

## INDIA'S FOREIGN TRADE PERFORMANCE OF AGRICULTURAL PRODUCTS IN MALDIVES

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### ABSTRACT

The study seeks to establish a trade relationship between agricultural products in the Maldives. India has become a significant player globally, especially for rice, cotton, sugar, and buffalo meat. Notwithstanding these items, India has likewise become a sizeable exporter of soybean supper, guar gum, corn, and wheat, just as differing scope of different things. India is the second-biggest organic product maker on the planet. Production of horticulture crops is estimated at a record of 313.9 million metric tonnes (MMT) in 2018-19 as per third advance estimates. In their present study, an aggregate of more identified with the agricultural product was chosen for the essential items. The statistical data used descriptive analysis and correlation. The study also reveals the critical relationship between farm products. Their research paper point was to the trade performance of agricultural products in the Maldives conceded out for five years from 2014-15 to 2018-19.

**Keywords:** Agricultural products, Trade and Organic Product.

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### I. INTRODUCTION

Agriculture is the science or practice of cultivating, including the development of the dirt to develop yields and the raising of creatures to give food [1], fleece [2], and different items [3]. Farming is the essential wellspring of jobs for around 58 percent of India's populace [4]. Growth in Gross Value Added (GVA) by agriculture and allied sectors stood at 2.1 percent in H1 2019-20 [5].

India is relied upon to accomplish the aspiring objective of multiplying ranch salary by 2022 [6]. India's agribusiness division is relied upon to create better energy in the following hardly any years because of expanded interests in the agricultural foundation [7], for example, water system offices [8], warehousing [9], and cold stockpiling [10].

Overall, agri and processed food exports rose to Rs 1.28 lakhs crore in 2019 from Rs 1.20 lakhs crore in the 2017-18 fiscal. While exports of Basmati rice grew, there was a steep decline in the export value of non-Basmati rice [11].

India and Maldives signed a trade agreement in 1981, which provides for the export of essential commodities. Bilateral trade is not commensurate with its potential [12].

### II. REVIEW OF LITERATURE

**Lakshmi Bala and Sudhakar (2017)** in this paper revealed "An Overview of Export Performance of Agricultural Products in India" have stated that export is the basis of the overall growth performance of any country. By increasing the rate of exports and development, countries can pave the way for action by earning international liquidity, thereby sorting out reserves to start up any project to come out of the circle of poverty. So, it becomes paramount for a country like India to start export promotion measures to boost the pace of its exports, and India has already taken many steps to increase its exports. It is concluded from the results of the

study that raw cotton, including waste, iron ore, plastic and linoleum, and transport equipment, has been observed as the products in which exports have been increased at the maximum rate. In contrast, exports of tea, iron, steel, mica, and leather and manufacturing have been identified as the areas in which satisfying results have not been achieved. So, it has been suggested that government should promote exports of different sectors by providing additional incentives to other industries to avail the opportunity and fill up the gaps as well. Indian agricultural export has undergone significant changes during recent times. The study has also analyzed the revealed comparative advantage (RCA). The RCA improved cotton, maize, and certain fruits and vegetables over time but declining in some spices, rice, and wheat. In plantation-based spices and other commodities, India is gradually losing its comparative edge, mainly to Asian countries. The study has so identified yield improvement through growth in total factor productivity (TFP) as a potential factor that would result in the generation of exportable surpluses and boosting India's export [13].

**Namita Kaur and Vishal Sarin (2017)**, in their article “**Comparative Advantages and Competitiveness of Indian Agricultural Products Exports to ASEAN in context of India's Look East Policy**” have stated that strengthening trade relations with East Asian countries has always been a matter of priority for two reasons. First, India wants to reduce dependence on developed countries as far as its trade is concerned and second, India wants to exploit large potential of growth lying with East Asian countries. In this direction, most coveted “Look East Policy” came into existence and India got its first free trade agreement in the form of India-ASEAN free trade agreement (AIFTA). But owing to its heavy reliance on agriculture, India never enjoyed a convincing position in agriculture products trade with ASEAN countries in particular and world, in general. This research paper measured the Indian export competitiveness vis-a-vis ASEAN countries in case of agriculture products and found that the products which India exported to AESAN countries from 2001-15 showed a little change in the comparative advantage and competitiveness [14].

