



EFFECTS OF SOCIO- ECONOMIC
FACTORS ON ADOPTION OF NEW
PRODUCTION TECHNOLOGIES BY FISH
FARMERS IN KOGI AND NIGER STATES,
NIGERIA.




INTRODUCTION


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INTRODUCTION


- ▶ Fish is a very important source of food for man.
 - ▶ It contributes about 40 % of the animal protein consumed in Nigeria (Adekunle and Akinyemi, 1994).
 - ▶ aquaculture production in Africa is still insignificant at the global level and accounts for about 0.9 % (404, 571 tonnes) (FAO, 2002).
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INTRODUCTION

- ▶ In Nigeria, accounts for about 20 % of the domestic need.
 - ▶ about 80, 000 metric tonnes of fish per annum
 - ▶ far less than national demand of 1.5 million metric
 - ▶ Other sources are artisanal, industrial and importation (\$241 million per annum)
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- ▶ Need for the proper development of aquaculture
 - ▶ Technology – the type and physical potential for fish farming: the physical and biological factors that can be modified through technology development.
 - ▶ The human element is characterized by exogenous (community structures, external institutions etc.) and endogenous factors, which can be controlled by the farm household.
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INTRODUCTION

- ▶ The fish farmer ultimately decides on whether or not to adopt technologies through their perception
 - ▶ low level of the technology in Nigeria
 - ▶ backdrop that this study, was set out evaluate the effects of socio – economic factors on the adoption of improved production technologies by fish farmers in Kogi and Niger states, Nigeria.
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METHODOLOGY

Study Area

- ❑ The study was conducted in Kogi and Niger states, Nigeria.

Population of the Study

- ❑ The population of the study is made up of all registered fish farmers in Kogi and Niger states.

Sampling Techniques

- ❑ Purposive and random sampling techniques were used to select the fish farmers

Sample Size

- ❑ A total of 180 fish farmers were used for the study (Table 1 and 2)

Data Collection

- ❑ Primary data were collected using interview schedule.

Reliability Test

- ❑ Cronbach's Alpha test was used.



KEY

■	Study Area
■	FCT



Table 1: Selection of the Fish Farmers from five (5) Local Government Areas of Niger State

Local Government Area	Number of Fish Farmers	Number of Fish Farmers Sampled
Minna	58	35
Bida	35	21
Suleja	30	18
Kotangora	25	15
Gurara	18	11
Total	166	100

Source: Niger State Ministry of Livestock and Fisheries Development ,2011

Table 2: Selection of the Fish Farmers from five (5) Local Government Areas of Kogi State.

Local Government Area	Number of Fish Farmers	Number of Fish Farmers Sampled
Lokoja	46	27
Idah	32	19
Ajaokuta	25	15
Kabba/Bunu	20	12
Kotonkarfe	12	7
Total	135	80

Source: Kogi state Agricultural Development Project, 2011

Table 3: Socio- Economic Characteristics of Sampled Fish Farmers

Variables	Kogi State (n=80)		Niger State (n = 100)		Total (n= 180)	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Age (years)		1.3				
Below 21	1	7.5	5	5.0	6	3.3
21 - 30	6	17.5	6	6.0	12	6.7
31 - 40	14	60.0	12	12.0	26	14.5
41 - 50	48	13.7	57	57.0	105	58.3
Above 50	11	100.	20	20.0	31	17.2
Total	80	0	100	100.0	180	100.0
Sex		90.0				
Male	72	10.0	88	88.0	160	88.9
Female	8	100.	12	12.0	20	11.1
Total	80	0	100	100.0	180	100.0

Source: Field Survey 2012

Table 3 Cont'd: Socio- Economic Characteristics of Sampled Fish Farmers

Variables	Kogi State (n=80)		Niger State (n = 100)		Total (n= 180)	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Marital Status						
Single	6	7.5	6	6.0	12	6.7
Married	74	92.5	91	91.0	165	91.7
Divorced/Separated	–	–	3	3.0	3	1.6
Total	80	100	100	100.0	180	100.0
Level of Education						
No form of Education					1	0.5
Quranic/Adult Education	–	–	1	1.0	4	2.3
Primary	9	11.3	9	9.0	137	76.1
Secondary	61	76.2	76	76.0	20	11.1
Tertiary	10	12.5	10	10.0	180	100.0
Total	80	100.0	100	100.0		

