The Obstacles of the Work of the General Company Laboratories for Grain Trading from the Point of View of Agricultural Staff Workers in Which they are in the Province of Baghdad.

J. M. M. Al-Sireen and A. A. Ghudhib

Department of Economic and Agricultural Extension University of Tikrit

Abstract. This research aims to identify the Obstacles faced by agricultural employees working in the laboratories of the General Company for Grain Trade in Baghdad Governorate. It also arranges the main Fields of research in descending order in each field. Then, it organizes the Obstacles for each of the seven fields studied. The research population included (As long as the study population is 93, the number of respondents covered by the pre-test is a large number, i.e., a percentage about 33%) subjects were taken for the pretest sample, and the remaining (63) subjects were studied. Research data were collected through a research questionnaire Prepared to in order to determine the determinants of work in silos and laboratories and included two parts: the first part included the personal and functional specifications of the respondents. The second part included a scale to measure the determinants related to the examiners; consisting of (61) items distributed into (7) items presented to professional jury members to achieve face and content validity. Through the first test, some paragraphs were modified, one paragraph was removed, and (60) items were adopted. The maintaining of the form was marked using the mid-segmentation method, and the stability factor was (0.84). The weighted mean, the Pearson correlation coefficient, the Spearman correlation coefficient, T test) The results showed that the setters facing agricultural employees are medium to high in general we conclude from this the importance of setters the determinants and finding ways to them. Training courses outside and inside the country.

1. Introduction:

Agriculture plays a major role in the life of the Arab community and in the economies of Arab countries, as it is the main source of most countries’ requirements for food and raw materials for industries that used in the field of agricultural products [1] and is an important sector in building the economies of countries regardless of their level of progress. [2]. The agricultural development is an organized planning process as it aims to bring about radical changes in society through what it achieves for the human being of the requirements of life by the human himself, that is, it aims to empower people and enhance their capabilities and abilities to face the problems and difficulties that they face [3]. And the dependence of global agricultural production mainly on cereal crops and to a lesser extent on pulses crops. Grains and pulses considered "basic commodities in the global food crisis due to the continuous increase in the world population by a rate that exceeds the increase in food production, which is difficult to stop or slow down [4]. The world has brought about a revolution in agriculture that has doubled agricultural production in recent decades, and many countries have recently realized that "this increase in productivity was not free of charge, as many problems emerged, most of which are the deterioration of natural resources such as agricultural land and water, as well as damage to the environment and human health. This has been attributed Mainly to the methods used to achieve this goal, which were based on the extensive and irrational use of those natural resources as well as the heavy dependence on chemical inputs made from fertilizers, pesticides and hormones [5]. Human development is the first and basic step in the comprehensive development process in various developed and developing countries alike, as the human element capable of absorbing and applying modern developments with a high degree of skill and efficiency is in fact the element on which the introduction and development of modern technologies depends [6]. The main goal of agricultural extension in the world is to improve and increase agricultural production by modernizing agricultural ways and introducing technologies invented by science, including improved seeds, fertilizers, chemical compounds and various agricultural [7]. The agricultural field in Iraq in the foreground a distinct position among the various economic sectors that make up the national economy, as this is the main source of food for the population as well as a large
proportion of the population working in this sector \[8\]. It is known that human beings from all societies play a fundamental role in achieving production, and that the human or human side effects the use of material elements to achieve the goals of societies and not the other way around. Officials define goals. They draw up plans to achieve them, distribute work, and guide the employees, and follow up the implementation that is carried out by employees to raise efficiency of human resources.\[9\]. The researcher notices that the duties and tasks of the laboratory examiner, which are summarized as follows.

1- The laboratory examiner draws the incoming and outgoing grain samples to the silos.

2- The laboratory examiner prepares the laboratory test sample on which all the physical tests are performed. And then issuing a laboratory certificate for it. The form is kept for a period of (15) days.

3- The examiner checks all imported pills designated for silo daily and issues an analytical certificate for the quantity received for each vessel.

4- Opening a special Notebook for the imported and exported quantities, in which the analysis ratios, the quantity and the source of the grains are confirmed.

5- Observing the temperature and humidity degrees of the stored quantities of grains and take necessary action in this regard by ventilating them periodically.

