



MUJERES Y AMBIENTE

United Mexican States



Equator Initiative Case Studies

Local sustainable development solutions for people, nature, and resilient communities

UNDP EQUATOR INITIATIVE CASE STUDY SERIES

Local and Indigenous communities across the world are advancing innovative sustainable development solutions that work for people and for nature. Few publications or case studies tell the full story of how such initiatives evolve, the breadth of their impacts, or how they change over time. Fewer still have undertaken to tell these stories with community practitioners themselves guiding the narrative. The Equator Initiative aims to fill that gap.

The UNDP Equator Initiative, supported by generous funding from the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Norwegian Agency for Development Cooperation (NORAD), awarded the Equator Prize 2020 to 10 outstanding Indigenous and local communities from 10 countries. The winning organizations showcase innovative nature-based solutions (NBS) for tackling biodiversity loss and climate change.

Selected from 583 nominations from more than 120 countries, the winners were celebrated at a high-profile virtual event on 29 September 2020. The event was held in conjunction with the UN Biodiversity Summit and the 75th Session of the UN General Assembly, both also held virtually. The winners are sustainably protecting, restoring, and managing forests, farms, wetlands, and marine ecosystems to mitigate greenhouse gas emissions, help communities adapt to climate change, and create a green new economy. Since 2002, the Equator Prize has been awarded to 255 initiatives.

The following case study is one in a growing series that describes vetted and peer-reviewed best practices intended to inspire the policy dialogue needed to scale nature-based solutions essential to achieving the Sustainable Development Goals (SDGs).



PROJECT SUMMARY

In the Mexican state of Querétaro, Mujeres y Ambiente, founded and led by women, has been working with an environmentally minded Spanish company, the Mexican Government, and a local university to develop and market cosmetics based on local plants. The agreement signed between the parties is considered one of the first cases of full compliance with the Nagoya Protocol on Access and Benefit Sharing, a supplemental agreement to the Convention on Biological Diversity. The association supports women entrepreneurs to grow agricultural micro-enterprises and engages in biodiversity conservation, restoration, stabilization of soils, and nursery cultivation. The activities have empowered women to create jobs and improve livelihoods in their community based on their traditional knowledge about local biodiversity, including herbal products and medicinal plants. The entrepreneurs have become part of a sustainable supply chain for the cosmetics industry and serve as an example of successful conservation through the sustainable use of genetic resources.



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KEY FACTS

Equator Prize winner

2020

Founded

2009

Location

La Carbonera, Santiago de Querétaro, State of Querétaro, United Mexican States

Beneficiaries

Direct beneficiaries include 8 members and 27 direct collaborators and their families; 30 indirect beneficiaries

Thematic areas

Preservation of Indigenous or traditional knowledge;
Women's empowerment; Sustainable livelihoods

Fields of work

Ecosystem restoration; Eco-enterprise or green business;
Medicinal plant conservation

Sustainable Development Goals addressed



EQUATOR PRIZE 2020 WINNER FILM





BACKGROUND AND CONTEXT

Mujeres y Ambiente emerged out of concern to take care of our environment and mitigate global warming. It has been fundamental for us to take into account the genetic resources in terms of the abundance that each of these plants offers us . . . At the beginning, we were 35 women who started using ecological techniques. We started by growing worm compost, vegetable gardens, and energy-saving stoves. We have a lot of plants, mostly medicinal with which we are making all of our products, and most of our recipes are based in traditional knowledge. It is knowledge we have received from our ancestors, transferred from our great-grandparents to our grandparents, then to our parents, and from our parents to us. And in turn, we are transferring it to the new generations. So, if we don't preserve this knowledge, we will not be able to transfer it either . . . Various ecological techniques allow us to care for the plants used for the products. They are grown without any agro-chemicals and using all these ecological techniques that help with mitigating global warming . . . If we take care of nature, we take care of ourselves. Because I stand by the fact that Earth is our mother, and we have to take care of her. Because from her we nurture ourselves so we need to learn to live with the Earth and not from the Earth.

