

To Take advantage of Mass Media Implementation on Agricultural Farms in Konya; The case of Altnekin District

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Abstract: This study was conducted to supply achievement of Agricultural Extension work which is being implemented in Konya region. It is significantly important to state that which extension implements will be used in which level in order to reach this objective. The minimum usable sample of farm enterprises was determined as 55 based on stratified sampling technique. The data were collected from Altnekin district in Konya. The new technologies application is quite high in the research area and the producers are open to innovation.

The results indicate that agricultural modernization has a positive effect on farm enterprises in the certain district and the reasons behind this are that the producers are open to innovation and they have positive future expectation, the producers in an economy have the right kind of knowledge and information, they can produce economic output efficiently.

Keywords: Mass media, Agriculture Extension, Konya Province

Introduction

The world we live in is shrinking with the same level of changing and developing. In the near future, the nations which can cope with this change and development will have the chance to survive. The certain change is ongoing with a spectacular speed in all part of life. Rational and economic production oriented towards needs is the main part of the modernization. Its centre is without doubt the human being. Modern technology which is utilized for agricultural production will be the cause of an increase in the technical agricultural production. That also means that there will be an improvement for the living conditions and a boost income of the farmers who lives in the rural areas. In the end, better quality food consumption, good nutritive and a growing work capacity will emerge.

On the other hand, the growing population and the population density in urban areas because of the migration force the farmers to make a production with more quantity and a high quality. Other wise, this uncontrolled population which consist of unemployed migrants will cause nuisance and social turmoil. For that reason the society have to take their responsibility of improving the living conditions of the rural people and create methods to provide agricultural technical information that they need. They also have to make those methods work. It is called agricultural extension. The developed countries that are conscious about this subject already established the necessary organisations.

With the 130 thousands registered farmers, Konya is the city that has the highest number of farmers in Turkey. In terms of the area, the situation is also the same and with 135.886ha registered agricultural area; Konya is the province that has the largest agricultural area. These figures signify the importance of agricultural extension work that will be implemented in Konya province. In such a broad area with such a large number of farmers, stating the usage of which agricultural extension methods will be utilized in which level will boost the success of the agricultural extension work that will be implemented. The main objective of this study is contributing the success of the agricultural extension work which is being implemented in Konya region. It is significantly important to state that which extension implements will be used in which level in order to reach this objective. For the below reasons, Altnekin district was chosen as the research field; the regions is well-known by the researchers, the level of the application of the new farming techniques is quite high and the producers are open to

innovation.

This study was done in order to reveal the progress in the use of the means of mass communication in the certain district and the reasons behind this are that the producers are open to innovation and they have positive future expectations.

Materyal ve Metot

The survey technique was applied for this research. When the survey form was prepared, the research subject and the features of the agricultural enterprises are considered and we also did benefit from the other survey forms which have being used for several researches. The data which was used for the research belongs to years 2006 and 2007. For the purpose of the research, Altinekin district was chosen as the research field and the reasons behind this are that the regions is well-known by the researchers, the level of the application of the new farming techniques is quite high and the producers are open to innovation. With the intention of improving the accuracy of the findings which is obtained with information gathered from the enterprises and ensuring the population's different sections to be represented sufficiently, the stratified sampling methods was used for the research. The stratified sampling is conducted by considering the factors which affect the examined populations' inspected features. With the stratified sampling, the population's parameters are better estimated because it is possible to select them from all stratum. (Çiçek and at all. 1996).

Farm Size Group (ha)	Sample enterprises (unit)
1-20	13
21-40	29
41- +	13
Total	55

Table 1. The distribution of sample enterprises

Research Results And Discussion

Freehold Land and land use situation

During the research that was carried out in the enterprises, the case of land use, freehold land, leasehold and share land's width were considered. Enterprises' ownership in land and their usage can be seen in table 2.

Farm Size Group (ha)	land		hiring		partnership		Total enterprise area	
	(ha)	ratio %	(ha)	ratio %	area(ha)	ratio %	Avg.land (ha)	ratio %
1-20	14,512	94,61	0,82	5,39	0,00	0,00	15,33	100,00
21-40	25,664	96,62	0,89	3,38	0,00	0,00	26,56	100,00
41- +	52,827	100	0,00	0,00	0,00	0,00	52,82	100,00
Average	31,001	97,08	0,57	2,92	0,00	0,00	31,57	100,00

Table 2. Land use situation in investigated holdings

In the Research field, the size of land is estimated as 31,57 ha. 97.08 % of this is freehold and 2, 92 % is leasehold. In turkey, the percentage of the enterprises which use freehold land is 92,7. But the percentage of the enterprises that use leasehold and share land is 7.3 (Anonym ,1997).

