

Agricultural Extension and Fishery Development: Training for Women in Fish Industry in Lagos State, Nigeria

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ABSTRACT This study focused on training for development for women involved in fish industry in Lagos state, Nigeria. Three hundred and fifty (350) women involved in fishery activities were randomly selected from 10 fishing villages purposively selected for the study in the state. Structured interview schedule was used to obtain information from the respondents. This was subjected to face validity and reliability test using split half techniques ($r = 0.85$). The results indicate high need for training in fish storage, maintenance of equipment, fishing techniques, storage and processing. Significant associations were recorded between degree of involvement in fishery activities and frequency of training ($\chi^2 = 36.04$, $p < 0.05$), time of training ($\chi^2 = 23.50$, $p < 0.05$) and constraints to training ($\chi^2 = 53.26$, $p < 0.05$).

INTRODUCTION

As stated by Bolade (1990), when compared with agricultural extension, fisheries extension is relatively new in any developing countries. Thus, it is expected that fisheries extension would have learnt some lessons from the experience in the agrarian sector. It therefore becomes imperative to examine some principles of agricultural extension that can serve as guide towards fisheries extension promotion.

As described by Kidd (1978), agricultural extension aims at assisting people engaged in farming and home-making to utilize more fully their own resources and those available to them in solving problems and in meeting changing economic and social needs. The content may encompass the entire range of agriculture and Home Economics yet centering on the interest or needs of the individual. The goals include:-

- development of an awareness of the problem
- stimulation of a group to organize for cooperative action
- training of individuals in the skills of farming and Home making and
- obtaining the acceptance of the findings of scientific research in the production, marketing and consumption of agricultural products.

To achieve these goals, some extension methods must be put in place. As stated by Laogun (1985), of the three methods, (individual,

group and mass contact methods) individual extension teaching method was most effective for all new agricultural practices. The largest single factor that probably determines the quality and effectiveness of a training programme is the method of instruction adopted or used. Extension method or combination of methods aims at encouraging the clientele to adopt an innovation.

An extension training programme carried out by qualified staff of a well organized advisory service, in cooperation with extension and research staff in the field and backed up by responsible official, is a most effective means through which the farmers (fish workers) become aware of their problem and learn skills for their involving rural women in practical demonstration to enhance training in areas of their need.

Training is an important tool for assisting policy makers, government officials, development project personnel, extension experts and agriculturists in the realization of their programme objectives and plans (Allsopp, 1985). As stated by Wentling (1980), training is the facilitation of learning by individuals and/or groups of people who can benefit by having new knowledge, skills or attitudes. According to Rolf and Udei (1978), training aims at a lasting improvement on the job. Training is thus concerned with people-on-jobs-in organizations. This implies that training is primarily concerned with preparing the participant for certain lines of action, which are delineated

by technology and by the organization in which he works. Training therefore, helps the participant improve his job. This is the essence of extension services. Training essentially deals with understating and skill.

The concept of training is undergoing transformation from its prevailing stands to states of action. As observed by FAO (1991), the following assumptions are made:-

1. the acquisition of subject matter knowledge by a participant leads to action
2. the participant learns what the trainer teaches. Learning is a simple function of the capacity of the participant to learn and the ability of the trainer to teach;
3. individual action leads to improvement on the job;
4. training is the responsibility of the training institution.

In the new concept of training however, Rolf and Udei (1978) and Roberts et al. (1991). In separate works, observed that:-

1. motivations and skills lead to action. Skills are acquired through practice.
2. learning is a complex function of the motivation and capacity of the individual participant, the norms of the training group, the training methods, and the behaviour of the trainers, and the general climate of the institution. The participant's motivation is influenced by the climate of his work organization.
3. improvement on the job is a complex function of individual learning, the norms of the working group and the general climate of the organization. Individual learning unused leads to frustration.

Training is the responsibility of three partners: the participants's organization, the participant and the training institution. It has a preparatory, pre – training, training and a subsequent post-training phase. All are of key importance to the success of training necessary for adoption of fishery innovation for desired fishery development. It is therefore the objective of this paper to investigate what preparatory, pre-training, training and post training steps that are necessary to improve women's fishery activities in Nigeria using Lagos-State as a case study being one of the country's riverine states where fishery activities are well pronounced.

HYPOTHESIS OF THE STUDY

The hypothesis which is stated in the null

form is that there is no significant relationship between training variables such as constraints to training time of training, frequency of training, preference for training personnel and involvement in fish industry.

METHODOLOGY

The study was conducted in five local government areas of Lagos State:- Ibeju-Lekki, Ikorodu, Ikeja, Lagos Island and Badagry. They respectively cover the five geographical divisions of Lagos State which are Epe, Ikorodu, Ikeja, Lagos and Badagry. The target population consisted of women involved in fishery activities in the area of study. For the choice of villages, from about 50 villages stretching along the lagoon and covering all the geographical divisions in Lagos State, 10 villages were purposively selected from each division and local government area. The villages selected included Oritamarun, Idado, Moserekogun, Iwesolu. Ibese, Igbologun, Itedo, Alaguntan, Vovoyan and Gnayingbo. Thirty five women were randomly selected from each of the 10 villages to constitute a total of 350 women for the study.