— María de los Ángeles Crescenciana Balderas Moreno, Member of the Committee and Official Spokesperson for Mujeres y Ambiente

In central Mexico, among arid and degraded soils north of the state of Querétaro's capital, Mujeres y Ambiente and community promoters are bringing life back to the land in three sparsely populated communities: La Carbonera, La Joya, and Charape-La Joya. La Carbonera is located within the Buenavista micro-watershed, while the other two communities are located in highly isolated areas of the La Joya micro-watershed.

In the Buenavista micro-watershed covering 13,149 hectares, the community worked to restore the El Venado spring. This spring was once a popular gathering place that provided the community with water until piped water arrived in 1989. The spring was later abandoned and used as a dump.

The La Joya micro-watershed is made up of a volcanic crater estimated to be up to 10 million years old. Covering approximately 1,592 hectares, this micro-watershed has a complex geological history with a diversity of land use, slopes, soils, and vegetation. Severe erosion affects more than 90 percent of the area, caused mainly by overgrazing of livestock and the inherent fragility of soils associated with a volcanic crater.

Part of this area is within the Madrean Pine-Oak Woodlands Biodiversity Hotspot identified by the Critical Ecosystem Partnership Fund (CEPF). The hotspot covers the main mountain ranges of Mexico, including the Sierras Madres (Mother Mountain Ranges), the Trans-Mexican Volcanic Belt, and minor mountain ranges, as well as some mountaintops in the states of Arizona and New Mexico in the United States.

This hotspot is characterized by its rugged terrain, high mountains, and deep canyons. In terms of biodiversity, it contains 5,300 plants species, equivalent to more than a quarter of all plant species present in Mexico. Most of the hotspot comprises temperate forests dominated by oaks, pines, and firs. These forests once covered about 21 percent of Mexico, although today it is estimated these remaining forests cover just 8 percent of the country at most.

Since 2003, the Joya-La Barreta Ecological Park has protected 245 hectares of one of the last remnants of oak forests in the region located approximately 40 kilometres north of the capital of Querétaro. The Park belongs to the Western Micro-Watersheds Zone Municipal Protected

Natural Area, which is important because it is the origin of the runoff from the western part of the municipality of Santiago de Querétaro. The type of soil present in oak forests ensures the recharge of aquifers and provides water through several streams to the nearby Santa Catarina dam.

There are only three or four well-preserved patches of oak forest, where the most representative species is the *Quercus affinis* oak species, which forms a 10-metre-high canopy. The largest segment of oak forest is located in the La Joya micro-watershed. Other important species associated with these forests are tepozán (*Buddleja cordata*) and granjeno (*Condalia mexicana*). In lower elevations, there are specimens of tropical deciduous forest, such as tepeguaje (*Senna polyantha*), and palo bobo (*Ipomoea murucoides*), as well as acacias or huizaches (*Acacia schaffneri* and *Vachellia farnesiana*), and various types of biznagas and nopales cacti species.

Origin and structure

The Mujeres y Ambiente group emerged in 2009 as a community response by a group of women of different ages and interests to the work of the Autonomous University of Querétaro (UAQ by its acronym in Spanish) in the community of La Carbonera located in the municipality of Querétaro. The project was developed to improve the conditions of peoples' homes. The project also works to guarantee the basic needs of subsistence by saving firewood and enhancing women's health and nutrition through the construction of family gardens with vermiculture, the growing of worms.

After building common vision and work elements, since 2012, the group has focused on structuring and consolidating micro-enterprises through ongoing training. This knowledge and empowerment of women participants made it possible for them to be linked with Spanish company Provital, with which a collaboration agreement was formalized in 2014.

This agreement marked the beginning of a training and installation phase for the cultivation of aromatic and medicinal plants. With financing from Provital, the UAQ through the Special Rectory Funds (FOPER by its acronym in Spanish), and the Regional Centre for Training in Watersheds (CRCC by its acronym in Spanish), the effort has resulted in a fair supply chain using a Mexican species, the Mexican giant hyssop (*Agastache mexicana*). In 2016, the group was legally consolidated as a Rural Production Society, with the support of the CRCC and the UAQ's Master's Degree in Integrated Watershed Management (MAGIC by its acronym in Spanish).

