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The School-on-the-Air (SOA) Extension Modality of the Agricultural Training Institute in Region I

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Abstract *– This study aimed to determine the effectiveness of the School on-the-Air (SOA) as an extension modality of the Agricultural Training Institute in Region I. The study was limited to the AEWs and farmers' beneficiaries in Region 1 who graduated through the SOA of the Agricultural Training Institute-Regional Training Center I (ATI-RTC I).*

There were two sets of questionnaire distributed as a research instrument for this study, for SOA Graduates and SOA Coordinators and both were translated into Filipino having 5 parts.

The characteristics of SOA by resources such as manpower; farmcaster (announcer) and resource persons was rated excellent, money; fund allocation as excellent, materials; topics discussed excellent; and, machines; radio station was rated very good, overall rating is excellent. On the extent of Knowledge, Skills and Attitude acquired, there was a significant difference in the overall extent of acquisition of learning across commodities was observed. The SOA in the region in all commodities have positive effect to the farmers' knowledge, skills and attitude. It means further that when the SOA satisfied the farmers in terms of manpower, money, materials and machines used, the learners will likely to change its knowledge, skills and attitude According to the respondents, SOA gave them the opportunity to learn new technology, gets additional farming and assisted farmers in implementing their farm decisions. The numbers of years of farming of the SOA graduates was found to be significant and positively correlated with the level of adoption of technology. Conferring to the SOA Graduates' answers, commodity vary in terms of the stage they've been using the technology. While others are in the adoption stage, some are also found still on the trial stage.

Keywords *–Air, Graduates, Knowledge, Skills and Attitude*

INTRODUCTION

In a developing country like the Philippines, the vital role of extension in agriculture development has been known for long. Extension offers support to farmers and fisher folks to identify and create solution on issues about production, farm management and marketing by the exchange of information, techniques, and methodologies among with co-farmers, extension agents, input suppliers, credit agencies and traders [1]. In credit to the sector's liability to climatic impacts [2], countries have highlighted agriculture as a focus for climate change adaptation.

By nature, radio, gives us the ability to 'hear' content, context, passion and pain" [3]. Dagron further explains that radio is the "most often utilized and successful medium for social change." For Freire, "ordinary people, not just talented leaders, can and should be agents of change" [4] and radio is an obvious medium for catering to such change by allowing ideas to be shared and beliefs critically questioned. The radio is readily available anytime and anywhere. It remains to be a cost – effective extension and training tool for developing countries like the Philippines due to its low production cost

and accessibility. Due to its availability to almost everyone, the radio could serve as an important connection between the implementers of the program and the farmer – beneficiaries [5].

Casey [6] states that, "instructional radio paved the way for distance learning opportunities through television technology". Even further, [7] argues that based on the educational radio implementation model, "television, audio and video conferencing, the Internet, and other technologies have been adapted for the needs of young learners". Radio in education, a pioneer of educational technology, created a legacy for itself by setting the stage for the development of other technologies still used in education to date, and perhaps will continue with other technologies in the future [8]. By 1925, 171 licenses had been established. In addition, K-12 education systems in Ohio and Wisconsin were developing "schools of the air", that would provide curriculum for use within traditional schools and distance education programs [9].

Farmers' education is very vital to their productivity; and as the training arm of the Department of Agriculture, the Agricultural Training Institute (ATI) is primarily mandated to ensure that farmers and fisher folks are able to maximize the facilities intended to uplift their condition. One of the modalities used by the ATI in educating their clienteles is the radio. Radio remains the most accessible and widely used medium in disseminating information specifically to the rural communities even to the far-flung areas in the locality [10]. Meanwhile, industry approximations suggest that the average radio listening time is two to three hours a day [11]. One program of the ATI is the School-on-the-Air.

