Agriculture Policy and Farmer's Satisfaction: Pragmatic Study in Tiruvallur District

[1]Dr. P. JEEVARATHINAM, [2]Dr. S. THAMEEMUL ANSARI

[1]Assistant Professor, [2]Assistant Professor & Research Supervisor, PG & Research Department of Economics, Presidency College (Autonomous), Chennai, India.

Abstract - Agriculture is as old as our civilisation. Agriculture has universally been accepted as one of the most important sector and it is taken up by all section of people in the world. Having realised this, the government of all countries frame policy on agriculture thereby improving agriculture productivity and standard of living of farmers. India is not exceptional to this. Farmers in India also are subjected to Indian Agriculture Policy. Predicaments of peasants are mitigated through well designed agriculture policy. In this research article, farmer's satisfaction on agriculture policy in India has been researched in Tiruvalluvar District where 145 farmers were met and data were thus collected and statistically analysed in order to provide insights into this research.

Keywords: FCI, IFCRI, Agriculture Policy, Livestock and MSP

I.   INTRODUCTION

Agriculture is one of the important activities broadly being taken up in India. Agriculture is simply defined as the science and business of cultivating crops and rearing of animals (livestock), for man's use and economic purpose. Agriculture is one of the major sectors of the Indian economy [1]. It is present in the country for thousands of years. Over the years it has developed and the use of new technologies and equipment replaced almost all the traditional methods of farming. Besides, in India, there are still some small farmers that use the old traditional methods of agriculture because they lack the resources to use modern methods. Furthermore, this is the only sector that contributed to the growth of not only itself but also of the other sector of the country. India largely depends on the agriculture sector. Besides, agriculture is not just a mean of livelihood but a way of living life in India. Moreover, the government is continuously making efforts to develop this sector as the whole nation depends on it for food. Agriculture Policy is framed keeping in view food requirement of the people and sustainable development in Agriculture Sector [2].

II.   INDIAN AGRICULTURE POLICY

Agricultural policy of a country is mostly designed by the Government for raising agricultural production and productivity and also for raising the level of income and standard of living of farmers within a definite time frame. This policy is formulated for all round and comprehensive development of the agricultural sector [3]. Agriculture Policy is designed by agriculture experts with required inputs fed by both central and state government. Agriculture policy is made keeping in view far sightedness. Policy with regard to agriculture is fine-tuned from time to time after hearing the voice of farmers. Banks functioning under the control of Reserve Banks of India play vital role in bringing agriculture policy to reality. Agriculture policy even covers rearing of animals for the purpose of effective crop activities [4].

III.   OBJECTIVE OF THE STUDY

1. To analyse the satisfaction of farmers with respect to Indian Agriculture Policy.

IV.   STATEMENT OF THE PROBLEM

Agriculture is the most important field which has attracted many people due to people depend on the food. In the years to come, Agriculture sector will revolutionise the entire world. But In India, Agriculture Policy is designed the way government wants. Though, there are plenty of benefits being accrued to farmers by way of Agriculture Policy, still farmers have hiccups on recent agriculture policy. Farmers want the government fix Minimum Support Price and curb the role of intermediaries in fixing price for their produce. Some of the demands of farmers are not met by the latest agriculture policy while similar problems were witnessed even in previous agriculture policies. Only few demands placed by the farmers' association were taken into consideration and most of the demands are only in the paper but they are not fulfilled by competent authorities. Conversion of agriculture land to residential purpose continue to be unabated. Therefore, agriculture are neglected by most of people due to minimum support or lack of support from government and agencies. Farmers on Agriculture Policy express their disgruntle since some of the demands are not met yet. Those demands include sanction of inadequate amount of financial assistance to farmers irrespective of whatever cost of farming activities are taken up, Rate of

Interest in some banks and financial institutions are high and Loan amount is not provided even for farm animals.

