# Development of Mushroom Production Skills among Students for Self-Reliance: A Case Study of Federal College of Education (Technical), Omoku

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#### Abstract

The research study titled "Development of Mushroom Production Skills among Students for Self-Reliance: A Case Study of Federal College of Education (Technical), Omoku" delved into the significance of skill acquisition in mushroom production as a means for self-reliance among youths. The study emphasizes the importance of skills beyond innate abilities highlighting the need for training, practice and experience. With agriculture being a pivotal sector in Nigeria's economy, the research underscored the potential of mushroom production as a lucrative venture. The study aimed to create awareness about the economic benefits of mushroom farming especially among the youths and its potential to address unemployment issues. The research employed a descriptive survey design targeting students and lecturers in the department of agricultural education. Findings revealed that mushroom production can serve as significant source of income, contributes to national revenue and offer environmental benefits by recycling agricultural wastes. The study concluded that mushroom production skills can empower youth, reduce societal vices and promote sustainable agriculture. Recommendations include establishing viable mushroom farms in the department for training of students and encouraging cooperative societies among students for resource pooling.

**Keywords**: Skills; development; mushroom; production; self-reliance

# Introduction

Skill is thought of as a quality of performance which does not rely solely upon a person's fundamental and innate capacities but must be developed through training, practice and experience (Idoko, 2014). Skill acquisition is the art of learning to do something so as to earn a living or survive. According to Career Guide 2022, acquired skills are talents and expertise often obtained through education or experience and can help one build confidence and achievement. Mushroom production skills could be acquired through vocational agriculture. It is not enough for vocational agriculture students to gain knowledge from the classroom without skill acquisition, for such education is incomplete. Quality education manifests as usable knowledge and productive skills, virtues and attitudes developed in learners, using relevant content that caters

for comprehensive learning and education that enhances competencies and capabilities that students obtain from education opportunities available (Ssimbua, Asimwe and Mawa, 2023). Agriculture has been one of the key sectors in the development of Nigeria economy even before the oil boom in Nigeria in the early 1960's and has been a source of food for her citizens (Ekezie and Deebom, 2019) but attention has long been shifted away from agriculture and this has led to food and nutritional insecurity. The youths play a major role in all-round development of every nation. The bulk of the workforce of any country across the globe is constituted by the youths (Ekezie and Owo, 2019). The concept of youth has been defined by some scholars as the period in an individual life which comes between the end of childhood and entry into adulthood (Umeh and Odom 2011) and the United Nation definition of youth argued that youth starts with a lower age of 15 years and upper age unit of 29 years of age. Again, youths as defined by the National Policy on Youth Development as cited in Olelewe, (2016) is any individual who is a citizen of Federal Republic of Nigeria between the ages of 18-35. Students found in higher institutions are within this age limit therefore should be trained on modern ways of agricultural production and agribusinesses during schooling programmes. Such students or graduates who have acquired agricultural skills may decide to take into agricultural enterprise fully or partly and become employers of labour. The youths at present constitute about 60% of Nigeria's population and have over the years made significant contributions to National Development (Vision 2010 Report, 2005; National Population Commission, 2007). However the potential of the Nigerian youths has not been fully explored in the area of agriculture leading to high rate of unemployment. Recently, Federal Government of Nigeria has come to the realization that agriculture is still the major sector that holds her economy and now seeks for diversification of the economy towards vocalization of agriculture (Ekezie and Deebom, 2019). With the current economic crisis facing the country, agriculture has been given more recognition as a huge economic pillar contributing heavily to the nation's Gross Domestic Product (GDP). The youths are future of food security in any nation because they are the successor of farming generation. For this to happen, the necessary skills and interest of the youth must be created. Governments all over the world are deeply convinced that youths' participation in agriculture will go a long way if not totally to eradicate among other things unemployment and food insecurity as well as provide abundance of food for highly populated countries like Nigeria (Ovwigho and Ifie, 2009). The rate of unemployment in Nigeria increases every year as a result of the number of youths that are turned out from the various higher institutions. The institutional well qualified youths are unable to find jobs and the situation is worst for semi-skilled and unskilled ones (Ejang, 2020). One of the major targets of United Nations Development Program (UNDP) is to address the issues of unemployment among youth through provision of vocational skills, increasing the competiveness of youth within the labour market, building capacities of national institutions to mainstream youth employment and supporting youth – led – enterprises to pilot innovative ideas, all these focus on enhancing selfreliance among youth (Nakyingi, 2019). Although these expectations are right and attainable, one of the major hindrances depends on the awareness and willingness of these youths who are supposed to be the major drivers behind these noble objectives towards participation in agriculture (Igbolekwu, Arisukwu, Ake and Onireti, 2020).

