



## Assessment of Scope and Implementation of Agricultural Extension Work in Marrah Mountains, Darfur Region

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### ABSTRACT

This study was mainly intended to; (i) stand on the extension workers scope of extension services in Darfur region, (ii) assess the implementation of these scopes by the extension workers and (iii) develop some recommendations that can help in improving the extension work status. The study was based on primary data collected, through social survey method by means of questionnaires; however 215 extension workers were responded, representing 91.5% of the region extension workers. The data was analyzed, using computerized statistical package for social sciences (SPSS). Simple descriptive statistic (frequency and percentage distributions) was used to describe the different variables of the study. The results revealed a great conception and convince of extension workers in providing farmers with educational and economical services and other services covered by the study. The study concluded that the comprehension and convince of the extension workers scopes were great, but the implementation was not coping with. The article recommends; the necessity of providing the extension workers with the required facilities and the authorities to give more attention for the on job training for these cadres.

### Introduction:

Extension services are the different programs/projects activities and recommendations be made available by extension service to their clientele through extension education process. Agricultural extension services, in broad term is used to mean the provision of timely information, ease farmers access to farming inputs and credit facilities and providing education services to farmers. Unfortunately many people have been limiting agricultural extension services to the concept of helping the farmers' access to their farming inputs. On the contrary for any agricultural project or program to succeed, agricultural extensionists must be fully involved, in all the steps from

planning to execution of the extension program (Anaeto, 2003). He added, modern agricultural extension work in Nigeria today, covers a wide spectrum of services, which include; improvement in production, marketing, storage, processing of; plant products, animal products, fish farming and agro-forestry. More than that encompasses man-power development, home economics/women in agriculture activities and livestock management, with no less heed to human resources/development, administration /management, youth development programs etc. It is argued that Extension remains weak when it stands alone, but gains the powerful when intervened with price incentives activities, credit supply, rural development and the relevant. This comprehension significantly improves the already established relationship between Research-Extension-Farmer Linkage and forward promoting the Linkages (REFILS). However some thought that the truth remains, even this linkage has not really improved the outlook of extension service (Contado, 1997). Also Anandajayasekeram et al. (2008) observed that an active agriculture extension system will need to provide abroad range of services (advisory, technology transfer, training and information) on a wide variety of actions (agriculture, marketing and social organization) needed by rural people so that they can better manage their agricultural systems and livelihoods. The agricultural extension workers in Darfur States are responsible for transferring the agricultural innovations and providing services to the farmers to increase their agricultural production which characterized by low productivity; may be due to low effectiveness of agricultural extension work. This study focus on the scopes of agricultural extension work as one of the factors affecting the prospects of extension work in the future. Specifically the study was aimed to; (i) stand on the extension workers scope of extension services in Darfur region, (ii) assess the implementation of these scopes by the extension workers and (iii) develop some recommendations that can help in improving the extension work status.

#### **Methodology:**

The study: was carried out in Darfur region of Sudan which consists of an immense rolling plain. It has an area of approximately 170,000 square miles (440,000 square km). The volcanic highlands of the Marrah mountains dominate the central part of this plain. The Marrah Mountains have an average elevation of 7,200 feet (2,200 meters), with the highest peak, Mount Marrah, rising to 10,131 feet (3,088 meters). Soils, which are generally stony or sandy, support some seasonal grass and low thorny shrubs with tropical vegetation. The Marrah highlands receive heavier rainfall than other parts of Darfur, and a number of large wadis (seasonal watercourses) rise in the mountains and flow southward across the plains heavy rainfall in the Marrah highlands permits the intensive cultivation of cereals and fruits. Crops grown at other locations in the southern part of Darfur include sorghum, millet, sesame, peanuts (groundnuts), other root crops, and vegetables. In the arid north, camels, sheep, and goats are raised (Encyclopedia Britannica, 2012). The study was based on social survey method to collect the primary data. Total coverage sampling method was used to collect data from all the extension workers in the region; however 215 were responded, representing 91.5% of the extension workers. The data to be collected from the respondents, through face to face interviews, was analyzed with the aid of computerized statistical package for social sciences (SPSS). Simple descriptive statistic (frequency distributions) was used to describe the different variables of the study.

