



STEP Students working together in the ICT room

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|-------------|---|-------------|---|
| P.02 | ▶ Training, rehabilitation of facilities begin at STEP-Oyo schools | P.02 | ▶ STEP-Oyo students embark on excursion to Fasola |
| P.04 | ▶ Mwiki students in Kenya replicate STEP activities at home | P.05 | ▶ STEP-DR Congo girls expand livestock business |
| P.05 | ▶ STEP gives university students practical training in agriculture | P.06 | ▶ Weza teacher's pig breeding project makes huge gains |
| P.06 | ▶ Oyo State Library Board donates reading materials to STEP-Oyo project | P.06 | ▶ STEP Students at Fasola Grammar School record bumper cucumber harvest |
| P.07 | ▶ Govt officials inspect rehabilitation projects at STEP-Oyo Schools | P.08 | ▶ International journal publishes IITA STEP article |

Training, rehabilitation of facilities begin at STEP-Oyo schools

The STEP-Oyo project kicked off in September 2020, with the STEP Nigeria team commencing training and rehabilitation activities in Bishop Philips Academy and Methodist High School. To select students for the first phase of training, the team carried out an Orientation Program, Baseline Survey and an Evaluation Exercise.

Training activities

The training activities took place concurrently in the two schools where the selected STEP club students were assembled and distributed to different enterprises for activities itemized in the enterprise work plans. The training team also organized tests, gave assignments and employed the Do It Yourself (DIY) technique for practical sessions.

Asides agribusiness training in Value addition, Crop production and Mechanization, Livestock production, ICT and Laboratory enterprises, topics like Leadership, Discipline, Food Security and Sanitation among others, were also taught.

The trainings were fun, interactive and educative, and the feedback and responses showed that the students were responsive and eager to learn

Rehabilitation Activities

As part of efforts to help improve the learning environment, STEP has refurbished and upgraded existing facilities in the schools. The facilities refurbished at Methodist High School included the ICT room, the Science



STEP Officers conducting training at respective schools

Block, STEP Office, STEP Training room, Processing Centre, Central Science Laboratory, store, toilets, fishpond, goat pen and the landscaping. At Bishop Philips Academy, the refurbished facilities were the Training room, Home-Economics Laboratory, Toilets, Processing Centre, Store, STEP Office, Central Science Laboratory, library, inverter room, ICT, chairs, tables, landscaping, carpark and fishpond.

The STEP-Oyo project also facilitated the purchase of training materials, equipment and machines; as well as chairs and tables for the staffroom. These training materials, equipment and machines, all set up in the appropriate work spaces, were purchased for the various enterprises. For the Value addition enterprise, the following were

procured: Library books, ovens, kitchen utensils, refrigerator, gas cookers, weighing scale, mixer, deep-fryer, blender, and aprons. Catfishes, fish feed, weighing scale, bowls and buckets were procured for the Livestock enterprise while desktop computers, keyboards, mouse, Uninterrupted Power Supply systems (UPS), photocopier and work stations were procured for the ICT enterprise. The Crop Production and Mechanization enterprise got seeds, fertilizers, motorized power sprayer, precision seed planter, mower, two-wheel weeder, knapsack sprayer, rototiller and farm kits among others. Some laboratory reagents, laboratory coats and a few apparatus were gotten for the Laboratory enterprise. The project also provided tablets and white boards for the STEP training rooms.



The Central Science lab before and after Rehabilitation at Methodist High School

STEP-Oyo students embark on excursion to Fasola

Students of Methodist High School and Bishop Philips Academy currently undergoing agribusiness training under the extended STEP project in Oyo State went on an excursion to Fasola Grammar School on December 15 and 16, 2020. The students participated in an array of activities including a tour of Fasola's STEP agribusiness facility, networking, games, enlightening talks, games, quizzes and exhibitions. The essence of the excursion was to expose the students to the modern agribusiness model and facilities at Fasola Grammar School, while allowing them to interact

with other STEP students. It was also an opportunity for them to unwind outside the intense STEP enterprise training activities.

