

Carbon project

San Diego de Tezains Durango, Mexico



CAR 1584



A Cool Effect onsite report

February 2025

Improved Forest Management

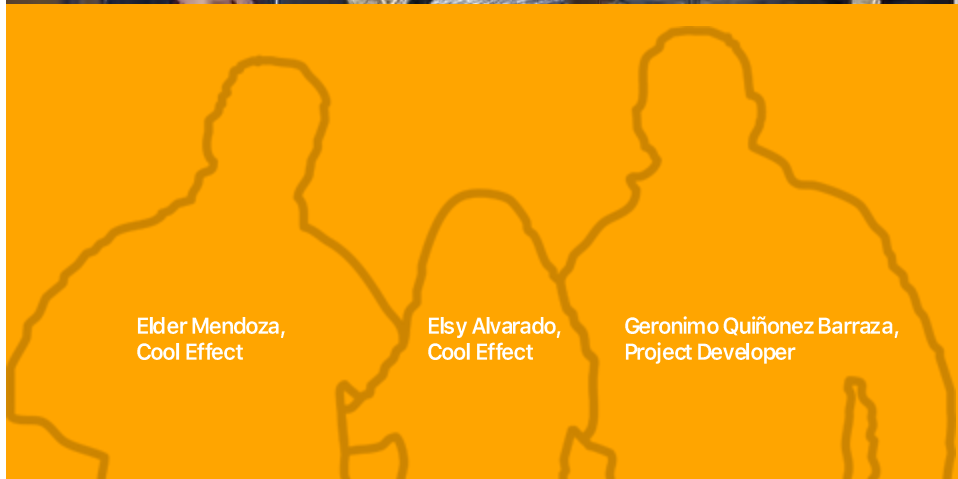


As part of our Seller's Pledge, Cool Effect conducts project site visits as part of its due diligence process.

This visit marked our second trip to the ejido and was carried out by Elder Mendoza and Elsy Alvarado in February 2025 — the same team that conducted the initial site visit in October 2023.

The Cool Effect team was accompanied by the project developer, Geronimo Quinonez Barraza, along with the entire Comisariado of the ejido, led by President Jose Manuel Quinonez.

Dr. Geronimo was born and raised in the ejido, where he gained early experience working in the forest industry. He holds a bachelor's, master's, and doctorate in forest sciences, along with a postdoctoral fellowship in Forestry and Natural Resources from the University of Georgia. Additionally, he earned a master's degree in applied statistics from the University of Juárez in Durango and a master's degree in applied artificial intelligence from the Tecnológico de Monterrey.

