

ALBANIAN AGRICULTURAL ADVISORS AND FARMERS' PREFERENCES ON EXTENSION SERVICE ACTIVITIES

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Abstract

A survey was carried out during the lockdown period (April-May 2020), to assess agricultural advisors' preferences on extension service activities. A questionnaire was mailed to the 66 advisors of the Regional Agencies of Extension Service of Tirana and Korça and the descriptive statistic method was used to analyse the data collected. Before disseminating the innovations, the advisors need more trainings on extension methods & activities, and agricultural practices. "Trainings combined with field visits for the practical side" is their first choice to get new knowledge on topics related to their work, while as a second choice they have preferred "open field days". Extensionists perception is that that "Demonstrations" and "Trainings combined with on-farm visits" are the two main activities that the extensionists think of as the most suitable activities for the farmers and for the realization of their plan of extension activities. As less important activities extensionists listed: "In-country trainings", "Brochure/Leaflet", "Study tours" and "Open field days".

Key words: agricultural advisors, extension service activities, farmers, preferences, survey.

INTRODUCTION

Agriculture in Albania contributes around 18% of the economy's GDP (World Bank, 2020) and it employs 37.4% of the country workforce (INSTAT, 2019). In addition, agriculture is the main sources of income for rural households and it is also important in terms of alleviating poverty and improving the standard of living, (Rama et al., 2018; Bicoku & Subashi, 2020). Agriculture in the last 30 years has signed a positive development of production and the sector is undergoing a transition from subsistence sector to a commercial one (Gjeci et al., 2018).

Although the positive trends the sector is facing several challenges starting from the small farm size (1.26 ha), and fragmentation of land (about 4 plots per farm)¹; lack of when it is in place weakness of farmers' organizations; limited access to agricultural credit; limited access to markets and low standards of products; inefficient farm management practices; and all these weaknesses lead to low level of

competitiveness of agriculture (Gjeçi et al., 2018). Several of these weaknesses are continued over the last 20 years, such as the low technology level of farmers, or the public and private advisory services not at the level required by farmers.

The public advisory system (PAS), which was recently organized in four Regional Agencies of Agricultural Extension (RAAE)², consists of about 260 agronomist and livestock specialist. The extensionists are working in district and village level, as well in 120 Agricultural Information Centres. Except the public sector the farmers receive advice from different sources such as: agro-input dealers, Agriculture Technology Transfer Centres (ATTCs), the Agriculture University of Tirana, donor supported projects and private sector organizations (Bicoku & Subashi, 2020).

The PAS started its operation in 1992, and for several years was supported with technical assistance by donors financed projects.

Skreli et al. (2014) and IPESA (2020) emphasis that the impact of government/public extension

¹ The land reform implemented after August 1991, in which the state agricultural land was equally distributed to the rural population, resulted in small and fragmented farms that hamper

the growth and competitiveness of agriculture.

² Since March 2018, by the Government Decision no. 147, date 12.03.2018

service on farm performance is limited, and also the coverage of public extension services is limited, specially to the contact farms³, most of them categorized as medium farms while the private advisory services are the main source of advice for largest farms. However, for the preparation of extension work plans the main opinion is of contact farmers, and large farms compared to small farms (89.4 versus 40.9%) at a time when in the vision of extension organizations is the support of small and medium farmers (Bicoku & Subashi, 2020).

In the advisory process one of the key factors is the education of extensionists and through it the farmers receive better technical knowledge and information, which help them to make decisions about the future of the farm. However, before starting any advisory program it is important to evaluate the knowledge of extension agents toward the innovations that need to be disseminated (Al-Shayaa et al., 2012). Because as it mentioned by Van den Ban & Hawkins (1996) the goals of agricultural extension include the transfer of information from the international knowledge base and from country research to farmers, enabling them: (i) to clarify their goals and opportunities, (ii) educating them on how to make better decisions, and (iii) stimulate desired agricultural development. To accomplish their job, extensionists need to be trained in various aspects of the extension process, which usually is done during the professional training of the extensionists (Oakley & Garforth, 1985).

Extensionists need to understand the communities they work for and be accountable for serving them. In addition to good technical knowledge, they must possess knowledge and skills for planning, implementing and evaluating extension programs, because the lack of training, after being employed, by the agricultural extension organization, affects negatively the success of their work. Good communication skills are much better in all aspects of their job (Suvedi & Kaplowitz, 2016; Man et al., 2016; Khan et al., 2011; Erbaugh et al., 2007).

