Effects Of Level Of Awareness Of Pig Rearers About Swine Flu On Markets Prices Of Pigs In Mubi Zone, Nigeria

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Abstract: A survey was conducted to assess the level of awareness of pig rearers about swine flu and their immediate reactions about anticipated outbreak of the disease in Mubi region. Two hundred and ten (210) pig keepers were purposely sampled. Questionnaires were used as instrument of data collection. Descriptive statistics and market price analysis revealed that 85.56% of the pig keepers were aware of the outbreak of swine flu in foreign countries, with 14.44% showing ignorance. While majority (80%) of the farmers practiced seasonal confinement of pigs, 16.11% semi-intensive, only about 3.89% were involved in intensive management system. Radio set accounted for the highest (71.11%) effective means of information dissemination in the area. Of the total respondents, 90.56% were not properly advised and enlightened on necessary biosecurity measures to take in case of any outbreak. The comparative market price analysis between grower and fattener pigs before and after the news of swine flu outbreak showed insignificant difference. It was therefore, concluded that the immediate reaction of the farmers about anticipated outbreak had no economic consequences on the pig industry in the area. The study recommends the employment of trained personnel in managing the news of disease outbreak of health economic importance like swine flu in order to curb the anticipated economic losses in the event of occurrence. [Journal of American Science. 2010;6(10):339-342]. (ISSN: 1545-1003).

Key Words: Awareness; Mubi; Nigeria; Pig rearers; Swine flu

1. Introduction

The scare and economic losses caused by avian influenza (Birds flu) in Nigeria has made many livestock farmers to be conscious of any flu or influenza-related diseases. The form and manner in which the news of Birds flu spread made many people to stop poultry production and even the consumption of poultry products (Ja'afar-Furo et al., 2007; Ja'afar-Furo et al., 2008). Here again emerged another form of flu outbreak referred to as Swine flu commonly found in pigs. This disease has become pandemic and drawn global attention because of its zoonotic and deadly nature. It is a contagious infection primarily of the respiratory tract (Encarta, 2008). The disease is caused by a virus which can be transmitted through droplets, coughing or sneezing and contact. The etiology is categorically to the H1N1 virus (SFI. 2009).

Report (Clair, 2009) had it that there are fears that if the virus spread, it could mutate into a second more lethal wave. Swine flu which has become a global threat is gradually spreading to unaffected regions of the world. The outbreak of this disease in a continent like Africa and particularly Nigeria that is already struggling with social and economic problems (FOS, 2004; Kwaghe *et al.*, 2009) will be more of a disaster.

While much work had been done on swine flu, little or no studies have been conducted on level of awareness of pig rearers about the disease and its economic effects in the region. This study therefore, attempted to find out the effect of scare created by the news of outbreak of swine flu in the area, with specific references to pig management systems, level of awareness of the disease outbreak among pig keepers and market price, among others.

Findings from this study will serve as a good source of information about the level of awareness of pig keepers about swine flu in Mubi region. It will also assist in making strategic policies that will equip pig keepers with the necessary information on biosecurity measures and the entire people on how to handle any situation of swine flu outbreak.

2. Materials and Methods

Location of the study Area: the study was conducted in Mubi region of Adamawa State, Nigeria. The area is located within the north-east guinea savannah on longitude 13° and 13° 45' east and latitude 9°30' and 11° north. It has a land area of 4728.77 km² (Adebayo, 2004). The total population of pigs in the area is estimated at 65.7 million (Adebayo and Tukur, 1999).

Sampling technique and data collection: Two hundred and ten (210) pig rearers were purposely sampled (30 respondents from each of the seven local government areas). Structured questionnaires were used as instrument of data collection. One hundred and eighty (180) questionnaires were retrieved.

Data analysis: Data obtained were analyzed using simple descriptive statistics (frequency distribution and percentages) and market price analysis. Data collection lasted for six months (April – September 2009).

3. Results and Discussion

Table 1 shows the level of awareness about swine flu in Mubi zone. Majority (85.56%) of the pig keepers were aware of the outbreak of swine flu in foreign countries, with only 14.44% showing ignorance. The huge awareness level among the respondents could be attributed to the news listening culture cultivated in the rural communities due to the present political dispensation.

