

Agroecological analysis of traditional practices in the Yaquivá Indigenous Resguardo (Inzá, Cauca, Colombia)

Análisis desde la agroecología de prácticas tradicionales en el resguardo indígena de Yaquivá (Inzá, Cauca, Colombia)

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ABSTRACT

Colombian ethnographic literature reveals a significant gap in systematized documentation of traditional practices. This study examines agroecological practices within the Yaquivá community, focusing on those at risk of disappearing, as a contribution to the socio-agricultural revalorization of local knowledge. Using Participatory Action Research (PAR) methodology, the research documented both the underlying causes of practice decline and potential recovery strategies. The study differentiates between practices experiencing gradual loss and those demonstrating resilience. The Community Educational Project (CEP) of the Jiisa Fxiw Agroecological School emerges as a crucial platform for strengthening and recontextualizing traditional practices, particularly the *minga* (collective work system), hand-to-hand labor exchange, and the *Tul* (ancestral household garden), elements that integrate technological, social, and spiritual dimensions. Findings demonstrate that the erosion of biological diversity parallels the loss of cultural diversity. Food production related to cultural heritage, intrinsically linked to the community's worldview, has diminished substantially, creating dependency on external inputs with severe economic, environmental, and social implications. Results indicate that the Yaquivá educational community recognizes threats to its cultural legacy and underscore the need to counter the expansion of conventional agriculture.

Keywords: ancestral knowledge, worldview, rural development, indigenous communities, reinterpretation.

RESUMEN

Dentro de la literatura etnográfica colombiana, se carece de registros que sistematicen las prácticas tradicionales. Se planteó como objetivo analizar desde la agroecología las prácticas tradicionales, con énfasis en aquellas amenazadas en desaparecer, como aporte a la resignificación socioagropecuaria en la comunidad yaquiveña. La metodología de investigación utilizada se basó en Investigación Acción Participativa (IAP); se documentó la razón de pérdida de las prácticas tradicionales y algunas alternativas de recuperación; las prácticas que se están perdiendo y las que todavía se realizan. El Proyecto Educativo Comunitario (PEC) del colegio agroecológico Jiisa Fxiw está contemplado como oportunidad para fortalecer y resignificar las prácticas tradicionales, entre ellas, la *minga* (el sistema del trabajo colectivo), el intercambio de trabajo mano a mano y el *Tul* (el jardín ancestral del hogar) como componentes que integran lo tecnológico, social y espiritual. Se concluyó que aunada a la pérdida de la diversidad biológica ha sucedido también la pérdida de la diversidad cultural. Se ha reducido el acervo cultural ligado a la producción de alimentos asociado a su cosmovisión y como consecuencia se ha incrementado el uso de insumos externos, con graves consecuencias económicas, ambientales y sociales. Los resultados señalan que la comunidad educativa yaquiveña es consciente de las amenazas y riesgos que penden sobre su cultura y que el énfasis de sus respuestas debe enfocarse en tratar de revertir este tipo de agricultura convencional.

Palabras clave: conocimiento ancestral, cosmovisión, desarrollo rural, comunidades indígenas, resignificación.

Introduction

The knowledge possessed by indigenous communities, with respect to their traditional practices, involves very complex interactions, socially constructed, that are integral, difficult to fragment and transversal to areas such as health, education, governance, environment, spirituality and production systems (including the *Tul*, defined as an

ancestral household garden), within the indigenous logic and worldview. According to Mendoza Hernández *et al.* (2017), the knowledge accumulated from practice and oral transmission is going through a very critical moment, a vision shared by the inhabitants themselves, so it requires great encouragement for its strengthening; beyond its rescue and transmission, it is important to revalue and motivate its practice, in such a way that it contributes to

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the existence of a culture according to its own concepts of life and worldview (Franco-Valencia & Sánchez de Prager, 2017).

Furthermore, the present of a community is the manifestation of historical cultural processes and spatiotemporal variables linked to the current socio-economic and political context at the global, national, regional and local levels (Caparrós, 2014; Harari, 2014; He, 2012). Hence, there is a need to specify, in the first instance, the features of local culture, the gradual changes implied by the imposition and adoption of the green revolution model vs. traditional production systems (Karplus & Deng, 2008), and their consequences on the society/culture/nature relationship in the notion of good living (León Sicard, 2010; Molina *et al.*, 2017; Rojas *et al.*, 2017; Sánchez de Prager, Rojas *et al.*, 2017).