### III. OBJECTIVES OF THE STUDY

The main objectives of this study have been India's foreign trade among the agricultural products in Maldives [15]. The researcher set the prime objectives is analyse export of the agricultural products for the period of five years 2014-15 to 2018-19 in Maldives [16]. The secondary objectives said that import performed in agricultural products from Maldives [17].

### IV. RESEARCH METHODOLOGY

#### 1. Period of the Study

The present study examines the India's foreign trade for five years (2014-15 to 2018-19).

#### 2. Data Collection

The study is mainly focused on the secondary sources. The data have been collected from secondary sources such as research papers, research reports, journals, and websites. Secondary data was collected from the Agricultural and Processed Food Products Export Development Authority (APEDA) during the study period of five years from 2014-15 to 2018-19.

#### 3. Tools for Data Analysis

The present study, table and graph representation tools are used statistical analysis [18],[19]. The researcher using the statistical analysis are descriptive analysis and Pearson correlation for the five years trade performance tested [20].

### V. HYPOTHESIS OF THE STUDY

- There is no significant relationship between the export of agricultural products Quantity and value to Maldives.
- There is no significant relationship between the import of agricultural products Quantity and value from Maldives.

### VI. LIMITATIONS OF THE STUDY

The present study focused only agricultural products [21]. The data used for this study only for the last five years of agricultural products. This study only made for the years-wise among the trade [22].

## VII. RESULTS AND DISCUSSION

### Export Performance of Agricultural Products to Maldives

The volume and value of agricultural products export to Maldives for the period of 2014-15 to 2018-19.

**Table -1. Export Performance of Agricultural Products to Maldives**

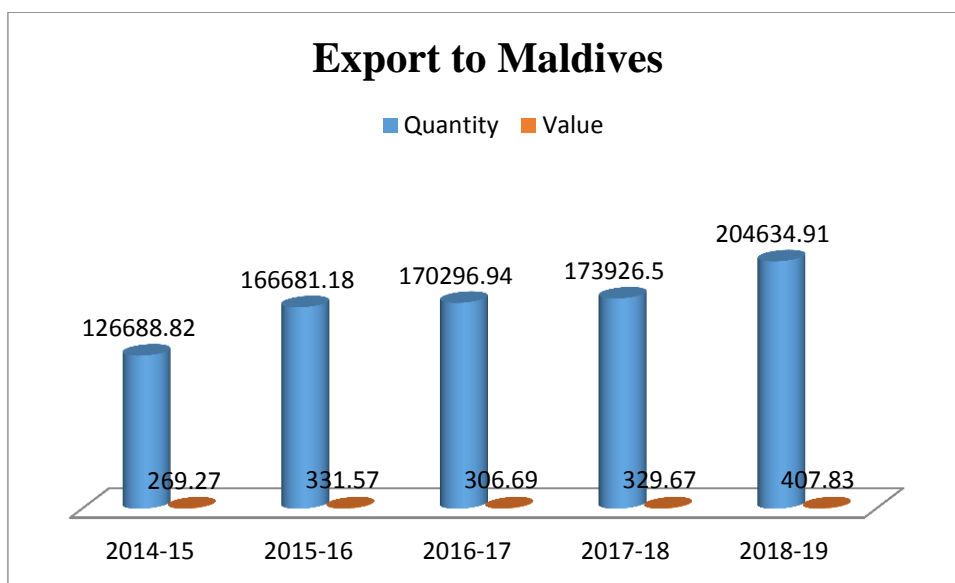
Year	Export Quantity(Mts)	Export Value (Rs in Crore)
2014-15	126688.82	269.27
2015-16	166681.18	331.57
2016-17	170296.94	306.69
2017-18	173926.5	329.67
2018-19	204634.91	407.83
Total	842228.35	1,645.03
Minimum	126688.82	269.27
Maximum	204634.91	407.83
Mean	178884.88	329.00
SD	17419.64	50.71
CV	0.09	0.15
CAGR %	10.06	8.66

