

MEASURING AGRICULTURAL EXTENSION SERVICE QUALITY IN NUBARIA REGION USING TOTAL QUALITY AND SERVICE QUALITY SCALES

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ABSTRACT

This study aimed to measure agricultural extension service quality in Nubaria region by measuring extension employees' perceptions of the total quality scale components, and farmers' perceptions of service quality scale components. The study was conducted on 20 extension personnel or 76.9% of the total number of extension personnel in Nubaria region (26 Personnel), and 159 farmers randomly selected from two villages in Nubaria region. Data were collected by questionnaire during October 2015. Frequencies, percentages and mean scores were used for data presentation. The results showed that although scores for extension employees' perceptions of the total quality are above average levels for all the twelve components of the total quality scale (75.8% of the total score), this didn't produce an effect upon farmers' perceptions of service quality, as scores for farmers' perceptions of the service quality were below average levels for all the five components of the service quality scale (45.9% of the total score). This indicates a clear gap between the two views of extension employees and farmers about agricultural extension service quality in Nubaria region. Extension employees in Nubaria region need to work hard to close this obvious gap to increase farmers' satisfaction through planning and implementing their extension programs and activities on the basis of farmers' perceptions and needs.

Keywords: Agricultural Extension, Service Quality, Total Quality Scale, Service Quality Scale, Nubaria Region

INTRODUCTION AND PROBLEM STATEMENT

Service quality is one of the primary goals of service organizations and is the ability of any service provider to provide promised services. Service quality assesses performance of services from customers' perspective. Customer focus in services delivery is essential for satisfying the customers. The success depends on customers' perceptions or judgment on the quality of services provided by the service personnel (Manjunatha and Shivalingaiah, 2004: 145). Daniel & Berinyuy (2010: 12) indicated that service organizations have begun focusing on the customer perceptions of service quality because it helps in developing strategies that lead to customer satisfaction. Dehghan (2006: 11) quoted from Edvardsen *et al.* (1994) that the starting point in developing quality of services is the measurement, because it allows for comparing between the before and after changes, for identifying quality-related problems and for establishing clear standards for service delivery.

Sureschandar *et al.* (2002a: 10) quoted from Rust and Oliver (1994) that service organizations find it difficult to envision and understand what aspects connote high quality to consumers, and the levels of those aspects that are required to deliver high quality service. Only when a service provider has a fairly definite knowledge on how the service would be perceived by the customer, he would be able to direct these assessments in the preferred direction. Besides, the rationally managing a service interaction also calls for comprehending the much complicated perceptions and behaviors of employees that will have a telling effect on the customer perceptions of service quality. Sureschandar *et al.* (2002c: 70) stated that much has been written about the philosophy of total quality/service quality and its ability to result in competitive success. Nevertheless, decision-makers are interested in ascertaining the exact nature of relationships between quality management practices and service quality performance.

Ruhana (2010: 1) pointed out that measuring service quality is of greater importance in service organizations such as agricultural extension organization, which has to be concerned with the quality of its services. That is because of the vital role of agricultural extension in the development of agriculture, rural poverty alleviation and enhancing food security. Besides that the quality of agricultural extension services is one of the most important indicators of agricultural extension as a whole.

While there have been efforts to study service quality, there has been no common agreement on the measurement of the concept (Dehghan *et al.*, 2012: 4). The research literature on service quality has identified numerous models by different researchers across the world. However, SERVQUAL scale (Parasuraman *et al.*, 1988) forms the foundation on which all other works have been built. SERVQUAL scale has been subjected to some severe criticisms, and seems to have overlooked some other important factors of service quality, in addition to ignoring the perspective of the employees in evaluating perceived service quality (Sureschandar *et al.*, 2002b: 364). In an effort to identify the critical dimensions of total quality (from the perspective of the employees), Sureshchandar *et al.* (2001a) presented the total quality scale. Sureshchandar *et al.* (2001b) presented the service quality scale to conceptualize service quality by taking into account all the aspects of customer perceived service quality. In summary, total quality and service quality scales are tools, which can be used to assess and find out how well extension is giving quality service to different farmers.

Objectives

According to the earlier quick discussion, this study endeavors generally to measure agricultural extension service quality in Nubaria region, and it aims particularly to reach the following objectives:

1. Measuring extension employees' perceptions of the total quality scale components.
2. Measuring farmers' perceptions of service quality scale components.