Agroecology as a science, practice and social movement welcomes analytical approaches, such as Participatory Action Research (PAR), to encourage appropriation by the communities of their problems and construction of endogenous solutions; that is, overcoming the vision of formal academia based on documents with an academia that accompanies processes of change that remain in the communities, regardless of whether academia is present or not (Fals Borda, 2008; Torre, 2014; Wezel *et al.*, 2011).

The present research is contextualized in the framework of agroecological processes developed in indigenous territories of Colombia. The objective was to study from an agroecological perspective, the traditional practices, with emphasis on those threatened with disappearance, as a contribution to the socio-agricultural reinterpretation in the Yaquivá community. The work was carried out in the Tierradentro region, in a community belonging to the Yaquivá Indigenous Resguardo (Inzá, Cauca). This community is undergoing a process of change to make better use of natural resources, in accordance with the legacy of their ancestors and, above all, with their social reality, the defense of their territories and the care of Mother Earth (Uma Kiwe), to provide sovereignty, dignity and food autonomy to all its inhabitants.

Materials and methods

Location

The Yaquivá Resguardo is located to the east of the central mountain range, in the municipality of Inzá, department of Cauca, Colombia (Fig. 1). It includes the villages of Mesopotamia, Cabuyo, Chichucue, Coscuro, Dos Quebradas, La Milagrosa, El Guadual and Yaquivá. It has a population of approximately 3,900 inhabitants, located in a total area of 16,184 ha at an altitude between 1,600 and 4,000 m a.s.l.,

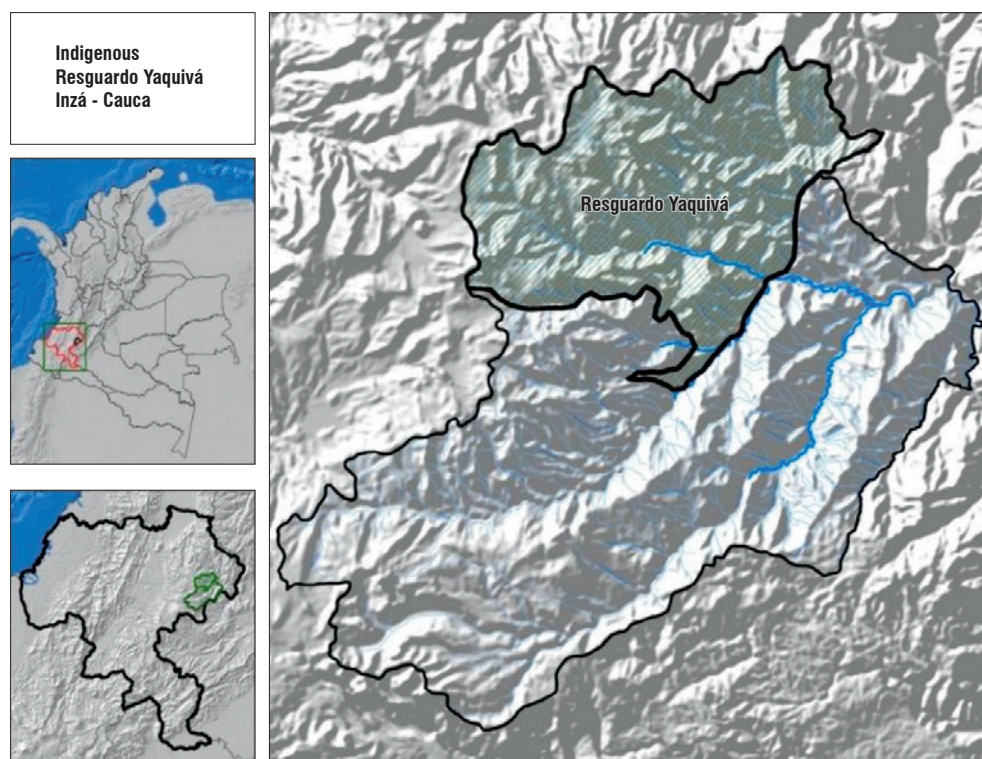


FIGURE 1. Map showing the geographic location of the Yaquivá Indigenous Resguardo. Reproduced with modification from Franco-Valencia and Sánchez de Prager (2018), with permission by Agronomía Colombiana.

which includes the paramo zone. The average annual precipitation and temperature are between 1,000 and 2,000 mm and 18°C, respectively.