The School-on-the-Air (SOA) is defined as a specially designed radio program where the subject matter is presented systematically and in progressive manner with the ultimate goal of achieving desired results under a teaching-learning situation. The lessons will be aired for forty minutes – or over forty minutes incorporated with the topics that will be discussed by a resource speaker. These programs will be made available to the radio stations and their broadcasters for airing regionally or nationwide. Broadcasters will be encouraged to supplement the produced module with discussions in order to localize the information [12]. The ATI defines SOA as "a series of radio programs, presenting the subject matter systematically and in a progressive manner, aired for a period of not less than three months." [13].

An example to the implementation was the ERAP-MakaMASA project which aimed to use radio in training farmers through the school-on-the-air (SOA) format. The SOA had active listeners, such as the farmers and fisherfolk. It offered a comprehensive set of knowledge on a particular subject matter. The active involvement of listeners, local broadcasters, and other cooperating institutions added another dimension to the ERAP-MakaMASA program. [14]. Another was in 2018, where farmers and students graduate from SOA program - School-on-the-Air (SOA) Program, "Usapang OA: Radyo Eskwela ukol sa IDOLS" in Sta. Cruz, Laguna. The program produced 563 graduates from the municipality/city of Calamba, Calauan, Cavinti, Liliw, Luisiana, Lumban, Magdalena, Majayjay, Nagcarlan, Pila, San Pablo City, and Sta. Cruz. [15]

As presented above, the Institute has long adopted the SOA as a mode of technology transfer and information dissemination to Agricultural Extension Workers (AEWs) and farmers nationwide, and there is a need to evaluate the effectiveness of this medium to enhance its capacity for better service, hence, this study.

OBJECTIVES OF THE STUDY

The purpose of the work in the form of the research problem was to evaluate the effectiveness of this medium, School-on-the-Air (SOA) as an extension modality to enhance its capacity for better service. It disproved the hypotheses. There is a significant difference in the level of technology adoption and the profile of SOA graduates and there is a significant difference in the extent of acquisition of learning across commodities.

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It sought to answer the characteristics of the SOA program as perceived by SOA Graduates and Coordinators, the extent of attainment of the objective of SOA as perceived by the coordinators, the level of technology adoption by the SOA Graduates along different commodities, the benefits derived as perceived by SOA coordinator from the SOA, the extent of knowledge, skills and attitude acquired by the respondents from the SOA and the problems encountered by the respondents in the implementation of SOA.

Theoretical Framework of the Study

To enhance the agricultural production and productivity in developing countries, access to and effective utilization of agricultural information by farmers play crucial roles. The Agricultural Training Institute (ATI), being the extension and training arm of the Department of Agriculture (DA), employs various modalities in the delivery of agricultural extension services and access to knowledge and information on technological developments, particularly the agricultural production technologies. Among these modalities is the School-on-the-Air (SOA) Program which uses the radio as its primary tool and medium in delivering information on agricultural technology developments to the farm masses.

The study included various variables. The five (5) level or stages of Adoption Theory by Rogers' was used to measure the extent of adoption of acquired Knowledge, Skills and Attitude (KSA) about the technology. The Diffusion of innovations theory seeks to explain how, why and what rate new ideas and technology spread. An individual might reject an innovation anytime during the adoption process.

The Likert scale provides a great way of measuring the Knowldege and Attitude wich was based on the decision to use the different technology while the acquired skills was measured with regards to owned competencies proficiency level, the use graduated scale facilitates the identification of the degree of skill or mastery. Adaptation or combination of commonly used scales such as blooms Taxonomy and the Bondy rating scale.