The golf ball cactus (*Mammillaria herrerae*), endemic to Querétaro, is classified as critically endangered by the International Union for Conservation of Nature (IUCN) Red List of Threatened Species. The main threat to its survival is illegal collecting and trade as an ornamental plant.

There are 35 wildlife species recorded with habitat within the park. One of the most iconic species in this region is the imperial woodpecker (*Campephilus imperialis*). This species is listed as critically endangered on the IUCN Red List, but is considered likely to be extinct because it has not been recorded with certainty since 1956. The destruction and fragmentation of its habitat, in addition to indiscriminate hunting, would be the causes of its extinction. The blackbelly garter snake (*Thamnophis melanogaster*) is another endemic species whose survival is threatened by declining populations and is listed as endangered by the IUCN Red List.

That same year, Mujeres y Ambiente collectively decided to participate and execute a project under the Nagoya Protocol on Access and Benefit Sharing, a supplemental agreement to the Convention on Biological Diversity. Mujeres y Ambiente participated in this effort together with the communities of La Joya and Charape-La Joya, which work under the basin management approach in the northern area of the municipality of Querétaro. This was the beginning of one of the first global experiences of full compliance in the cosmetics industry with the Nagoya Protocol and Sustainable Development Goal (SDG) Target 15.6.

The objective of Mujeres y Ambiente is to create capacity and employment in the communities, increasing sources of income to improve family economy, while using resources in a sustainable way. Its mission is to be a responsible company dedicated to cultivating and harvesting vegetables, seeds, and medicinal and aromatic plants through practices that do not disturb or contaminate the structure and function of the micro-watershed. It also aims, through training, to generate knowledge for women and men on natural resource management and responsible production techniques.

Mujeres y Ambiente is a Rural Production Society with eight members. Decisions are made collectively by members of the organization. Generally, if a member of the organization has to deal with an issue or project that involves the organization, the members of the group receive information about the project, its implications, and its benefits or impacts for the group, in order to finally

make a decision. If the project goes beyond the scope of the organization and involves the community or other communities, the issue is raised with the corresponding

authorities or key stakeholders so they can decide whether to get involved.



“We need to do the best we can, because everywhere we go, we have to leave a mark, and the mark we leave must be a legacy of well-being for everyone. This is the greatest treasure that we can provide to others not to keep what we have but to always share it.”

María de los Ángeles Crescenciana Balderas Moreno

Member of the Committee and Official Spokesperson for Mujeres y Ambiente



LOCAL CHALLENGES

Water scarcity

Water scarcity is the main challenge faced in the area. Mujeres y Ambiente arises precisely from this need, since the spring that years before had supplied water to the community of La Carbonera and surrounding communities was abandoned and was becoming a garbage dump. This was compounded by soil degradation, erosion and low yields, lack of seeds, and overgrazing by cattle.

All this prompted the group to learn how to use new technologies that would help take care of the environment and mitigate the effects of climate change. Every year, it rains less and the effects of temperature changes are seen in the harvest cycles. In addition, due to the proximity of the communities to the city, there is intense pressure from developers for farmland and forests.

Migration to the United States

Although the three communities are close to an industrial city, there is a high rate of migration of men, mostly to the United States, in search of economic opportunities. Therefore, women are left in charge of the homes and the decision-making. As a result of social resilience, the

structure of these communities is composed mainly of women, children, and the elderly. This has contributed to women assuming leadership in seeking support for improving the living conditions in their homes.

