% of global food trade *(Investindia).*

The paper will contribute in knowing the adoption of fintech by India and also will be helpful in evaluating the role and scope of fintech in developing and expanding food industry. It will be very supportive in examining the technological and financial innovation in all the sectors especially food processing sector of the country. The paper will also be responsible for providing all the trends and information regarding fintech in food processing industry at one place. It is also beneficent for different sectors to improve their financial and technological status and will motivate to adopt fintech widely. The aim of this paper is to know the overall growth of Food Industry in India by looking into the financial innovation adopted by Food Industry and also knowing the role of fintech in it.

Remaining paper is categorised as literature review, research methodology, data analysis, findings and results, recommendations and conclusion.

II. LITERATURE REVIEW

Large food companies' primary partnership approach is cooperative research. Open innovation was aggressively undertaken overseas in order to obtain raw resources and markets, resulting in greater growth and profitability. A company that seldom uses open innovation, on the other hand, may be able to develop gradually through internal techniques. On the other side, despite the deployment of a large number of open ideas, growth and profitability may suffer. Open innovation helps firms with sufficient absorptive capacity to increase their financial sustainability *(Jeong et al.,2020).* The innovation activities have a positive and substantial impact on product and process innovation. Process innovation, on the other hand, has a favourable impact on MSMEs' financial performance, but product innovation, while good, is not substantial. This means that senior executives in this industry should focus more on process innovation in order to improve their financial performance during the Dammam shutdown *(Yusuf Opeyemi Akinwale, 2020).* The goals of this research are to determine the current status of financial technology research, identify gaps in the area, and identify problems and trends for future research possibilities. The results of this study provide a theoretical basis for fintech research from an information systems perspective, including the formulation of fintech technology concepts and their development, using Kitchenham's systematic literature review approach, as well as thematic analysis, meta-analysis, and observation to validate the quality of literature and analysis *(Suryono et al., 2020).* The essential aspects for Information Communication Technology (ICT) applications in the Indian food sector for long-term growth of SMEs. For factor analysis, the Grey based Decision-Making Trial and Evaluation

Laboratory approach was used. The findings suggest that "government policies and initiatives" are at the heart of efforts to improve the food supply chain *(Singh et al. 2019).* The potential of block chain to future-proof the food industry, allowing consumers to verify product claims and thereby protect themselves from food fraud.

In doing so, the paper examines future trends in the food industry, identifies current instances of food fraud, and describes the various applications in the food chain and the challenges they pose *(Singh and Sharma,2022).* The results confirmed that the added value of the farmer is positively correlated to the added value of the supplier, the added value of the processor and the added value of the distributor. Furthermore, the sum of the supplier's value is positively related to the sum of the transformer's value and the sum of the transformer's value is positively related to the sum of the distributor's value. Furthermore, the distributor's value addition correlates positively with the retailer's value addition *(Sashi et al.,2016).* The objective is to understand the organizational factors, which influence investment on ICT at the firm level. The Technology-Organization-Environment (TOE) framework is adopted to understand the organization factors affecting company's ICT investment. The study sample is made up of companies in the bakery sector. The study reveals that last year's ICT investment have a significant impact on current year's business ICT investment. The result of the econometric methods also shows that large, labour-intensive and heavily liquidated firms invest more in ICT in the present study *(Navyashree and Bhat.,2020).* Focuses on the technological competitiveness of the agri-food sector Processing units in the state of Jammu and Kashmir, India. The study establishes a relationship of Competitive performance in terms of investment in technology that describes the Orientation of business technology. The results describe the dynamics of the technology boosted competitiveness in agriculture food processing operations of Jammu and Kashmir state. *(Sultan et. al.,2016).* This study examines 1015 papers that were published in specialist journals in order to provide a bibliometric analysis of technological innovation in the food business. The methodology entails using the SCIM at and VOS viewer tools to analyse bibliometric indicators of quantity and quality *(Vergara et al.,2021).*

III. RESEARCH METHODOLOGY

For this paper, All the relevant literature were thoroughly reviewed. The paper is based on the secondary data collected through various sources i.e., Ministry of Food processing industry in India (MOFPI). Information related to GDP, information technology and digital lending was collected from Reserve bank of India (RBI). Data related to Foreign direct investment and Ease of doing business has been taken from Department of Industrial Policy Promotion (DIPP), Ministry of Commerce and World Bank (WB). The paper analyses the data from 2007 to 2021 and implemented regression analysis to find out the casual relationship between dependent and independent variables i.e., Food outlets in India and Growth drivers, Ease of doing business, FDI, and Financial Innovation. The paper also gives some implications at the end.