6- When receiving any quantity of pills, it must be passed to the filter devices, especially the end of the stores.

7 - Observing the stockpile from insect infestation and be combated, and in the absence of an insect infestation, the fumigation process is carried out every three months and periodically to prevent infection.

8- The laboratory examiner must observe the cleanliness of the store and control it before carrying out the process of emptying and storing. \[10\] and by informing the researcher.

On the work of the laboratories of the General Company for Grain Trade, being an employee working in this field, he noticed the presence of many determinants and problems that prevent doing the right work and give a negative indication of the performance of this company’s work. He noticed that there are many problems and limitations that require standing there and identifying them for the purpose of avoiding them and addressing aspects of strength. The weakness, therefore, has taken the initiative in the researcher's mind to study the determinants facing the work of laboratory examiners in the General Company for Grain Trade in the Republic of Iraq in order to identify and avoid them and develop effective solutions to address them.

2. Materials and Methods:

2.1. Research Methodology

This research Concerned of diagnostic research, which Lay within the descriptive approach, as this approach is used to reach the goals set in this research, as the descriptive approach is an appropriate approach through which detailed data and facts represent the reality of the respondents in a specific period \[11\] and then to classify those data and facts, process them and analyze them accurately, in order to reach comprehensive and accurate results and generalizations about the phenomenon in question \[12\].

2.2. Research area or study site

The research area included the laboratories of the General Company for Grain Trade in Baghdad Governorate, represented by the sites (Quality Control Department, Taji grain complex, Al-Atifiyah silo, Khan Dari silo, Khan Bani Saad silo, Rusafa silo, Dora silo, Kasra and at ash stores).
2.3. Research population and sample

The research community included all the agricultural employees working in the laboratories of the sites affiliated to the General Company for Grain Trade in Baghdad Governorate, whose number is (93) agricultural employees distributed over (8) sites as shown in Table (1).

| s   | site name                  | Number of respondents (agricultural employees) |
|-----|---------------------------|-----------------------------------------------|
| 1   | Department of Quality Control | 21                                             |
| 2   | Taji grain silo            | 9                                              |
| 3   | Kisra& atash Stores        | 13                                             |
| 4   | Stores crust and thirst    | 8                                              |
| 5   | Khan Dari silo             | 10                                             |
| 6   | Atifiyah silo              | 11                                             |
| 7   | Rusafa silo                | 11                                             |
| 8   | Khan Bani Saad Silo        | 10                                             |
|     | Total                      | 93                                             |

The numbers of respondents (agricultural employees working in the laboratories of the company's sites in Baghdad governorate) were obtained from the Quality Control Department on (1/8/2020).

2.4. Research tools

To achieve the objectives of the research, the researcher relied on many Ways to prepare the initial outline of the research tool, and from these sources:

1- Personal interviews with specialists.

2- Sources and specialties related to the determinants of the laboratories of the General Company for Grain Trade

3- Previous studies related to the research topic.

4- Internet.

5- The Experience of experts in the General Company for Grain Trade, represented by the experts whose names are listed in Appendix (C).

2.5. Preparing the questionnaire form

One of the appropriate methods for obtaining information, data and facts that are objective and through which the objectives of the research are achieved is the questionnaire form [13] For the purpose of collecting the necessary data, a questionnaire form was prepared in its initial form consisting of two parts (Appendix A) and includes:
part two:

Through relying on the previously mentioned sources and conducting personal interviews with experts of specialization (exclusively), the fields and paragraphs related to the determinants of the work of the General Company for Grain Trade were identified from the viewpoint of the agricultural employees working in it in Baghdad Governorate, as it included the measures in their initial form (61 paragraph Distributed into (7) seven domains, as shown in Table 2).

