

Declaration of the Fourth National Meeting of *La Red Nacional de Manejadores de Maguey Forestal*

At the El Rosario Community Library, in Santa Catarina Minas, Ocotlán, Oaxaca, on November 16 and 17, 2019, we met — women and men, individual and collective producers, social and civic organizations, all concerned with the use and management of magueyes that are extracted from forests and jungles in different regions of Mexico, in honest dialogue with university students who carry out research and teach about agricultural, forestry and agroforestry issues. As participants of the fourth national meeting of *La Red Nacional de Manejadores de Maguey Forestal* (“the Network”), we are 120 citizens from 8 states of the Mexican Republic (Oaxaca, Michoacán, Guerrero, Jalisco, Puebla, Querétaro, State of Mexico and CDMX), representatives of hundreds of communities and rural families, caretakers of wild maguey, and mezcal producers. We are also researchers, professors and students from nine research centers and institutions of higher education (IIES, ENES, IB, IE, from UNAM, COLMICH, CUCBA-UDG, UACH, CIATEJ, ITO) from different Mexican universities. Our purpose was to continue analyzing the problems facing the exploitation of maguey, share experiences to address them, review the progress of ourselves and others in understanding these issues, and continue developing an agenda in order to strengthen ties within our Network. As in previous meetings, we have been brought together by shared interest in developing sustainable management systems of *maguey forestal*¹, conserving agaves and the ecosystems that host them, as well as improving the conditions of production, commercialization, and the social benefit of maguey-derived products.

Per the agreements of our previous meetings, the fourth Network meeting furthered the exchange of experiences regarding: (1) preparation of natural insecticides and fungicides, (2) preparation of composts and substrates to foster the development of magueyes and associated species, (3) techniques for seed selection, management and germination, (4) agroforestry, land management and implementation of soil and water conservation strategies, (5) maguey waste management, (6) identification of nursery and reforestation practices, (7) “mezcalization” processes and best practices, (8) identification of agaves, (9) calculation of mezcal’s cost of production, (10) ancestral and contemporary uses of agaves, (11) agaves and agro-biodiversity and, (12) trends and risks of the intensification of production. We also incorporated children and adolescents from Santa Catarina Minas into a storytelling and drawing workshop around magueyes, to record their daily perceptions about these plants and the ecosystem in which they grow.

The Network continues to consolidate and expand its membership, and has attracted the attention and aroused the interest of a growing number of participants. Their efforts

¹ Translator’s note: Throughout the text, “*maguey forestal*” is left in the original Spanish to avoid confusion. The concept encompasses both wild agave (managed in its native habitat, without concomitant deforestation of other species), and agave grown in nurseries from collected seeds and replanted in native habitat. Some such agaves are left to produce seeds, permitting natural reproduction, and not all mature agave is harvested.

to unify different sectors of Mexican society begin to bear fruit by exchanging visions and experiences to improve the conditions of maguey use, avoid maguey loss, and increase the benefits for the communities that use magueyes. We analyzed the major environmental problems related to this use, and continued to develop the exchange of technological and organizational experiences for the management of agaves and the ecosystems they inhabit. Likewise, we remain interested in analyzing the problems in the management of markets, the legal aspects related to the ownership of natural resources, intellectual property related to production techniques and processes, regulations on the quality and sale of products, and the different ways to exploit agave derivatives and strategies employed to maintain them. We are glad to hold this meeting in a community of maguey caretakers and mezcal producers, and to witness the lead role of the local producers themselves in organizing and conducting the event.

With great concern, we see in this meeting the serious ecological and social consequences generated by new national and international market contexts. We are referring to a growing volume of mezcal production that has already reached more than five million liters annually, a growth rate so rapid that it exceeds that of tequila in comparative terms. While the latter grew in 2018 at a rate of 12.3%, mezcal's rate was 27.7%, having been even higher in preceding years. Both distillates are produced predominantly for the international market, which has wreaked great socio-environmental havoc in Mexico.

As in the third meeting, the Network remains particularly concerned about the implications of Denominations of Origin as protective entities, and about regulations on agave distillates, as related to tequila, mezcal and raicilla. The exchange of these experiences and visions allows us to take stock of the goals set in previous meetings, and nourishes efforts to find solutions to common problems, while sharing these advances with new members of the Network.

Our Network has been a space to solve socio-environmental problems associated with the management of *maguey forestal* and its products — mainly mezcal, raicilla, pulque and other multiple-use derivatives of these species, of which Mexico is the primary center of diversity worldwide. In this new stage, the Network continued to collect valuable management, production, and commercialization experiences from throughout the country. We addressed topics on the care, preservation and recovery of soils, flora and fauna of the ecosystems where agaves are found, as well as the water and firewood necessary to maguey-derived products. Particular attention was devoted to the analysis of the consequences of poor use of agaves and firewood, not only as regards the species that are used, but on a wide range of organisms with which they interact. Likewise, the enormous risk involved in the extensive transformation of agave monocultures and the transfer of genetic material between sites and regions, phenomena that loom large on the national stage. We continued activities focused on the goal of cataloging management practices to address various challenges.

The already rapid intensification of mezcal production and increased domestic and international demand has generated the irresponsible expansion of monocultures, at

the cost of deforestation of natural areas, looting and theft of maguey, and accelerated soil deterioration and loss of biodiversity. Market perversion has drawn threatened maguey species into mezcal production, giving them opulent values. It has encouraged the movement of genetic material to regions of Mexico where it is not naturally found, with still uncertain ecological and genetic problems that warrant precautionary measures. Likewise, the genetic material native to Mexico is at risk from instances of biopiracy, which are not fully documented. This Network is committed to evaluating these phenomena and strengthening protections of national genetic resources.