#### Source: Secondary Data

From the above table 1, by looking at the table, we can infer that the maximum of agricultural products export was quantities to 204634.91 in Mts, which is 2018-19. The minimum amount of agricultural product export earnings product quantities is 126688.82 Mts in 2014-15. An average India is agrarian exporting to the Maldives for 178884.88 Mts every year with a standard deviation of quantities 17419.64 Mts. By looking at the exports of agricultural products are always volatile, and hence the compound annual growth rate is 10.06 percent [23].

From the above table 1, by looking at the table, we can conclude that the maximum amount of agricultural products export was amounting to 407.83 crore in rupees in the year 2018-19 [24]. The minimum amount of agricultural products export earnings is 269.27 crore rupees in the year 2014-15. An average India is agricultural exporting to the Maldives for the amount of 329.00 Rs in Crore every year with a standard deviation of the amount of 50.71 Rs in crore. By looking at the growth rates, one can easily predict that the export products are always volatile, and hence the compound annual growth rate is 8.66 percent [25].

Graph-1. Export Performance of Agricultural Products to Maldives



From the Graph 1, it is easy to infer that there is a steady increase over the years in the export performance of India and this is confirmed by the positive Compound Annual Growth Rate of around 10.06 and 8.66 percent [26].

Table - 2. Correlation Analysis

		Export- Quantity	Export-Value
Export-Quantity	Pearson Correlation	1	.941
	Sig.(2-tailed)		.017
	N	5	5
Export-Value	Pearson Correlation	.941	1
	Sig.(2-tailed)	.017	
	N	5	5

\*.Correlation is significant at the 0.05 level (2-tailed).

The estimated significance value for the variables; Maldives Export-Quantity [Metric Tons] and Maldives-Export-Value (Rs in Crore) is 0.017 which is less than 0.05, so there is a significant relationship between the variables [27]. The calculated correlation (R) value is 0.941, which indicates there is a strong positive relationship between the considered variables; Maldives Export-Quantity (Metric Tons) and Maldives-Export-Value (Rs in Crore). Hence, we can perceive that, when India’s export to Maldives increases considerably [28].

**Import Performance of Agricultural Products from Maldives**

The volume and value of agricultural products import from Maldives for the period of 2014-15 to 2018-19.

Table - 3. Import Performance of Agricultural Products from Maldives

Year	Import Quantity(Mts)	Import Value (Rs in Crore)
2014-15	0.06	0
2015-16	5	0.07
2016-17	0.03	0

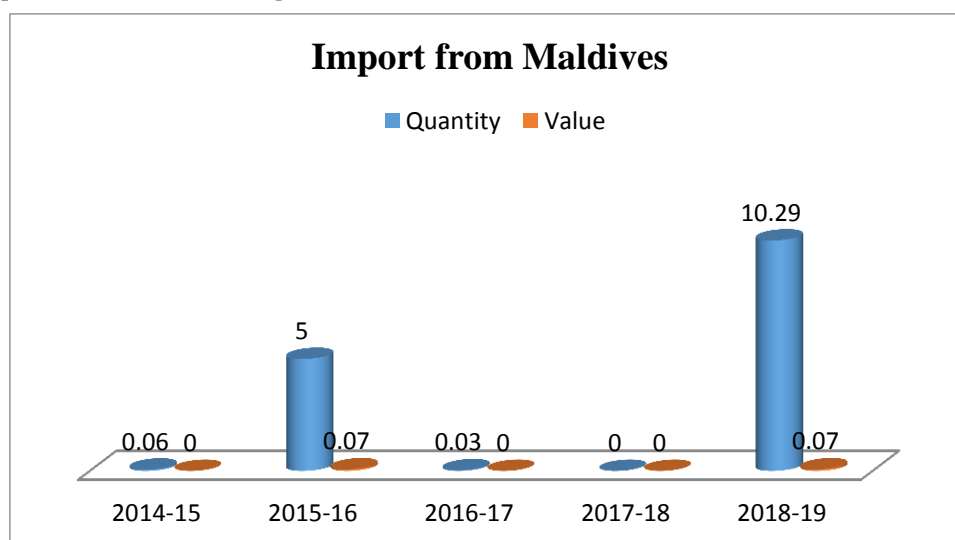
2017-18	0	0
2018-19	10.29	0.07
Total	15.38	0.14
Minimum	0	0
Maximum	10.29	0.07
Mean	3.07	0.02
SD	4.57	0.03
CV	1.48	1.5
CAGR %	179.8	--