Table no. 1 (Variables)

Independent variables	Proxies	sources
1. Growth Driver	Gross Domestic Product and number of registered persons in Food Processing sector	Ministry of industrial policy and promotion, Ministry of Food Processing Industry (MOFPI)
2. Ease of doing business	Ease of doing business	World bank (WB)
3. Foreign Direct Investment (FDI)	Foreign Direct Investment (FDI)	World bank (WB)
4. Financial innovation	Digital lending and information technology	Reserve Bank of India (RBI)

A. *Data Analysis And Interpretation*

1) *Linear Regression:* Linear Regression is used to investigate the relationship between the dependent and independent variable. It is usually applied to identify the casual effect of on variable upon the other.

Reg 1nn 1ngd 1nease d1 1nit, vce (robust)

Linear regression

Number of obs = 64
F (5,58) =6499.41
Prob > F =0.0000
R-squared =0.984
Root MSE =.46729

Table no. 2 (Linear Regression)

1nn	coefficient	Robust Standard error	t	P >| t |	95% conf. interval]
1ngd	3.29493	.1632711	20.18	0.000	2.968108
1nfdi	.0771215	.0393841	1.96	0.055	-.0017144
1nease	-4.219009	.9388606	-4.49	0.000	-6.098343
d1	-.0240325	.0053507	-4.49	0.000	-.034743
1nit	-.2801266	.0702565	-3.99	0.000	-.4207602
_cons	-9.249434	5.655616	-1.64	0.107	-20.57039

2) *Correlation Analysis:* Correlation Analysis is used to investigate the behavior between two variables and to investigate the presence and absence of relationship between the variables.

Corr 1nn 1ngd 1nfdi 1nease d1 1nit
(obs=64)

Table no. 3 (Correlation Coefficient)

	1nn	1ngd	1nfdi	1nease	d1	1nit
1nn	1.0000					
1ngd	0.9771	1.0000				
1nfdi	-0.7795	-0.8645	1.0000			
1nease	-0.4278	-0.5225	0.5112	1.0000		
d1	0.5822	-0.6745	-0.6541	-0.9747	1.0000	
1nit	-0.1497	-0.0022	-0.2123	-0.6373	0.5276	1.0000

3) *Descriptive Statistics:* The data presented is described or represented visually in the same way as the data obtained because the aim of descriptive statistics is to convey information based on data. Tables, graphs, and other representations of the data can be used to display the results of descriptive statistics.

Sum 1nn 1ngd 1nfdi 1nease d1 1nit

Table no. 4 (Descriptive Statistics)

Variables	obs	Mean	Standard deviation	Min	Max
1nn	64	8.694595	3.625644	2.711378	11.40582
1ngd	64	13.11434	1.278216	10.98108	14.33667
1nfdi	64	6.286313	3.755409	2.875258	10.74841
1nease	64	4.602647	.4703052	3.198673	4.955827
d1	64	68.21875	89.87263	-16	322.5
1nit	64	16.75504	2.131557	13.79857	19.10932

4) *Durbin Watson test:* used to find autocorrelation in regression analysis residuals.

estat dwatson
Durbin-watson d-statistic (6, 64) = 1.072755

B. Interpretation Of Data

1) Relationship between GDP and number of food outlets in India

The above table no.3 shows that there exists a positive causal relationship between GDP and number of food outlets as P value < 0.05 i.e., 0.000 which indicates that if 1unit of GDP increase then it leads to increase in 3 units of food outlets in India. Increasing GDP indicates growth of India and as the economy of a country increases the food industry also grows due to the increasing population and change in the taste and preference of the consumer, thus leads to expand number of food outlets in India.

2) Relationship between FDI and number of food outlets.

The above table no. 3 shows that there exists a positive causal relationship between FDI and food outlets in India as P value < 0.05 i.e., 0.055 which indicates that if 1 unit of FDI increases then it leads to increase in 0.7 unit of food outlets in India. A favorable political environment and demand push effect of growth young consumers disposable income India offers significant investment opportunities in the food industry and therefore become an attractive investment destination for foreign investors. Although there are many promising dynamics in this area, supporting the healthy growth of food industry in India by providing opportunities for talented foreigners. Investment in frozen food processing technology, packaging etc. Thus, the FDI has increased significantly year by year which ultimately increases the number of food outlets in India.