Farm Size Group (ha)	Wheat	Barley	Sugar-beet	bean	sunflower	Other	Total farm area
1-20	6,788	3,500	3,092	3,125	3,688	-	20,194
21-40	9,647	6,615	5,220	4,208	7,034	4,750	37,475
41- +	16,038	10,650	9,521	6,500	11,885	8,125	62,719
Average	10,824	6,922	5,944	4,611	7,536	6,438	42,272
(%)	25,60	16,37	14,06	10,91	17,83	15,23	100,00

Table 3. Plant sowing in investigated holdings (ha, %)

The enterprises product proportion is following as: 25,60 % wheat, 16,37 % barley, 14,06% sugar-beat, 10,91 % dried bean, 17,83 % sunflower and 15,23 % other plants. The proportion of grain (barley, wheat etc.) farming and the proportion of dried bean and sunflower farming is almost equal. This signifies that rotate cultivation system is working successfully in agricultural fields.

Substructure situation in village according to the enterprise groups

When the villages' infrastructures, where the enterprises are situated, are observed, it is determined that 78, 60 % of the enterprises have asphalt-paved road. All of the villages have electricity. Only 24, 31 % of these have health centres, 16, 89 % of these have canalization and 97, 44 % of these have telephone. Infrastructures of the telephone and electricity are completed. This indicates that farmers easily reach the communication sources.

Farm Size Group(ha)	Asphalt road		Electricity		Health organization		Canalization		Home phone	
	exist	not	exist	not	exist	not	exist	not	exist	not
1-20	69,23	30,77	100,00	0,00	7,69	92,31	15,38	84,62	92,31	7,69
21-40	89,66	10,34	100,00	0,00	34,48	62,07	27,59	68,97	100,00	0,00
41- +	76,92	23,08	100,00	0,00	30,77	69,23	7,69	92,31	100,00	0,00
Average	78,60	21,40	100,00	0,00	24,31	74,54	16,89	81,96	97,44	2,56

Table 4. Substructure situation according to the enterprise groups (%)

The situation of machinery equipment possessions according to the enterprise groups

In the research area, when enterprises' usage of the equipment-machine is obtained, it is found that all the enterprises have tractor and plough. enterprises %97,44 Driller, %94,87 Atomizer, %67,37 Cultivator, % 8,84 Combine harvester, % 37,44 Sugar-beet harvester, % 87,44 Manure distributor, %35,10 Rotatiller, %22,55 subsoiler

It can be understood that when the largeness of the enterprise increase, the possession of agricultural equipment also increase but in contrary to this situation we have observed that it can be seen when the largeness of the enterprise increase, possession of the sub-soiler, used for crumbling the hard-pan, begins to decrease.

Farm Size Group(ha)	Driller	Atomizer	Cultivator	Combine harvester	Sugar-beet harvester	Manure distributor	Rotatiller	Subsoiler
1-20	92,31	84,62	76,92	0,00	30,77	76,92	30,77	7,69
21-40	100,00	100,00	48,28	3,45	27,59	93,10	20,69	13,79
41- +	100,00	100,00	76,92	23,08	53,85	92,31	53,85	46,15
Average	97,44	94,87	67,37	8,84	37,40	87,44	35,10	22,55

Table 5. The situation of machinery possessions in investigated holdings (%)

The situation of using the electrical house equipment (household utensil)

The using Tv and Refrigerator according to the average enterprise groups were observed as 100 %. Using the washing machine, hoover, dish washer, tv satellite receiver, bread dough machine were determined as 81,43%, 89,12%, 13,70% 91,69 % 16,89 respectively. The most noticed results is the increasing of usage of electrical equipments depending increasing the enterprise largeness. It shows that the results of high usage of satellite receiver in rural areas put forth the high watching rate of various tv Channels. Nevertheless, it is very noticeable that usage of the Bread Dough machine especially in larger farmer, most of the makes/bakes of their own bread is in the level of 16,89 %.

Farm Size Group(ha)	Washing machine	hoover	dish washer	(TV satellite receiver)	Bread dough machine
1-20	69,23	84,62	7,69	92,31	7,69
21-40	82,76	82,76	10,34	82,76	27,59
41- +	92,31	100,00	23,08	100,00	15,38
Average	81,43	89,12	13,70	91,69	16,89

Table 6. The situation of using the electrical house equipment in investigated holdings (%)

Agricultural issues needed assistance for the farmers according to the enterprise groups

Agricultural issues needed assistance for the farmers according to the enterprise groups are listed as below 66,84% for disorder and pests, 80,02 % for growing, 88,86 % for market data (prices, support amounts, credits), 87,98 % for fertiliser and fertilizing, 7,43 % for environmental protection and other issues. These results show that farmers mostly wonder some issues related to marketing and finance and try to find out support amounts dealing with supporting their enterprises. It is noticeable situation that farmers needed some knowledge concerning with environmental protection.

