

Technical Training Skills Needs of Youth for Sustainable Job Security in Rice Production in Ebonyi State, Nigeria

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Abstract

The study identifies technical training skills needs of youth for sustainable job security in rice production in Ebonyi State, Nigeria. This study was carried out in secondary schools in three educational zones in Ebonyi State, Nigeria. Ebonyi state is one of the states in the southeast geopolitical zone in Nigeria. Descriptive survey design was adopted for this study. Target population was 317 made up of 300 registered rice farmers, 5 Agricultural education lecturers and 12 Agricultural extension agents. Sample for the study was 267. Simple random sampling technique was used in selecting the respondents. Four research questions guided the study. The instrument used for data collection was structured questionnaire developed by the researchers. Three experts validate the instrument, one expert from Measurement and Evaluation, Department of science education and two from Agricultural education option, in Technology Vocational Education in the same Ebonyi State University Abakaliki. The Cronbach Alpha reliability coefficient was used to test the internal consistency of the item statement and the reliability co-efficient of 0.78 was found. Instruments were administered to respondents. Data collected were analyzed using mean and standard deviation, result revealed that table 2, 3 and 4 all the items statement were needed with 2.50 and above while table 1 item 10 and 11 statements were not needed with mean score below 2.50. Among the recommendations made was that the technical training skills identified should be used in train youth for maximum rice production in Ebonyi State.

Keywords: Job Security, Needs, Sustainable, Training Skill, Youths

INTRODUCTION

Rice is one of the most popular seeds of plant that is widely grown across the globe including Ebonyi State, Nigeria in general. It may be *Oryza sativa* or *Oryza glaberrima*. The two varieties exist in Ebonyi State. *Oryza sativa* like swampy environment and they are known as Asian rice. While *Oryza glaberrima* prefer up land environment for positive yield, and it is called African rice. Both varieties yield well in Ebonyi State-land. Both are beneficiary to the children and adult for consumption after cooking them. It is used in industries for making different wines in brewery (Ezike, 2015). Rice has high content of vitamin, protein, and carbohydrate with its outer layers known as bran. Rice is used as livestock feed; especially in formulating poultry feeds (Nwite, 2014). The major stakeholders in rice production are the rice farmers. They eat some and sell some to get money which they use in financing the next season rice labour. Since most of its production process involved intensive labour and consume money (Ramasubrammian, et. al, 2015). In view of Ndem, (2015) rice produced in Ebonyi State suppose to be exported to other State in Nigeria and even beyond, when Federal Government, State and Researchers are integrated to meet the demand of consumers in Ebonyi State. He stressed that rice farmers in the villages are aging and reducing the metric tons of rice produced in a year. He optioned that scarcity of rice products, hunger and poverty may become worse in nearest future if serious attention is not given to rice productions to reduce such threaten condition. In support of the above view, Food and Agricultural Organization (F. A.O., 2015) is maintaining that series process exist in the area of technology input supply, youth organization, financing, content with research Institution, among others. However the gap in these areas mentioned need to be addressed to meet the increased demand of rice by the Nigerian teaming population. Therefore, there is need to acquire technical training skills needs to the youth, who are still energetic, strong and powerful to face the threaten conditions facing sustainable youth job security in rice production in Ebonyi State. This is why Nwankwo, (2014) stress that technical training to Agricultural development has been highlighted as providing youth the basic skills, improving rationality and increasing inquisitiveness and thereby improving receptive to new ideas, and strengthening the willingness to facilitate the production of rice in Ebonyi State. In the same vein, Ezike, (2015) is of the view that importance of technical training skill and active participation of youth in developmental process will help cover rice agronomy, management, and transformation of positive yield in rice production.

He maintains that technical is connected with the execution of work of art, craft, scientific. Technical in this study is the scientific ways of training youth in rice production. Training is to give teaching and practice to a

child, youth, in order to bring to a desired standard of behavior, efficiency or physical condition. Training in this study is the teaching and practice of production process in rice production. Skill is the ability to do something expertly well. Skill in this study is the ability to exhibits the process of rice production in a way it will give much yield to meet the individual demand of rice in Ebonyi State. Youth are the boys and girls who are skill, energetic, and strong to perform an action. Youth in this study are the boys and girls who need the teaching and learning in expertise method in rice production who will be needed as rice farmers to replace the aged rice farmers and produce more metric tons of rice annually to increase our food production level in the state.

