Measuring Farmers' Satisfaction with the Services of Agricultural Service Providers in Minya and BeniSuef Governorates
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Measuring Farmers’ Satisfaction with the Services of Agricultural Service Providers in Minya and BeniSuef Governorates

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Chapter one: Literature Review

First: Definition of Customer Satisfaction

Customer satisfaction is a matter of attitude towards or evaluation of product or service quality. It can be defined as: "a mental or emotional reaction that results as a response to the experience of interaction with the service." (Rust. and Oliver 1994). It can also be regarded as "the extent to which one realizes the effectiveness of the received product or service in fulfilling his needs (Reed, Johan & Nicholas 97). Accordingly, customer satisfaction is a personal feeling or evaluation, which explains the difficulty of satisfying all individuals or estimating satisfaction among a group of individuals.

Literature confirms the crucial interaction between customers and service provider in forming the notion of satisfaction. Some believe that customer satisfaction is a result from direct interaction with the service provider (Ganpat, Webste, Narine, 2014). The theory of customer satisfaction leadership presents the notion of "contact surface" (Rope & Pöllänen, as cited in Ihalainen, 2011). Contact surface is the intersection point of a provider and customers, which is explained, with examples in the field of agricultural extension.

1. Personnel contacts: Extension communications with farmers
2. Product contacts: information on technology and agriculture inputs.
3. Support system contacts: assistance to access support and incentives.
4. Ambience contacts: kind treatment and the cleanliness of extension office.

Second: Understanding Service Quality

According to (Jhas. 1988, 645), a service can refer to: production, performance, output, presentation or process. It varies from one field to another based on service characteristics, which include: intangibility, heterogeneity, inseparability, and perishability.

Intangibility refers to the lack of physical aspects to touch, taste or hear before buying the service. Heterogeneity means the variability in all phases of service provision based on various individual behaviors, whether it be service provider or customer. Perishability is the fact that services are bought and consumed simultaneously, and hence they cannot be stored for future use. Inseparability is that services are consumed at the moment of buying and that the customer participates in the process of producing the service.

The main question in understanding service quality is how customer realizes quality. What are the quality aspects that satisfy him? In this regard, "Gronroos" developed the first model to measure service quality (Gronroos. 1982), he distinguished between two aspects of service quality, as follows:
1. Technical quality, which involves the delivery of service. It is measured subjectively by the customer.

2. Functional quality, the state in which service is provided. It is concerned with the personal perception of interaction between buyer and seller, including:
   - Staff attitudes and behavior
   - Access to service provider (being approachable and kind treatment)
   - Access to service.
   - Personal appearance and personality of staff.
   - Relations with staff.
   - Interaction between staff and customers.

Service quality components in the service quality model (SERQUAI) are considered to be one of the most important measures of service quality. Service quality model (SERQUAI), also known as gap model (Parasuraman et al., 1985), is regarded as one of the best methods in this regard. The model stipulates that when a perceived doesn't meet expectations, service quality is less than satisfying. Whereas, when the perceived service exceeds expectations, service quality is considered more than satisfying.

**Figure 1**

**Gap Model for Measuring Satisfaction**

SERQUAL model consists of 22 pairs of Likert-scale statements. The first part measures perception of quality, while the second part is concerned with quality expectations. The original vision included 10 components for quality; it was later categorized into 5 main components as follow:
Third: Customer Satisfaction and Service Quality

Based on understanding customer satisfaction as a result of customer experience with a certain service, hence service quality is a determinant of customer satisfaction, since service quality is the output of a provided service (AGBOR. 2011.p. 11). Oliver. 1993 is acknowledged for suggesting linking service quality to satisfaction. He believes that service quality is a preset determinant for satisfaction.

Researchers tried to examine the definitions of satisfaction and product quality in a way that enables measuring the relation between them, in which satisfaction is perceived as a general notion, while the service quality is focused on quality components. Service quality is regarded as one of the determinants of satisfaction along with factors such as price and product quality (Wilson et al., 2008. P.78), which implies that the perception of quality is one of the components of customer satisfaction (Zeithaml et al. 2006, p. 106-107. As cited in Agbor 2011.p.11).

Fourth: Customer Satisfaction and Value for the Client

Researchers later tried to examine the relation between customer satisfaction and service quality in more details through adding one more preset determinant for satisfaction, which is service value (Wang et al.,2002). accordingly, the American index for service quality was developed in 1994. The model starts with customer expectations, perceived quality and perceived value, as three midway factors influencing satisfaction. The model ends with satisfaction outcome (complaints or loyalty) (See the figure 3). Perceived value is defined as the paid price considering the level of product quality level (Le Xue el al.,2008).
Literature review reveals a significant overlap between the concepts of customer satisfaction and service quality to the extent of equivalence, since the objective of providing quality service is achieving customer satisfaction. Therefore, measuring service quality is the best way to understand customer satisfaction; the better service quality, the higher customer satisfaction.

**Fifth: Customer/ Citizen Satisfaction in the Literature of Good Governance**

The main objective of the study is to contribute to achieving project goals through presenting analysis of satisfaction/dissatisfaction motives of farmers to form a basis for building and developing interventions aiming to improve governance in agricultural service organizations which, in turn, should contribute to the improvement of satisfaction level. This motivated the research team to review the literature related to measuring satisfaction on public services'. However, literature review was very useful in designing the study in terms of tackling alternative dimensions for satisfaction with public services. Those studies and how it benefited the design of this study are presented in the hopes that the study findings add value to this field.

In 1998, the Canadian government conducted the first in the series of *Citizens First* surveys aimed at discovering what citizens thought about the delivery of public services. It found that there were five “drivers” of satisfaction which accounted for over seventy percent of the service satisfaction outcome in the public sector. These drivers were:

- Time.
- Staff: staff knowledge to treat customers impartially and exerting extra efforts.
- Positive outcome: customers fulfill their needs.
- Easy Access.
- Customer’s new experience with the service.

The above mentioned determinants are the basis for developing public service satisfaction index in the United Kingdom (Ipos Mori, 2008). The index includes a number of preset determinants for satisfaction with public services as follows:

1) Service provision, providing promised outputs and dealing with problems that may arise.

2) Time, responding immediately when contacting the customer and handling issues in a timely manner regardless to the bureaucratic system.

3) Information, providing accurate and comprehensive information and informing the customer on the progress.

4) Professionalism: possessing adequate capabilities and treating customers with impartiality.

5) Staff attitudes: kind and polite staff, empathy with customer needs.

As for this study, the research team worked on linking previous determinants to models measuring satisfaction. These determinants are adopted as quality measurement dimensions instead of SERQUAL components, keeping the essence of the model as a measurement of equivalence between expectations and perception of quality.
Chapter Two: Theoretical and Methodological Framework

First: Framework of Analysis

Main research questions are:

1) Extent of farmer satisfaction with the three agricultural service providers.

2) Extent of farmer satisfaction with mechanisms for participation and complaints of the providers under study.

To answer the first question, the research team developed a model to describe the relation between satisfaction determinants, relations between one another on the one hand and with overall satisfaction on the other hand (see model 4). The presented model is actually a mix of SERVQUAL and Cause-Effect models. It is consistent with the general understanding of satisfaction as a gap between perception of quality and customer expectations. It overlooks the criticism of SERVQUAL model that confuses satisfaction and perceived quality. Finally, this model helps identify cause-effect relations; and hence responds to study objectives of identifying satisfaction/dissatisfaction causes and motives.

Figure 4

Study adopted model

Preset determinants of satisfaction are: perceived quality, customer expectations and perceived value.

1) **Perceived quality**: the first determinant of satisfaction. It is the customer perception of service quality according to the above mentioned quality variables.

2) **Customer expectations**: the second determinant of satisfaction. It affects the customer perception of quality, perception of overall utility from the service (perceived value) and directly affects overall satisfaction. Expectations are referred to as needs in this study.

It is worth noting that the research team used service quality variables found in the literature of customer satisfaction with public services, because they are more suitable for the nature of providers under study and more consistent with the requirements of achieving the second
objective of the study (satisfaction with mechanisms for participation and complaints).

3) **Perceived value**: the third determinant of satisfaction. It involves two aspects: 1. The match between perceived quality and expectations for quality. 2. The price effect. This understanding of perceived value supports study analysis of causal relations between satisfaction and preset determinants and helps explore qualitative relations contributing to satisfaction between variables of quality components, which helps best identify causes and motives of satisfaction. In this framework, the study will analyze three cases of matching perception of quality and expectations:

- Rejection: when customer expectations and performance lead to dissatisfaction.
- Acceptance: when the performance is adequate and accepted in relation to expectations.
- Confirmation: when the performance is too close to expectations.

Taking the price effect into account in the analysis of perceived value helps respond to the nature of services provided by the organizations under study, especially paid services provided by agricultural cooperatives. This means that the price effect will be estimated only in the case of paid services.

**Second: Methodology and Tools**

**A. Questionnaire Development**

The main challenge facing service satisfaction studies is the ability to describe the service under study in terms of general characteristics of services (heterogeneity, inseparability, perishability). The research team did their best to respond to this challenge through reviewing the literature of satisfaction in the agricultural field and conducting field visits. Unfortunately, local studies on farmers’ satisfaction did not discuss this issue and hence no solutions were found to guide the process.