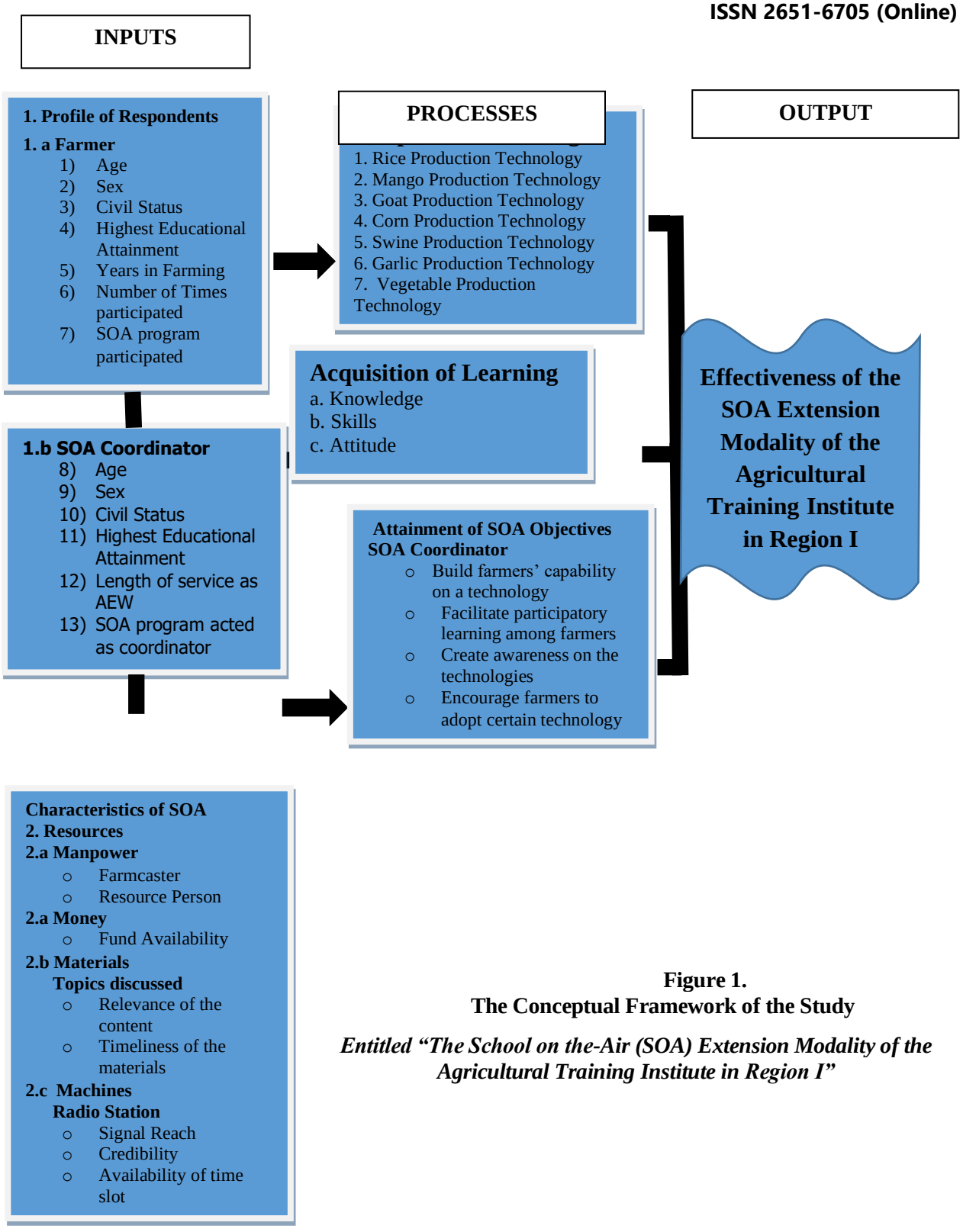

Figure 1.
The Conceptual Framework of the Study

Entitled "The School on the-Air (SOA) Extension Modality of the Agricultural Training Institute in Region I"

MATERIALS AND METHODS

For this research study, the instrument used to gather data was a survey questionnaire. These were distributed to the graduates and the Coordinators of the conducted SOAs from 2014 – 2018. In this study, descriptive research design was employed.

Data Collection Procedure

In gathering the needed data to answer the study's main and specific problems, interviews and analysis of SOA participants were the tools in the collection of data. This was supplemented with the existing records available at the ATI-RTC I where the data was stored.

