

Privatization of Agricultural Extension Service in India – An Attitudinal Analysis

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ABSTRACT. *Agriculture in the developing countries during the 21st century demands a technically sound and client accountable extension service. Financial crisis, disappointing performance of public extension service and challenges and opportunities of the globalization and liberalization era calls for structural and functional adjustment with cost effective and demand driven extension. In the years to come, privatization of the agricultural extension service might be an inviting proposition. A study was conducted during 1999 in Coimbatore district of Tamil Nadu (India) to find out the attitude of farmers, extension personnel and scientists towards privatization of the agricultural extension services (PAES).*

A summated rating scale has been employed to know the attitude of farmers, extension personnel and scientists towards PAES. Results revealed that the overwhelming majority of progressive farmers were aware of PAES (91.67%), progressive farmers utilized PAES (96.67%) and a majority of scientists (67.50%) had a favourable attitude. In contrast to this, 70% of extension personnel had least favourable attitude. Statement-wise analysis of attitude revealed that, 4 categories of respondents had agreement with positive aspects. Farmers had disagreement with negative aspects. More or less an equal percentage of scientists had agreement and disagreement with negative statements and extension personnel had agreement with all negative aspects of privatization. Socio-economic characteristics of the farmers had a positive significant relationship with attitude. Therefore, it is recommended that privatization should be experimented and implemented in a phased manner with utmost caution.

INTRODUCTION

In developing countries achieving progress in agriculture from subsistence farming to more commercialized and specialized farming demands a technically sound and client accountable extension service. In most of the developing countries, the performance of the public extension system is not up to expectation and is generally disappointing. Moreover, in the recent past, public extension systems around the world is witnessing a severe financial crisis. The ideology of globalization and liberalization has thrown many challenges and opportunities to developing countries, particularly in the agriculture sector to meet the challenges of the global free market economy. This situation demands a structural and functional adjustment in the extension system. In this existing climate, privatization of the agricultural extension service might be an inviting proposition. In the years to come, many developing countries around the world are likely to try experimentation or implementation of privatization.

The objectives of the study were to find out the attitude of farmers, extension personnel and scientists towards the privatization of the agricultural extension service and also to investigate the relationship between personal, socio-economic, psychological and communication characteristics of farmers and their attitude towards privatization of the agricultural extension service.

Operational definition of attitude: Attitude towards privatization of agricultural extension service refers to the "individual's degree of favourableness or unfavourableness towards privatization of agricultural extension service".

Operational definition of privatization of agricultural extension service (PAES): Privatization of agricultural extension service refers to the services rendered in the area of agriculture and allied aspects by extension personnel working in the private agencies or organizations for which farmers are expected to pay a fee and it can be viewed as supplementary or alternative to public extension service.

METHODOLOGY

Locale of the study

The research was conducted in Coimbatore district of Tamil Nadu state (India), during March and April 1999.

Selection of respondents

The study was conducted involving 4 categories of respondents viz., progressive farmers aware of privatized agricultural extension service, progressive farmers utilizing privatized agricultural extension service, extension personnel and agricultural scientists.

Selection of farmers

Considering the newness and complexity in understanding the privatization issue, the study was planned to involve only progressive farmers, who were responsive to the developments taking place around in general and privatization being a recent development, farmers who were aware and utilizing privatized agricultural extension service were considered as respondents. Other 2 criteria like minimum level of education (8th standard pass) and awareness about the public extension service were added to give additional weightage to 'progressive farmer' status. Twelve villages were randomly selected from the purposively selected 4 blocks in the Coimbatore district of Tamil Nadu. A list of progressive farmers aware of PAES was prepared and 5 farmers in each village were randomly selected making a sample of 60. Progressive farmers utilising PAES were not many, so 2 or 3 respondents were purposively selected from each village, which came to the final 30 respondents.

Selection of scientists

The scientists representing the agricultural social science disciplines such as, agricultural extension, agricultural economics, and who were much exposed to agricultural developmental and policy issues were selected purposively as respondents. Forty scientists (representing all 3 cadre, such as, Assistant Professor/Scientists, Associate Professor/Senior Scientist, Professor/Principal Scientist) working in the Tamil Nadu Agricultural University (TNAU), Sugarcane Breeding Institute (SBI) and Central Institute for Cotton Research (CICR) at Coimbatore were selected as respondents.

