The Perceptions of Irish Potato Producers and Agricultural Extension Staff Concerning Mutual Working Relationship in the Mwaghavul Chiefdom, Plateau State, Nigeria

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Abstract: - A total of 70 questionnaires were developed and used for the collection of data from the seven districts of the Mwaghavul land. Seven other questionnaires were specifically developed and used for the Agricultural Extension staff serving in the same area. Data collected were analysed using descriptive statistics. The result reveals that most of farmers were males and age 35 years old and above, and were mostly illiterate. The ages of Agricultural Extension staff range between 26-34, as indicated by 71.67 percent of the agents' respondents. The Extension staff have not attained a high level of training for their job performance. Since the Agricultural Extension staff percent indicated that farmers were skilled and all agreed that farmers responses to their visits were "friendly," it was concluded that farmers are ready to work hand in hand with the Extension staff. All farmers showed they had problems requiring the Extension staff to help. It was, therefore, concluded that the farmers feel it is "important" to have help from the Extension staff. A specific area of concern by the potato producers was "watering during dry season gardening," since 92.31 percent of the farmers indicated they need help in this area.

Keywords: Irish Potato Producers, Farmers, Agricultural Extension Staff, Working Relationship and Mwaghavul

I. INTRODUCTION

There is great need for more attention to be placed on agriculture in terms of, not just financing and mere human labour, but mutual working relationships between the agricultural sector and other sectors of the economy in general. In particular, human working relationships are needed within the managerial hierarchy of the agricultural sector.

Agriculture plays a major role in the socio-economic development of Nigeria as a nation. Since time immemorial, it has been the major support of industrial development of other nations, such as European nations. According to Ndifon (1980 and 1983), the main problem is that the previous governments of Nigeria failed to invest sufficient funds in the agricultural sector of the economy. As a result, the farmers have not been able to produce enough food to feed the population of the country. One other problem has been lack of cordial working relationship between the farmers and the Extension staff. There is therefore, a desperate need for a reorganization of the agricultural sector by the Plateau State government of Nigeria

in such a way as to make the improved farming techniques be fully utilized by the farmers in general, and Irish potato producers in particular.

The Agricultural Extension staff need more adequate training in the field of production, marketing, and storage as well as processing, so as to be in a better position to educate the public. Such areas as prevention of food wastages and preservation of food would be of tremendous help to Irish potato producers in the future.

Another point of observation is the wide communication gap between the farmers and Agriculture Extension staff as well as between the farmers and the Ministry of Agriculture. There is need to get this amended in order to create an atmosphere of mutual working relationships. Part of the problem is lack of adequate training relationships and adequate training for Agricultural Extension staff, which often results in lack of coordination of the activities of the agricultural programs, causing a loss by the Irish potato producers. Such losses result quite often in a shortage of seedlings needed during planting seasons, both in the rainy- season farms and the dry-season gardens. The other side of the problem is the need to educate farmers regarding methods of improved farming in some specific areas as pointed out in this study. Compared to some other ethnic groups in Nigeria, like the Hausa, Ibo, Yoruba, and the Fulani people, the Mwaghavuls are a smaller group of people found on the high land areas of Plateau State Nigeria. Jos is the capital city of Plateau State, and the Mwaghavul people, numbering approximately one- quarter million, live east of Jos in Mangu Local Government. They are mainly Irish potato producers that is farmers.

The main purpose of this study was to determine the perceptions of Irish potato producers and Agricultural Extension staff, regarding their training needs and changes needed to improve mutual working relationships.

II. MATERIALS AND METHODS

Location of the study area

The seven districts selected for this study are: Mongu, Mangun, Panyam, Ampang West, Kerang, Pushit, and

Page 51

Kombun among the whole Mwaghavul speaking people. Others like Chakfem, Mupun, Mushere, and Jipal were not included, although there are some similarities among all of these languages, because they are not under Mwaghavul Chiefdom.

Population of Studies

In the seven districts of the Mwaghavul Chiefdom, 10 farmers were chosen as representatives for the sample from each of the districts, so a total of 70 farmers were thus selected as respondents. The selection was based on the following criteria:

- The representatives from these areas were Irish potato producers.
- The respondents were age 25 and above.
- The respondents were Mwaghavul persons and living within the jurisdictions of the Mwaghavul Chiefdom.
- The respondents were recognized farmers and had often obtained at least ten sacks of Irish potatoes each harvesting period.

Development of the Survey Instrument

Two separate questionnaires were developed for the study in order to gather the required information to meet the purpose and objectives of the study. The author reviewed the literature closely related to the study to develop the questionnaire. The instruments were submitted to the staff in the Department of Agricultural Education, Oklahoma State University for review.