COVID-19

Like the rest of the world, these communities are not immune to the effects of the COVID-19 pandemic. Many activities have had to be suspended or postponed. For example, when schools were closed, it was not possible to continue maintaining the garden. COVID-19 has also stopped awareness and educational tourism. In this case, the visitors were mainly students. Now, tours can only be offered to small groups and payments are inadequate to

offer complete tours showing other houses and paying cooks and guides. Likewise, due to the pandemic, markets for the sale of local products have been closed and some of the inputs that come from abroad have increased their costs by up to 100 percent. Additionally, trainings have been reduced by the pandemic and online trainings do not work for some topics.





LOCAL RESPONSES

Sustainable management and eco-enterprises

This project consists of a dynamic use of degraded land and local biodiversity, which includes soil restoration and the implementation of nurseries to produce native and usable plants. These efforts have become an engine of development, facilitating the creation of a local beauty and cosmetic brand featuring a wide range of products based on principles of sustainability.

The first efforts focused on achieving sustainable management of the territory with a watershed approach. With the support of the UAQ's Master's Degree in Integrated Watershed Management, where the guiding axis is water, efforts considered social, environmental, and economic aspects. Management and training of the communities began first in La Carbonera. By 2009, these efforts expanded to La Joya and Charape-La Joya, where a master plan for the production and conservation of the micro-watershed was developed. In turn, this enabled defining and carrying out various productive and land management projects in these localities, as well as in the community of La Carbonera. This has allowed the management and implementation of many projects jointly between the three communities, thus forming the Regional Training Centre in Watersheds (CRCC by its acronym in Spanish). The CRCC later expanded to two other micro-watersheds in the state, providing certainty to launch other projects that would generate financing.

Thus, in 2011, with financial support from the Ministry of the Environment and Natural Resources (SEMARNAT by its acronym in Spanish) state delegation, the 'La Carbonera: Sustainable Community' project was started. The objective was to address family nutrition through healthy food with the establishment of biointensive gardens, vermiculture, and grey-water sanitation. Biofilters were constructed for recycling water in orchards during the first stage of the project. In 2012, a second support was received for the purpose of strengthening the use and construction of eco-techniques, developing micro-enterprises, and marketing products. Here, the aim was for the participants

to obtain an economic return that would make it possible to improve their quality of life and sustain themselves as a united, organized community that takes care of its natural resources. That same year, the project was also carried out with La Joya and Charape-La Joya. There, the first trainings were provided for the three communities on herbal issues and local knowledge for the transformation into cosmetic and personal hygiene products as part of the practices in the micro-enterprises area.

Those who participate in Mujeres y Ambiente practice sustainable backyard management with an agroecological approach. They produce vegetables, as well as aromatic and medicinal plants, some of them native. They also produce animals, including chickens, rabbits, and sheep, in addition to honey. The plants used in manufacturing products and obtained from harvesting are sourced without damaging the ecosystem. For example, in the case of dragon's blood (*Croton draco*), a graduate thesis by a horticultural student found that pruning the plant stimulated the growth of stands. Additionally, the Mexican false calico (*Loeselia mexicana*) is obtained when the trails of the Joya-La Barreta Ecological Park are cleaned. Production surpluses from the backyard are used to manufacture artisan cosmetics and personal care products.

To increase the awareness of the communities about the biodiversity and threats facing their territory, they have designed tours to learn about runoff, eco-techniques, and micro-enterprises. With this activity, employment is generated for community promoters and cooks, as well as from the sale of products manufactured by Mujeres y Ambiente and other people in the community. Additionally, they created a school garden at the primary school to promote healthy eating. Finally, they offer training to groups who are also interested in caring for the environment, using eco-techniques, backyard gardening, and even making some products.

At the same time, the Autonomous University of Querétaro (UAQ) worked with both Mujeres y Ambiente and the producers who signed the agreement in the development of a protocol for the cultivation of Mexican arnica (*Heterotheca inuloides*) with an agroecological approach. Thus, the experi-

ence generated by the group in the production of aromatic plants was used and reinforced through new training sessions. These sessions were shared with the group of producers from Charape-La Joya, who began the cultivation of the species for the commercial phase of the new agreement with Provital.