According to Davis & Sulaiman (2016), the extensionists must have knowledge of agronomy, plants, livestock and natural resources. They also need to understand human

nature and how people make their choices. Thus, the discipline of extension includes elements of the natural sciences, as well as education, sociology, anthropology, communication, and much more.

Nevertheless, Suvedi & Kaplowitz (2016) are emphasising that, extensionist should not be judged only on how much knowledge they have in their area of technical expertise, but how skilled they are at providing services to their clients. It should also be noted that the basic needs of competencies depend on the circumstances in which the extensionists work, and they affect both the competency requirements and the level of competencies. Therefore, competency improvement is essential for all extension staff training. In addition, the level of skills and competencies required for extensionists can vary depending on the circumstances. While Salah et al. (2016) says that one of the most important steps of training needs is the performance development and the factors that motivate employees for continuity and stability of their employment. Training removes dust from acquired knowledge. It is therefore important that all employees update their knowledge periodically and become aware of the constant changes of science or technology. Because, training is the process of acquiring specific skills to perform the job better. It includes the processes of teaching, informing and educating people.

Training is not a luxury but something necessary for extensionists, it is a kind of investment for them (Ahmed & Khalid, 2013).

MATERIALS AND METHODS

The purpose of the survey was to identify the preferences of the extensionists, of the Regional Agencies of Agricultural Extension (RAAE) - Tirana and Korça⁴, for their extension activities. The realization of the survey has been made possible by the use of primary, secondary sources and literature data related to extension service in the field of agriculture.

The survey was conducted with 66 extensionists (all of them who have a computer, about 90% of the staff) whom are staff of RAAE of Tirana and Korça.

³ Farmers with whom the advisers have regular contacts.

⁴ There are four RAAE in Albania (subordinate to Ministry of

Agriculture and Rural Development) with centres in Shkoder, Tirane, Korçe and Lushnje.

For the purpose of this survey, a questionnaire is designed for interviewing extension agents and collecting the data needed. The questionnaire consists of a series of questions. There are questions about the extensionists personal background, such as age, gender, year of graduation, working experience, education background. Other variables in the dataset relate to extensionists' preferences for the extension activities they conduct.

The questionnaire was subject to review by a panel of three experts, which was conducted via Google Meet⁵, in the case of inconsistent questions, it was modified accordingly.

The survey was administered in early May 2020, and the questionnaires were filled electronically by the extensionists, as Covid-19 protocols didn't allow the direct interviews. The extensionists were clarified about the purpose of the interview and the survey, as well that the data would be confidential.

The questionnaire contained open-ended and closed-ended questions. Open-ended questions allow for a greater variety of responses from participants, but are difficult to analyse statistically because data has to be coded or reduced in some way. While, closed-ended questions are easy to analyse statistically, but they seriously limit the answers that participants can provide (Jackson, 2009). Also is used a Likert-type scale (1932), because it is very easy to analyse statistically and it is very used in agricultural research (Clason & Dormody, 1994).

The data obtained were entered in Microsoft Excel and transferred into SPSS. The analysis is based on descriptive statistics, namely frequencies.

RESULTS AND DISCUSSIONS

1. General data on the interviewed agricultural advisors

In this study, we aimed to identify the preferences of AREB-Tirana and Korça extension employees for extension activities.

As can be seen from the data in Table 1, 62% of the interviewees interviewed are male and 38% female (63% and 37% of RAAE Tirana and 61.5% and 38.5% of RAAE Korça).

The extensionists have a long working experience in agriculture (23 years as average; 26.5 years of RAAE Tirana and 20.7 of RAAE Korça), but only 11.3 years in extension (11.7 years in Tirana and 11.0 in Korça); difference which is explained by the frequent movements made in the direction of the Ministry of Agriculture and the Governments.

In terms of education, 62.1% of extensionists have a degree in agronomy, 22.7% in animal science, 6% in plant protection and by 3% in fruit growing, in agrarian economics, and in agro-environment (Figure 1).