The second challenge faced by the research team is the difficulty of separating services provided by agricultural extension providers and agricultural cooperatives, who provides what?

The research team undertook this task and reviewed the literature of the agricultural extension service provision to identify skills and knowledge that staff should have and quality indicators in this regard. Field visits conducted were of great value in examining the nature of interaction (contact surface) between various service providers and farmers. It also contributed to exploring performance indicators important to farmers in receiving services.

Field visits confirmed the difficulty of separating extension and cooperative services not only for the overlapping of the roles of a cooperative and an extension but also because the services of both are provided in the same outlet. Accordingly, farmers deal with those 2 kinds of services provider as one. Therefore, responses to the questionnaire inevitably involve confusing both associations. This additional complexity led to the solution adopted; the questionnaire was divided into two sections, the first is concerned with service provision of agricultural information which is the essence of the extension function and the second tackles
production inputs provision which is the responsibility of agricultural cooperatives.

Based on the foregoing, the research team developed a preliminary version of the questionnaire and presented it to the project team for feedback on its structure and question phrasing. Feedback received was very valuable and most of it was used in the final drafting of the questionnaire.

Research team further developed the questionnaire by separating the questions of each of the three providers under study and adding questions covering expectations and perceived value.

B. Sample

The size of the sample is determined according to the number of the farmers in the three districts in each governorate (original population), and the size of the sample has been estimated using [www.surveystesmates.com](http://www.surveystesmates.com) and according to this site, at a trust level of 95% and sampling error of 5%, and therefore the sample units in each governorate should not be less than 382 as demonstrated in the following table:

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Number of Farmers in Study Regions</th>
<th>Sample Size Based on Determinants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minya</td>
<td>68,000</td>
<td>382</td>
</tr>
<tr>
<td>BeniSuef</td>
<td>76,000</td>
<td>382</td>
</tr>
<tr>
<td>Total</td>
<td>144,000</td>
<td>764</td>
</tr>
</tbody>
</table>

The sample size should take into account the probability of excluding responses for one reason or another. This probability is estimated by 7% of the total sample size, which equals to 54 responses.

Accordingly, the total sample size is supposed to amount to 820, equally divided in the two governorates of the study, where the sample of each governorate is distributed based on the number of farmers in each district.

The team faced a significant difficulty in obtaining official approvals to collect data in Minya governorate. Therefore, instead of collecting the data from the Minya sample, a mix of quantitative and qualitative tools was used; 12 group interviews were conducted (2 interviews in each village in Minya), and a short version of the questionnaire was designed for quantitative data collected from 64 respondents (see annex 1).

C. Method of Sample Selection

1. SAMPLING METHOD

The proposed sample is a multi-stage stratified cluster sample.

- Multi-stage: sample is selected over stages as follows:
  - Purposive Selecting for local unit or department in each district.
Purposive Selecting for main village in each local unit.

Purposive Selecting for sub-village in each main village.

- **Cluster:** the sample assumes that each main village or its affiliated village represents the characteristics of farmers in each district.

- **Stratified:** determining required sample in each village takes into account the proportional representation of different groups according to landholding and gender.

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### 2. SAMPLING SELECTION PROCEDURES

#### Selecting villages

The organization team in each governorate selects a control district.

The organization team in each governorate selects 2 villages in each district as follows:

- One main village in each district of project districts, with a total of three main villages in each governorate.

- One village affiliated to the main village, with a total of three sub-villages.

Villages are selected based on The availability of necessary support to conduct the field survey (e.g. active agricultural NGO, a team in the village and convenient transportation, strong ties with society).

#### Sample distribution

- The research team determines the sample size in each village.

- The research team allocates the sample in each village to landholding and gender categories.

#### Identifying sub-areas/ grid squares for data collection

- The research team divides each village into a number of sub areas (squares), with a total of 20-30 houses.

- The research team identifies the number of required responses in each grid square and its allocation according to landholding and gender categories.
D. Analysis of Findings

1. TERMINOLOGIES

The study uses three main terminologies to analyze the survey findings as follows:

<table>
<thead>
<tr>
<th>Evaluation Score</th>
<th>Response categories</th>
<th>disagree</th>
<th>Agree to some extent</th>
<th>Largely agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw score frequency</td>
<td>N1</td>
<td>N2</td>
<td>N3</td>
<td>N4</td>
<td></td>
</tr>
</tbody>
</table>

Evaluation score refers to the weighted average of frequency of response categories. Most questions are drafted on a 4 point scale for agreement with statements.

Evaluation score is calculated using the weighted average method by summing the product of each response category by its corresponding weight and dividing the summation by the frequency number.

In case of building an indicator of a collective variable (consisting of more than one statement or more than one difference), the arithmetic mean is calculated for the total responses for all statements or implicit sub-variables, leading to the calculation of the total weighted average.

<table>
<thead>
<tr>
<th>Percent</th>
<th>In the context of analysis, it means the percentage of evaluation (score divided by the total number of response score (4</th>
</tr>
</thead>
</table>

Level

A qualitative description of the score or percentage achieved. It is calculated using the total interval length of the index by subtracting the lowest raw score from the highest (here equals 3). The total interval is further divided into 4 levels; each interval is 0.75 long, providing a qualitative description according to the interval as follows:

<table>
<thead>
<tr>
<th>Poor</th>
<th>fair</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1.75</td>
<td>1</td>
<td>2.5 – 1.75</td>
<td>3.25 – 2.5</td>
</tr>
</tbody>
</table>

3. THE CHARACTERISTICS OF THE SAMPLE:

The study will categorize the result according to the factors of geographic distribution, size of ownership, level of education and age.

Regarding the ownership, we can differentiate three sub-categories:

1) The owners of very small ownerships of less than 1 faddan, and they are the majority of the distribution of landownership and they are described in the socioeconomic studies as the group under the lower line of poverty in rural communities.
2) The owners of intermediate ownerships, less than 3 faddans, they belong under the upper line of poverty.

3) The owner of big more than 3 faddans.

Regarding levels of education:

1) low education level; illiterate or primary school certificate holders

2) Intermediate education level; preparatory school certificate holders

3) High education level; high school certificate holder

Part Two: Analysis of Satisfaction and Quality in BeniSuef Governorate

Chapter three: Satisfaction Analysis of the Agriculture service in BeniSuef

First: general Satisfaction with Agricultural Services

The survey findings reveal a general low level of satisfaction with the performance of different agricultural service providers. As shown in figure 5, all service providers in BeniSuef governorate score “poor” level of satisfaction. Although there are no significant differences in the satisfaction level for all service providers, agricultural cooperatives demonstrate a relatively higher level compared with other providers; it comes in the first place with around 42% satisfaction percentage, followed by NGOs (39%) and agricultural extension (36%) (See table 1in table annex). A more detailed analysis of satisfaction levels of all service providers studied will be discussed as follows.

A. Satisfaction with Extension Services

The average satisfaction level for services provided by agricultural extension is 1.42 degree, on a scale of 4 points, reaching around 36%; which indicates a poor level of satisfaction with its services. The study further explores variations in satisfaction levels according to variables of districts, age, educational level and landholding in order to present a base for designing the adequate intervention to increase satisfaction level.

According to the response analysis, there are no big differences in the satisfaction level for extension services in the four sample characteristics. However, some significant differences appear in some categories: as shown in table 1, the majority scores a poor level of satisfaction with extension services except for Ehnasia district and respondents with more than 3 feddans of land.
Table 1

Distribution of Satisfaction levels for Extension Services According to Main Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Ehnsia</th>
<th>Beba</th>
<th>El-Fashn</th>
<th>Less than 35</th>
<th>55 – 35</th>
<th>More than 55</th>
<th>Low intermediate</th>
<th>High</th>
<th>Less than one Feddan</th>
<th>One–three Feddans</th>
<th>More than 3 Feddans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>1.82</td>
<td>1.41</td>
<td>1.25</td>
<td>1.50</td>
<td>1.44</td>
<td>1.38</td>
<td>1.38</td>
<td>1.26</td>
<td>1.58</td>
<td>1.38</td>
<td>1.39</td>
</tr>
<tr>
<td>Percent</td>
<td>46%</td>
<td>35%</td>
<td>31%</td>
<td>38%</td>
<td>36%</td>
<td>34%</td>
<td>35%</td>
<td>32%</td>
<td>40%</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>Poor</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Fair</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. **VARIATIONS IN THE GEOGRAPHICAL DISTRICTS**

As figure 6 illustrates, demonstrates significant variation in the satisfaction distribution among study districts. Satisfaction level is largely lower in El-Fashn district as a result of the high percentage of dissatisfaction reaching 81% of total El-Fashn responses (See table 2 in the annex). In general, El-Fashn scores a satisfaction level of no more than 1.25 (roughly 31%). On the other hand, Ehnsia district scores a “fair” average of satisfaction due to the high percentage of “fair” satisfaction level (65%). Ehnsia scores 1.82 according to the scale (roughly 46%). Beba district scores “low” satisfaction levels (1.42 points, around 35%).

2. **VARIATIONS ACCORDING TO LANDHOLDING**

As figure 7 illustrate, some kind of polarization or conflict appears among small and medium landholdings compared with large landholdings. Respondents with small and medium landholding score no more than 1.39 with a percentage of no more than 35%, whereas respondents with more than three Feddans of land score an average of 2.15 (roughly 54%) (See table 5 in the annex).