In the view of Mary (2015) sustainability is to keep in existence or maintain for a long term support or performance. To agricultural point of view, sustainable is described as farming system that is capable of maintaining their productivity and usefulness to scarcity, effectively. Sustainable job security in agriculture are those factors that follows the principles of nature to develop system for crop and livestock raising that are like nature, in sustaining. In this study, sustainability is holding long, last longer the lasting rice job for youth employment. Job is what one does to earn his or her living and source his income. It may be vocation. Job in contest is the situation where youth are engaged in production of rice as ways of earning living or source of income.

Agricultural sustainability that achieves a balance between production and protection goals remains one of the challenges in rice production in this 21st century. However, agricultural production need to be intensified to meet anticipated demand and respond to increasing demand of rice to the citizenry and enhance food security. Education, combined with access to new technologies, provides a key mechanism for enabling sustainable crop management which improves and protects human health in the environment. Harvesting as described by Nwofe (2013) who is of the opinion that crop harvest carried out when the crops is matured, and ready for it. He stress that crop harvesting in rice production, include cutting, threshing, winnowing, measurement and bagging for marketing. Aliyu (2001) reiterated that training is organizational effort aimed at helping an employee to acquire basic skills required for the efficient execution of the function for which he was hired. He maintained that training should include the following: Prepare workers in order to reduce constant supervision and overdependence, Prepare workers to perform their job effectively, Prepare workers for higher job responsibilities and Provision of job security against obsolesce of skill technology, method and product

In this study, youth need training and practices that would equip them in rice production. In their training, youth are expected to carry out successful performance of task which involves the use of psychomotor skills instead of cognitive domain and agreed that psychomotor domain, psycho productive skill lay emphasis in performance which a very vital aspect of learning for sustainable job security in rice production (Obaniyi, (2014). It based on this background that this study set out to identify the technical training needs of youth for sustainable job security in rice production in Ebonyi State.

Purpose of the study

The purpose of this study is to determine the technical training skills needs of youths for sustainable job security in rice production in Ebonyi state, Nigeria. Specifically, the study sought to

1. Determine the site selection training skills, needs of youth in rice production
2. Find out land preparation training skills, needs of youth in rice production
3. Determine the seed selection and planting training skill, needs of youth in rice production
4. Find out the harvesting and marketing skills, needs of youth in rice production

Research Question

1. What are the training skills needs of youth in site selection for rice production?
2. What is the technical training skills need in Land Preparation for youth in Rice Production?
3. What are the seed selection and planting training skills needs for youth in rice production?
4. What are the technical training skills needs of youth in harvesting and marketing rice production?

Methodology

Area of the study is Ebonyi State of Nigeria. Ebonyi State is one of the states in the southeast geopolitical zone in Nigeria. The design of the study is descriptive survey research design. The population of the study is 317 respondents in the three agricultural zones in Ebonyi State. The population comprises of the 300 registered rice farmers, 5 Agricultural education lecturers and 12 Agricultural extension agents. The sample for the study was 267. Simple random sampling techniques was used in selecting the sample size by balloting, those that picked "yes" were used in the study. Structured questionnaire was developed by the researcher. The instrument was validated by three experts, one in Measurement and Evaluation, in Department of Science Education and two in Agricultural Education option in Department of Technology and Vocational Education, in the same, Ebonyi State University Abakaliki. The Crown-bach Alpha reliability coefficient was used to test the internal consistency of the item statement and the reliability co-efficient of 0.78 which was found to be good enough for the study. The instruments were administered to respondents with the help of three research assistants who were

trained by the researcher for one day. Out of the 267 questionnaire administered, 265 were returned. That is 99.3% return. Mean and standard deviation was used for analyzing the data. Mean score of 2.50 and above were regarded as needed, while below 2.50 were regarded as not needed