V.   SCOPE AND IMPORTANCE OF THE STUDY

Agriculture Policy is very essential for smoother Agriculture Productivity. Agriculture Policy ensures food security of a nation. Standard of living of farmers are guaranteed by Government of India by enacting various legislations on Agriculture. Today food problems of our nation is marginally diminished through Farm Laws and Agriculture Policy. Crop Production is maximised and farmers have stable income. Furthermore, Government at the time of formulation of Agriculture Policy pay heed to farmers and solve their problems gradually [5].

Now a days, people from different walks of life have understood the significance of Agriculture and youth also are involved in farm activities. With the entry of latest technology on agriculture, agriculture has become passionate occupation in youth's minds rather than being a normal activity. Latest Agriculture Policy is very useful to farmer's community and it supports farmers in each and every respect. In this article, researcher has portrayed the satisfaction of farmers with Indian Agriculture Policy.

VI.   REVIEW OF LITERATURE

Mullen et al. (2005) explained their focus on Agricultural policies in India. International Food Policy Research Institute (IFPRI), MTID discussion papers. This paper contributes empirically to our understanding of informed traders. It analyses traders' characteristics in a foreign exchange electronic limit order market via anonymous trader identities. We use six indicators of informed trading in a cross-sectional multivariate approach to identify traders with high price impact. More information is conveyed by those traders' trades which--simultaneously--use medium-sized orders (practice stealth trading), have large trading volume, are located in a financial center, trade early in the trading session, at times of wide spreads and when the order book is thin [6].

Sekhar (2014) in his article said that Indian agricultural policy and its effect on agricultural growth over time. First the analytical framework is presented followed by a detailed account of policy evolution and growth performance. The evolution of Indian agricultural policy may be analyzed in the context of the role of agriculture in the development process and the factors affecting agricultural growth. In the development process of a country, agriculture serves mainly three functions i) to provide initial surpluses for other sectors of the economy ii) to provide wage goods to the industrial sector iii) to promote growth through forward linkages (provide inputs to industrial sector) and backward linkages (use outputs from industrial sector in agriculture). The first and the third functions require a robust overall agricultural growth whereas the second requires adequate food supplies. Therefore, for sustained economic growth, both overall agricultural growth and growth in food production are indispensable. Factors that affect agricultural growth can be broadly categorized into the following natural (climatic), technological, economic, institutional and policy factors. (For a debate on policy versus technology fatigue. Agricultural development depends on an interplay of all these factors. Natural factors include soils, rainfall and temperature among others. Technological factors include seeds, machinery, pest-protection and fertilizing technology available in the country. The third set of factors is economic in nature. Profitability of agriculture visa -vis other sectors influences private investment in agriculture and similarly relative profitability of different crops determines the inter-crop allocation of land and other resources. The fourth set of factors is institutions which is a much less-understood concept. Institutions include both formal (created by the law or de jure) and informal (de facto) rules of the game that determine interaction among the economic agents. The Food Corporation of India (FCI), which carries procurement operations and the village level moneylender who provides basic credit to the farmers can be thought of as two examples of formal and informal institutions respectively. Institutions are the main determinants of transaction costs [7].

Cheng et al. (2018) highlighted that since the launch of economic reform and openness policy in the late 1970s, significant growth and sprawl, resulting in a large amount of farmland converted for urban construction. Given the need to both protect farmland and provide options for urban development, the central government proposed the Link Policy in 2005. Under this scheme, farmers are relocated into centralised communities by consolidating their original homestead into farmland, and enabling the transfer of land quotas for urban construction. The implementation of the Link Policy has restructured rural farming and lifestyles but studies on the Link Policy from a farmer's perspective are limited. This paper investigates farmers' satisfaction with the Link Policy and explores the underlying factors. Using Ezhou in Hubei Province as a case study, face-to-face interviews were undertaken with farmers in centralised communities to understand their satisfaction with the Link Policy. Interview data were coded and analysed using Structural Equation Modelling (SEM) to identify the factors affecting farmers' satisfaction. The results show that farmer's willingness to participate, knowledge of the Link Policy, living conditions before resettlement, and the compensation for resettlement had significant influence on satisfaction with policy implementation. We suggest that meaningful consultation and improved communications between farmers and local governments are needed to enhance the social acceptability of policy outcomes. To minimize the social impacts of resettlement, urbanised villages would be prioritised in project implementation and a long-term supporting scheme should be offered by local government to assist farmers in their lifestyle transition [8].