Data were collected from the respondents using structured interview schedule. This was pre-tested and also subjected to face validity and reliability tests ($r=0.85$). For the data analysis, frequency counts, percentages, and means were used to describe the perceived needs of the women for training, preference for time and place of training. Chi-square was used to determine relationship between the independent variables in training and women's involvement in fishery activities. Involvement activities of the women were measured by considering the percentage of women involved in each activity.

RESULTS AND DISCUSSION

The results indicated that 92.6 percent of the women preferred training by female extension agents (Table 1). The reasons for their choice were that:

- a. A female extension agent would understand their problems better than a male extension agent.
- b. The female extension agents would have better method of approach because of by her feminine nature
- c. Female extension agents would be more acceptable to train them by their husbands than the male extension agents.

Table 1: Preference for training personnel (gender issue)

<i>Personnel</i>	<i>Frequency</i>	<i>Percentage</i>
Male extension agent	15	4.3
Female extension agent	324	92.6
Male or female	7	2.1
Undecided	4	1.0
Total	350	100.0

From the results, 4.3 percent of the women preferred male extension agents.

The reasons given were that male extension agents would be hard working and would be more consistent than their female counterparts since the men don't go on maternity leave. However, 2.1 percent would prefer either male or female while 1.0 percent could not decide.

Period of training in this study refers to the time of the day the women preferred training. The results revealed that 86.9 percent preferred training in the evening after the day's business (Table 2). This is because training at any other time according to the women would adversely affect their fishery activities. Just 7.7 percent of the women showed preference for training in the afternoon because to them, the evening period would have been tiresome for any training activity. They would also use the morning for the major part of their fishery activity while none chose the morning for training, 5.4 percent were undecided about when they preferred training.

Table 2: Preference for time of training

<i>Period</i>	<i>Frequency</i>	<i>Percentage</i>
Morning	-	-
Afternoon	27	7.7
Evening	304	86.9
Undecided	19	5.4
Total	350	100.0

As for the duration of training 48.3 percent of the women preferred training for 1-2 hours every week. The results also revealed that 37.7 preferred to have training fortnightly for 2-3 hours while 10.0 percent showed their preference for monthly training lasting for 3 hours. However, 4.0 percent of the women gave no response (Table 3). Since majority of the women preferred training for 1-2 hours every week, it could be assumed that extension services should use this as a yardstick to determine training duration.

Majority (61.2%) of the women indicated preference for training at the fishing site where

Table 3: Duration of training

<i>Period</i>	<i>Frequency</i>	<i>Percentage</i>
1-2 hours weekly	169	48.3
2-3 hours fortnightly	132	37.7
3 hours monthly	35	10.0
No response	14	4.0
Total	350	100.0

fishery activities were mostly carried out. The result also revealed that 58.9 percent preferred training at home since they also processed fish at home. Twenty-two percent showed preference for the training institute for training. This is because they believed this would give them better exposure to new development in fishery activities. This result supports earlier work by Laogun (1991) that women farmers preferred training at farm sites and home since they found it difficult to leave their husbands and children.

The areas of fisheries involvement activities the women perceived as requiring training include:

Fishing Technique: Most fishing techniques were inappropriate for women. It is found out that only 5.1 percent of the women involved in fishery activities in Lagos State took part in fish catching. Results of the present study revealed that 86.6 percent of the women saw improvement in fishing technique to suit women as an area where they need training.

Maintenance of equipment: This is also an area where the women were dependent on the men. The results indicated that 81.2 percent of the women required training in maintenance of their fishery equipment. The women claimed their improved knowledge in maintenance of equipment would make them less dependent on the men and enhance their fishery activities.

Storage: Most of the women (78.9%) needed training in storage of fish. Adeokun (2000) found out that 66.3 percent of women involved in fishery activities in Lagos State identified inadequate processing and storage facilities as impediments to their involvement in the fish industry. Previous works by Moses (1982) and Akogun (1994) also support the current findings, though their works were not quantitative and not particular to Lagos State.

Processing: The results showed that 55.4 percent of the women perceived fish processing as an area where training was necessary. Majority of the women (85.9%) were involved in fish processing and 60.9 percent had been in the fish

industry for over ten years (Adeokun, 2000). The women were therefore well experienced in the processing aspect of fish production and did not strongly perceive fish processing as an area that they needed training.

Cooperative Membership: The women appreciated the essence of cooperative bodies. In this study, 80.9 percent of the women recognized the essence of cooperative bodies. In this study, 80.9 percent of the women perceived the need for training in establishing cooperative societies, principles of operating cooperative societies and the advantages that can be derived from being a member of a cooperative society (Table 4).

