

KEY INFORMANT INTERVIEW INSTRUMENT

**Key Informant Tool for Enhanced of ICARDA-APRP
Technology Transfer and Technology Transfer Models in
the GCC Countries and Yemen**

Towards an Effective Technology Transfer Methods

***Improving agricultural production systems and conserving
natural resources under climate change in the Arabian
Peninsula***

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October 2019

1. General Background

The ICARDA project “Improving agricultural production systems and conserving natural resources under climate change in the Arabian Peninsula” aims to contribute to the national goals of Arabian Peninsula countries through the development of more sustainable and resilient agricultural production systems, adapted to climate change, that enhance food security and reduce demands for imports.

In the frame of this project the ICARDA Arab Peninsula Regional Program has been on the forefront of generation and transfer of modern and improved agricultural technologies. Thus, the influence that ICARDA has had in the Arabian Peninsula is demonstrated by the technology packages developed by APRP in rangeland rehabilitation, irrigated forages, on-farm water management, and protected agriculture. These packages have been introduced to pilot growers and shown to have positive impacts on the income and welfare of farmers in the region, and on the management of natural resources, both water and rangelands.

Although all those improved and considered technologies proved to be successful in catering to the needs of the AP farmers, much still needs to be done to promote better and more effective methods of technology transfer, in order to achieve increased output and higher incomes for small-scale farmers in the AP countries. Technology does not stand alone, but encompasses political, social, economic, and cultural factors that can impede the diffusion or transfer of technology. One of the major concerns in the transfer process is how to effectively disseminate the ICARDA-APRP improved technologies considering the viewpoint of farmers, particularly in addressing the questions of where, how, and what improved technologies are appropriate and available to them. While many farmers know the nature of their problems in the field, research and extension workers' presence of knowledge of their socio-economic conditions will contribute helping them from adopting technologies and pursuing technological solutions to their problems. Therefore, this KII is conducted with the purpose to give an emphasis on understanding the most effective technology transfer process of these improved technologies. Thus, an understanding of the processes leading to the adoption of the ICARDA-APRP improved technologies by small-scale farmers will be important to the planning and implementation of successful research and extension programs in most AP countries.

2. Implementation Process

Target: Extension staff and related stakeholders who have expertise, knowledge and are unique perspective on the agricultural technology transfer methods in the Arabian Peninsula region.

Objective: To determine the effectiveness of different extension methods used in scaling up improved ICARDA-APRP technologies

Key Informant Interviews: (40-60 minutes each)

Number of Interviewees: Minimum 10-15 Extension and service delivery officers in each AP countries (Extension organizations).

3. Key Informant Interview (KII) Questionnaire

3.1. General Introduction

3.1.1. Agricultural Extension Personnel Identification

Question One:	Could you please provide me with your name and your position
Answer One	
Question Two	Please describe how you are involved in the area of agricultural technology transfer services?
Answer Two:	
Question Three:	What information on the agricultural technology transfer methods are you most familiar with and/or knowledgeable about?
Answer Three:	
Question Four:	What resources do you use to stay informed about new agricultural technology transfer methods?
Answer Four:	
Question Five:	What are the factors to consider in addressing farmers' technological and extension needs?
Answer Five:	

3.1.2 Agricultural Extension Personnel Job Satisfaction

Agricultural Extension Personnel Job Satisfaction	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
I feel encouraged to come up with new and better ways of doing my works and provide services to the growers					
My work gives me a feeling of personal accomplishment					
I have the tools and resources to do my job well					
On my job, I have clearly defined quality goals.					
When a grower has difficulty in farm or questions, I can usually correct the problem to their satisfaction					
My job makes good use of my skills and abilities					
My supervisor's manager visibly demonstrates a commitment to quality					
Senior managers at HQ visibly demonstrate a commitment to quality					
I am satisfied with the information I receive from management on what is going on in my division/region					
I am satisfied with my involvement in decisions that affect my work?					
Considering everything, I am satisfied with the salary and benefits I am receiving					
I am satisfied with my opportunity to get a better job in My Respectful organization/ministry					