Jamanal et al. (2019) highlighted universally agriculture is perceived to be synonymous with risk and uncertainty. Agricultural policy is one of the management strategies to overcome risk to the greater extent. It helps in stabilization of farm production and income of the farming community. Crop insurance will not only helps the farmers to withstand the shock from uncertain situations but also acts as incentive to use the resources efficiently and achieve higher level of productivity. The study was conducted in Karnataka State during the year 2017-18 by using the "Ex-post- facto" research design. Belgavi, Dharwad, Haveri and Vijayapura districts were selected purposively based on more number of insured farmers. Further, two taluks from each district and from each taluk three villages (i.e. total 24 villages) were selected randomly. The sample size for the study was 240. The findings of the study revealed that fifty-one per cent (51.67%) of the insured farmers had low level of satisfaction with respect to crop insurance schemes followed by medium (32.92%) and high (15.41%). The variables such as education, land holding, annual income, extension contact and mass media exposure exhibited positive significant relationship at five per cent level of probability with the satisfaction level of insured farmers. The coefficient of determination ($R2$) was 0.450 which indicated that 45.00 per cent of the variation in satisfaction level of insured farmers was together explained by all the independent variables. In the present study farmers satisfaction was found to be low. Thus, concerned officers should conduct awareness programmes, inform the farmers on or before conducting the Crop Cutting Experiment, make the loss assessment procedure flexible and hassle free and disperse the claim before starting of the next season [9].

Kassem et al. (2021) in their article stated that Assessing farmers' satisfaction with agriculture Policy is essential for developing extension programs that comply with farmers' needs and agroecological conditions. This study aimed to determine factors influencing farmers' satisfaction with extension services. Data were collected through a questionnaire from a random sample of 393 farmers in the Kafr El Sheikh governorate, Egypt. Farmers assessed the quality of extension services by five main indicators: (1) availability, (2) accessibility, (3) diversity, (4) relevance, and (5) effectiveness. Descriptive statistics and a logistic-regression model were used to analyze the data. Results showed that farmers had lowly participated in the provided extension services. The accessibility of services was ranked first with regard to satisfaction, while diversity of services was the lowest-ranked quality attribute. Results also revealed that factors significantly influencing farmers' satisfaction included farm size, diversity of farming activities, annual income, and participation in extension services. Results provide practical implications for policy makers to support smallholder farmers by providing high-quality extension programs [10].

VII.   RESEARCH QUESTION

1. Are farmers really feel satisfied with Indian Agriculture Policy?

VIII.   RESEARCH HYPOTHESIS

1. Satisfaction of Farmers and Indian Agriculture Policy are not significantly different.

IX.   RESEARCH METHODOLOGY

The research work is wholly based on Investigation. Researcher has collected data by dint of both primary sources and secondary sources. Totally, 145 farmers have been contacted from whom primary data have been obtained. Researcher came out with structured questions for the purpose of eliciting primary data. Farmers were made to understand each and every questions by the researcher thereby gathering primary data. On the other hand, secondary data were collected by referring to reputed journals, books, magazines, e-journals, theses, dissertations of similar title and so on. Descriptive and Empirical Research Design were put to use all through this research. Systematic Random Sampling was adopted as desired size of farmers are selected from total farmer's population and the results of which would be mostly representative of universe farmer's population. Tiruvalluvar District was chosen as study area because agriculture is seen to be most common activity over there. Farmers in Tiruvalluvar District were chosen for study.