Selection of extension personnel

Forty extension personnel (20 assistant agricultural officers and 20 agricultural officers) working in the State Department of Agriculture in Coimbatore district were randomly selected as respondents.

Measurement of attitude

A summated rating scale was developed (as suggested by Likert, 1932; Devellis, 1991 and Spector, 1992) and a standardized scale (Saravanan and Shivalinge Gowda, 1999) consisting of 21 statements (10 positive and 11 negative) was administered to find out the attitude towards privatization of the agriculture extension service. The responses were obtained on a 5 point continuum *viz.*, 'strongly agree', 'agree', 'undecided', 'disagree' and 'strongly disagree' with weightage of 5, 4, 3, 2 and 1 for positive and reverse scoring system was employed for negative statements. The total attitude score for each respondent was calculated by summing up of the responses of all the statements. The possible total score of the scale ranged from 21–105. Based on scores obtained, the respondents were categorized into 3 categories *viz.*, least favourable (up to 64.84), favourable (64.84–78.22) and most favourable (above 78.22) taking mean and standard deviation as measure of check. Further, attitude statement-wise analysis was also done making the 5 point continuum into 3 point continuum, agreement (strongly agree + agree), undecidedness and disagreement (disagree + strongly disagree) responses were expressed into a percentage. Statements were rearranged and tabulated based on similarity in agreement or disagreement of respondents with the statement.

Measurement of farmers characteristics

To quantify the selected farmer characteristics, standard measurement tools such as scale and structured schedule were used. Personal interview technique was employed for collection of data. To find out the relationship of farmer characteristics with the attitude towards privatization of agricultural extension service, correlation technique was used.

RESULTS AND DISCUSSION

Results revealed that, a substantial number of progressive farmers were aware of PAES (48.33 and 43.33%), and progressive farmers utilizing PAES (46.67 and 50%) had favourable and most favourable attitude towards PAES respectively (Table 1). In contrast

Table 1. Comparison of attitude of farmers, extension personnel and scientists towards PAES.

Comparison I:

Attitude Categories	Attitude Score	Respondent categories							
		PF-A-PAES (n=60)		PF-U-PAES (n=30)		EP (n=40)		Scientists (n=40)	
		No	%	No	%	No	%	No	%
Least favourable	<64.84	5	8.33	1	3.33	28	70.0	13	32.5
Favourable	64.84 -78.22	29	48.33	14	46.67	9	22.5	18	45.0
Most favourable	> 78.22	26	43.33	15	50.00	3	7.5	9	22.5

Comparison II:

Sl. No.	Attitude score category	Mann-Whitney U-test computed value
1	PF-A-PAES vs PF-U-PAES	0.01901641*
2	PF-A-PAES vs Extension personnel	0.00000001**
3	PF-A-PAES vs Scientists	0.00000081**
4	PF-U-PAES vs Extension Personnel	0.00605284**
5	PF-U-PAES vs Scientists	0.04133089*
6	Extn. Personnel vs Scientists	0.00005625**

PF-A-PAES: Progressive Farmers Aware of Privatized Agricultural Extension Service

PF-U-PAES: Progressive Farmers Utilizing Privatized Agricultural Extension Service

EP: Extension personnel * Significant at 5% level ** Significant at 1% level

to this, a great majority (70%) of extension personnel and considerable proportion of scientists (32.50%) had the least favourable attitude towards PAES. Table 1 also indicates that comparison of attitude scores of the 4 respondent groups were significantly different from one another as explained by Kruskal-Wallis One-Way analysis of variance. The Table 1 (Comparison II) shows that comparison of attitude score of each respondent group with the other respondent group by using Mann-Whitney U-test indicated that, all 6 combinations of comparison of groups significantly differed from each other. However, progressive farmers aware of PAES - progressive farmers utilizing PAES and scientists -

progressive farmers utilizing PAES group comparison significantly differed at 5% level of significance. The other 4 combinations of comparisons viz., progressive farmers aware of PAES - extension personnel, progressive farmers aware of PAES - scientists, progressive farmers utilizing PAES - extension personnel and extension personnel - scientists showed difference at 1% level of significance (Fig. 1).

It is interesting to note that, 70% of extension personnel and nearly one-fourth of scientists (22.5%) had an unfavourable attitude. This was mainly because extension personnel had agreement with almost all negative aspects of privatization. A considerable percentage of scientists also had agreement with some of the negative aspects of privatization.