KEY IMPACTS

Sustainable management and eco-enterprises



- With the financial support of the SEMARNAT state delegation, the environmental park 'El Venado' was cleaned up and 17 planters were built, turning it into a green space for the community.
- A total of 35 biointensive orchards and 70 energy-saving stoves have been installed.
- More than 60 biofilters and more than 10 ferro-cement tanks for collecting rainwater have been built in La Carbonera.

Project under the Nagoya Protocol

In October 2014, while Mujeres y Ambiente began to work with Spanish company Provital and the Autonomous University of Querétaro (UAQ) on the development of the supply and value chain, the 'Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization' entered into force. It is a complementary agreement to the Convention on Biological Diversity (CBD) that provides a solid basis for greater legal certainty and transparency, for both providers and users of genetic resources.

Founded in 1979 in Barcelona, Spain, Provital is a company that integrates 6 companies, with 41 distributors and presence in 88 countries. In 2002, the subsidiary Provital México S.A. de C.V. opened in Mexico to continue expanding the offer of solutions to the cosmetic industry, generating fair supply chains that encourage social and economic development, considering the conservation and use of biodiversity as a key element.

After the opening of the Mexican subsidiary in the state of Querétaro, Provital was in a constant search for suppliers of quality raw materials, grown under standards that include the non-use of agrochemicals and preferably establishing direct contact with producers in order to reach fair trade agreements. However, the conditions and information asymmetries of the aromatic and medicinal plants market made it difficult to establish fair supply chains, while the

high level of informality in these types of markets has increased the vulnerability of all links in the value chain.

However, the obstacles were overcome by the Mujeres y Ambiente group. In 2016, with the advice of the UAQ and CRCC, the Mujeres y Ambiente group began exporting Mexican giant hyssop (*Agastache mexicana*) for the Spanish company Provital. Agreements have also been concluded with Provital aimed at the production and commercialization of more aromatic and medicinal plants.

In June 2016, Provital approached the National Focal Point for the Nagoya Protocol in Mexico to know the requirements to obtain the Internationally Recognized Certificate of Compliance (IRCC) for access to Mexican arnica and its associated traditional knowledge. The technical and legal staff of the office of the National Focal Point advised Provital on the legal requirements and, once the permit process had concluded, invited the company, Mujeres y Ambiente, and its partners to be part of the Mexican chapter of a global project for the 'Strengthening of National Capacities for the Implementation of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity' (also known as the ABS GEF-UNDP Project). The objective was to strengthen in the participating countries, including Mexico, the capacities of the national, legal, and administrative framework for the implementation of the Nagoya Protocol.

Between 2016 and 2017, Provital took the necessary actions to obtain the Prior Informed Consent (PIC) of the Charape-La Joya and Mujeres y Ambiente ejido in accordance with the Mo'otz Kuxtal Voluntary Guidelines. These guidelines were adopted in 2016 during the CBD's 13th Conference of the Parties (COP 13) in Mexico. Once the regulatory file was completed, the Mutually Agreed Terms (MAT) were signed with the community and the UAQ before a notary public between the Provider and the User of Genetic Resources. The National Focal Point for the Nagoya Protocol in Mexico and the coordination of the ABS GEF-UNDP Project were present as witnesses. Provital then submitted an access permit application to the Forest and Soil Management Division of the Ministry of Environment and Natural Resources. In August 2017, once the collection permit for commercial purposes was issued, the company received the Recognized Certificate of Compliance with the identifier ABSCH-IRCC-MX-238488-1, which was published on the website of the Access and Benefit-sharing Clearing-House (ABS Clearing-House) of the Nagoya Protocol.

That was the start of the effort to collect and analyse the samples in the UAQ with the monitoring of Provital and the support of Mujeres y Ambiente, together with the producers of the communities. It soon became clear, however, that not all the required tests could be carried out at the University and it would be necessary for some to be conducted in European laboratories, including Provital's

own laboratory, which involved a change of intention in the originally defined access. This required the community to agree to this small modification for confirmation of the results obtained in the initial tests. In March 2018, Provital carried out the new PIC process and subsequently, after tests carried out in European laboratories, promising results were obtained for the potential manufacturing of a product in the cosmetic area.

