

Attitudes of the Farmers and Agricultural Officers on Privatisation of Agricultural Extension Service in Up Country Vegetable Sector in Sri Lanka

S.H.P. Falkanthi and R.P. Mahaliyanaarachchi¹

Postgraduate Institute of Agriculture
University of Peradeniya
Peradeniya, Sri Lanka

ABSTRACT. *Government has traditionally taken the dominant role in the provision of agricultural extension services because of its importance to the development of the agricultural sector. However, escalating fiscal deficit in many developing countries and, in several cases, problem of poor governance of public programs over the last decade have increasingly redirected attention towards how to make agricultural extension more cost effective and responsive to specific farmer needs. This has increased attention towards the potential for the privatisation of agricultural extension service. This study was conducted to examine the attitudes of the vegetable farmers in Nuwara Eliya district in Sri Lanka towards privatisation of agricultural extension service. A cross sectional survey was conducted to collect necessary primary data. A sample of 240 farmers, 20 agricultural instructors, 20 higher officers of the Department of Agriculture and 20 higher officers of private companies were interviewed. Results revealed that more than 50% of the up country vegetable farmers have positive attitudes towards privatisation of agricultural extension service. Socio-economic factors, such as type of labour, monthly profit, monthly total income and management ability have affected directly the attitudes of farmers. According to the study there is a possibility to privatise the extension service under certain conditions.*

INTRODUCTION

The agricultural extension service in Sri Lanka was started in 1920's with the establishment of the Department of Agriculture (DOA) (Second Perennial Crop Development Project, 1999). Until early 1980's it was gradually grown and developed offering a greater service to all types of the farmers equally, irrespective of scale of farming, wealth and other socio economic factors. The Department of Agriculture, agricultural research institutions and other agricultural related institutions in the state sector have delivered the extension services free of charge to the farmers as a public commodity. But today it has reached a critical stage. Public sector extension services need a large sum of public funds to maintain and conduct the service. Due to shortage of public funds, government has to continue the extension service under big pressure. In this situation government extension services are criticized for wasting public money and other resources, due to lack of their effectiveness and efficiency and not devoting sufficiently to the agricultural development of the country. This situation demands the structural and financial adjustment in the extension system. In this existing climate, privatization of agricultural

¹ Department of Agri-Business Management, Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka, Belihul Oya.

extension might be an important alternative. Therefore, most of the developing and developed countries are willing to study the feasibility of privatization of extension services.

Attitude towards privatisation of agricultural extension services is considered as the person's degree of willingness or unwillingness towards it. Privatisation of agricultural extension service (PAES) means the services provided by extension personnel in the private extension agencies or organizations for which farmers are expected to pay a fee.

MATERIALS AND METHODS

This research was conducted in Nuwara Eliya District where intensive, well-planned, commercial level vegetable cultivation is carried out throughout the year by the majority of the farming community.

A cross-sectional survey was carried out by using structured questionnaires to collect necessary primary data from the farmers. Two hundred and forty farmers were interviewed. The sample of farmers was derived according to a multistage cluster sampling procedure. Apart from farmers, 20 agricultural instructors (AI), 20 higher officers (HO) of DOA and 20 higher officers of private companies (PC) were also interviewed.

Determination of attitude of the respondents

According to the standardized scale (Saravanan and Gowda, 1999) 21 (10 positive and 11 negative) attitudinal items were subjected to judgement by four respondent groups to determine the attitudes towards PAES. The responses were obtained on a five point continuum viz., strongly agree (SA), agree (A), undecided (UD), disagree (DA) and strongly disagree (SDA) with weightage of 5, 4, 3, 2 and 1 for positive and reverse scoring system was employed for negative statements. The total score for each respondent was calculated by summing up the responses of all the statements. The possible total score of the scale ranges from 21-105. Based on the score obtained by the respondents, they were categorized into three attitudinal categories as least favourable (< 63.15), favourable (63.15-76.37) and most favourable (> 76.37) by taking the mean and standard deviation as measure of check.

In the statement analysis of attitude towards PAES, five point continuum was converted into three point continuum as agree (strongly agree + agree), undecided and disagree (disagree + strongly disagree). Result was converted into percentages and conclusions were drawn based on these values.

Determination of characteristics that affect the attitudes of the farmers

Sixteen hypotheses were constructed by using 16 socio-economic factors of farmers to determine the factors affecting attitudes of the farmers towards PAES in vegetable cultivation. By using categorical data analysis these hypotheses were tested.

Out of the 16 characteristics, only significant factors were subjected to analysis of variance by using multiple linear regression in order to determine the variance explained by each factor regarding the attitudes towards PAES.