Day 1: Methodist High School

Nineteen STEP students from Methodist High School accompanied by their Agricultural Science teacher, Mrs. Oluwayemisi Ademikanra went on the trip on Tuesday December 15.

Akingbeja Damilare, one of the STEP students interviewed on arrival at Fasola expressed excitement at the prospects of

meeting fellow STEP members; taking part in competitions and demonstrating what they had learnt at their various enterprises. "We are also here to have fun and see the facilities and equipment mentioned during our training," he added.

The Agricultural Science teacher at the host school, Mr. Gbadegeshin Ayoola, addressed the visiting students on academic success and life after school.

Revealing that the staff, principal and school management of Fasola Grammar



Arrival to Fasola Grammar School.



A section of the students in the School Hall.

School were pleased to receive the young children, Mr Ayoola stated that "it is a good thing that the STEP club members were coming together to meet with one another, at least to know themselves and relate more cordially when they meet outside.

A talk on team building was given by Mrs. Ademikanra who shared tips on how team building motivates and develops the strengths of members while ensuring collaboration, solidifying leadership and engendering team and individual accomplishments through division of labor.

Day Two: Bishop Philips Academy

Eighteen STEP students from Bishop Philips Academy accompanied by their Agricultural Science teacher; Mr. Olumide Aderonmu. and some STEP trainers went on the trip on 16 December 2020.

Before the tour of facilities began, Adebayo Adenike, a STEP student at the Laboratory enterprise, who spoke upon arrival at Fasola, stated that she hoped to benefit academically and socially from the trip. Another student, Aderonmu Ademidotun said he was looking forward to finding out the impact of STEP on the lives of students of Fasola Grammar School. "The environment and structure is good and I'll like our school; Bishop Philips Academy to also look like this," he said.

Mr. Gbadegeshin Ayoola, the Agricultural Science teacher at Fasola Grammar School, welcomed the students,

admonishing them on the benefits of hard work, passion, big dreams and humility.

A career talk session, facilitated by Ms. Yemi Adunoye, highlighted the agricultural careers the students could venture into. According to Adunoye, through their involvement in STEP, the students can contribute to agricultural developments.

In his talk on team building, Mr. Aderonmu. harped on the activities that promote team building, the importance of team building and how the students could foster team building.

Tour of STEP facilities and enterprises

Two tour guides selected from STEP students in Fasola facilitated the tours alongside Ms. Bolanle Larinde, the STEP-Oyo Coordinator. The visiting STEP students and their teachers were through descriptive and explanatory tours of the school farm, processing centre, training room, ICT room, biogas station, broiler pen, layers pen, screen house and the laboratory. The visitors were also shown pictures of the state of the school facilities before and after STEP's intervention.

After the tours, the visitors joined their counterparts in Fasola in their respective enterprises to carry out tasks with respect to team building and networking. The tasks carried out included doughnut making, titration experiments, Christmas card design, transplanting of pepper seedlings at the screen house and enlightenment at the poultry.

The students also took part in competitive games and educative quizzes and the excursion ended with lunch and remarks from teachers of the visiting and host schools.

Teachers and students speak after the trip

The Methodist agricultural science teacher, Mrs. Ademikanra, in an interview described the excursion as truly enriching, saying it afforded the students the opportunity to know new places and exposed them to new trends in agriculture. "IITA has tried in changing the mind-set of the students and teachers on how to get things done in a much easier way", she said.

On what they learnt from the trip, Hameed Sefiu from Fasola Grammar School, ICT enterprise, and Saheed Abdulmuheez from Methodist High School, Crop and Mechanization enterprise, described the event as educative and memorable.

Abdulmuheez said: "My expectations were met. I had fun, learnt a lot and met other STEP students. I learnt that team building is a tool we need to achieve a common goal. In my enterprise, I used machines like rotary tiller, transplanted pepper and also played games. I would love to go on another excursion".