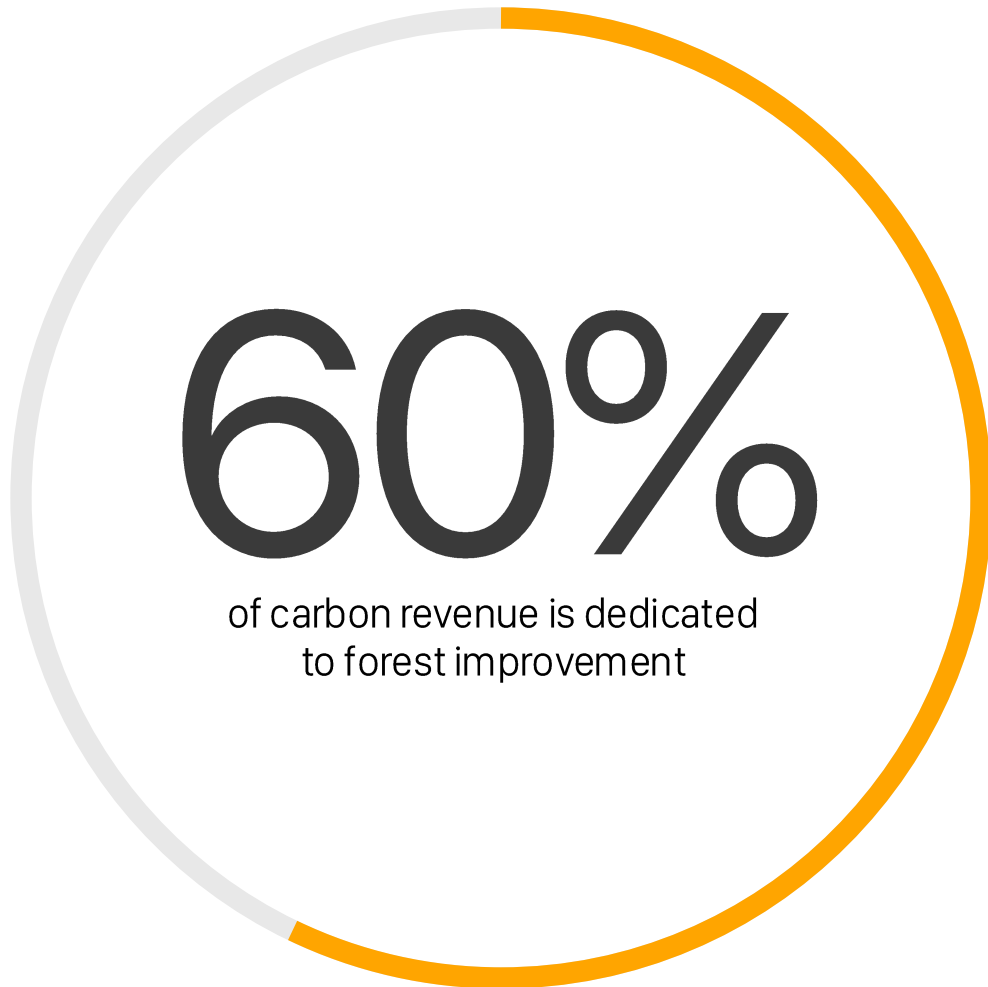


Elder Mendoza,
Cool Effect

Elsy Alvarado,
Cool Effect

Geronimo Quiñonez Barraza,
Project Developer

How the revenue is used



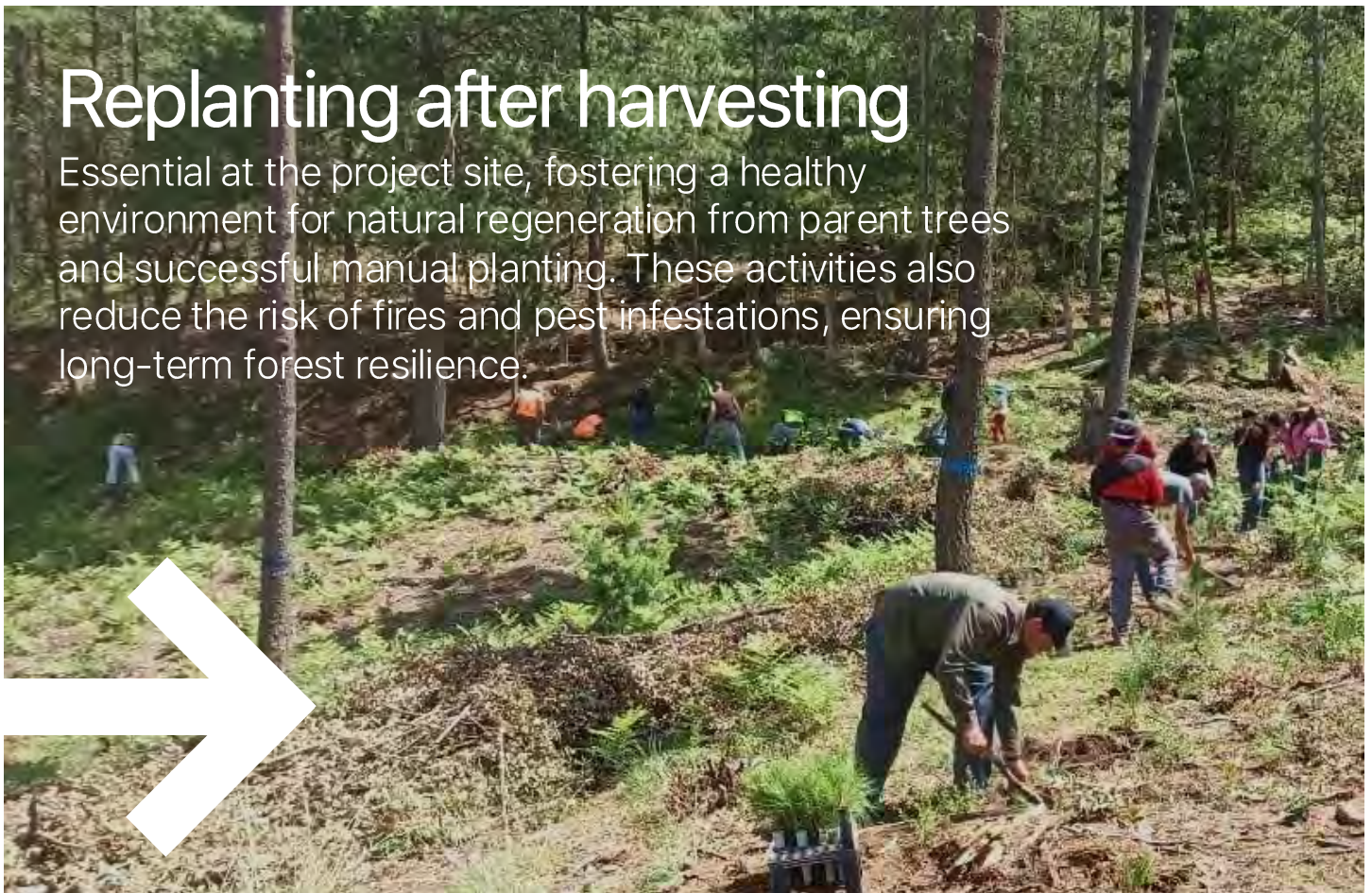


Reforestation of old agricultural farms that were abandoned years ago was once financially unfeasible. However, with revenue from carbon credits, reforestation has now become a priority, restoring these lands to their natural state.



