

## Nuestra Selva, Nuestro Futuro: A Case Study on Experiential Learning in Calakmul, Mexico



**The Rainforest Alliance has been working since 2016 with youth and community partners in Calakmul, Mexico to prepare young people for a meaningful and financially viable future within their communities. The ability of youth to access employment and education in their communities is crucial to combating out-migration and ensuring the continuation of sustainable farming and forestry.**

Nestled within the Selva Maya on the Yucatán Peninsula of Mexico lies the ancient Maya city of Calakmul, now a UNESCO World Heritage site. This richly biodiverse region is home to more than 80% of the plant species in the Yucatán Peninsula, in addition to 350 species of birds and nearly 100 mammal species. It also contains the most extensive tropical forest in Mexico. Calakmul is situated in the state of Campeche and is principally composed of the Calakmul Biosphere Reserve which, with 7,238 km<sup>2</sup>, is the largest protected tropical forest area in Mexico.

Around the buffer zone of the Calakmul Biosphere Reserve, communities grouped into 90 ejidos have been sustainably managing the forest, harvesting timber and non-timber forest products for sale, and living off subsistence agriculture. The communities engage in a range of activities and many have opportunities to improve, innovate, and expand into new markets. However, within the ejidos, only those who own

or stand to inherit land have opportunities to make decisions and work the land, making it difficult for the most vulnerable — youth, women and those without land rights — to participate in local government and decision-making.

Youth in these communities also have limited options to study, pay for their education, and find meaningful employment. These challenges drive many young people in Calakmul to migrate in search of better education and employment opportunities. Such out-migration leaves communities without the leadership, innovation, education, and ambition of their best and brightest young residents. At the same time, local forestry ejidos often hire technical experts and outside consultants to support their operations because of a lack of specialists within their community. Without engaging young people, communities lack the next generation of technical specialists and forestry professionals to work the land and keep the local economy running.

### ***Land Tenure and Community Structure: Ejidos***

The ejido system is a form of land tenure in which land is cooperatively managed by a community, while individual families can hold and manage their own parcel within. Ejidos follow customary procedures that grant land and voting rights within the community to the founding male heads of house-

holds. In some cases, if the father passes away, women or children gain the right to take his seat on the leadership team. In rare cases, the ejido has set aside lands for interested and motivated youth. However, those whose families were not a founding member of the ejido are unable to have a voice in matters affecting the communal land; or have their own parcel. With such a system in place, it is hard for youth and female residents to become active and informed community participants.

As a result, communication gaps arise between younger and older generations. There is a limited understanding of the ejido's workings among youth, as well as a perceived lack of opportunity for youth. The Rainforest Alliance conducted a baseline assessment in three ejidos in Calakmul and found that adult leaders felt that there were abundant opportunities for youth involvement in local governance, but that youth lacked interest and motivation to participate. Meanwhile, youth expressed sincere interest, but perceived a lack of opportunities and support from elders. Through our work in Calakmul, we aim to open a dialogue between young and old in order to bridge this gap and find ways for both populations to bring their distinct skills together to improve their community.

### **Why focus on youth in forestry?**

Young people are critical to the Rainforest Alliance's mission. Investing in the future of community forests means investing in the next generation of leaders, community members and technicians in sustainable farming and forest management. Because of this, the Rainforest Alliance is working to increase ecological knowledge and technical skills and motivate young inhabitants to become active and interested participants in local life—both for their future and the future of the forest.



### **RAINFOREST ALLIANCE'S INTERVENTIONS IN CALAKMUL**

We began working with local young people, in partnership with the Centro de Bachillerato Tecnológico Forestal 07, a technical forestry school in Zoh Laguna, Campeche, in early 2016. Over the past four years, we implemented capacity-building courses to build young people's understandings of the rich biodiverse place in which they live, introduce them to experts in the field, and help them explore their skills, interests, and potential. In addition, we co-designed experiential learning activities with community leadership to allow youth the opportunity to gain practical skills, while meeting existing needs of their communities.

We provided over 250 hours of coursework to a cohort of 70 young people through our course, Nuestra Selva, Nuestro Futuro. Over the course of this work, we held 9 training sessions, that included three elements critical to our youth strategy: deepening ecological knowledge and content, socioemotional learning and group development, and visits to the field and meetings with experts. We also provided mentorship and individualized support during the learning process.

#### **Experiential Learning Opportunities**

In addition to capacity-building courses, we worked with community leadership to develop experiential learning opportunities for youth participants. We aimed to bridge existing communication gaps and foster trust-based relationships by creating opportunities and spaces for young people and community members to interact.

#### **Theoretical Framework:**

*"Education is not the filling of a pail, it's the lighting of a fire." - Yeats*



Experiential learning is a widely used approach to teaching that links the students' education, work, and experience.<sup>1</sup> It is a teaching philosophy in which educators engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities.<sup>2</sup> In this learner-centered approach, students play an active role in their learning, focusing on reflections and assessments of real experiences, which sets it apart from a traditional education.