Discussion and Result

1. Research Question 1: What are the training skills needs of youth in site selection for rice production?

Table 1: Site selection Training Skills Needs for Rice Production

S/N	Item statement	X	SD	REMARK
1	Soil test is suitable for site selection to determine its acidity	3.35	0.85	Needed
2	Soil test is suitable for site selection to determine its structure	3.50	0.65	Needed
3	Soil test is suitable for site selection to determine its texture	3.43	0.70	Needed
4	Soil test is suitable for site selection to determine its profile	3.61	0.83	Needed
5	Soil test is suitable for site selection to determine soil aeration	3.37	0.74	Needed
6	Soil test is suitable for site selection to determine soil nutrients	3.70	0.86	Needed
7	Soil test is suitable for site selection to determine soil water retention	2.98	0.54	Needed
8	Availability of lowland inland or river basin	3.84	0.79	Needed
9	Upland is the best environment for rice production	3.05	0.75	Needed
10	Lowland is the best environment for rice production	3.91	0.68	Needed
11	Gentle slope area is good for rice production	2.46	0.66	Not Needed
12	Flat area is good for rice production	3.74	0.53	Needed
13	Strong flood area is good for rice production	2.33	0.71	Not Needed
14	Good access road for plant and machinery movement	3.65	0.59	Needed
15	Rain-fed and stream or river water is available for rice production	3.85	0.62	Needed

In table 1, item 11 and 13 had mean score below 2.50. This implies that other items were appealing to the respondents as needed technical training skills in rice production.

Research Question 2: What is the technical training skills need in Land Preparation for youth in Rice Production?

Table 2: Land Preparation Training Skills in Rice Production

S/N	Item statements	X	SD	REMARK
16	Identify equipment for land preparation	3.31	0.55	Needed
17	Land clearing with herbicides	3.44	0.56	Needed
18	Land clearing cutlass	3.85	0.75	Needed
19	Land clearing with tractor	3.10	0.59	Needed
20	Stumping the rice farm area	2.75	0.44	Needed
21	Use hoe or plough to till the land	3.94	0.78	Needed
22	Flooding the rice field	2.55	0.51	Needed
23	Harrowing and puddling the rice field	2.85	0.45	Needed
24	Construction of water control structures	2.66	0.35	Needed
25	Leveling the rice field	2.78	0.60	Needed

In table two, all the item statement had their mean score 2.50 and above. This indicates that the respondents accepted all the item statement as technical skill training needs in land preparation for rice production.

Research Question 3: What are the seed selection and planting training skills needs for youth in rice production?

Table 3: Seed selection and planting training skills

S/N	Item statements	X	SD	Remark
26	Testing for good variety of rice	3.75	0.59	Needed
27	Availability of clean and healthy seed	3.66	0.73	Needed
28	Test for percentage germination	3.23	0.42	Needed
29	Nursery establishment	3.87	0.82	Needed
30	Lifting for transplanting to avoid much shock or damage	3.85	0.61	Needed
31	Transplanting	3.73	0.75	Needed
32	Planting distance	2.66	0.56	Needed
33	Planting rate	2.62	0.36	Needed
34	Planting with the use of guiding line	2.65	0.42	Needed
35	N:P:K basement application	3.95	0.85	Needed
36	Urea application	3.75	0.61	Needed
37	Manual weeding	3.77	0.72	Needed
38	Use of herbicides	3.65	0.68	Needed
39	Pest management	2.85	0.53	Needed
40	Disease management	3.15	0.57	Needed
41	Use of knapsack sprayer	3.95	0.59	Needed

In table 3, all the item statements had mean score of 2.5 and above. This implies that all the items were accepted by the respondents as needed skills for youth in rice production.

Research Question 4: What are the technical training skills needs of youth in harvesting and marketing rice production?

Table 4: Harvesting and Marketing Skills.

S/N	Item statements	X	SD	REMARK
42	Harvesting at fully ripe stage	3.95	0.73	Needed
43	Harvest at well dried grain	3.86	0.67	Needed
44	Use of an axial tractor mower to cut the rice	2.60	0.35	Needed
45	Use of threshing machine to thresh the rice Proper threshing	2.83	0.40	Needed
46	Use of sickle or tools in cutting the rice	3.88	0.65	Needed
47	Remove rice debris by winnowing	3.76	0.64	Needed
48	Treating the rice seeds with storage insecticide and pesticides	2.85	0.47	Needed
49	Measurement and bagging	3.62	0.54	Needed
50	Labeling	2.64	0.32	Needed
51	Production record	2.75	0.52	Needed
52	Labour record	2.73	0.39	Needed
53	Sales record	2.97	0.41	Needed
54	Expenses record	2.61	0.36	Needed
55	Inventory record	2.75	0.43	Needed

In table 4, item statements 42 to 55 had mean score of 2.5 and above. This implies that all the items were accepted by the respondents as needed skills for youth in harvesting and marketing rice production.