To facilitate the gathering of data, the SOA graduates and coordinators who were the chosen respondents for the SOA were selected according to the recommendations of the of the Agricultural Technician/Technologist who was designated as Municipal SOA Coordinator in their respective municipalities in coordination with their City/Municipal Agriculturists with the permission of the Local Executives.

Statistical Treatment of Data

To analyze the problem of the study, the data that were gathered from the respondents that were treated with various statistical tools. All results in the questionnaire were encoded and analyzed using IBM SPSS Statistics Version 23.0. The first problem was treated using frequency and percentage. The second to the fifth problem which will illustrate the relationship of the respondents to their level of adoption to the technology were analyzed using average frequency and weighted mean.

For the sixth problem, frequency and rank was used to identify the benefits derived from SOA and for the seventh and eighth problem, Multivariate Analysis of Variance (MANOVA) were statistically used to study the level of technology adoption and the profile of SOA graduates and extent of acquisition of learning across commodities.

And lastly, for problem nine, frequency and rank was used to identify the problems encountered in the implementation of SOA.

RESULTS AND DISCUSSION

There were 2,033 SOA graduates and 55 coordinators all provinces in the region, served as respondents. Out of 2,033 SOA graduates; aged between 19 to above 71, 1,388 males and 645 females. Most of them were married and were high school graduates. Most of them were engaged in farming for more than 30 years. SOA coordinators aged were between 20 to 70 years old, 16 males and 39 females and most were college graduates. Most of them have 21 to 30 years as AEW, and served as SOA coordinator most of the time. These were based on the frequency and percentage results.

The extent of attainment of the SOA objectives is rated as "Very Attained" and the level of technology adoption of graduates across commodities, for rice, mango and garlic adopted technology are described to as in Trial stage, while technologies on goat, corn and swine is defined as to in "Adoption Stage". Also, based on the result, the numbers of years of farming of the SOA graduates was found to be significant and positively correlated with the level of adoption of technology. The problems encountered by the SOA graduates in the implementation of SOAs includes weak radio signal.

On the extent of Knowledge, Skills and Attitude acquired from SOA, there was a significant difference in the overall extent of acquisition of learning across commodities was observed based on the values of the multivariate Wilk $\Lambda = .935$ with the significance value($p=<.001$) lower than the level of significance. Moreover, the test between subjects along Knowledge ($fc=9.322$, $p<.001$), Skills ($fc=5.004$, $p<.001$), and Attitude ($fc=6.948$,

p<.001), were also found to be significant at the 5% level. Hence, the null hypothesis which stated that there was no significant difference in the extent of acquisition of learning was hereby rejected.

Table 1. Summary of Characteristics of the SOA as Perceived by Respondents

Characteristics of SOA by Resources	**SOA Graduates**		**SOA Coordinators**	
	WM	**DE**	**WM**	**DE**
A. Manpower	4.38	E	4.62	E
B. Money	4.09	VG	4.07	VG
C. Materials	4.29	E	4.41	E
D. Machines	4.05	VG	3.90	VG
Overall Mean	**4.28**	**E**	**4.40**	**E**

Findings revealed that the manpower's ability of the farm caster/s was rated excellent by both respondents with 4.38 by SOA Graduates and 4.62 by SOA Coordinators. Money, as a vital characteristic to implement SOA was rated 4.09 by SOA Graduates and 4.07 by SOA Coordinators, both implied as Very Good.

For materials or the topics discussed on air, it was rated by "Excellent" by both respondents with weighted mean of 4.29 and 4.41. Meanwhile, machines as a characteristic used to implement the program was rated "Very Good" with weighted mean 4.05 and 3.90 by both respondents. This happened because even if it reaches the audience, there are still unwanted interferences and the availability of the program's timeslot doesn't appeal to all.