X.   STATISTICAL TOOLS USED

1. Single Sample t Test
2. Multiple Regression
3. Chi-Square Test
4. Confirmatory Factor Analysis

XI.   DATA ANALYSIS AND RESULT DISCUSSION

11.1 Single Sample t Test

Single Sample t Test for Satisfaction of farmers with respect to Indian Agriculture Policy

In this section, Satisfaction of Farmers with respect to Indian Agriculture Policy were studied. There are three variables namely, (i) Loan Enhancement, (ii) Loan for Farm Animals, (iii) Low Rate of Interest. To test the significant difference among the mean value of the variables measured towards Satisfaction of Farmers with respect to Indian Agriculture Policy against the test average response of 4 (mean score), the following null hypothesis was framed.

❖ *Satisfaction of Farmers with respect to Indian Agriculture Policy does not differ with the average score*

The results of one sample t-test for variables measured for Satisfaction of Farmers with respect to Indian Agriculture Policy are shown in the table as below:

Table 11.1 One sample t-test for Satisfaction of farmers with respect to Indian Agriculture Policy

Statements	Mean	SD	t-value	p-value
Loan Enhancement	4.23	1.039	2.637	.009
Loan for Farm Animals	4.03	1.121	.371	.712
Low Rate of Interest	4.36	.970	4.454	.000

** Significant at 1% level

Interpretation

As regards Satisfaction of Farmers with respect to Indian Agriculture Policy, the t-values of two variables: 2.637 and 4.454 are highly significant at 1% level and t value of one variable: .371 is not significant at 1% level. This shows that there is significant difference between the mean responses given by the respondents towards Satisfaction of Farmers with respect to Indian Agriculture Policy, three variables have been identified under Satisfaction of Farmers with respect to Indian Agriculture Policy such as loan enhancement, loan for farm animals and low rate of interest. Mean responses given by respondents are highly significant in case of loan enhancement and low rate of interest due to p value is less than .05. Therefore, formulated null hypothesis i.e. loan enhancement and low rate of interest do not differ with mean score is rejected while loan for farm animals does not differ with mean score is accepted due to p value is greater than .05.

11.2 Multiple Regression Analysis

Multiple Regression Analysis for Satisfaction of Farmers with Respect to Indian Agriculture Policy

Multiple regression analysis is performed by taking Loan Enhancement as dependent variable and Low Rate of Interest and Loan for Farm Animals were taken as Predictors.

Table 11.2 Regression analysis for Satisfaction of Farmers with Respect to Indian Agriculture Policy

Predictors	Standard Beta	t-value		
Loan for Farm Animals	.083	1.042	F= 2.585	R² = 0.035
Low Rate of Interest	.151	1.633	R = .187	Adjusted R2 = .022

** Significant at 1% level

It is observed from the above table that the regression model's F value is 2.585 and it is not significant at 1% level as p value is greater than .05. The regression model's coefficient of determination (R^2) is 0.035 and adjusted R^2 is .022 which is a moderate coefficient. Therefore, formulated null hypothesis i.e. there is no significant relationship between Loan Enhancement and Loan for Farm Animals and Low Rate of Interest is accepted at 1% level of significance.

11.3 Chi-Square Analysis

Association among the variables of Satisfaction of Farmers with Respect to Indian Agriculture Policy

To assess the association among the variables of Satisfaction of Farmers with Respect to Indian Agriculture Policy, Chi-square test was performed to identify association among the variables of Satisfaction of Farmers with Respect to Indian Agriculture Policy. The following null hypotheses are framed:

H_{045}: There are not significant association among the variables of Satisfaction of Farmers with Respect to Indian Agriculture Policy

Table 11.3 Association among the variables of Satisfaction of Farmers with Respect to Indian Agriculture Policy