 Table 1: Distribution of respondents according to

 level of awareness about swine flu in Mubi zone

Variables	Frequency	Percentage
• Aware of swine flu	154	85.56
• Not aware of swine	26	14.44
flu		
Total	180	100
Source: Field Survey (20	00)	

Source: Field Survey (2009).

Reasons for keeping pigs in Mubi zone are summarized in Table 2. The result revealed that 90% of pig rearers kept pigs as source of income while only 10% were for domestic consumption. This clearly shows that, pig rearing could greatly contribute to employment generation for people whom raising of pigs are considered lawful in the area.

Table 2: Distribution of respondents according toreasons for keeping pigs in Mubi zone

Criterion	Frequency	Percentage
Source of income	162	90.00
• For consumption	18	10.00
 Spiritual purpose 	-	-
 Hobby 	-	-
Total	180	100

Source: Field Survey (2009).

The breed of pigs kept by farmers in the region is shown in Table 3. The result indicated that 88.33% of the farmers reared local breeds while 9.44% kept exotic breeds and 2.22% kept cross-bred breeds. Most subsistence farmers in this area are poor and therefore, cannot afford to purchase exotic breeds and the necessary inputs required to manage same. In addition, they are ill-equipped with improved skills and the appropriate technology of managing these breeds of pigs.

Table 3: Distribution of respondents according totypes of pig breeds reared in Mubi zone

Breeds	Frequency	Percentages
• Local	159	88.33
• Exotic	17	1.44
• Others	4	2.22
Total	180	100
Source: Field St	(2000)	

Source: Field Survey (2009)

The type of pig management systems are presented in Table 4.

Table 4: Distribution of pig rearersaccording to management systems in Mubi zone.

Frequency	Percentage
7	3.89
144	80.00
29	16.11
180	100
	7 144 29

Source: Field Survey (2009).

The result revealed that seasonal confinement is the dominant (80%) system of management. Majority of the farmers in these areas are rain-fed subsistence crop producers. Further, pigs have destructive tendencies towards crops. This factor compelled pig keepers to confine their animals during cropping season (raining season) and allow them to go on free range in the dry season after crops are harvested. The intensive system is least practiced (3.89%). This is because pig rearers in the area are both financially and technically handicapped to intensively manage pigs. The above findings agree with a study (Charse, 2009) which reported that intensive production of pigs involves considerable capital investment in housing and equipment as well as high degree of skills in management.

From the result in Table 5, it could be observed that most (71.11%) of the pig rearers got informed about the swine flu outbreak through the

radio set. The television, internet and newspapers accounted for 15.0%, 10.0% and 3.39%, respectively. Similar finding was documented by Ja'afar-Furo *et al.* (2007) where radio set was the major source of information dissemination among poultry keepers (82.5%) in the State with regards to bird flu outbreak. The immediate reactions of the farmers on hearing the swine flu outbreak are also shown in the Table 5. About 89.44% of the rearers were adamant, 9.44% contacted veterinary personnel for advice, with absolutely few (1.11%) selling-off their stock.

Table 5: Distribution of pig rearers according to source of information on swine flu outbreak in foreign nations and their immediate reactions in Mubi zone Nigeria.

Item	Frequency	Percentage
1. source of		
information		
Radio	128	71.11
 Television 	27	15.00
 Newspapers 	7	3.39
• Internet	18	10.00
Total	180	100
2. Immediate reac about swine flu ou foreign nations		
foreign nationsSale off pigs/	2	1.11
 stopped production Contact vet/livestock personnel for 	17	9.44
adviceNo action taken	161	89.44
Total	180	100
Source: Field Surv	ey (2009).	

The comparative cost of grower and fattener pigs and the average cost difference in Mubi zone before and after the swine flu outbreak in foreign countries are presented in Tables 6 and 7. The average cost difference of grower and fattener pigs showed little variation which could be attributed to minor fluctuations in market demand and supply and not due to anticipated swine flu outbreak. It therefore, means that the foreign media news about swine flu outbreak had no economic implication on the pig industry in Mubi area. Table 6: Comparative cost of grower and fattener pigs according to local government areas in Mubi zone before and after the foreign media news about swine flu outbreak in foreign nations.

