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"PROBLEMS ENCOUNTERED BY THE FARMERS IN THENI DISTRICT"

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ABSTRACT

Agriculture is the only sector holding unskilled and semiskilled workers till now. It provides employment opportunity to more than 50 percent of India's total population and meets the ever growing demand for food grains to the population. It also provides fodder to cattle and plays an important role in India's export. Tamil Nadu is the largest producer of pulses, rice and millets. It also received Krishi Karma Award in 2014 for producing rice largely. It contributes about 17 percent to the nation as GDP. Though it is an important sector in India, this sector is facing series of problems continuously. Monsoon, natural calamities, shortage of rainfall, cost of production, delay in fixing and announcing support prices, lack of storage and ware housing facility and the like. In addition to them, Agricultural Policies introduced in India and globalizations have also created lot of problems to them. They face problems in the form of application of HYV seeds, usage of chemical fertilizers and pesticides, and irrigation facility. So farmers have to carry out their activities in the midst of all such kind s of natural and situational problems. So the authors have made an attempt to analyze the problems of farmers and its impact on them using ANOVA and attitude index. Though agriculture sector holds marginal, small, medium and large farmers, as per the agriculture census, marginal and small farmers form more than 70 percent in the total farming community. So, marginal and small farmers are facing lot of problems while comparing with medium and large farmers.

Introduction

The agriculture enterprise is subject to a lot of uncertainties. But still more people in India depend on this sector for their livelihood. Around 40 per cent of the population of Theni District in Tamil Nadu earns their livelihood through this sector. There is a gradual decline in agricultural sector in the district over the past

ten years; the people, who depend on this sector, face series of challenges. It is well known that agriculture sector is associated with several risks; they may be of two types such as production and institutional risk. Both types of risks may create adverse impact on the farm production right from the selection of input to output and fixation of price. Apart from these two risks, they face natural disasters like flood, drought, pest and other diseases. Though the natural factors are foreseen, the other factors like growing input cost, lack of finance, practical difficulties in getting input from the government departments and extension centers, formalities in availing subsidized input and non remunerative price of agricultural products are not manageable by all the farmers especially marginal and small farmer. This paper presents the problems faced by the farmers related to financial and situational (Globalization) factors alone.

Research Methodology and Sample Design

As per the census 2011, there are 36371 farmers in TheniDistrict. Five Taluks and Eight Blocks are in the district. In order to have an insight analysis on the farmers' problem, one revenue village from each block was selected and the farmers' details were obtained from the block development office of the respective block and also from the senior farmers with the help of the villagers. 150 farmers from each village was selected comprising large, medium, small, and marginal using stratified sampling technique. 3 percent of the total farmers were taken for the study. One way analysis was used to analyze the problems faced by farmers. In order to find out whether globalization has benefited the farmers and the quantum of benefits they have received from globalization, the attitude index and the problem score were calculated to find out the extent and magnitude of the problems faced by the farmers.

The selected factors for analysis are

- Problems related to agricultural inputs
- Problems related to government Subsidy
- Problems related to finance
- Problems related to agricultural technology
- Problems related to price for agricultural produce

Table 1 presents the attitude of the respondents towards problems related to agricultural inputs and the calculated mean score and respective 'F' statistics.

Table 1
Problems related to Agricultural Inputs

Sl. No	Variables	Mean score of the problem					'F' Statistics
		Marginal	Small	Medium	Large	Overall	
1	Free flow of untested and fake seeds	3.9535	4.0694	3.9375	3.9028	3.97330	0.759^{NS}
2	Inadequate supply of inputs in the government departments	4.0385	4.7500	4.000	4.2083	4.2250	40.746^{**}

Source: Primary data ** Significant at one percent level **NS** Not Significant

It is evident from the table 1 that the perception of the respondents towards the problem related to agricultural inputs has perceived high mean score among all the farmers with the highest overall mean score of 4.2250. It has perceived the mean score of 4.7500, 4.2083, 4.0385 and 4.000 among small, large, marginal and medium farmers respectively. The statement free flow of untested and fake seeds has high mean score among small farmer.