In the words of Mr Aderonmu, Bishop Philips Agricultural Science teacher, "it will be a good thing for STEP to expand to all schools in Oyo state and then to all schools in Nigeria."

According to him, exposing children to agricultural education at the early stage in primary and secondary school will ignite their interest in agriculture and encourage them to apply for agricultural courses in higher institutions.

Bello Usman from Fasola Grammar School, Value addition enterprise, said he enjoyed the visit because he got to meet new people, practise team work and learn about different careers in agriculture. "This has helped me decide to become an Agricultural Engineer in future" he said.

"I learnt about battery cage system where layer birds are kept, the deep litter system for rearing broiler birds," said Babatunde Precious, STEP student from Bishop Philips Academy. "I also learnt that crops that cannot withstand harsh weather conditions are kept in the screen house".



Participants at the Central Science Laboratory.



Participants in the Value addition enterprise making doughnuts.



Participants on the Demonstration field taking a look at the Farm machines.



Participants interacting at the ICT room.



A STEP student from Fasola Grammar School fascinating another participant at the poultry.

Mwiki students in Kenya replicate STEP activities at home

The STEP program at Mwiki Secondary School, Kenya, is expanding the students' home enterprises and encouraging them to use the knowledge gained from agribusiness trainings at home. To encourage urban agriculture, the students have been provided with vertical garden bags since most of them find it difficult to access land in the urban areas where they live. The garden bags are durable with a lifespan of about three years.

Some of the beneficiaries shared their experiences and future plans in urban agriculture

Parmenas Mwangi

"I am an agribusiness student in my second year of study. I have a small garden at home where I plant and sell crops. I grow vegetables like spinach and kale, and fruits like passion, avocado, mangoes and bananas. I also have three chickens and two goats.

Part of the money I earn from the ventures sustains my family and supports me financially in school. In the last avocado season, my avocado tree produced between 70 to 120 fruits, which I sold for 30 to 70 Kenyan shillings per one, depending on the size.



Parmenas Mwangi, a STEP student in his garden

Through the program I have acquired a vertical garden bag that will help me plant other types of crops in the space available at my home. I am very grateful to STEP for the support and encouragement that has sustained my passion for agriculture."

Daniel Lusasi

"I am a student in my third year of study and I really enjoy agriculture. I was a participant of the home challenge. When I heard about the home challenge from my friend, I immediately looked for space since most of the area has some form of activity going on. I looked for red soil and signed up. My kales



Grace posing with her rabbits

did well and I was able to harvest and sell to workers in our home.

I stay in the Solidarity Child Rescue Centre in Kasarani. The center operates as a school during the day where students from outside come for their studies and in the evening, becomes our home. This means I have to constantly put mechanisms in place to ensure younger children do not tamper with my crops. This has taught me leadership as I have had to constantly engage them to explain why they should not tamper with the place.

I really desire to venture into agriculture, and STEP has provided an avenue for me through the trainings I've gotten. The vertical garden bag will come in handy for my new enterprise because it will solve the problem of limited space. I look forward to more support in expanding my small farm and starting a rabbit enterprise."

Grace Wambui Gitau

"I am in my third year of study and I joined the club in 2019. I keep rabbits at home because I enjoy looking after them. I started

out with a rabbit and now I have 50 rabbits. I started selling to the locals as a source of food and for those who want to join me in the venture. I provide after sale services by sharing skills with them on rabbit handling and feeding.

Rabbit-keeping has been challenging especially with diseases and marketing but through my interaction with STEP, I will be able to get guidance on what to do to increase and sustain my enterprise. The vertical garden bag is another additional source of income for me and I am very happy about it."

STEP-DR Congo girls expand livestock business



A student of Mushunguri in the pigsty

Twenty young girls in the STEP Club in Mushunguri, in the South Kivu Province of DR Congo have demonstrated that rabbit rearing can be turned into a big livestock business.

