## THE IMPACT OF EXTENSION SERVICES ON THE PERFORMANCE OF THE PRODUCTIVE FAMILIES PROJECTS OF POULTRY IN THE GEZIRA STATE (SUDAN)

By

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**Abstract:** Astudy was done to evaluate the impact of extension on the performance of the productive families of poultry in the Gezira State. It was found that the productive fa milies were centered in and around Wad Medani town. About 70% of them were directed by mature males and 90% of them were highly educated. About 75% of the productive families were under advice and supervision of the extension veterinary services. They showed optimum performance in all aspects of the recommended technical management practices of poultry production. It was recommended that extension clubs or groups should be initiated and sustained to receive extension, secure loans and cooperate in production and marketing for the productive families in the Gezira State.

### **INTRODUCTION**

Poultry Production has become one of the biggest agricultural industries in Sudan. Elsheikh (1984) ,give types of poultry production in Sudan in five major categorie were:-

- 1.Governmental farms, county farms and Animal Production Adminis tration farms.
- 2.Large-scale productive farms having large capitals and they were centered in or around Khartoum State .
- 3.Medium- size poultry farms also allocated in and around Khartoum State.
- 4.Small farms having a capacity of 1000-5000 layer birds scattered all around the country regions.

5. The productive families farms, no emphasis were given to it although it has a great importance to the families. (The productive family farms were the farms owned and managed by the producer and his family without any other foreign labor help ).

The productive families (having other names as House-Hold and Backyard)in the Gezira State are mainly centered in and around

Wad Medani area. The productive families in the Gezira State were technically advised by the extension unit of the Animal Resources Administration. The Administration sells chicks ,pullets and chickens to the productive families . The Administration also provided with the birds fact sheets and pamphlets oftechnical know-how practices of poultry production to the productive families .This study carried to measure the impact level of extension on the productive families in the Gezira State.

## **MATERIALS AND METHODS**

Aquestionnaire of 28 questions had been distributed in July –August 1999, About 20 families were randomly selected from 89 productive families only in the Gezira Province. Due to the lack and weakness of resources and financing of the extension unit in the Gezira Province the program of the productive families only allocated in and arround Wad Medani area . The stratified random sampling procedure was used to select the 20 productive families . The area covered was Wad Medani town and 12 km North and South Wad Medani town and 10 km East of it and nothing in the West (because there was no productive families under the supervision of the extension unit). The Research Methodology (Kumar ,1999) was referred to in constructing the design of this study.

The collected raw questionnaire data, which contains the carried-on poultry practices, had been processed, tabulated and segmented to personal characteristics of the productive families and technical recommendaions implemented by them. The tables had been fed to the computer and the Statistical Package of Social Sciences (SPSS) Program had been applied.

## **RESULTS AND DISCUSION**

 Table 1- Distribution of the productive families' projects beneficiaries by personal characteristiscs:

Character	Frequency	Percentage		
1- Sex of the producer :				
Females	6	30		
Males	14	70		
2- producers' Age:				
>20-30 years old	2	10		
31-40 years old	6	30		
41-50 years old	4	20		
51-<60 years old	8	40		
3- Educational levels:				
University (graduates)	8	40		
Secondary school certificates	5	25		
Intermediate schools	5	25		
Below that	2	10		
4- Marital status:				
Married	10	55		
Unmarried	3	15		
Divorced women	5	20		
Widows	2	10		
5- Financing sources:				
Self dependent	5	25		
Bank loans	15	75		
6- Producers' family size:				
2-5 persons	6	30		
6-10 persons	13	65		
more than 10 persons	1	5		
7-revious experience:				
Have experience	14	70		
Don't have experience	6	30		

Technical practice	Frequenc y	Percentage	Nature of technical practice
1-Production types:			
Layers only	12	60%	Recommended
Broilers only	0.0	0%	-
Pigeons beside layers	5	25	Not recommended
Waterfowls and rabbits beside layers(two typs)	3	15	Possible
2-Birds age preferred:			
Day-old chicks	10	50	Recommended
One month-old chicks	6	30	Recommended
Pullets (3-4 months old)	4	20	Possible
3-Losses causes:			
Mortality	11	55	Too high
Sold in the market	3	15	-
Stolen	6	30	-
4-Direction of cages:			
North-South	3	15	Possible
East-West	17	85	Recommended
Other directions	0.0	0%	-
5-Cage materials:		<b></b>	
Bricks	0.0	0%	-
Steel and wirenets	3	15	possible
Bricks, steel and wire- nets	17	85	possible
6-6-Cage roofs:	10	0.5	D 11
Truss type (zinc)	19	95	Recommended
Local weeds (haseer) Asbestos	1 0.0	5 0%	Not Recommended
7-7-Floor litter types:	0.0	070	-
Saw-dust	0.0	0%	Recommended
Sand	20	100.0	possible
Saw-dust and sand	0.0	0%	Possible
1- 8-Breeds used:	0.0	0,0	1 0001010
Local breeds	0.0	0%	-
Foreign breeds	20	100.0	Recommended
Fayomi	0.0	0%	-
9-Floor spaces:(area/bird)			
Suitable	18	90	Recommended
Not suitable	2	10	Not Recommended
1 10- Cage cleaning program			
2 Daily	17	85	Recommended
3 Weekly	3	15	Not Recommened
4 11-Litter removal and disinfecting:			_
5 Daily	0.0	0%	Possible
6 Weekly	2	10	Not Recommended
7 Monthly	11	55	Recommended
8 Sometimes	7	35	Possible
9 12-Lighting period:	17	05	Dagammandad
Efficient Not efficient	17 3	85 15	Recommended Not Recommended
	5	15	
10 13- Perches	17	85	Recommended
	17 3	85 15	Recommended Not Recommended