The significant difference among the four types of farmers is identified regarding the perception of the respondents on the statement "inadequate supply of agricultural inputs in the government departments" since the respective 'F' statistics is at one percent significant.

In order to know the significance of the problems mentioned in the problem towards Agricultural Inputs (AIS) among all the four types of farmers was worked out. It helps in further analysis. The formula for the computation of AIS is as follows.

$$AIS = \frac{\sum_{i=1}^{n} SAIV_i}{\sum_{i=1}^{n} MSAIV_i} X\ 100$$

Where

AIS = Agricultural Inputs Score

SAIV= Score on Government Support Variables

MSAIV= Maximum Score on Government Support Variables

i=1 = Number of Variables included in agriculture input

The score of the farmers towards agricultural inputs is summarized in the table 2

Table 2

Score of the respondents towards the problem related to agricultural inputs

Score	Type of farmers				Total
	Marginal	Small	Medium	Large	
2-3	33 (5.3%)	22 (7.6%)	0 (0.0%)	0 (0.0%)	55 (4.6%)
3-4	220 (35.3%)	70 (24.3%)	57 (39.6%)	28 (19.4%)	375 (31.3%)
4-5	371 (59.5%)	196 (68.1%)	87 (60.4%)	116 (80.6%)	770 (64.2%)
Total	624 (100.0%)	288 (100.0%)	144 (100.0%)	144 (100.0%)	1200 (100.0%)

Source: Primary data Figures in parenthesis represent percentage to the total

It could be observed from the table that 2 the majority of the farmers (64.2%) fall in the score between 4and 5; it revealed that their major problem is agricultural inputs which create adverse impact among the farmers significantly; it creates operational problems which reflect in the output and price.

The table 3 presents the attitude of the respondents towards problems related to government subsidy and the calculated mean score and respective 'F' value.

Table 3

Problem Related to Government Subsidy

Sl.No	Variables	Mean Score of the problems					'F' Value
		Marginal	Small	Medium	Large	Total	
1	Inadequate government subsidy on agricultural inputs	3.2019	4.6042	2.7917	2.0417	3.3500	148.514**
2	Formalities in availing subsidized inputs	3.7692	3.9167	3.0417	4.0417	3.7500	15.325**

Source: Primary data ** Significant at one percent level

It is clear from the table 3 that of the two variables pertaining to problems related to government subsidy on agricultural input; the small farmers have perceived high mean value as 4.6042 and the large farmers, as 3.3500. The variable "formalities in availing subsidized inputs" has perceived high mean score 4.0417 among the large farmers and of 3.9167 among the small farmer. It implies that the other two types of farmers do not find much difficulty in getting subsidized inputs.

The significant difference is identified among the four types of farmers regarding their perception of the statement on the above said two variables since their respective 'F' statistics are at one percent significant.

The Government Subsidy Score (GSC) was computed to know the significance of the problems stated in the table 5.e.3. The further analysis has been worked out with the help of the following formula and the resulted score is given in the table 5.e.4

$$GSS = \frac{\sum_{i=1}^{n} SGSPV_i}{\sum_{i=1}^{n} MSGSPV_i} X\ 100$$

Where GSS = Government Subsidy Score

SGSV= Score on Government Subsidy Variables

MSGSV= Maximum Score on Government Subsidy Variables

i=1 = Number of Variables included in Government Subsidy

The score of the farmers towards government subsidy is presented in the table 4

Table 4

Score of the Respondents towards the problem related to Government Subsidy towards agriculture

Score	Type of the farmers				Total
	Marginal	Small	Medium	Large	

<2	0 (0.0%)	2 (0.7%)	4 (2.8%)	0 (0.0%)	6 (0.5%)
2-3	28 (4.5%)	23 (8.0%)	36 (25.0%)	60 (41.7%)	147 (2.3%)
3-4	226 (36.2%)	70 (4.3%)	99 (68.8%)	62 (43.1%)	457 (38.1%)
4-5	370 (59.3%)	193 (67.0%)	5 (5%)	22 (15.3%)	590 (49.2%)
Total	624 (100.0%)	288 (100.0%)	144 (100.0%)	144 (00.0%)	1200 (00.0%)