In order to bring institutions and academia closer to rural communities (peasant and indigenous), participatory research has been carried out since 2008 between the Universidad Nacional de Colombia and the indigenous community of the Yaquivá Resguardo, in the municipality of Inzá, department of Cauca. The methodology used was Participatory Action Research (PAR), and the methodological tools used were participant observation, discussion groups, participatory diagnoses, surveys and interviews, and dialogic discussions (dialogues of knowledge and practice). Other techniques used to collect information included meetings, visits, pedagogical tulpas (a word derived from the ancestral *Tul* production system, where training events are held), days of hand-to-hand labor exchange and mingas (collective work in the villages) to fix roads and aqueducts, build houses, health centers and schools, and/or assist with sowing; in which all members of the Resguardo participate. The mingas are as much about work as they are about thinking.

Analysis of socio-agricultural clustering data

Analyses were performed using the InfoStat program (Di Rienzo *et al.*, 2017), with the support of the biostatistics unit of the graduate school of the Tropical Agricultural Research and Higher Education Center (CATIE) in Turrialba, Costa Rica. To group the interviewees according to socio-agricultural variables, a cluster analysis was carried out using the Ward grouping method and Gower distance.

The variables used were level of schooling, age composition of the family nucleus, and agricultural information on the farm. The variable composition of the family nucleus was transformed using a Shannon-Weaver diversity index; this index measures the diversity of the family nucleus (Sana *et al.*, 2010). Subsequently, the groups formed with the socio-agricultural variables were associated with the different perceptions of the interviewees. The association was made through Multiple Correspondence Analysis (MCA) for each of the questions. From the worldview of the Nasa people and their own thinking, they were asked: what is agroecology? what traditional and ancestral practices are being lost? why are they being lost? how can they be recovered? what practices are still carried out in the Resguardo? what is the spiritual meaning of the *Tul*?; and what is the participation in the minga and hand-to-hand labor exchange and their relation with the loss of the *Tul*, among others.

Results and discussion

Grouping of respondents according to socio-agricultural variables

Five groups (clusters) were formed according to socio-agricultural variables. The groups are mainly characterized by the following activities: Group 1 (G1), cultivation of pastures and livestock production (cows, guinea pigs, and pigs). Groups 2 (G2) and 5 (G5) are engaged in coffee cultivation, day labor and commerce. Group 3 (G3) includes those who cultivate *Tul*, corn and beans. In group 4 (G4), the main activity is the cultivation of bananas, sugarcane, and poultry (Fig. 2).

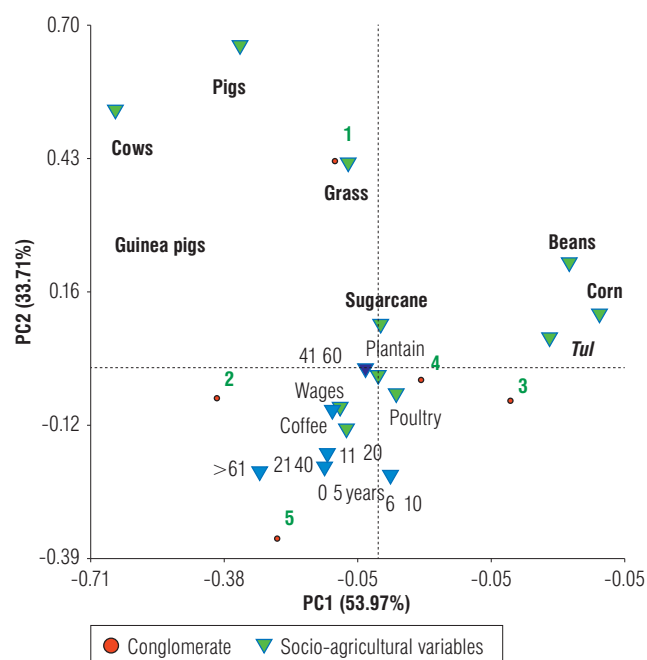


FIGURE 2. Association between groups, age ranges, and socio-agricultural variables.