Table 2. Extent of Attainment of the Objectives of SOA as Perceived by the Coordinators

SOA Objectives	**Rate**					**WM**	**DE**
	EA	**VA**	**MA**	**SA**	**LA**		
Build farmers' capability on a technology	24	**31**	0	0	0	4.44	**VA**
Facilitate participatory learning among famers	24	**28**	3	0	0	4.38	**VA**
Create awareness on the technology	26	**27**	2	0	0	4.44	**VA**
Encourage farmers to adopt certain technology	24	**31**	0	0	0	4.44	**VA**
Overall Mean	**4.42 (Very Attained)**						

The extent of attainment of the objectives of SOA as perceived by the coordinators is rated as "Very Attained" with an overall rating of 4.42. Almost all of the four (4) objectives had the same rating 4.44; build farmers' capability on the technology, create awareness on the technology and encourage farmers to adopt certain technology except for the facilitate participatory learning among farmers with 4.38. Unlike the usual extension modality, the face to face training or hands-on training, technology demonstration, farmers field schools' farmers can interact and immediate feedback is present or they

can directly share their ideas that can attribute participation among farmers. These objectives were based on the overall objectives of SOA and only the coordinators can be of help to monitor the progress of the enrollees. SOA used the radio as its medium and it is confined within the four walls or within the cubicle but it can reach a wide diversified audience and at the far-flung and isolated areas. Radio ownership is higher than that of other media vehicles, therefore it is a mass-based media. Radio represents a "home" entertainment medium. This is similar with the statement of [16] that the radio allowed who had one to listen to news or informational broadcasts without having to physically be there.

Table 3. Level of Technology Adoption by the SOA Graduates Across Commodities

Commodity	Weighted Mean	Description
Rice	4.02	Trial
Mango	4.05	Trial
Goat	4.28	Adoption
Corn	4.31	Adoption
Swine	4.30	Adoption
Garlic	4.17	Trial
Vegetable	4.23	Adoption

Rice commodity was in a Trial stage with 4.02 weighted mean, the same as mango commodity with 4.05. Garlic adopted technology is also described to as in Trial stage with 4.17 as its weighted mean. It means to say that SOA graduates have already tried the technologies but they are not every time or in every instance being practiced by the respondents. On the other hand, technologies on goat with 4.28 as its weighted mean, corn with 4.31 and swine with 4.30 were all defined as to in "Adoption Stage". This proves that SOA implementation is effective as it verifies that radio delivers the desirable reach, frequency, and access to rural and remote areas, making it a suitable and influential tool for education. In addition, ownership and support among poor households are relatively high compared to other media forms, particularly in rural settings[17].

Related to this, the study of [18] centered upon the assessment of SOA program on herbal medicines after one and a half years since its implementation. Their knowledge retention and rate of adoption served as indicators. Moreover, the study of [19] also focused on knowledge retention and adoption of information of the graduates of the program "Paaralang Panghimpapawid ukol sa Produksyon ng Lanzones". The result of the study showed that about 53% of the participants said they only recall some of the lessons from SOA. On the other hand, adoption of technology among the graduates was at 79%, while non-adoption was at 21%.

Table 4. Summary of Extent of Acquisition of Learning by the SOA Graduates across Commodities

Commodity	Knowledge		Skills		Attitude	
	WM	DE	WM	DE	WM	DE
Rice	3.98	High	3.74	Advanced	4.02	Agree
Mango	3.93	High	3.84	Advanced	4.09	Agree
Goat	4.2	High	4.01	Advanced	4.23	Strongly Agree
Corn	4.22	Very High	3.94	Advanced	4.2	Agree

Swine	4.21	Very High	3.93	Advanced	4.17	Agree
Garlic	4.09	High	3.91	Advanced	4	Agree
Vegetable	4.07	High	3.97	Advanced	4.02	Agree

The summary of extent of acquisition of Learning (KSA) by the SOA Graduates across commodities was presented. This was all based on the given measurement below the table. As to the acquired Knowledge of the respondents, it was noted that the commodities on corn and swine were rated 4.44 and 4.21 respectively were "Very High" which meant that they were strongly agree with the attitude towards adopting it.

