

Clientele of Public, Private and NGOs Agricultural Extension

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ABSTRACT

The pluralistic agricultural extension system demands to generate information on type of clientele they concentrate and it is necessary to formulate future extension approach and to revitalize the public extension system. Hence, a research study was undertaken with the objective to find out the clientele characteristics in the public, private and NGOs extension in three districts of Karnataka State, India, during 2003. Based on judges relevancy rating eight characteristics of clientele were selected. Information was collected from 210 clientele covered by public and private extension organizations like; Farmers' Contact Centres (FCCs), Agri-Business Firms (ABFs), Agricultural Consultancies (ACs) and Non-Governmental Organizations (NGOs). To quantify the selected clientele's characteristics, standard measurement tools such as summated rating scales, index and structured schedule have been used. Personnel interview method was employed for collection of data. Results revealed that Agricultural Consultancies clientele had high level of education, annual income, farm size, irrigation intensity, innovation proneness and extension service commitment. Whereas, NGOs clientele had low level of education, annual income, marginal and small farm size. The Farmers' Contact Centres and Agri-Business Firms clientele had medium level of annual income, farm size and low level of extension service commitment.

Over the years, agricultural extension viewed as a public good and has been financed by the public sector in most countries (Dinar, 1996). But, in recent past, financial burden on governments, disappointing performance of public extension (Ameur, 1994; Hunsra and Adhiguru, 1998; and Saravanan, 1999a) and opportunities in Global free market economy calls for structural and functional adjustment with cost effective and demand driven approach (Saravanan, 1999b). Further, in the present globalization and liberalization era, plant breeders rights, patent rights to specific technologies has facilitating emergence of private sector in agricultural extension (Umali, 1997). The NGOs are entering in a big way in agricultural extension service provision (Saravanan, 2001). In this existing scenario, emerging pluralistic agricultural extension system demands

to generate information on type of clientele they concentrate and it is necessary to formulate future extension approach and to revitalize the public extension system (Saravanan, 2003). Hence, a research study was undertaken with the objective to find out the clientele characteristics in the public, private and NGOs extension.

METHODOLOGY

The research was conducted in Chitradurga, Kolar and Tumkur districts of Karnataka State, India, during, 2003. The extension organizations selected are given in Table 1. Considering number of extension personnel working in field level, one client for each extension person was selected randomly in Farmers' Contact Centers. But in private extension system, comparatively less number of extension

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personnel and clientele were available. Hence, two clientele for each extension personnel were selected.

Table 1: Selected public and private extension organizations and sample size

Public and private extension organizations	Clientele sample size
Public extension	
Farmers' Contact Centers -15	60
Private extension	
Agri-Business Firms	
1. Hindustan Lever Limited (HLL)	6
2. Global Green Co. Ltd.	22
3. Unicom Ltd.	24
4. PEPSICO: India Holdings Pvt. Ltd.	8
	60
Agricultural Consultancies	
1. Rallis Kissan Kendra - A TATA Enterprise	8
2. Vaishnavi Farm Services: Agricultural Consultants and Agro-Chemical Suppliers	22
	30
Non-Governmental Organizations (NGOs)	
1. Bharat Agro-Industries Foundation (BAIF)	
Institute for Rural Development- Karnataka (BIRD-K)	28
2. Mysore Resettlement and Development Agency (MYRADA)	14
3. OUTREACH: Volunteers of Rural Development	12
4. PRAYOG: Centre for Agricultural and Rural Development	12
	60
Public extension clientele	60
Private extension clientele	150
Total sample size	210

Clientele's characteristics: Referring books, journals, discussion with the extension experts, academicians, farmers, extension personnel from state developmental departments and NGOs a large number of clientele characteristics were listed. The listed characteristics were mailed with appropriate instructions to 110 judges and they were asked to check each of the characteristics for being relevant or not relevant, using three point continuum viz., Most Relevant, Relevant and Not Relevant. The response were obtained from 74 judges (67.27 per cent). The relevancy score for each objective was worked out by using following formula:

$$\text{Relevancy percentage} = \frac{\text{Most Relevant Response} \times 2 + \text{Relevant Response} \times 1}{\text{Maximum Possible Score (72} \times 2 = 148)} \times 100$$