1 table synthesized by researcher based on tables 2,3,4,5 in annex 2
B. Satisfaction with Cooperative Services

Agricultural cooperatives come at the forefront of service providers. However, it scores a “poor” level of satisfaction with a 3% percentage margin from NGOs and 6% margin from extension associations. Table 2 demonstrates a general description for the variation across sample characteristics. The table shows a relative variation of estimates according to districts, education and landholding as follows:

1. **VARIATION ACROSS DISTRICTS,**

   as shown in figure 8, there are significant differences (variation across levels) between satisfaction estimates for cooperative services. El-Fashn scores a very low level of almost 32% matching a poor satisfaction level, compared with a significantly higher satisfaction percentage in Ehnasia (around 53%) and Beba (around 49%) matching a “fair” satisfaction estimate. (Table 6 in annex).

2. **VARIATION ACCORDING EDUCATIONAL LEVEL**

   All age categories gave low scores for satisfaction level. Whereas satisfaction level is found to increase as the educational level increases; as shown in figure 9, respondents with medium (holding secondary education) and high education (holding more than secondary education) express “fair” level of satisfaction, while respondents of lower educational levels (illiteracy or primary education) express “poor” satisfaction levels (Table 7, 8 in annex).

3. **VARIATION ACCORDING LANDHOLDING**

   on landholding, figure 10 shows that satisfaction level is significantly higher for respondents who own more than three feddans; with a score of 2.3 and roughly 58%, which is equivalent to a “fair” level of satisfaction. Medium-scale category of landholding comes second with a score of 1.7 and roughly 42% matching a “poor” level of satisfaction,
which is 16% lower than the high category of landholding. The small-scale landholding category scores even less with 1.6 and roughly 39%. (Table 9)

1 Analysis of satisfaction with NGO services included only El-Fashn and Beba districts; Ehnasia sample did not consist of any cases for dealing with NGO in the field of agriculture.

C. Satisfaction with NGO Services

NGO services score a “poor” overall level of satisfaction with around 39%. Table 3 shows a significant variation in satisfaction level according to geographical distribution, age and educational level.

Table 3

<table>
<thead>
<tr>
<th>Variables</th>
<th>Districts</th>
<th>Age</th>
<th>Education</th>
<th>Landholding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ehnasia</td>
<td>Beba</td>
<td>El-Fashn</td>
<td>Less than 35</td>
</tr>
<tr>
<td>Poor</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Fair</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. VARIATION ACROSS DISTRICTS,

As for variation across geographical distribution, figure 11 demonstrates a significant variation across Beba and El-Fashn districts’ evaluations. El-Fashn District scores a “poor” satisfaction level for NGO services, with a score of 1.5 on a 4-point scale and a percentage that did not exceed 37%, whereas Beba district scores a “fair” level of satisfaction with a score of 1.95 and percentage 49% with a 12% margin compared with El-Fashn district. (annex, Table 10).

2. VARIATION ACROSS AGE CATEGORIES

Concerning satisfaction level distribution for NGO services across age categories, figure 12 shows that respondents aged less than 35 years tend to express “fair” level of satisfaction; with a 1.8 score and around 45%, while older groups express “poor” satisfaction levels, with percentages ranging between around 37% and 39%. (Annex, Table 11).

2 Analysis of satisfaction with NGO services included only El-Fashn and Beba districts; Ehnasia sample did not consist of any cases for dealing with NGO in the field of agriculture.

3 Table synthesized by researcher based on tables 11,10/ 13,12 in annex.
3. VARIATION ACROSS EDUCATION LEVELS

As shown in figure 13, respondents with high level of education tend to express a “fair” level of satisfaction with NGO services, with an average of 1.86 score and around 47%, with a significant margin compared with respondents of other educational levels; 19% margin compared with intermediate educational level and 11% margin compared with low educational level. (annex, table 12)

4. VARIATION ACROSS LANDHOLDING

As for variation of satisfaction levels for NGO services according to landholding categories, all categories score “poor” satisfaction levels. A significant variation among the three categories appears as follows: respondents of medium-scale category of landholding tend to score lower percentage of satisfaction (35%), while the small-scale category tends to score relatively higher percentage (around 43%) (Annex, Table 13).

Chapter four : Perception of Quality of Services in BeniSuif

Farmers’ perception of service quality is the main factor influencing overall satisfaction. The study aims at measuring farmers’ perception of the quality of services provided by the three studied providers through six main variables of quality perception. The following is an overview of quality perception before discussing quality perception for each of the three service providers.

First: General Overview

The average level of overall quality perception in various providers is fair. There are no significant differences of overall quality perception across different categories of age, education or landholding status. Furthermore, no significant differences are found according across geographical districts. (See table 14 in the annex)

Overall quality perception for services of each provider scores a fair level. However, analysis reveals some variation of farmers’ perception for each service provider. Figure 14 shows that all three providers score a fair level, with NGOs in the forefront (average of 57%), followed by agricultural extension associations (51%) and cooperatives (around 47%) (See table 15 in the annex)
Table 4 demonstrates the distribution of service quality levels in the three studied providers according to the six quality variables. The table shows that all three providers suffer from poor level of professionalism and effectiveness. Professionalism is a matter of the knowledge and capabilities of staff, while effectiveness is all about the benefit and actual return from services. Service quality is supposed to be basically measured by those two factors and achieving high scores in them may justify low levels scored in the rest of quality aspects. However, data show a reversed situation; with poor levels scored for professionalism and effectiveness factors, while waiting time and access score higher levels.

Interestingly, NGOs comes first in regard to professionalism and effectiveness compared with extension associations and cooperatives; professionalism in NGOs scores a quality level of 43%, compared with 32% for extension associations and cooperatives. Effectiveness in NGOs scores 42%, compared with 35% for extension associations and 30% for cooperatives (See table 3 in the annex).

**Second: Perception of Quality of Extension Services**

**A. Overall Assessment**

Majority rate the overall quality of extension services as “fair”. Figure 15 shows that 13% of sample respondents rate it as “poor”, while the majority rate it as “fair” (69%) and 18% gave higher assessments. On an aggregate level, the overall quality assessment of extension services is fair, scoring around 51%.(see table 17 in annex)
B. Variation According to Sample Characteristics

Table 5

<table>
<thead>
<tr>
<th>Categories</th>
<th>Districts</th>
<th>Age</th>
<th>Education</th>
<th>Landholding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

Table 5 shows an overview of quality assessments according to various sample characteristics. All categories of age, educational levels and landholding show a consensus on rating extension service quality as fair. As for assessment distribution across districts, a considerable decrease in the extension service quality perception of Beba district respondents is noted. Figure 16 shows that respondents of Beba rate it as poor, with a weighted average of 1.7 on the four-point quality scale and a percentage of 42% with at least 11 point decrease compared with other districts. (See table 17 in annex).

C. Variation According to Quality Aspects

Farmers’ assessment of extension service quality varies in regard to various quality aspects. Figure 17 shows that access, information provision and waiting time are highly rated ranging from good to excellent ratings, whereas the rest of aspects get low ratings. (see Table 16 in annex). This detailed analysis is particularly important, because it provides a detailed assessment of strengths and weaknesses of extension service quality aspects and in turn can guide the process of identifying intervention areas that can be most effective. Table 5 in the annex demonstrates farmers’ perception of quality aspects in each district. The following is a discussion of strengths and weaknesses of extension service quality.
D. **Strengths and Weaknesses**

1. **STRENGTHS**

| Waiting time until receiving the service | This aspect consists of two sub-variables which are: office waiting time and field waiting time. Both score 3 points on a four-point scale, with a percentage of around 65% which is equivalent to “good” on the quality scale (See table 18 in annex). |
| Access to service provider | Accessing extension service provider consists of two variables which are: accessing staff and accessing provider premises. Accessing staff scores 3 points on the scale which is equivalent to “good”, while accessing premises scores 4 points, which is equivalent to “excellent.” |
| Service information provision | This aspect consists of two variables which are: prior awareness of services, which scores 1.4 on the scale (equivalent to “poor”), and subsequent awareness of service, which scores 3.5 points on the scale (equivalent to “excellent”). In total, this aspect scores around 2.8 points (equivalent to “good”). |

2. **WEAKNESSES**

| Professionalism | This aspect consists of 3 sub-areas; one is related to farmers’ perception of extension staff knowledge and capabilities over various stages of production cycle. Land preparation scores 1.6 on the scale (equivalent to “poor”), the rest of the variables score 1.4 which is equivalent to “poor” as well. |
| 1. Staff knowledge and capabilities | This area addresses the number of target group in the extension activity. Individual extension methods come at the forefront with a score of 1.5 (equivalent to “poor”), while group methods score 1.3, followed by mass methods (1.2). |
| 2. diversity of extension methods | This area explores how staff listen to farmers and build upon their experiences. It scores 1.4 which is equivalent to “poor”. |
| 3. respect for farmers’ experience | includes 4 areas: |
| | Topic importance. |
| | Appropriate timing of agricultural service provision. |
| | Consideration of farmers’ situation. |
| | Benefit from the service. |
| Effectiveness | Topic importance scores 1.5 (equivalent to “poor”), while other areas score 1.4 (also “poor”) |
| Treatment | includes kind reception, readiness and devotion in service provision. Kind reception scores 2.1 (equivalent to “good”), while readiness and devotion scores 1.5 (equivalent to “poor”). |
Third: Quality of Agricultural Cooperatives

A. Overall Assessment

Like other service providers, overall quality of agricultural cooperative services scores “fair” on the quality perception scale. However, cooperatives come at the third and last place among service providers with a score of 1.86 on the four-point scale and a quality level and a percentage of no more than 47% (See table 15 in annex), which is barely higher than “poor” rating (quality is rated poor if it is 43% or less). Figure 18 shows that 30% rate cooperative services quality as “poor”, while 56% rate it as “fair” and 16% give higher rating.(see table 19 in annex)

B. Variation in Overall Assessment According to Sample Characteristics

Table 6 shows that all groups of sample characteristics rate cooperative services as “fair” without any significant differences. Respondents with high education and large-scale landholding tend to give relatively high ratings.

