



WEST AFRICA: FEEDING THE FUTURE THROUGH EDUCATION IN NIGER, HOW A USAID PARTNER IS PLANTING SEEDS OF SUCCESS WITH GIRLS IN SCIENCE

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18-year-old Rimana Issoufou
Hassane Mayak/ *Girls in Science*
Member, Niamey, Niger

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November 2020 – It’s not unusual to see stretches of dry land in Niger, West Africa. The Saharan terrain is often baked by the scorching sun, however for 18-year-old Rimana Issoufou Hassane Mayak, the climate that she has known all her life is changing. And, almost every day, as she makes her way to school, she notices something different.

“In my country, the climate has changed considerably in recent years. During some months it is extremely hot, and then extremely cold during others. Also, the floods are more and more devastating. The climate is now very variable, and this has repercussions on agricultural and pastoral production,” Rimana said.

One of hundreds of young girls in Niamey, Rimana is growing more aware of the changing environment because of a unique mentoring program called “*Kimiya Yan Mata* (translated as “*Girls in Science*”). Established by [SERVIR West Africa](#), a United States Agency for International Development (USAID) partner, the program is designed to encourage students, especially girls, in Niger to become more involved in Science, Technology, Engineering and Math (STEM) subject areas. Conducted on school grounds, through hands-on activities rooted in STEM subject areas, the program educates students in areas related to agricultural development, sustainability and more. For example, the students learn about the importance of threats that can affect global food security and how to proactively address nutritional needs through building micro-gardens. From planting moringa, tomatoes, chili-peppers and more, the students learn how to grow crops, and then train other students. The students are also expected to continue to grow crops in micro-gardens at home; and share their newly acquired agricultural skills with their families. *SERVIR*’s Assiya Alhassane Chekaraou works with students, and highlights that this program is more than just gardening, it’s a program that literally plants seeds of success in the ground and in students; seeds that will feed the future in more ways than one.

“The idea is to have long-term effects on food security in terms of quality organic production and environmental protection,” Chekaraou said.

Growing organic crops, Rimana and her friends don’t mind kneeling in the dirt and getting their hands dirty, it’s all a part of becoming junior experts in agriculture and taking care of the environment.

“The micro-garden, one of the first activities I had to do with the club, was very beneficial for me and my friends. It allowed us to be budding biologists by following seedlings throughout their evolution and to make us more critical, respectful and responsible towards the environment,” Rimana said.

Additionally, the program cultivates leadership skills. The engaging extracurricular club is based in various middle and high schools in Niger. In a traditionally male-focused educational environment, Rimana is a rising star. Like some girls, the thought of being a researcher or a scientist was not top of mind or common for women in her community. However, *SERVIR*’s program has given her a new perspective regarding academic studies connected to STEM.

"SERVIR made me understand that science is not only theoretical and that I had to experiment with new things," Rimana said.

She's also learning more about how to lead. She's the first female president of the SERVIR club, which is involved in "Kimiya Yan Mata", at Mariama secondary school. And, she is also the President of the Young Parliamentarians of Niger. In both roles, she has helped to boost interest in proactively engaging others in actions to protect the environment and fight climate change.

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Committed to learning more about how the environment is changing, and how the change is impacting the terrain around her, Rimana is also committed to using the skills she has acquired through the program to motivate, educate and lead fellow club mates in engaging actions geared towards protecting the environment. Rimana believes that communicating in a creative way about climate change education is key in changing behaviors to support environment protection. Recently, she and a few other students created a poetry slam performance to help raise awareness about climate change.

"For me, by helping young people understand the importance of the environment, we can encourage them to take care of it. And as I have learned, one of the simplest and most beautiful ways to take care of the environment is to plant a tree," Rimana said.

With "Kimiya Yan Mata", and thanks to funding from USAID, SERVIR West Africa will continue to promote STEM connected career choices, especially for girls, with hopes of one day filling the gap in qualified female scientists and engineers in the Sub-Region. A student with high academic marks, Rimana continues to work hard in her studies and is now passionate about another area of science geared toward helping people.

"I would like to become a biomedical engineer, a discipline that will allow me to study in a laboratory in order to discover more about certain diseases and to develop revolutionary tools in the field of medicine," Rimana said.

Currently with this project, more than two-hundred boys and girls have participated in various SERVIR West Africa Food Security and Agriculture activities including soilless gardening, water quality assessments, digital mapping, etc.

"Specifically, in regard to digital mapping, each club has developed a project. There is one school that has planned to map the flood areas of their city, and another club has planned to map the health centers and schools in their area," Chekaraou said.

From micro-gardens to digital mapping, all activities are designed to engage students now and in the future. As for Rimana, as the environment changes, she and others are taking action toward promoting positive behaviors aimed at promoting a healthy environment for all now, spurring hopes of a brighter future.

"In Niger, I hope that in 20 years' time, we will have trees as far as the eye can see, clean streets and responsible citizens who are aware of the climate issue," said Rimana.

Molding future leaders like Rimana, SERVIR West Africa is "Feeding the Future" through hands-on education in Niger. By inspiring students, especially girls to dream big, work hard and plant seeds that will one day yield food and career opportunities that will support Nigerians on a path toward self-reliance.