Mushrooms are fleshy, spore-bearing fruiting body of fungi which grow above the ground on soil or organic materials. Mushrooms are heterotrophs which do not have the ability to manufacture their own food. They depend on food sources in their surroundings for nutrients such as animal waste, plant matter or organic carbon. The word "mushroom" means different things to different people in different countries (Zhang, Geng, Shen, Wang and Dai, 2014). Gebretsadkan (2015) defined mushrooms as macro-fungi with distinct fruiting bodies which can be hypogenous or

epigeous, large enough to be seen by naked eyes and big enough to be picked by hands. Since ancient times, man has been interested in mushrooms which were called "food of gods" by the roman and the Greek regarded them as providing strength for warriors in battles (Zhang *et al*, 2014). Increasing human utility and dependence of humans on mushrooms over several millennia may be the basis for the characteristics global cultural divergence and knowledge diversity of edible mushrooms estimated at over 1,500 species (Boa,2004).

Mushrooms grow naturally in the wild and are the most popularly documented edible forest products (Gebretsadkan, 2015; Chamberlain, Bushand Hammett, 1998). The edible wild mushrooms are picked by farmers for food or sale and the quantity picked or harvested from the forest depends on what is available in the forest at that moment. Wild mushrooms are seasonal, so cultivation guaranties a constant supply to the market all year round (Mutema, Basira, Savadye and Parawira, 2019). Considering the health benefits and industrial value of mushrooms, there is need for its cultivation to meet global demand. Mushrooms are excellent source of nutrition tonic, medicine and dietary food items being produced and consumed all over the world (Vishwakarma, Shukla, Singh and Chaturvedi, 2020). Mushroom production can greatly impact the lives of youths (students and young graduates) and empower them economically so that they can be selfreliant. In this era of youth unemployment, where graduates go in search of job endlessly, acquiring mushroom production skill will help the youth to be financially independent and keep them busy, diverting their attention from social vices such as kidnapping, internet fraud, drug abuse and so on. Mushroom production can also act as a source of extra income for those who are gainfully employed. The good thing about mushroom farming in comparison with other agribusinesses is that, it can be carried out in small area of land. Mushroom farming needs low capital, low technical knowledge and even in an indoor setting it is possible to cultivate mushroom in small scale and one can easily get high returns with low investment (Easin, Ahmed, Alam, Reza, and Ahmed 2017; Islam, Khan and Islam, 2013). This makes it easy for landless farmers and individuals as well as uneducated persons to augment their income through mushroom production. According to Asemota, Etim, Okereke, Abubakar and Ogbadu,(2015), mushrooms remediate and also clean the environment, create employment, save land and bring extra earnings to the urban farmers.

### **Objectives of the Study**

Agriculture used to be the main strength of Nigerian economy before the oil boom era. With fluctuation in oil prices which resulted from the discovery of other sources of energy, agriculture is regaining its lost glory in Nigeria. However, population increase has made it difficult for most youth who are interested in agriculture to start production for lack of access to land. There is paucity of information about the economic and food value of mushrooms among the Nigerian populace. Those who have some knowledge about mushroom production look at it as not lucrative enough for one to take it as a major source of income. Therefore, little or no attention is given to its production. Mushroom constitutes low calories but nutritious diet as it is rich in protein, vitamins and essential minerals hence they are considered as best food for patients having diabetes, hypertension, heart attack, obesity, anemia, cancer and constipation (Aditya and Bhatia, 2020). Mushrooms are being grown in commercial quantity in many parts of the world. However, in Nigeria there are very few farmers that cultivate mushrooms and harvest for commercial purposes. Therefore embarking on this research study "Development of Mushroom Production Skills among Students for Self-Reliance: A Case Study of Federal College of Education (Technical), Omoku" is thought necessary. The specific objectives of the research are to:

- i. create awareness on the relevance of mushroom farming as a potential means of engaging youths for self-reliance;
- ii. helping undergraduates and graduates of agriculture generate income and improve their standard of living;
- iii. contribute to national income through exportation of mushroom;
- iv. encourage youths to become employer of labour;
- v. boost food and nutritional security;
- vi. recycle agricultural waste materials and reduce environmental pollution.

