



PERCEIVED SERVICE QUALITY OF AGRICULTURAL ORGANIZATIONS COMPARATIVE ANALYSIS OF PUBLIC & PRIVATE SECTOR

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Abstract: *The aim of the paper is to investigate in a synchronized framework highlighting the perceived quality of public and private sector organizations in agriculture. The public sector is striving hard to improve quality. Investigation take-up the measurement of perceived quality of public and private as a basis for comparison. Results of survey responses from 360 farmers show that there is significant difference between public and private sector services in term of perceived value.*

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BACKGROUND

Indian agricultural extension and service delivery system is at the crossroads struggling hard to pace with change through reinvention and adaptation. The entire agriculture sector is encountering new pressures and budding opportunities that are multifaceted and challenging. Drought, floods, climate change, uneven distribution of rainfall, increasing input costs and competition for resources and market access concerns are just some of these challenges. The augmented interest in eccentric substitutes of innovative models in Indian public sector agricultural research and extension system has been resulted due to following main factors. First is the apparent failure of most agricultural technologies and extension systems in generation and application of innovations efficiently in the service delivery to pro-poor end-users. Next is the global impulsion towards a reappraisal, accountability and transparency in the deliverable outputs. Thirdly experimentation and competition with private sector; The turbulence created in agriculture by vulnerability, uncertainty and fiscal crisis in the era of structural adjustment as well as climate change; Shift from low value crops to high value crops; Last but not least, is the public sector service models based on the framework of Lab to Land initiative with least importance given on determining the types of services, quality of services, knowledge and advice farmers actually need. It resulted in restructuring agricultural extension and service delivery system, either to allow for private service providers or for recovering the performance of public sector agricultural organizations.

Quality is important and strategic aspect in effective management of not only for public and private sector firms, but also for other types of organizations including non-profit making organizations. The changing scenario demands increased expectations for superior quality of services rather than mere its availability. The global competition has created a competitive environment among different service providers like public sector, Private Sector, NGO's, Cooperative societies, Farmer organizations etc. Perceived Quality has become the expectations & determinant while selecting a service or product (Cronin and Taylor, 1992; Grönroos, C., 2001). Farmer's perception plays a momentous role in the success or failure of a service. Service quality is conceptualized as the stakeholder perception about the intensity of services in terms of high low quality (Zeithaml et al., 1990; Grönroos, 2001; Parasuraman et al, 1985, 88; Rana et al., 2011,).



Although service quality has occupied central attention in planning and research but till now all-inclusive definition has not emerged (Wisniewski, 2001). Quality is the key strategies that organizations exercise to bring better value to customers in order to gain a competitive advantage. According to Crosby (1979), quality is conformance to requirements. According to Juran (1974), quality is fitness for use. According to Kanji (1990), quality is to satisfy customers' requirements continually. However, with the scope of this research, service quality can be termed as:

- It is the difference between customer expectations and perceptions (Parasuraman et al., 1985, 1988).
- It is the difference between customers' expectations for service performance prior to the service encounter and their perceptions of the service received (Asubonteng et al., 1996).
- It is a comparative evaluation made by the user between the quality of services they expect and what is received from the service provider (Gefan, 2002).

Service in agriculture has several definitions and no valid concurrence exist (Albert, 2000; Bruhn, 1997; Corsten, 1990; Lehmann, 1995). The term "Agriculture services" is a term usually used to mean services granted or provided by government to its agriculturist or agriculture stakeholders, either directly (through the public sector) or by financing private provision of services (www.wikipedia.org). Agricultural services can be broadly categorized for this study as research & advisory services, capacity building & training services, support services for dissemination & access to information and financial services. Access to agricultural services is evaluated on the bases like- type of services, service relevancy, timeliness and outreach of services, quality of the service, cost and the efficiency of the services offered (Birner et al., 2006). Till recent past, the public sector agricultural extension service delivery system has played the important role. Recent trends has witnessed shifting pattern on the need of services – both the agricultural operating environment and the support farmers .requires. The public sector service providers has to scuffle with emerging challenges in the conversion of their roles, functions, relationship with society and market actors. Situation driven demand has been stimulate for following factors:

- Minimize time & distance to access.
- Extending access to un-served groups.