Discussion of findings

The findings of the study in table 1 revealed that youth needs 13 skill items for rice production while two item statements was not needed technical training skills for youth in rice production. Item 11 revealed that gentle slope area is not good for rice production, in the same vein, item 13 revealed that strong flood area is not good for rice production. This finding is in line with the study of Obaniyi, (2014), who is of the view, that flood area needs an expertise hands before planting rice on such unfriendly environment. He maintained that gentle slope area is not good for rice production, rather valley area that retains water for effective performance of rice for job security. In table 2, all the item statements were accepted by the respondents as needed technical training skills for youth in rice production. This finding is in line with the study of Nwankwo (2014) who is of the view that land preparation remains the basic training skills needs of youth in rice production. He stress that land is the medium for crop germination, growth yield maturity for harvest and marketing. In table 3, all the item statements (26- 41) indicated acceptance by the respondents, since their mean rating was 2.50 and above. This implies that all the technical training skills are needed by youth in rice production and ensures sustainable job security. The finding is in line with the study of Ezike (2015) who is of the view, that seed selection and plant training skills remain the basic in crop production. Since, crop species determine to a great extent, on the quality of seeds, seedling, germination seed, growth and yield. He stress that seeds which is not of improved varieties are liable to

give low yield and will not justify the cost of production. In table 4, all the item statements had their mean score of 2.50 and above. This implies that all the item statements were appealing to the respondents as technical training skill needs of youth in rice production. The finding is in line with the study of Nwofe (2013) who is of the view that harvesting and marketing skills is needed in rice production for youth who want to go into rice production process. He stress that marketing has channel and youth needs to be expertise in such skills to enable them locate good marketing channel in Oder to make good profit in the rice production

Conclusion

In Ebonyi state, most rice farmers do not make profit from their production. This occurs because of poor skills in rice production. Rice farmers in the state need to produce rice, with intention of making a bumper harvest, that will lead to sustainable job security. Based on the above observations, the study was carried out to identify the technical training skills needs of youths for sustainable job security in rice production. The study found out those 53 skills items are needed in rice production.

Recommendations

1. The identified 53 skills items by this study should be used to train farmers in rice production.
2. Extension agents should be given enough incentives and equip with the necessary materials to transfer the identified skills to the needed farmers.
3. Government should inculcate the identified skills into the agricultural programmes in other to boast rice production

References

1. Aliyu J. N., Technical training report guide for youth empowerment. Federal Collage of Education Ehamufu 2001.
2. Ezike, K. N., Extent of utilizing extension Agent services in promoting rice production in Nigeria Vocational Association Journal. 2015.
3. F. O. A Report on Statistics of International and National rice Production, 2015
4. Mary, L. Halbleib and Paul C. Jepson Adopting an outcome Base Education Development Process to Meet Near Real-Time Challenges to sustainable Agricultural Production. 2015.
5. Ndem J. U. Impact of poor faculties and Inadequate Financial Support in Rice Production. Ebonyi Journal of Technology and Vocational Education, 2015.
6. Nwankwo, M. O. The Status of Rice Production as Job Security Tools, Journal of Technology and Vocational Education 2014.
7. Nwite, S. N. Farmers Education and productivity Among Rice Farmers. Seminar, Ikwo Collage of Education 2014.
8. Nwofe M. A. Rice Major Stable Food in Africa. Journal of Nigerian Teachers of Technology 2013.
9. Obaniyi, K. S. Participation of Rice Farmers in Agricultural Development, Journal of Agriculture and Vet nary Science 2014.
10. Ramasubhramanian, M. Sectharaman, N and V. S. Agricultural Training Needs and Development Programme. India journal of Training and Development 2014.