During 2019, the ABS GEF-UNDP project financed the development of a biocultural community protocol prepared by the UAQ and CRCC, under the local community modality, for the communities involved in the access to genetic resources. The aim was to take advantage of the lessons learned during the preparation of the MAT and the PIC, and to have a community instrument that would allow Mujeres y Ambiente, and particularly the communities involved, to systematize their experience and apply it in future genetic access processes, as well as negotiations and provisioning between peers with other communities.

Likewise, as a final product of its project with full compliance with the Nagoya Protocol on access to genetic resources and traditional knowledge, Provital prepared a comprehensive specialized study on the opportunities of having a financial instrument for the fair distribution of direct benefits to genetic resource providers. This result will be fully operational in 2021.

KEY IMPACTS

Project under the Nagoya Protocol



- Provital is the first cosmetic ingredient supplier worldwide to achieve an Internationally Recognized Certificate of Compliance (IRCC).
- The UAQ awarded two scholarships, in horticulture and biology, for the development of a protocol for the propagation and establishment of Mexican arnica.
- After the laboratory studies carried out by the UAQ and Provital to identify potential activities of cosmetic interest of the Mexican arnica flowers (*Heterotheca inuloides*), the company carried out a clinical study, achieving significant improvements in hydration, skin barrier elasticity, firmness, wrinkles, spots, redness, and skin shine. As a result of this project, in June 2021, Provital launched the new cosmetic active ingredient called ETHICSKIN™ on the market.
- At the beginning of 2021, Mujeres y Ambiente made the first export of Mexican arnica flower to Provital. In addition to arnica flower, they currently provide Mexican giant hyssop (*Agastache mexicana*), amaranth leaf (*Amaranthus hypochondriacus*), and Mexican arnica root (*Heterotheca inuloides*).
- Mujeres y Ambiente also produces a great variety of medicinal plants, such as calendula, mint, lavender, rosemary, chamomile, nettle, and thyme, which are used to make approximately 50 different cosmetic and therapeutic products, including shampoo, tinctures, gel, ointments, creams, worm collagen, and soaps.



POLICY IMPACTS

National policy impacts

The work of Mujeres y Ambiente has influenced policy at the national level through its participation in the global project for ‘Strengthening of National Capacities for the Implementation of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity’ (also known as the ABS GEF-UNDP Project), executed between 2017 and 2021. The initiative was supported and implemented by the United Nations Development Programme (UNDP) in Mexico, in association with the Ministry of the Environment and Natural Resources (SEMARNAT), with funding from the Global Environment Facility (GEF).

The efforts of Women and the Environment, as well as the genetic and traditional knowledge access that was carried out, were important elements and experiences that contributed to the final products developed by the ABS GEF-UNDP project in Mexico. These included 22 biocultural community protocols, the development of a proposal for a national policy on genetic resources under

the framework of the Nagoya protocol, and a draft General Law initiative on the same subject. These products, along with many others, were part of the dialogues between providers—local communities, Indigenous peoples, and Afro-descendants—and users—research institutions, universities, and the private sector—that enriched this project in the country.

The experience of Mujeres y Ambiente has been so positive that it was highlighted in 2018 in the flagship publication of the project ‘ABS is Genetic Resources for Sustainable Development’ that collects case studies from different countries that participated in this global project. The book illustrates the efforts supported by the GEF and UNDP, carried out by governments, local communities, and the private sector to implement the three objectives of the Convention on Biological Diversity: the conservation of biological diversity, its sustainable use, and the equitable sharing of the benefits derived from the utilization of genetic resources.

Contributions to the global agenda

At the global level, the efforts of Mujeres y Ambiente support the implementation of several multilateral agreements that promote the conservation of natural resources and sustainable development, including the [Convention on Biological Diversity](#) (CBD), the [United Nations Framework Convention on Climate Change](#) (UNFCCC), and the [2030 Agenda for Sustainable Development](#) (2030 Agenda).

