

ANALYSES OF THE COMPREHENSION OF FARMERS DURING CONSULTATION PROCESSES

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ABSTRACT

The understanding process during consultation of different groups of farmers in the Agrarian sector depends on many factors, one of which is the adult teacher. The article shows the changing of farmers' understanding during the various types of adult teachings. During the academic lectures, when the teacher did not use any materials or situational exercises, and did not care about the audience, the residual knowledge was minimal compared to sessions conducted by a facilitator, where during the teaching process, they used some situational exercises. The article suggests what kind of training can be used during adult teaching for the purpose of increasing the comprehension of farmers.

Key Words: comprehension, residual knowledge, lecturer, trainer, facilitator, moderator.

INTRODUCTION

After the proclamation of independence the Agriculture of Armenia was in the centre of attention for the government. Currently the agriculture sphere is announcement as a priority area, because for this goal a lot of mechanisms implements by a Governments, new, high productive varieties have been imported and tested, have been done works in animal husbandry, veterinary and biotechnology. But for transferring all the new technologies and information from science to farmers, the agro-consultancy activity also stimulated in the Republic [8].

But the observation, have been done by us shows, that even of the trainings and workshops, organized before, had positive effect on the agricultural and economic activities, but the efficiency was very low and the monitoring and evaluation of the consultancy activity shows, that farmers didn't have any residual knowledge. The observation, have been done from many scientists [1, 2, 3, 6]. proved, that only with periodically trainings of farmers can create a conditions for have a possibility to sustainable development of the agriculture system.

Generally, the research shows that a lot of factors are affecting the level of residual knowledge of farmers. But one of the key factors is maintaining the communications chain, which generally includes: information for the sender or consultant, message or information, the way of communicating, information receiver or farmer and feedback [5, 6, 8].

Based on the above mentioned situation, the research has been done to observe the influence of information that teachers/senders have over the behavior of the farmer's as well as their residual knowledge and appropriate suggestions have been made.

MATERIALS AND METHODS

The research has been conducted during the period of 2005 and 2010 in five regions of Republic of Armenia: Ararat, Armavir, Vayots, Dzor, Kotayq and Tavush. During the observation we've conducted 120 seminars and organized field trips, where 1704 farmers have participated. The distribution of farmers is in four groups and it is displayed in table 1 below.

During our experiments, four different type of groups have been sorted. The first group includes farmers taught by an academic lecturer; the second group consists of farmers taught by a trainer; the third group is comprised of farmers taught by a facilitators and the last group under the same conditions was instructed by a moderator.

Table 1

Distribution of farmers in groups observed

##	Groups, taught by	Number of seminars (S) and farmers (F)										TOTAL	
		Ararat		Armavir		Vayots Dzor		Kotayq		Tavush		S	F
		S	F	S	F	S	F	S	F	S	F		
1	Lecturer	6	90	6	72	6	84	6	90	6	90	30	426
2	Trainer	6	90	6	72	6	84	6	90	6	90	30	426
3	Facilitator	6	90	6	72	6	84	6	90	6	90	30	426
4	Moderator	6	90	6	72	6	84	6	90	6	90	30	426
TOTAL		24	360	24	288	24	336	24	360	24	360	120	1704

The teaching period took two days in all the groups. The teachers were selected by a special scale. The selection of farmers was based on their social conditions and level of awareness. The farmers' knowledge from all groups was in equal levels. The research was done for the purpose of identifying the main adult learning methods, during which the farmers' comprehension is higher. Immediately after the teaching process and then two weeks after we observed the residual knowledge, which farmers acquired during the training process with the help of questionnaires and also individual inquiries. The residual knowledge was evaluated on a scale from 1 to 10, where 10 was the maximum level and 1 was the minimum.

All of the data was analyzed by software program STATISTICA.

RESULTS AND DISCUSSIONS

It is obvious, that technologies and methods used for educating farmers can play a very important role and can affect to their comprehension an awareness.

During our research we have observed, that the orientation of teacher plays crucial role for the farmer's comprehensional scale, which can be different depending on teacher's type. As the data shows in table 2 and in the Graphic, four different type of teachers in our observation have had different approaches, and, respectively, different orientation to the subject and to the people, or farmers. Thus, the farmers' comprehension and the quantity of their residual knowledge changed dramatically.