The girls who got 30 rabbits from STEP for school club activities in March 2020 had grown the number to 320 by September 2020. After selling 280 rabbits at \$6 per rabbit, they realised \$1680 and used the amount realised to purchase 14 pigs for the purpose of diversification of the livestock business.

The girls who now manage a rabbit farm and a pig farm have vowed to further expand the livestock business by multiplying the animals in order to become major suppliers of livestock in Mushunguri.

While encouraging fellow girls to develop interest in the livestock farming, they begged governments in Africa to invest more in the education of young people in order to secure the future of the continent.

STEP gives university students practical training in agriculture

Universities in DR Congo, and in other parts of the world, generally dwell more on theoretical knowledge, sometimes leaving students and graduates yearning for the practical side of what they are learning. This is why STEP has succeeded in extending its reach to university students.

The move started in February 2020, when Yvette Ntabaza, a student of the Evangelical University of Africa, DR Congo, requested the approval of the Director General of IITA, Dr Nteranya Sanginga,

to create a STEP Club in her university, to avail many agronomy students opportunities to practice. Incidentally, many of the students were beneficiaries of STEP in their secondary schools.

By April 2020, members of the club had benefitted immensely from STEP trainings and had begun to produce fruit juice using the \$350 obtained from membership fees as capital.

In order to encourage the undergraduates, STEP organized a 2-day training to

enable them develop a good business plan that eventually won them \$2000 business grant following a presentation to Sanginga and delegates from Nigeria and Benin.

In their presentation, the club members demonstrated that with the funding, production would double while about 5000 households would be reached. To boost sales, they decided to collaborate with stores and supermarkets and promoted their products on radio, television and social media.



Yvette NTABAZA founder of Club STEP UEA



Arthur Zigabe defends the business plan in the presence of Dr. Nteranya Sanginga

Weza teachers pig breeding project makes huge gains

A pig breeding project initiated for teachers in Weza, DR Congo, by the Director General of IITA, Dr Nteranya Sanginga, has recorded huge gains with the number of pigs in the pigsty increasing from 46 to 230 in nine months.

The project which started in March 2020 with \$16,000 aims to provide a platform for the teachers to acquire practical agribusiness knowledge with which they would impact their students and also empower them economically. The start-up money helped to pay for the building of the pigsty, buying 46 pigs to start the farm, feeding the animals and other sundry charges and payments.

With the success recorded so far, the project now plans to give two piglets each to 45 school teachers to start pig farming at home, while the remaining 140 pigs would remain in the pigsty for the project to continue.

In order to make the initiative sustainable, STEP organized an agribusiness training for the beneficiaries hoping that it would help them discover the numerous opportunities surrounding the pig farming business.



A student from Weza at the teachers' project pigsty

There are plans to extend the project to other schools in Nyangezi to stimulate development in the area. It is also testing a model that would make teachers agribusiness extension agents to sustain STEP interventions in schools

and create a generation of agribusiness teachers in Africa. The teachers' pigsty has now become a real educational material for learning agribusiness and a reference point for pig breeding in Nyangezi.

Oyo State Library Board donates reading materials to STEP-Oyo project

The Oyo State Library Board has donated reading materials including school books, a shelf, six reading tables and chairs to the STEP-Oyo project. The items were received when the STEP Nigeria team visited the Board on 11 December 2020. The team was received by the Director of Public Library Services, Pastor Oluyemi Akintunde and the Principal Librarian, Mrs. Oluwatoyin

Falana, who facilitated the donation.

Commending the IITA and STEP for their impactful activities, Pastor Akintunde said: "We're glad that IITA is developing libraries, encouraging reading, renovating schools in Oyo State."

He expressed hope that the project will receive more support from the government, and promised that the

library will be willing to give more support in the future.

On her part, Mrs. Falana said it was fulfilling to be part of the STEP story.

Speaking on behalf of the STEP Coordinator and the IITA team, the STEP-Oyo Project Coordinator, Ms. Bolanle Larinde, thanked the library for the donation, promising that the materials would be used effectively.



The donated materials.