**Source: Secondary Data**

From the above table 3 by looking at the table we can infer that the maximum of agricultural products import was quantities to 10.29 in Mts which is in the year 2018-19 The minimum quantity of agricultural product import earnings product quantities are 0 Mts in the year 2017-18 [29]. An average India is agricultural importing from Maldives for quantities of 3.07 Mts every year with a standard deviation of quantities 4.57 Mts. By looking at the imports of agricultural products are constantly volatile and hence the compound annual growth rate is 179.8 percent [30].

From the above table 3 by looking at the table we can conclude that the maximum amount of agricultural products import was amounting to 0.07 crore in rupees which is in the year 2015-16 and 2018-19 and this is clearly seen in the Graph 2 which indicates this by a dip [31]. The minimum amount of agricultural products import earnings is 0 crore rupees in the year 2014-15, 2016-17 and 2017-18. An average India is agricultural importing from Maldives for amount of 0.02 Rs in Crore every year with a standard deviation of amount of 0.03 Rs in crore [32].

**Graph-2. Import Performance of Agricultural Products from Maldives**



From the Graph 2, it is easy to infer that there is a steady fluctuation over the years in the import performance of India and this is confirmed by the positive Compound Annual Growth Rate of around 179.8 percent [33].

**Table – 4. Correlation Analysis**

		Import- Quantity	Import-Value
Import-	Pearson Correlation	1	.912

<b>Quantity</b>	Sig.(2-tailed)		.031
	N	5	5
<b>Import-Value</b>	Pearson Correlation	.912	1
	Sig.(2-tailed)	.031	
	N	5	5

\*.Correlation is significant at the 0.05 level (2-tailed).

The estimated significance value for the variables; Maldives Import-Quantity [Metric Tons] and Maldives-Import-Value (Rs in Crore) is 0.031 which is less than 0.05, so there is a significant relationship between the variables [34],[35]. The calculated correlation (R) value is 0.912, which indicates there is a strong positive relationship between the considered variables; Maldives Import-Quantity (Metric Tons) and Maldives-Import-Value (Rs in Crore) [36],[37]. Hence, we can perceive that, when India's import from Maldives increases considerably.

### VIII. CONCLUSION

The present study has evaluated the trade performance of agricultural products in India. The study focused on the export and import of farm products of the trade for the Maldives. Some agricultural products have performed in the Maldives. In their products like Poultry Products, Non-Basmati Rice, Other Fresh Vegetables, Fresh Onions, and Other Fresh Fruits: Firstly, India has the highest export of agricultural product quantities are 204634.91 Mts, and the value is 407.83 Rs in Crore. Secondly, the import of agricultural products from Maldives quantities is 10.29 Mts. Finally, the study concludes that export and import of augmented, which indicates the significant improvement the economy developed in India.

### ACKNOWLEDGEMENTS

I heartily thank to the Department of International Business in Alagappa University. This research work was partially supported and sponsored by RUSA 2.0 scheme of MHRD in Alagappa University, Karaikudi.