Source: Field Survey 2012

Table 3 Cont'd: Socio- Economic Characteristics of Sampled Fish Farmers

Variables	Kogi State (n=80)		Niger State (n = 100)		Total (n= 180)	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Household Size						
< 6	25	31.3	28	28.0	53	29.4
6 – 10	48	60.0	60	60.0	108	60.0
11 – 15	7	8.7	7	7.0	14	7.8
16 and above	-	-	5	5.0	5	2.8
Total	80	100.0	100	100.0	180	100.0
Fish Farming(years)						
< 6	36	45.0	49	49.0	85	47.3
6 – 10	38	47.5	40	40.0	78	43.3
11 – 15	6	7.5	9	9.0	15	8.3
16 and above	-	-	2	2.0	2	1.1
Total	80	100.0	100	100.0	180	100.0
Major Occupation						
Fish Farming	65	81.3	85	85.0	150	83.3
Civil Servant	12	15.0	10	10.0	22	12.2
Trading	3	3.7	5	5.0	8	4.5
Total	80	100.0	100	100.0	180	100.0

Source: Field Survey 2011

Table 4: Fish Farmers' Perception of the Effectiveness of Pond Construction Technologies in Kogi and Niger States

Pond Type	Not Effective	Effective	Very Effective	Sum	Mean	Overall Perception
Earthen	25	67	88	423	2.35	Effective
Concrete	14	62	104	458	2.54	Effective
Plastic/Fibre	121	39	20	259	1.44	Not Effective

Cut Off Mean = 2.0

Source: Field Survey, 2012.

Table 5: Fish Farmers Perception of the Seriousness of the Constraints Faced in Kogi and Niger States

Constraints	NS	SS	S	VS	Sum	Mean	Overall Perception	Rank
Insufficient Market	75	80	14	11	321	1.78	Not Serious	6 th
Inadequate transportation	55	70	34	21	381	2.12	Not Serious	3 rd
Inadequate Credit	4	4	52	120	732	4.06	Serious	1 st
Availability of Fingerlings	77	63	12	17	307	1.71	Not Serious	8 th
Insufficient Land	83	61	19	17	330	1.83	Not Serious	5 th
Insufficient Water	110	44	3	13	259	1.44	Not Serious	10 th
High Cost of Input	4	9	44	123	646	3.59	Serious	2 nd
Problem of predators	100	47	13	20	313	1.74	Not Serious	7 th
Disease problem	110	36	11	23	307	1.71	Not Serious	8 th
Mortality rate	105	35	21	19	356	1.98	Not Serious	4 th

Cut Off Mean = 2.5


Source: Field Survey, 2012

CONCLUSION

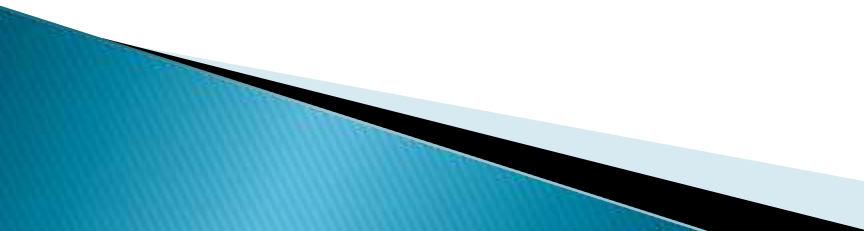
Based on the findings of the study, the following conclusions can be reached:

- ❑ Fish farmers in the study area are within the productive agricultural age.
- ❑ Majority of the fish farmers are educated hence, they are likely to adopt improved technologies with little persuasion.

CONCLUSION CONT'D

- ❑ Capital, feed, pond size, fingerlings and adoption have a significant effect on the output of fish farmers.
 - ❑ Inadequate credit facilities and high cost of feed are major constraints to fish farmers in the study area.
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RECOMMENDATIONS

- ▶ Education both formal and informal should be encouraged among the fish farmers in the study area.
 - ▶ Provision of adequate credit facilities by stakeholders to enable the fish farmers adopt and improve on their fish farming activities should be encouraged.
 - ▶ Alternative source of feed that is relatively cheaper but maintains the same quality should be made available to the farmers so as to reduce the cost of production as well as increase their productivity and profitability.
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THANK YOU FOR
LISTENING!!!!

