Effects of Aquaculture Researchers’ Job Characteristics on Linkage Activities in Nigeria

J.B Ogunremi*, E.O Faturoti1 and O.I Oladele2
1Department of Biological Sciences, Ondo State University of Science and Technology, Okitipupa, Nigeria
2Department of Wildlife and Fisheries Management, University of Ibadan, Nigeria
3Department of Agricultural Economics and Extension, North West University Mafikeng Campus Mmabatho 2735, South Africa

Abstract

The study examined the effects of researchers’ job characteristics on linkage activities in Nigeria due to the fact that many fish farmers have not been properly reached with technologies and the problem of poor food production has been attributed to the weak linkages existing between research, extension and fish farmers. A simple random sampling technique was used to select aquaculture researchers and their responses on involvement in linkage activities and level of job characteristics were elicited through a questionnaire. The result showed that researchers were satisfied with qualification for job (mean =4.50), opportunities to advance education and publish research (mean = 4.02 and 4.0). No significant relationship exist between linkage and researchers job characteristics (p=0.05). The paper concludes with the need to look into factors that will improve on the job characteristics and staff retention in the institute.

Keywords: Researchers; Aquaculture; Job satisfaction; Fish farmer; Linkage

Introduction

In Nigeria, the last two decades have witnessed food insecurity, a problem that has been significantly linked with low levels of technology widely applied in food production by majority of fish farmers. In order for productivity to increase accordingly and resulting industrial growth, more of that productivity will have to result from new knowledge and technology generated by agricultural research. Aquaculture research addresses two sets of problem: those related to the competitiveness of aquaculture products in domestic and global markets, and those related to the quality and maintenance of natural resources.

Advances made through agricultural research is an important factor in yield increase, this has also been identified as a major factor in increased food production [1]. Thus, research remains an important tool for a virile agricultural development programme in both developed and developing areas of the world. While aquaculture research has generated a lot of technologies adopted by farmers, its capacity to meet future challenges is below what is actually required. Ogunremi [2] reported that the impact of agricultural research in generating research findings influences the effective performance of the agricultural sector. Aquaculture technology generation in Nigeria lies with University based and non-University based scientists. There is a relatively long history of aquaculture researcher in Nigeria dating to as far back as 1975 [3]. Despite this, coupled with enormous investments in human and physical resources, the earlier anticipated result has not been fully realized. This connotes therefore, that the present performance in aquaculture leaves room for improvement. National Institute for Freshwater Fisheries Research (NIFFR) formerly known as Kainji Lake Research Institute was established in 1975 with national mandate for research on areas of fresh water fishes. The concept of linkage implies the communication and working relationship established between two or more organizations pursuing commonly shared objectives in order to have regular contact and improved productivity [4].

Salami [5] defined job satisfaction as the favorableness or un-favorableness with which employees view their works. It expresses the amount of agreement between ones’ expectations of the job and the rewards that the job provides and therefore it relates to equity and motivation theories. A person who is satisfied with his or her work will be committed to the organization and is more likely to contribute to high morale than people who are dissatisfied. Consequences of the employees’ dissatisfaction are reflected in low labor turn over, frequent complaints, threats to down tools, excessive absenteeism from work, rumor mongering, and employees’ generated petitions against the management, strikes and deterioration in employees’ job performance [6].

The main objective of the study is to examine the effects of aquaculture researchers’ job satisfaction on linkage activities in Nigeria.

The specific objectives are to:

(a) Identify linkage activities of aquaculture researchers.
(b) Determine satisfaction of aquaculture researchers with job characteristics.

Hypothesis of the Study

There is no significant relationship between linkage activities of aquaculture researchers and job characteristics.

Methodology

The study was carried out among aquaculture researchers from Nigeria Institute of Freshwater Fisheries Research (NIFFR) whose mandate is to carry out research on fresh water fisheries. Forty researchers were randomly selected from a total of 57 researchers in the Institute which represents 75% of the total population. A structured questionnaire was adopted to collect data on researchers’ job characteristics and linkage activities.

*Corresponding author: J.B Ogunremi, Department of Biological Sciences, Ondo State University of Science and Technology, Okitipupa, Nigeria, E-mail: jogunremi@gmail.com

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naire was administered on the researchers in the Fisheries research institute.