3.2. Effectiveness of the Agricultural Extension System

To improve the efficiency and capacity of extension system, in general, how satisfied you are about the ability of your organization’s extension system for technology transfer (especially those targeted by APRP) and knowledge dissemination:

- Completely satisfied
- Somewhat satisfied, but there are some areas that can be improved
- It is OK but not very efficient
- Somewhat not satisfied
- Completely not satisfied

To strength the capacity of extension system please determine the priority of the following activities:

Factors Affecting Performance of Agricultural Extension System	High Priority	Very Important	Important	Average	Not Important
Increase technical capacity of extension agents					
Increase number of experts and subject matter specialist working in extension					
Enhance the capacity of extension management and agents on participatory and new extension approaches					
Increase capacity of extension personnel on marketing, value chain and post-harvest					
Organizing farmers into community and/or producer groups					
Increase number of extension agents					
Strengthening the information and communications technology for grower’s distance educations (email, SMS, expert systems, online chatting, etc.)					
Change the extension policy toward more decentralization					
Change the extension policy toward more market orientated approaches .					
develop model farms and conduct on-farm research and demonstration activities					
Establish/enhance connections with university and other research institute					
Develop/improve training facilities and equipment at the regional and sub-regional offices .					
Increase number of vehicle available for extension activities					
Strengthening the involvement of agricultural inputs company in extension activities					
Develop or enhance private advisory services to serve medium to large farmers or farmers association against direct payment .					
Involve private company to deliver extension services to all growers under government management					

3.3. Effectiveness of the Agricultural Technology Transfer Methods in the AP Region

3.3.1. Agricultural Technology transfer methods: General perceived effectiveness

Would you please score (on a scale of 1 to 5) the effectiveness of the following technology transfer methods used to transmit information to farmers in your country?

Agricultural Technology Transfer Methods	Scores (The rank 5 being most effective and 1 being least effective)
Farmer-to-famer	
Household	
Demonstration	
School: Lecture	
Farmer fields school	
Field days	
Mass Media - Radio	
Mass Media - Mobile Phone	
Mass Media - Video	
Mass Media - TV	
Mass Media - Drama	
Mass Media - Posters	
Mass Media - Newspaper	
Other (specify.....)	

3.3.2. Agricultural technology transfer methods: Perceived effectiveness of ICARDA-APRP improved technologies

For the below ICARDA-APRP improved technologies, would you please score (on a scale of 1 to 5) the effectiveness of the following technology transfer methods that are being used or potentially to be used to transmit information to farmers in your country? *(The rank 5 being most effective and 1 being least effective)*

Agricultural Technology Transfer Methods	Soilless Production System (SPS)	Integrated Production & Protection Management (IPPM)	Irrigated Forages (IF)	Spineless Cactus (SC)	Rangeland Rehabilitation (RR)	Green House Cooling System (GHCS)
Farmer-to-famer						
Household						
Demonstration						
School: Lecture						
Farmer fields school						
Field days						
Mass Media - Radio						
Mass Media - Mobile Phone						
Mass Media - Video						
Mass Media - TV						
Mass Media - Drama						
Mass Media - Posters						
Mass Media - Newspaper						
Other (specify.....)						

3.3.3. Factors influencing effectiveness of the extension methods in agriculture information transmission

There are several agricultural extension methods used to transmit information on improved agricultural practices to farmers. However, a number of factors could affect the effectiveness of the extension methods used by various actors in the technology transfer space.

Would you please score the below factors from 1 to 5, where the rank 1 being least important and 5 being most important?

Potential Factors Affecting the Effectiveness of the Agricultural Technology Transfer Methods	Scores (The rank 5 being most effective and 1 being least effective)
Cost of the extension method	
Type of farmer being targeted	
Geographic location of the farmer	
Socio cultural conditions of the farmers	
Economic conditions of the farmers	
Age of extension Officers	
Years of experience for extension officers	
Qualification of extension Officers	
Number of farmers per extension officer and categories of farmers	
Leadership and supervision	
Location and availability of extension offices	
Availability of resources (transport for extension officers, information technology and equipment's, etc.)	
Other (Please specify.....)	