Special emphasis was placed on the need to strengthen efforts for the recovery of agave populations and other elements of the natural environments where they are found, as well as on the promotion of agro-forestry systems as a complement to forest management. Of course, we also emphasized the need to establish regulatory mechanisms that help stop the massive, destructive, irresponsible, and illegal extraction of more than 30 agave species. In our Network we recognize that agroforestry management has been the basis of maguey management, and these systems of management are an extensive and deep agro-ecological legacy of Mexico's rural people. Nationally, there are numerous examples of agroforestry systems that include agaves among their main elements, and the enrichment in composition and structure of such systems provide important benefits to agriculture and the use of agaves and other species. In these systems we see not only the possibility of building and developing sustainable agro-ecosystems, but also best practices management of agave and numerous forest resources and an important platform for conserving biodiversity. These systems are also areas where continuous technological innovations are developed within the new social and environmental contexts Mexico is passing through.

At our fourth meeting, we considered the need to gather technical experiences for the management of soil and waste from the production of agave distillates. These issues, along with continuing concerns about pest control, were analyzed with particular emphasis. Likewise, we recognized the importance of inventorying and documenting in detail the species and varieties described taxonomically, the varieties recognized and named by maguey caretakers, their uses and cultural value, and the knowledge and uses that our people have generated throughout history. These species and varieties are valuable genetic resources, constituting a fundamental bio-cultural heritage for the country. Recognizing this diversity of species and varieties offers a wide range of options for innovation in products and management techniques, and documenting and protecting such diversity is a high priority.

The development of conservation strategies for the optimal exploitation of forest products while ensuring their sustainable use is a great challenge. This premise should be extended not only to resources of particular interest, but also to the ecosystems in which they are found. In this effort, scientific research and local community knowledge have a common point of reference that has begun to develop, but where much remains

to be done. A basis of criteria and management proposals that address the particularities of each species, variety, and population of magueyes is necessary.

In previous meetings of the Network, we affirmed that the certification and recognition of best practices must correspond to fair trade. Production that safeguards environmental and human health requires greater financial investment and work, which, to be sustainable, requires the assurance of fair compensation. This is a significant challenge, which involves many difficulties, but that will be fundamental for our sector and that may influence the actions of caretakers of other non-timber forest products who, like us, seek sustainable use.

As stated in previous meetings, the Network reiterates its interest in magueyes being propagated primarily in the ecosystems in which they grow naturally — enriching, in an orderly manner, these agroforestry systems. We are interested in promoting the protection of the species that interact with agaves — among them, numerous species of bats, larks, hummingbirds and other birds, bees and other pollinators, as well as various species of nurse plants that are the necessary habitat for the establishment of agaves and numerous other plant species. After some evaluation, we maintain our interest in analyzing the impact of the induced propagation of species and varieties of magueyes, as well as their ecological, socioeconomic and cultural consequences, especially that of intensive monoculture systems. We consider it necessary to start mapping such impacts. We intend to continue developing a catalog of sustainable agave management practices and the agroforestry and forestry systems that host them.

We insist that the rules protecting intellectual property be governed in accordance with the principles of sustainability and respect for cultural diversity. As we expressed in previous meetings, we celebrate the diversity of magueyes and mezcales from different regions of the country, with distinct uses, management, organizational forms, and names. Each species, each variety, each soil, each production process, and the know-how of each producer bestows unique characteristics upon distilled beverages called mezcales, expressing a rich diversity of traditional products.

In Network meetings we have experienced a genuine dialogue between different types of knowledge, and with different methodologies, for example, the exchange of experiences between maguey caretakers. Knowledge and techniques are common resources that unite us, and dialogues about them go beyond meetings, connecting communities nationwide, since meeting attendees can transmit such knowledge to their families and communities.

We want to insist on the need to build new regulatory frameworks that *do* recognize these principles and value the particular attributes of our products. The diversity of the socio-ecological or bio-cultural contexts where Mexican mezcales are produced is much broader than the current regulations, which are supposed to protect those very mezcales. But in reality, the regulations are limited in their recognition of the practices

and know-how of the producing communities where tradition and ancestral knowledge and techniques have been preserved. These are the true core of what should be protected. In a bio-culturally mega diverse country, a single protection mechanism is unsatisfactory, because it does not meet the expectations of small producers. These producers do not feel represented or protected but, rather, violated and excluded. Moreover, the regulatory bodies that exist have contributed to legitimizing the usurpation of small producers' creations for the benefit of intermediaries and large brands.

Consequently, the participants of this fourth meeting express our commitment to continue working on the construction of the conditions for the recognition of this heritage, and the importance of protecting it with different legal mechanisms, which must be built in a participatory manner, with a basis in regional peculiarities, bio-cultural indicators, criteria, and parameters appropriate to each context.

MILPA (*Civil Association Integral and Local Management of Agroforestry Products (MILPA) AC*), backed by the Network, was created as a platform to confront continuous technical and legal challenges on various issues, in benefit to caretakers of maguey and other agroforestry products. We propose that MILPA be an organizational instrument, a legal representative, a resource developer, and a coordinator of initiatives and actions between different institutions and sectors. It is, however, a platform whose construction we must consolidate and continue developing. In this fourth Network meeting we intend to continue the task of disseminating and convoking producers, civil associations, academics and activists to join efforts to build national strategic plans that allow producers and conservationists to obtain just benefits from these resources, in a sustainable way that ensures their conservation and recovery.