## **Research Questions**

The following research questions have been drawn from the objectives of the study.

- 1. How does creating awareness on the relevance of mushroom farming act as a potential means of engaging youths for self-reliance?
- 2. To what extent can mushroom production be seen as a means of generating income for undergraduates and graduates of agriculture?
- 3. How can mushroom production contribute to national income?
- 4. What are the ways mushroom production can encourage youth to become employers of labour?
- 5. How can mushroom production boost food and nutritional security?
- 6. To what extent does mushroom production help to recycle waste materials and reduce environmental pollution?

### Methodology

The design of the study was a descriptive survey research design which sought the opinion of a group of students and lectures that was used for data analysis. The area of the study was Federal College of Education (Technical), Omoku, Rivers State. FEC(T), Omoku is an NCE (Nigeria Certificate in Education) and degree awarding institution where agricultural education is taken as a course of study.

The population for the study comprised all students and lecturers in the department of agricultural education. The purposive sampling technique was used for the study. The sample size of sixtynine students and twenty-seven lecturers giving a total number of ninety-six respondents. The students were selected using simple random sampling techniques while the entire population of lecturers was sampled due to the small size of the total population.

The instrument used for data collection was a structured questionnaire titled "Development of Mushroom Production Skills among Students of Agriculture for Self-reliance: A case study of Federal College of Education (Technical), Omoku. Rivers State. Thirty-four (34) items were formulated to guide the study. The questionnaire was based on 4-point Likert type rating scale of Strongly Agree (SA); Agree (A); Disagree (d) and Strongly Disagree (SD). The data collected from respondents were analyzed using arithmetic means with the formula: Mean  $(X) = \sum fx / N$ 

Discussion rule for questionnaire item was pegged at 2.50. The implication was that any item which was less than 2.50 was rejected while any item within 2.50 and above was accepted.

#### Results

The results obtained from data analysis are presented in Tables 1-6 in line with the research questions.

Table 1: Create Awareness on the Relevance on the Relevance of Mushroom Farming as Potential Means of Engaging Youth for Self-reliance

S/N	Items	SA	A	D	SD	Total	Mean	Remarks
1	Students are involved in mushroom production before admission into the school.	7	10	39	40	96	1.8	Rejected
2	Mushroom production is part of entrepreneurial skills acquired by students of vocational agriculture before graduation.	23	66	5	2	96	3.2	Accepted
3	Students are familiar with mushroom production as agricultural practice.	33	53	7	3	96	3.2	Accepted
4	Students are interested in acquiring mushroom production skills for economic self-reliance	30	56	6	4	96	3.2	Accepted
5	Agricultural students are given opportunity to participate in mushroom production training/workshop before they graduate.	30	46	10	10	96	3.0	Accepted
6	Department of agricultural education has mushroom farm for students to put into practice the knowledge gained from training/workshop.	30	49	11	6	96	3.1	Accepted
7	Students are faced with challenges of availability of resources to start up their personal farms after skill acquisition Students are faced with challenges of availability of resources to start up their personal farms after skill acquisition.	49	31	10	6	96	3.3	Accepted

Field Survey (2923). SA=Strongly Agree; A= Agree; D=Disagree; SD = Strongly Disagree

Item 1 in Table 1 had a mean score of 1.8 which is an indication that students had not been involved in mushroom production before their admission into the department of agricultural education of Federal College of Education (Technical), Omoku. Items 2-7 had mean scores of 3.2, 3.2, 3.2, 3.0, 3.1 and 3.3 respectively. This showed that mushroom is part of entrepreneurial skills acquired by students of vocational agriculture before graduation. Therefore, students or graduate of agriculture are familiar with mushroom production as an agricultural practice. The results in the Table 1 also indicated that students of agriculture are given opportunity to participate in mushroom production training/workshop which made them to be in interested in mushroom farming for economic self-reliance. Their interest in mushroom farming might have been aroused

by what they have seen in the Institutional Based Research (IBR) farm within the department. However, students are faced with the challenges accessing resources to start up their farm after skill acquisition.