	Chi-square	p-value
Loan Enhancement	137.310	.000
Loan for Farm Animals	89.103	.000
Low Rate of Interest	169.310	.000

**Significant at 5% level

Interpretation

With regard to the above table, three variables i.e. (Loan Enhancement, Loan for Farm Animals and Low Rate of Interest) of Satisfaction of Farmers with Respect to Indian Agriculture Policy were tested in order to find any close association among three variables as show in the table and result is highly significant and formulated null hypothesis i.e. *there are not significant association among the variables of Satisfaction of Farmers with Respect to Indian Agriculture Policy is* rejected at 5% level.

11.4 Confirmatory Factor Analysis

Confirmatory Factor Analysis is used to determine the relationship among construct and observed variables of Satisfaction of Farmers with Respect to Indian Agriculture Policy

Table 11.4 Confirmatory Factor Analysis for Satisfaction of Farmers with Respect to Indian Agriculture Policy

|			Regression Estimates	S.E.	C.R.	P	Remarks
Satisfaction of Farmers with Respect to Indian Agriculture Policy	<---	Loan Enhancement	1.000				
	<---	Loan for Farm Animals	1871	1.017	1.839	.066	Not Significant
	<---	Low Rate of Interest	2.068	1.356	1.524	.127	

Factor Structure is predetermined by researcher through hypothesized model and hypothesis is tested to see if this is true. Similarly, this is used to test how well the measured variables represent the number of constructs. Construct is Satisfaction of Farmers with respect to Indian Agriculture Policy and measured variables are namely Loan Enhancement, Loan for Farm Animals and Low Rate of Interest. The regression estimate for Satisfaction of Farmers with respect to Indian Agriculture Policy in the prediction of Loan for Farm Animals and Low Rate of Interest are not significantly different from zero at 5% level of significance under two-tailed and formulated null hypothesis i.e. factor model for Satisfaction of Farmers with respect to Indian Agriculture Policy is ideally fit accepted.

			Standardized Regression Estimate
Satisfaction of Farmers with Respect to Indian Agriculture Policy	<---	Loan Enhancement	.274
	<---	Loan for Farm Animals	.476
	<---	Low Rate of Interest	.608

In the above table, it is believed that When Satisfaction of Farmers with Respect to Indian Agriculture Policy scaled up by 1 standard deviation, Loan Enhancement, Loan for Farm Animals and Low Rate of Interest are shot up by 0.133, .476 and .608 standard deviations respectively.
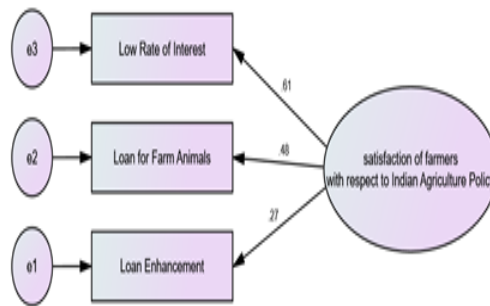
	Estimate of Variance	S.E.	C.R.	P	Remarks
F1	.081	.074	1.095	.274	Not Significant
e1	.992	.130	7.658	***	Significant
e2	.965	.226	4.272	***	Significant
e3	.589	.248	2.371	.018	Not Significant

PLM for Satisfaction of Farmers with respect to Indian Agriculture
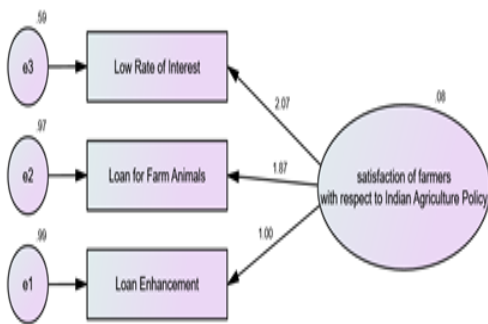
(Based on Unstandardized Estimates)

