NAU Journal of Technology and Vocational Education
Volume 11, No. 2, April 2026

# ENTREPRENEURSHIP BUILDING NEEDS OF YOUTHS IN GREENING TVET FOR WORKFORCE ENTRY AND ENVIRONMENTAL SECURITY IN BENUE STATE

**[1]Onu, D. O, [2]Lan, M. T. & [3]Ezhim, I. A.**
[1]Department of Agricultural Education, Joseph Sarwuan Tarka University, Makurdi, Nigeria
[2,3]Department of Agricultural Education, University of Nigeria, Nsukka
debbieonu2@gmail.com

**Abstract**
This study identified Entrepreneurship building needs of youths in greening TVET for workforce entry and environmental security in Benue State. Three research questions were raised and three hypotheses were formulated and tested at 0.05 alpha level. The study made use of survey research design and was carried out in Benue State. The instrument for data collection was a structured questionnaire made up of a 21-item titled "Entrepreneurship building needs of youths in greening TVET (EBNYG TVET)" and was administered on a112 respondents made up of 47 extension workers and 65 youths randomly selected from the entrepreneurship training Centres in the State. The data collected were analyzed using weighted mean, standard deviation and t-test statistics. From the analysis, it was revealed that youths: needed 5 skills in greening TVET, 4 entrepreneurship skills for workforce entry and 12 skills in environmental security. Testing of hypotheses revealed that there was generally no significant difference in the responses of youths and extension workers in Benue State. It was therefore, recommended among others, that the identified skills be packaged into workshop materials and bulletins for youths. The extension workers should use the materials for training and retraining youths in the registered centers.
**Keywords**: *Green economy, Entrepreneurship, workforce and environmental security.*

Green economy can be seen as a new environmental guiding principle on a global level which plays an increasingly important role in strategic development processes at the national and international levels. The concept of green economy refers to an economy that is oriented towards ecological sustainability, economic profitability and social inclusion. The concept considers itself an addition to the concept of sustainable development. Within Asia and the Pacific, policy frameworks are being prepared to ensure that these growing economic benefits are inclusive by improving the quality and outreach of skills development, employability and sustainable livelihoods (Maclean 2018). The countries are also taking action to ensure that economic growth in Asian and Pacific countries is "green", which minimizes adverse impacts on the environment. The transition to green growth currently focuses on efficient use of energy; greater use of renewable energy and the associated investment in technology development; waste reduction leading to lower pollutant emissions; production processes that are conserved; the recycling and reuse of natural resources; and, an understanding that environmental regulations, standards, and economic instruments are not a hindrance to production, but are essential for achieving inclusive, sustainable, and environmentally friendly growth.

The adoption of green growth policies in support of green jobs and the greening of existing occupations is likely to require new skills to respond to the needs of the labor market. In this study, green jobs are defined as jobs that reduce the environmental impact of enterprises and economic sectors, ultimately to the levels that are sustainable. This comprises work in agriculture, industry, services, and administration that contributes to preserving or restoring the quality of the environment while also meeting the requirements of decent work, involving adequate wages, safe conditions, workers' rights, social dialogue, and social protection. Transitioning to a green economy can help mitigate the adverse impact of rapid population growth in the depletion of natural resources (UNEP 2011). In the assertion of international labour Organization (ILO) 2023, green jobs aim to preserve the environment by using fewer natural resources with the characteristics of minimizing contamination and waste, reducing greenhouse emissions, contributing to the adaptation of climate, protecting or

restoring various ecosystem, amongst others. This transitioning requires entrepreneurship skills for greening TVET.