# **Table 2-** Distribution of the productive families' projects beneficiaries by implementing technical recommendations:

14 Normal (local used and suitable )	20	100	Recommended
15 Automatic	0	0	-
2- 15-Extension /Vet. Services:			
Accessible	7	35	Recommended
Not accessible	8	40	Not Recommended
Sometimes accessible	5	25	Possible
16-Productivity ranges:			
50-60%	4	20	Acceptable
61-70%	8	40	Acceptable
More than 70%	8	40	Recommended
17- Cost of Production:			
It covers and benefician	9	45	Recommended
It does not cover	3	15	Not Recommended
Sometimes covers	8	40	Possible
3- 18-Problems faced:			
Absence of extension service and lack of	7	35	
experience	5	25	-
Prevailing diseases	2	10	-
Prices of feeds	6	30	-
Other factors	0	30	-
19-Neighboring cages:			
O Other cages found near No cages nocegs	11	55	Recommended
around	9	45	Possible
20-Observation/recording:			
bs bservation only	19	95	Possible
Records notes	1	5	Recommended

The Table 2(from 1-20question) indicated that the productive families of poultry in the Gezira State carried out their production practices according to the technical recommendations. The only blame that they had been centered in urban areas in the Gezira State mainly around Wad Medani area.

Bessei (1990), reported that even when specialized poultry services were well organized and working effectively, the impact on large number of rural poultry keepers remains low because only a few specialists were available and a substantial increase in the number of poultry extension staff were not forth- coming. It was, therefore, necessary that links be established between the poultry specialist and other established institutions, such as general agricultural extension services, veterinary services, agricultural colleges and the services of non- governmental organizations. He also mentioned that, the extension service not only provided technical know-how but also acted as a supplier of feed, birds and veterinary products. It also serves as egg marketing organization. In many cases, those supplies should be provided on credit and/ or at subsidized prices.

Other rural areas of the Gezira State can achieve that type of production to improve their way of living. It can be done and sustained if astrong linkages between the authorities and policy-makers simultaneously with research institutions is built. If such linkages are established or improved it will help to raise the awareness of the rural people to consume poultry products and ultimately increase the rural welfare (Sanders (1966) and krostitz (1987))

The productive families of poultry in the Gezira State is a successful project and it should be expanded all over the Gezira State; precisely the Gezira Scheme, due to the availability of production inputs. This may lead to the encouragement of consumption habits of the Gezira scheme rural. Also, extension clubs or groups should be initiated and sustained to receive extension, secure loans, cooperate in production and marketing.

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## الملخص العربي

## أثر الخدمات الأرشادية على أداء مشروعات دواجن الأسر المنتجة في ولاية الثر الخدمات الأرشادية في ولاية

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اجريت در اسة لتقييم اثر الخدمات الإرشادية على أداء مشروعات دواجن الأسر المنتجة بو لاية الجزيرة.أتضح من الدراسة أن الأسر المنتجة فى مجال الدواجن تتحصر فى مدينة ودمدنى وما جاورها ووجد أن ٧٠% من الأسر المنتجة يديرها رجال ناضجون وأن حوالى ٩٠%من الذين يديرونها نالوا حظا وافرا من التعليم. حوالى ٧٥%من هذه الأسر تشرف عليها وحدة خدمات الارشاد البيطرى. من الدراسة اتضح أن هذه الأسر التى تقدم لها الخدمات الارشادية أظهرت أداء مثالياً فى كل مجالات الادارة والاشر اف والانتاج الداجني وتدعم بالمعلومات الارشادية. الدراسة الى التوصية بانشاء أندية أو مجموعات ارشادية وتدعم بالمعلومات الارشادية وتسهل لها القروض وتتعاون فيما بينها بالارشاد والتسويق لمنتجات تلك الأسر المنتجة بولاية الجزيرة.