Source: Primary data Figures in parenthesis represent percentage to the total

It is observed from the table 4 that, in total, a maximum of 49.2 per cent of the respondents had the GSS of 4-5: 38.1 per cent had the GSS of 3-4; 12.3 per cent had the GSS of 2-3 and mere 0.5 per cent had the GSS of less than 2. It may be drawn from the analysis that around 50 per cent respondents' major problem is government subsidy. Further 67.0 per cent of the small and 59.3 per cent of the marginal farmers came under the score of 4-5 which implies that they find it as the major problem of them.

The table 5 presents the attitude of the respondents towards the problems related to finance and the calculated mean score and respective 'F' statistics.

Table 5

Problem related to Lake of Finance

Sl. No	Variables	Mean value of the problem					'F' Statistics
		Marginal	Small	Medium	Large	Overall	
1	Low income	4.0769	3.8333	2.2917	1.3333	3.4750	259.284**
2	Delay in getting institutional credit	4.0192	4.0625	3.8542	3.986	4.0058	0.924^{NS}
3	Inadequate credit	4.0032	4.0415	3.8125	3.8472	3.9717	1.581^{NS}

Source: Primary data ** Significant at one percent level**NS** Not Significant

It is evident from the table 5 that of the three variables related to problem related to lake of finance, "low income" has perceived the high mean score of 4.0769 while comparing with the other three types. While "looking at delay in getting institutional credit", the small and marginal farmers have perceived high mean score of 4.0635 and 4.0192 respectively. The statement "in adequate" credit also has perceived high mean score among small and marginal farmers as 4.0415 and 4.0032 respectively.

The significant difference is identified among all the four types of farmers regarding their perception on the statement "low income" since its respective 'F' statistics is

at one percent significant. In order to find out the quantum of the problem towards lack of finance sated in the table, the Lack of Finance Score (LFS) was computed using the following formula which has helped further analysis.

$$LFS = \frac{\sum_{i=1}^{n} SLFPV_i}{\sum_{i=1}^{n} MSLFPV_i} X\ 100$$

Where

LFS = Lack of Finance Score
SLFPV = Score on Lack of Finance Variables
MSLFPV = Maximum Score on Lack of Finance Variables
i=1 = Number of Variables included in Lack of Finance

The score of the farmers towards lack of finance is presented in the table 6

Table -6
Score of the Respondents towards the problem related to Lack of Finance

Score	Types of farmers				Total
	Marginal	Small	Medium	Large	
<2	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (2.1%)	3 (0.3%)
2-3	65 (10.4%)	49 (17.0%)	30 20.8%	60 (41.7%)	204 (17.0%)
3-4	343 (55.0%)	36 (12.5%)	86 (59.7%)	81 (56.3%)	546 (45.5%)
4-5	216 (3.6%)	203 (0.5%)	28 (19.4%)	0 (0.0%)	447 (37.3%)
Total	624 (0.0%)	288 (100.0%)	144 (100.0%)	144 (100.0%)	1200 (100.0%)

Source: Primary data Figures in parenthesis represents percentage to the total

It is observed from the table 6 that, in total, a maximum of 45. 5% of the total farmers had the LFS of 3-4; 37.3 per cent had the LFS of 4-5; 17.0 per cent had the LFS of 2-3 and mere 0.3 per cent had the index of less than 2. 59.7 of the medium farmers, 56.3 of the large farmers and 55.0 per cent of the marginal farmers came under the score of 3-5. On the whole 82.8(45.5 +37.3) per cent of the farmers falls above the score of 4. This implies that finance is the major constraint for them.

The table 7 presents the attitude of the respondents towards problems and the calculated mean score and respective 'F' statistics.