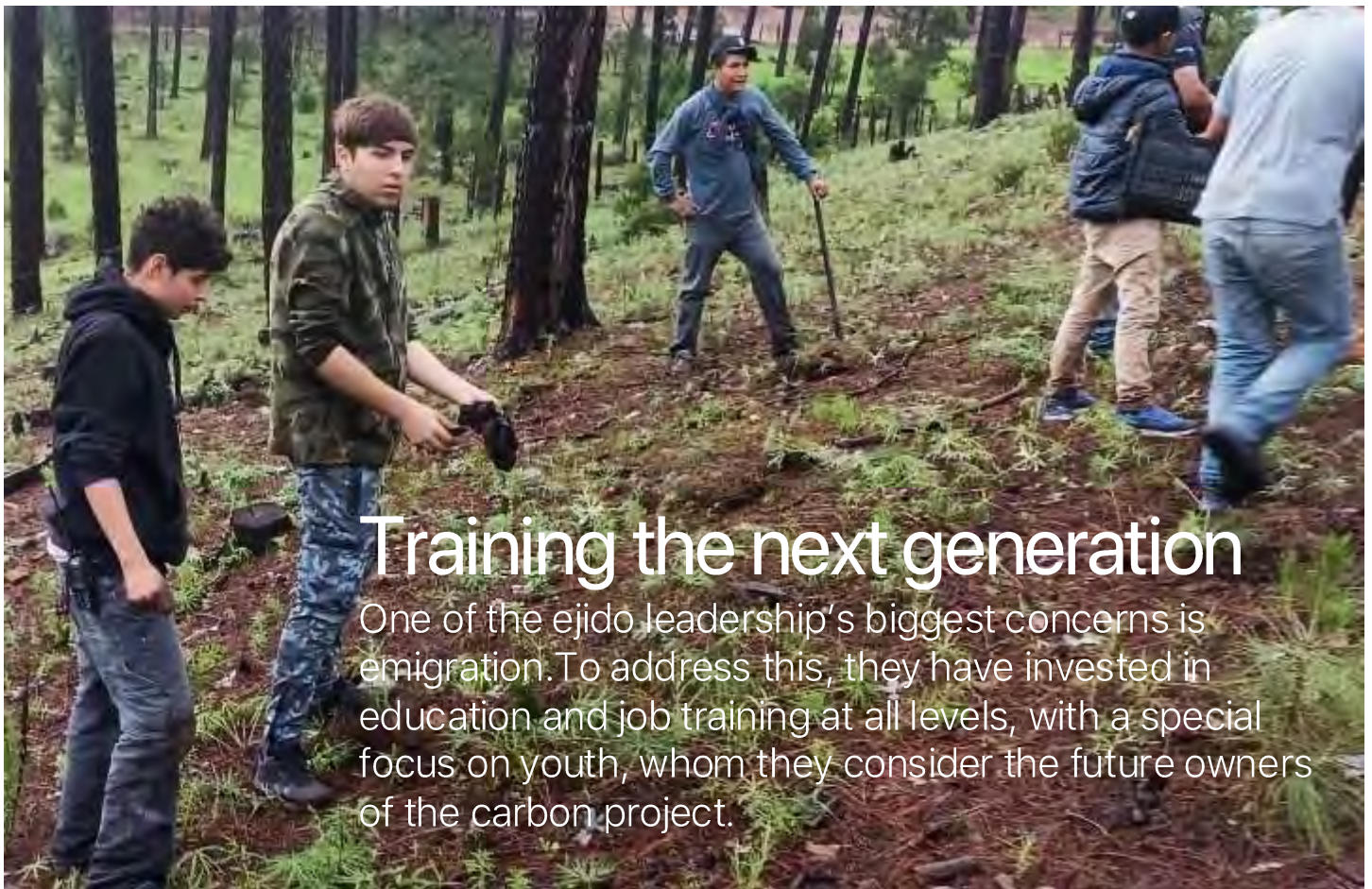
Replanting after harvesting

Essential at the project site, fostering a healthy environment for natural regeneration from parent trees and successful manual planting. These activities also reduce the risk of fires and pest infestations, ensuring long-term forest resilience.



Training the next generation

One of the ejido leadership's biggest concerns is emigration. To address this, they have invested in education and job training at all levels, with a special focus on youth, whom they consider the future owners of the carbon project.



New fire station and brigade



Fire poses the greatest threat to a carbon project. To enhance protection, the community built a new fire station and equipped the fire brigade with protective gear, essential equipment, and reliable transportation.

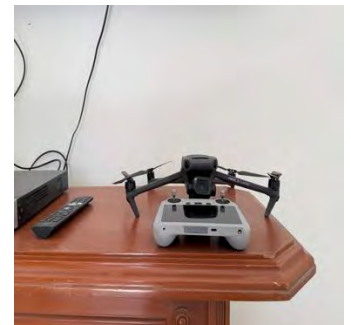
A brand-new fire station has been constructed, featuring:

- A garage area to house three newly acquired trucks for plague control, water cisterns, and crew transport.
- Two ATVs and two motorcycles for rapid deployment of brigade members, ensuring quick response in fire zones and navigating difficult terrain.
- Living quarters with two bedrooms, two bathrooms, and a kitchen to accommodate the night crew.
- Additional firehouses built in the neighboring communities of Montoro and Old San Diego, both part of the ejido, to extend fire protection efforts in the area.



Training and monitoring room The ejido invested in advanced fire detection and prevention technology, including:

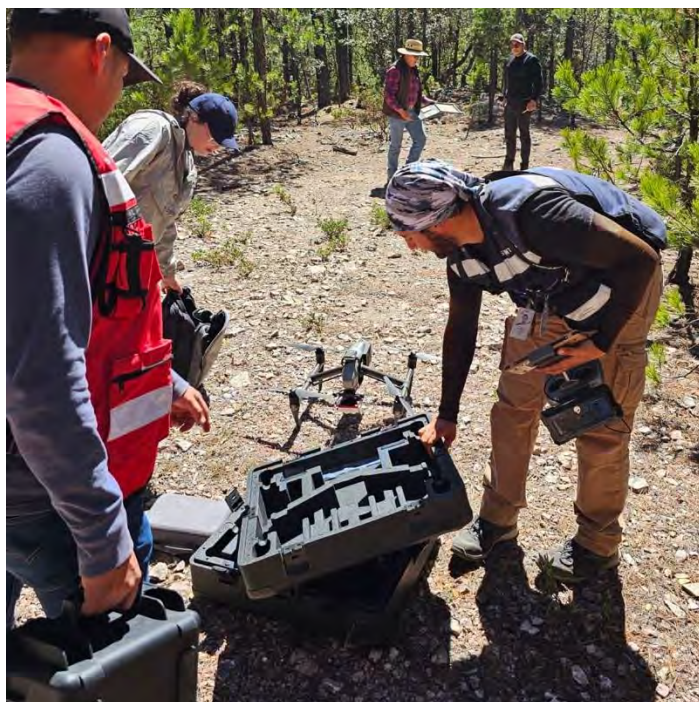
- Seven solar-powered fire cameras equipped with AI for immediate alerts, a 20km detection range, and a 360-degree view — eliminating blind spots in the ejido and neighboring communities.
- Two specialized drones: one for plague control and a thermal drone for fire detection, capable of seeing through smoke.
- A dedicated monitoring operator stationed in the control room throughout the fire season to ensure rapid response