C. Variation According to Quality Aspects

Cooperative service quality scores “poor” on the four-point quality scale in four out of six quality aspects, while only two score “fair”. Figure 19 shows that Professionalism, effectiveness, access and treatment have relatively lower ratings (less than 43%), which is equivalent to “poor”. While the percentages for waiting time and service information access are 7% and...
77% respectively, falling into the “good” category (ranging between 62.5% and 8.25%).

Table 20 in the annex demonstrates assessments of quality aspects and sub-areas and their distribution over districts. The following is a discussion of strengths and weaknesses of the perception of cooperative service quality.

### D. Strengths and Weaknesses

#### 1. STRENGTHS

#### Waiting time

This aspect includes 2 areas, which are: waiting time until receiving production input services and waiting time until receiving formal deposition services. The first scores 2.8 on the scale (69%) which is equivalent to “good” and the second scores 3.1 (77%) which is also equivalent to “good.”

In total, this aspect scores 3.1 (77%), which is equivalent to “good” on the scale

#### Service Information

This aspect addresses prior awareness of activities and services provided by the cooperative association. It scores 3 (74%), which is equivalent to “good.”

![Assessments of cooperative service quality](image)
2. WEAKNESSES

<table>
<thead>
<tr>
<th>Professionalism</th>
<th>Overall professionalism aspect (staff skills and capabilities) scores 1.3 (equivalent to poor). It includes 5 sub-areas:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Providing subsidized fertilizers.</td>
</tr>
<tr>
<td></td>
<td>- Providing the rest of production inputs.</td>
</tr>
<tr>
<td></td>
<td>- Responding to problems arising from using inputs.</td>
</tr>
<tr>
<td></td>
<td>- Managing mechanization services.</td>
</tr>
<tr>
<td></td>
<td>- Marketing knowledge and skills.</td>
</tr>
<tr>
<td></td>
<td>All areas score “poor” level; with 43% for providing subsidized fertilizers and mechanization services coming last with 32%.</td>
</tr>
</tbody>
</table>

| Effectiveness | This aspect includes 3 areas: reliability of production inputs, reliability of mechanization services and effectiveness of marketing services. In total, it gets a very low score (1.2) and percentage (33%). Reliability of production inputs comes at the forefront with a difference between El-Fashn district (1.3), and Ehansia and Beba districts (1.7 and 1.8 respectively) (See table 7). |

| Service Access | Includes 2 areas: access to subsidized fertilizer shares and service coverage of remote villages. In total, this aspect scores 1.5 (38%), which is equivalent to “poor”. A significant difference exists between both areas; access to subsidized fertilizer shares scores 1.8 (equivalent to “fair”) while service coverage scores 1.4 (equivalent to “poor”). |

| Treatment | includes 2 areas: “reception and kind treatment” and “readiness and devotion”. In total the score is 1.6, which is equivalent to “poor”. A significant difference appears between both areas; reception and kind treatment scores 2.2 (equivalent to “fair”) while readiness and devotion scores 1.6 (equivalent to “poor”). |

---

Fourth: Non-Governmental Organizations

A. Overall Assessment

Like other service providers studied, farmers’ perception of overall NGO service quality reaches a “fair” level on the quality scale. However, it comes at the forefront scoring 56%, compared with extension associations (51%) and cooperatives (47%). (See table 2 in annex).

Figure 19-2 shows NGO service quality assessments (See table 21 in annex).

---

Analysis on NGO services is conducted only in Beba and El-Fashn districts. The research team had to exclude Ehansia responses due to its very limited number, responding for only two out of the six quality aspects. So that Ehansia responses were excluded in order to avoid confusing the service quality assessment.
B. Variation in Overall Assessment According to Sample Characteristics

Assessments of NGO service quality vary across districts; table 7 shows that all age, education and landholding groups give a “fair” score to NGO services. On the other hand, a significant difference appears among quality assessments in each geographical district; El-Fashn district scores a 2.5 weighted average (63%), which is equivalent to “good” on the quality scale, while Beba district scores 2.2 with 55% (equivalent to “fair”). Such variation is clearer in the analysis of quality aspects (See table 21 in annex).

<table>
<thead>
<tr>
<th>Table 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distribution of Quality Assessments for NGO Services according to Sample Characteristics</strong></td>
</tr>
<tr>
<td><strong>Categories</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Ehnasia</td>
</tr>
<tr>
<td>Score</td>
</tr>
<tr>
<td>Percentage</td>
</tr>
</tbody>
</table>

C. Variation According to Quality Aspects

Analysis of farmers’ perception of NGO service quality aspects shows same features as the other providers. A high assessment of waiting time and access is noted compared with other aspects. A very high and significant variation appears between the two studied districts in regard to assessments of professionalism, effectiveness, treatment and service information provision aspects. In general, Assessments of those aspects are higher in El-Fashn district compared with their counterparts in Beba, with at least around 25% margin. Studying the reasons for such variation will surely guide project interventions with NGOs.

4 Analysis on NGO services is conducted only in Beba and El-Fashn districts. The research team had to exclude Ehnasia responses due to its very limited number, responding for only two out of the six quality aspects. So that Ehnasia responses were excluded in order to avoid confusing the service quality assessment.
Chapter five: Participation and Complaint Analysis in BeniSuef Governorate

First: Analysis of Participation

Table 8 lists ways of participation in the agricultural field in all three service providers:

<table>
<thead>
<tr>
<th>Provider</th>
<th>Participation forms</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extension</td>
<td>Individual consultations from advisors</td>
<td>a. Extension staff consult me at the season's beginning on farmers' extension needs</td>
</tr>
<tr>
<td></td>
<td>Consulting a communication farmer</td>
<td>b. Plot advisors ask farmers about their extension needs at the beginning of the season.</td>
</tr>
<tr>
<td></td>
<td>Meeting in the beginning of the season</td>
<td>c. Meetings are held to identify extension needs at the beginning of the season.</td>
</tr>
<tr>
<td></td>
<td>Follow up during the season</td>
<td>d. Extension staff follow up on crop status in the village and take necessary actions and activities to address new problems or needs.</td>
</tr>
<tr>
<td>Cooperative</td>
<td>Attending the general assembly</td>
<td>a. I can always attend the annual general assembly to discuss budget and services provided and share my opinions.</td>
</tr>
<tr>
<td></td>
<td>Participation in major decisions</td>
<td>b. Cooperative's board of director is interested in engaging farmer in all major decisions (meetings with farmers to discuss organizing input provision and cleansing plan)</td>
</tr>
<tr>
<td></td>
<td>Participating in periodical meetings</td>
<td>c. Board of directors organize meetings with farmers from time to time to update them on developments and identify their needs</td>
</tr>
</tbody>
</table>

![Figure 20](image) Relative distribution of dimensions of quality
The research team developed a number of total indicators for total participation level and participation level in each service provider as well as analysis of ways of participation in each provider. The following part presents participation overview and analysis for each provider.

### A. Participation Overview

The findings reveal a common theme of the lack of participation in all service providers in BeniSuef governorate. Overall participation levels are very low; as shown in figure 21, total participation (average participation in all service providers) is only around 33%, which is equivalent to "poor" on the scale.

No significant differences are found across districts, characteristics or providers. As for variation across districts, participation level scores 1.2 in Beba and 1.4 in El-Fashn (30%, 35% respectively) (Table 23 in annex).

**Regarding variation among sample characteristics**, table 9 shows no differences except for the large-scale landholding group that gives a relatively high rating to participation (39%) compared with small-scale landholding group.

<table>
<thead>
<tr>
<th>Table 9</th>
<th>Distribution of Overall Participation Assessments According to Sample Characteristics⁵</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age</td>
</tr>
<tr>
<td></td>
<td>Less than 35</td>
</tr>
<tr>
<td>Score</td>
<td>1.37</td>
</tr>
<tr>
<td>Percentage</td>
<td>34%</td>
</tr>
<tr>
<td>Level</td>
<td>Poor</td>
</tr>
</tbody>
</table>

⁵Table synthesized by researcher.
Moreover, no significant differences in participation levels of service providers. Some difference is found in participation levels in NGOs (37%) and extension associations (36%) compared with agricultural cooperatives (32%). (see table 24 in annex)

**B. Participation in Agricultural extension**

Overall participation in extension associations scores 1.37 on the scale (around 34%), which is equivalent to “poor” participation level. Variations across districts and in different ways of participation are thus discussed in the following sections.