Analysis of the feasibility of PAES

Feasibility of PAES was determined by using two ways:

- By using direct question regarding the payments for the service from the farmers. Reactions were noted in three point continuum as willing to pay, sometimes willing to pay and not willing to pay. These values were converted into percentages and the conclusions were made based on these values.
- By considering the attitudinal categories of farmers that are constructed on the statement-wise analysis of attitudes of farmers as least favourable, favourable and most favourable towards PAES.

RESULTS AND DISCUSSION

Attitudes of the respondents

Table 1 explains the nature of attitude of the four groups of respondents. Nearly 41% of the farmers had least favourable attitude regarding PAES. But 59% of farmers had favourable and most favourable attitude towards PAES. Farmer's demand for agricultural extension service varied with the type of farmer such as subsistence, small scale and medium and large scale farmers. Medium and large scale farmers had large marketable output value in relation to potential demand for agricultural extension service. Given that a fixed or negotiated fee is paid for extension information, these farmers can "spread the cost" resulting in lower per unit cost of extension, thus increasing the affordability of the service. Small or subsistence farmers, unless they have the capacity to convert to commercialised farming, will have limited or no incentive to convert to pay for extension service (Second Perennial Crop Development Project, 1999). Even though majority of the AIs and HOs of DOA had favourable and most favourable attitude regarding PAES, there were considerable number of AIs and HOs of DOA having least favourable attitude regarding PAES (30 and 35% respectively). Almost all the HOs of PC had the most favourable attitude towards PAES (95%).

According to Table 2, all respondent groups agreed with some positive statements such as reduction of budget burden, enhancement of the overall efficiency of agricultural production system, provision of services based on seasonal needs (demand driven services), provision of appropriate advisory service. There are fundamental goals of privatisation process. Improvement of management, inducement of efficiency to provide better consumer service, inducement of technology transfer and modernization are the major ones. The aim of these factors is to increase productivity and growth in order to relieve the state of the burden of subsidising cost making public enterprises and thereby induce better budgetary

Table 1. Comparison of attitude of four different categories of respondents.

Attitude category	Attitude score	Respondent categories							
		Farmers (n=240)		AIs (n=20)		DOA (n=20)		PC (n=20)	
		No.	%	No.	%	No.	%	No.	%
Least favourable	(<63.15)	98	(40.83)	7	(35.00)	6	(30.00)	0	(00.00)
Favourable	(63.15-76.37)	80	(33.43)	8	(40.00)	10	(50.00)	1	(05.00)
Most favourable	(>76.37)	62	(25.83)	5	(25.00)	4	(20.00)	19	(95.00)

Table 2. Statement-wise analysis of the attitude of farmers towards privatization of agricultural extension service (PAES).

Attitude statement	Response category	Response categories (percentage)			
		Farmers	AI	DOA	PC
1. PAES reduces the budget burden of state or central government	A	83.33	90.00	95.00	100.00
	UD	11.67	10.00	05.00	00.00
	DA	05.00	00.00	00.00	00.00
2. PAES enhances the overall efficiency of agricultural production system	A	68.33	75.00	50.00	90.00
	UD	23.33	25.00	30.00	10.00
	DA	08.33	00.00	20.00	00.00
3. PAES ensures maximum profit to the farmers	A	36.67	30.00	40.00	95.00
	UD	38.33	55.00	40.00	05.00
	DA	25.00	15.00	20.00	00.00
4. Farmers will be more inclined to follow advices of the private extension workers	A	30.00	30.00	20.00	80.00
	UD	53.33	55.00	50.00	20.00
	DA	16.67	15.00	30.00	00.00
5. PAES renders services based on seasonal needs	A	85.00	95.00	50.00	100.00
	UD	08.33	05.00	20.00	00.00
	DA	06.67	00.00	30.00	00.00
6. PAES provides solutions to all technical problems of farmers pertaining to agriculture and allied activities	A	25.00	15.00	20.00	90.00
	UD	55.00	65.00	60.00	10.00
	DA	20.00	20.00	20.00	00.00
7. PAES helps extension workers to gain more confidence among farmers	A	45.00	40.00	20.00	90.00
	UD	40.00	50.00	60.00	10.00
	DA	15.00	10.00	20.00	00.00
8. PAES helps extension workers upgrade their knowledge	A	66.67	45.00	30.00	90.00
	UD	28.33	50.00	50.00	10.00
	DA	05.00	05.00	20.00	00.00
9. PAES ensures appropriate advisory services	A	78.33	70.00	50.00	100.00
	UD	13.33	20.00	30.00	00.00
	DA	08.33	10.00	20.00	00.00

Continued.....

Attitudes of the Farmers and Agricultural Officers on Privatisation

Table 2. Cont'd.....