Table 2: Mushroom Skills Acquisition as a Source of Income Generation and Improvement of Standard of Living

S/N	Items	SA	A	D	SD	Total	Mean	Remarks
8	Mushroom farming can be a source of livelihood.	51	43	1	1	96	3.5	Accepted
9	Mushroom farming requires large sum of money to start up	5	35	30	26	96	2.1	Rejected
10	Income generated from mushroom farming is less than what is put into its production	5	8	59	24	96	1.9	Rejected
11	Mushroom farming can be a sole source of income for undergraduate and graduates of agriculture.	51	36	6	3	96	3.4	Accepted
12	Mushroom farming can be a secondary source of income for undergraduate and graduates of agriculture.	32	54	4	6	96	3.2	Accepted
13	Mushroom farmer can make money through the training of other students or youths	47	47	2	-	96	3.5	Accepted
14	Mushroom farmer can generate income through the establishment of mushroom farms for other interested students or youths.	58	36	2	-	96	3.6	Accepted

Field Survey, (2023). SA=Strongly Agree; A= Agree; D=Disagree; SD = Strongly Disagree

Table 2 had items 8-14 with mean scores of 2.5, 2.1, 1.9, 3.4, 3.2, 3.5 and 3.6 respectively. According to the respondents, mushroom farming could be a source of livelihood and generate more income than what is put into its production as well as requires small amount of money for its establishment. The results also showed that mushroom farming could be a sole or secondary source of income through the generation of income from sale of mushrooms, training prospective mushroom farmers and establishment of mushroom farms for other interested youths.

**Table 3: Contribution Mushroom Production to National Income** 

S/N	Items	SA	A	D	SD	Total	Mean	Remarks
15	Mushroom is a cash crop	32	38	16	10	96	3.0	Accepted
16	Mushroom is produced for only consumption	13	16	35	32	96	2.1	Rejected
17	Mushroom has industrial uses	49	30	13	4	96	3.3	Accepted

18	Mushroom is not needed in other	8	13	40	35	96	1.9	Rejected
19	countries.  Mushroom can be exported to other countries for food and industrial uses.	48	40	6	2	96	3.4	Accepted

Field Survey, (2023). SA=Strongly Agree; A= Agree; D=Disagree; SD = Strongly Disagree

The mean scores of items 15-19 in Table 3 are 3.0, 2,1, 3.3, 1.9 and 3,4 respectively. The results obtained from the respondents showed that mushroom is a cash crop that has industrial uses, therefore, it is not produced for only consumption. Again, the results indicated that mushroom needed in other countries for food and industrial uses.

**Table 4: Encouraging Youths to Become Employers of Labour** 

S/N	Items	SA	A	D	SD	Total	Mean	Remarks
20	Agriculture undergraduates may not have time to embark on mushroom production.	6	19	61	10	96	2.2	Rejected
21	Graduates of agriculture can take up mushroom farming as his/her employment.	61	33	2	-	96	3.6	Accepted
22	A mushroom producer can become employer of labour.	51	42	2	1	96	3.5	Accepted
23	Labour is not required for effective running of mushroom farm.	6	9	52	29	96	1.9	Rejected
24	There is no value chain in mushroom production.	12	2	44	38	96	1.9	Rejected

Field Survey, (2023).  $SA=Strongly\ Agree;\ A=Agree;\ D=Disagree;\ SD=Strongly\ Disagree$ 

Table 4 had items 20-24 of the research study. The mean scores of the items are 2.2, 3.6, 3.5, 1.9 and 1.9 respectively. Data from the respondents indicated that graduates and undergraduates of agriculture could take mushroom farming as their employment and become employers of labour for effective and efficient running of their farms. Mushroom farmers could also employ labour indirectly through mushroom value chain.

**Table 5: Boosting Food and Nutritional Security** 

S/N	Items	SA	A	D	SD	Total	Mean	Remarks
25	Mushroom is recommended as food	25	67	2	2	96	3.2	Accepted
	for all ages by nutritionist							
<b>26</b>	Mushroom is recommended as food for	37	44	11	4	96	3.2	Accepted
	all ages by nutritionist.							
<b>27</b>	Mushroom is highly nutritious.	41	53	1	1	96	3.4	Accepted
28	Mushroom is a better alternative	51	35	5	5	96	3.4	Accepted
	source of protein for those who do not							
	consume animal protein.							
29	Mushroom has medicinal value.	28	63	5	-	96	3.2	Accepted

Field Survey, (2023).  $SA=Strongly\ Agree;\ A=Agree;\ D=Disagree;\ SD=Strongly\ Disagree$ 

In Table 5, the mean scores obtained for items 25-29 are 3.2, 3.2, 3.4, 3.4 and 3.2 respectively. Results from respondents showed that mushroom is eaten by many people, it is highly nutritious and could be recommended as food for all ages by nutritionists. The results also indicated that mushroom is a better alternative source of protein for vegetarians and it has health benefits.