In the descriptions of the Nasa (Paeces) communities of Tierradentro from the last century to the present, these have been fundamentally agricultural-horticultural, using the slash-and-burn system and cultivating, in the different thermal floors, a diversity of products, including corn, wheat, potato, ulluco, majua, achira, arracacha, and plantations of cabuya, coffee and sugarcane (Rappaport, 1982). Agriculture is based on a calendar around the cultivation of maize, whose labors involve cultural systems of the indigenous worldview (Sanabria Diago, 2016).

Regarding the age composition of the family group, G4 is more associated with people between 41 and 60 years of age; G3, between 6 and 10 years; in G2 those older than 61 years; while G5 presents the highest family composition,

in all age ranges, and G1 does not present a defined trend (Fig. 3). In this sense, Franco Valencia (2010) affirms that, for the Nasa people, the family is a vital component of the community and the nucleus of the same, and it will be the school, based on their own education and the worldview of this people, that will be able to nurture this concept and the meaning it has in the children and youth, who, in the future, will be the bearers and transmitters of these values, when they become adults, elders, spiritual leaders (*the Wala*) and indigenous authorities of their communities.

Of the 163 community members interviewed, 41 (25.15%) belong to Cabuyo, 50 (30.68%) to Yaquivá and 72 (44.17%) to La Milagrosa. A review of the distribution of the community members interviewed in the groups obtained from the cluster analysis shows that: 60 (36.81%) are in G4; 34 (20.86%) in G2; 28 (17.18%) in G3; 23 (14.11%) in G5 and 18 (11.04%) in G1 (Tab. 1). In addition, 80 are female and 83 are male; that is, 49.08% and 50.92%, respectively.

Association between typologies, villages and knowledge of agroecology

Community members who know the least about agroecology are those in the G4 group, mainly in the Yaquivá and Cabuyo villages. In contrast, those who know the most are found in groups G1, G2, G3, and G5, in the villages of La Milagrosa, Yaquivá and Cabuyo (Fig. 3). Agroecology and its practices are often spoken of as something relatively new, but it is evident that many of these practices are ancestral; it would be more accurate to say that they have been reused, rediscovered, or better yet, have regained validity and recovered their meaning. In this sense we speak of “resignifying”.

There are countless indigenous communities and native peoples whose subsistence depends on ancestral knowledge and traditional practices and who enjoy an intimate familiarity with their culture, forged over hundreds or even thousands of years. Their existence makes sense thanks to this millenary knowledge and “doing”. It is their way of life, although they call it differently, distinct from the word “agroecology”, which is new to them and unknown

to the vast majority; however, agroecological processes and practices are immersed in their daily work and daily life.

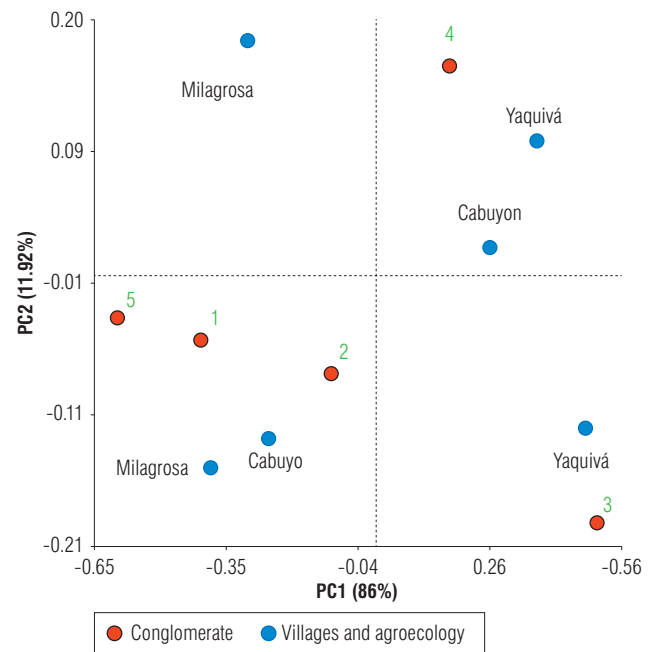


FIGURE 3. Association between typologies, villages, and knowledge of agroecology.