1. **VARIATION ACROSS DISTRICTS**

As figure 22 show El-Fashn comes at the forefront in terms of overall participation (36%), followed by Ehnasia (33%) and Beba (32%). The relatively higher level in El-Fashn can be attributed to the high percentage of responses reporting participation (sometimes or often) (around 15%) compared with 6% in the two other districts.

2. **VARIATION AMONG VARIOUS WAYS OF PARTICIPATION**

Figure 23 demonstrates participation levels in extension services in terms of selected ways of participation. Consulting communication farmers comes at the forefront (38%), followed by individual consultations with advisors whether it be at the beginning of the season or during the agricultural production cycle. Percentage of participation through consulting communication farmers is relatively high, scoring “fair” level in Ehnasia district (around 45%) (See table 4,5).

**C. Participation in Cooperatives**

Participation in cooperatives scores 1.3 (32%), which is equivalent to “poor” on the participation scale. No significant differences emerge among participation levels in different districts or ways of participation (See table 28,29 in annex).
D. Participation in Non-governmental Organizations

NGOs score 1.47 on the participation scale (equivalent to “poor”). A significant difference is noted in participation in different districts; figure 24 shows that participation in NGOs in El-Fashn district scores 71% (equivalent to “good”), whereas participation in Beba scores 30%, which is equivalent to “poor” participation level.(see table 30 in annex)

This variation is present in both districts regarding all forms of participation; figure 25 shows that participation level in El-Fashn ranges from 69% to 70% for all forms of participation, compared with their counterparts in Beba (ranging from 29% to 35%). (see table 32 in annex)

Second: Complaint Analysis

Complaint analysis consists of two aspects: first: measuring the awareness of complaint system. Second: examining the complaint environment.

A. Awareness of the Complaint System

Surprisingly, the percentage of respondents, who are aware of how to submit a complaint, is high (85%), while 15% are not. This very high percentage is not reflected in filing complaints; number of respondents who actually filed a complaint is only 12 (around 2% of the total sample).

As for variation in awareness of ways to file a complaint, around 83% know how to file a complaint in all three service providers, while only 3% know how to file a complaint in one service provider. (Table 13 in annex)
B. Conducive Complaint Environment

The study constructs a scale for extent to which the environment is conducive to complaints on the service provider level. The scale is divided as follows, see figure 10

<table>
<thead>
<tr>
<th>Environment ranks</th>
<th>Values</th>
<th>Q54 How was the response to ?the complaint</th>
<th>Q55 why didn't you file a complaint?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hostile environment</td>
<td>1</td>
<td>Negative consequences (4)</td>
<td>To avoid maltreatment (4)</td>
</tr>
<tr>
<td>Unsupportive environment</td>
<td>2</td>
<td>No one cared about my complaint (3)</td>
<td>Nothing worth a complaint (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No one cared (3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I don’t know how to file a complaint (2)</td>
</tr>
<tr>
<td>Supportive to some extent</td>
<td>3</td>
<td>Good response but slow (2)</td>
<td></td>
</tr>
</tbody>
</table>

Figure 26 shows that 31% believe that the environment is hostile towards complaints; they explained they are afraid to get punished for filing complaints. The majority (66%) believe that the environment doesn’t support filing complaints, including those who say that no one cares about complaints, others who do not know how to file a complaint or believe that there is nothing that calls for filing one. Only 2% believe that the environment is supportive in this regard, they say that responses (either slow or quick) to their complaints were good.(table 36 annex)

Part Three: Analysis of Satisfaction with Services in Minya Governorate

Chapter Six: Satisfaction Analysis in Minay

First: Satisfaction with Services

Agricultural service providers score a “fair” level of satisfaction. No significant differences are detected among satisfaction in different categories of age, education, or landholding, whereas significant differences appear across districts; table 11 demonstrates distribution of satisfaction levels over sample characteristics and figure 27 shows satisfaction levels in districts.

Figure 26
Distribution of complaint environment status

Figure 27
Distribution of satisfaction levels by Districts
Table 11
Distribution of Overall Satisfaction Levels for Extension and Cooperative Services in Minya

<table>
<thead>
<tr>
<th>Variables</th>
<th>Age</th>
<th>Education</th>
<th>Landholding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories</td>
<td>Less than 35</td>
<td>55 – 35</td>
<td>More than 55</td>
</tr>
<tr>
<td>Satisfaction Score</td>
<td>1.80</td>
<td>1.79</td>
<td>2.04</td>
</tr>
<tr>
<td>Satisfaction Percentage</td>
<td>45%</td>
<td>45%</td>
<td>51%</td>
</tr>
<tr>
<td>Low</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Medium</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

Figure 27 shows that satisfaction with agricultural services in Maghagha district is the highest among other districts (around 53%), followed by Matay (45%) and Minya district (around 41%). Maghagha services score 2.12 on the satisfaction four-point scale (equivalent to “fair” satisfaction level), while Matay services score 1.8 (equivalent to “fair” satisfaction level), and Minya services score almost 1.65 (equivalent to “poor” satisfaction level). (See table 37 annex).

**Second: Satisfaction with Extension Services**

Extension services generally score a low level of satisfaction. No significant differences exist in satisfaction levels among different categories of age, education and landholding. (See table 12). Also, no significant differences are detected in satisfaction levels in different districts. However, Matay comes at the forefront (36%), followed by Minya (33%) and Maghagha (29%). (table38 annex)

Figure 28

satisfaction with Extension Services in Minya
**Third: Satisfaction with Cooperative Services**

Satisfaction with cooperative services is the highest compared with extension services in Minya or other studied service providers. Minya cooperative services score 2.61 on the satisfaction four-point scale with 65% (equivalent to “good” satisfaction level). (See table 39 in annex).

Satisfaction levels vary significantly across districts; figure 29 shows that Maghagha ranks first in terms of satisfaction with cooperative services (73%, equivalent to “good” level of satisfaction), while Matay and Minya districts follow in the second place (around 60% each, equivalent to “fair” level of satisfaction).

As for variations among categories of sample characteristics, table 13 shows that the majority of sample groups score “good” except for middle age group and respondents with intermediate educational levels in which satisfaction reaches “fair”.

<table>
<thead>
<tr>
<th>Table 13</th>
<th>Distribution of Overall Satisfaction levels for Agricultural Cooperative Services in Minya</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variables</strong></td>
<td><strong>Age</strong></td>
</tr>
<tr>
<td><strong>Categories</strong></td>
<td>Less than 35</td>
</tr>
<tr>
<td><strong>Satisfaction Score</strong></td>
<td>2.80</td>
</tr>
<tr>
<td><strong>Satisfaction Percentage</strong></td>
<td>70%</td>
</tr>
</tbody>
</table>

- Low
- Medium
- High

Figure 29
Distribution of satisfaction with Cooperative Services in Minya by District
Chapter Seven: Analysis of Quality

First: Overall Quality Perception

Analysis of service quality in Minya includes four quality aspects: professionalism, effectiveness, proper treatment and access. Service providers achieve a “fair” level of overall quality (54%). The following addresses variations of overall quality assessments across districts and in sample characteristics categories.

A. Overall Quality Variation across Districts

No significant differences are detected in quality assessments across districts. However, some differences (a difference that is valid within the same level of assessment) appear among districts overall quality assessments. As illustrated in figure 30 Maghagha district ranks first (around 57%) followed by Matay (52%) and Minya (50%) (See table 40 in annex).

B. Overall Quality Variation According to Sample Characteristics

Table 14 Distribution of Overall Quality Assessment of Service Providers in Minya

<table>
<thead>
<tr>
<th>Variables</th>
<th>Age</th>
<th>Education</th>
<th>Landholding</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 35</td>
<td>55 - 35</td>
<td>More than 55</td>
<td>Poor</td>
</tr>
<tr>
<td>Quality Score</td>
<td>1.80</td>
<td>2.09</td>
<td>2.27</td>
<td>2.14</td>
</tr>
<tr>
<td>Quality Percentage</td>
<td>45%</td>
<td>52%</td>
<td>57%</td>
<td>54%</td>
</tr>
<tr>
<td>Poor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 14 shows that the majority rate service quality as “fair”. A significant difference exists only in the group of respondents with high education; they rate quality as “poor” (around 40%) which is much higher than other education categories. Another significant difference exists in the medium-scale landholding category that rates it as “excellent” (around 70%). Otherwise, variations exist among age and landholding categories as follows: young respondents tend to give a “poor” rating (around 45%), compared with respondents older than 55 (57%) and small-scale landholding group tend to give “poor” rating (around 49%) compared with medium-scale landholding group (58%) and large-scale landholding group (71% as mentioned above). The following discuss quality assessments of the two service providers in more details.
C. Variation among Service Providers

A significant variation is noted among quality assessments of both service providers. As shown in figure 31, cooperative service quality scores 2.8 (70%), which is equivalent to “good” quality, whereas extension services score only 1.6 (41%), which is equivalent to “poor” quality. (See table 41 annex).

D. Variation among Quality Aspects

Figure 32 shows assessments of various quality aspects of service providers in Minya governorate. The four quality aspects score “fair” quality in total and separately. Similar to Beni Suef, a variation is detected among “proper treatment” and “access” aspects on the one hand (a score of 2.4, 59%), and “professionalism” and “effectiveness” on the other (50%, 49% respectively) which are almost 10% lower than other aspects. (See table 41 annex)

Second: Quality of Extension Services

Overall quality assessment of extension services in Minya scores 1.64 (41%), which is equivalent to “poor” quality. The following will discuss variations of quality assessment of extension services across districts, sample characteristics and quality aspects.