Table 6: Recycling Agricultural waste Materials and Reduction of Environmental Pollution

S/N	Items	SA	A	D	SD	Total	Mean	Remarks
30	Organic wastes constitute nuisance in	31	30	5	-	96	3.3	Accepted
	the environment.							
31	Mushroom grows on organic waste materials.	51	41	3	1	96	3.7	Accepted
32	Mushroom production helps to keep the environment clean.	41	47	6	2	96	3.3	Accepted
33	Mushroom farm does not produce foul smell.	27	62	6	1	96	3.2	Accepted
34	Waste from mushroom farm can be used as organic manure for food crop production	58	34	1	3	96	3.5	Accepted

Field Survey, (2023). SA=Strongly Agree; A= Agree; D=Disagree; SD = Strongly Disagree

Table 6 had items 30-34 with the mean scores of 3.3, 3.7, 3.3, 3.2 and 3.5 respectively. The results from the respondents showed organic waste materials on which mushrooms grow constitute environmental nuisance but mushroom production helps to keep the environment clean by reducing the quantity of organic wastes in the environment. The results also indicated that mushroom does not produce foul smell and the waste is used as organic manure for food crop production.

# **Discussion of Findings**

The findings from Table 1 results showed that mushroom production skill acquisition is a means of creating awareness on the relevance of mushroom farming as a way of engaging the youths for self-reliance. Modern agriculture is more than tilling the soil and rearing animals. There are other career opportunities like mushroom farming which has not been maximally tapped into for national economic growth. Mushroom farming can greatly impact the lives of youths and empower them economically and make them self-reliant. This can be attainable if the youths are aware of the economic importance of mushroom production. This assertion is supported by Osemwegie and Dania, (2016) who reported that in Nigeria, ignorance, depending on wild mushroom, lack of political will and legislative support have hindered the integration of mushroom cultivation into agricultural briefs across the country and its recognition as a potential income earner. Mushroom production is limited in local areas but it can equally be practiced in the cities where its value will be much appreciated.

Table 2 results indicated that mushroom production skill acquisition would help undergraduates of agriculture who are mostly youths to generate income and improve their standard of living. A

youth who is into mushroom farming can generate income in 3 ways which are sale of harvested mushrooms and spent mushroom substrates (SMS), training of other youths to acquire skill involved in mushroom production and establishment of mushroom farms for other youths or farmers. Wealth can be created by those acquired skill and put such skills into use. This finding is in line with the report of Wuliya, (2022) which stated that entrepreneurship which comes through skill acquisition is the blue print or gate way of financial freedom and great platform for wealth creation that can help to fast-track any nation to become one of the world's greatest economies.

The results in Table 3 showed that acquisition of mushroom production skills could contribute to national income through exportation of mushrooms. Although mushrooms are seen in the local markets in southern Nigeria from mushrooms hunters and small scale producers, there are scarce data on the contribution of mushroom production to the nation's GDP. There is also scarce data on the volume of mushroom tonnage produced annually for export or local consumption and the number of commercial sale mushroom cottage industries in Nigeria (Celik and Perker, 2009; Marshall and Nair, 2009). The global mushroom market size was valued at USD 50.3 billion in 2021 and is expected to expand at a compound annual growth rate (CAGR) of 9.7% from 2022 to 2030 (Iwuagwu, 2023). Nigeria is not listed among the top 20 countries that produce mushrooms for export. With the increase in global demand of mushrooms, national income can be boosted through mushroom production.