In the submission of Enamudu *et al,* (2015), Technical Vocational Education and Training is described as education designed to develop skills, abilities, work habits and appreciations encompassing knowledge and information needed by workers to enter in and make progress in a job on useful and productive basis. This training and education gotten from TVET helps to facilitate and improve access to social participation by teaching core skills which enables people to take an active part in shaping the environment in which they live and work. When individuals take up tasks with gainful income generation, it is referred to as entrepreneurship. Entrepreneurship involves the willingness of an individual to seek investment opportunities in an environment and be able to establish and run the enterprise successfully. Uko (as cited in Dahiru, Amonjenu and Onu (2018), opined that entrepreneurship is a state of having the ability to manipulate input resources efficiently within a particular enterprise. An entrepreneur is a person that combines the management skills needed to successfully run the affairs of an enterprise. Skills in the statement of Okorie (2000) are a well-established habit of performing tasks in a manner that is acceptable by workers in the profession. The author stated that to possess skills is to demonstrate the habits of acting, thinking and behaving in the specific activity in such a way that the process becomes natural to the individual through continuous practice. Entrepreneurship skills are the abilities a person possesses in order to apply the skills into productive ventures. Entrepreneurial skills are needed for the youths to build a formidable workforce for national development. Workforce can be seen as persons engaged in activities in an enterprise. It is basically all the people who are able and willing to work in a country, company or industry. These entrepreneurship skills will be of great benefits for workforce entry by the youths. Youths are group of people characterized by freshness and vitality. The United Nations (2015) sees youths as a transitional period from dependence of childhood to adulthood independence. Some of the youths fall within the active years of 15 to 24 and depend on their parents because they have no means of livelihood. Sometimes this joblessness often pushes them to engage in social vices such as prostitution, arm robbery, thuggery and kidnapping in order to earn a living. If these youths develop entrepreneurship skills in greening TVET, obviously they will be engaged and will become part of the workforce for environmental security. Environmental security is the act of keeping the environment safe by taking care of the resources available in the environment. Environment is our surrounding be it land, water and atmosphere (Igbabaka et al, 2015). Youths are part of the secondary school and university graduates who are aware of the job opportunities that lies in TVET but may not have the entrepreneurship skills to enter into the workforce. The researchers therefore studied the entrepreneurship building needs of youths in greening TVET for workforce entry and environmental security in Benue State.

**Purpose of the Study**

The general purpose of this study is to identify the entrepreneurship building needs of youths in greening TVET for workforce entry and environmental security in Benue State with the following specific objectives as to identify the entrepreneurship building needs of youths in: 1. greening TVET, 2. for workforce entry and 3. environmental security.

**Research Questions**

1. What is the entrepreneurship building needs of youths in greening TVET?
2. What is the entrepreneurship building needs of youths for workforce entry in TVET?
3. What is the entrepreneurship building needs of youths for environmental security?

**Hypotheses**

1. There is no significant difference in the mean responses of extension agents and youths in entrepreneurship building needs of youths in greening TVET
2. There is no significant difference in the mean responses of extension agents and youths in entrepreneurship building needs of youths for workforce entry
3. There is no significant difference in the mean responses of extension agents and youths in

entrepreneurship building needs of youths in environmental security.

**Methodology**

The research design for this study is survey. This design, according to Nworgu (2006), is a design in which group of people or items is studied by collecting and analyzing data from a few people, or items considered to be representative of the entire group. The total population for the study was 112 comprising 65 registered youths and 47 extension agents which were randomly selected from the three agricultural zones in Benue State namely: Zones A, B and C. A 21 item structured questionnaire titled, "Entrepreneurship building needs of youths in greening TVET (EBNYG TVET)" was developed by the researcher from the literature reviewed and administered on 112 respondents. The data collected were analyzed with the weighted mean and standard deviation. The population was small and could be managed by the researchers hence, no sampling but census sample was used. The questionnaire had a four-point response options of very highly needed (VHN), Highly needed (HN), slightly needed (SN) and not needed (NN) with the weighting value of 4, 3, 2 and 1 respectively. A mean of 2.5 and below for any item was interpreted as not needed while any item with a mean of 2.5 and above was interpreted as needed. Similarly, t-test was used to test the formulated hypotheses at 0.05 level of significance. The decision rule for acceptance or rejection of null hypothesis was based on the p-value. A hypothesis of no-significant difference was rejected for any cluster of items whose p-value was less than 0.05 while it was not rejected for any cluster of items whose p-value was greater or equal to 0.05.

