Vocational Training Needs of Rural Farmers for Enhanced Productivity in Rivers and Bayelsa States of Nigeria

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Abstract
This study identified vocational training needs of rural farmers for enhanced productivity in Rivers and Bayelsa States. On thousand and thirty two (1,032) farmers were drawn from a population of 10,320 cooperative – based farmers using proportionate and stratified random sampling techniques. The instrument used for data collection was questionnaire developed through literature and containing structured items with a focus group discussion guide. Data analyses used frequency counts and the mean. It was found out that rural farmers in Rivers and Bayelsa States need training in the knowledge and skill of field crop protection and soil management, poultry production in commercial quantity, and deep sea fishing and pond management. It was therefore recommended that any community training programme aimed at improving the productivity of rural farmers in Rivers and Bayelsa States should incorporate knowledge and skill of field crop protection and soil management, poultry production in commercial quantity, and deep sea fishing and pond management as baseline content materials.

Keywords: *Vocational Training, Training need, vocational training needs, Rural Farmers, Farmers Productivity, Rivers State, Bayelsa State*.

Introduction

The predominant occupation of the indigenous Rivers State people is farming. They rely on the environment for livelihood prominent among their farm produce are cassava, yam, vegetables, plantains, cocoyam, coconuts and citrus crops. Owing to their proximity with rivers, creeks and sea, some communities are involved in various forms of artisanal fisheries capture activities. The animals reared are goats, sheep and poultry at the extensive, free range and tertering management system. Among the Ijaws of Bayelsa State, fishing is the most predominant occupation with few farmers of tuber crops, vegetables, crops, vegetables, plantain and banana on a subsistence level. These agricultural activities on the subsistence level among the people of Rivers and Bayelsa States suggest a peasant and rural population (Deekor, 2017).

This subsistence level or peasantry is characterized by the use of traditional and un-improved methods resulting in low yield and productivity. For improvement therefore, farmers in Rivers and Bayelsa States need to be exposed to alternative and better methods of farming and fishing through capacity building. This in unequivocal term is training. But, it is popular

among community development experts and vocational educators that workers, trainees, learners or students will participate better in programmes that are based on their needs than programmes not based on their needs. In importance, Gupta (2007) therefore declared that need assessment is often conducted for a specific group, organization or business in order to improve effectiveness or productivity of the group.

To this end, there is need for assessment of what the farmers already possess to be able to identify the areas of need and appropriate programmes to meet the needs (Onyeozu, Adekola & Deekor, 2016). In addition to the philosophical doctrine of difference between "what is" and "what ought to be" needs, according to Etheridge (2006) is stimulus factor in motivation. That when one is motivated, he is, in fact "reaching out" to satisfy perceived needs, interests, wants, desires, gaps, deficiencies, goals and objectives.

Needs of the people can be categorized into needs which the people are aware of termed "felt needs" and needs which the people are unaware of termed unfelt needs (Kreitner, Kinocki & Buelens, 2002). Felt needs according to Akintayo and Oghenekohwo (2004) refers to what people want to do in order to achieve their desired development. The awareness of such needs arise from dissatisfaction with one's state of living. This underscores the importance of the famous Freirean praxis of reflection and action in community development but it is only the reflection component that is operationalized in this study. This opposite components in Paulo Freire's conscientization theory is contained in his *pedagogy of the oppressed* published in 1972.

In this Freirean pedagogy as explained by Ak inpelu (2002), the critical consciousness of the people is awakened to the reality of their situation with a view to creatively transforming it through positive and critical action. This has been the philosophy behind several agricultural programmes launched by the Nigerian government with the general goal of increased productivity. But the level of development in the rural areas and the high level of poverty among rural farmers attest to the fact that these programmes had not made significant impact on the life of the people (Deekor, 2017). Thus, this study was therefore planned to, identify the vocational training needs of rural farmers for enhanced productivity in Rivers and Bayelsa States of Nigeria.

