Final Evaluation Report

We ask all grant recipients to complete a project evaluation that helps us to gauge the success of your project. This must be sent in **MS Word and not PDF format**. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please DO NOT fill in and submit this form until the project has been completed.

Complete the form in English. Note that the information may be edited before posting on our website.

Please email this report to jane@rufford.org.

Details	
Full Name	Carlos Augusto Torres Barragán
Project Title	Biocultural Conservation through Participatory Management in Mitla-Yagul, Oaxaca, Mexico
Application ID	43605-1
Date of this Report	9 December 2025

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Supporting biodiversity conservation in the study region/area.			X	The conservation of biocultural heritage and biodiversity was supported by identifying the main attributes, species and priority sites of the landscape. This was achieved through 70 field trips across four indigenous communities: Villa de Mitla, Villa Díaz Ordaz (both community and ejido), and Unión Zapata. Of these, 25 trips focused on conservation areas—supported by Elvira Durán, Licet Olguín, local experts, and community authorities—to document biodiversity and sites of high biocultural value. An additional 20 trips were conducted to document management practices in restoration zones, agave monocultures, and fire-affected areas, some of which included participation from Dr. Robson and his student. The remaining 25 visits were dedicated to community-center activities, such as planning meetings with local authorities (*comisariados*), interviews with local experts (over 70 years old), and the collaborative review of project materials. Throughout the fieldwork, a total of 40 interviews were conducted with

				local experts, farmers, and management committees. These sessions were led by Dr. Elvira Durán, Licet Olguín, Mayra Cerero, Sandra Idrogo, and Carlos A. Torres. Outputs: a) catalogue of biocultural attributes and biodiversity of MYBcL; b) species list with conservation status and local perception or use; c) maps of biocultural attributes and new potential areas for conservation. These outputs were delivered to local communities to strength local actions about biodiversity and biocultural heritage conservation like biodiversity monitoring and ecotourism.
Documenting participatory conservation management strategies in the MYBcL			X	We implemented participatory action research methods for documenting local management strategies. Indigenous communities and ejidos recognized the term "conservation", primarily defining it as caring for the nature, forests, and wildlife within their community. The main actions associated with this concept were protection and stewardship, with a focus on nature, forests, and the environment. While perceptions of conservation were similar across genders, women tended to emphasize 'cultural wealth' as an object of conservation and 'people' as a determining factor. Local people agreed that the formal concept of conservation

				was primarily adopted following the VCA certification. However, they noted that prior to this, while not explicitly using the term, they already conducted monitoring trips to care for their "monte" (forest and territory) and ensure sustainable use. Nonetheless, they also acknowledged that, during that period, unrestricted access to resources had led to a steady increase in overexploitation. Currently, the MYBcL´s communities maintain much of their ecological integrity and protect unique biocultural legacies, relying on the conservation and participatory management of voluntary conservation areas, incentivized by government programs. There are strengths and social innovation, but also threats, such as the agave monocultures, wildfires, crises of climate change, and biodiversity loss. The primary participatory conservation management strategies documented within the MYBcL are outlined below: 1. Voluntary Conservation Areas (VCA) Certification: Through community assemblies and support from CONANP (National Commission of Natural Protected Areas), land-use and conservation regulations were established. This has improved control over heritage sites and fostered social learning in

				conservation. 2. Internal Organization: Assemblies have strengthened their structure by implementing environmental committees and distributing conservation tasks and productive projects. Conservation activities (surveillance, restoration, and reforestation) are carried out through "*tequio*" (Unpaid communal labor) system. 3. Biodiversity Monitoring: This process has enabled the verification of local species and strengthened conservation efforts. 4. Government Program Support: Funding and guidance have bolstered conservation activities, productive projects, and cultural events, such as the state agrobiodiversity fair and the UNESCO World Heritage anniversary. 5. Community-Based Tourism: This initiative facilitates the sustainable use and preservation of sites with high biocultural value, such as prehistoric caves. 6. Traditions and Ritual Sites: "Petition sites" and local traditions continue to strengthen the community's appreciation for biocultural heritage and biodiversity. Outputs: a) We implemented participant observation in biocultural events and with this

				information we create biocultural sheets; b) accepted scientific article "The Mitla-Yagul biocultural landscape, in Oaxaca, Mexico, as an example of conservation and participatory management"; c) We participated in agrobiodiversity fair, where we are sharing with local people dissemination materials on biocultural heritage of MYBcL like sheets, maps, photos and canvas.
Identify the management strategies and actions that can strengthen or weaken social-ecological system resilience within the MYBcL			x	We documented and analyzed the management and the main threats and challenges facing the conservation of biodiversity and the biocultural heritage of the MYBCL through three main themes: **1)** Agave monocultures expansion: We report through scientific paper, on the patterns and dynamics of agave monoculture expansion, and the economic-social and ecological impacts this is having, in the Mitla Yagul Biocultural Landscape (MYBcL) in Oaxaca. This biocultural landscape has faced a transition from traditional agriculture, native vegetation and abandoned agricultural areas, to agave management as a cash crop to put the landscape's cultural values, biodiversity, and protected areas at risk. **2)** Wildfires: We identified that forest fires showed that although it was a landscape with more than a decade of politics conservation implemented, it requires strength