3) Relationship between ease of doing business and number of foods outlets in India

From the above data it is seen that there exists a negative relationship between Ease of doing business and number of food outlets in India as P value <0.05 i.e., 0.000 which indicates that if 1 unit of FDI increases in India leads to the 4 units of decrease in number of food outlets. Doing business in India is getting easier day by day and this attracts outsiders towards India to expand or set up their business in the country thereby surpassing or leading to decrease in number of small food outlets in India.

4) Relationship between digital lending and number of food outlets in India

Digital lending has negative impact on the number of food outlets in India as shown in table no. 3 the P value is 0.000 which is less than 0.05 means if 1 unit of Digital Lending increases it will lead to decrease in 0.02 unit of food outlets, the reason behind this is that digital lending is apart from banks. Digital lending services are provided by certain applications and the policies and rules are very stringent so it is not easy for people to take loan digitally and if somehow, they are able to take loan through digital lending, they fail to repay it thus trapped by debt.

5) Relationship between Information Technology and number of food outlets

Table no. 3 shows the negative relationship between information technology and food outlets in India as if 1 unit of IT increases the 0.28 unit of food outlets decreases. Information technology are definitely promoting the food outlets in India but only the larger such as KFC, ZOMATO etc. it fails to promote the expansion of retail and small food outlets as people use digital technology to order food from reputated once and the small food outlets hesitate to use digital and information technology for their restaurant hance not able to expend themselves. Hence information technology does not lead to the increase in number of food outlets.

IV. SUGGESTION AND CONCLUSION

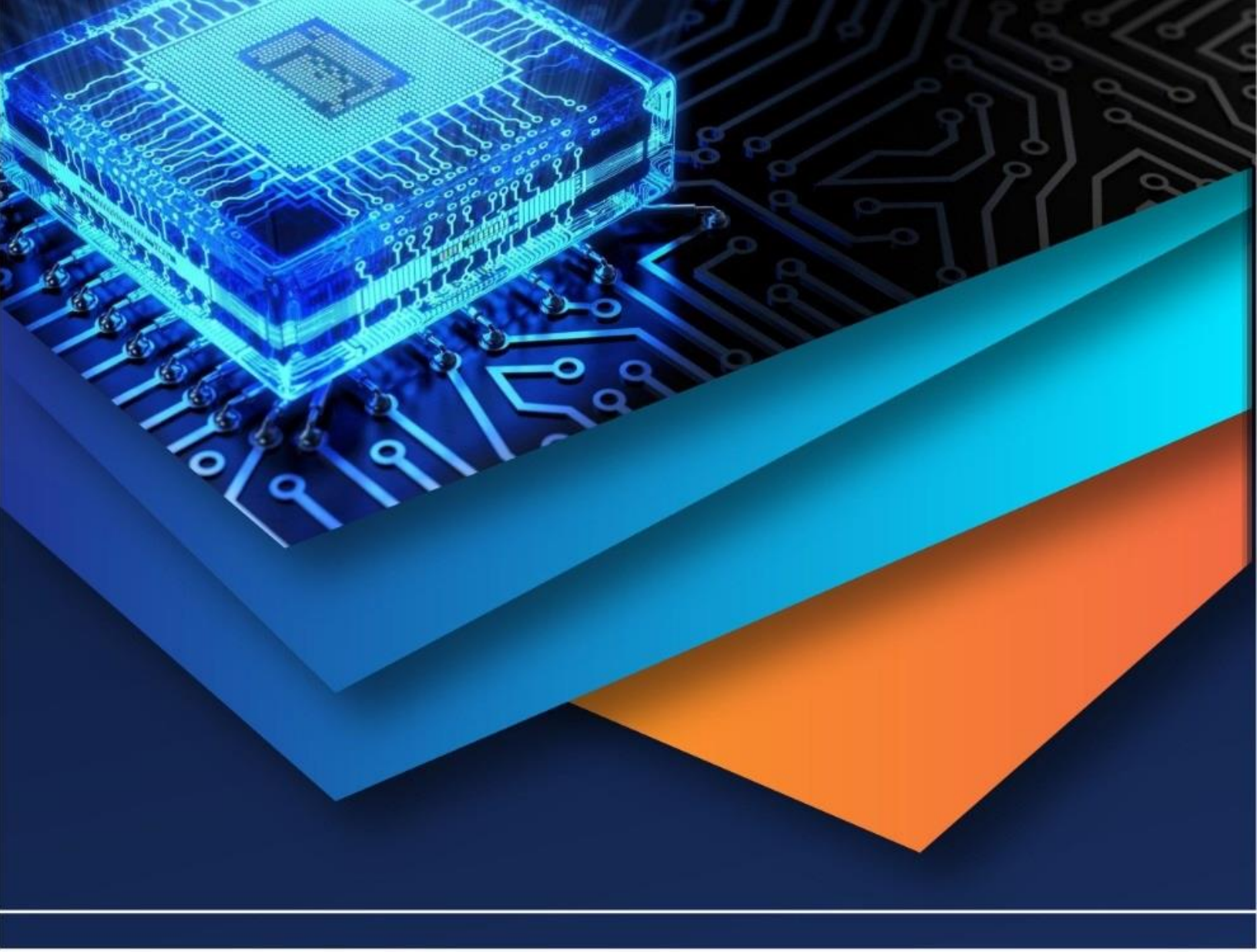
The study makes it abundantly evident that increased economic development, especially in developing countries like India depends on expanding industrial sectors i.e., food industry and financial technology industry where equity-based growth is very much important. The optimal development of food system with financial technology plays a major role in addressing issues like reducing food waste, enhancing nutrition, raising funds, risky transactions etc.