Attitude statement	Response category	Response categories (percentage)			
		Farmers	AI	DOA	PC
10. The status and recognition of extension workers increases in PAES	A	45.00	55.00	20.00	90.00
	UD	48.33	40.00	60.00	10.00
	DA	06.67	05.00	20.00	00.00
11. PAES is not suitable because, most of the operational land holdings are small and marginal	A	13.33	20.00	20.00	00.00
	UD	10.00	25.00	20.00	10.00
	DA	76.67	55.00	60.00	90.00
12. Subsistence nature of farming does not support the farmers to meet expenses	A	30.00	25.00	40.00	05.00
	UD	36.67	35.00	40.00	15.00
	DA	33.33	40.00	20.00	80.00
13. Area subjected to external calamities provides less scope	A	55.00	20.00	40.00	05.00
	UD	33.33	70.00	40.00	20.00
	DA	11.67	10.00	20.00	75.00
14. PAES hampers the free flow of information	A	30.00	30.00	35.00	10.00
	UD	43.33	50.00	40.00	25.00
	DA	26.67	20.00	25.00	65.00
15. Commercial interest of PAES jeopardizes achieving eco-friendly and sustainable agriculture	A	08.33	20.00	30.00	00.00
	UD	20.00	30.00	40.00	15.00
	DA	71.67	50.00	30.00	85.00
16. PAES is not desirable in the interest of poor farmers	A	40.00	25.00	40.00	05.00
	UD	30.00	50.00	40.00	30.00
	DA	30.00	25.00	20.00	65.00
17. Achieving coordination between PAES and other allied govt. depts., govt. agricultural research system is very difficult	A	31.67	15.00	40.00	10.00
	UD	43.33	65.00	35.00	30.00
	DA	25.00	20.00	25.00	60.00
18. PAES is more inclined to charge for services and more commercial oriented rather than public interest	A	45.00	10.00	30.00	05.00
	UD	25.00	80.00	40.00	10.00
	DA	25.00	10.00	30.00	85.00
19. PAES is more likely to increase the regional imbalance	A	30.00	15.00	20.00	30.00
	UD	40.00	70.00	60.00	20.00
	DA	30.00	15.00	20.00	50.00
20. PAES is a hindrance to employ group approach technique	A	43.33	25.00	40.00	20.00
	UD	30.00	50.00	40.00	20.00
	DA	26.67	25.00	20.00	60.00
21. Information transferred by PAES needs constant monitoring by some govt. agency	A	51.67	25.00	40.00	10.00
	UD	05.00	45.00	20.00	10.00
	DA	43.33	30.00	40.00	80.00

management and to spread the ownership of shares to a wider spectrum of the population (Kelegama, 1992). But the farmers and agricultural officers of the state sector were undecided about some positive statements such as ensuring maximum profit to the farmers, more inclination of farmers to follow advices of the private extension workers, provision

of solutions to all technical problems of farmers, helping extension workers to gain more confidence among farmers, upgrading of the knowledge of private extension workers and increment of the status and recognition of private extension workers. The farmers and agricultural officers of the state sector were unable to agree or disagree with these statements, due to inexperience with privatised agricultural extension services and inability to compare with other private services such as government and private medical services, free school education with private school education *etc.* There are also moral hazard problems associated with the dissemination of agricultural information. Unless the private "fee for services" extension industry can effectively police itself to ensure the quality of the information communicated, public intervention will be necessary (Umali and Schwartz, 1994). In the negative statements of PAES, most of the time first three groups of respondents *viz.*, farmers, AIs and HOs of DOA were not in a position to predict about the PAES. They have agreed or disagreed with few of the statements. But for most of the statements they stayed without any decision. However, privatisation of traditionally publicly provided agricultural extension services, raises several related issues. Will private sector delivery particularly fee for service system, necessarily lead towards greater efficiency and equity? What are the social and income distributional implications of privatisation, in terms of access to the services by small farmers and rural poor? (Umali and Schwartz, 1994). It is important that majority of HOs of some private companies *e.g.*, Haychem, CIC, Bours, Finlay and Uni-power are 100% agreed with positive statements and disagreed with negative statements without any hesitation as they believe the advantages of privatisation.

Factors that affect the attitude of the farmers

Sixteen variables such as, age of the farmer, size of the family, educational level of the farmer, type of farming, farming experience, type of labour used, land size, cropping pattern of the farmer, profit from the vegetable farming, total monthly income of the farmer, access to modern technology, access to market information, decision making ability, management ability, nature of the government extension service and nature of the other extension services were tested to determine the factors affecting the attitudes of the farmers towards privatization of agricultural extension service.