**Results**

**Research Question 1:** What is the entrepreneurship building needs of youths in greening TVET?

**Research Hypothesis 1**: There is no significant difference in the mean responses of extension agents and youths in entrepreneurship building needs of youths in greening TVET

**Table 1:** *Mean ratings and t-test analysis of responses of youths and extension agents on entrepreneurship building needs of youths in greening TVET* (N=112)

| S/N | Items | $\bar{X}$ | Std | Df | Sig. | Remark |
|---|---|---|---|---|---|---|
| 1 | Sustainable farming techniques (like organic farming, permaculture) | 3.46 | .50 | 110 | .354 | Needed, ** NR |
| 2 | Environmental knowledge | 3.28 | .70 | 110 | .571 | Needed, ** NR |
| 3 | Problem-solving for environmental challenges | 3.29 | .95 | 110 | .763 | Needed, ** NR |
| 4 | Adaptability in green industries | 3.21 | .67 | 110 | .347 | Needed, ** NR |
| 5 | Soil health management skills | 3.28 | .81 | 110 | .661 | Needed, ** NR |

*N= number of respondents, $\bar{X}$= mean of respondents Std = Standard deviation of respondents, df = degree of freedom=110, Sig. = P-value; P > 0.05, ** = Not significant, NR = Not rejected.*

Data in table 1 revealed that all the 5 skills listed are needed and the null hypothesis tested was not rejected. The mean for the items ranged from 3.21 -3.46 which showed that the skills are highly required. The table also showed that the standard deviation of the responses of the respondents ranged from 0.50 – 0.95, indicating that the respondents were consistent in their responses regarding the data collected. There was no significant difference in the mean rating of the responses of extension agents and that of the youths on the five items needed in greening TVET. Therefore, the null hypothesis of no significant difference of the two groups was not rejected for all the 5 items needed by youths for greening TVET.

**Research question 2:** What is the entrepreneurship building needs of youths for workforce entry?

**Hypothesis 2**: There is no significant difference in the mean responses of extension agents and youths in entrepreneurship building needs of youths for workforce entry

**Table 2** *mean ratings and t-test analysis on responses of youths and extension agents in entrepreneurship building needs of youths for workforce entry* (N=112)

| S/N | Items | $\bar{X}$ | Std | Df | Sig. | Remark |
|---|---|---|---|---|---|---|
| **1** | Green tech skills (renewable energy like solar, wind, etc) | 3.56 | .59 | 110 | .613 | Needed, ** NR |
| **2** | Eco-friendly practices skills | 3.41 | .63 | 110 | .712 | Needed, ** NR |
| **3** | Waste management practices skills | 3.06 | .79 | 110 | .635 | Needed, ** NR |
| **4** | Water management and soil conservation skills | 2.93 | .83 | 110 | .887 | Needed, ** NR |

*N= number of respondents, $\bar{X}$= mean of respondents Std = Standard deviation of respondents, df = degree of freedom=110, Sig. = P-value; P > 0.05, ** = Not significant, NR = Not rejected.*

Data in table 2 has a mean value range from 2.90-3.56 which showed that all the 4 skills mentioned are highly needed and the tested hypothesis was not rejected for any item. The table also showed that the standard deviation of the responses of the respondents ranged from 0.59 – 0.83, indicating that the respondents were consistent in their responses. The hypothesis tested indicated that there was no significant difference in the mean rating of the responses of extension agents and that of the youths on the 4 items needed by youths for workforce entry. Therefore, the null hypothesis of no significant difference of the two groups was not rejected for all the four items needed by youths for workforce entry.

**Research Question 3:** What is the entrepreneurship building needs of youths in environmental security?

**Hypothesis 3:** There is no significant difference in the mean responses of extension agents and youths in entrepreneurship building needs of youths in environmental security.

**Table 3** *Mean ratings and t-analysis of responses of youths and extension agents on entrepreneurship building needs of youths in environmental security* (N=112)