- Minimizing costs to farmers & stake holders.
- Minimizing cost to government (internal efficiency)
- Offering integrated & relevant competitive services.
- Modernization/adoption to best fit.
- Capacity to pay for consultancy services
- Willingness to pay (WTP)

The perceived quality of services provided by public sector is declining further quantitatively and qualitatively of what was previously provided by them, when farmer compares it with the service of private sector. The study aims at measuring and doing comparative analysis in term of the perceived quality of public sector and private sector by the end-users. The gap identification and its measurement in service sectors is the critical issue and several research works have been carried on for modeling it. Nitin Seth and Deshmukh (2005) had appraised 19 models (Table-1.) for measuring the service quality in diverse service environment.

Table-1. : Models for Service Quality.

S. No.	SERVICE QUALITY MODEL	AUTHOR
	Technical and functional quality model	Groönroos, 1984
	GAP model	Parasuraman et al., 1985
	Attribute service quality model	Haywood-Farmer, 1988
	Synthesized model of service quality	Brogowicz et al., 1990
	Performance only model (SERVPERF)	Cronin and Taylor, 1992
	Ideal value model of service quality	Mattsson, 1992
	Evaluated performance and normed quality model	Teas, 1993
	IT alignment model	Berkley and Gupta, 1994
	Attribute and overall affect model	Dabholkar, 1996
	Model of perceived service quality and satisfaction	Spreng and Mackoy, 1996
	PCP attribute model	Philip and Hazlett, 1997
	Retail service quality and perceived value model	Sweeney et al., 1997
	Service quality, customer value and customer satisfaction model	Oh, 1999
	Antecedents and mediator model	Dabholkar et al., 2000
	Internal service quality model	Frost and Kumar, 2000
	Internal service quality DEA model	(Soteriou and Stavrinides, 2000)
	Internet banking model	Broderick and Vachirapornpuk, 2002
	IT-based model	Zhu et al., 2002
	Model of e-service quality	Santos, 2003



Source: Nitin Seth and Deshmukh (2005)

According to Riadh Lidhari, (2009) SERVQUAL" model by Parasuraman et al. (1985, 1988) is the most commonly used to measure service quality.

METHODOLOGY

In this study, a quantitative survey method was employed to validate the hypothesis. This study is conducted to evaluate the difference between the service quality level between the private and public service providers in agriculture. The farmers having availed the services of both the public and private sector were chosen for the study for capturing close evaluation between the public and private agricultural service providers. This study was conducted at a 4 districts of Andhra Pradesh (Ranga reddy, Warrangal, Nalgonda & West Godavari). In questionnaire design, the 19 items in the SERVQUAL questionnaire developed by Parasuraman *et al.* (1985) were referred to with modifications and adaptations for increasing its relevancy to agricultural services. It consists of seven dimensions: access, assurance, empathy, reliability, responsiveness, tangibility and timeliness. Responses were recorded against two columns in the questionnaire consisting of 19 items which evaluates information based on the perceptions of farmers having experience of both public and private service providers in agriculture. These items were measured against five point Likert scale ranging from 1= strongly disagree to 10= strongly agree. A total of 360 questionnaires were collected after rejecting incomplete questionnaires.

MEASURES

Access: Access involves approach, ability and ease of contact. It means the service is easily accessible; convenient. Poor access to agricultural services is one of the significant factors which affect the agricultural productivity. The first service quality construct comprise of 2 items.

Assurance: It is any systematic process of checking to see whether a product or service being developed is meeting specified requirements through quality control and quality determination service. The second service quality construct comprise of 3 items.

Empathy: It is the third service quality construct in this study, which represents the individual concern and the customer relation management (CRM). It includes 3 items.

Reliability: It is the competence to take the promised service in dependable and accurate ways. It includes 4 items.



Responsiveness: It is consideration given for prompt and considerate service from the staff and their willingness to help. It includes 4 items.

Tangible: It includes 2 items.

Timeliness: It includes 2 items.

Reliability is an assessment of the degree of consistency between multiple measurements of a variable (Hair, *et al.*, 2007). A commonly used measure of reliability is internal consistency, which applies to the consistency among the variables in a summated scale. Cronbach alpha is a reliability coefficient that assesses the consistency of the entire scale. The generally agreed upon lower limit for Cronbach alpha is 0.70 although it may decrease up to 0.60 in exploratory research (Hair, *et al.*, 2007), (Flynn *et al.*, 1990)(Nunnally, 1978). The Cronbach alpha scale reliability value was calculated for both construct using SPSS16.0. It can be seen that the measurement scale is highly reliable, with Cronbach alpha values 0.843 for Public sector service provider and 0.911, which is above the minimum acceptable level of 0.60 for exploratory research (Flynn *et al.*, 1990). As reliability of the instrument helps to provides consistency in the results (Green *et al.*, 2000). Overall Cronbach Alpha of public and private service provider data along with service quality construct provides values greater than 0.70.