According to the study, out of the 16 factors only four factors were associated with attitudes of farmers, towards privatisation (Table 3). Type of labour used, monthly profit from vegetable cultivation, monthly total income and management ability of farmers had positive relationship with attitude towards PAES. Farmer demand for agricultural extension services depends upon the expected net benefit from the investment of the new information. Strong market competition associated with highly tradable commodities will further enhance effective demand for new information (Umali and Schwartz, 1994). According to the study, farmers who had financial capabilities were willing to have efficient and effective advisory service. Even though there were other important characteristics, which are needed for the success of the cultivations, they were unable to gain better income out of farming alone. Income of the farmers depends on successful cultivation as well as better marketing opportunities. Therefore, only the factors that directly affect the income of the farmers are significant here.

Table 3. Association between attitudes of the farmers towards privatization of agricultural extension and the selected factors.

No.	Factor	χ^2 value	P value
1	Age of the farmer	3.764	0.439
2	Family size	1.415	0.493
3	Educational level of the farmer	8.935	0.177
4	Type of farming	6.338	0.845
5	Farming experience of the farmer	1.543	0.819
6	Type of labour used*	34.445	0.001
7	Land size	6.518	0.164
8	Cropping pattern of the farmer	5.888	0.660
9	Monthly profit from vegetable cultivation*	144.481	0.001
10	Monthly total income*	149.508	0.001
11	Access to modern technology	0.160	0.997
12	Access to market information	3.609	0.165
13	Decision making ability of the farmer	4.021	0.403
14	Management ability of the farmer*	39.239	0.001
15	Nature of the extension service of the DOA	3.359	0.500
16	Nature of the extension service of other companies	6.426	0.853

* significant at 1% level

It is useful to know, how important these four factors are for the determination of attitudes. Therefore, these factors were subjected to analysis of variance to find out the contribution of each of the factors towards attitude. Stepwise multiple regression procedure was used.

According to the results only the total monthly income was significant and it explained 19.72 of the total variance in the attitude of farmers towards privatisation.

Feasibility of privatisation of agricultural extension

The feasibility of privatization of agricultural extension was determined by adopting two methods viz., using direct questions regarding willingness to pay for the extension service (Table 4) and using attitudinal categories towards PAES (Table 5).

Table 4. Willingness to pay for extension services by the farmers.

Willingness	No. of farmers	%
Not willing	101	42.09
Sometimes willing	74	30.83
Always willing	65	27.83

Table 5. Number of farmers under each attitudinal categories.

Attitude categories	Attitude score	Respondent category	
		Farmers (n=240)	
		No.	%
Least favourable	(<63.15)	98	40.83
Favourable	(63.15-76.37)	80	33.43
Most favourable	(>76.37)	62	25.83

Results of the two methods were similar. Results of the first method revealed that about one-fourth of the farmers were willing to pay for the service without any hesitation. Nearly one-third of the farmers were willing to pay for the service whenever they decide the service was essential and economical. Nobody likes to pay just for advice until that advice is proved to be financially rewarding (Second Perennial Crop Development Project, 1999). Therefore, more than 50% of the farmers were willing to buy the service. According to the results of the second method also, about one-fourth of the farmers had most favourable attitude and nearly one-third of the farmers had favourable attitudes towards PAES. These results clearly show that there is a feasibility to privatize agricultural extension service in the vegetable sector in upcountry in Sri Lanka.

CONCLUSIONS

According to the results of this study higher percentage of farmers, agricultural instructors and higher officers of the DOA have favourable and most favourable attitude towards privatization of agricultural extension service. Economic factors such as monthly profit from farming, monthly total income and type of labour and management ability of the farmer are the most important factors that determined the attitude of farmers in relation to PAES. Therefore, there is a feasibility of privatization of agricultural extension service, but under certain conditions such as scale of farming, type of farming *etc.*

Most of the farmers are in a position to realize the advantages of privatization over public extension service. But, the main constraint is inability of farmers to earn reasonable amount of income out of farming due to present situation of farming and existing poor marketing facilities. Therefore, privatization of extension service in a phased manner, by meeting the demands of the farmers can be recommended.

REFERENCES

- Kelegama, S. (1992). *Privatisation: The Sri Lankan experience*. Institute of Policy Studies, Sri Lanka.
- Saravanan, R. and Gowda, N.S.S. (1999). Development of a scale to measure attitude towards privatisation of agricultural extension service. *Trop. Agric. Res.* 11: 190-198.
- Second Perennial Crop Development Project. (1999). *Privatisation of Advisory Service for Perennial Crops*, Uniquet Ltd., Sri Lanka.

Umali, D.L. and Schwartz, L. (1994). Public and Private Agricultural Extension Beyond Traditional Frontiers, World Bank Discussion Paper, Washington D.C., USA.