Literature Review

The concept and importance of service quality

Services are activities or benefits provided to group which ends up with non-ownership. The production of service may or may not be related to materialized product (Jain and Gupta, 2004: 25). Strömngren (2007:12) quoted from Grönroos (2001) that service is an activity or series of activities that take place in the interaction between the customer and service employees. There are major distinctions between a service and a product. These differentiations are the intangible nature of a service – it cannot be touched, held, and so on-, the consumption of a service involves the interaction between the producer and the consumer and services are produced and consumed simultaneously (Naik *et al.*, 2010: 234).

Zeithaml *et al.* (1985: 33) summarized the diverse attributes of services which are repeatedly cited in the literature as follows: 1) intangibility (they cannot be touched; and it is hard to anticipate exactly the outcome of a particular service), 2) inseparability (providing and receiving services cannot truly be separated from each other), 3) heterogeneity (service performance varies depending on the time or the service provider) and 4) perishability (services cannot be saved and used later in times of need or emergency).

Becser (2007: 15) mentioned the four classes of services as follows: 1) distributive services (the services with a distribution nature provided to other sectors, producers or service providers; such as transportation, storage, telecommunication, wholesale and retail commerce), 2) production services (services provided to other sectors or to other producers, service providers, which are connected to production and providing services, facilitate and support the operational process; such as insurance, invoicing, accountancy, legal and other business services), 3) social services (services aimed at satisfying individual or social needs like medical, education, religious, non-for-profit organizations, postal and consultancy services), and 4) personal services (services provided to individuals like hotels, restaurants, stores, repair services, laundry and cleaning, beauty salons, and entertainment services).

Quality has come to be recognized as a strategic tool for attaining operational efficiency and improved business performance (Jain and Gupta, 2004: 26). Dursun *et al.* (2013: 1134) quoted from Deming (1998) that quality is the judgment of consumer on conformity degree of a product or service to requirements. Manjunatha and Shivalingaiah (2004: 145) stated that "conformance to standards" and "fitness for use" are the classic definitions of quality.

There are several different definitions as to what is meant by service quality. The one that is commonly used defines service quality as the extent to which a service meets customers' needs or expectations (Dehghan, 2013: 197). According to the majority of authors who have explored the subject, perceived service quality is the result of customers' subjective judgment of the level of the service offering and its delivery (Korda and Snoj, 2010:189; Sureschandar *et al.*, 2002b: 364)). Service organizations have recognized a number of benefits derived from implementing service quality programs,

including customer satisfaction, customer retention, attraction of new customers, employee benefits, development of customer relationships, and financial performance (Lewis *et al.*, 1994: 3).

Measuring service quality

Korda and Snoj (2010:191) reported that the most frequently used scale in the measurement of perceived service quality is the SERVQUAL scale of Parasuraman *et al.* (1988). SERVQUAL is based on the perception gap between the perceived and the expected service quality. It consists of 22 pairs of items: one member of each pair assessing the customer's expectations, the other assessing perceptions of service quality. The five dimensions, that are proposed to be common to any service are: 1) tangibles (physical evidence of the service), 2) reliability (the ability to perform the promised service dependably and accurately), 3) responsiveness (the willingness and readiness of employees to help customers and to provide prompt service); 4) assurance (the knowledge and courtesy of employees and their ability to convey trust and confidence), and 5) empathy (the provision of caring and individualized attention to customers). SERVQUAL measures service quality by finding the difference between customer perceptions (P) and expectations (E). This difference is the service quality gap ($Q = P - E$). The wider the gap, the poorer the service quality is viewed by the customers (Parasuraman *et al.*, 1985: 64-48; Parasuraman *et al.*, 1988: 23).

The efficacy of SERVQUAL in measuring service quality has been criticized by different authors for diverse reasons, such as the logic and requirement behind the measurement of expectations, the reliability and validity of gap scores, the ability of SERVQUAL scores to provide additional information beyond that already contained in the perception component of service quality scale is under doubt (Sureshchandar *et al.*, 2011b: 114; Jain & Gupta, 2004: 27). Brady *et al.* (2002: 19) suggest that the expectation portion of the SERVQUAL scale adds no additional information beyond that which is obtained from performance perceptions alone. Even Zeithaml (one of the founders of the SERVQUAL scale) later reported that service quality is directly influenced only by perceptions (Boulding *et al.*, 1993: 24).