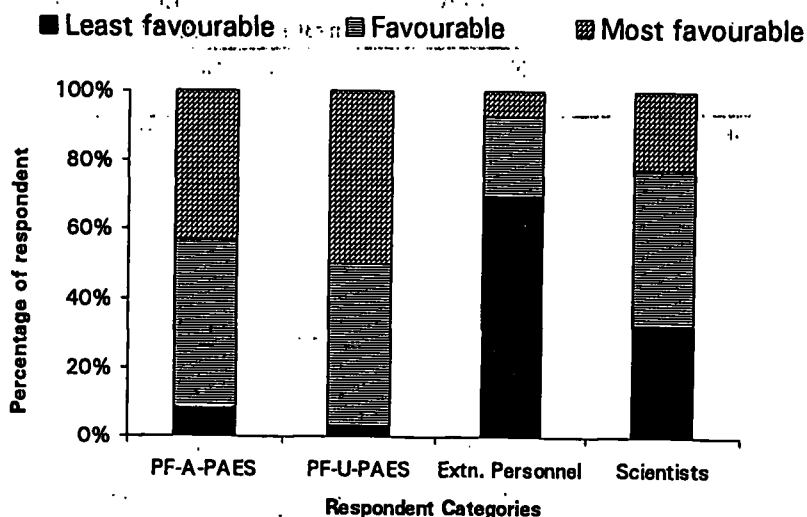


Fig. 1. Comparison of attitude of farmers, extension personnel and scientists towards PAES.

Statement-wise analysis of attitude towards PAES

Table 2 indicates that respondents of all the 4 categories had agreement with the positive statements. Reduction in budget burden is seen from the possibility that public extension system may stop the new recruitments or even reduce attention on certain areas concentrated by private agencies. Expectation of the respondents that, PAES enhances overall efficiency of agricultural production system and generates maximum profit, are borne out of the reality that private extension can sustain only when farmers realise positive differences in private system as compared to the existing public system. This is possible through appropriate advisory service based on the seasonal needs. And when it happens, it is quite obvious that private extension is accorded a better status and recognition among the user community, with an increased credibility.

Table 2. Statement-wise analysis of attitude towards PAES.

Sl. No.	Attitude Statements	Response Categories	Respondent categories (%)			
			PF-A-PAES	PF-U-PAES	EP	Scientists
1	PAES reduces the budget burden of state or central government	A	56.67	70.00	70.00	77.50
		UD	13.33	3.33	2.50	7.50
		DA	30.00	26.67	27.50	15.00
2	PAES enhances overall efficiency of agricultural production system	A	71.67	83.33	62.50	67.50
		UD	5.00	3.33	20.00	17.50
		DA	23.33	13.34	17.50	15.00
3	PAES ensures maximum profit to the farmers	A	88.33	80.00	52.50	47.50
		UD	5.00	3.33	12.50	20.00
		DA	6.67	16.67	35.00	32.50
4	Farmers will be more inclined to follow advice of Private Extension Worker	A	58.34	66.67	47.50	40.00
		UD	21.67	10.00	10.00	15.00
		DA	20.00	23.33	42.25	45.00
5	PAES renders services based on seasonal needs	A	90.00	93.33	72.50	70.00
		UD	3.33	0.00	12.50	15.00
		DA	6.67	6.66	15.00	15.00
6	PAES helps extension worker to gain more confidence among farmers	A	71.67	80.00	52.50	75.00
		UD	13.33	3.37	20.00	5.00
		DA	15.00	16.67	27.50	20.00
7	PAES extension worker upgrade their knowledge	A	80.00	93.33	67.50	75.00
		UD	5.00	0.00	17.50	12.50
		DA	15.00	6.64	15.00	12.50
8	PAES ensures appropriate advisory services	A	85.00	96.67	57.50	75.00
		UD	5.00	3.33	17.50	15.00
		DA	10.00	0.00	25.00	10.00
9	The status and recognition of extension workers increases in PAES	A	91.66	90.00	67.50	77.50
		UD	1.67	3.33	12.50	5.00
		DA	6.67	6.67	20.00	17.50
10	PAES provides solution to all technical problems of farmers pertaining to agriculture and allied activities	A	68.33	76.67	40.00	35.00
		UD	13.33	6.67	20.00	12.50
		DA	18.34	16.66	40.00	52.50
11	PAES is more inclined to charge for services and more commercial oriented rather than public interest	A	8.34	23.33	85.00	70.00
		UD	26.67	13.33	5.00	2.50
		DA	65.50	63.34	10.00	27.50
12	Information transferred by PAES needs constant monitoring by some government agency	A	23.34	10.00	70.00	67.50
		UD	20.00	33.33	0.00	2.50
		DA	56.67	56.67	30.00	30.00

Continued

Table 2. Continued....