A. Variation across Districts

Figure 33 shows that the score of extension service quality in Matay district is the highest with a significant margin, compared with Minya and Maghagha districts. Extension service quality in Matay scores 1.8 (around 45%), which is equivalent to “fair” quality, while Minya district scores 1.7 (43%) and Maghagha scores 1.4 with around 36%. Both districts’ scores are equivalent to “poor” quality. (table 42 annex)

B. Variation in Characteristic Groups

Table 15 shows the distribution of scores and levels of extension service quality assessments
among age, education and landholding categories. Extension services score “poor” quality level in total and by most sample groups. Significant variations appear in middle-age and intermediate education groups; as both rate quality as “fair”, while medium-scale landholding group rate it as “good”.

### Table 15

<table>
<thead>
<tr>
<th>Variables</th>
<th>Age</th>
<th>Education</th>
<th>Landholding</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories</td>
<td>Less than 35</td>
<td>55 – 35</td>
<td>More than 55</td>
<td>Poor</td>
</tr>
<tr>
<td>Satisfaction Score</td>
<td>1.40</td>
<td>1.85</td>
<td>1.42</td>
<td>1.60</td>
</tr>
<tr>
<td>Satisfaction Percentage</td>
<td>35%</td>
<td>46%</td>
<td>36%</td>
<td>40%</td>
</tr>
</tbody>
</table>

#### C. Variation among Quality Aspects

No significant variations exist between among assessments of various quality aspects of extension services in Minya. As shown in figure 34, all quality aspects scores are ranging from 38% to 41%, all equivalent to “poor” quality level. (table 43 annex)

#### D. Findings of Qualitative Analysis

The findings of qualitative interviews reveal three main aspects as follows:

**1. Weak Functional Hierarchy of Extension Services**

The structure of an extension unit is supposed to be similar to the structure of the central administration. Every advisor provides services of the central administration he represents. According to association directors we interviewed, each extension unit should consist of at least five advisors (field, animal, apiaries, food manufacture, pest control), given that each unit is supposed to cover 750 feddans. According to the statements, most extension units have only one advisor; all are old and expected to retire within the upcoming 5 years.

In this context, we can form a better understanding of comments of the majority of farmers in Minya who said that there are no extension services:
- "Extension services have no role since we stopped planting cotton" said Samir Hanna, BeniAgmad.

- "I give them zero score, because they do not exist" said Farouk Abdel Wahab, Kafada.

- "It’s been a year since I last received extension services" Abwan.

- "There is no advisor to begin with" Abwan.

- "There are 21 plots under the association and one advisor who only care about protecting the land from encroachments" Abwan.

- "We only have 2 advisors responsible for 2300 feddans" Aba Alwakf.

- "I only saw the advisor five years ago at the mandatory training" Aba Alwakf.

Over 50% of participants of the qualitative interviews affirmed the need for activation of extension role and appointing an extension authority in associations.

2. LOW COMPETENCY AND EFFECTIVENESS

Participants’ assessment of competency and effectiveness varies among districts. In Magha, farmers say that advisors do their job. Participants expressed their opinions as follows:

- "The advisor visit my land when it is infected and provide advice."

- "The advisor guide me about planting wheat and how to trim wheat spikes"

- "When the advisor visits, he gives me feedback on my planting techniques"

However, even in Matay farmers express their dissatisfaction with extension performance as follows:

- There are no more seminars and visits... that was a long time ago.

- No one provides us with veterinary advice.

- What advisors care about is protecting agricultural lands from encroachments.

In Matay, the situation is even worse. Farmers say:

- Advisors receive no trainings, that’s why he knows nothing.

- We need experts to diagnose pests and issues.

- Advisors should simplify things to the farmers.

In Minya, Farmers say:

- Advisors are too busy to help us.

- Extension doesn’t matter; it’s useless anyway.

3. LACK OF SERVICES

Participants in all studied districts agreed on the severe lack of service provision and expressed their wishes for a package of services that include: animal extension services, soil
analysis services, apiaries and bird breeding project services, as well as extension guidance on new crops.

- No one provides us with veterinary advice.
- We need to activate extension for new crops such as beets, fennel and coriander.

Second : Quality of Cooperatives in Minya

Cooperative services in Minya are rated as “good” on the quality scale (2.8, around 70%). The following is a description of variations of agricultural cooperative service quality assessments in Minya across districts, sample characteristics and quality aspects.

A. Variation across Districts

Cooperative service quality scores of all districts in Minya governorate are equivalent to “good”. Despite the fact that there are no significant differences across districts, Maghagha ranks first (79%), followed, with a 15% margin, by Matay (65%) and Minya district (around 63%) with a score equivalent to “good” quality level. (See table 44 annex).

B. Variation in Characteristic Groups

Table 16 demonstrates cooperative service quality assessments in Minya in age, education and landholding categories. All categories rate service quality as “good”, except for younger and highly educated respondents who rate them as “fair”.

Table 16
Distribution of Satisfaction Levels for Cooperative Services in Minya According to Sample Characteristics and Categories

<table>
<thead>
<tr>
<th>Variables</th>
<th>Age</th>
<th>Education</th>
<th>Landholding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 35</td>
<td>55 - 35</td>
<td>More than 55</td>
</tr>
<tr>
<td>Satisfaction Score</td>
<td>2.40</td>
<td>2.64</td>
<td>3.08</td>
</tr>
<tr>
<td>Satisfaction Percentage</td>
<td>60%</td>
<td>66%</td>
<td>77%</td>
</tr>
<tr>
<td>Medium</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>High</td>
<td>*</td>
<td>*</td>
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</table>
C. Variation among Quality Aspects

Most cooperative service quality aspects score “good” on the quality scale except for effectiveness that scores “fair”. “Professionalism” and “effectiveness” aspects are also lower than other aspects; while “treatment” and “access” aspects score around 72%, “Professionalism” and “effectiveness” aspects score 62% on average. “Professionalism” rating (good) is half percentage point higher than “fair” (See table 8).

D. Findings of Qualitative Interviews

The actual role of agricultural extension is almost limited to providing subsidized fertilizer shares and seeds provided by the extension authority. The rest of areas and services such as providing production inputs, supporting agricultural mechanization and agricultural marketing is almost non-existent. Most farmers feel gratitude for agricultural cooperatives for fulfilling this part from their responsibilities. As expressed by Shaaban, one farmer in Kafada, “The association doesn’t provide services that match farmers’ needs, it only provides available services”. Most farmers are not aware that cooperatives are responsible for providing the rest of the services, they don’t even know that they are members in the agricultural association and have a share in its capital. The following is a discussion of notable farmers’ remarks regarding the role of cooperatives in providing fertilizers and seeds and their urgent need for other services.

1. ISSUES RELATED TO PROVIDING SUBSIDIZED FERTILIZERS AND SEEDS

Over 35% of the quantitative sample respondents report problems related to the availability of subsidized fertilizers and seeds. Most participants call for a larger share of fertilizers, which is out of the power of the cooperative association. Participants mention demands related to fertilizer provision in a timely manner. According to farmers,

- The landowner is the one who receive fertilizers, said by a farmer, Maghagha.
- The landowner gets the fertilizer share and I have to buy unsubsidized fertilizers” said Wafaa Khaled, Abwan.
- Fertilizer bags used to be lead-protected.
- Owners of 50 feddans receive high quality fertilizers and sell it because they are not farmers and don’t actually need it.
- Fertilizers should be distributed 2 times (3-5 day contracts).

2. ON SEED PROVISION, FARMERS REPORT:

- They provide high quality seeds but they are different from the types we order, about 50% of our order is met and we filed a report to the association’s board to demand specific seeds, Maghagha.
- Seeds are not trusted, a rat may eat half of the seed bag, we have to buy expensive seeds, Reeda.
- Extension associations plant good seeds and provide bad seed to farmers in order to sell the good ones, said Salah, Kafada.

3. ISSUES RELATED TO AGRICULTURAL MECHANIZATION

About 27% of quantitative sample respondents have demands related to providing agricultural mechanization such as tractors and irrigation motors. According to farmers,

- There is no tractor in the association, and i have to pay a lot of money to use one, said Ramadan, Abwan.
- We had mechanization and they were sold in an auction, everything gone, Reeda.
- We deal with other farmers who own tractors because they allow payment facilities. If the association can do the same we would definitely deal with it because we trust it, Aba Al-Wakf.
- Want to help farmers? we have no tractors and it consumes a large sum of money, provide mechanization and that would help, Abwan.

5. MARKETING ISSUES

16% of quantitative sample respondents express the lack of cooperative marketing services. According to farmers:

- Nobody wants to buy our crops; we have to sell them half-price, Kafada.
- Corporates and businessmen exploit us, said Mohamed Abdel Azeem, Reeda.
- Look, sir; Corporate managers decide what to buy and cause prices to fall, Abwan.