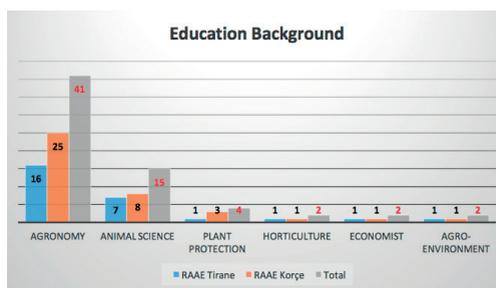


Figure 1. Extensionists education background

It should be noted that 36.4% of extension workers were employed without interviews and only 48.5% were interviewed by DPA, which is the only institution to conduct interviews for employees working in the public administration (Table 2). In addition, the cost of transport from home to workplace should be covered by the extensionists and therefore about 25% of them express it as unsatisfactory part of their work (Table 4).

Extensionists respond that getting to know farmers' problems is the most satisfying part of their job. The same is reported from the study of Agunga (1995). What stands out is that only two extensionists place demonstrations as a satisfactory part of their work, at a time when demonstrations are the main activities they perform, during each year (Table 3).

The least satisfactory part are the expenses they make for transport, bureaucracies (frequent requests from MARD⁶ for filling in various forms, or operational data), as well as the lack of support of the farms with subsidies from ARDA⁷.

⁵ The Covid-19 protocols didn't allow the direct interviews and meetings.

⁶ Ministry of Agriculture and Rural Development

⁷ Agriculture and Rural Development Agency (Payment Agency).

Table 1. Main sample socio-demographic

RAAE	Extensionists											
	Number of Interviews	Gender		Age (years)	Experience (years)		Education					
		M	F		Total	In extension	Agro-nomy	Zootech nic	Plant protection	Horticulture	Econo mist	Agro-environment
Tiranë	27	17	10	53.6	26.5	11.7	16	7	1	1	1	1
Korçë	39	24	15	51.7	20.7	11.0	25	8	3	1	1	1
Total	66	41	25	52.5	23.1	11.3	41	15	4	2	2	2

Table 2. Hiring and distance of work

RAAE	Hired			Transport used to reach the workplace		Distance from home to work place or clients		
	Without interview	Interviewed by		Public	Private	Average	minimum	maximum
		DPA ⁸	RAD ⁹					
Tiranë	4	16	7	15	12	16.2	13	27.7
Korçë	20	16	3	30	9	14.5	9.3	27.8
Total	24	32	10	45	21	15.2	10.8	27.76
Percentage	36.4	48.5	15.1	68.2	31.8			

Table 3. The most satisfying part of the work of extensionists

RAAE	Opportunity to know the problems of farmers	When farmers are satisfied with the advice received	Meeting with farmers in Extension Office as they believe in the advice received	Field demonstrations where knowledge is confronted with practice	When farmers apply the advice received	TOTAL
Tiranë	14	7	3	1	2	27
Korçë	38			1		39
Total	52	7	3	2	2	66
Percentage	78.8	10.6	4.6	3.0	3.0	100%

Table 4. The least satisfactory part of the work of extensionists

RAAE	Transport cost	Bureaucratic requirements for issues that do not pertain to extension	When the farmer fails to receive the subsidy and he start to loses the trust to RAAE	Non-implementation of advice by the farmer	Distance of farms from each other	I do not have	TOTAL
Tiranë	8	6	6	1		6	27
Korçë	9	4	2	6	2	16	39
Total	17	10	8	7	2	22	66
Percentage	25.8	15.2	12.1	10.6	3.0	33.3	100

Extensionists help farmers complete the documentation required by ARDA for their support of national schemes. At the end of the process there is no information from ARDA to the extensionists whom from the farmers won and also to know the reasons why some of the farmers are not qualified for the support schemes. Since years the extension service is facing difficulties

for the dissemination of information, as in the work territory of one advisor are performing their activity approximately 2400 farms and only 26.5% of them are visited annually by the extensionists, but a good part of them is visited only once a year (IPESA, 2017; Hoxha, 2021). The number of farmers who have received information during the year is only 31% higher

⁸ Department of Public Administration⁹ Regional Agricultural Directory

than the farms visited. Contact¹⁰ farms constitute 10% of farms who have received information during the year. This should be a problem that: (i) farmers do not visit the extensionists offices to obtain information, (ii) a part of farm visits are not for information, but for data collection required by MARD.