Table 4 results indicated that mushroom production skills acquisition could encourage youths to become employers of labour. The potential of Nigerian youths has not been fully explored in the area of mushroom production because much attention has not been given to it. Governments all over the world are deeply convinced that youths' participation in agriculture will go a long way if not totally to eradicate among others things unemployment and food insecurity as well as provide abundance of food for highly populated countries like Nigeria (Ovwigho and Ifie, 2009). A youth who has acquired mushroom production skills is out of the labour market and the same time provide employment directly or in directly through mushroom value chain. This report in corroboration with the report of Ekezie and Owo, (2019) who stated that skills acquisition in vocational agricultural education is a substitute for employment generation among youths in Rivers State. UNESCO, (2012) also reported that some of the reasons for youths' unemployment include lack of relevant life skills for individual job roles, poor information about job vacancies, poor entrepreneurship skills for job creation, lack of relevant work experience among others. It is therefore necessary that students of vocational agriculture should get mushroom production skills in the course of their training in the school and become self-employed while they are still in school or after graduation.

Results from Table 5 showed that mushroom production skills acquisition could boost food and nutritional security. Many people have come to the awareness that mushroom is a useful food product and most people eat mushrooms because of their palatability and the unique flavour they possess. Mushrooms are prepared into various food products such as mushroom tea/coffee, mushroom noodles, mushroom chips, mushroom suya, mushroom burger patties, mushroom pizza, mushroom soup, mushroom pie, mushroom bread, mushroom drinks, etc (Iwuagwu, 2022). From the results mushrooms are used in place of meat and fish due to their high protein content. This is in assertion with the report of Nor, Faridah, Noorzainah, Ashadi, Rawaida and Mazliana,2023 which stated that mushroom is a good source of dietary fibre (3g/100g), protein (7.9g/100g), low in fat (0.5g/100g) and it is cholesterol free. Again Priyanka and Kanuni (2022) reported that mushrooms are low-calorie food that packs a nutritional punch and they are waded

with many health-boosting vitamins, minerals and antioxidants. Iwuagwu, (2022) also reported that mushrooms are high in protein, vitamins ( $B_1$ ,  $B_2$ ,  $B_{12}$  and C), essential amino acids and carbohydrates but are low in fat as well as rich in phosphorus, potassium, copper, zink and selenium. Mushroom production does not only boost food security but also boost nutritional security. It is not enough to have food on your table but the nutritional value of the food is very important

In Table 6, the results have shown that mushroom production skills acquisition could help to reduce organic waste materials and prevent environmental pollution. However, mushroom production generate large quantity of waste which is the spent mushroom substrates. Although SMS has no foul odour, it has high level of organic matter, therefore it should be properly disposed to reduce environmental pollution problems. From the results, food crops farmers use SMS as organic fertilizer to improve soil fertility and boost crop production. This is in line with the report of Nakatsuka, Oda, Hayashi and Tamura, (2016) which stated that studies have confirmed that SMS is good bio-fertilizer or soil improver for crop production, thanks to its high amounts of macro and micronutrients, high cation exchange capacity, near-neutral pH, high porosity and high water holding capacity. SMS with its biodegradability, availability and sustainability could be a promising alternative traditional plastic mulch in the context of global plastic-reduction behavior (Zhong, Yun-Qi, Lu-Jun, Guang-Long, Xiao-Qiang, Qian, Shu-Chai and Jian-Xun, 2021). Mushroom production is environmental friendly and contributes majorly to sustainable agriculture.

#### Conclusion

Skills are acquired through training and practice and they are very necessary for the development of an individual and the nation at large. Mushroom production skills acquisition by undergraduates and graduates of vocational agriculture will go a long way to impact on the youths positively. Through the skills acquired, they can be gainfully engaged and employ other youths directly or indirectly thereby making money and improve their livelihood. Useful engagement of youths can help to reduce some societal vices such as cultism, prostitution, drug abuse/addiction, armed robbery, kidnapping, gabbling, internet fraud and so on. The department of agricultural education engaging their students in mushroom production skills acquisition will increase their knowledge about mushroom production and erase the notion that mushroom farming is not lucrative enough for one to take as a major source of income.

#### Recommendations

The following recommendations are made based on the findings of the study.

- 1. The department of agricultural education should have viable mushroom farm that can be used as a training ground for their students and students from other department who may be willing to go into mushroom farming.
- 2. Students should be sensitized on the economic importance of mushroom production.
- 3. Students who have been trained but do not have enough resources to start up their personal farm should be allowed to put to practice their skills in the departmental farm. This will help to increase their interest in the job as well as increase the experience gained.

4. Again, for student who cannot stand on their own for inadequate resource to start up should be encouraged to pull their resources together through the formation of cooperative societies which could make it easy for them to start up mushroom production.

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