Table 5. Benefits of SOA as perceived by the SOA Coordinators

Benefits of SOA[a]	Frequency	Percentage
Learns new technology	54	98.2
Improves farmers' technical know-how	52	94.5
Gets Additional information in farming	52	94.5
Assist farmers in implementing their farm decisions	47	85.5
Increased farm productivity	46	83.6
Home-Based Learning	44	80.0
Develops interest on the technology	43	78.2
Increased income	40	72.7
Considers and practice the technology	37	67.3
Open to new ideas and technologies	35	63.6
Saves time	33	60.0
Changes farm approach	31	56.4
Saves money	31	56.4
Learns better communications skills	28	50.9
Provides better environment for linkage	28	50.9

There were benefits derived from SOA as perceived by the SOA coordinators. Learns new technology ranked the highest with 98.2% rating followed by improves farmers' technical know-how, the same as the benefit perceived by the SOA graduates as an objective to build farmers' capability on a technology and create awareness on the technology and gets additional farming with the same rating at 94.5%. Next, the objective to assist farmers in implementing their farm decisions followed with a rating of 85.5% which was also the same with the benefit perceived by the SOA Graduates - to encourage farmers to adopt certain technology garnered the highest rating, respectively.

However, some problems are also encountered despite the benefits. This is similarly attested to the results of the research study of [20] showed that the attendance was high (87% per lesson), and reasons for missed lessons were attributed to schedule conflict, inconvenient airing time and poor radio reception.

Table 6. Relationship in the Level of Technology Adoption and the Profile of SOA Graduates

Profile	Statistics	Sig.
Age[a]	-0.028	0.201

Sex[b]	0.020	0.374
Civil Status[c]	19.823	0.071
Highest Educational Attainment[d]	0.008	0.709
Years in Farming[d]	**0.062****	**0.005**

Based on the result, the numbers of years of farming of the SOA graduates was found to be significant and positively correlated with the level of adoption of technology. This implied that the experience of farming has brought them the attitude towards adoption which meant that they rely in technology to improve their farming system. The result was based on the significant value (p=.005) which was lower than the .05 level. Hence, the null hypothesis is hereby rejected. On the other hand, other profile variables (age, sex, civil status and highest educational attainment) of the SOA graduate were not significantly(p>.05) related with the level of technology adoption. Hence, the null hypothesis was hereby rejected. On the other hand, other profile variables (age, sex, civil status and highest educational attainment) of the SOA graduate were not significantly(p>.05) related with the level of technology adoption.

Table 7. Mean Comparison in the Extent of Acquisition of Knowledge Across Commodities

Pairwise Comparisons (I) Commodity	(J) Commodity	Mean Difference (I-J)	Std. Error	Sig[a]
Rice	Mango	0.043	0.054	0.429
	Goat	**-.221***	**0.052**	**0.000**
	Corn	**-.245***	**0.053**	**0.000**
	Swine	**-.232***	**0.052**	**0.000**
	Garlic	**-.115***	**0.055**	**0.037**
	Vegetable	-0.089	0.064	0.161
Mango	Goat	**-.264***	**0.054**	**0.000**
	Corn	**-.288***	**0.054**	**0.000**
	Swine	**-.275***	**0.054**	**0.000**
	Garlic	**-.158***	**0.057**	**0.005**
	Vegetable	**-.132***	**0.065**	**0.042**
Goat	Corn	-0.024	0.052	0.640
	Swine	-0.011	0.051	0.838
	Garlic	0.106	0.054	0.052
	Vegetable	**.132***	**0.063**	**0.035**
Corn	Swine	0.014	0.052	0.793
	Garlic	**.130***	**0.055**	**0.018**
	Vegetable	**.156***	**0.063**	**0.014**
Swine	Garlic	**.116***	**0.055**	**0.033**
	Vegetable	**.143***	**0.063**	**0.024**
Garlic	Vegetable	0.026	0.066	0.688

* The mean difference is significant at the .05 level.