Extensionists answer that about 15% of the working time they are not at their place of work, meaning that they are in the RAAE offices, for meetings (with limits of 1 to 6 days); while farm visits occupy about 55% of their time (with limits of 2 to 16 days), and the rest of the time (30%) is spent in the office where farmers come for information (Table 5). Only 89.4% of farmers seek advice from extensionists after receiving financial support from ARDA, and in 89.8% of cases is related to the implementation of the technology for which the grant was received, while the rest ask for information to receive a grant in the following year.

Most extension activities (Table 6) take place for crop production and fruit growing (80.5-83.8%) and the rest for livestock (17.5-19.5%). Demonstrations are the main activities, where on average each extension holds one demonstration per month. After the demonstrations are trainings and open field days. While leaflets are prepared by the subject matter specialists of RAAE or ATTCs, and extensionists only make multiplications of them, according to the farmers' requests. A survey conducted by Franz et al. (2010) with Virginia-US extensionists, reports that the most common methods used by extension service for new technologies and information were: (i) demonstrations, (ii) trainings, (iii) visits to other farms, (iv) experiments and, (v) on-farm problem-solving visits.

2. The best way of acquiring new knowledge for extensionists

Table 7 summarizes the forms that extensionists like to receive new information on topics related to their work. The results are interesting as extensionists as a first choice have preferred "Trainings combined with on-farm visits", the same is reported by Lakai et al. (2012). The other alternatives are on the same level, but "Open field days" are the second form, which is also reported by Andrango & Bergtold (2015).

The three lowest rated formats were videos (2.5%), brochures / leaflets (9.9%) and study tours (11.2%).

These findings contradict those of some authors who report travel abroad (Chizari et al., 1999; Al-Rimawi et al., 2017) or university publications, internet, and newsletters (Andrango & Bergtold, 2015) as the most effective forms to get new information. Whereas, Khan (2011) reports demonstrations as the best form to train extensionists.

From the eight forms of knowledge acquisition we see that there are some differences between agronomists and zootechnics (Table 8). In four of them, zootechnics consider them more important than agronomists (Open field days, Training abroad, Brochure / leaflet, and Video), as agronomists consider more important than zootechnics only one of them (In-country training). In three of them they answer in the same way (Trainings combined with on farm visits, Demonstrations, Study tours).

Extensionists of both groups (1-10 years of experience and over 11 years) consider "Trainings combined with on-farm visits" as the best form for acquiring new knowledge.

Extensionists who have fewer years in extension give a more positive answer in terms of Field days, demonstrations, in-country training, training abroad, compared to extensionists with more years of extension experience.

Regarding the institutions for conducting trainings, the extensionists evaluate five of them for different topics as given in table 9. Draws attention to the fact that extensionists choose Agricultural University of Tirana (AUT) for topics related to plant protection. This is due to the fact that the Plant Protection Laboratory - Durres is under the auspices of the Department of Plant Protection of AUT.

3. The best form of acquiring new knowledge for farmers and implementing the extension plan

Extensionists perception is that that "Demonstrations" and "Trainings combined with on-farm visits" (Table 10) are the two main activities that those who are suitable for farmers think about and for the realization of their plan of extension activities.

¹⁰ As it is impossible to cover many farmers the extensionists has selected few small and medium farms that are consulted and

informed regularly during the year.

Table 5. Data on daily work of the extensionists

RAAE	Farms in your area		Livestock farms in your area		Number of farmers getting information during the year		Days per month	
	Total	Farms visited per year	Total	Farms visited per year	Total	Contact farmers	You are not in the working place	Farm visits
Tiranë	2447	371	774	69	726	65	3	9
Korçë	2363	821	602	181	914	98	3	21
Average	2398	637	672	135	837	85	3	10.8

Table 6. Activities perform as average in the last three years

RAAE	Activities											
	Demonstrations on			Open Field Days			Trainings			Leaflets		
	Agriculture	Livestock	Total	Agr.	Liv.	Total	Agr.	Liv.	Total	Agr.	Liv.	Total
Tiranë	25.3	4.3	29.6	11.2	1.9	13.1	19.8	3.9	23.7	33.0	12.7	45.7
Korçë	29	8.3	37.3	19.6	4.1	23.7	12.7	2.9	15.6	18.1	5.8	23.9
Average	27.6	6.7	34.3	16.0	3.1	19.1	15.5	3.3	18.8	24.0	8.5	32.5
Percentage	80.5	19.5	100	83.8	16.2	100	82.5	17.5	100	73.8	26.2	100