Drone training

The ejido hired drone consultants to train the local populations.

- The ejido is highly concerned about fire hazards and has invested in AI-powered drones to accurately pinpoint the exact location of fires or potential fire sources.
- These advanced drones are unaffected by smoke and can efficiently detect heat sources, enhancing fire prevention and response efforts.



Other uses of carbon revenue

The indirect significant benefits to the community

- Permanent jobs for young community members in carbon activities who would otherwise have to leave in search of work.
- High-paying jobs and equipment for fire protection.
- Advanced fire surveillance technology, replacing traditional fire tower monitoring and radio communication. With AI-equipped cameras, alerts are now sent instantly to cell phones, ensuring immediate response.
- Full fire protection across all three towns of Ejido San Diego de Tezains, each now equipped with a firehouse and a communications plan which prevents spread.



Still under construction: the new fire house storage in the Old San Diego community.

Building community pride



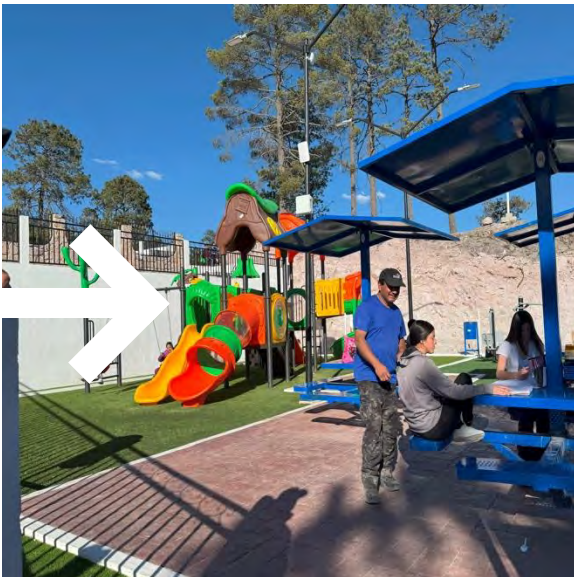
Ejido assembly pavilion

The assembly building holds a vital role in the ejido community as the central hub for decision-making that impacts everyone. Community meetings take place here, where members openly discuss and vote on the allocation of resources generated by the carbon project.

The photos emphasize the significance of the IFM carbon project by showcasing symbols of social safeguards. These visual elements not only underline the project's importance but also serve as a means of educating the community about its goals and benefits.

Church square

The Church Square and the church are essential spaces for the community for gatherings and celebrations of significant events. However, limited funding over the years left the church in disrepair, and the square was never completed. Thanks to the resources from the carbon projects, the ejido successfully restored the church and constructed the square, creating vibrant spaces for the community's cultural and social life.