Collection of Data

The researcher instructed the distributors to distribute the questionnaires on Sundays at churches, since many farmers in

the Mwaghavul land area are church attendants. They were also to distribute them on market days. The market days in Mwaghavul land districts are as follows: Tuesday for Mangun, Kombun, and Ampang West districts, Wednesday for Pushit, Friday for Mongu, Thursday for Panyam, and Monday for Kerang as of the time of data collection.

- The questionnaires were distributed between 9:30 and 11:00 a.m., both on market days and Sundays.
- Questionnaires meant for Agricultural Extension staff were distributed at any time on the weekdays when the ones for potato farmer were distributed.
- The Agricultural Extension staff completed their questionnaires with little or no assistance from the distributors. Most farmers (participants) had their questionnaires completed for them through interviews by the distributors because most of them hardly can read or write English.

Analysis of the Data

Data collected were analysed using descriptive statistics (frequency distributions, percentages, rank order, and calculated arithmetic means).

III. RESULTS AND DISCUSSIONS

Number and percentages of the Irish potato producers (respondents) taking part in the study are revealed in Table 1. As a whole, 70 farmers were given the opportunity to respond to the questionnaires. As shown on Table 1, 26 (37.14 percent) of the selected respondents actually took part in the survey.

Table 1: Summary of extension staff an	I Irish Potato Producers	from selected Districts par	ticipating of the study
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		EXTENSIO	N STAFF		FARMERS		
DISTRICTS	Number surveyed	Number returned	Percentage returns	N- 70 surveyed	Returned	Percentage returned	
Ampang west	1	1	14.28	10	6	60	
Mangun	1	1	14.28	10	4	40	
Panyan	1	1	14.28	10	2	20	
Kerang	1	1	14.28	10	2	20	
Kombun	1	1	14.28	10	4	40	
Pushit	1	1	14.28	10	3	30	
Mangun	1	1	14.28	10	5	50	
TOTAL	7	7	100	70	26	37.143	

Table 2 shows the Personal and Demographic Data of the Respondents. The study revealed that most farmers are male, married elderly persons. As already presented, 13 (50 percent) of the respondents were 40 years old or above; an additional 11 (44 percent) were between 30-40 years of age. On the other hand, the Agricultural Extension staff were male, married but

younger in age, since among them 5 (71.43 percent) were between 26-34 years and 2 (28.57 percent) were above 35 years of age. Their years of experience in the Extension service were all below 13 years with over 70 percent below six years.

FACTORS FOR COMPARISON	MA	NGU	MANGUN			AMPANG WEST		PANYAM		KERANG		KOMBUN		PASHIT		TOTAL N - 26	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
SEX																	
Male	5	100	4	100	5	83.33	2	100	2	100	4	100	3	100	25	96.15	
Female	_	_	_	_	1	16.67	_	_	_	_	_	_	_	_	1	3.85	
MARITAL STATU	JS																
Married	5	100	3	75	4	80	2	100	2	100	3	75	3	100	22	88	
Single	_	_	1	25	1	20	_	_	_	_	1	25			3	12	
AGE																	
20 - 24	1	_	_	_	_	_	_	_	_	_	_	_	_	_	0	0	
25 – 29	_	_	1	20	_	_	_	_	_	_	_	_	_	_	1	4	
30 – 34	1	20	2	40	_	_	_	_	_	_	2	50	_	_	5	20	
35 – 39	2	40	_	_	2	40	_	_	_	_	_	_	_	_	6	24	
40 years or above	2	40	2	40	3	60	2	100	2	100	2	50	_	_	13	52	

Table 2: Summary of Mwaghavul land Irish potato producers responses based on age, sex and marital status

Agents Training Desired was shown on Table 3. The study also revealed that most of the Agricultural staff had attained schooling ranging from 6-10 years. The majority of them have had between 2-3 years training as Agricultural Extension staff

and they do go for training often. All (100 percent) of them however, would like more training, preferably for 1/2-1 year length of time.

Table 3: Summary of Educational level and frequency of "inservice" training desired as reported by the Agricultural extension staff

ITEM		NUMBER	PERCENTAGE
Level of schooling attained	i		
1 - 5 years		0	0.00
6 - 10 years		6	85.71
11 - 15 years		1	14.21
Level of training as Agricu	ulture Extension staff		
0 - 1 years		_	0.00
2 - 3 years		3	42.86
4 - 5 years		2	28.57
6 years and above		2	28.57
How often do you get to ge	o for training		
Very often		_	0.00
Often		2	28.57
Seldom		4	57.14
None		1	14.29
Would you like more train	ing		
Yes		7	100.00
No		_	0.00
Length of time perferred for	or further training		
½ - 1 year		5	71.43
1½ - 2 years		2	28.57
2½ - 3 years		_	_
3½ - 4 years		_	_

Table 5 shows the extent of Contact Between Potato Farmers and Agricultural Extension Staff. The Extension staff averaged between 20 and 60 registered potato farmers in their districts, with whom they said they met often. They said they attended farmers' meetings, which they desired less than once

a week. All agents indicated they visited farmers with problems and received a friendly response. They perceived farmers as being skilled and chose farmers to visit based on friendliness or skill.