Table 2. the fields that include the scale in its initial form

| s  | Domains                                                                 | Number of items |
|----|-------------------------------------------------------------------------|-----------------|
| 1  | Limitations related to sampling                                         | 10              |
| 2  | Determinants related to the work of the password committee              | 6               |
| 3  | Limitations related to grain screening and analysis                      | 13              |
| 4  | Limitations related to the process of discharging and storing grain      | 10              |
| 5  | Limitations related to stock preservation (control and coverage)         | 13              |
| 6  | Determinants related to grain recycling and aeration                    | 4               |
| 7  | Limitations related to the transmission and processing of mills          | 5               |
|    | Total                                                                   | 61              |

2.6. Validity and Reliability

What is meant by validity is that the test actually measures the goal that was set to measure it [14,15]. It is also intended with truthfulness that the test measures what was set in order to measure it, and it does not measure anything other than it [16,17]. The validity of the scale is that the scale measures what it is supposed to measure, as validity refers to the degree of accuracy with which the researcher measures what he wants to measure [18]. The validity of the scale is that the scale measures what it is supposed to measure, that is, the extent of the scale achieving the goal for which it was set, and this is known as outward validity [19]. (Ebel) stated that the best way to measure the apparent validity of a number of experts and specialists is the validity of paragraphs for the characteristic to be measured. As for the validity of the content, it is the extent to which the components of the scale represent the aspects measured, that is, the extent to which the set goals are covered. The group of experts and specialists in the measurement subject is required to perform each statement to find out the extent to which it measures the content of the material to be measured [20]. This was achieved by presenting the questionnaire form in its initial form to experts on apparent validity and content validation (experts specialized in the field of agricultural extension) according to a triple scale of paragraphs (valid, valid after modification, not valid) Experts were asked to put a tick (correct) in the place they agreed to and to suggest what they deem appropriate in the event that they disagree with the paragraph by modifying or deleting it or adding new paragraphs they deem appropriate to come up with a final version of the paragraphs before presenting them to the respondents. The opinions of the experts were collected and their answers recorded for the items from 7/15/2020 to 8/12/2020. Their opinions were taken into account by setting a cutoff threshold of 85% or more about the validity of the fields and the items they contain, as the item on which the percentage of experts’ agreement is less than 85% was
avoided, as the Face validity coefficient is acceptable if the percentage of agreement between the opinions of experts is not less than 75% [21]. And after the opinions of each of the virtual veracity experts and content verification experts. The questionnaire form was amended in its final form, Appendix (A), whereby some paragraphs were modified and paragraphs deleted, and thus the number of paragraphs (60) became sixty paragraphs that were distributed into seven areas as shown in Table (3).

| Fields | Number of Fields |
|--------|-----------------|
| 1 Limitations related to sampling | 10 |
| 2 Determinants related to the work of the password committee | 6 |
| 3 Limitations related to grain screening and analysis | 13 |
| 4 Limitations related to the process of discharging and storing grain | 10 |
| 5 Limitations related to stock preservation (control and coverage) | 13 |
| 6 Determinants related to grain recycling and aeration | 4 |
| 7 Limitations related to the transmission and processing of mills | 4 |
| Total | 60 |

2.7. Exploratory sample

After making amendments to the questionnaire form according to the observations and guidance of the experts, the questionnaire form became finalized and valid for data collection, the researcher conducted a preliminary test on a sample of (30) agricultural employees that included all agricultural employees working in the laboratories of the General Grain Trade Company in Baghdad (Laboratory of Control Department) Quality, Taji Pills Complex Laboratory) and as shown in Figure (4). The survey sample data were collected through a personal interview on 8/25/2020.

| site name | Number of agricultural employees working in the laboratory unit |
|-----------|---------------------------------------------------------------|
| 1 Laboratories of the Quality Control Department | 21 |
| 2 Taji Silo Laboratory | 9 |
| Total | 30 |
2.8. Stability measurement

Stability is the degree of Constancy in the marks achieved on the measuring instrument during time (stability of results if the measurement is repeated on the same group of individuals after a period of time). [22,23]. The stability of the tool means that the tool is reliable as well as that it can be relied upon for data collection [24]. The stability factor was measured by the half-segmentation method by dividing the items into single Its value was 0.73, which represents the stability of the half of the test, and to find the stability factor for the whole test, the (spearman-prown) correction equation was used, and its value was 0.84. If its value reaches (0.70) or more and is more acceptable as it approaches the correct one [25,26] and after applying all the conditions of stability and validity to the paragraphs, the questionnaire is ready for data collection Appendix (A) and even and finding the correlation between them according to the (Pearson) equation.