STEP-Oyo team members with the Director of Public Library Services; Pastor Oluyemi Akintunde, and two Principal Librarians; Mrs. Oluwatoyin Falana and Mrs. Hafsat Akerle.

STEP Students at Fasola Grammar School record bumper cucumber harvest

STEP Students in the Crop and Mechanization enterprise at Fasola Grammar School have recorded bumper yield of cucumber fruits. Two of the students, Adekunle Taofeek and Opalade Samuel, who have been exceptional were particularly thrilled as they tended to the cucumber plants during the Christmas holiday.

The youngsters planted the crop on 27 November 2020 and harvested mature and juicy cucumber fruits on 7 January 2021. The cucumber fruits were bulky and healthy, and the overall yield was exceptional. They are currently being sold at fantastic prices.

The feat is an indication of how

much the students are interested in agriculture, and how familiar students in the Crop and Mechanization Enterprise had become with screen house activities. The enterprise is looking forward to the harvest of their tomatoes, pepper and other vegetables.



Samuel and Taofeek posing with the cucumbers.



Harvested Cucumbers.

Govt officials inspect rehabilitation projects at STEP-Oyo Schools

Officials of the Oyo State Government on 21 January 2021 carried out an inspection-audit tour of the STEP-Oyo project. The visiting team consisted of representatives of the Commissioners of Education and Agriculture, the Director-General of the Oyo State Agribusiness Development Agency (OYSADA), and heads of the state's Planning and Development Office, Bureau of Public Procurement, and the Auditor General's Office.

The STEP schools visited were Methodist High School and Bishop Philips Academy.

The National President of the Old Boys Association of Methodist High School, Dr. Olalekan Michael Abioye and the school's management were on hand to receive the government officials.

In an interview, Abioye described the transformation taking place in the school through the STEP-Oyo project as a miracle, adding that "we're excited to see this beautiful thing happening and happy to see that our students would be in a very conducive environment learning the science of agriculture and other areas of science. I've moved round here today and I can see that God has visited the school."

Abioye hailed the Oyo state governor, Engr. Seyi Makinde; his Executive Adviser on Agribusiness, Dr. Debo Akande, and the International Institute of Tropical Agriculture (IITA), saying "they've done



Inspection of the processing centre at Methodist High School

fantastically well to consider our school for such a befitting project."

He stated further that the impact of the STEP-Oyo project seen so far has motivated the Old Boys to also contribute their quota to the development of the school. "By the time you come here in another one year or two, you'll mistake Methodist High School for a private university," he vowed.

During the inspection and audit process, STEP-Oyo Project coordinator, Ms. Larinde, briefed the team at every

rehabilitated or refurbished structure, also sharing photos of the structure before the renovation began.

At Methodist High School, the visiting team inspected the ICT room, the science block, STEP office, STEP training room, processing centre, central science laboratory, store, toilets, fishpond, goat pen, the landscaping, as well as the chairs and tables acquired for teachers.

At Bishop Philips Academy, they inspected the training room, Home-Economics laboratory, toilets, processing



Arrival at Bishop Philips Academy



Inspection of the ICT room at Bishop Philips Academy

centre, store, STEP office, central science laboratory, Library, inverter room, ICT room, chairs, tables, landscaping, carpark and fishpond.

Apart from the inspection, some STEP students presented the activities of the enterprises to the visiting team and displayed an array of products and equipment they use for training.

At the end of the inspection exercise, the visiting team commended the STEP team

for the quality of the rehabilitated structures and training materials and equipment. They also made recommendations in certain areas and hailed the STEP team for being a competent host.

At Methodist High School, Dr. Akande stopped by to interact with the inspection team on their observations and recommendations.

The agribusiness expert, while speaking about the impactful projects of IITA,

praised the agribusiness facility at Awe, which is a collaboration between the Oyo State Government and IITA, and expressed delight at how other states in the country were requesting for the presence of STEP in their schools.

He advised that the state government and its agencies set up a sustainability committee for the STEP-Oyo project and urged the Old boys to act keenly on the sustainability efforts.