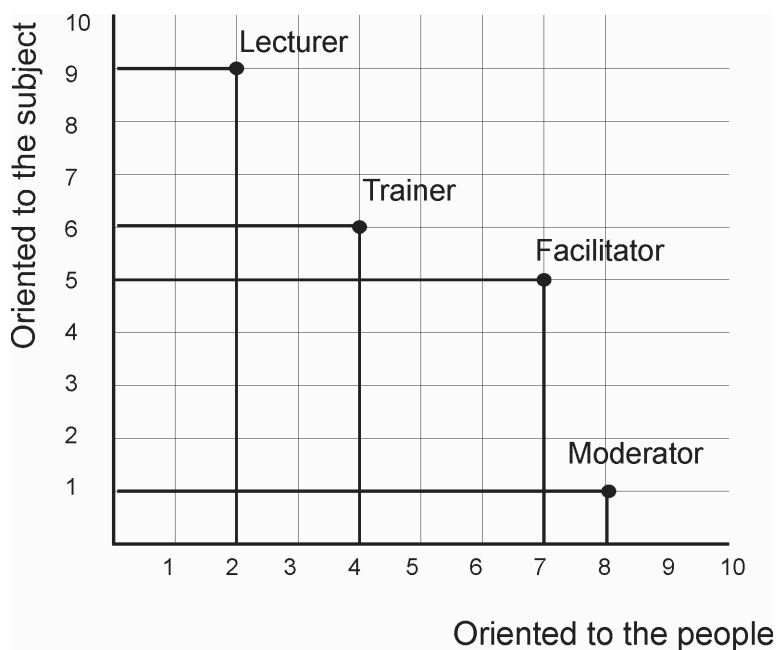
Table 2

Characteristics of the groups

##	Teacher	Characteristics of teacher	The scale of teacher's orientation	
			to the subject	to the people
	Lecturer	The lecturers focuses their attention on his materials only and doesn't pays attention to the public or to the farmers and their behavior, regardless of their comprehension condition or tiredness. The lecturer carries on with his teaching modules, prepared before the begginging of the seminar and does not deviate	9	2
	Trainer	The trainers are driven by the principle that firstl they must provide all theory parts, and then they can move to the practical exercises. They paid attention to the farmers behavior, but continued with their subjects without interruption.	6	4
	Facilitator	The facilitator always starts his seminars with an exercise or with a story from his personal experience. The purpose of this technique is to throw a participant into a discomfort zone, when the latter starts to think about the problem and tries finding a solution without assistance. After that the facilitator starts to discuss and explain his theories.	5	7
	Moderator	The moderator usually doesn't teach, he just organizes a teaching process. By giving materials to the participants or farmers and just answers questions. His activities are intended to satisfy the participants' needs.	1	8

Graph. 1

Characteristics of different type of teachers



We have calculated the average of residual knowledge, expressed by scale from 1 to 10 immediately after the teaching process and after 2 weeks have passed. The results are shown in the table and graphics below:

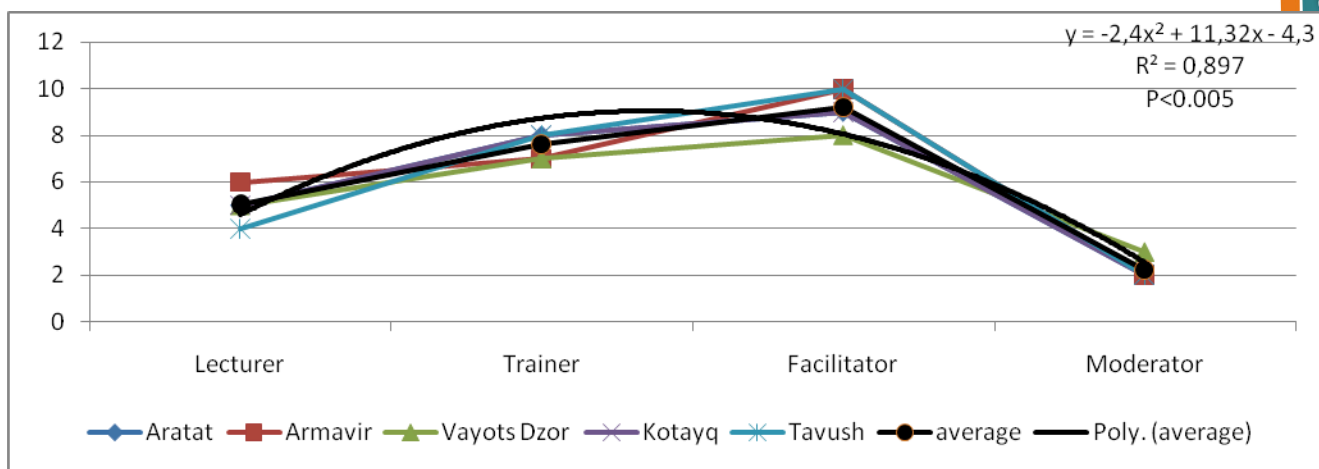
Table 3

The average of residual knowledge after trainings

##	Groups, taught by	Means of scale of Residual knowledge of 1704 farmers immediately after the teaching process (atp) and after 2 weeks (a2w)										Average	
		Ararat		Armavir		Vayots Dzor		Kotayq		Tavush		atp	a2w
		atp	a2w	atp	a2w	atp	a2w	atp	a2w	atp	a2w		
1	Lecturer	5	2	6	3	5	2	5	2	4	1	5.0	2.0
2	Trainer	8	5	7	4	7	6	8	4	8	3	7.6	4.2
3	Facilitator	9	7	10	7	8	6	9	7	10	8	9.2	7.0
4	Moderator	2	0	2	1	3	1	2	1	2	1	2.0	0.8

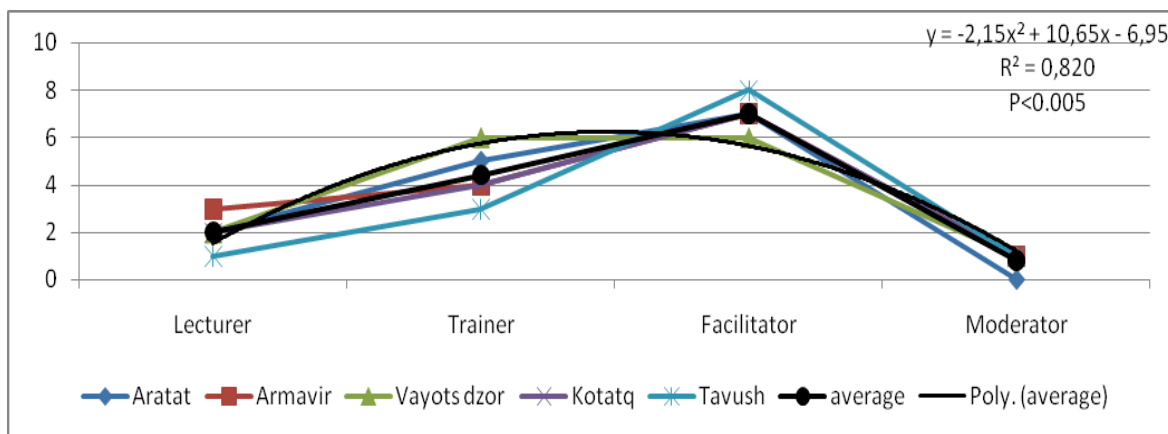
Graph 2

Average scale of Residual knowledge of farmers immediately after teaching process



Graph 3

Average scale of Residual knowledge of farmers after 2 weeks of training



The table 3 and graphs 2 and 3 shows the relationship between teaching styles and understanding processes. As we can see, in the group where the academic lecturer taught, right after the teaching level of residuals knowledge was low, in comparison with the methods used by trainers and facilitators. This can be explained due to the fact that the lecturer didn't pay as much attention to the farmer's level of comprehension and tiredness. The lecturer is only interested in his notes and modules. The residual knowledge is low in the group of the moderator too. We think that the reason for that is the moderator's behavior itself, because the only

thing he did was to distribute teaching materials, but not having to explain them. Therefore, farmers couldn't understand hence their residuals knowledge was very low.