According to Chate (2016, pers. commun.), “with the arrival of the Spaniards and the subsequent colonization policies of the Colombian government, the Paez culture, like other cultures of the country and the continent, has suffered a process of forced assimilation that has resulted in the loss of many elements of traditional culture.” In the Yaquivá Resguardo, although it is one of the Resguardos that has existed since the conquest, the process of assimilation and cultural confrontation is one of the strongest in the Nasa communities of Tierradentro. In this sense, Mendoza Hernández *et al.* (2017) state: “The loss of the cultural base would bring enormous consequences in terms of identity, governance, social and natural control, and territorial management, among others, given that the process of knowledge transmission has been weakened because of the current distancing of youth from traditional activities”. In addition, we must implement agroecological production systems to

TABLE 1. Number and percentage distribution according to the typologies formed with the socio-agricultural variables.

| Village | G1 | | G2 | | G3 | | G4 | | G5 | | Total | |
|-----------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
| | Number | % | Number | % | Number | % | Number | % | Number | % | Number | % |
| Cabuyo | 4 | 22.22 | 9 | 26.47 | 8 | 28.57 | 15 | 25 | 5 | 21.74 | 41 | 25.15 |
| Milagrosa | 11 | 61.11 | 16 | 47.06 | 6 | 21.43 | 23 | 38.33 | 16 | 69.56 | 72 | 44.17 |
| Yaquivá | 3 | 16.67 | 9 | 26.47 | 14 | 50 | 22 | 36.67 | 2 | 8.70 | 50 | 30.68 |
| Total | 18 | 11.04 | 34 | 20.86 | 28 | 17.18 | 60 | 36.81 | 23 | 14.11 | 163 | 100 |

avoid the loss of biodiversity, dependence on external inputs, environmental pollution (soil, water, air) and the loss of biocultural memory (Toledo & Barrera-Basolls, 2008).

The agroecological approach proposes a change in the technological orientations developed by conventional agricultural sciences, seeking to offer farmers contributions that go beyond the technological circuits (Altieri, 1999); therefore, agroecology is considered as a way of producing and living while respecting and loving nature. Furthermore, it is not only a change of inputs but a different way of understanding the complexity of systems. Agroecology takes on the challenge of understanding and applying the principles of nature in agriculture and animal husbandry. To do this, it is necessary to understand a little more about nature. People who live in the countryside know more about nature, but they were induced to abandon this knowledge and adopt a technology that disregarded both knowledge and nature (Sevilla Guzmán, 2006).

Association between typologies, villages and the ancestral practices being lost

The traditional and ancestral practices that are being lost in G1 and G2 are mainly rituals, minga, manual weeding and *Tul*. In addition, activities linked to the phases of the moon, native seeds and organic fertilizers are being lost in G4 and G5, while traditional doctors (*the Wala*) and polycultures are being lost in G3 (Fig. 4).

In the Resguardo, ancestral and agroecological production practices are being lost because conventional agriculture, the green revolution until 1990, the genetic revolution (since 1990 until today) and input-dependent agriculture (both yesterday and today) have managed to permeate the traditional production systems (peasant, indigenous and Afro). According to Ceccon (2008), the green revolution emerged as a standard-bearer of development, and its main purpose was to generate large-scale yields from agricultural activities based on extensive production and the use of high technology, especially genetic manipulation through bioengineering. It has been the Western concept of progress that has invaded every corner of the world. This has been one of the immediate or specific causes for the Resguardo to have lost the vision of agroecological production, bringing with it social, economic and environmental consequences.