Another point worth debating is that the comprehensiveness of the SERVQUAL scale in addressing the critical dimensions of service quality is in question, for the simple reason that the items at large focus on the human aspects of service delivery (four dimensions: reliability, responsiveness, assurance and empathy, relate to this aspect) and the fifth one on the tangibles of service (like the effect of atmospherics, design and decor elements, appearance of equipment, employee dress, etc.). Therefore, the SERVQUAL instrument seems to have overlooked some other important factors of service quality, such as the features associated with a service, namely the service product or the core service, systematization/standardization of service delivery (the non-human element), and the social responsibility of the service organization (Sureschandar *et al.*, 2002b: 364).

Total quality scale

Sureshchandar *et al.* (2001a) presented the total quality scale; they identified the critical twelve dimensions (126 items) of total quality scale (from the perspective of employees) by addressing the different facets of total quality, such as human and non-human aspects of service production and delivery. The dimensions that have been identified are as follows: 1) Top management commitment and visionary leadership (11 items), 2) Human resource management (21 items), 3) Technical system (11 items), 4) Information and analysis system (9 items), 5) Benchmarking (6 items), 6) Continuous improvement (5 items), 7) Customer focus (24 items), 8) Employee satisfaction (9 items), 9) Union intervention (6 items), 10) Social responsibility (7 items), 11) Tangibles (8 items), and finally 12) Service culture (9 items).

- 1- Top management commitment and visionary leadership: Top management commitment is a prerequisite for effective and successful total quality service. Visionary leadership is the art of leading and espousing a mental, strategic and spiritual change in the organization by the formulation of a long-range vision for the development of the organization.
- 2- Human resource management: This refers to the number of organizational behavior issues (ranging from management selection and recruitment, employee empowerment, training and education) that form the cornerstone upon which the corporate strategy is built. The moot point here is that only if the employers treat their employees as precious resources would the employees, in turn, treat their customers as valuable.
- 3- Technical system: The technical system includes design quality management and process management. A good service design enables the organization to satisfy customers' needs, resulting in improved business performance. Service process management involves the procedures and technology that are required to streamline the service delivery to customers without any hassles; it delineates the non-human element of service delivery, as opposed to human element which is captured in the dimension 'service culture'.
- 4- Information and analysis system: Service organizations should keep to equipping the employees with information regarding the process and the customers. Prompt, sufficient and pertinent data that are critical to the implementation and practice of total quality constitute information and analysis. Measures for prevention rather than correction are employed to monitor quality in order to sustain a true customer focus.
- 5- Benchmarking: It is actually a comparison standard that consists of analyzing the best services and processes of other similar organizations and then analyzing and using that information to improve one's own services and processes. Service organizations need to focus on benchmarking certain behavioral features such as customer satisfaction and employee satisfaction, in addition to comparing the services and processes through which they are delivered.

- 6- Continuous improvement: Improvement should be viewed as an ongoing process in the sense once targets are met, new ones must be set, aiming for even higher levels of service efficiency. It is a race which has no finish line but has the sole objective of striving for continuous improvement.
- 7- Customer focus: It is the ultimate goal of any total quality program, because organizations can overstep their competitors by effectively addressing customers' needs and demands and anticipating and responding to their evolving interests and wants.
- 8- Employee satisfaction: It is a multi-dimensional concept, which is defined as the satisfaction degree to which employees of an organization believe that their needs and wants are continuously satisfied by the organization.
- 9- Union intervention: As total quality success is greatly influenced by its employee union. Those employee representatives affect the organizational system and consequently determine the nature and extent of total quality implementation. It could be concluded that union attitudes play a critical role in any quality improvement effort.
- 10- Social responsibility: The concept of corporate citizenship should come to the fore if an organization has to be successful and progress towards achieving business excellence. An organization should meet its social and community obligations. It is not only the profit or revenue that counts for an organization, but also a belief in corporate responsibility to its society.
- 11- Tangibles of the service: It is the man-made physical environment (such as equipment, machinery, and employee appearance), strongly influence both employees and customers in physiological, psychological, emotional, sociological and cognitive ways; particularly as the core service becomes more intangible.
- 12- Service culture: It is actually the extent to which the employees at all levels realize that the real purpose of their existence is 'serving customers'. While customer focus is seen as a goal of the total quality movement, service culture is an organizational strategy that motivates the employees to have a service orientation in whatever they do.