Table 7
Problems related to Cost Effective Technology

Sl.No	Variables	Mean Score of the problem					'F' Value
		Marginal	Small	Medium	Large	Overall	

1	Lack of cost effective technology	4.0721	4.0972	3.9861	3.9236	4.0500	0.840^{NS}
2	Lack of technology to protect micro organisms	4.0865	4.1285	4.0208	4.0069	4.0792	0.442^{NS}
3	Degradation of cultivable land	4.0288	4.0833	3.9583	3.9583	4.0250	0.479^{NS}

Source: Primary data ** Significant at one percent **NS** Not Significant

It is shown in the table 7 that all types of farmers have considered the above said variables are the constraints for them. However "lack of technology to protect micro organisms" has perceived high mean score as 4.0972; "lack of cost effective technology" has perceived 4.0500.But they are not significant. The significant difference among the four types of farmers is not indentified in any variables.
However creating access to cost effective technology is one way of increasing agricultural inputs. It becomes the sensible need for agriculture among all types of farmers which should be addressed by the government. In order to know the significance of the problems related to lack of cost effective technology the Lack of Cost Effective Technology Score(LCETS) was worked out for further analysis and the result is presented in the table

$$LCETS = \frac{\sum_{i=1}^{n} SLCETPVi}{\sum_{i=1}^{n} MSLCETPV_i} X\ 100$$

Where
LCETS = Lack of Cost effective Technology Score
SLCETPV = Score on Cost effective Technology Problem Variable
MSLCETPV = Maximum Score on cost Effective Technology Problem Variable
i=1 = Number of Variables included in the Lack of Finance

The score of the farmers towards cost effective technology is presented in the table 8

Table 8
Score of the Problems Related to Lack of Cost Effective Technology

Score	**Type of the farmers**				**Total**
	Marginal	**Small**	**Medium**	**Large**	
<2	0 (0.0%)	27 (9.4%)	0 (0.0%)	0 (0.0%)	27 (2.3%)
2-3	61 (9.8%)	22 (7.6%)	27 (18.8%)	0 (0.0%)	110 (9.2%)

3-4	124 (19.9%)	27 (9.4%)	33 (22.9%)	54 (37.5%)	238 (19.8%)
4-5	439 (70.4%)	212 (73.6%)	84 (8.3%)	90 (62.5%)	825 (68.8%)
Total	624 (100.0%)	288 (100.0%)	144 (100.0%)	144 (100.0%)	1200 (100.0%)

Source: Primary data Figures in parenthesis represent percentage to the total

It could be observed from the table 8 that, in maximum, a total of 68.8 per cent of the farmers had LCET of 4-5; 19.8 per cent had the LCET of 3-4; 9.2 per cent had the LCET of 2-3 and 2.3 per cent had the LCET of less than 2. 73.6 per cent of the small and 70.4 per cent of the marginal farmers have also fallen in the same range. This represents that lack of cost effective technology is the major problem for them which would create adverse impact on them and affect the production also. The analysis inferred that, majority of the respondents' problem is lack of cost effective technology.

Price of agricultural produces

The table 9 presents the attitude of the respondents towards problems and the calculated mean score and respective 'F' value.

Table 9

Problems Related to the Price of Agricultural Produces

Sl.No	Variables	Mean value of the Problems					'F' Value
		Marginal	Small	Medium	Large	Overall	
1	Low support price of Government	4.1442	2.2708	2.4583	4.2083	3.5000	312.395**
2	Low price due to more import of agricultural commodities	3.8942	4.2500	4.4167	3.7500	4.0250	13.108**
3	Non – effective price regulation	4.0497	4.1215	4.0134	4.0486	4.0625	0.330^{NS}

Source: Primary data ** Significant at one percent

It is clear from the table 9 that the variable "low support price of Government" has perceived high mean score among large and marginal farmers viz 4.2083 and 4.1442 respectively. In respect of low price due to "more imports of agricultural commodities" the highly perceived mean score among medium and small farmers are 4.4167 and 4.2500 respectively. "With regard to non effective price regulation", the small farmers has perceived high mean score as 4.1215 and there is no much difference in the mean score among the other types of three farmers on the same statement.