### IX. REFERENCES

- [1] Dr.M.Lakshmi., And K.Sudhakar (2017), "An Overview Of Export Performance Of Agricultural Products In India" Journal Of Business And Management, 19(2). Pp:1-5.
- [2] Namita Kaur., And Vishal Sarin (2017), "Comparative Advantages And Competitiveness Of Indian Agricultural Products Exports To ASEAN In Context Of India's Look East Policy" International Journal Of Agriculture Statistical Science. 13(1).Pp:159-167.
- [3] V. Palanisingham, V. Abdul Salahudeen., And Dr. T.R.Gurumoorthy (2017), "Dairy Exports In India: Production And Consumptions" International Journal Of Advance Research In Management And Social Science, ISSN: 2278-6236, 6(5), Pp.70-75.
- [4] Dr.S.Gopalsamy., And M.Arul Kumar.(2020), "Export Of Wheat In India-With Reference To Middle East Countries" CLIO An Annual Interdisciplinary Journal Of History, ISSN:0976-075X, 6(2), Pp.509-518.
- [5] Nilanjana Kumari.(2014), India's Foreign Trade With China With Special Reference To Agricultural Commodities, Abhinav National Monthly Refereed Journal Of Research In Commerce & Management, 3(9), Pp. 40 - 48.
- [6] Babasaheb R Jadhav.,And Anita S Satpute (2014). "Direction And Composition Of India's Foreign Trade" International Journal Of Business Economics & Management Research, 4 (10), Pp: 46-58.
- [7] Saraswati.(2014), "Export Potential Of Food Processing Industry In India", International Journal Of Computing And Corporate Research, 4(2), Pp: 1-14.
- [8] M.Arul Kumar., And Dr.S.Gopalsamy (2020). "India's Foreign Trade Performance Among Bangladesh-With Special Reference To Agricultural Products" Studies In Indian Place Names, 40(60), Pp: 2329-2336.
- [9] Wwww.Apeda.Gov.In
- [10] Wwww.IBEF.Org