Service quality scale

Sureshchandar *et al.* (2001b) presented the service quality scale in an effort to conceptualize service quality (by taking into account all the aspects of customer perceived service quality, including those already addressed in the existing instruments and those that are left out in the empirical service quality literature). The service quality scale contains five factors (41 items) of service quality that are critical from the customers' point of view. These factors are: (1) core service or service product (5 items), (2) human element of service delivery (17 items), (3) systematization of service delivery -non-human element (6 items), (4) tangibles of service (6 items), (5) social responsibility (7 items). The items under the dimensions of human element of service delivery and tangibles of service are primarily based on the SERVQUAL scale after making some changes for the original items by modifying, adding, retaining and deleting. For the other three dimensions (core service, systematization of service delivery and social responsibility),

items are framed suitably in order to measure these dimensions. The five dimensions are presented in the following lines.

- 1-The core service (the content of a service): The core service portrays the 'content' of a service. What is delivered is as substantial as how it is delivered. Managers become so involved with all the procedures, processes and contexts for service, they tend to overlook that there is also something called the 'core service'. To put everything in a nutshell, the core service itself has discernible, tangible and multidimensional quality features that could discriminate services and could preponderate over other issues such as delivery. The quality of this core service largely influences and sometimes may be the ultimate determinant of the overall service quality from the viewpoint of the customers.
- 2-Human element of service delivery: it includes reliability (the ability to perform the promised service dependably and accurately), responsiveness (the willingness and readiness of employees to help customers and to provide prompt service); assurance (the knowledge and courtesy of employees and their ability to convey trust and confidence); and empathy (the provision of caring and individualized attention to customers).
- 3-Systematization/standardization of service delivery: The service delivery represents the 'how' of a service. It has two distinct and disparate features:
 - 1- Human element of service delivery, which has been effectively addressed by the SERVQUAL.
 - 2- The processes, procedures, systems and technology that would make a service a seamless one (Non-human element of service delivery). The second aspect is as crucial as the first one. Customers would always like and expect the service delivery processes to be perfectly standardized, streamlined and simplified so that they could receive the service without any hassles or undesired/inordinate questioning by the service providers.
- 4-Tangibles of the service (physical evidence of the service): it includes equipment, physical facilities, and neatness of employees.
- 5-The social responsibility of the service organization (the responsibility of the organization to the society in which it exists): Social responsibility helps an organization to lead as a corporate citizen in encouraging ethical behavior in everything it does. The point which merits articulating here is that an organization cannot count only on financial performance to survive in this ever-changing scenario of global competition, but also has a responsibility to the society in which it exists. These subtle, but nevertheless forceful, elements send strong signals towards improving the organization's image and goodwill and consequently influencing the customers' overall evaluation of service quality and their loyalty to the organization.

Methodology

This study used the total quality scale (Sureshchandar *et al.*, 2001a) and the service quality scale (Sureshchandar *et al.*, 2001b) to measure the agricultural extension service quality in Nubaria region. The two scales ask subjects to respond according to their perceptions on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Questionnaire forms concerning the total quality scale were prepared and distributed among extension personnel in Nubaria region. The process of their completion was followed up and the completed forms were gathered. The total number of completed forms was 20 or 76.9% of the total number of extension personnel in Nubaria region (26 Personnel).

To identify the farmers sample of this study to fulfill the service quality scale, two regions (Gharb El-Nubaria and EL-Bostan) had been randomly selected from the five regions in Nubaria. After that, two villages (Taha Hussein and Hafez Ibrahim) had been randomly selected from the two regions respectively to be the place of this study. To identify the sample size, the study used the table of Krejcie and Morgan (1970: 608) for determining sample size from a given population, as the population of this study is the total number of farmers in the two chosen villages (266 farmers, 97 from Taha Hussein and 169 from Hafez Ibrahim), then the sample size is 159 farmers distributed proportionally on the two villages (58 from Taha Hussein and 101 from Hafez Ibrahim), and they were drawn as simple random sample from farmers of the two selected villages by SPSS.

Data were collected during October 2015 by questionnaire. Data analysis was carried out using SPSS (version 15). Frequencies, percentages and mean scores were used for data presentation.

RESULTS AND DISCUSSION

The personal characteristics of the respondents

Table (1) indicates the distribution of extension employees according to their personal characteristic; it became clear that the majority of respondents were aged 50 years or more, hold B. SC. in agricultural sciences, have rural origin, and have less than 10 years of work experience in agricultural extension.