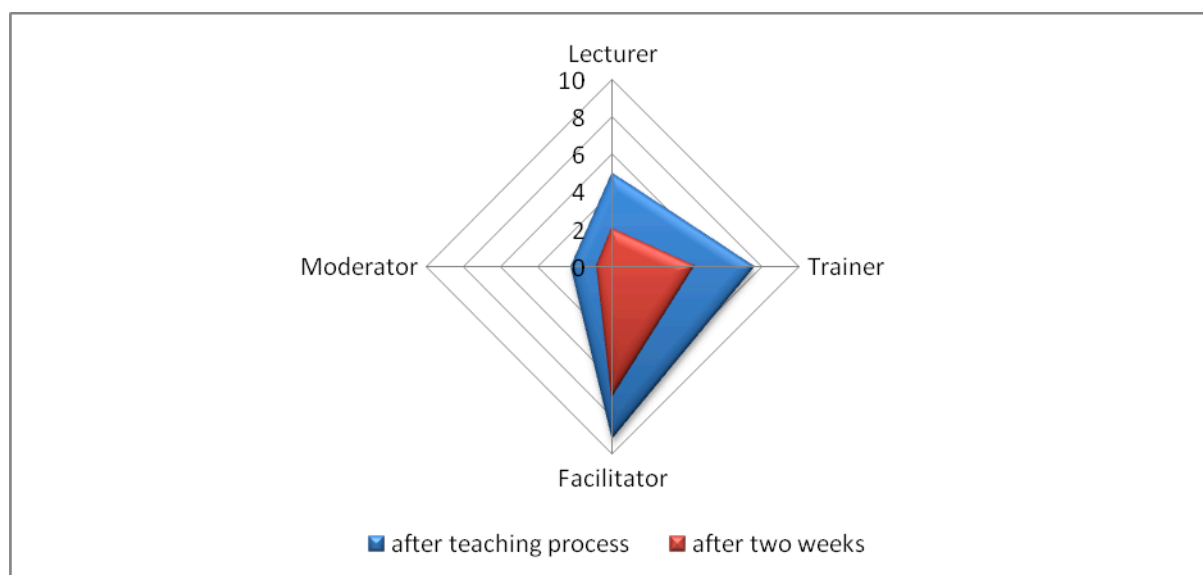
We have discovered analogical results, with observation of the residual knowledge after 2 weeks of trainings. Farmers could easily remember and explain the subject in the groups with the trainers and the facilitators. The explanation of this was that during the academic lectures, the teacher did not use any materials or situational exercises whatsoever, and did not care about the audience, therefore the residual knowledge was at minimal in comparison to the sessions conducted by a facilitator, when during the teaching process they used situational exercises. Initially this caused perplexity, because of the lack of knowledge but it was followed by the desire to get information which could help them solve the problem. And during this situation the interest of the trainees increased substantially.

We haven't found any differences of farmers comprehension during our research in different regions of Armenia. We haven't found any differences during our research in different regions of Armenia. {harut you have the same sentence here repeating itself, I haven't deleted it because I thought it'

We also have research proving the differences of residual knowledge of farmers immediately after the teaching process and after 2 weeks have passed, for finding a good method of teaching (graph 4).

Graph 4

The differences of residual knowledge of farmers immediately after teaching process and after 2 weeks (RMSE=5.1)



As we can observe from the graph, the residuals knowledge is higher, when the facilitator or the trainer were teaching. On the contrary, after the lecturers and the moderators' teachings, the amount of residuals knowledge was at a minimum, not more than 2 to 4.

CONCLUSIONS AND SUGESTIONS

After our research we have concluded that:

1. The most effective methods of teaching to use in certain cases are the situational exercises, which are the cause for disturbance, because of the lack of knowledge, which in terms by itself leads to the increasement and the desire to get information which could help farmers solve the problem. For that matter the teacher must be either trainer or facilitator.
2. Another conclusion is, that there are no particular differences between the regions of Armenia, but, the residuals knowledge is different depending on the teacher.

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