2.9. Data collection

Data collection was relied upon through personal interviews, which is considered one of the most important ways to collect data directly, as data were collected during the period from 2/9/2020 to 28/9/2020.

2.10. Statistical tools and means

After the process of collecting, unloading and classifying the data. These data were analyzed by using set of statistical methods to analyze the results, including (range, mean, standard deviation, percentage weight, Pearson correlation coefficient, and stability coefficient (Spearman - Brown).

3. Results and Discussion

3.1 Objective 1

Identify the limitations faced by agricultural employees working in the laboratories of the General Company for Grain Trade in Baghdad Governorate. It was found that the highest value reflects the limitations faced by the agricultural employees working in the laboratories of the General Company for Grain Trade in Baghdad Governorate in general (209) and the lowest value (130) and the mean value was (170) and the standard deviation (16.4). Into three categories as shown in Table (5).

Table 5. Distribution of respondents according to their point of view of the determinants of the work of the laboratories of the General Company for Grain Trade in Baghdad

| Categories      | Quantities | Percentage | Average parameters |
|-----------------|------------|------------|--------------------|
| Low (130-156)   | 13         | 20.6       | 145                |
| Medium (157-183)| 36         | 57.1       | 170                |
| High (184-210)  | 14         | 22.2       | 191                |
| Total           | 63         | %100       |                    |

Sid= 16.4
Mean = 170

Table (6) shows that the highest value of the rate of determinants level lies within the middle category and its value was (170) and constitutes (57.1) and that the lowest value of the rate of determinants level lies within the category (low) and its value was (145), which formed a percentage (20.6). The higher groups had the highest average and its value was (191), while the low groups got the lowest average and its value was (145). The reason for this is that there are many determinants facing agricultural employees working in the laboratories of the General Company for Grain Trade, from their point of view that solutions are difficult to find. Therefore, it is imperative for the relevant official authorities to take their role in developing effective solutions to solve these determinants.

3.2. Second Goal

Arranging the limitations faced by agricultural employees working in the laboratories of the General Company for Grain Trade in Baghdad Governorate in each of the research areas:

First: "Arranging the research areas in descending order" according to the averages, and for the purpose of eliminating the difference in the number of items for each field, where the total of each field was divided among its paragraphs and the results appeared as shown in Table (6).

Table 6. Arranging the ranks of determinants of work of the site laboratories affiliated to the General Company for Grain Trade in Baghdad.

| Domains                                           | Total | Number of paragraphs | Average | Rank |
|----------------------------------------------------|-------|----------------------|---------|------|
| Determinants related to grain Re-cycling and aeration | 890   | 4                    | 222     | 1    |
| Limitations related to unloading and storage of grain       | 2176  | 10                   | 217     | 2    |
| Limitations related to grain checking and analysis           | 2600  | 13                   | 200     | 3.5  |
| Determinants related to the work of the code - number committee | 1202  | 6                    | 200     | 3.5  |
| Determinants related to stock preservation (control and cover) | 1944  | 13                   | 149     | 5    |
| Limitations related to the transmission and processing of mills | 589   | 4                    | 147     | 6    |
| Limitations related to taking the samples.                   | 1313  | 10                   | 131     | 7    |

Table (7) shows that the field of recycling and ventilation of grains ranked first, with an average of (222). The reason for this may be attributed to the importance of this field in preserving storage and to the difficulty of working in this area due to its need for follow-up and scientific and technical expertise, so it appeared in the forefront of the fields.
4. Conclusion

From the research results, the researcher concluded the following:

1- The results of the research showed that the determinants that guide the agricultural employees working in the laboratories of the General Company for Grain Trade in the governorate of Baghdad tend to rise from this. We conclude from this the need to pay attention to the agricultural employees working in the laboratories of the General Company for Grain Trade by involving them in training courses by increasing their information in addition to providing Modern technologies for them to work in their field of work.

2- The results of the research showed that the arrange of the research fields was according to the averages according to the priorities, where the first rank an issued in the field of recycling and ventilation of grains. We conclude from this there is importance for this determinant and the difficulty of working in it due to its need for scientific and technical expertise and its need for maintenance periodically, so it appeared in this rank.

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