| S/N | Items | $\bar{X}$ | Std | Df | Sig. | Remark |
|---|---|---|---|---|---|---|
| 1 | Identify biodegradable house waste or refuge | 3.13 | .67 | 110 | .331 | Needed, ** NR |
| **2** | Identify abandoned parks, factory sites and roads for recycling | 3.09 | .80 | 110 | .091 | Needed, ** NR |
| **3** | Sorting out of biodegradables materials from refuge sites | 3.03 | .88 | 110 | .813 | Needed, ** NR |
| **4** | Making a compost for manure for agricultural use | 2.94 | 1.01 | 110 | .312 | Needed, ** NR |
| **5** | Control of soil erosion | 2.95 | .81 | 110 | .883 | Needed ** NR |
| **6** | Prevention of soil/water pollution by avoiding toxic and contaminated waste dumping | 2.95 | .59 | 110 | .712 | Needed, ** NR |
| **7** | Prevention of air pollution by avoiding open air burning | 3.08 | .96 | 110 | .341 | Needed, ** NR |
| **8** | Prevention of indiscriminate dumping of solid waste | 3.61 | .63 | 110 | .879 | Needed, ** NR |
| **9** | Maintenance of biodiversity by conserving the natural environment | 3.24 | .75 | 110 | .532 | Needed, ** NR |
| **10** | Adoption of proper farming techniques | 3.35 | .61 | 110 | .223 | Needed, ** NR |
| **11** | Planting of trees (afforestation) | 2.64 | 1.06 | 110 | .775 | Needed, ** NR |
| **12** | Setting monitoring policy and fines for violation/ bad use of environment. | 3.08 | .88 | 110 | .619 | Needed, ** NR |

*N= number of respondents, $\bar{X}$= mean of respondents Std = Standard deviation of respondents, df = degree of freedom=110, Sig. = P-value; P > 0.05, ** = Not significant, NR = Not rejected.*

Data in table 3 has a mean range of 2.64-3.61 which showed the 12 items listed were needed while item 8, 9, and 10 were very highly needed by youths for environmental security because they had a mean range of 3.24 to 3.61. The table also showed that the standard deviation of the responses of the respondents ranged from 0.59 – 1.06, indicating that the respondents were consistent in their responses. The hypothesis tested indicated that there was no significant difference in the mean rating of the responses of extension agents and that of the youths on the 12 items needed by youths for environmental security. Therefore, the null hypothesis of no significant difference of the two groups was not rejected for all the 12 items needed by youths in environmental security.

**Discussion**

The results revealed that there are 5 entrepreneurship building needs of youths in greening TVET, 4 entrepreneurship building needs of youths for workforce entry and 12 entrepreneurship building needs of youths in environmental security.

The results of this study agree with the findings of Ukonze (2010) research line on TVET/Agricultural skills where the Author revealed that teachers needed improvement in soil erosion prevention and control, soil tillage and mulching skills, soil testing and problem soil skills to improve teachers' performance. These findings are similar to the present research which revealed that skills in sustainable farming techniques (like organic farming, permaculture), environmental knowledge, problem solving skills for environmental challenges and soil health management are the entrepreneurship building needs of youths in greening TVET.

Also, the result is in consonance with Asogwa, Odo and Obetta (2015) in a study on Job skills required by retirees in cucumber production enterprise for sustainable economic and emotional security in Enugu State. The researchers identified skills in site selection, soil treatment, soil testing, irrigation, disease control and nutrient management which are similar to the green tech skills (renewable energy like wind, solar) waste management skills, soil conservation skills as entrepreneurship building needs of youths for workforce entry.

The research is also in alignment with Maclean (2018) on education and skills for inclusive growth. The author Maclean stated that TVET system need to integrate education for sustainable development, develop green skills for new industries, adaptable skills, and skills for environmental sustainability in order to respond to environmental challenges while promoting jobs. These skills mentioned are similar to the present study which states that identifying biodegradable house waste or refuge, identifying abandoned parks and factory sites for recycling, making compost manure for agricultural use, control of erosion, avoiding toxic and contaminated waste dumping, maintenance of biodiversity by conserving natural environment amongst others are the skills needed by youths in environmental security.

**Conclusion and Recommendations**

Green Economy and green jobs are a thing of recent development which when embarked upon by youths will make life sustainable and enjoying. The youths will be engaged thereby reducing unemployment and over dependence on parents and wondering around in social vibes. The benefits of green job/economy can never be over emphasized, because it enhances a safety environment for living and life of other living creatures by recycling and effectives managing of natural resources. The researchers therefore, put forward the following recommendations:

1. The identified entrepreneurship skills should be packaged into training modules and workshop materials for training of youths in greening TVET.

2. The extension workers should use the materials for training and retraining of registered youths in entrepreneurship centres in the State for mastery of the identified skills.

3. The identified skills should also be made available to schools of vocational and technical education and training for training of their students so that upon graduation, they will be gainfully self-employed.

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