Table 7. Most appropriate way to get new knowledge for extensionists¹¹

Activities	RAAE				Total	
	Tiranë		Korçë			
	persons	%	persons	%	persons	%
Trainings combined with on-farm visits	26	17.1	35	20.6	61	18.9
Open field days	18	11.8	30	17.7	48	14.9
Demonstrations	18	11.8	28	16.5	46	14.3
Trainings abroad	22	14.5	24	14.1	46	14.3
In-country trainings	25	16.5	20	11.8	45	14.0
Study tours	20	13.2	16	9.4	36	11.2
Brochures/Leaflets	18	11.8	14	8.2	32	9.9
Video	5	3.3	3	1.7	8	2.5
Total	152	100	170	100	322	100

Table 8. Extensionists most appropriate way to acquire new knowledge according to the professions¹²

Activities	Profession					
	Agronomist		Zootechnics		Other	
	persons	% to the number of agronomist	persons	% to the number of zootechnics	persons	%
Trainings combined Witt on-farm visits	38	92.7	14	93.3	9	90.0
Open field days	28	68.3	12	80.0	8	80.0
Demonstrations	30	73.2	11	73.3	5	50.0
Trainings abroad	27	65.8	13	86.7	6	60.0
In-country trainings	29	70.7	9	60.0	7	70.0
Study tours	21	51.2	8	53.3	7	70.0
Brochures/ leaflets	17	41.5	10	66.7	5	50.0
Video	3	7.3	5	33.3	0	0

Table 9. Institutions offering trainings

Institution	Respondent		Percentage	Topic
	Total	For main topics		
ATTC	44	28	63.6	New technologies
AUT	35	15	42.9	Plant protection
MARD	34	9	26.5	Agricultural strategies approx. with those of the EU
Donors' projects	32	12	37.5	Adaptation of cultivars and indigenous breeds
NGO	14	11	78.6	Establishment of agricultural associations/cooperatives

¹¹ Total answer is bigger than the number of the extensionists because were multiple choices.¹² Total answer is bigger than the number of the extensionists because were multiple choices.

Table 10. The most appropriate activities to implement the extension program for farmers

Activities	RAAE				Total	
	Tirane		Korçe			
	Persons	% to the number of extensionists	Persons	% to the number of extensionists	Persons	% to the number of extensionists
Demonstration	24	88.9	37	94.5	61	92.4
Trainings combined with on-farm visits	22	81.5	36	92.3	58	87.9
In- country trainings	15	55.5	31	79.5	46	69.7
Brochures/Leaflets	12	44.4	32	82.1	44	66.7
Study tours	13	48.1	29	74.3	42	63.6
Open field days	14	51.8	28	71.8	42	63.6
Video	5	18.5	6	15.4	11	16.7
Trainings abroad	1	3.7	0	0	1	1.5
Visits to the fruit and vegetable markets	1	3.7	0	0	1	1.5

Table 11. Information channels liked by farmers according to extensionists opinion

Activities	RAAE				Total	
	Tirane		Korçe			
	Persons	% to the number of extensionists	Persons	% to the number of extensionists	Persons	% to the number of extensionists
Individual discussions (extensionists-farmer)	27	100.0	38	97.4	65	98.5
Leaflets	27	100.0	31	79.5	58	87.9
Group discussions	26	96.3	30	76.9	56	84.8
Demonstrations	3	11.1	32	82.0	35	53.0
Visits to other farms (exchange of experience)	1	3.7	32	82.0	33	50.0
Open field days	1	3.7	29	74.4	30	45.5
TV	3	11.1	14	35.9	17	25.8
Internet	6	22.2	10	25.6	16	24.2
Radio	0	0.0	1	2.6	1	1.5

After these two activities, on the same level the extensionists list are “In- country trainings”, “Brochure/Leaflet”, “Study tours” and “Open field days”.