The group’s work significantly contributes to the implementation of the [Nagoya Protocol](#), which supports the fair and equitable sharing of benefits arising from the utilization of genetic resources derived from traditional knowledge. In this context, both Mujeres y Ambiente and Provital are benchmarks for how companies, communi-

ties, a local university, and the federal government can collaborate to set the foundations to conduct processes that comply with the third objective of the Convention on Biological Diversity.

Mujeres y Ambiente and Provital defined the financial mechanism for the distribution of benefits on commercialization in accordance with the signed MAT, which will be operational in 2021. The analysis and elaboration of the mechanism by a specialist on the subject were financed by Provital. Thus, this project would be completing the cycle of an integral intervention under the Nagoya Protocol and demonstrating that nature-based solutions (NBS) and bio-economy are key pillars to create the new solutions that Mexico requires for the sustainability of its development.

The work of Mujeres y Ambiente also contributes to the achievement of numerous [Sustainable Development Goals](#) (SDGs) of the 2030 Agenda. For example, the activities for sustainable management and eco-enterprises carried out in La Carbonera contribute specifically to the objective of creating sustainable cities and communities (SDG 11), while the project under the Nagoya Protocol helps to reduce inequalities (SDG 10). Together, both initiatives of

the group support the objectives of no poverty (SDG 1), gender equality (SDG 5), responsible consumption and production (SDG 12), and life on land (SDG 15), whose SDG Target 15.6 is to “promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed.”





REPLICATION, SCALABILITY, AND SUSTAINABILITY

Replication

Although there are no direct cases of replication of the activities of Women and the Environment, there are groups, such as the women of the El Palmar community in the municipality of Cadereyta de Montes also in the state of Querétaro, or the Kayra group, a group of walnut oil producers located within the Sierra Gorda de Guanajuato, that are interested in replicating the experience and being trained by Mujeres y Ambiente. Also within the

Sierra Gorda of Guanajuato, the group of Producers of Chilcuague received training with Mujeres y Ambiente in the preparation of gels and ointments a few years ago. This group was also supported by the ABS UNDP-GEF Project in Mexico to develop a biocultural protocol with which they established the rules and procedures to follow for those who want to gain new access to species in their region.

Scalability

The project already has a scalability that can be verified in contracts between peers, drawn up by Mujeres y Ambiente and the communities, with other communities that provide biological resources. Thus, they are beginning to

integrate broader value chains based on biodiversity and its sustainable use. It is expected that greater scalability will be achieved over time and through the group's networks.

Sustainability

Both Mujeres y Ambiente and their partners trust in the sustainability of their initiatives, since they are promoting the participation of women under a framework of care and use of their natural heritage and fair and local trade. The goal for growth is to go beyond the group, for the community and the communities with which they work, adding and integrating more people, maintaining and generating new win-win agreements between people, communities, public and private institutions, and other organizations.

Likewise, the work carried out in various places with the communities in the preservation of the genetic resources of their ecosystems and the associated traditional knowledge is also bearing fruit. The benefits are already beginning to show in the form of business opportunities, jobs, research, technology transfer, and capacity-building.

FUTURE PLANS

In the future, Mujeres y Ambiente hopes to continue fostering the care of the environment and water, promoting the work of the group and the work model with other communities, integrating climate adaptation measures and the sustainable use of biodiversity. The group also hopes to have adequate and dignified workspaces and facilities that will enable activities in a simple and efficient way, but, above all, with the capacity to grow micro-enterprises so they can create employment for people in their community and in other communities. Mujeres y Ambiente wants to build a local network of producers and link with marketing and fair-trade schemes, offering training to the communities of the region. Finally, the group plans to create a portfolio of projects between Mujeres y Ambiente, the UAQ, the CRCC, and Provital.

