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ECONOMIC EMPOWERMENT OF SMALL FARMERS IN DIGITAL ERA

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Abstract

The agriculture sector is the fundamental and backbone of many countries. The tiny level agricultural sector is one of the small-scale industries and these sectors may be identified by the whole population in India. The aim of economic empowerment is provide sustainable and resourceful development with efficient improvement of tiny agricultural sectors. This digital era is highly beneficial to all and especially there is urgent need in promoting this ICT among the small farmers and ting agricultural people. Obviously, we know small farmers in the Coimbatore district are playing a vital role in the economic development. The study considers Correlation and Regression as a tool for analyzing the relationship and impact of GDP and economic development, farming agricultural activity. The researcher found out the major critical problem as employment eradication in the small-scale agriculture industry and migration of rural people to urban area and semi-urban area for non-farming activities in and around Coimbatore District.

Keywords: *Economic Empowerment, Small Farmers, GDP, Digital Era, ICT.*

Introduction:

Agriculture is the backbone of every unit of the economy. A significant part of the government as a whole is globalization. Economic empowerment may provide the agricultural unit and small-scale industries. The combat of each sector in the agricultural and non-agricultural part improves the farming activities in the economic empowerment. The Gross Domestic Product (GDP) occurs the 58% of the economic level of tiny agricultural sectors and technological institutions. In India, the percentage level of the economy provides the small-scale industry. India is the controlling unit of the commodity in small-scale business for Export. Economic empowerment is growing day by day from the population of separate industries. The agricultural sector is developing more and maintaining the legal aspects of the whole economy. Based upon the small-scale enterprise employees are motivated by themselves. The agriculture sector is concerned with the comparison of GDP and the Indian Economy. Economic empowerment in each activity relating to the small farmer in production of agricultural commodity. When the population grows automatically the economy will also grow. The agricultural industry may cover the principal aspects of every combat between GDP and economy. In the economic sector was changing increment in the top to bottom management. It includes community and the business with the system and balancing statement in the development. The main content of the agriculture sectors is having the challenges between the GDP and the economy. The economic control of 5% of farming activities and 10% of non-farming activities are understood as the components of every

aspect of the influence of small-scale sectors at the economic level maintained in the employment.

Review of Literature:

This review of literature is mainly discussed by the economic empowerment of agricultural sectors of the small-scale business in the Coimbatore district. The agricultural-based industry is adopted by the people in the low economic firms and environmental aspects of every industry in the development. The adoption of environmental practices in today's generation is more difficult to operate and overloaded.

Rahul Wagh, Dr. Anil P.Dongre (January 2016), in this article says about the economic activities in the whole agricultural sectors, financial institutions based on the investment. The sectors in the government initiatives in the Indian economy identified the challenges to begin agricultural and rural activities. The action was taken by the government for agricultural and farming activities to improve the status in the economic employment and also uncontrollable environments. The researchers have to find out each sector in the farming and non-farming activities in agriculture.

Roger Southall (15 June 2007), in this article, says about black economic empowerment in various countries in a logical way to handle every aspect of the democratic settlement.GDP in various aspects from the Black economic empowerment in the agricultural and small industries. The objective is to identify the GDP and black economy. The findings of the study are to change the economy in women's employment. The suggestions are to be discussed for the growth of economic development and the women employment by the various politicians and governments in the higher authority.

Statement of the Problem:

The problem explains the economic conditions all over the world. It specifies the statement that is Economic Development in agricultural areas is divided into farming and non-farming activities. Indian farmers are affecting the major cause of the low income in marketing their crops. The government is concerned by agricultural in farming activities from this last 2019 till 2021. The non-farming activities are not concerned with economic development and GDP. Economic empowerment is not developing specifically in agricultural sectors. The government is not improving the tiny agricultural sectors all over the world. Hence, the researcher undertook the study to examine the relationship and impact of agricultural sectors. Based on the following research problem the researcher has framed the following research questions.

1. Is there any relationship exist between GDP and agricultural productivity of India?
2. Whether there is any impact on GDP and Farming Production of Major Agricultural Crops?

Objectives:

1. To measure the relationship between GDP and Agricultural Productivity of India.
2. To study the impact of GDP and Farming Production of Major Agricultural Crops.

Hypotheses:

1. $\mathbf{H_{01}}$: There is no significant relationship between GDP and the Agricultural Productivity of India
2. $\mathbf{H_{02}}$: There is no significant impacton GDP and Farming Production of Major Agricultural Crops.

Research Methodology:

The period of the study covers5 years from (2015-to 2020) the researcher took sampling design as purposive sampling. The data were taken from various websites such as the World Bank, articles, journals, published and unpublished thesis. The study describes as non-probability sampling data for the GDP and Economic Development and the raw sources

were taken from various websites such as the world bank, articles, journals, published and unpublished thesis about India's GDP from agriculture, GDP in India, Economic Growth in GDP from the data were collected.

ANALYSIS AND INTERPRETATION

H_0: There is no significant relationship between GDP and the Agricultural Productivity of India

CORRELATION TABLE
GDP AND AGRICULTURAL PRODUCTIVITY
Correlations

		GDP	AGRIPRODUCT
GDP	Pearson Correlation	1	.966**
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	110.000	229.280
	Covariance	11.000	22.928
	N	11	11
AGRIPRODUCT	Pearson Correlation	.966**	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	229.280	511.898
	Covariance	22.928	51.190
	N	11	11

**. Correlation is significant at the 0.01 level (2-tailed).

The correlation table provides the relationship between GDP and the Agricultural Product. The Calculated value of f statistics is less than the significant value of 0.01, the null hypothesis is rejected. Thus, there is a significant relationship between the GDP and the Agricultural Productivity of India.