#### **Results and Discussion:**

The results of the study (table 1) show that the great majority (92-93%) of the extension workers are convinced with the importance of the provision of some extension services to the farmers.

They even attested that this should be more than the current status for the services like educational services, natural resources management activities, home economic activities to farmers' families and soil erosion control services. Sinkaiye, (2005) stated that, agricultural extension brings about changes through education and communication in farmers attitude, knowledge and skills. Even for all the other services, not obviously less than that, about 86-89% of the respondents confirm this importance, except for the provision of marketing extension services, about 80% of the respondents thought this importance. Though the extension agents are convinced with the importance of transferring all the extension services to their clientele; the episode remains how to materialize that in their work on the ground? It is argued that despite the glamorous conceptualization and convince of the importance of extension services to most if not all the stakeholders, the actual expression of this comprehension in the real life is extremely lagging behind. In line with this argument, despite the convince of the extension agents with importance of conveying the extension services to the farmers, the results in table 2, revealed that small proportion (as minimum as 7% and up to 38% at maximum) of the respondents always do that for marketing and educational services respectively, or a portion in between regarding the other services. The percentages of those who convey the service, sometimes, range between 29-45%. Some others, rarely or didn't perform this role at all.

These results indicate the weak performance of the extension workers in their provision of the various extension services to the farmers. This situation may be due to insufficient necessary facilities made available to the workers, or inadequate job incentives as claimed by many of the respondents, little or no on job training. In response to describe their role in linking the farmers to the sources of farming inputs, approximately 16% of the respondents motioned that they always do. About 43.7% claimed, sometimes, provide the messages and a considerable proportion (40.4%) rarely or not all do so in table 3. Again the results reflect the weak performance of the extension workers regarding the provision extension services to the farmers. Rivera, (1997) stated that extension work is a dynamic process i.e. the extension agent should be active to build the capacities and raise the knowhow of his clientele in all dimensions. He argued that one of the main principle of extension is that the extension agent is the important link between research centers and the producers, this require and active caliber to create strong relationships with sources of information and scientific problem solving institutions like the research centers on one side and the farmers on the other side. Chaudhry et al. (2006) stated that development and implementation of sustainable agricultural practices require active involvement of research centers and private sector organizations and agricultural organizations and agricultural extension management in extension methods for creating awareness among the farmers about improved agricultural technologies. Unfortunately astonishing results (table 4) revealed that more than third (about 36%) of the extension workers confessed their weak or no relationships with the research centers and the farmers, and only a quarter (25.6%) of them their relationship is very strong. Again the respondents raise the claim of insufficient facilities to reach and continuously be in contact with these centers and to have adequate outreach to the farmers; especially the farmers in the region are distributed over vast enshrouded areas. Perhaps also, internal and external on job training is rather weak or completely not available. The results in total reflect the high level of the agents convince of the importance of the extension services, this of course requires planning an evaluation program design to promote the extension services. Despite this argument, the results (table 5) show that who always have program planning and evaluation in their work, represent only 19% of the respondents. Half

(50.2%) the respondents rarely or not at all performs this activities in their extension work. One of the important principles of extension work is planning and evaluation, and incorporating the target group in both aspects. The episode of that is to stand on the weak points to be corrected to fulfill the objectives intended by the clientele (Chaudhry et al. 2006).

