

# The Training Needs of agricultural Guides at the field of Construction and Maintenance of Water Harvesting Facilities at Matrouh Governorate

It is well known that the identification of training need is one of the most important supporting issues for achieving its objectives. It is important and necessary to identify the training needs for agricultural extensions who are working in the establishment and maintenance of water harvesting structures in Matrouh Governorate, for identifying their actual training needs in all training fields. As well as providing support which will be resulted in improving agricultural work in the respective areas, and by consequence increasing yields in terms of quantity and quality. The research problem was identified based on the light of scarcity of researches in this area, and studies on training needs for agricultural extensions who are working in the establishment and maintenance of water harvesting structures in Matrouh Governorate.

The objectives of the research focused on:

- 1- Identification of the general characteristics of the extension workers in the establishment and maintenance of water harvesting structures in Matrouh Governorate.
- 2- Determination of training needs of agricultural extensions who are working in the establishment and maintenance of water harvesting structures in Matrouh Governorate, through the following:
  - Determine the knowledge needs.
  - Determine the implementation needs.
- 3- Suggest a proposal for training need program to agricultural extensions who are working in the establishment and maintenance of water harvesting structures in Matrouh Governorate.
- 4- Identification of the important problems that facing the agricultural extension workers in the establishment and maintenance of water harvesting structures in Matrouh Governorate.
- 5- Determination the most important suggestion to improve and increasing the extension works in the establishment and maintenance of water harvesting structures.

The current research was carried out in Matrouh Governorate as it relies exclusively on rainfall. Selected districts for the study relies upon to rainfall in agricultural production, while districts have access to irrigation were excluded such as "El-hamam and some areas in El- alamein (Nile water), and Siwa Oosis (artesian water). Eighty five agricultural extension working in water harvesting were selected (all population) for the study. Data was collected through personal interviews with agricultural extension are working in the establishment and maintenance of water harvesting structures in Matrouh Governorate, by using questionnaire designed to achieve the study objectives. Frequencies, percentage, averages, means, and standard deviations were used for data presentation and analysis. The most Important Result are as follows:

First: to regard to the general characteristics of agricultural extensions who are working in the establishment and maintenance of water harvesting structures in Matrouh Governorate, the result showed that:

- All agricultural extension workers have attained high education levels (91.3%).
- They have a low (weak) extension efforts in the establishment and maintenance of water harvesting structures, percent of (58.6%) them have never done any extension efforts.
- More than third of them (37.9%) never attended training in agricultural fields.
- About one third (29.3%) never attended training in the establishment and maintenance of water harvesting structures.

Secondly: knowledge needs required for agricultural extension workers in the establishment and maintenance of water harvesting structures, the study revealed that 53.5% of searches have low knowledge (477 degrees and less), 31% have medium needs (478 — 755 degrees) and 15.5% with high knowledge needs (756 degrees and more). Thirdly: Implementation

needs of the agricultural extension workers in the establishment and maintenance of water harvesting structures: The study revealed that, 56.9% of searches are located in the low implementation needs category (391 degrees and less), 29.3% located in medium implementation needs category (392-592 degrees), and 13.8% are located in the high implementation needs category (593 degrees and more). Fourth: a training program was suggested and designed to be implemented in the research area in Matrouh Governorate, for the benefit of agricultural extension workers in the establishment and maintenance of water harvesting structures, and it includes the following: - Study situation for identifying the indicators of training needs. - Problem diagnosis. - Objectives identification. - Plan of action. Fifth: problem facing the agricultural extension workers in the establishment and maintenance of water harvesting structures: The study showed that the main problems facing the agricultural extension workers in the area, the lack of means of transportation to reach the implementation set. And the lack of the required instruments was reported by 36.2% of searches, 29.3% mentioned to social disgust between tribal members. while 24.1% reported the unsuitability of soil to excavate cisterns. Regarding solution suggested by the searches to their problem, 43.1% of searches indicate that availability of sufficient fund. 39.7% mentioned to the increased awareness of the people, 17.2% suggested and imposed systems and trials to change attitudes. While 15.5% reported the availability of maps and data. The most important suggestion for increasing and improve the extension work were conducting training programs for agricultural extension workers in the establishment and maintenance of water harvesting structures, that reported by 41.4%. Financial supported to be directed to permanent authorities not temporary project reported by 31. %. increased financial support reported by 31%.