Playground with study area and internet access

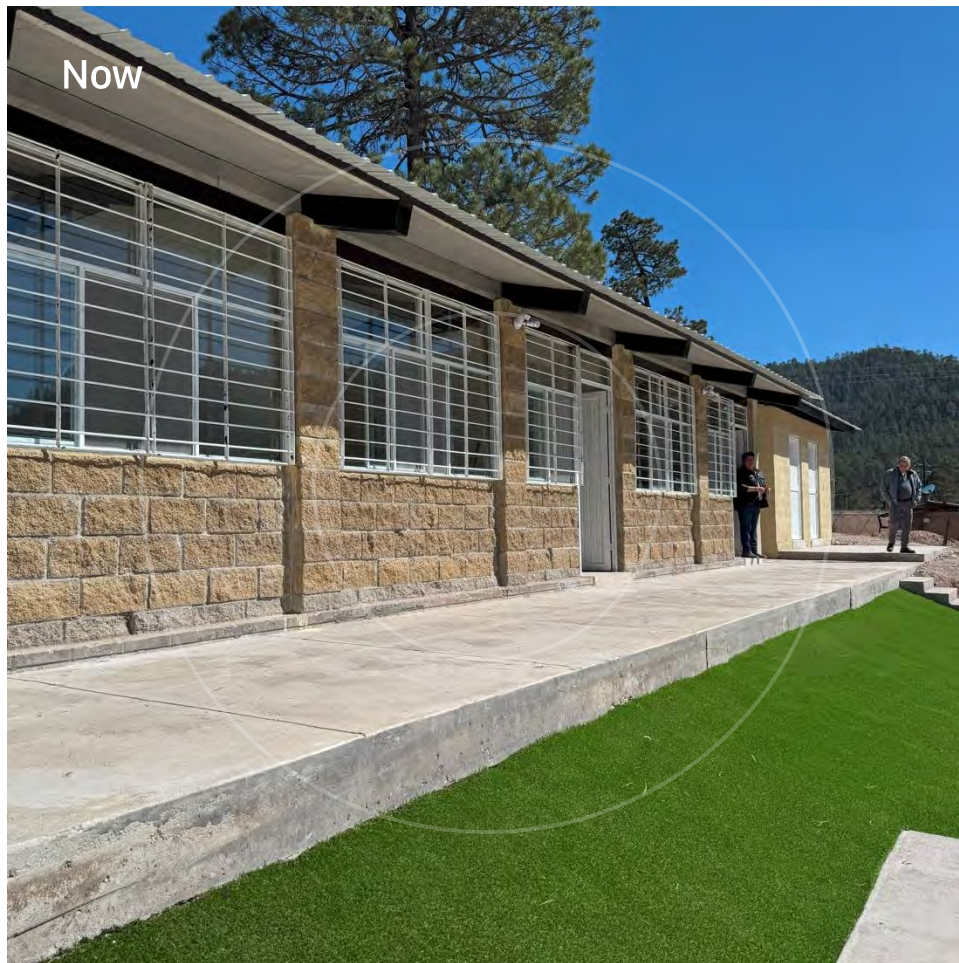
The playground features an internet-equipped study area, encouraging students to gather and complete their homework.

In the evenings, the community comes together in the squares, which are equipped with BBQ pits and solar lighting, creating a welcoming space for social gatherings.

Ejido high school

Access to education is a significant challenge in rural areas and is highly valued by the local community.

Unfortunately, the high school was in poor condition due to a lack of resources. However, revenue from carbon credits allowed the community to rebuild three new classrooms. This improvement has increased youth retention in the community by providing local access to education, reducing the need for students to leave the area. It has also eased financial burdens on families, as they no longer have to bear the additional expenses of supporting their children while studying away from home.



Ejido roads

New roads benefit the community by improving accessibility while also serving as crucial routes for emergency medical and fire responses.

The roads in the ejido were previously unpaved and highly susceptible to erosion. In winter, they became muddy and wet, creating hazardous conditions for both trucks and pedestrians. In summer, they turned dry and dusty, further complicating travel.

Thanks to funding from the carbon project, the ejido has begun paving the main roads that run through the community. This improvement has significantly enhanced safety and accessibility for everyone including during emergencies, whether driving or walking.



Still more to do...

"I want to make sure to finish each project the current comisariado has started so the future comisariado can start with new ideas."

— president of the ejido, Mr. Jose Manuel Quiñonez Barraza

President: **With the new revenue, I would like to finish the last of the most transited roads."**



A parent said:

My child used to get all muddy going to school and it was unsafe. Now, it is safe due to the new lights, and she is clean, no mud in her shoes."