Farm Size Group(ha)	Disorder and pests	growing	market	Fertilizer and fertilizing	Environmental protection	other
1-20	61,54	76,92	84,62	92,31	0,00	0,00
21-40	62,07	86,21	89,66	79,31	6,90	6,90
41- +	76,92	76,92	92,31	92,31	15,38	15,38
Average	66,84	80,02	88,86	87,98	7,43	7,43

Table 7. Agricultural issues needed by assistance in investigated holdings (%)

Information centers reached by the farmers according to the enterprise groups

Information centers reached by the farmers according to the average enterprise groups have been come out as follow 81,43 % from other farmers, 95,14 % from Sub-province agricultural Directorate , 24,58 % from agricultural, 8,58 % from published journals, 12,29 % from internet, 9,99 % from universities, 23,96 % from research institutes, 80,02 from vendors and 7,43 % from other knowledge sources. Sub-province agricultural Directorate, others farmers and agricultural pesticide vendors have come forward as the mostly made connections centers.

Farm Size Group(ha)	From other farmers	Sub-province agricultural Directorate	Agricultural engineer	Published journal	Internet	Univercity	Research institute	Vendor	Other
1-20	76,92	92,31	23,08	0,00	7,69	7,69	15,38	69,23	0,00
21-40	82,76		27,59	10,34	13,79	6,90	10,34	86,21	6,90
41- +	84,62	100,00	23,08	15,38	15,38	15,38	46,15	84,62	15,38
Average	81,43	95,14	24,58	8,58	12,29	9,99	23,96	80,02	7,43

Table 8. Information centers reached by the farmers (%)

The Consideration of how accurately the agricultural practices have been done

It is determined that 1,15 % of Producers in the enterprise areas carried out accurate activities everytime , 27,4 % of them accepted the correctness of practices, 62,68 % accepted some inaccuracies, 8,84 of them accepted that that made some mistakes in many times. in total more than 70 % farmers admitted that they makde some mistakes in some acricultural practices.

Farm Size Group(ha)	Accurate everytime	Accurate	Sometime inaccurate	Many times, inaccurate agricultural practices are common
1-20	0,00	38,46	61,54	0,00
21-40	3,45	27,59	65,52	3,45
41- +	0,00	15,38	61,54	23,08
Average	1,15	27,14	62,86	8,84

Table 9. The Consideration of how accurately the agricultural practices have been done(%)

The situation of usage mass communication means according to the enterprise groups

When researching the situation of usage mass communication means according to the enterprise groups in agricultural issues, it was determined that whole farmers utilized from Tv as mass communication means . Utilization ratio is 6,28 % from the Radio, 1,15 % from VCD, 16,89 % usage internet, 7,43 % from home phone, 40,58 % from newspaper, 18,30 % from magazine and 41,1 % from leaflets.

Farm Size Group(ha)	Tv	Radio	VCD	internet	Home phone	Newspaper	Journal	Leaflet
1-20	100,00	7,69	0,00	7,69	0,00	38,46	0	30,76
21-40	100,00	3,45	3,45	27,59	6,90	44,83	24,14	31,03
41- +	100,00	7,69	0,00	15,38	15,38	38,46	30,77	61,54
Average	100,00	6,28	1,15	16,89	7,43	40,58	18,30	41,11

Table 10. Utilizing of Mass-Media implementation in investigated holdings (%)

The State Of Attending The Group Agricultural Knowledge Connection Supplies According To Groups Of Enterprises

According to the means of enterprises, the farmers have attended as the sharing place of agricultural knowledge to farmer meetings at a rate of %73,12, panels at %22,02, conference at %14,59 and seminars at %7,16.

Farm Size Group(ha)	Farmer meetings	Panel	Conference	Seminar
1-20	84,62	7,69	15,38	0,00
21-40	65,52	27,59	20,69	13,79
41- +	69,23	30,77	7,69	7,69
Average	73,12	22,02	14,59	7,16

Table 11. The situation of exchangeable agricultural knowledge (%)

The State Of Attending Individual Agricultural Knowledge Connection Supplies According To Groups Of Enterprises

In the research field, the farmers gets the agricultural news and knowledge from coffee houses at %86,56, other farmers when at the field at %79,13, village rooms at %44,56, stock market at %54,55, market at %39,17 and from the fairs at %39,17.