The characteristics having relevancy percentage of more than 75 were selected. Accordingly, eight characteristics were selected. To quantify the selected clientele's personal, economic, situational and psychological characteristics, standard measurement tools such as; summated rating scales, index and structured schedule have been used. Personnel interview method was employed for collection of data. Based on the scores obtained by the respondents they were categorized in to three categorized in to three categories like Low (< Mean-1/2 SD), Medium (Mean + 1/2 SD) and High (>Mean + 1/2 SD). Results were expressed in percentage.

RESULTS AND DISCUSSION

Personal, Economic and Situational Characteristics of the Clientele

Education: Comparison of all the agricultural extension organisations' clientele education level in Table 2 clearly indicates that there is not much difference in educational level among the clientele of different organisations. However, NGOs, Farmers' Contact Centres and agribusiness firms clientele are mostly less educated and in contrast to this agricultural consultancies clientele had high level of education. It is a fact that, farmers in rural areas possess less education. In agricultural consultancies, most of the clientele were progressive and well educated. Further, most of them were holding some office, based on their education as a primary education and agriculture becoming secondary occupation for them.

Farming experience: Overwhelming majority of the public and private extension clientele had high to medium

Table 2: Education level, farming experience and annual income of the public and private extension clientele (n = 210)

Category and characteristics score	Public extension	Private extension		
	SDA-FCCs (n ₁ = 60)	Ag. buss. firms (n ₂ = 60)	Ag. consultancies (n ₃ = 30)	NGOs (n ₄ = 60)
	Per cent (%)	Per cent (%)	Per cent (%)	Per cent (%)
Education				
Low - Up to primary	43.33	46.67	23.33	46.67
Medium - 6 th std to 12 th std	46.67	38.33	43.33	48.33
High - Degree	10.00	15.00	33.33	5.00
Farming experience				
Low - Up to 4.54	0.00	0.00	2.17	1.67
Medium - 4.55 to 9.50	10.00	26.67	13.33	23.33
High - 9.51 and above	90.00	73.33	83.33	75.00
Annual income				
Low - Up to 33,750	21.67	13.33	13.33	80.00
Medium - 33,751 to 1,44,500	63.33	78.33	40.00	13.33
High - 1,44,001 and above	15.00	8.33	46.67	6.67
Mann - Whitney U test				
Education	FCCs vs ABF: 0.372* ABFs vs ACs: 0.016**	Public vs private: 0.445* FCCs vs ACs: 0.073** ABFs vs NGOs: 0.315*	FCCs vs NGOs: 0.0718** ACs vs NGOs: 0.001**	
Farming experience	FCCs vs ABF: 0.170* ABFs vs ACs: 0.188*	Public vs private: 0.403* FCCs vs ACs: 0.456* ABFs vs NGOs: 0.315*	FCCs vs NGOs: 0.588* ACs vs NGOs: 0.600*	
Annual income	FCCs vs ABF: 0.876* ABFs vs ACs: 0.000*	Public vs private: 0.026 FCCs vs ACs: 0.000** ABFs vs NGOs: 0.000**	FCCs vs NGOs: 0.000** ACs vs NGOs: 0.000**	

*,**Significant at 5 and 1 per cent level respectively.

is ranges from Rupees 33,750 to Rs. 1,44,000, whereas, agricultural consultancy clientele were having medium and high level of income. It was mainly because of their potential of land, favourable soil with sufficient water resources. Further, most of them earning from non-agriculture occupation also, as a continuous income. In contrast to this, great majority of NGOs clientele had low income level. It is a fact that majority of the NGOs are concentrating on resource poor farmers and also few NGOs are exclusively concentrating rural population who are below poverty line.