Methodology

The study was carried out in Rivers and Bayelsa States of Nigeria. Rivers and Bayelsa States were purposively chosen as the study area because they possess the characteristics needed for the purpose of the study. While the vegetation of Rivers State is essentially lowland rain forest with peripheral coastal mangrove (Girigiri, 2000), that of Bayelsa is predominantly coastal mangrove with fresh water swamp (Bode-Cooker, 2014).

One thousand and thirty two (1,032) farmers were drawn from a population of 10,320 cooperative society-based farmers using 10% proportionate and stratified random sampling techniques. Data were collected by the use of structured questionnaire and a Focus Group Discussion guide facilitated by 4 trained field assistants. The respondents rated on a 4-point summated rating scale of level of importance and extent of possession. By comparing mean of importance with mean of extent of possession with a mean cut-off point of 2.55, decision was reached on each item using the rule that, for an item to be needed, it must be important and not possessed. The scale was graduated as follow:
Not important = 1; low importance = 2; important = 3; very important = 4 on the first part and very low extent = 1; low extent = 2; high extent = 3; very high extent = 4 on the second part.

Results and Discussions

Table 1: Vocational competencies and skills needed by crop farmers in Rivers and Bayelsa States

S/No	Vocational Competencies and skill needs	Rivers			Bayelsa		
		$\bar{X}_1$	$\bar{X}_2$	Decision	$\bar{X}_1$	$\bar{X}_2$	Decision
1.	Preparation and use of manure	2.82	3.06	Not needed	3.44	3.39	Not needed
2.	Application of chemical fertilizers	2.90	1.62	Needed	3.84	3.50	Not needed
3.	Mixing and application of herbicides	2.93	1.54	Needed	3.71	3.85	Needed
4.	Land preparation	3.13	3.22	Not needed	4.00	3.44	Not needed
5.	Nursery beds construction and raising of seedling	4.00	3.95	Not needed	2.82	3 66	Not needed
6.	Selection of planting materials	4 00	3.97	Not needed	4 00	3.62	Not needed
7.	Raising of different crops	4 00	4 00	Not needed	4.00	3.39	Not needed
8.	Prevention and control of crop pests and diseases	3.69	2.27	Needed	4.00	2.21	Needed
9.	Construction of drainage canals	1 71	3 42	Not needed	3.55	1.24	Needed
10.	construction of storage systems	2.26	3.67	Not needed	1.76	4.00	Not needed
11.	Use of simple farm tools	3.50	3.57	Not needed	4.00	3.83	Not needed
12.	Maintenance of farm tools	3.40	3.49	Not needed	3.68	3.88	Not needed
13.	Forest products harvest and use	3.34	1.54	Needed	3.68	4.00	Not needed
14.	Harvesting of produce	2.62	1.91	needed	3.59	3.50	Not needed
15.	Processing of produce	3.65	3.49	Not needed	3.55	3.55	Not needed
16.	Ability to store produce	2.58	2.88	Not needed	2.82	3.83	Not needed
17.	demonstration of suitable crop production attitude	3.48	3.72	Not needed	4.00	3.39	Not needed

$\bar{X}_1$ = mean of importance $\bar{X}_2$ = mean of extent of possession

Result in table 1 identified ability to mix and apply herbicides on farm lands and ability to identify, prevent and control different pests and diseases of crop plants as two farm vocational skills needed by crop farmers for improved productivity in Rivers and Bayelsa States. This is in line with the study of Musebe, Massawe, Mansuet, Kimani, Kuhlmann and Toepfer (2014) which recommended the training of farmers in pest control to improve production of vegetables.

While mastery of the application of chemical fertilizers was needed by crop farmers in Rivers State, ability to construct drainage canals was needed separately by crop farmers in Bayelsa State. This portrays flooding and drainage problems among the Bayelsa State crop farmers.