Farm Size Group(ha)	In cafes	On farm	Village meeting room	Stock market	On market	Fair
1-20	84,62	84,62	30,77	38,46	23,08	7,69
21-40	82,76	75,86	41,38	48,28	24,14	48,28
41- +	92,31	76,92	61,54	76,92	30,77	61,54
Average	86,56	79,13	44,56	54,55	25,99	39,17

Table 12. The situation of sources of individual exchanging agricultural knowledge(%)

The State Of Getting Out Of The Village According To The Enterprise Groups

When examined the state of getting out of the village according to the enterprise groups, it is stated that %55,97 of them everyday, %41,73 once a week and %2,30 once in a two week gets out of the village. Advances in transport opportunities and getting cheaper in rural areas and diversifying of needs increased getting out of village and according to these %97,70 of the farmers at least once a week feels to get out of the village. As a result, accepting the innovations level becomes high by the farmers who have strong connections with city centers.

Farm Size Group(ha)	Everyday	One at a week	One in every two weeks
1-20	61,54	38,46	0,00
21-40	44,83	48,28	6,90
41- +	61,54	38,46	0,00
Average	55,96817	41,73298	2,30

Table 13. the situation of frequency of visiting interval to the city (%)

The State Of Mobile Communication Level According To The Enterprise Groups

According to the enterprise groups the state of possessing the mobile phone is at a rate of % 98,85. The rate of farmers who constantly have mobile phones nearby is %96,26. The rate of farmers that agricultural knowledge comes to whose mobile phones is %14,85 and who doesn't come is %85,15. The rate of farmers who want to get agricultural knowledges by their phones is % 95,14. The farmers have their phones at the average of 8,4 years. The farmers have paid 36,23 TL at average for monthly speech fee. It is important to evaluate this condition and using the form of SMS for farmers to reach knowledge.

Farm Size Group (ha)	Possession of mobile phone		Situation of holding the mobile phone		Coming of agricultural knowledge from mobile phone		Do yo want to get agricultural infor matin from phone ?		Haw long have you had mobile phone? (year)	What is the monthly cost? (\$)
	yes	no	yes	no	yes	no	yes	no		
1-20	100,00	0,00	92,31	7,69	7,69	92,31	100,00	0,00	8,15	20,5
21-40	96,55	3,45	96,55	0,00	13,79	82,76	93,10	6,90	8,28	23,4
41- +	100,00	0,00	100,00	0,00	23,08	76,92	92,31	7,69	8,77	26,05
Average	98,85	1,15	96,29	2,56	14,85	85,15	95,14	4,86	8,40	23,3

Table 14. The situation of level in mobile communication in investigated holdings (%)

Result and Suggestions

There are 3.076.650 enterprises in our country and 4.2 % (130000) of those are in Konya. The following facts prevent farmers who are disbanded in wide area from gaining accurate, solid information at the correct time; Konya province has a broad area and it is consist of 31 districts. Our farmers concerns about certain issues such as; transferring the agricultural technology to the farmers in research fields, announcing the innovations, strengthening the farmers against the market and transferring the information about agricultural support and credits. In 2007, agricultural supports was tried to be announced under 102 headings by only the Ministry of Agriculture (<http://www.tugem.gov.tr>). Furthermore, there are new headings that need to be announced to farmers. These are the followings; keeping records during the process of European Union, agricultural support works based on these records, changes which are made based on figures and practises each years. In the past 3 years including 2005 and 2007, 7 laws, 23 ministers council decisions, 16 communiqués, 13 circulars and 33 legislations were published by the Ministry of agriculture with the intention of regulating the agricultural production (<http://www.tugem.gov.tr>).

The farmers are having difficulties reaching the information and using the communication sources. The level of following up organs of the printed publication is low and the internet use began to increase. Despite the fact that TV is the best-known mass communication method, only one channel is consist of agricultural programs amongst the 373 national TV channels which are revealed in the daily TV listing and the local TV channels programmes do not have the sustainability. The existing communication sources do not contain such subjects as is valuable for the farmers. Furthermore, the farmers are not interested in agricultural subjects which organs of the printed publication contain. Ministry of agriculture is trying to apply all sort of visual and printed publications so as to reach banks, the farmer organisations and the private sector farmers. To gain the results of these efforts, modern communication methods need to be utilized. Mobile communications that present us the innovations in different sectors has to be included in agricultural extension works.

In the case of mobile communication, one way information flow which is in SMS format requires to be two way. With the information transfer, sound files also need to be enabled to be sent and received. ARGE works should be conducted so as to boost and generalize the effectiveness of mobile communication in order to produce communication equipments at the prototype level. Agricultural publications models which are suitable for the mobile communications methods used by farmers should be generated.

Farmers registration system that is implemented by Ministry of Agricultural, agricultural business accounting data networks and the software sub-structure of all sort of farmer organisations have to be suitable for

the mobile communications.

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