The paper's findings and conclusion are that food industry requires lots of financial and technological innovation so as to overcome the above issues and the government should promote foreign investment, digital lending and information technology in food processing industry and it continuously records high growth and provides employment opportunities thus contributes for the economic development of the country. Therefore, India should always work to become a competitive, effective and appealing investment location via efficient government policies and initiatives.

REFERENCES

[1] Athukorala, P.C. and Sen, K. (1998), "ProcessedFood Exports from Developing Countries: Patterns and Determinants", (Mimeo).
[2] Desai, Vasant (2003), "Small scale Industry and Entrepreneurship", Himalaya Publishing House, New Delhi

[3] Saravan, S. and Mohansundaram, V. (2013), "An Analysis of FDI in Indian Food Processing Industry", Indian Journal of Applied Research, Vol. 3, Issue 3, March, pp. 80-81
[4] Government of India, Ministry of Food Processing Industries (2011), "Strategic Plans for Food Processing Industry in India".
[5] Ministry of Food Processing Industries (2012), "Data Bank on Economic Parameters of the Food Processing Sector", New Delhi.
[6] Jeong H, Shin K, Kim E, Kim S. Does Open Innovation Enhance a Large Firm's Financial Sustainability? A Case of the Korean Food Industry. Journal of Open Innovation: Technology, `Market, and Complexity. 2020; 6(4):101. https://doi.org/10.3390/joitmc6040101
[7] Suryono RR, Budi I, Purwandari B. Challenges and Trends of Financial Technology (Fintech): A Systematic Literature Review. Information. 2020; 11(12):590. https://doi.org/10.3390/info11120590
[8] Singh, V., Sharma, S.K. Application of blockchain technology in shaping the future of food industry based on transparency and consumer trust. J Food Sci Technol (2022). https://doi.org/10.1007/s13197-022-05360-0
[9] GR, N. and Bhat, S. (2020), "Drivers of ICT investments in bakery and sugar confectionery processed food sub-sector in India", Journal of Agribusiness in Developing and Emerging Economies, Vol. 10 No. 2, pp. 191-202. https://doi.org/10.1108/JADEE-01-2019-0001
[10] Sultan, Abid; Saurabh; Jain, Deepak.
[11] South Asian Journal of Management; New Delhi Vol. 23, Iss. 4, (Oct-Dec 2016): 54-68.
[12] Sarkar, S. and A. K. Karan (2005), "Status and Potentials of village agro-processing units/industries", Occasional paper 37, National Bank for Agriculture and Rural Development, Mumbai.
[13] Other Important Sources for Data relating to food processing industries
http://dipp.nic.in
http://mospi.nic.in
www.apeda.gov.in
http://rbi.org.in
www.fao.org
http://agricoop.nic.in
Ease of doing business 2.0 - KPMG India (home.kpmg)
Indiaretailing.com
World Bank Group - International Development, Poverty, & Sustainability
UPI: Unified Payments Interface - Instant Mobile Payments | NPCI



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