From a forest technician, Cristobal:

"I am from another ejido that is twice as big as this one. We waited for decades for the government to paved a few hundred meters of road. Here, in San Diego de Tezains, the ejidatarios paved 1.9km of road in just a few months without the help of the government. This is all due to the carbon credit project. I am inspired to keep working. Everyone benefited of all these social projects. I am proud to be part of this project."

Testimonial in appreciation for the new school



"Now my son doesn't have to go away for high school."

"My son did not like going to school because it was old, dirty and extremely cold. Now, he just wakes up and goes."

"There has been an attitude change within the students. They feel appreciated by the community, and they come prepared and ready to learn. This new school has been extremely positive."

— a teacher at the school



New greenhouse: Securing the availability of native plants

The old greenhouse was open and exposed to the elements. The area has now been covered, and new greenhouses have been built with thermostat-controlled environments and automated water irrigation systems.



The newly built greenhouse can accommodate 160,000 plants at various stages of growth.

Currently, there are three active greenhouses, with two more under construction. Additionally, older greenhouses have been refurbished and are now fully operational.

All greenhouses are equipped with an automated irrigation system, ensuring efficient and consistent watering.

Elder Mendoza from Cool Effect inspecting the new greenhouses and the different plants.



Water: Finding new sources

With Durango facing a drought, the community is making significant investments to secure and conserve water for the future.

- In the remote town of Old San Diego, the community faced a severe drought. To address this crisis, the ejidatarios invested in a water project that involved pumping water from the San Lorenzo River, located 5 km away, and elevating it 1 km to connect with the town's existing infrastructure. The pumps used are solar.
- By repurposing the old water system already linked to homes, the project was both efficient and cost-effective. It was a complete success, ensuring a reliable water supply for the community.
- Accessibility to water during fire season is key to protect the project.
- A similar project was done in Montoro, the third town of the ejido.



Elsy Alvarado from Cool Effect inspecting the water project in Old San Diego. This is a very important project for the community as the accessibility of water was previously very limited.

Water projects: New irrigation system

The ejido leadership understands the critical role of water infrastructure and is actively investing in new technology. Using revenue from the carbon credits, the ejido replaced its rudimentary irrigation system with a fully automated, programmable system, complete with a 50,000-liter water storage unit.



Elsy Alvarado and Elder Mendoza from Cool Effect inspecting the new water source at New San Diego with the president of the ejido, Mr. Jose Manuel Quiñonez Barraza. This well is crucial for the community and for the new greenhouses.



Forestry database for future generations

This is the first database of its kind in Durango, providing a groundbreaking resource for forestry research and data collection.

Using revenue from carbon credits, the ejido is developing a specialized database tailored to the region.

This database will record valuable environmental data, serving as a resource for current and future forestry students and universities in Durango, Mexico.

The revenue from carbon credits is essential for acquiring sophisticated forestry equipment from outside Mexico.

This equipment is crucial for accurately collecting and analyzing forestry data.



Clinic reconstruction

In the remote town of Old San Diego, the ejido invested in refurbishing the local clinic by constructing a fence, installing new floors, roof, and ceiling, and restocking the medicine room.



Elder Mendoza and the president of the ejido, Jose Manuel Quiñonez Barraza, visit the recently refurbished clinic of Viejo San Diego, one of the three towns of the ejido. A similar refurbishing was done in Montoro's clinic, the third town of the ejido.



Current Investment Plan based on revenue received and revenue forecasted for future sales

Proyecto Forestal de Carbono del Ejido San Diego de Tezains, Durango. México (CAR1584)

Plan de Inversión Periodo 2 (Vintage 2022 y 2023)