PLM for Satisfaction of Farmers with respect to Indian Agriculture

(Based on Standardized Estimates)

Construct variance and error variances are highlighted in the above table and the purpose of this computation is to remove mostly errors present in the data collected by the research and ensure quality of data. The variance estimates of Satisfaction of Farmers with respect to Indian Agriculture Policy (F1) is not significantly different from zero at 5% level under two tailed and it is evident that only minor errors were highlighted in the collected data however, the variance estimates of error terms e1 and e2 are significantly different from 0 at 5% level under two tailed and it is evident that errors were present in collected data and corrected in due course of time and the last error term e3 which is not significantly different from 0 at 5% level of significance under two tailed and only minor errors were present in the collected data.

XII. FINDINGS

1. With regard to the finding of satisfaction of farmers with respect to Indian Agriculture Policy. Mean responses given by respondents are highly significant in case of loan enhancement and low rate of interest due to p value is less than .05. Therefore, formulated null hypothesis i.e. loan enhancement and low rate of interest do not differ with mean score is rejected while loan for farm animals does not differ with mean score is accepted due to p value is greater than .05.

2. In relation to regression analysis for Satisfaction of Farmers with Respect to Indian Agriculture Policy, The regression model's coefficient of determination (R^2) is 0.035 and adjusted R^2 is .022 which is a moderate coefficient. Therefore, formulated null hypothesis i.e. there is no significant relationship between Loan Enhancement and Loan for Farm Animals and Low Rate of Interest is accepted at 1% level of significance.

3. With regard to finding of chi-square analysis of Satisfaction of Farmers with Respect to Indian Agriculture Policy, three variables have been identified which include loan for enhancement, loan for farm animals and low rate of interest. Result is highly significant and formulated null hypothesis i.e. there are not significant association among the variables of

Satisfaction of Farmers with Respect to Indian Agriculture Policy is rejected at 5% level.

4. In relation to Confirmatory Factor Analysis of Satisfaction of Farmers with Respect to Indian Agriculture Policy. The regression estimate for Satisfaction of Farmers with respect to Indian Agriculture Policy in the prediction of Loan for Farm Animals and Low Rate of Interest are not significantly different from zero at 5% level of significance under two-tailed and formulated null hypothesis i.e. factor model for Satisfaction of Farmers with respect to Indian Agriculture Policy is ideally fit accepted.

XIII. SUGGESTIONS

Farmers should be made to understand the subject matter of agriculture policy. Some farmer's organisations misinterpret the agriculture policy which prompt the farmers resort to sit in dharna and agitation against the government. Therefore, Government should call for negotiation with all farmer's associations to reach consensus. The same should be intimated to farmer's community at large so that they will cooperate and support for agriculture policy to be rolled out by government at different point of time.

Loan enhancement has to be made depending on circumstances. Banks should hold negotiation with Reserve Bank of India in connection with this. So that farmers will take steps to enhance agriculture productivity in future. Agriculture policy should encompass request of farmers as and when it undergoes periodical changes. Banks should unanimously charge fair rate of interest to farmers and encourage them to keep in touch with farming activities.

XIV. CONCLUSION

Agriculture Policy should be designed in such a way that satisfaction of farmers be intact. Government and Banks in India should announce bountiful measures for the sake of farmers and motivate them to remain in this field forever. Awareness programme has to be conducted by the banks at grass root level and make the farmers come and ask for farm credit from all the banks instead of going to indigenous bankers. This move will curb the suicide of farmers to some extent. All the banks should follow the standard protocol devised by Reserve Bank of India.

Satisfaction of farmers depends on the size of farm credit provided by the banks in India. Government of India and Reserve Bank of India should hold negotiation and constitute of committee as to size of agriculture credit. Because, in this study size of agriculture credit is said to be not being sufficient and farmers abandon the farm activities due to least support of Indian Banks to farmers. It is the role of government in ensuring that Agriculture Credit be made available at lower rate of interest. It should be taken by all farmers without having any discrimination. Based on this study, farmers are harassed at the hands of indigenous bankers as farmers get the instant loan from them at

exorbitant rate of interest. They get trapped of not being able to repay the loan on time.