A key principle of practice of experiential education is that experiences require the learner to take initiative, make decisions, and be accountable for results.<sup>3</sup> Additionally, throughout the experiential learning process, the learner is actively engaged in posing questions, investigating, experimenting, solving problems, assuming responsibility, being creative, and constructing meaning.<sup>4</sup> Social and emotional skills are also critical to experiential learning, as this learning role often requires skills in teamwork, collaboration and relationship building.<sup>5</sup>

The benefits of experiential education include preparation for jobs, building skills in leadership, management and social interaction, facilitation of dialogue and critical thinking, and insights for personal growth.<sup>6</sup> Hands-on experiential learning allows youth to practice their skills, while being exposed to potential employment opportunities, as well as community members and leaders.

### ***Building Skills and Shared Understanding***

We provided experiential learning opportunities to 40 young people; these included those identified as part of this project in addition to some identified by the ejido leaders. In close collaboration with local ejidos, we identified concrete needs that could be resolved by our youth participants and would help ejidos comply with government and certification standards or support community initiatives. We worked to place young people in these positions, supported and mentored them, and included an individual evaluation at the end. Students were involved in several activities including taking real GPS data in the field, logging data points in the of-

fice, creating maps, writing reports, and surveying community members on different topics. One group was interested in collecting data for a population study of mahogany. The students spent more than two months in the tropical forest georeferencing and measuring and calculating the dimensions of the trees. The data collected was used to comply with FSC audits and CITES requirements to allow commercial sale of the ejido's mahogany on the international market. Initially, there was a lack of trust from community leaders in the capacity of the students to carry out the tasks but as the students progressed in the activities, they gained the trust of the landowners, who began to see them as technical specialists in data collection.

These experiential learning opportunities are a win-win for the ejidos and youth. They provide youth with the chance to gain experience, a small stipend, and opportunities to interact with community members and leaders. At the same time, community members gain support on real needs. Overall, these activities fostered the chance to create a better shared understanding of the youth's skills and enthusiasm, furthering their confidence and trust in each other.

### **LESSONS LEARNED**

The most important lesson learned from the first two phases of this project, which confirmed our previous knowledge, is that if given the opportunity and support, **youth will rise to the occasion, work hard, and make change.** This was most evident in the experiential learning opportunities which our youth participated in within nearby ejidos. With a base foundation of knowledge and skills, youth were able to engage with community members, learn new technology and lead on various activities. Essential to this success were the coaching and mentorship we provided along the way. This activity helped youth participants learn, gain confidence in themselves, their team, and from their community members. An important part of this learning was being treated not as students, but as professionals with job roles and responsibilities. Unlike the classroom, they had a different set of rules and were held accountable for the jobs they completed or failed to complete. They personally reported progress to the



community and were given an individual performance evaluation at the end of the process.

We also learned that helping students **understand and analyze the “why” is critical**. Too often in traditional schooling, students are taught concepts in isolation of their application. We focused on this connection, believing that if young people understand the reason behind collecting certain data in the field or why community structures are built a certain way, they are more connected to the impact of that work and are able to think critically and resolve problems that arise.

Another key lesson from this project is that **connecting knowledge to employment is key**. In rural communities like Calakmul where employment opportunities for youth are limited, it is especially crucial that learning in school prepares young people for the workforce. The connection of the content knowledge with real field experiences, in particular those developed and practiced during our experiential learning opportunities makes our program unique and prepares young people to find more meaningful work in the future.

Similarly, we learned that developing **socioemotional skills** also helps develop key skills that are necessary to make young people employable, while also developing their whole self. This has been a key element of our work, both within each training session, as well as through individual support and mentorship provided to youth participants as they progress through the program, develop and explore their interests and think about their future educational and professional path. Developing a safe space for personal growth takes intentionality and time dedicated to support youth participants.



### Next Steps

This project is now in its third phase of work, building on the success of our previously funded projects with the W.K. Kellogg Foundation. We are now working with two local education institutions - Centro de Bachillerato Tecnológico Forestal 07 (CBTF 07) and Universidad Tecnológica de Calakmul (UTC)- to build the capacity of their own academic teams to multiply the impacts of our efforts in the years to come.

We aim to institutionalize these activities so that both academic institutions continue to develop capable professionals, leaders, and human beings in natural resource management. Without question, this work will indirectly benefit and improve the quality of life of the people who inhabit these territories. We are supporting the development of two new educational tracks focusing on tropical forestry and building community technicians at these institutions. To ensure the success of these new tracks, we will provide professional development to their teachers, including learning in the field and access to our experts on staff. Additionally, we will facilitate learning experiences within the ejidos to continue to provide youth with on-the-job training and exposure to potential avenues of employment and opportunities within the community. Key to the future success of the efforts will be to also connect academic staff to the ejidos. Over the next two years, we will continue to work to build a bridge between the needs of the forestry ejidos and the young people who will ensure the long-term sustainability of the forest. 🌱

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1: <https://www.jstor.org/stable/pdf/43766169.pdf>

2: <https://www.aee.org/what-is->

3: <https://www.aee.org/what-is-ee>

4: <https://www.aee.org/what-is-ee>

5: <https://teachingcommons.unt.edu/teaching-essentials/engaged-learning/components-experiential-learning>

6: <https://www.ucop.edu/global-food-initiative/best-practices/experiential-learning/learning-from-the-ground-up.pdf>



The Rainforest Alliance is creating a more sustainable world by using social and market forces to protect nature and improve the lives of farmers and forest communities.

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