H_0: There is no significant impact on GDP and Farming Production of Major Agricultural Crops.

REGRESSION TABLE
GDP AND FARMING PRODUCTION OF AGRICULTURAL CROPS
Linear Regression Analysis Indicates

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.293[a]	.086	-.016	3.343	.086	.845	1	9	.382	.291

a. Predictors: (Constant), FARMING

b. Dependent Variable: GDP

The regression table shows the model summary for the impact of GDP. When the GDP is a dependent variable, R= 0.293 which means that there is a strong relationship. R square is 0.086 indicating that 86 percent of variation is accounted for the combined linear

impact of probability on the GDP. The value of Durban Watson statistics is 0.291.The significant value for the above model is more than a null hypothesis is accepted and concluded that there is no significant impact of Farming production of crops.

Findings:

The GDP and Agricultural Productivity indicate that farming productivity is not correlated with overall performance. Hence, the calculated value of F statistics is more than the significant value of 0.01, the null hypothesis is rejected. Thus, there is a significant relationship between the GDP and Agricultural Productivity.

The model summary indicates that the Farmer Production of Agricultural Crops, R square is 0.086 indicating that 86 percent of variation is accounted for the combined linear impact of probability on GDP. The value of the Durbin Watson statistic is 0.291 representing the model is a positive correlation. The significant value for the above model is more than 0.05, hence the null hypothesis is accepted and concluded that there is no significant impact of probability on Farming Production of Agricultural Crops.

Suggestion:

1) Agricultural sectors are the combat part in the economic empowerment and more vagaries in the GDP that will include the higher business institutions and human resource management and also financial sectors.
2) The main farming productivity should suggest the implementation of land reforms for improving the production and it should be maintained as flood control and drainage management and also minor irrigation and more facilities.

Conclusion:

As the Indian Agriculture and Allied sector is on the verge of adopting modern technologies, such as IoT, AI/ML and agri-drones for unmanned aerial surveying, Indian and foreign agritech players can play a vital role in supplying these advanced technologies to farmers. Currently, there are few players in the market, but catering to 267 million farmers in a country exhibits a huge opportunity for private and foreign entities to expand their footprint in the country. However, influential factors that will define the success of digital agriculture in India are technology affordability, ease of access and operations, easy maintenance of systems and supportive government policies.

Adopting a holistic ecosystem approach to address challenges faced by the Indian agriculture sector is of national interest, to achieve objectives, like doubling farmer incomes and sustainable development. Thus, a multi-stakeholder approach will be required for the wide-scale adoption of digital agriculture in India, with the government playing a key enabler's role in the ecosystem. As rural India has begun to digitize, entrepreneurs have launched and scaled farmer platforms to organize smallholders and the value chains around them. Most of these platforms combine a mix of physical and digital infrastructure to provide services, including access to inputs, market linkages, advisory/extension, storage, farm equipment, and/or credit/insurance.

References:

1. Chhay, D. (2011). Women's economic empowerment through microfinance in Cambodia. *Development in Practice*, *21*(8), 1122-1137.
2. Geetharaj, S., & Paramasivan, C. (2014). Asset Quality of Nationalised Banks and New Private Sector Banks on Priority Sector Lending. *SELP Journal of Social Science*, 5(21), 22-26.
3. Muthusamy, S. (2021). *Factors influencing the success of technopreneurship.*

4. Muthusamy, S. (2023). *Technopreneurship Education: Teach and Train the Youths.*
5. Naidu, V. K., & Paramasivan, C. (2015). A Study on Green Banking Trends in India. *Research Explorer*, 6(10), 24-26.
6. Paramasivan, C., & Muthusamy, S. (2017). *IT and ITeS Industry in Tamil Nadu with Reference to ELCOT.*
7. Paramasivan, C., & Pasupathi, R. (2016). Performance of agro based industries in India. *National Journal of Advanced Research*, 2(6), 25-28.
8. Paramasivan, C., & Selvam, P. M. (2013). Progress and performance of micro, small and medium Enterprises in India. *International Journal of Management and Development Studies*, 2(4), 11-16.
9. Priyadharshini, J., & Muthusamy, S. (2018). Gender Equality and Women's Empowerment in India. *International Journal of Business and Administration Research Review, 1*(23).
10. Rahul Wagh, Dr. Anil P. Dongre (2016), Economic empowerment for rural women in Nigeria: poverty alleviation through agriculture. *Journal of agricultural science*, *7*(9), 236
11. Roger Southall (2007), A staple theory of economic growth. *Canadian Journal of Economics and Political Science/Revue Canadienne de economies et science politique*, *29*(2), 141-158.
12. S.Rajaram (2017) *Empowering Indian Economy Through GST in India, Economic Challenger.,* Issue 77.,pp.46-50
13. Sarban, V. H., & Hassanzadeh, M. (2014). Survey of barriers to rural women economic empowerment in Iran. *European Online Journal of Natural and Social Sciences*, *3*(3), pp-494.
14. Sato, C. (2013). *Black economic empowerment in the South African agricultural sector: A case study of the wine industry* (No. 384). Institute of Developing Economies, Japan External Trade Organization (JETRO).
15. Selladurai, M. (2020). Evolution of technopreneurial entrepreneurs in the Covid-19 pandemic situation. *Research Explorer-A Blind Review & Refereed Quarterly International Journal*, *8*(29), 2349-1647.