This table showed that the mean difference of mango in comparison to goat, corn, swine, garlic and vegetable were found to be significant at 0.05 level. Negative mean difference indicated that the extent of acquisition of knowledge of SOA graduates of Mango commodity was lower compared to the SOA graduates of goat, corn, swine, garlic and vegetable commodity.

Table 8. Mean Comparison in the Extent of Acquisition of Skills Across Commodities

Pairwise Comparisons (I) Commodity	(J) Commodity	Mean Difference (I-J)	Std. Error	Sig[a]
Rice	Mango	-0.064	0.05	0.207

	Goat	**-.209***	**0.048**	**0**
	Corn	**-.177***	**0.049**	**0**
	Swine	**-.147***	**0.049**	**0.002**
	Garlic	0.02	0.051	0.694
	Vegetable	0.006	0.059	0.923
Mango	Goat	**-.145***	**0.05**	**0.004**
	Corn	**-.113***	**0.05**	**0.024**
	Swine	-0.084	0.05	0.093
	Garlic	0.084	0.053	0.111
	Vegetable	0.069	0.06	0.248
Goat	Corn	0.032	0.048	0.509
	Swine	0.061	0.048	0.2
	Garlic	**.229***	**0.05**	**0**
	Vegetable	**.214***	**0.058**	**0**
Corn	Swine	0.03	0.048	0.54
	Garlic	**.197***	**0.051**	**0**
	Vegetable	**.183***	**0.059**	**0.002**
Swine	Garlic	**.168***	**0.051**	**0.001**
	Vegetable	**.153***	**0.058**	**0.009**
Garlic	Vegetable	-0.014	0.061	0.812

* The mean difference is significant at the .05 level.

This table presented the result of pairwise comparison of commodities in the extent of acquisition of skills using Least Significant Difference. Based on the results only the mean difference of rice in comparison to goat, corn, swine, garlic and vegetables had a significant difference at 5% level. This implied that rice was the most adopted and known in terms of ways in its system among the rest. Mean difference of rice and mango; mango in comparison to all commodities, goat in comparison to all commodities, corn in comparison to all commodities; swine in comparison to garlic and vegetables; and garlic and vegetables did not differ significantly at 5% level. Moreover, a negative mean difference meant that SOA graduates of Rice in comparison to SOA graduates in Goat, Corn, Swine, Garlic, and Vegetable have lower extent of acquisition of skill.

There was a significant difference at 5% level on the mean of goat and vegetable. A positive difference meant that SOA graduates on Goat had higher extent of acquisition of knowledge compared to SOA graduates of vegetables. This was mainly because some most of them are into goat-raising. The mean difference of corn compared to garlic and vegetable were found to be significant in 5% level. A positive difference meant that SOA graduates of corn has higher extent of acquisition of knowledge compared to SOA graduates of garlic and vegetables. Comparably, on the study of [21] to determine if the graduates of DZLB SOA broadcasts on vegetable gardening gained knowledge after completing the course. It was found in the study that there was no significant difference between the participants' knowledge before and after the program because many of the graduates already have a background about the subject matter.

Table 9. Mean Comparison in the Extent of Acquisition of Attitude Across Commodities

Pairwise Comparisons				
(I) Commodity	**(J) Commodity**	**Mean Difference (I-J)**	**Std. Error**	**Sig[a]**
Rice	Mango	-0.101	0.059	0.089
	Goat	**-.278***	**0.056**	**0**
	Corn	**-.201***	**0.057**	**0**