Conclusive Chapter: Observations and Recommendations

First: Satisfaction Analysis

The results of the study show low level of satisfaction from the performance of all the agriculture service providers in BeniSuef. All the service providers have achieve a grade of (weak) for satisfaction with a percent of satisfaction less than 43%. The cooperatives ranked first with 43% approx. of satisfaction, followed by NGOs with 39% approx and then agriculture extension 36% approx. satisfaction.

According to the results of the study, Elfashn district has scored very low in percent of satisfaction from the three service providers in relation to all other districts. In general the low education level groups and the very small landowners tended to give less satisfaction rating than other groups. Accordingly, to develop the satisfaction in BeniSuef, the interventions have to be focused on Elfashn district relative to Ehnasia. If we refer to the difference of satisfaction in both districts, the ration of intervention focus is 3 to 2 for Elfashn and Ehnasia respectively. The interventions have to be directed to enhance the satisfaction of very small landowners and low education level. This doesn’t mean
ignore the other groups in the interventions, or act in a way to decrease their satisfaction. Otherwise, the involvement of intermediate education group can important and supportive and their relative high level of satisfaction can be employed positively in project. Since, their relative high satisfaction implies readiness in believing in change, and can influence the less educated and very small landowners positively.

The results of satisfaction in Minay showed big difference between the extension services and cooperative services ratings. The satisfaction of the cooperatives reached 65% while for extension services it was only 32%. While regarding the NGOs services, the study could not measure the satisfaction from it, as very small responses identified that they get any benefits from NGOs services. There were no significant differences concerning the categories of age, education, geographic distribution or landownership in Minya in cause of the response of the services of cooperatives. While for the services of extension, the satisfaction level was less in cause or younger age (less than 35 years) and higher education (high school or university level).

Therefore in order to enhance the satisfaction in Minya, the role of the NGOs in offering agriculture services has to be activated and focus on enhancing satisfaction from agriculture extension services.

Second: The Analysis of Quality

- All the three service providers achieved an average grade for quality. Within this range, The NGOs achieved the first rank with an average of 57%, then agriculture extension achieved 51%, then the cooperatives achieved 47% approx. there was no significant difference in the quality estimates referring to the properties of the sample either in age, level of education or categories of ownership.

- The detailed analysis of dimensions of quality discloses a complex image of the performance of the service organizations. It shows contraction in performance estimates for every dimension of quality of the service: the detailed indictors measuring the perception of dimensions of quality is reflecting image of high performance organization when it come to time needed to receive the service, accessibility to the service and availability of information. On the other hand we are facing organizations that are deteriorated in performance when it comes to professionalism, effectiveness and treatment. (See table number: 18) it sounds like farmers saying “the employees at the service organization do their best to serve us, but we don’t get any benefits”

| table17 |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| The distribution of the estimate of the variable of quality by service provider | | | | | |
| | Professionalism | Effectives | time | access | treatment | Knowledge |
| Extension | | | | | | |
| Degree | 1.2 | 1.4 | 2.70 | 3.26 | 1.74 | 2.84 |
| Percent | 32% | 35% | 67% | 82% | 48% | 71% |
| Evaluation | Weak | Weak | Good | Excellent | Weak | Good |
To respond to the areas of weakness in quality of services—therefore enhance satisfaction—we need to develop comprehensive understanding of each of performance problems in each of the service providers individually to reach the stage of introducing relevant interventions. In the following we will discuss performance problems in each service provider, analysis reasons behind weak performance and suggesting interventions.

A. **Performance problems in Extension services**

- The farmer’s responses’ analysis declared very weak in the dimensions of professionalism, effectiveness and relative weakness of the dimension of treatment. The dimensions of professionalism include the following variables: the staffs’ knowledge of the production cycle, the availability of various tools of agriculture extension, respect of the farmer’s experience. While, the effectiveness dimension include the following variables: the importance of the topics of the extension, the appropriateness of the time of providing the knowledge, understanding of the circumstances of the farmer, impact of the service. While in the dimension of the treatment: weakness was regarding the dimensions of sincerity and readiness of the staff to provide the service.

- Many of problems of performance lie to a large extent outside the authority of the extension units. And according to the conclusions of this report, the customer orientation is missing from the extension services. For instance, the extension plan is prepared on the level of the agriculture directorates (top-bottom) and in accordance with the food national security plan and distant from the actual need of the farmers. On another hand, the extension units suffer of very weak human and material resources. For instance, the extension units miss the appropriate number of extension staff, materials and equipment needed to provide the extension services.

- Regarding the extension staff, it is supposed that each extension unit includes 8 extension staff members in various specialities, while the actual situation as a result of the inception meeting help by the researcher, each unit has two extension officers at most. And they are loaded with 25 days of administrative work, which means 12 working day for each extension officer and more than 60% of his/her monthly time allocation. (See table number: 19). It is supposed also that the extension unit possess the financial resources to finance the extension activities, equipped conference room, equipment for screening extension videos, extension brochures and flyers and transportation for the extension officers. None of such resources and equipment was available in the extension units upon our visit in the inception phase.

<table>
<thead>
<tr>
<th>Coopera-tives</th>
<th>Degree</th>
<th>1.28</th>
<th>1.2</th>
<th>3.08</th>
<th>1.50</th>
<th>1.7</th>
<th>3.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>32%</td>
<td>30%</td>
<td>77%</td>
<td>38%</td>
<td>42%</td>
<td>74%</td>
<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td>Weak</td>
<td>Weak</td>
<td>Good</td>
<td>Weak</td>
<td>Weak</td>
<td>Good</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>NGOs</th>
<th>Degree</th>
<th>1.71</th>
<th>1.66</th>
<th>3.50</th>
<th>3.45</th>
<th>1.73</th>
<th>1.57</th>
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<tbody>
<tr>
<td>Percent</td>
<td>43%</td>
<td>42%</td>
<td>87%</td>
<td>86%</td>
<td>43%</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td>Weak</td>
<td>Weak</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Weak</td>
<td>Weak</td>
<td></td>
</tr>
<tr>
<td>Procedure</td>
<td>Content</td>
<td>frequency</td>
<td>Time involved</td>
<td>days per month</td>
<td></td>
<td></td>
<td></td>
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<td>-------------------------------</td>
<td>-------------------------------------------------------------------------</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ownership certificate issuance</td>
<td>Issued for the Ministry of Solidarity, bank and insurance</td>
<td>certificate 900 per month</td>
<td>min 30</td>
<td>working 6 days per month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breaches</td>
<td>Checking a breach every day for 3 hours, writing a record and a memorandum for the local unit, going to the administration to save the record</td>
<td>Daily visits</td>
<td>hours 2</td>
<td>working 5 days per month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recording and follow up 25 breach each year</td>
<td>working 4 days for each breach</td>
<td>working 8 days per month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collecting information</td>
<td>Data on machinery</td>
<td>Once a year</td>
<td>working day 5</td>
<td>working 6 days per month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data on livestock from 1500</td>
<td></td>
<td>working 10 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data on poultry and apiaries</td>
<td></td>
<td>working 10 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data on palm dates (male/ (female)</td>
<td></td>
<td>working 10 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data of summer and winter crops</td>
<td></td>
<td>working 30 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>working days per month 25</td>
<td></td>
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- In spite of what have been presented, there still a chance to achieve development in the dimensions of professionalism, effectiveness and the treatment in the extension units as follows: From the viewpoint of the researcher, one important reason of the weakness in professionalism of the extension staff in the perception of farmers is communication shortcomings. It was found that the knowledge of the extension officer is higher than what was perceived by farmers according to the result of the study. So, it is up to the extension officers to proof their ability and proficiency by offering complete and comprehensive information and guidance to the farmers, or spend more time explaining information, and make sure that the messages have been conveyed clearly, and make sure to follow up implementation of the advices provided.

- It is important to activate and organize group activities for extension: that includes organizing extension meetings covering all kinds of crops in all stages of production cycle, and make sure that the flyers and brochures available are disseminated.

- It is important to build the capacity of the extension officer to develop and announce an extension plan and commit to it, which will enhance the farmer’s perception of the dimensions of professionalism and effectiveness of the extension officers.

- It is important to provide communication training to both the extension officers and farmers, for the extension officers to be able to treat every case as unique case, and with focus on listening skills to farmers.

- The researcher suggests that the project adopt the system of extension convoys, which is a system to overcome the lack of number and specializations among extension officers. This system is accredited system of extension in Agriculture faculties and extension centres that follows the Ministry of Agriculture. These convoys originally were set for scientific func-
tions, but also can be used for extension purposes. The researcher suggests that a team of extension officers covering all specificities in each district to cover all the extension needs in all the targeted villages and to develop a plan and field frequent and rotational visits and geared towards the needs of the farmers. Adopting such system can bridge the gap between the needs for extension and the number of extension officers available.

- By comparing the levels of the perception of the quality of services in BeniSuef, the tendency of the sample from district Elfashn and middle level education farmers to grade the quality of the service of extension as very low (32% in both cases) and therefore targeting such groups can influence the perception of quality in a significant way.

**B. Enhancing the service of Agriculture Cooperatives:**

- According to the results of the study, farmers perceived the services of the cooperatives to be very weak in four dimensions: professionalism, effectiveness, access and treatment. The researcher suggests that such weakness has to be understood in the light of the weakness of the sector of cooperatives in general and the sector of agriculture cooperatives in specific. The cooperative sectors are suffering of major deterioration as a result of lack of ability or may lack of will to be flexible with free economy.