RESULTS AND DISCUSSIONS

For analyzing the differentiation between the service quality delivered by private and public sector agricultural services, descriptive statistics representing the mean, standard deviation and mean square error for each of the service quality construct was used in order to increase understanding regarding the difference in service quality delivered to farmers by private and public service providers against each of the service quality dimension. Secondly, paired t-test was performed to calculate t-value, df and p-value to test the significance level of the public and private service providers quality constructs.



Variables and Constructs	Public			Private		
	Mean	SD		Mean	SD	
Access						
Easily approachable	6.93	1.63		8.23	1.48	0.07
Quick interaction between the stakeholder	7.07	1.67		7.58	1.58	0.083
Assurance						
Special consideration to individual needs	7.12	1.28		8.19	1.80	0.094
Expertise and Skills	6.98	1.70		7.82	1.43	0.075
Level of confidence in the service	6.81	1.66		8.09	1.46	0.076
Empathy						
Individualized attention	6.84	1.41		7.79	1.49	0.078
Localized Solutions	7.03	1.36		8.05	1.37	0.072
Reorient to provide first level assistance	7.04	1.55		7.85	1.65	0.087
Reliability						
consistency in changing circumstances	7.15	1.31		8.03	1.64	0.086
Relevant information	7.28	1.49		7.93	1.45	0.076
Cost effectiveness	7.55	1.61		7.92	1.28	0.067
Accuracy	7.31	1.36		7.98	1.27	0.066
Responsiveness						
Efficiently of response to the individual or specific needs	7.46	1.51		7.75	1.40	0.073
Attention given prompt and considerate service	7.33	1.54		8.40	1.49	0.078
Quick feedback mechanism	7.01	1.70		8.54	1.42	0.074
Tangibility						
Appearance of the facilities or equipment	7.26	1.38		8.23	1.65	0.087
Good communication materials on usage & process	6.94	1.61		8.14	1.77	0.093
Timeliness						
In time delivery of required services	7.08	1.44		8.04	1.49	0.078
Provision of transitional and after care services	7.68	1.17		8.11	1.39	0.073



Table-2: Paired t test results.

Measure	N	t	df	Sig (2-tailed)	Mean Diff.	Std. Error Diff,	95% Confidence Interval of the Diff.	
							Lower	Upper
Access	360	11.46	359	<0.0001	-0.903	0.079	-1.058	-0.748
Assurance	360	12.40	359	<0.0001	-0.958	0.077	-1.110	-0.806
Empathy	360	14.40	359	<0.0001	-0.926	0.064	-1.053	-0.8003
Reliability	360	10.59	359	<0.0001	-0.640	0.060	-0.759	-0.5215
Responsiveness	360	17.38	359	<0.0001	-0.962	0.055	-1.070	-0.853
Tangibility	360	15.09	359	<0.0001	-1.085	0.072	-1.226	-0.943
Timeliness	360	12.28	359	<0.0001	-0.697	0.057	-0.809	-0.586

Results from the empirical analysis (Table-2) show that the farmers perceive the quality of services from private sector are better than public sector provided. The results show significant difference in perceived value of quality between both the services providers. They are better satisfied with the service of private sector even at higher cost due to better perceived value. Public sector has to deliver high quality services for sustainable growth and competitive advantage.

The conclusion drawn from the results of this study should consider the following limitations. Firstly, this study was a cross-sectional research design where the data were taken one time within the duration of this study. Secondly, this study only examines the relationship between perceived value and underlying variables (i.e. access, assurance, empathy, reliability, responsiveness, tangibility and timeliness). It does not specify the relationship between specific indicators. Thirdly, due to shortage of time and resources, the sample size is not adequate to generalize the model. Future research should be carried out with adequate sample for generalization & future use.

In sum, the findings of this study confirm that perceive value does act as key indicator in the service quality having future impact.

CONCLUSIONS AND RECOMMENDATIONS:

Overall, the use of perceived quality to measure the organization performance is much needed not only for the private sectors but public sectors as well. This study attempt to make comparison of quality by public sector & private sector as well as its at the implementation of quality management in the public sector. Progress has been made in



access to services in agriculture in rural areas over the recent past. Projections suggest this trend can sustain better and improved upon if coupled with quality initiative. Greater investments in infrastructure and the human resources capacities of providers in terms of quality could enable the country to expand coverage and enable access to enhanced services for the majority of the farming population. Furthermore, the public sector should step ahead towards new paradigm of performance and achievement through quality management which will enhance service impact and results consequentially delivering value for money in public service delivery.

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