Table 4: Perceived areas for training need determination in fisheries by women in Lagos State, Nigeria (n= 350)

<i>Fishery operation areas</i>	<i>Frequency</i>	<i>Percentage</i>
Fishing technology	303	80.6
Maintenance of equipment	284	81.2
Fish storage	276	86.3
Fish processing	194	55.4
Cooperative membership	283	80.9

Source: Field survey, 2000

The constraints to training in fishing activities as identified by the women included inadequate time: government's inability to organize training programmes and shortage of training personnel (Extension agents).

i. Inadequate Time: The results indicated that 82.5 percent of the women gave inadequate time as the major obstacle facing them as far as training was concerned (Table 5). The dual roles of the women as home makers left them with little or no

Table 5: Perceived constraints to training by women in the fish industry

<i>Constraints</i>	<i>Frequency</i>	<i>Percentage</i>
1. Inadequate time	289	82.5
2. Government's inability to organize training programmes	253	72.3
3. Inadequate extension personnel	219	62.7

Source: Field survey, 2000

Table 6: Relationship between training variables and involvement in fishery activities

<i>Training variables</i>	χ^2	<i>df</i>	<i>p</i>	<i>Contingency coefficient</i>	<i>Decision</i>
Constraints to training	53.26	4.	0.00	0.36	Significant
Time of Training	23.50	3	0.01	0.25	Significant
Frequency of training	36.04	3	0.00	0.31	Significant
Preference for training personnel	89.01	3	0.00	0.45	Significant

Source: Field survey, 2000

time that could be spared for training programmes. They claimed they normally left home early in the morning for fish procurement and came back late in the evening. The evening period according to them was normally utilized to cater for the family.

ii. Inability of Government to Organize Training Programme: From the results, 72.3 percent of the respondents claimed that government did not organize training programmes for them to improve their fishery activities even if they had interest in participating in such programmes. Earlier findings indicated that only 25 percent of women involved in the fish industry in Lagos State had contact with extension services for training and advice.

iii. Inadequate Personnel for Training: The results indicated that 62.7 percent of the women expressed that inadequate extension personnel had been responsible for their inability to take advantage of government advisory programmes that could help improve their fishery activities.

TESTING OF HYPOTHESIS

Hypothesis Tested: There is no significant relationship between training variables such as constraint to training, time of training, frequency of training, preference for training personnel and involvement in fish industry.

Results of the test of association indicated significant relationship between frequency of training and involvement ($\chi^2=36.04$, $p<0.05$) (Table 6). Time of training also gave significant relationship ($\chi^2=23.50$, $p<0.05$) with involvement in the fish industry. This result shows that the more consistent the training process, the greater would be the improvement in the fishery activities of the women. The result further indicates that trainers should take into consideration accurate timing of training activities. It implies that a good training programme may be frustrated if the timing is wrong.

Chi-square (χ^2) results for the test of association further showed significant relationship between constraints to training and involvement

in the fish industry ($\chi^2 = 53.26, p < 0.05$) (Table 6). This reveals that the constraints to training were relevant to involvement activities of the women in the fish industry. It also implies that if the constraint to improvement could be removed. There would also be improvement in the fishery involvement activities of the women.

Significant association was further obtained between preference for training personnel and involvement in the fish industry ($\chi^2 = 89.01, p < 0.05$) (Table 6). This implies that the right choice of training personnel will accelerate the training process and hence improve the women's fishery involvement activities.

CONCLUSION AND RECOMMENDATIONS

From the results of the study, the women indicated interest in obtaining training necessary to acquire improved knowledge, skill and experience in their fishery activities. They gave specific areas where they required training as fish catching technique to suit their feminine nature, maintenance of equipment, fish processing, storage and principles of cooperative action. Much as the women desired training to enhance their performance, they gave factors such as inadequate time, inadequate training programmes from government and inadequate extension or training personnel as hindrances. Therefore the case for training stands firm.

Based on the findings. It is therefore recommended that government institutions concerned with fishery development should initiate training programmes essential to modern technologies in the areas of need of women in the fish industry. Such programmes should be realistic to the economic systems of the women and flexible in action through understanding and confidence.

Training should be seen as part of the grand design towards greater empowerment and equality of women involved in the fish industry with their male folks. Government should also provide adequate resources for training in terms

of finance, material, and personnel to tackle the training needs of women in fishery activities such as fishing technology, processing, storage, cooperative action among others. Finally, the present inadequacies of training as identified by the women should be addressed and removed to allow for real progress in the fishery sub-sector.

Training by extension agents should be carried out for 1-2 hours every week at the fishing sites where most fishery activities are carried out by the women. More female extension agents should be trained, encouraged and motivated by government to teach women in their areas of training need for sustained fishery development.

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