				intercommunity management, including traditional knowledge and practices, and reorient conservation objectives in the MYBcL. A clear example of this was that by abandoning traditional practices such as local use of the forest, harvesting firewood and visiting sites of cultural value; a not resilient forest was created, which didn't have access to attend to the fire and large amount of combustible material accumulated that caused a high severity fire that affected more than 50% of its conservation area. **3)** ADVC: We identified that the certification of voluntary conservation areas in MYBcL as one way to help to limit the spread of Agave monocultures expansion and build conservation alliances with external actors who can then support communities to face other challenges like wildfires or biocultural conservation.
Develop and promote participatory management strategies for strengthening biodiversity conservation and sustainability in the MYBcL			X	We developed via participatory workshops strategies for restoration and conservation in the voluntary conservation areas. Three participatory workshops were held—one in each location (see Workshop attendance lists)—with a total of 70 participants (18 women and 52 men) from the Zapotec ethnic group. The Mitla workshop included 22 participants (4 women and 18 men) ranging from 17 to 80 years

				of age. The Villa Díaz Ordaz workshop (including both the ejido and the community) had 23 participants (3 women and 20 men), while the Unión Zapata workshop had 25 participants (11 women and 14 men). All workshops were designed and implemented by Elvira Durán, Magdiel Luis, Mayra Cerero, Luis Fernando Martínez, Sandra Idrogo, Licet Olguín, Elena Galindo, and Carlos A. Torres. Moreover, with the main outputs of the project, we promoted participatory planning and community conservation agreements for expansion of voluntary conservation areas through the collaboration of communities, researchers, and government agencies (CONANP-Comisión Nacional de Áreas Naturales Protegidas) of Mitla and Ejido Villa Diaz Ordaz. For Mitla, we analyzed with local authorities the expansion of voluntary conservation area "Laacanloo Cruz" with 323 hectares to protect biocultural values like Mitla Fortress and springs. For Ejido Villa Diaz Ordaz, we analyzed and measured with local authorities the first voluntary conservation area of 24 hectares.

2. Describe the three most important outcomes of your project.

a) The main biocultural attributes and biodiversity of the MYBcL were documented and disseminated to strengthen its conservation and its inclusion in the management strategies currently implemented in the biocultural landscape, such as ecotourism, agave cultivation, community monitoring of fauna and surveillance.

b) The main threats to the biocultural heritage and biodiversity of the Mitla Yagul Landscape were identified and analysed through participatory processes. This information is being used by CONANP (Comisión Nacional de Areas Naturales Protegidas) to develop improved fire prevention and response strategies. Likewise, INAH (Instituto Nacional de Antropología e Historia) has used it to promote the conservation of UNESCO World Heritage sites and archaeological zones within MYBcL.

c) Communities, government agencies, and academia came together to collaboratively develop strategies to address the main threats and challenges facing the biodiversity and biocultural heritage of the MYBcL. The groundwork was laid for a community-based restoration plan for the area affected by the fire, and new initiatives were added to the MYBcL conservation agenda, including: 1) developing inter-community strategies for conservation, monitoring, and fire response; 2) restoring the wetland upon which the MYBcL's biodiversity depends; and 3) reorienting agave-mezcal production toward the conservation of biodiversity and biocultural values.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

At the project's inception, the plan was to implement workshops to analyse the achievements and challenges of biocultural heritage conservation. However, a severe fire occurred, affecting 50% of the community conservation areas of the MYBcL. While it was a catastrophe, it also presented an opportunity to rethink the conservation actions that had been underway. Therefore, the workshops were reoriented to address the impact of the fire, and in doing so, a clear understanding was established of how to redirect and strengthen biodiversity and biocultural heritage conservation efforts in the face of challenges such as climate change.

4. Describe the involvement of local communities and how they have benefitted from the project.

The communities benefited from the project primarily by being able to reclaim their traditional vision of conservation and their relationship with nature, given that they had been implementing strict and prohibitive conservation practices. Furthermore, the communities became directly involved in recognizing and characterizing the main biocultural attributes of their territory and adopted them to strengthen their ecotourism and conservation projects. Through the project's activities, the communities also identified and validated areas for expanding or certifying new areas voluntarily designated for conservation to protect sites of high ecological, biocultural, and productive value. The project also provided the Indigenous communities with information and resources they can use to strengthen their internal

land-use planning instruments, such as community land-use plans and internal regulations, and to manage support from government agencies for specific issues clearly identified during the project's implementation.