Table 2: Vocational competencies and skills needed by animal keepers in Rivers and Bayelsa States

S/No	Vocational Competencies and skills need	Rivers			Bayelsa		
		$\bar{X}_1$	$\bar{X}_2$	Decision	$\bar{X}_1$	$\bar{X}_2$	Decision
1.	Ability to raise poultry in commercial quantity	3.39	1.62	Needed	3.75	1.62	Needed
2.	Ability to rear sheep and goats for business	3.32	3.57	Not needed	1.55	1.22	Not needed
3.	Ability to raise pigs for commercial purpose	1.53	1.55	Not needed	1.54	1.46	Not needed
	Ability to feed animals, different feeds	3.44	3.46	Not needed	1.54	1.40	Not needed
5.	Ability to prevent and control different pests and diseases of farm animals	3.42	2.11	Needed	1.55	1.26	Not needed
6.	Ability to select farm animals for breeding	3.59	3.54	Not needed	3.75	1.46	Needed
7.	Ability to manage breeders	3.25	1.53	Needed	1.65	3.24	Not needed
8.	Disposal of saleable animals by marketing	3.49	3.64	Not needed	3.67	3.65	Not needed

$\bar{X}_1$ = mean of importance $\bar{X}_2$ = mean of extent of possession

Result in table 2 show that ability to raise poultry in commercial quantity was needed as a farm vocational competency by animal farmers in both Rivers and Bayelsa States. This need for production in commercial quantity here presupposes that poultry production in Rivers and Bayelsa States at present is still at the subsistence level with indigenous breeds characterized by small body weights and low egg production which collaborates Monsi (2008) that the Nigerian indigenous breeds constitute over 90% of the chicken stock in Nigeria.

Table 3: Vocational competencies and skills needed by fish farmers and fishers in Rivers and Bayelsa States

S/No	Vocational Competencies and Skill needs	Rivers			Bayelsa		
		$\bar{X}_1$	$\bar{X}_2$	Decision	$\bar{X}_1$	$\bar{X}_2$	Decision
1.	Ability to choose fish pond site	3.05	2.63	Not needed	1.84	1.31	Not needed
2.	Fish pond construction and preparation	3.55	1.61	Needed	1.77	1.38	Not needed
3.	Sourcing and stocking of pond with fingerlings	4.00	1.37	Needed	1.46	3.36	Not needed
4.	Ability to maintain healthy fish pond by carrying out different cultural practices	3.46	1.48	Needed	3.25	3.38	Not needed
5.	Ability to harvest fish pond	3.31	1.74	Needed	3.95	3.59	Not needed
6.	Handling of fishing and fish culture tools	3.53	3.65	Not needed	3.61	3.56	Not needed
7.	Ability to repair fishing nets	3.57	2.41	Needed	3.91	2.56	Not needed
8.	Ability to carryout deep sea fishing with motorized fishing gears	3.34	1.68	Needed	2.76	1.75	Needed

$\bar{X}_1$ = mean of importance $\bar{X}_2$ = mean of extent of possession

Findings in table 3 identified ability to carryout deep sea fishing with motorized fishing gears as vocational competency needed by fish farmers and fishers in both Rivers and Bayelsa States. This collaborates Rafail (2008) who recommended the use of large, motorized, modern and efficient fishing boats for seagoing expeditions in Rivers and Bayelsa States.

Table 3 also found out that fish farmers and fishers in Rivers State needed ability to construct and prepare fish pond, sourcing and stocking of pond with fingerlings, ability to maintain healthy fish pond by carrying out different cultural practices, ability to harvest fish pond, and ability to repair fishing nets. This fish pond management needs of fish farmers in Rivers State is in agreement with Rafail (2008) who stated that harvest from fish farms in Rivers State can be increased by the use of modern pond management like manuring, artificial feeding, appropriate stocking rates, and cross-breeding of fish species with desirable characteristics of fat growth rate and disease resistance.

Conclusion and Recommendations

The study identified vocational training needs of rural farmers for enhanced productivity in Rivers and Bayelsa States. The study concluded that rural farmers in Rivers and Bayelsa States need training in the knowledge and skill of field crop protection and soil management, poultry production in commercial quantity, deep sea fishing and fish pond management.

The study therefore recommends that knowledge and skill of field crop protection and soil management, poultry production in commercial quantity, deep sea fishing and fish pond management should form baseline content materials for any community empowerment programme aimed at improving the productivity of rural farmers in Rivers and Bayelsa

States.

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