Measurement of variables

The dependent variables are linkage activities and independent variables are job characteristics. Twenty-four (24) of the linkage activities that researchers perform in the research institute were listed [7]. Researchers were to indicate if they performed these activities (Yes/No). Researchers indicated their degree of job satisfaction or dissatisfaction and its related characteristics were measured on a 5-point scale of not satisfied (NS), least satisfied (LS), fairly satisfied (FS), almost satisfied (AS) and most satisfied (MS) for fourteen job characteristics related statements. The tools used in analyzing data in this study were descriptive and inferential statistics. The former includes frequency counts and percentages while the later include correlation analysis.

Results and Discussion

The result of this study, (Table 1) shows that dissemination of knowledge and information (77.5%); joint seminar and workshop training (72.5%) and collaborative professional activities (70.0%) are major linkage activities of researchers. These activities buttress the primary role of researchers in boosting farmers’ productivity. Joint committees (20.0%); joint financial resources (27.5%) and joint field days (35.5%) were not popular as linkage activities. Limited resources could be limiting where comprehensive and cooperating links have been established [8].

| LINKAGE TYPES AND FUNCTIONS | YES | NO | TOTAL |
|-----------------------------|-----|----|-------|
| 1. Joint problem identification | 22 (55.0) | 18 (45.5) | 40(100) |
| 2. Joint priority setting and planning | 18 (45.0) | 22 (55.5) | 40(100) |
| 3. Joint programming | 19 (47.5) | 21 (52.5) | 40(100) |
| 4. Joint technology publications | 23 (57.5) | 17 (42.5) | 40(100) |
| 5. Committees | 8 (20.0) | 32 (80.0) | 40(100) |
| 6. Collaborative professional activities | 28 (70.0) | 12 (30.0) | 40(100) |
| 7. Joint research contracts | 17 (42.5) | 23 (57.5) | 40(100) |
| 8. Joint research activities | 25 (62.5) | 15 (37.5) | 40(100) |
| 9. Exchanges of resources | 20 (50.0) | 20 (50.0) | 40(100) |
| 10. Joint facilitates (library, Laboratory) | 15 (37.5) | 25 (62.5) | 40(100) |
| 11. Joint financial resources | 11 (27.5) | 29 (72.5) | 40(100) |
| 12. Contact for services | 22 (55.0) | 18(55.0) | 40(100) |
| 13. Staff rotation | 8 (20.0) | 32 (80.0) | 40(100) |
| 14. Dissemination of knowledge and information | 31 (77.5) | 9 (22.5) | 40(100) |
| 15. Joint publications | 28 (70.0) | 12 (30.0) | 40(100) |
| 16. Joint reports | 23 (57.5) | 17 (42.5) | 40(100) |
| 17. Joint demonstration trials | 19 (47.5) | 21 (52.5) | 40(100) |
| 18. Joint field days | 14 (35.0) | 26 (65.5) | 40(100) |
| 19. Joint audio – visual materials | 15 (37.5) | 25 (62.5) | 40(100) |
| 20. Joint seminar and workshop training | 29 (72.5) | 11 (27.5) | 40(100) |
| 21. Cross research - extension training | 23(57.5) | 17 (42.5) | 40(100) |
| 22. Evaluation survey | 21 (52.5) | 19 (47.5) | 40(100) |
| 23. Evaluation field visits | 16 (40.0) | 24 (60.0) | 40(100) |
| 24. Evaluation reports | 20 (50.0) | 20 (50.0) | 40(100) |

Note: Figures in parentheses are percentages

Table 1: Linkage activities among researchers.