- [11] M.Mahendraprabu, K.Sathish Kumar, M.Mani, P.Saravana Kumar , “Open Educational Resources And Their Educational Practices In Higher Education,” Mukta Shabd Journal, Vol. 10, No. 2, Pp. 527–540.
- [12] N Mahalakshmi, M Mahendraprabu, Mani Mookkiah, Sathish Kumar, “Work Values Of Secondary Grade Teachers Based On Certain Selected Variables,” Journal Of Xi'an University Of Architecture & Technology.,12(3), 4910–4918 (2020).
- [13] Mani Mookkiah, Mahendraprabu, Kalaiyaran, Ramnath, Sasikumar, Sathish Kumar, Sathiyaraj , “Yoga Based Intervention Strategies In Accelerating Self-Efficacy Among Primary School Teachers,” Elementary Education Online, Vol. 20, No. 4. Pp. 794–805, 2021, <https://doi.org/10.17051/ilkonline.2021.04.85>
- [14] Kumar, K., Mahendraprabu, M. Open Educational Practices Of SWAYAM Programme Among Research Scholars. Educ Inf Technol (2021). <https://doi.org/10.1007/S10639-021-10495-2>
- [15] Kumar, K. S., Mahendra Prabhu, M., Kalaiyaran, G., Ramnath, R., Sasi Kumar, N., Mookkiah, M., ... B, R. (2021). OPEN EDUCATIONAL PRACTICES FOR RESEARCH EFFECTIVENESS TO RESEARCH SCHOLAR. International Research Journal Of Modernization In Engineering Technology And Science, 3(4), 113–121.
- [16] Kumar, K.Sathish; Mahendraprabu, M.; Kalaiyaran, G.; R.Ramnath, R.; Kumar, N.Sasi; And Mookkiah, Mani, "Social Media As An Open Educational Practice Tools And Challenges" (2021). Library Philosophy And Practice (E-Journal). 5265. <https://digitalcommons.unl.edu/libphilprac/5265>.
- [17] Kumar, K. S., Prabu, M. M., Kalaiyaran, G., Ramnath, R., Kumar, N. S., Mookkiah, M., Kumar, M. A., & M.Manida. (2021). Impact Of The Open Educational Practices Through Academic Achievement With Emotional, Social And Academic Adjustment Among Researchers. International Journal Of Research Publication And Reviews, 2(4), 434–444. <https://doi.org/10.5281/ZENODO.4705214>
- [18] Kumar, K. S., & Mahendraprabu, M. (2021). PERCEPTION OF OER AND OEP. Notion Press. <https://notionpress.com/read/perception-of-oer-and-oep>.
- [19] Kumar, K. S., & Mahendraprabu, M. (2020). Awareness Of Swayam Programme Among The Postgraduate Students. LAP LAMBERT Academic Publishing. <https://www.amazon.com/Awareness-Swayam-Programme-Postgraduate-Students/dp/6203193445>.
- [20] Kumar, K. S. (2018). International Conferences On Curriculum And Instructional Designing For Global Education. In SOCIAL MEDIA AS A LEARNING TOOL IN MODERN EDUCATION TREND (1st Ed., Vol. 2, Pp. 495–497). Karaikudi, Tamil Nadu; Alagappa University. [https://www.researchgate.net/publication/327971761\\_SOCIAL\\_MEDIA\\_AS\\_A\\_LEARNING\\_TOOL\\_IN\\_MODERN\\_EDUCATION\\_TREND](https://www.researchgate.net/publication/327971761_SOCIAL_MEDIA_AS_A_LEARNING_TOOL_IN_MODERN_EDUCATION_TREND).
- [21] Kumar, K. S. (2017). National Conference In Education And Empowerment Of Women With Disabilities Towards Sustainable Development. In DEFIANCE OF WOMEN WITH DISABILITY (1st Ed., Vol. 1, Pp. 30–32). Karaikudi, Tamil Nadu; Alagappa University. [https://www.researchgate.net/publication/350767087\\_DEFIANCE\\_OF\\_WOMEN\\_WITH\\_DISABILITY?\\_sg=W0aeeu0ld2fzm0hqjkbkse65jyuvzrehbrqmrfrpmezcmrd9o5mzzcbtucqucwag9dyvzffw3pyhcdyjofoaj9sb7k\\_C-U3trgfunqjx1h.Vr0kfrsdgljpsg05ija5gp\\_Jrdwe4\\_Y9kgnutlgwntlyys-Oiiu9yi8n](https://www.researchgate.net/publication/350767087_DEFIANCE_OF_WOMEN_WITH_DISABILITY?_sg=W0aeeu0ld2fzm0hqjkbkse65jyuvzrehbrqmrfrpmezcmrd9o5mzzcbtucqucwag9dyvzffw3pyhcdyjofoaj9sb7k_C-U3trgfunqjx1h.Vr0kfrsdgljpsg05ija5gp_Jrdwe4_Y9kgnutlgwntlyys-Oiiu9yi8n).
- [22] Kumar, K. S. (2018, September 26). SOCIAL MEDIA AS A LEARNING TOOL IN MODERN EDUCATION TREND. [https://www.researchgate.net/publication/327971761\\_SOCIAL\\_MEDIA\\_AS\\_A\\_LEARNING\\_TOOL\\_IN\\_MODERN\\_EDUCATION\\_TREND](https://www.researchgate.net/publication/327971761_SOCIAL_MEDIA_AS_A_LEARNING_TOOL_IN_MODERN_EDUCATION_TREND).
- [23] Arul Kumar, M., & Gopalsamy, D. S. (2018). India's Export Performance Of Agricultural Products To BRICS Countries. International Journal Of Humanities And Social Science Research, 5(1), 58–60.
- [24] Arul Kumar, M., & Gopalsamy, D. S. (2019). India's Foreign Trade Relationship Between Nepal –With Special Reference To Agricultural Products. International Journal Of Advance And Innovative Research , 6(2), 133–136.
- [25] Arul Kumar, M., & Gopalsamy, D. S. (2020). Export Of The Agricultural Products In India – With Special Reference To Saarc Countries. International Journal Of Scientific & Technology Research, 9(1), 3151–3158.