	Table 5: Summary of agricultural	l extension staff responses	as to the number and freque	nev of contact with farmers
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ITEM			N	NUMBER	PERCENTAGE
Number of re	egistered farme	rs in yours areas ?			
1_20			1		14.29
21 _ 40			2		28.57
41_60			3		42.85
61 _ 80			1		14.29
81_ 100					0.00
100 and abov	ve		_		0.00
Total			7	•	100.00
Frequency of	f meeting farme	ers			
Very often			_		0.00
Often			6	i	85.79
Seldom			1		14.29
More			_		0.00
Total			7	•	100.00
Staff attendar	nce at potatoes	farmers meetings			
Yes			6	;	85.71
No			1		14.29
Total			7	1	100.00
Desired frequ	uency of potato	es farmer meetings			
Less than one	ce a week		5	í	71.43
Once per wee	ek		2		28.57
More than or	nce a week		_		0.00
Total			7	1	100.00

Producers Perceptions of Importance of Extension Staff Aid with Production Problems was shown on Table 6. The Irish potato producers perceived that the importance of Extension staff to help with production problems was very important in

all the selected areas except two. The two areas were considered of some importance. Highest among the areas for which help is required from the Extension staff is "watering during dry-season gardening".

Table 6: Summary of Irish producer's perceptions of the importance of agricultural extension staff help with selected production problems

ITEM OF PRODUCTION AREAS		Very	ortant	Imp	ortant	Some	e ortance	Little importa	ince	No impor	rtance	Mean response	Rank by mean	Category
ITEM OF TRAINING		N	%	N	%	N	%	N	%	N	%			
Potato farm protection		17	65.38	6	23.8	2	2.6	1	3.85	-	-	3.5	9	VI
Fertilizer application		22	84.61	3	11.54	0	0	1	3.85	-	1	3.77	5	VI
Watering during dry season gardening		23	88.46	2	7.69	1	3.85	_	_	_	-	3.85	1	VI
Use of credit source		22	84.61	3	11.54	1	3.85	_	_	_	-	3.81	2	VI
Use of new equipment		24	92.3	1	3.85	_	_	_	_	1	3.85	3.81	2	VI
Storage facilities		24	92.3	1	3.85	_	_	_	_	_	-	3.81	2	VI
Transportation of potatoes		23	88.46	1	3.85	1				1	3.85	3.73	7	VI
Marketing information		22	84.6	2	7.7	1	3.85	1	3.85	_	-	3.73	7	VI
Weed control		23	88	2	7.7	_	_	_	_	_	_	3.77	5	VI
Climatic control		11	42.3		_	2	7.7	12	46.2	1	3.85	2.31	10	S
Finding new seed varieties		7	6.92	2	7.69	6	23.8	10	38.46	1	3.85	2.15	11	S
Values: Very importa No important - 0	nt - 4	4 Im	portant - 3	Som	e importar	nt - 2	Little impo	rtant - 1						

The tendencies of farmers to contact Agricultural Extension staff when faced with problems showed positive results, but the Agricultural staff approachability was perceived as unfriendly. This is shown in Table 7. Twenty-three (88.46 percent) indicated they seek help or assistance from a friend who is a potato farmer, 2 (7.69 percent) showed they seek assistance from relation who have money while 1 (3.85 percent) indicated others a part as shown in Table 8. Farmers were instructed to specify other places from where they sought assistance, but none of them could point out any specific sources other than the first two, despite the fact that they chose the "others."

When asked how often they received information from outside their village regarding potato farming, 2 (34.61 percent) of the farmers indicated "very often," 9 (34.61 percent) indicated often, 10 (38.46 percent) indicated "seldom," and 5 (19.24 percent) indicated "none." As for the source from which the information was received, 1 (3.85 percent) indicated "radio," 2 (7.69 percent) indicated "newspaper," 4 (15.38 percent) indicated Extension staff, 16

(61.54 percent) indicated neighbor, and 3 (11.54 percent) indicated "others" but did not specify.

When asked if information from Extension staff would improve production, 24 (92.31 percent) farmers indicated "Yes" while 2 (7.69 percent) responded "No."

When asked "should Extension staff help if there is a problem regarding marketing potatoes?" 26 (100 percent).

In regard to the importance of Extension staff helping with selected production problems, the Irish potato producers felt that help in all selected areas was "very important" except in two areas: "new seed varieties" and "climatic control."