LGA	Average cost (N) per grower and fattener pig before the news		Average cost (N) per grower and fattener pig after the news	
	Grower pig	Fattener pig	Grower pig	Fattener pig
• Mubi north	2,700.43	5,167.40	2,850.00	5,210.25
• Mubi south	2,697.50	5,075.50	2,702.11	5,000.00
• Hong	2,533.90	4,600.00	2,550.90	4,431.34
Gombi	2,340.11	4,554.68	2,300.19	4,502.18
 Michika 	2,540.46	4,900.11	2,500.98	4,963.28
 Madagali 	1,978.62	5,004.26	2,100.47	5,110.67
• Maiha	2,360.80	4,200.00	2,300.50	4,170.93
Total	17151.80	33501.95	17305.15	33388.65

Source: Computed from Field data (2009).

Table 7: Average cost difference according to local government area in Mubi zone before and after the news of swine flu outbreak in foreign nations.

LGA	Average cost difference (N) per grower pig	Average cost difference (N) per fattener pig
• Mubi north	149.57	42.85
• Mubi south	4.61	75.50
• Hong	17.00	168.66
• Gombi	39.92	52.00
 Michika 	39.48	63.17
 Madagali 	121.85	106.41
• Maiha	60.30	29.07
Total	432.73	537.66

Source: Computed from Field data (2009).

4. Conclusion and Recommendation

Influenza-related diseases have continued to remain a source of worry and panic in the Nigerian livestock sector, because of its zoonotic and enormous economic losses associated with the diseases. Even though farmers in Mubi region had anticipated the outbreak of Swine flu disease, there were no any economic losses incurred as a result of panic and scare. It is therefore, recommended that news of anticipated outbreak of disease of health economic importance such as swine flu be managed by trained personnel who should give more emphasis on biosecurity measures that could help in preventing a possible outbreak of such disease in a region that is already struggling with economic and social problems.

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REFERENCES

- 1. Ja'afar-Furo, M.R.; Balla H.G. and Yakubu, B. (2007). Avian influenza (Birds flu) outbreak news scare and its economic implication on poultry enterprises in Adamawa State, Nigeria. *Global Journal of Agricultural Sciences*. 6(1):61-68.
- 2. Ja'afar-Furo, M. R.; Balla, H. G.; Tahir, A. S. and Haskainu, C. (2008). Incidence of avian influenza in Adamawa State, Nigeria: The epidemiology, economic losses and the role of wild birds in the transmission of the disease. *Journal of Applied Sciences*. 8(2): 205-217
- 3. Encarta (2008) Swine flu as a contagious infection primarily of the respiratory tract.
- 4. Swine flu information SFI, (2009): Everything you need to know: <u>www.direct.gov.uk/Swineflu</u>.
- Clare, N. (2009) Africa scrambles to prevent arrival of swine flu as the Continent struggles with other dieases. <u>www.mhtml:file:/swineflu.6/92009</u>. Africa scramble to prevent arrival of swine flu 8/25/2009.
- Federal Office of Statistics (2004). Nigeria living standard survey 2003/2004. Report prepared by FOS in collaboration with EU, World Bank and Department for International Studies. Pp 9-24
- Kwaghe, P. V.; Amaza, P. S. and Ja'afar-Furo, M. R. (2009). The relationship between social factors and the poverty experienced by farming households in Borno State, Nigeria. *Global Journal of Agricultural Sciences*. 8(2): 119-126
- 8. Adebayo, A.A (2004) Mubi Region: A Geographical Synthesis. Published by Paraclete publishers, Yola, Nigeria.

- 9. Adebayo, A.A and Tukur, A.L (1999) Adamawa State in maps. Published by Paraclete publishers, Yola, Nigeria.
- Charse O. (2009) Animal management and health issues. Tapas Institute of Science Research and Development. <u>http://www.tapasinstitute.org/technotes/9.htm11/</u> <u>5/2009</u>.

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