Table (1) Frequency distribution and percentage of respondents according to their views about importance of provision of certain extension services to farmers

Type of service	Frequency (percent)			Total
	Yes Important	Not Important	No response	
Providing more educational services to farmers.	202 (94.0)	8 (3.7)	5 (2.3)	215 (100)
Enforcement the link between farmers and sources of farming input	193 (89.8)	15 (7.0)	7 (3.2)	215 (100)
Provision of more timely information.	180 (83.7)	25 (11.6)	10 (4.7)	215 (100)
Provision of more marketing services to farmers	172 (80.0)	17 (7.9)	26 (12.1)	215 (100)
Provision of more storage services to farmers	192 (89.3)	8 (3.7)	15 (7.0)	215 (100)
Strengthen the link between research-extension-farmers	191 (88.9)	5 (2.3)	19 (8.8)	215 (100)
Implementation of more man- power development programs	191 (88.8)	6 (2.8)	18 (8.4)	215 (100)
Provision of more natural resources management activities.	201 (93.5)	4 (1.9)	10 (4.7)	215 (100)
Provision of more farm mechanization services to farmers.	200 (93.0)	3 (1.4)	12 (5.6)	215 (100)
Provision of more soil erosion control services.	198 (92.1)	4 (1.9)	13 (6.0)	215 (100)
Implementation of more home economic activities to farmers families	198 (92.1)	5 (2.3)	12 (5.6)	215 (100)
Provision of more irrigation services to farmers.	185 (86.0)	16 (7.4)	14 (6.5)	215 (100)

Source: Field survey

Table (2) Frequency distribution and percentage of extension workers according to the frequency of their provision of extension services to farmers

Service	Frequency (percent)					Total
	Always	Some-times	Rarely	Not Provided	No Response	
Timely information	76 (35.5)	95 (44.2)	27 (12.6)	14 (6.5)	3 (1.4)	215 (100)
Storage services	43 (20.0)	58 (27.0)	40 (18.6)	61 (8.4)	13 (6.0)	215 (100)
Educational services	83 (38.6)	97 (45.1)	15 (7.0)	17 (7.9)	3 (1.4)	215 (100)

Marketing services	15 (7.0)	63 (29.3)	48 (22.3)	78 (36.3)	11 (5.1)	215 (100)
Farm mechanization	57 (26.5)	68 (31.6)	42 (19.5)	40 (18.6)	8 (3.7)	215 (100)
Man-power development program	31 (14.4)	79 (36.7)	39 (18.1)	51 (23.7)	15 (7.0)	215 (100)
Soil erosion control	52 (24.2)	73 (34.0)	34 (15.8)	44 (20.5)	12 (5.6)	215 (100)
Natural resources management activities	63 (29.3)	69 (32.1)	36 (16.7)	35 (16.3)	12 (5.6)	215 (100)
Irrigation extension	37 (17.2)	63 (29.3)	38 (17.7)	69 (32.1)	8 (3.7)	215 (100)
Home economic activities to farmers families	28 (13.0)	62 (28.8)	50 (23.3)	68 (31.6)	7 (3.3)	215 (100)

Source: Field survey

Table (3) Frequency distribution and percentage of extension workers according to their linking farmers with sources of farming inputs

Frequency of linking	Frequency	Percent
Always	34	15.8
Some times	94	43.7
Rarely	40	18.6
None	47	21.8
Total	215	100.0

Source: Field survey

Table (4) Frequency distribution and percentage of respondents according to their relationship with research centers and farmers

Levels of relationship	Frequency	Percent
Very strong	55	25.6
Strong	83	38.6
Weak	48	22.3
No relationship	29	13.5
Total	215	100.0

Source: Field survey

Table (5) Frequency distribution and percentage of respondents according to their implementation of program planning and evaluation in their work

Levels of implementation	Frequency	Percent
Always	41	19.1
Some times	66	30.7
Rarely	41	19.1
None	67	31.2
Total	215	100.0

Source: Field survey

### Conclusion:

The paper concluded that the extension workers are of wide scope and high level of convince of the importance of extension services in the matter of agriculture and rural development, however the implementation of these concepts and convince in realty is rather weak. The study recommends that the authorized bodies to; provide adequate facilities for the extension workers

to perform their work efficiently, to take seriously the matter of on job training for the extension workers, to give more focus on educational activities for them to raise their knowhow in conveying the message, especially of the marketing extension services to the farmers.

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