International journal publishes IITA STEP article

The Journal of International Agricultural & Extension Education has published an article by the Start Them Early Program (STEP) of the International Institute of Tropical Agriculture (IITA).

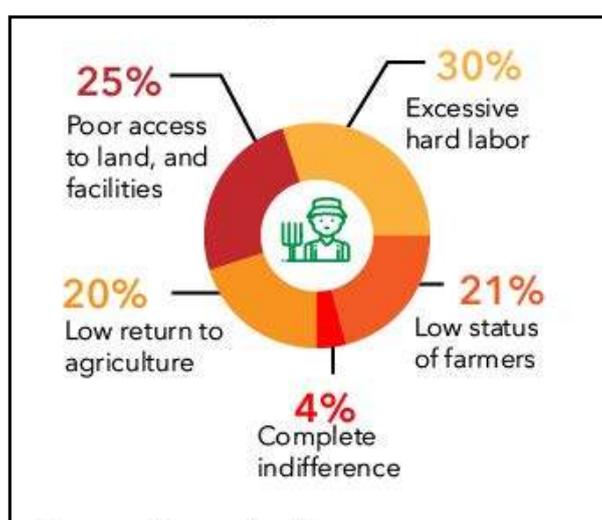
The article, titled, "Understanding the Perceptions of Secondary School Youth toward Agricultural Careers in Democratic Republic of Congo, Kenya and Nigeria" was published in December

2020 in Volume 27, Issue 4 of the journal which is available online at:

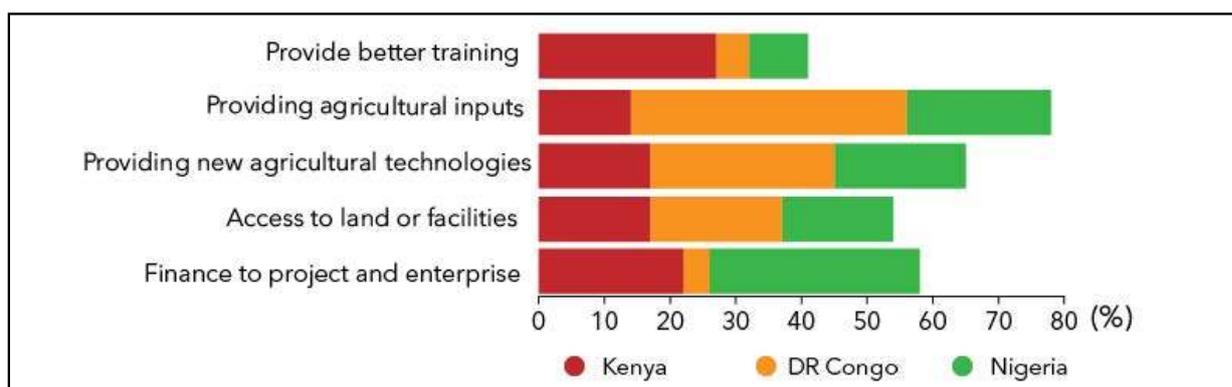
<https://www.iaaee.org/index.php/vol-27-4-december-20>.

	F	SEM
From a farming background?	30%	± 1.3%
Future plans for farming	54%	± 1.4%
If yes: future plan involves field crops	30%	± 1.5%
If yes: future plan involves animals	42%	± 1.6%
If yes: future plan involves processing	15%	± 1.2%
No future plans for farming	46%	± 1.4%
Currently study agriculture in school	86%	± 1.0%
Member of young farmer club	9%	± 0.8%
Currently involved in agriculture	69%	± 1.3%
If yes: grow field crops	58%	± 1.7%
If yes: raise animals and livestock	37%	± 1.7%
If yes: practice horticulture	24%	± 1.9%
Not currently involved in agriculture	31%	± 1.3%

Summary results of Survey



Reasons stated for lack of interest in agriculture



Students' opinions on better advancing career pathways in agriculture

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