The significant difference is identified among the four types of farmers regarding their perception on the statements "government support price is low" and "low price due to more import of agricultural commodities" since their respective 'F' statistics are at five and one per cent respectively. In order to find out the quantum of the problem they stated in the non remunerative price, problem related to Price Score was computed for further analysis with the help of the following formula and the result is presented in the table 10

$$PAPS = \frac{\sum_{i=1}^{n} SPAPSi}{\sum_{i=1}^{n} MSPAPSV_i} X\ 100$$

Where
PAPS = Price of Agricultural Produces
SPAPS =Score on the Price of Agricultural Produces
MSPAPS =Maximum Score on the Price of Agricultural Produces
i=1 = Number of Variables included in Price of Agricultural Produces

Table 10
Score of the Respondents towards the problems related to Agricultural Price

Variables	Type of farmers				Total
	Marginal	Small	Medium	Large	
2-3	93 (14.9%)	54 (18.8%)	25 (17.4%)	27 (18.8%)	199 (16.6%)
3-4	294 (47.1%)	150 (52.1%)	92 (63.9%)	54 (7.5%)	590 (49.2%)
4-5	237 (38.0%)	84 (29.2%)	27 (18.8%)	63 (43.8%)	411 (34.3%)
Total	624 (100.0%)	288 (100.0%)	144 (100.0%)	144 (100.0%)	1200 (100.0%)

Source : Primary data Figures in parenthesis represent percentage to the total
It could be observed from the table 10 that, in total, a maximum of 49.2 per cent had the APS score of 3-4; 34.3 per cent had the APS of 4-5; 16.6 per cent had the APS of 14.9 per cent. Medium, small and marginal farmers constitute 63.9, 52.1 and 47.1 per cent in the same score of 3-4. On the whole 83.5949.2+34.3) percent of the farmers have fallen in the score of above 4. It may be drawn from the analysis that, t non remunerative price is the major problem for them. This would severely affect the source of the livelihood of the marginal and small farmers.

Table 11
Overall Score of the respondents towards problems

Score	Type of farmers				Total
	Marginal	Small	Medium	Large	
2-3	33(5.3%)	49(17.7%)	27(18.8%)	27(18.8%)	136(11.3%)

3-4	236(37.8%)	61(21.2 %)	109(75.7%)	67(46.5%)	473(39.4%)
4-5	355(56.9 %)	178(61.8%)	8(5.6%)	50(34.7%)	591(49.3%)
Total	624 (100.0%)	288 (100.0%)	144 (100.0%)	144 (100.0%)	1200 (100.0%)

Source: Primary data Figures in parenthesis represent percentage to the total

Conclusion

The analysis reveals that in total; a maximum of 49.3 per cent fall under the score of 4-5; 39.4 per cent under the score of 3-4 and only 11.3 per cent fall under the score of 2-3. It could be inferred from the analysis that more than 49 per cent of the respondents' score is between 4 and 5. It implies that all types of the respondents face all types of problems severely. However, majority of the small and marginal farmers came under the score of 4-5 as 61.8 and 56.9 per cent respectively. It indicates that they face many problems than the other two types of farmers.

References

[1] Misra and Puri, (2010). Indian Economy, Himalaya Publishing House, New Delhi, pp 242-243, 226, 340-341.
[2] Sankaran.S. (2015). "Agricultural Economy of India" Margham Publications, Madras, pp.13-17
[3] Agriculture statistics at a Glance (2014) retrieved from http/www.eands.dacnet.nic.in
[4] Rita Sharma,(2002)" Reforms in Agricultural Extension, New Policy Frame work",Economic and Political Weekly,Vol.XXXVII, NO .30, pp. 3124-3131.
[5] MahendraDev.S. (2009) "Challeges for Revival of Indian Agriculture", Agricultural EconomicsResearch Review,Vol 22, p 22

Websites

Government Agriculture statistics at a Glance 2014 http/ www.e and s.dacnet.nic.in
http:// www.apy
http:// www.land
http://www.tn.in.
www.agcensus.nic.in