	Swine	**-.191***	**0.057**	**0.001**
	Garlic	**-.177***	**0.06**	**0.003**
	Vegetable	**-.236***	**0.069**	**0.001**
	Goat	**-.178***	**0.058**	**0.002**
	Corn	-0.101	0.059	0.087
Mango	Swine	-0.09	0.059	0.124
	Garlic	-0.076	0.062	0.217
	Vegetable	-0.136	0.07	0.054
	Corn	0.077	0.056	0.169
Goat	Swine	0.088	0.056	0.116
	Garlic	0.102	0.059	0.085
	Vegetable	0.042	0.068	0.537
	Swine	0.011	0.056	0.852
Corn	Garlic	0.025	0.06	0.681
	Vegetable	-0.035	0.069	0.609
Swine	Garlic	0.014	0.059	0.814
	Vegetable	-0.046	0.069	0.505
Garlic	Vegetable	-0.06	0.071	0.402

The data above presented the result of pairwise comparison of commodities in the extent of acquisition of attitude using Least Significant Difference. The mean difference of rice compared to goat, corn and swine has a significant difference at 5% level. A negative difference meant that SOA graduates in Rice compared to SOA graduates in Goat, Corn and Swine have lower extent of acquisition of attitude. Moreover, there was no significant difference on the mean difference of rice, mango, garlic and vegetables.

Table 10. Difference in the Extent of Acquisition of Learning Across Commodities

Overall	**Wilk's Λ**	**Sig.**	**Between Subjects**	**Fc**	**Sig.**
Commodities	**0.935****	**0**	Knowledge	**9.322****	**0**
			Skills	**5.004****	**0**
			Attitude	**6.948****	**0**

The mean difference of mango compared to goat and corn differed significantly at 5% level confidence. This meant that mango is more recognized and adopting in terms of ways to take care of it. Meanwhile, negative difference meant that SOA graduates in Mango has lower extent of acquisition of attitude compared to SOA graduates of Goat and Corn. Mean difference of mango, swine, garlic and vegetable did not differ significantly at 5% level.

Based on the result, a significant difference in the overall extent of acquisition of learning across commodities was observed based on the values of the multivariate Wilk $\Lambda = .935$ with the significance value($p=<.001$) lower than the level of significance. Moreover, the test between subjects along Knowledge ($fc=9.322$, $p<.001$), Skills ($fc=5.004$, $p<.001$), and Attitude ($fc=6.948$, $p<.001$), were also found to be significant at the 5% level. Hence, the null hypothesis which stated that there was no

significant difference in the extent of acquisition of learning was hereby rejected.

Hence, doing the SOA in the region in all commodities have positive effect to the farmers' knowledge, skills and attitude. It means further that when the SOA satisfied the farmers in terms of manpower, money, materials and machines used, the learners will likely to change its knowledge, skills and attitude. The highest impact will be on knowledge, then by skills and last on attitude.

CONCLUSION AND RECOMMENDATION

The objective of SOA to reach out and train learners who were needed to be improved on their experience on agriculture was attained. It is recommended to continue implementing the SOA for enhancing knowledge on the listeners for SOA resources were found to be effective in enhancing skills and knowledge in farming by the graduates and coordinators.

Findings revealed that the manpower's ability of the farm caster/s was rated excellent by both respondents. Money, as a vital characteristic to implement SOA was both implied as Very Good. For materials or the topics discussed on air, it was rated by "Excellent" by both respondents. Meanwhile, machines as a characteristic used to implement the program was rated "Very Good".

Rice commodity was in a Trial stage, the same as mango commodity. Garlic adopted technology is also described to as in Trial stage. It means to say that SOA graduates have already tried the technologies but they are not every time or in every instance being practiced by the respondents

There was a significant difference in the overall extent of acquisition of learning across commodities was observed based on the values of the multivariate, were also found to be significant at the 5% level. Hence, the null hypothesis which stated that there was no significant difference in the extent of acquisition of learning was hereby rejected.

There are also problems met by the SOA graduates like non availability of radio and weak radio signal. Signal interferences should also be considered for the accessibility of the SOA. Radio sets should be considered a requirement for listeners who are interested in SOA programs so that not having a radio set at home would no longer be considered as a learning hindrance.

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