SCOPE FOR FUTURE RESEARCH

In order to overcome research gap to some extent, the researcher has suggested the following for future research.

- Role of Farmers towards GDP can be studied.
- Similar studies can be done elsewhere.
- Role of bankers on Crop Credit can be studied

REFERENCES

16.1 Primary References

1. "Agriculture in India: Agricultural Exports & Food Industry in India | IBEF".

2. Government of India, Ministry of Agriculture, Department of Agriculture & Cooperation website.

3. Manida, Mr M., and G. Nedumaran. "Agriculture In India: Information About Indian Agriculture & Its Importance." *Aegaeum Journal*, 8#3 (2020) online

4. Akarowhe (2018). Retooling Agricultural Policies and Programmes for Sustainable Development in Nigeria *Current Investigations in Agriculture and Current Research*2(1):165-168 doi: 10.32474/CIACR.2018.02.000129

5. Akrill, Robert, *The Common Agricultural Policy* (Sheffield: Sheffield Academic Press, 2000).

6. Mullen, Kathleen & Orden, David & Gulati, Ashok. (2005). Agricultural policies in India. International Food Policy Research Institute (IFPRI), MTID discussion papers.

7. C.s.C., Sekhar. (2014). Indian Agriculture – A Review of Policy and Performance. Yojana. June 2014. 32-36.

8. Cheng, Long & Liu, Yan & Brown, Gregory & Searle, Glen. (2018). Factors affecting farmers' satisfaction with contemporary China's land allocation policy – The Link Policy: Based on the empirical research of Ezhou. Habitat International. 75. 38-49. 10.1016/j.habitatint.2018.04.004.

9. Jamanal, Siddalingappa & Natikar, K. & Halakatti, Sunil. (2019). Satisfaction Level of Insured Farmers about Crop Insurance Schemes in Northern Karnataka. Current Journal of Applied Science and Technology. 1-8. 10.9734/cjast/2019/v38i430370.

10. Kassem, Hazem & Alotaibi, Bader & Muddassir, Muhammad & Herab, Ahmed. (2021). Factors Influencing Farmers' Satisfaction with Agriculture Policy in Egypt. Evaluation and Program Planning. 85. 101912.

16.2 Other References

11. Behera, Bhagirath and Pulak Mishra (2007), "Acceleration of Agricultural Growth in India: Suggestive Policy Framework", Economic and Political

Weekly, Vol. 42, No. 42 (Oct. 20 - 26, 2007), pp. 4268-4271

12. Chand, Ramesh, S. S. Raju and L. M. Pandey (2007), "Growth Crisis in Agriculture: Severity and Options at National and State Levels", Economic and Political Weekly, Vol. 42, No. 26 (Jun. 30 - Jul. 6, 2007), pp. 2528-2533

13. Dev, S. Mahendra, Srijit Mishra, and Vijay Laxmi Pandey. "Agriculture in India: Performance, Challenges, and Opportunities." in *A Concise Handbook of the Indian Economy in the 21st Century* (Oxford University Press, 2014) pp. 321–350.

14. GoI, Agricultural Statistics at a Glance (various issues), Directorate of Economics and Statistics, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India

15. GoI, Economic Survey (various issues), Ministry of Finance, Government of India.

16. Goyal, S. & Prabha, & Rai, Dr & Singh, Shree Ram. *Indian Agriculture and Farmers-Problems and Reforms.* (2016)

17. Akarowhe (2018). Retooling Agricultural Policies and Programmes for Sustainable Development in Nigeria *Current Investigations in Agriculture and Current Research*2(1):165-168 doi: 10.32474/CIACR.2018.02.000129