Farm size: The data in Table 3 reveals that a majority of the Farmers' Contact Centres clientele were belongs to small and medium land holders. Whereas, small proportion of marginal farmers, who are approaching Farmers' Contact Centers. It is due to majority of the marginal farmers do not have the sufficient resources to practice the advanced technologies, this may restrict them to approach for agricultural advisory service. Further, generally big farmers are proportionately less compared to small and medium farmers. Hence, data shows less proportion of large

landholders. Whereas majority of the clientele of agribusiness firm and agricultural consultancies had medium and large land holdings. This was mainly due to some agribusiness firms only concentrating on large landholders with assured irrigation potential (HLL, PEPSI for tomato and chilli contract farming) whereas, some agribusiness firms concentrating farmer who are having assured irrigation and they will allow only small land area to maintain quality of the produces (Gherkin cultivation). In contrast to this,

overwhelming majority of the clientele of NGOs had marginal and small land holdings, because generally NGOs concentrating on farmers who are below poverty line, resource poor, rainfed area and farmers possessing lands in watershed area. Interestingly, clientele of agricultural consultancies had big and medium land holdings. Because it is elite at educated farmers with large land holdings who approach for agricultural advisory service for which they normally pay.

Table 3: Farm size, irrigation intensity and cropping intensity of the public and private extension clientele (n = 210)

Category and score	Public extension	Private extension		
	FCCs (n ₁ = 60)	Ag. buss. firms (n ₂ = 60)	Ag. consultancies (n ₃ = 30)	NGOs (n ₄ = 60)
	Per cent (%)	Per cent (%)	Per cent (%)	Per cent (%)
Farm size				
Marginal - below 2.50 ac	18.33	3.33	13.33	50.00
Small - 2.51 to 5.0 ac	30.00	20.00	23.33	40.00
Medium - 5.01 to 10.00 ac	36.67	28.33	20.00	6.67
Big - above 10.00 ac	15.00	48.33	43.33	3.33
Irrigation intensity				
Low - up to 63.21	35.00	0.00	6.67	58.33
Medium - 63.22 to 115.28	48.00	46.67	66.67	31.67
High - 115.29 and above	16.67	53.33	26.67	10.00
Cropping intensity				
Up to 94.81	8.33	1.67	3.33	5.00
94.82 to 128.38	81.67	46.67	80.00	93.33
128.39 and above	10.00	51.67	16.67	1.67
Public vs private: 0.053**				
Mann - Whitney U test	FCCs vs ABF: 0.000**	FCCs vs ACs: 0.060**	FCCs vs NGOs: 0.000**	
Farm size	ABFs vs ACs: 0.2633*	ABFs vs NGOs: 0.000**	ACs vs NGOs: 0.000**	
Public vs private: 0.0937**				
Irrigation intensity	FCCs vs ABF: 0.000**	FCCs vs ACs: 0.005**	FCCs vs NGOs: 0.001**	
	ABFs vs ACs: 0.173*	ABFs vs NGOs: 0.000**	ACs vs NGOs: 0.000**	
Public vs private: 0.644*				
Cropping intensity	FCCs vs ABF: 0.000**	FCCs vs ACs: 0.000**	FCCs vs NGOs: 0.021**	
	ABFs vs ACs: 0.003**	ABFs vs NGOs: 0.000**	ACs vs NGOs: 0.275**	

***Significant at 5 and 1 per cent level respectively.

Irrigation intensity: Majority of the clientele of Farmers' Contact Centres and NGOs had low to medium level of irrigation intensity. This was mainly because of NGOs clientele were mostly resource poor and they were from rainfed area. Whereas, agribusiness firms selecting only those farmers who are having assured irrigation supply because of tomato and gherkin cultivation needs assured irrigation. Further, gherkin crops were cultivated three times in a year. This was main factor to show high level of irrigation intensity among agribusiness clientele. Whereas agricultural consultancy farmers were mainly from plantation crops, hence they are coming under medium to high level of irrigation potential.