Table 1: Distribution of extension employees according to their personal characteristics (N= 20)

Characteristics	Category	Frequency
Age	Below 50 years	7
	50 and above	13
Qualification	Diploma of agric. second. schools	8
	B. SC.	12
Origin	Rural	18
	Urban	2
Work experience in extension	Less than 10 years	11
	10 years and above	9

Source: Questionnaire forms

Table (2) clarifies the distribution of farmers according to their personal characteristic; it can be noticed that less than two thirds of respondents (62.3%) were aged 50 years and above, more than half of them (54.1%) hold diploma of agricultural secondary schools, less than two thirds of them (64.8%) work in agriculture only, more than two thirds of them (69.8%) have families below 5 members. All of farmers (100%) have a farm size of five

feddans, members in one local organization (agricultural cooperative) and have never traveled abroad.

Table 2: Distribution of farmers according to their personal characteristics (N= 159)

Characteristics	Category	Frequency	Percentage
Age	Below 50 years	60	37.7
	50 and above	99	62.3
Qualification	Diploma of agric. second. schools	86	54.1
	B. SC.	73	45.9
Profession	Agriculture only	103	64.8
	Agriculture plus another profession	56	35.2
No. of family members	Below 5 members	111	69.8
	5 members and above	48	30.2
Farm size	5 feddans	159	100
Membership in organizations	Member in one organization	159	100
Traveling abroad	Never traveled before	159	100

Source: Questionnaire forms

Extension employees' views regarding the total quality scale components

Table 3 shows mean scores and percentages for extension employees' views of the total quality scale components. It can be realized that the respondents' overall view of the total quality is 477.36 which represents 75.8% of the total score; this implies that extension employees are entirely satisfied with the quality of services they provide. The table also revealed that scores are above average levels for all the twelve components of the total quality scale. Service culture received the highest score among the twelve components (82.1% of the maximum score) followed by customer focus (81.5% of the maximum score); while tangibles of the service received the lowest score (59.6% of the maximum score) followed by social responsibility (69.6% of the maximum score).

This implies that extension employees realize that the real purpose of their existence is 'serving farmers' and addressing their needs and demands received the highest scores between them. On the other hand, they clarify the deficiency of equipment, facilities and the extension organization's social and community obligations.

Table 3: Means and percentages of extension employees' views of the total quality scale components

No.	The components of the total quality scale	Mean	Maximum score	Percentage
1	Management commitment	39.90	55	72.5
2	Human resource management	74.20	105	70.7
3	Technical system	44.30	55	80.5
4	Information and analysis system	34.50	45	76.7
5	Benchmarking	23.15	30	77.2
6	Continuous improvement	19.70	25	78.8
7	Customer focus	97.75	120	81.5
8	Employee satisfaction	35.10	45	78.0
9	Union intervention	23.60	30	78.7
10	Social responsibility	24.36	35	69.6
11	Tangibles of the service	23.85	40	59.6
12	Service culture	36.95	45	82.1
	Overall total quality score	477.36	630	75.8

Source: Questionnaire forms

Farmers' views of the service quality scale components

Mean scores and percentages for farmers' views of the service quality scale components are indicated in table 4. It can be observed that farmers are not satisfied with the overall service quality since the overall average score is 94.14 which is 45.9% of the total score and indicating that extension employees in Nubaria region need to work hard to cover up the remaining 54.1%. As pointed out in the table, scores are below average levels for all the five components of the service quality scale. Systematization of service delivery (non-human element) received the highest score among the five components (49.9% of the maximum score); while human element of service delivery received the lowest score (43.8 % of the maximum score).

This indicates that farmers perceive that they could receive the service without any hassles or undesired questioning by extension employees, while they clarify the insufficiency of the human element of service delivery including: reliability (the ability to perform the promised service dependably and accurately), responsiveness (the willingness and readiness of employees to help customers and to provide prompt service); assurance (the knowledge and courtesy of employees and their ability to convey trust and confidence); and empathy (the provision of caring and individualized attention to customers).