- The agriculture cooperatives since established have played the role of middle man between the farmers and the government and since then the cooperatives are trapped in this role. Although, the government reduced its role in agriculture sector in 1986, the cooperatives role deteriorated. The roles of marketing, financing, supporting agriculture industries and agriculture automation have disappeared totally, and the role currently is limited to supplying government subsidized seeds and fertilizers.

- Regarding performance problems identified in the qualitative meeting held in the inception phase, the formation of the boards of directors of the cooperatives were found to be controlled by the land owners of large ownerships, and the ages of the members are majority order age groups (over 55) and missing cooperation awareness and initiative.

**In the light of the aforementioned findings, we recommend two options to enhance farmers perception of quality:**

First: target the root reasons of the problems, which means aim to develop interventions to advance the roles of the agriculture cooperatives for example:

- Raise the awareness of the farmers regarding the roles and responsibilities of cooperatives and support their ability to participate and accountability

- Support the legitimacy and representation of the boards of directors in the cooperatives units, raising the awareness of the board members regarding the law of cooperatives and the responsibilities and commitments of high level cooperatives structures.

- Build the capacity of the cooperatives to perform all its roles, by producing guide books on each role and organize learning visits to effective cooperative models

Second: aiming at the direct reasons of the problems, which means developing the quality of the services offered currently which will include for example:

- Develop the negotiation skills of the board members in order to be able to acquire the
subsidized fertilizers in the adequate timings.

- Develop a system of acquiring enhanced seeds and make them available
- Offer technical support to the board members to develop small credit service for the farmers.
- Build the capacity of board members to offer small credit service, which will increase the competitiveness of the agriculture automation services and other equipments supplied by the cooperative.
- Implement farmer’s communication training.
- Develop after sale customer services for seeds and fertilizers especially for defected products.
- Enhance the transparency in delivering seeds and fertilizers quotes.

The importance of the first choice is reaching out for a long term impact on the “governance in agriculture sector”. But, it has the many risks, for instance it will increase the expectations of the farmers and therefore, it may lead to decrease the level of stratification even if case of the success of the interventions. The first choice intervention can threatening to the current structure of the boards and therefore could discourage the cooperation board members. On the other hand, the second choice offers a safe trajectory to achieve an increase in perception of quality, but does not offer actually increase the level of satisfaction of the services of cooperatives.

Regarding this challenge, and in order to implement the interventions with the cooperatives successfully, we recommend finding a balanced approach combining the two choices according the conditions and relevance of each choice and anticipating cooperation in every case. The governing principle should be treating the farmers as customer having their own interests and individual needs. Allowing the field officers to find the balancing approach can result of a very rich and unprecedented learning experience.

- Establishing the principle of serving the farmers as customers, suggest adding some activities to the first choice, for example:
- Raise the awareness regarding cooperation among farmers and support any autonomous cooperative initiatives.
- Encourage every cooperative to adopt an initiative of adding one new service as least managed by young volunteers under the supervision of the board.
- Foster cooperation between the boards of the cooperatives and the high level cooperation structures by organizing periodic problem solving sessions.
- Articulate and activate the role of the cooperatives as observer and mediator between the farmers and the business sector actors (suppliers of production and buyers either individuals of groups). Offering services which include receiving complains, mediating for solving problems and announce information about changes in prines.

The Problems in the Performances of NGOs:

- The researcher has two main observations regarding NGOs: The first observation is related to the low percentage of responses on NGO service questions; the number did not exceed 122, i.e. 30% of the sample size. This indicates a problem of low visibility and threats to continuity,
implying an unfulfilled need for NGO services and the absence of NGO role in the agricultural field.

- The second observation is about the high variation in evaluating the level of service quality aspects in associations. The perception of NGO service quality yields a “fair” overall score level. In this context, waiting time and access to services yield “excellent” score level, whereas professionalism, effectiveness, decent treatment and information scored “poor” level; the scores of these later aspects are found to be too close to the “fair” level, which indicates a great potential for a significant improvement in the perception of NGO service quality. Such a potential requires decomposing and understanding what can be called the dilemma of NGO role in agricultural development in general. Active NGO in the field, if any, lack a clear vision for their work and options, and hence lack a long-term commitment towards farmers as well as continuity. As for long-term commitment, NGOs seem to face two challenges: the first is lacking the courage to compete with established governmental and semi-governmental agencies in this field, which will be discussed later on. The second challenge is the lack of awareness of the role of intermediary and the ways it can be manifested in the field of agriculture.

- To build a long term commitment with NGO, we need to make sure that NGOs are really to put the actual problems of on its agenda. Which could mean change the mission and the vision if the NGO and its organizational structure to allow a committee representing the farmers, and the commitment of the NGO to offer a least one stable service to the farmers.

- The role of intermediary in the agricultural field requires the association’s awareness of the governmental and semi-governmental players in the process of agricultural service provision. This includes awareness of the roles of organizations such as research organizations, extension centers and the nature of cooperative structure, including the knowledge of the roles of these parties, their responsibilities and quality requirements of the services provided. The role of intermediary also requires the ability to evaluate the performance of each of these parties and hold them accountable. It mainly demands, in the first place, the ability to predict problems that may face farmers and take precautionary measures to alleviate risks and failure, as well as effective frameworks and mechanisms for farmer’s engagement in the association structures.

- A more effective role of NGOs will definitely motivate governmental agencies and cooperatives to improve their level of service provision.

**Third: Participation and Complaints**

- Participation indicators of extension associations reveal the lack of participation policy; most of participation practices seem to be accidental, which indicates the presence of participation culture despite the lack of a clear and specific system for participation. It also indicates the important role of communication farmers in minimizing the participation gap. Accordingly, improving participation requires focusing on the collective forms of participation.

- Activating participation in cooperatives is a significant challenge facing the project. Forming a general assembly and activating participation in it is a great accomplishment for the project. However, this success is offset by the risk of losing cooperation with cooperative boards of directors, the lack of motives for the public participation or disgruntled participation. On the other hand, an actual improvement in the participation levels is not
expected so long as cooperative services are limited to organizing the process of receiving subsidized fertilizers and improved seeds. Accordingly, improving participation is largely subject to adding new services that can be identified in a participatory manner as well as formulating a policy to participate in service delivery.

- Despite the high level of participation in El-Fashn district, scoring “good” level, the project has a huge opportunity of improving participation levels through focusing on activating the role of associations in Ehnasia district, for any improvement in the participation levels in Ehnasia district will be reflected as a higher level of overall participation. There is definitely so much for Ehnasia associations to learn from El-Fashn associations.

- The research team faced significant difficulty in examining complaint systems in providers under study. Based on the results of preliminary meetings before the questionnaire design phase, there is definitely a mechanism of complain to responsible person in the service providers, and to the higher levels of administration. But, there is no complaint system in any of the three providers; the announcement of the possible reasons of complaint is missing, as well as, to whom is should be presented and the expected time to get a response. There was no record of the complaints and responses offered.

- According to the results of the study 85% know how to make a complain, but in the same time, 2% only have placed actual complains, which in contrast with the high level of dissatisfaction of the service and low perception of quality reported. This contradiction can be explained in different ways:
  - The farmers are lacking of awareness of their rights and the service providers’ obligations.
  - The farmers are lacking confidence in achieving serious responses.
  - Feeling embarrassed socially to place a formal complaint against the staff of the service providers because the powerful family, kinship and neighborhood relationships and ties.

- In the researcher point of view, to develop and activate a complaint system, the following factors have to be considered:

- Start by building the readiness and the culture of complain inside the service providers. The culture and the system for complaint could significantly reduce complaints that are placed in outside parties like the administrative control authority which is an intimidating situation for any government’s official. In the same time, having the complaints collected can support the service provider’s claim for new funding or equipments.

- Establishing a community based mechanism of complaint by building on the lessons learned from citizen charter and make sure to found it on a positive partnership among all involved parties.

- The NGOs can play an important role in building trust in the system of complaint, by holding a periodic meeting to collect the complaints from the farmers and discuss it in periodic meetings with officials and provide feedback to the farmers.
Fourth: Towards a Theory of Change

“Apparently chaotic systems are governed by deeper, complex social principles that defy easy understanding or manipulation, that confound the best-laid plans”

- This quotation is summarizing the kind of challenge that is facing the project. We are facing 3 kinds of service providers, there systems governed by deep ambiguous principles and they are complex and intertwined with their social context. In this situation it is inevitable to adopt the theory of emergent change; such theory depends and assumes that accumulative marginal change can lead eventually to larger structural shift. This theory describe daily discovery and conscious and unconscious learning evolving from experience and change that is emerging through.

- It is suggested to adopt a strategy of effective coordination, assuming that they three service providers can commit working together toward enchaining the quality of the service provided to the farmers. The aim should be building partnership relations to invest the competitive advantage of every service provider within a teamwork context. The partnerships can be for example that the NGOs and the extension providers can work together to build the capacity of the extension staff to offer guidance to the farmers leadership and representatives of the farmers from each agriculture area, in such case the cooperatives can provide supplies and organization, while NGOs can provide funding and staff.
References


6 On the Road to Satisfaction: Using the Canadian Common Measurements Tool to Measure Satisfaction with Government Services, Prepared by Information Victoria, Department of Innovation, Industry and Regional Development, July 2010, p3