PARTNERS

- **Autonomous University of Querétaro (UAQ by its acronym in Spanish):** Promoted the emergence of the group; provided support for grouping, training, infrastructure, and technical monitoring; and provided sales space within the university market.
- **Empatitís S.C.:** Supports the development of the business plan for Mujeres y Ambiente.
- **Fundación Gonzalo Río Arronte:** Financing managed through the CRCC for training, building eco-techniques, reforestation, and soil and water conservation.
- **Governments at the municipal and state level:** Supported brand registration, promotion, and sales spaces such as the Querétaro market or the international fair of Querétaro.
- **Laboratorio Rural A.C.:** Designs and monitors the work of the Women and Environment Training and Community Development Centre.
- **Ministry of the Environment and Natural Resources (SEMARNAT by its acronym in Spanish):** Between 2011 and 2013, provided financing for two projects for the installation of eco-techniques.
- **Producers of La Joya and Charape-La Joya and other producers:** Producers working under the same approach and the main partners in production.
- **Provital S.A.U.:** Commercial partner for the sale of aromatic and medicinal plants. Have co-benefits of promotion and have shared research results on plants.
- **Regional Watershed Training Centre (CRCC by its acronym in Spanish):** Provided training and technical follow-up; supported the legal constitution of Mujeres y Ambiente; and currently assisting with design and architectural planning of the laboratory and store, as well as the search for possible project co-financiers.
- **United Nations Development Programme (UNDP):** With funding from the Global Environment Facility (GEF), implemented a global project to strengthen national capacities for the implementation of the Nagoya Protocol in Mexico with participation of Mujeres y Ambiente.

SOURCES AND FURTHER RESOURCES

AD. 'Conoce las plantas mexicanas que están en peligro de extinción' ('Learn about the Mexican plants that are in danger of extinction'). 2020. (In Spanish). Available online [here](#).

Centro Regional de Capacitación en Cuencas (CRCC). 'La Carbonera Microcuenca Buenavista' ('La Carbonera Buenavista Micro-watershed'). 2021. (In Spanish). Available online [here](#).

Centro Regional de Capacitación en Cuencas (CRCC). 'La Carbonera una historia comunitaria de construcción de un futuro diferente' ('La Carbonera a community story of building a different future'). n.d. (In Spanish). Available online [here](#).

Centro Regional de Capacitación en Cuencas (CRCC). 'La microcuenca La Joya' ('The La Joya micro-watershed'). 2021. (In Spanish). Available online [here](#).

Consejo Nacional de Ciencia y Tecnología (CONACYT). 'Áreas naturales protegidas del estado de Querétaro' ('Protected natural areas of the state of Querétaro'). n.d. (In Spanish). Available online [here](#).

Critical Ecosystem Partnership Fund (CEPF). 'Madrean Pine-Oak Woodlands.' 2021. Available online [here](#).

Fideicomiso Queretano para la Conservación del Medio Ambiente (FIQMA). 'Catálogo de plantas nativas del estado de Querétaro' ('Catalog of native plants of the state of Querétaro'). 2014. (In Spanish). Available online [here](#).

Grupo Ecológico Sierra Gorda. 'Las Sierras Madres de México, hotspots de biodiversidad' ('The Sierras Madres de México, biodiversity hotspots'). 2014. (In Spanish). Available online [here](#).

Mujeres Y Ambiente. 'Página de Facebook.' [Facebook page]. 2021. (In Spanish). Available online [here](#).

Provital. '13 JUL | Provital apuesta por el comercio justo y lanza Ethicskin™' ('13 JUL | Provital is committed to fair trade and launches Ethicskin™'). 2021. (In Spanish). Available online [here](#).

United Nations (UN). 'Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.' 2019. Available online [here](#).

United Nations Development Programme (UNDP). 'ABS is genetic resources for sustainable development.' 2018. Available online [here](#).

United Nations Development Programme (UNDP). 'A revolutionary approach. Rural and urban women forging new partnerships to protect biodiversity in Mexico.' 2018. Available online [here](#).

Vive Santa Rosa. 'Parque Ecológico Joya-La Barreta' ('Joya-La Barreta Ecological Park'). 2019. (In Spanish). Available online [here](#).

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