All Extension staff make visits to farmers with problems and all of the Extension staff agreed, also, that the farmers' responses were "friendly." It was understood by the staff, by an 88.71 percent response, that the farmers are skilled. Also it is interesting to note that "friendliness" and skills of farmers are major factors influencing the Extension staff to make visits with farmers rather than riches or "offers" from the farmers.

100.00

	N	%
Tendency to contact		
Yes	23	88.46
No	3	11.45
Total	26	100.00
Approachability		
Unfriendly	21	80.77
Friendly	3	11.54
Doesn't care to help	2	7.69
Seek gift before offering help	_	0.00

Table 7: Summary of farmer's tendencies to contact extension staff and the staff's approachability

Table 8: Summary of the farmer's responses concerning sources of assistance and information

Questions concerning information sources				N	%
Who farmer contacts conterning potato farming problem					
Friend who is potato farmer				23	88.46
Relation who has money				2	7.69
Others apart from two above				1	3.85
Total				26	100.00
How often farmer receives information from outside the village	regarding pota	to farm	ing		
Very often				2	7.69
Often				9	34.61
Seldom				10	38.46
None				5	19.24
Total				26	100.00
Source of outside information					
Radio				1	3.85
Newspaper				2	7.69
Extension staff				4	15.38
Neighbour				16	61.54
Others				3	11.54
Total				26	100.00
Production improved by putting into use information from Exte	ension staff				
Yes				24	92.31
No				2	7.69
Total				26	100.00

IV. CONCLUSIONS

The interpretation and analysis of findings from the study have led to the following conclusions:

- Since 40 percent of sampled farmers, most of them males, were age 35 years old and above, it happens that farming in the Mwaghavul land is in the hands of elderly people. They sooner or later will give way to the younger ones. Also, since education is much more pursued by young people than the elderly in the Mwaghavul land, it becomes apparent that the farmers are mostly illiterate.
- The ages of Agricultural Extension staff range between 26-34, as indicated by 71.67 percent of the agents' respondents. The age difference between the Extension staff and those of the potato producers does affect communication as well as the entire production process, because by Mwaghavul tradition it is not appropriate for older persons to take advice from younger persons unless proved beyond doubt to be absolutely necessary.
- The Extension staff have not attained a high level of training for their job performance. Most of them are high school graduates. They, therefore, have very little or almost nothing to tell the farmers in terms of professional instruction. It is not surprising that all of them (100 percent) desired further training.
- Since the Extension staff have all attended school, and they are working with farmers who have not been to school, this results in a communication gap between the Extension staff and the illiterate farmers.
- Since the Agricultural Extension staff percent indicated that farmers were skilled and all agreed that farmers responses to their visits were "friendly," it was concluded that farmers are ready to work hand in hand with the Extension staff. This is encouraging since the Extension staff base their visits to farmers on the influence of skills and friendliness of the farmers rather than "possessions" of the farmers and/or "offers" from the farmers. The "contact" aspect between the farmers and the Extension staff is very essential for improved potato production.
- Apart from "selecting new seed varieties" and "climatic control," the farmers felt it was very important to have help from the Extension staff in all other selected areas of production. All farmers showed they had problems requiring the Extension staff to help. It was, therefore, concluded that the farmers feel it is "important" to have help from the Extension staff. A specific area of concern by the potato producers was "watering during dry season gardening," since 92.31 percent of the farmers indicated they need help in this area.

V. RECOMMENDATIONS

Through the author's experiences as a Mwaghavul man, by analysis of the findings and results, and interpretation of the study, the following recommendations are put forward.

- There is need for the government of the Plateau State
 of Nigeria to encourage young men and women in
 the Mwaghavul Districts to choose agriculture as
 their future career because the present farmers are
 getting too old in age to remain active as farmers for
 sufficient potato production.
- More incentives need to be offered by the government to encourage the Extension staff to remain on the job a greater number of years in order to gain more experience. Such experience would enable the Extension staff to gain more confidence in working with the farmers 'in their respective districts. The farmers need to be educated to give up traditions to make way for positive modern agricultural changes. They need to learn to take good advice from the young Agricultural Extension staff.
- The government needs to provide some in-service training for the Agricultural Extension staff in the most needed areas of agriculture for which training is required.
- The Agricultural Extension staff needs to work hard to gain the confidence of the farmers in order to better perform their duty among the farmers.
- There is need for more contact between the Agricultural Extensions staff and the potato producers. This will help bridge the communication gap.
- The Agricultural Extension staff needs to provide more assistance to the potato producers facing problems, particularly watering during dry-season gardening. The Extension staff should communicate such problems like this to the government for a more effective and lasting assistance.

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