The project's implementation team comprised two academic advisors (Elvira Durán and James Robson) and seven local researchers: three doctoral students (Magdiel Luis, Afro-descendant; Licet Olguín, Mixtec; and Carlos A. Torres, Zapotec); three undergraduate students (Mayra Cerero, Luis Fernando Martínez—Chinantec; and Sandra Idrogo—Zapotec); and one postdoctoral researcher (Elena Galindo, Zapotec). These individuals received training in advanced research methods and logistical support for fieldwork.

A total of 128 members from the Indigenous communities of Mitla, Villa Díaz Ordaz, Villa Díaz Ordaz Ejido, and Unión Zapata Ejido actively participated. This group included 88 community leaders and authorities—such as "*comisariados*" (22 from each community)—alongside 10 local experts, 10 youth representatives, and 20 local producers. Participants received training through workshops, technical assistance in diagnosing territorial threats (such as agave monocultures and wildfires), and resources to strengthen biodiversity monitoring, ecotourism, and sustainable management. And local people received daily stipends, as well as coverage for meals and transportation.

Furthermore, operational teams from government agencies, including the National Commission of Natural Protected Areas (CONANP), and external technical advisors participated. They gained insights into community-led conservation and biocultural heritage, which CONANP is now utilizing to enhance the management of protected areas within these communities.

Finally, by presenting the project's key findings at the State Agrobiodiversity Fair, we reached over 200 people from various regions of Oaxaca and diverse government agencies. This allowed us to showcase the biocultural richness of the landscape and raise awareness for its conservation.

5. Are there any plans to continue this work?

Yes, the plan is to continue working with these communities to develop and implement a restoration and monitoring plan for the area affected by the fire. This plan will utilize information on biodiversity, fire-resistant species, and ecological succession, and will also evaluate the reforestation efforts currently being implemented by the government. To get this, we have a 10-day assessment of the impact of the fire that occurred during the project's implementation. We also plan to restore the MYBcL wetland, the only one in the region and a vital habitat for

biodiversity, including migratory species. This wetland is disappearing due to overexploitation and requires assistance to safeguard its biodiversity.

6. How do you plan to share the results of your work with others?

The catalogue of biocultural attributes of the landscape will be published, two scientific articles will be published, and the information will be shared with government agencies such as CONAFOR, CONANP, INAH, and COESFO to strengthen actions for the restoration, conservation, and monitoring of biodiversity. Additionally, we will participate in forums and events to raise awareness in society about the importance of protecting biodiversity, wetlands, and the biocultural values of the MYBcL and we use this case study to share the experience with other regions. Recently, a workshop on the conservation of natural water bodies and the MYBcL wetland was held to commemorate the 15th anniversary of the UNESCO World Heritage Area.

7. Looking ahead, what do you feel are the important next steps?

The next steps involve developing participatory restoration actions that contribute to strengthening the ecological and social resilience of the MYBcL. The next steps include generating the first participatory restoration project and developing a restoration protocol with native species and the community actions needed for its implementation. Monitor the area's recovery process, study biodiversity recovery patterns, identify fire-resistant species, and examine traditional practices that contribute significantly to innovative forest recovery and biodiversity conservation. In addition to restoring the area affected by the fire, an important step for biodiversity conservation is rescuing the wetland, which has been reduced to 30% of its original size.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

The Rufford Foundation logo and project logo were used in promotional materials, and presentations at regional and state events. These materials were also shared with the Foundation. Four scientific articles include a special mention of the Rufford Foundation for the grant and support received; two scientific articles have already been accepted, one is submitted, and one more is about to be submitted.

9. Provide a full list of all the members of your team and their role in the project.

1) Dra Elvira Durán Medina (Researcher-Professor of IPN-CIIDIR-Oaxaca). Director of the research project.
2) James Patrick Robson (Researcher-Professor of University of Saskatchewan). Director of the research project.
3) Licet Olguín Hernandez (Indigenous researcher of Mixtec ethnic group). She assisted with field trips, interviews, regional events and workshops.

4) Mayra Cerero Santiago (biology student). She assisted with regional events and workshops.
5) Sandra Idrogo Hernández (biology student). She assisted with regional events and workshops.
6) Luis Fernando Martínez Victoriano (Indigenous researcher of Chinantec ethnic group). He assisted with regional events and workshops.
7) Magdiel Yair Luis Santiago (Indigenous researcher of Afro-descendant group). He assisted with regional events and workshops.
8) Elena Galindo Aguilar (Indigenous researcher of Zapotec ethnic group). She assisted with regional events and workshops.
9) Karina Gloria Torres (graphic designer). She assisted with design of dissemination materials.

10. Any other comments?

I am very grateful for your support, which allowed me to delve deeper into the real challenges facing biodiversity conservation in Oaxaca's biocultural landscapes, as well as document the challenges local people face in protecting their biocultural values. Through the activities of this project, we were able to create spaces for reflection where the communities and ejidos of the MYBcL expressed that conservation policies and programs need to be more comprehensive and foster the connection between people and nature. This project also allowed us to identify opportunities and needs to strengthen biodiversity conservation, governance, and local organizational systems for the protection of their biocultural heritage.

ANNEX – Financial Report

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