- [26] Arul Kumar, M., & Gopalsamy, S. (2019, November 25). India's foreign trade performance of Sri Lanka - with special reference to agricultural products. SEUIR Home. <http://ir.lib.seu.ac.lk/handle/123456789/4296>.
- [27] Arul Kumar, M., & Gowri, S. (2018). India's Export Performance Of Floriculture To Middle East Countries: An Analytical Study. *International Journal For Innovative Research In Multidisciplinary Field*, 4(10), 323-328.
- [28] Ganesan, S., & Arul kumar, M. (2019). Trends of Big Data Analytics: Impacts and Difficulties review. *International Journal of Advanced Science and Technology*, 28(19), 1260-1266.
- [29] Gopalsamy, D. S., & Arul Kumar, M. (2019). Coffee Export from India. *International Journal of Scientific Development and Research*, 4(5), 516-520.
- [30] Gopalsamy, D. S., Prabakaran, P., & Arul Kumar, M. (2020). India's Trade Performance With Russia In Textiles. *Mukt Shabd Journal*, IX(V), 3485-3492.
- [31] Gopalsamy, S., & Arul Kumar, M. (2020). Export Of Wheat In India-With Reference To Middle East Countries. *Clio An Annual Interdisciplinary Journal of History*, 6(2), 509-518.
- [32] Kumar, MARUL KUMAR, & Gopalsamy, D. R. S. (2018). Export Of The Cereal Preparations In India-With Special Reference To Brics Countries. *ZENITH International Journal of Multidisciplinary Research*, 8(10), 185-193.
- [33] Kumar, M. A., & Gopalsamy, S. (2019). Agricultural Sector FDI and Economic Growth in Saarc Countries. *International Journal of Recent Technology and Engineering*, 8(2S10), 116-121. <https://doi.org/10.35940/ijrte.b1019.0982s1019>
- [34] M, M., Nedumaran, G., Kumar, M. A., & Alaguraja, M. (2020). Effect of Mobile Applications on Farming in Virudhunagar District - A Study. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3551979>
- [35] Manida, M. M., Nedumaran, D. G., Prabakaran, M. V., Arul Kumar, M. M., & Alaguraja, M. M. (2020). Challenges And Possible Of Organic Farming. *Challenges And Possible Of Organic Farming*, 14(3), 156-165.
- [36] Manida, M. M., Nedumaran, D. G., Prabakaran, M. V., Arul Kumar, M. M., & Alaguraja, M. M. (2020). CHALLENGES AND POSSIBLE OF ORGANIC FARMING. *Journal of Xidian University*, 14(3), 156-165.
- [37] Manida, M., Prabakaran, V., & Arul Kumar, M. (2020). Challenges Of Organic Farming On Rural Development In Tamilnadu. *Dogo Rangasang Research Journal*, 10(8), 154-161. (PDF) Impact of the Open Educational Practices through Academic Achievement with Emotional, Social and Academic Adjustment among Researchers. Available from: [https://www.researchgate.net/publication/351005843\\_Impact\\_of\\_the\\_Open\\_Educational\\_Practices\\_through\\_Academic\\_Achievement\\_with\\_Emotional\\_Social\\_and\\_Academic\\_Adjustment\\_among\\_Researchers](https://www.researchgate.net/publication/351005843_Impact_of_the_Open_Educational_Practices_through_Academic_Achievement_with_Emotional_Social_and_Academic_Adjustment_among_Researchers) [accessed Apr 23 2021].