| S.No | JOB CHARACTERISTICS | NS | Freq. % | LS | Freq. % | FS | Freq. % | AS | Freq. % | MS | Freq. % | Mean | SD |
|------|-------------------|----|---------|----|---------|----|---------|----|---------|----|---------|------|----|
| 1.   | Qualification for job | -  | -       | 2  | 5.0     | 3  | 7.5     | 8  | 20.0    | 27 | 67.5    | 4.50 | 0.85 |
| 2.   | In – Service training | 2  | 5.0     | 6  | 15.0    | 10 | 25.0    | 10 | 25.0    | 12 | 30.0    | 3.60 | 1.22 |
| 3.   | Word exposure      | 8  | 20.0    | 20.0| 15.0    | 6  | 15.0    | 8  | 20.0    | 10 | 25.0    | 3.03 | 1.33 |
| 4.   | Research policies  | 7  | 17.5    | 8   | 20.0    | 7  | 17.5    | 13 | 32.5    | 5  | 12.5    | 2.85 | 1.17 |
| 5.   | Identification farmers’ problems | 5  | 12.5    | 11  | 27.5   | 13 | 32.5    | 7  | 17.5    | 4  | 10.0    | 2.20 | 1.18 |
| 6.   | Job security       | 2  | 5.0     | 13  | 32.5    | 8  | 20.0    | 11 | 27.5    | 16 | 40.0    | 3.90 | 1.17 |
| 7.   | Transportation     | 14 | 35.0    | 12  | 30.0    | 8  | 20.0    | 4  | 10.0    | 10 | 5.0     | 2.20 | 1.18 |
| 8.   | Availability of experimental land | 8  | 20.0    | 5   | 12.5    | 8  | 20.0    | 10 | 25.0    | 9  | 22.5    | 3.17 | 1.45 |
| 9.   | Work equipment and tools | 13 | 32.5    | 8   | 20.0    | 11 | 27.5    | 5  | 12.5    | 3  | 7.5     | 2.43 | 1.28 |
| 10.  | Opportunities to advance education | -  | -       | 3  | 7.5     | 8  | 15.0    | 18 | 45.0    | 13 | 32.5    | 4.02 | 0.89 |
| 11.  | Opportunities to publish research | -  | -       | 5  | 12.5    | 3  | 7.5     | 15 | 37.5    | 17 | 42.5    | 4   | 1.01 |
| 12.  | Rewarding system  | 11 | 27.5    | 14  | 35.0    | 9  | 22.5    | 4  | 10.0    | 2  | 5.0     | 2.30 | 1.14 |
| 13.  | Relationship among professionals and administrative staff | 8  | 20.0    | 7   | 17.5    | 15 | 37.5    | 7  | 17.5    | 3  | 7.5     | 2.75 | 1.19 |
| 14.  | Budgeting         | 10 | 25.0    | 7   | 17.5    | 7  | 17.5    | 11 | 27.5    | 5  | 12.5    | 2.85 | 1.41 |

Table 2: Researchers level of satisfaction with job characteristics NS= Not satisfied, LS= Least satisfied, FS=fairly satisfied, AS= Almost satisfied, MS=Mostly satisfied.
The analysis in Table 2 attempts to determine researchers' level of satisfaction regarding various job characteristics in the discharge of their duties which is linkage. The results show that researchers satisfaction in job characteristics include qualification for job (mean =4.50), opportunities to advance education and publish research (mean of 4.02 and 4.0). However, transportation and rewarding system (mean 2.20 and 2.30) are other job characteristics that were unsatisfactory to the researchers.

Analysis was conducted to determine if significant relationship exist between linkage and researchers job characteristics (Table 3). The result of the analysis indicates that there is no significant relationship between linkage and researchers job characteristics.

**Table 3:** Pearson correlation between linkage and researchers job characteristics. (n = 40)

| Variables         | Mean  | Std.Deviation | r     | p      | df | Remark          |
|-------------------|-------|---------------|-------|--------|----|-----------------|
| Linkage           | 42.4000 | 8.4088       |       |        |    |                 |
| Job characteristics | 126.7500 | 29.6005     | -.237 | .141   | 40 | Not significant |

**Conclusion**

The study indicates that dissemination of knowledge and information; joint seminar and workshop training and collaborative professional activities are major linkage activities of researchers. The findings of the study also revealed high qualification for job, opportunities to advance education and publish research to be the most satisfied job characteristic among the researchers. No correlation exists between linkage and researchers job characteristics. The most valuable resource of an agricultural research organization is its people; there is therefore the need to create conducive working conditions, increased participation and involvement, a good reward system and the work itself.

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