Andrango & Bergtold (2015), in their study, conducted with extensionists of some US states, emphasize that extensionists ranked field days as the main activity to inform farmers, while radio/TV programs as the least used. While in the study conducted by Franz et al. (2010), the most preferred extension activity by farmers are demonstrations, field days, farm visits, while when extensionists are asked which activities farmers like the most they list farm visits, demonstrations and open field days. Whereas, Declaro-Ruedas (2019), in a study conducted in the Philippines reports that the most preferred activities by extension to introduce new technologies to farmers are group discussions/ meetings of farmers, demonstrations and farmers field schools. Radhakrishna et al. (2003) in the study conducted in South Carolina as a

preferred method by farmers mentioned the agricultural magazines, and field days.

In the opinion of extensionists, farmers prefer individual discussions with extensionists, leaflets and group discussions more than all information channels (Table 11). The same is reported by Chaudhry et al. (2006) and Siddiqui & Mirani (2012) in their studies.

According to a study conducted with farmers in the area of Vora-Tirana (Bicoku & Subashi, 2020) farmers thought that the main methods that were most valuable to them were: (i) demonstrations, (ii) meetings with other farmers, (iii) open field days, as well as (iv) discussions with advisors, other farmers and dealers. The same is mentioned by Luukkainen (2012), who states that farmers are keen to see how a new idea works and how it can affect their farm production and these can be done with a demonstration. Explaining why farmers say demonstrations are an effective method may be that they are able to see a particular technique or

technology in practice. It also states that the farmer-to-farmer method is the most productive for farmers.

CONCLUSIONS

Our survey shows that we have a gender disproportion in the ranks of extensionists, where 62% are male and 38% female, at a time when female extensionists had to be at least 50%, since most farm work is done by women. Extensionists have a long work experience of 23 years but only 11.3 years in extension, which tells us about frequent movements of extension staff, which negatively affects not only the work of the extensionists but also farmers.

Disproportion is also observed in employment by profession where 62.1% of extensionists are agronomists, and only 22.7% zootechnical, when livestock production provides about 52% of total agricultural production

About 1/3 of the extensionists have started working without interviews, which should be improved in the future, through the interview we understand the level of their knowledge and their training needs in the future.

The distances from home to work place are considerable and the extensions have to bear the cost of transportation themselves and therefore about ¼ of them express it as an unsatisfactory part of their work. Whereas, as the most satisfactory part of their work, ¾ the extensionists mention "the acquaintance with the farmers' problems".

The least satisfactory part are the expenses they make for transport, bureaucracies (frequent requests from MARD for filling in various forms, or operational data), as well as the lack of support of the farms with subsidies from ARDA. About 4/5 of the extension activities take place for crop production and fruit growing and the rest for livestock. Demonstrations are the main activities, where on average each extension holds one demonstration per month. After the demonstrations are trainings and open field days. It should be noted that the number of participants in each extension activity is low: only 6.3 participants for demonstration and trainings, and seven participants for open field days.

In terms of the appropriate form to receive new information, on topics related to their work,

extensionists as a first choice have preferred "Training combined with on-farm visits", while as a second choice have preferred "Open field days", forms which are also mentioned by other foreign authors. The three lowest rated formats were videos, brochures/leaflets and study tours. However, there are some differences between agronomists and zootechnics in terms of forms suitable for acquiring knowledge. The zootechnics consider more important than agronomists, the "Open field days, Training abroad, Brochure/leaflet, and Videos, while agronomists consider more important than zootechnics only the In-country training. While for activities such as Trainings combined with on-farm visits, Demonstrations, and Study tours, the agronomist and zootechnics have the same opinion.

Extensionists who have fewer years experience in extension service give a more positive answer in terms of "Open field days, demonstrations, in-country training, training abroad", compared to extensionists with more years of extension service experience. Extensionists of both groups (1-10 years of experience and over 11 years) consider "Trainings combined with on-farm visit" as the best form for acquiring new knowledge.

According to extensionists opinion "Demonstrations" and "Trainings combined with on-farm visits" are the two most suitable activities for farmers and for the implementation of their plan of extension activities. After these two activities, the extensionists list "Training", "Brochure/Leaflet", "Study tours" and "Open field days".

Farmers prefer individual discussions with extensionists, leaflets and group discussions, according to the extensionists opinion.

ACKNOWLEDGMENTS

The authors of this paper are thankful to the extensionists of AREB - Tirane and AREB - Korçe for their contributions in filling the questionnaires in relation with their training needs. In addition, we are thankful to Prof. Asc Edvin Zhllim and Prof. Asc Drini Imami for the very good discussions for the extension activities of extensionists.

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