Sl. No.	Attitude Statements	Response Categories	Respondent categories (%)			
			PF-A-PAES	PF-U-PAES	EP	Scientists
13	PAES is not suitable because most of the operational land holdings are small and marginal	A	20.00	30.00	55.00	37.50
		UD	20.00	6.67	5.00	5.00
		DA	60.00	63.33	40.00	57.00
14	In India, nature of the farming does not support the farmers to meet the expenses of PAES	A	25.00	10.00	70.00	52.50
		UD	11.67	10.00	5.00	2.50
		DA	63.33	80.00	25.00	45.00
15	Vast rainfed area subject to external calamity provides less scope for PAES	A	40.00	23.34	75.00	42.50
		UD	6.67	6.66	12.50	12.50
		DA	53.33	70.00	12.50	45.00
16	PAES hamper the free flow of information	A	6.67	3.33	40.00	37.50
		UD	6.67	3.33	17.50	10.00
		DA	86.66	93.34	42.50	52.50
17	Commercial interest of PAES jeopardises achieving eco-friendly and sustainable agriculture	A	18.33	6.66	62.50	40.00
		UD	10.00	6.67	17.50	22.50
		DA	71.67	86.67	20.00	37.50
18	Achieving coordination between PAES and other allied Govt. Depts., Govt. Agril. Research System is very difficult	A	23.33	26.66	57.50	40.00
		UD	20.00	13.33	0.00	15.00
		DA	56.67	60.00	42.50	45.00
19	PAES is an hindrance to employ group approach techniques	A	83.33	93.33	47.50	30.00
		UD	6.67	3.34	17.50	20.00
		DA	10.00	3.33	35.00	50.00
20	PAES is likely to increases the regional imbalance.	A	33.33	13.33	45.00	25.00
		UD	30.00	30.00	25.00	27.50
		DA	36.67	56.67	30.00	47.50
21	PAES is not desirable in the interest of poor farmers	A	86.67	96.67	75.00	57.50
		UD	6.67	3.33	7.50	7.50
		DA	6.67	0.00	17.50	35.00

PAES - Privatization of Agricultural Extension Service

A - Agreement

UD - Undecidedness

DA - Disagreement

Generally, majority of the farmer respondents had disagreement with the negative statements. More or less equal proportion of scientists had agreement and disagreement with most of the negative aspects. However, in the case of extension personnel, majority of the respondents agreed with the negative aspects. This type of negative attitude was mainly due to the fact that, in most of the developing countries like India, farmers are either small or marginal, resource poor, operating subsistence farming with limited marketable surplus which do not support some kind of cost recovery (Sulaiman and Gadewar, 1994). Farmers also may be less inclined to tell their colleagues what they have learnt from the private extension agent as they do not like free riders (Van den Ban and Hawkins, 1996). The extension personnel and scientists are apprehensive over the cost factor as well as the integrity of such private agencies. Contradictory message flow from the private sector was also feared, because, private agents may follow aggressive marketing strategies, resulting

in contradictory message flow, leading to unnecessary confusion among the clients, particularly the illiterate (Sulaiman and Gadewar, 1994).

Extension personnel and scientists also fear that private extension personnel may try to glorify their causes forgetting the public interest and hence suggest constant monitoring by some government agency. Commercial interest of PAES jeopardises achieving eco-friendly and sustainable agriculture. The commonly encountered weakness of these private sector input supply agencies involved in transfer of technology is that little attention is given to low input, sustainable agricultural technologies including environmental and resource conservation (UNDP, 1991).

PAES is a hindrance to employ group approach technique to this negative aspect is agreed, by the overwhelming majority of farmers. This is because the group extension approach may not be favoured by the private consultancy firms as these will reduce their chances of paid consultancy work. These group approaches reduce the number of "days sold per consultant each year driven by the interest of those clients who are able to pay the bills, it could no longer be an agency responsive to the public interest as whole" (Harter and Hass, 1992). Private extension agencies mostly employ personal contact methods and low with group mass communication (Saravanan and Shivalinge Gowda, 2000).