Cropping intensity: Clientele of Farmers' Contact Centres agricultural consultancies and NGOs had medium level of cropping intensity, which is due to most of Farmers' Contact Centers, NGOs cultivating annual crops with small proportion may be with plantation crops. Due to continuous guidance of NGOs extension personnel, rainfed farmer also atleast cultivating seasonal crops. Whereas, most of the agricultural consultancies clientele were plantation growers, which gives cent percent of cropping intensity. In contrast to this, majority of the clientele of agri business firms had high cropping intensity, which was mainly attributed by the gherkin contract cultivation where farmers cultivate three crops in a year. Consultancies also aim at increasing the overall profit of farmers by advising high cropping intensity.

Table 4: Innovation proneness and extension service commitment of the public and private extension clientele (n = 210)

Category and score	Public extension	Private extension		
	SDA-FCCs (n ₁ = 60)	Ag. buss. firms (n ₂ = 60)	Ag. consultancies (n ₃ = 30)	NGOs (n ₄ = 60)
	Per cent (%)	Per cent (%)	Per cent (%)	Per cent (%)
Innovative proneness score				
Low - upto 6.21	36.67	25.00	33.33	41.67
Medium - 6.22 to 8.25	31.67	36.67	20.00	40.00
High - 8.26 and above	31.67	39.33	46.67	18.33
Extension service commitment				
Up to 18.77	31.66	47.67	30.00	25.00
18.78 to 26.51	43.33	31.67	17.67	18.33
26.52 and above	25.00	21.67	53.33	56.67
Public vs private: 0.787*				
Mann - Whitney U test	FCCs vs ABF: 0.000**	FCCs vs ACs: 0.291*	FCCs vs NGOs: 0.019**	
Innovative proneness	ABFs vs ACs: 0.619*	ABFs vs NGOs: 0.000**	ACs vs NGOs: 0.019**	
Public vs private: 0.158*				
Extension service commitment	FCCs vs ABF: 0.263*	FCCs vs ACs: 0.022**	FCCs vs NGOs: 0.019**	
	ABFs vs ACs: 0.000	ABFs vs NGOs: 0.000**	ACs vs NGOs: 0.965**	

*, **Significant at 5 and 1 per cent level respectively.

Innovation proneness: Table 4 indicates that, with respect to innovation proneness character, the Farmers' Contact Centres and agri business firms clientele, almost equally distributed in all the three categories. But, three-fourths of agricultural consultancy clientele possessed medium and high level of innovation proneness character, which is mainly due to the clientele mostly came from non-agricultural background, more educated and also they had non-agriculture as a primary occupation. They also ready take high risk by going for advanced technologies to make more profit. Whereas, four-fifths of NGOs clientele had low and medium innovation proneness character, which is mainly attributed to their less education level, rainfed nature of agriculture makes to complacent in using recent technologies and resource poorness may made them less innovative.

Extension service commitment: Three-fourths of Farmers' Contact Centres clientele had low and medium extension service commitment, which might be due to difficulty in access of extension personnel, lack of timely input supply, less accountability of public extension personnel, blanket nature of recommendations. Absence of extension personnel even during normal office hours was found. Similar trend was also noticed in agri business firms. Which is due to the fact that extension personnel of agri business firms generally concentrate only on contract crops like gherkin and tomato cultivation. Further, the extension

personnel are not from technical background and they are less competent to provide advice to other crops.

Majority of the clientele of agricultural consultancies and NGOs had high level of extension service commitment, which is mainly due to the high accountability and committed service of the extension personnel. Services are need based and client-specific. In agricultural consultancies, clientele were paying for the extension services and hence the demands appropriate service to increase their farm income.

Mann-Whitney U test in all the tables revealed that in public and private extension organizations, the study variables were compared with all possible seven combinations. Interestingly, all the variables had significant difference from each other.

CONCLUSION

From the results it is concluded that Agricultural Consultancies clientele were had high level of education, annual income, farm size, irrigation intensity, innovation proneness and extension service commitment. Whereas, NGOs clientele had low level of education, annual income, marginal and small farm size. The Farmers' Contact Centres and Agri-Business Firms clientele had medium level of annual income, farm size and low level of extension service commitment.

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