Actividad	CRTs	CRT USD	Porcentaje	USD	16.79
Total CRTs	221,088.00	14	100.00%	3,095,232.00	51,968,945.28
1. Comisión Reserva de Acción Climática	3,758.50	14	1.70%	52,618.94	883,472.07
2. Reporte de monitoreo anual	13,818.00	14	6.25%	193,452.00	3,248,059.08
3. Desarrollador del Proyecto	13,818.00	14	6.25%	193,452.00	3,248,059.08
4. Red de Estación de Clima	2,210.88	14	1.00%	30,952.32	519,689.45
5. Equipo LIDAR	11,054.40	14	5.00%	154,761.60	2,598,447.26
6. Auditorio Ejidal	20,052.68	14	9.07%	280,737.54	4,713,583.34
7. Brigada de Incendios Forestales	13,265.28	14	6.00%	185,713.92	3,118,136.72
8. Monitoreo Ambiental	4,421.76	14	2.00%	61,904.64	1,039,378.91
9. Centro de Esparcimiento Social y Deportivo	13,928.54	14	6.30%	194,999.62	3,274,043.55
10. Mejoramiento social	44,217.60	14	20.00%	619,046.40	10,393,789.06
11. Mantenimiento de Cuentas	66.33	14	0.03%	928.57	15,590.68
12. Verificación	884.35	14	0.40%	12,380.93	207,875.78
13. Ecoturismo	6,632.64	14	3.00%	92,856.96	1,559,068.36
14. Brigada de Plagas y Enfermedades	6,632.64	14	3.00%	92,856.96	1,559,068.36
15. Producción de Planta	15,476.16	14	7.00%	216,666.24	3,637,826.17
16. Plantaciones y Reforestaciones	15,476.16	14	7.00%	216,666.24	3,637,826.17
17. Fondo Forestal (Cuenta de Ahorro)	13,265.28	14	6.00%	185,713.92	3,118,136.72
18. Reparto de Utilidades	22,108.80	14	10.00%	309,523.20	5,196,894.53
Total	221,088.00	14	100.00%	3,095,232.00	51,968,945.28

Current Investment Plan based on revenue received and revenue forecasted for future sales

Las acciones son las siguientes:

1. Comisión Reserva de Acción Climática (1.70%)

A1. Comisión CAR (100%)

2. Reporte de monitoreo anual (6.25%)

A2. Reporte Monitoreo Anual (100%)

3. Desarrollo del proyecto (6.25%)

A3. Desarrollo del proyecto (100%)

4. Red de Estación Climática (1.00%)

A4. Una Red de Estación Climática (100%)

5. Equipo LIDAR (5.00%)

A5. Equipo LIDAR terrestre (100%)

6. Auditorio Ejidal (9.07%)

A6. Construcción del Edificio y Comedor (75.00%)

A7. Equipamiento y Mobiliario (25.00%)

7. Brigada de Incendios Forestales (6.00%)

A8. Herramientas y Equipo de Operación (26.00%)

A9. Vehículo Carro Cisterna (64.00%)

A10. Capacitación y plan de acción (10.00%)

8. Monitoreo Ambiental (2.00%)

A11. Equipo y herramientas (30.00%)

A12. Seguimiento del monitoreo ambiental (70.00%)

9. Centro de Esparcimiento Social y Deportivo (6.30%)

A13. Centro de esparcimiento Social y Recreativo (100.00%)

10. Mejoramiento social (20.00%)

A14. Pavimentación etapa 1 complementario Nuevo San Diego (41.00%)

A15. Pavimentación cordones y banquetas Nuevo San Diego (29.00%)

A16. Plaza de Esparcimiento etapa 2 Nuevo San Diego (14.00%)

A17. Salón de Telebachillerato Nuevo San Diego (3.00%)

A18. Tanque captación de agua Montoros (2.00%)

A19. Reparación Iglesia San Diego (1.00%)

A20. Palapa baños y contenedores de basura San Diego (5.00%)

A21. Equipamiento Clínica Montoros (2.50%)

A22. Equipamiento Clínica San Diego (2.50%)

11. Mantenimiento de Cuentas (0.03%)

A23. Mantenimiento de cuentas CAR (100.00%)

12. Verificación anual (0.40%)

A24. Verificación del proyecto anual (100.00%)

13. Ecoturismo (3.00%)

A25. Rehabilitación y Mantenimiento del Centro Ecoturismo (50.00%)

A26. Equipo y herramientas (50.00%)

14. Plagas y Enfermedades (3.00%)

A27. Capacitación a brigadas (20%)

A28. Adquisición de equipo técnico para diagnóstico y monitoreo de plagas y enfermedades (20%)

A29. Operación de Brigada para la realización de diagnósticos de prevención y acciones de control de plagas y enfermedades (20%)

A30. Adquisición de Insumos para prevención, control y combate de plagas y enfermedades (20%)