All four categories of respondents were almost equally divided with agreement, disagreement and undecidedness about the statement that, privatization increases the regional imbalance. It is mainly because of the fact that commercial agencies concentrate their activities on areas having favourable physical environments such as fertile soil, irrigation potential and satisfactory infrastructure (Harter and Hass, 1992). And also they will not be interested in investing in rainfed, resource poor and unfavourable environments, where the possibility of making profits is very difficult (Sulaiman and Gadewar, 1994).

Unanimity in attitude was also expressed by all the 4 categories of respondents for the statement that PAES is not desirable in the interest of poor farmers. This expression may be due to the fact that private extension service involves cost. The low per capita income and limited marketable surplus hinder the poor farmers to approach cost recovery extension. Private extension targets only those who can pay, that is the commercial and big farmers (Saravanan and Shivalinge Gowda, 2000).

Relationship between farmer characteristics and their attitude towards PAES

Table 3 indicated that, in the case of progressive farmers aware of PAES, characteristics such as annual income, farm size, socio-economic status (socio-economic status comprises of the position which the individual farmer occupies with reference to the prevailing average standards of cultural possessions, material possessions and social participation), level of aspiration, achievement motivation, management orientation, economic motivation, scientific orientation and innovation proneness had positive significant relationship with attitude towards privatization of agricultural extension service. It shows that, increasing these characteristics also makes favourable attitude towards privatization. In respect of progressive farmers utilizing PAES, characteristics such as farming experience and occupation had negative significant relationship with attitude. It

Table 3. Relationship between farmers characteristics and their attitude towards PAES.

Sl. No.	Farmers characteristics	Correlation co-efficient	
		PF-A-PAES	PF-U-PAES
1	Age	0.049 NS	0.083 NS
2	Education	0.216 NS	0.198 NS
3	Farming experience	-0.084 NS	-0.381 **
4	Occupation	0.181 NS	-0.272 *
5	Annual income	0.401**	0.482 **
6	Farm size	0.304**	0.362 **
7	Socio-economic status	0.394**	0.473 **
8	Cropping intensity	0.021 NS	0.071 NS
9	Irrigation intensity	0.032 NS	0.271 *
10	Risk orientation	0.172 NS	0.021 NS
11	Decision making ability	0.212 NS	-0.081 NS
12	Level of aspiration	0.301 *	-0.062 NS
13	Achievement motivation	0.308 *	-0.062 NS
14	Management orientation	0.273 *	-0.108 NS
15	Economic motivation	0.382 **	-0.610 NS
16	Scientific orientation	0.373 **	0.421 **
17	Innovation proneness	0.378 **	0.398 **
18	Cosmopoliteness	-0.021 NS	-0.081 NS
19	Mass media participation	0.042 NS	0.062 NS
20	Extension participation	0.091 NS	0.068 NS
21	Extension agency contact	0.061 NS	0.072 NS

* - Significant at 5% level ** - Significant at 1% level NS - Non Significant

shows that farmers having non-agricultural occupation and less farming experience had more favourable attitude towards PAES. Annual income, farm size, socio-economic status, irrigation intensity, scientific orientation and innovation proneness had positive significant relationship. This shows that a high level of these characteristics favourably influence the attitude towards privatization.

Here it is evident that the attitude of the farmers who were aware of the private extension services is influenced more by socio-economic, scientific and psychological characteristics. However, the farmers who were utilizing extension services are mainly influenced by socio-economic and scientific characteristics.

CONCLUSIONS

Results of this investigation conclude that farmers had the most favourable attitude and their socio-economic, physiological characteristics such as annual income, farm size, socio-economic status, scientific orientation and innovation proneness had positive significant relationship with their favourable attitude. However, majority of extension personnel and considerable percentage of scientists had apprehensions about the advantages of privatization. Results of this investigation provide a basis for planning future extension approach. It is recommended that a balanced approach to take advantage of PAES and counteract disadvantages is essential. Privatization of agricultural extension service should be experimented and implemented in a phased manner with utmost caution. Privatization for agricultural extension service will facilitate to meet the present needs and future challenges of the farming community.

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