Table 4: Means and percentages of farmers' views of the service quality scale components

No.	The components of the service quality scale	Mean	Maximum score	Percentage
1	Core Service	11.19	25	44.8
2	Human element of service delivery	37.20	85	43.8
3	Systematization of service delivery (non-human element)	14.98	30	49.9
4	Tangibles of the service	14.69	30	48.9
5	Social responsibility	16.08	35	45.9
	Overall service quality score	94.14	205	45.9

Source: Questionnaire forms

CONCLUSION

Although scores for extension employees' perceptions of the total quality were above average levels for all the twelve components of the scale, scores for farmers' perceptions' of the service quality were below average levels for all the five components of the scale. Considering the overall average score of service quality, the previous situation leads to extension employees' satisfaction with the quality of the services they provide versus farmers' dissatisfaction with the quality of the services they received.

This indicates a clear gap between the two views of extension employees and farmers about service quality. Extension employees in Nubaria region need to work hard to close obvious gap to increase farmers' satisfaction through planning and implementing their extension programs and activities on the basis of farmers' perceptions and needs.

For example, service culture (the extent to which the employees at all levels realize that the real purpose of their existence is 'serving customers') and customer focus (addressing customers' needs and demands and anticipating and responding to their evolving interests and wants) received the highest scores of perceptions between extension employees, and this didn't produce an effect upon farmers' perceptions' of service quality.

Based on the results obtained, the agricultural extension organization in Nubaria region is deficient in respect of all dimensions of service quality from the viewpoint of farmers. The farmers' perceptions of all service quality scale dimensions are below average levels; this indicates that farmers look for more than what extension organization are actually offering in terms of the quality of services. In this regard, farmers are not satisfied with any dimension of service quality.

Several recommendations for extension employees in Nubaria region can be derived from the results of this study; they should focus on all dimensions of service quality and make efforts to improve them in order to have better performance that would lead to higher perceived service quality and farmers' satisfaction. Because of time and resources constraints, extension employees in Nubaria region need to prioritize quality deficient areas, this can be done on the basis of the perception scores (lower scores

pointing to higher priority for intervention), and they can pick up one or a few areas for intervention depending on the availability of time and financial resources.

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قياس جودة الخدمة الإرشادية الزراعية بمنطقة النوبارية باستخدام مقياسي الجودة الشاملة وجودة الخدمة

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الملخص

يهدف البحث إلى قياس جودة الخدمة الإرشادية الزراعية بمنطقة النوبارية عن طريق قياس إدراك العاملين بالجهاز الإرشادي بمنطقة النوبارية لمكونات مقياس الجودة الشاملة، وقياس إدراك الزراع بمنطقة النوبارية لمكونات مقياس جودة الخدمة. أجريت الدراسة على ٢٠ فرداً يمثلون ٧٦.٩٪ من إجمالي العاملين بالإرشاد في منطقة النوبارية (٢٦ فراداً)، و١٥٩ مزارعاً تم اختيارهم عشوائياً من قريتين من قرى منطقة النوبارية. تم جمع البيانات عن طريق الاستبيان خلال شهر أكتوبر ٢٠١٥. وإستخدمت التكرارات والنسب المئوية والمتوسط الحسابي لعرض البيانات. وأوضحت النتائج أنه على الرغم من ارتفاع متوسطات درجات إدراك العاملين بالجهاز الإرشادي بمنطقة النوبارية لجميع مكونات مقياس الجودة الشاملة (٧٥.٨٪ من الحد الأقصى لمقياس الجودة الشاملة)، فإن ذلك لم ينعكس على إدراك الزراع لجودة الخدمة، حيث كانت متوسطات درجات إدراك الزراع بمنطقة النوبارية منخفضة لجميع مكونات مقياس جودة الخدمة (٤٥.٩٪ من الحد الأقصى لمقياس جودة الخدمة). ويشير ذلك إلى وجود فجوة واضحة بين إدراكات كل من العاملين بالجهاز الإرشادي والزراع لجودة الخدمة الإرشادية الزراعية بمنطقة النوبارية. وبالتالي يجب على العاملين بالجهاز الإرشادي بمنطقة النوبارية العمل على سد تلك الفجوة بما يمكن من زيادة رضا الزراع عن جودة الخدمة الإرشادية، وذلك عن طريق تخطيط وتنفيذ الأنشطة والبرامج الإرشادية بناءً على إدراكات وحاجات الزراع وليس بناءً على إدراكاتهم الشخصية حول الخدمات الإرشادية المقدمة.

الكلمات الدالة: الإرشاد الزراعي، جودة الخدمة، مقياس الجودة الشاملة، مقياس جودة الخدمة، النوبارية