Andoque and Castro (2012) highlight the importance of local participatory research and consider that the strengthening of traditional practices ensures the welfare of indigenous communities and becomes a strategy to cope with global climate change; therefore, they highlight

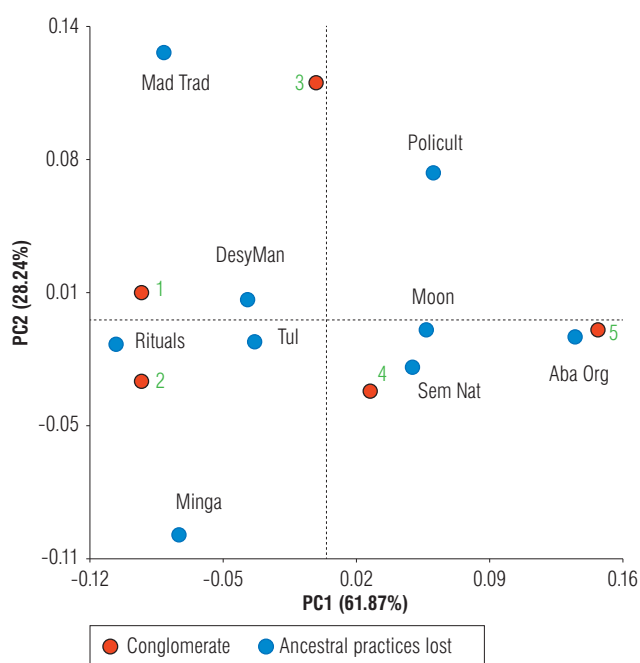


FIGURE 4. Association between typologies and ancestral practices lost

the vision of local knowledge associated with agricultural production systems and, on the other hand, the role of women in the care of crops, the home and the beings of nature. According to Nicholls *et al.* (2017), many of the traditional agroecological strategies that reduce vulnerability to climate variability include crop diversification, maintenance of local genetic diversity, animal integration, biological control, addition of organic matter to the soil, water conservation and harvesting.

Currently, it is difficult to find traditional production systems that manage all these practices; the changes in these production systems reflect the processes of forced acculturation that peasant and indigenous communities are undergoing (Van der Hammen, 1992). By forced or imposed acculturation, we refer to the phenomena of imposition of elements foreign to a culture that imply a loss of elements proper to that culture. From the political ecology perspective, these transformations should be seen not only from a local perspective, since global economic and political processes have been determinant (González de Molina *et al.*, 2014).

Therefore, the traditional *Tul Nasa* production system (traditional ancestral orchard) replicates, from its ancestral knowledge and experience, agroecological practices that have been recognized today, such as crop rotation and association, minimal soil intervention, use of cover crops, allelopathic relationships between the plants, natural

biological control, conservation of animal and plant genetic wealth and rational use of water, among others (Franco Valencia, 2010; Sanabria Diago, 2006).

In this way, the *Tul*, which is a fundamental part of the *Nasa* culture and preserves ancestral and agroecological practices, continues to be replicated in a life cycle that respects and preserves life (Franco-Valencia & Sánchez de Prager, 2018). Consequently, the approach from food security and sovereignty towards dignity and food autonomy seeks to promote the development of sustainable production systems, aimed at the well-being of indigenous families. These systems do not generate irreparable consequences to culture and nature; on the contrary, they recover and preserve knowledge along with culture, worldview, vegetation, fauna, water and soils (Franco & Chate, 2016).

From the local level and through the impulse of the *Tul*, an environmental and cultural fabric is reconstructed, where the *Wala* and the elders guide what plants to sow, how to sow, and how much to sow, as exercises of autonomy, territoriality, culture and unity. Additionally, according to Franco Valencia (2010), the environmental program has defined strategies for the conservation of the natural base, articulated with productive and extractive proposals for the Resguardo, in which four components stand out: 1) territorial planning and management; 2) establishment of biological corridors; 3) rescue and improvement of the *Tul Nasa* production system; and 4) community regulation.

According to Vásquez (2004), in parallel to the biological corridors, corridors for food sovereignty have been established, structured based on the improvement of production system models and towards the configuration of a model that reflects the worldview of the *Nasa* people while responding to current ecological and economic needs. In this sense, the rescue and improvement of the *Tul Nasa* model has been proposed as an important strategy for the food sovereignty of the indigenous family and as productive base for the reconstruction of the *Nasa* worldview, which integrates differentiated productive processes with simultaneous processes of conservation of natural resources and strategic ecosystems (Sánchez de Prager, Barrera *et al.*, 2017).

Association between typologies, villages and ancestral practices still performed

For the five groups (G1, G2, G3, G4, and G5), the practices that are still performed in the Resguardo are the minga, hand-to-hand labor exchange and rituals. However, it is

worth noting that bartering is mainly carried out in G2 (Fig. 5).

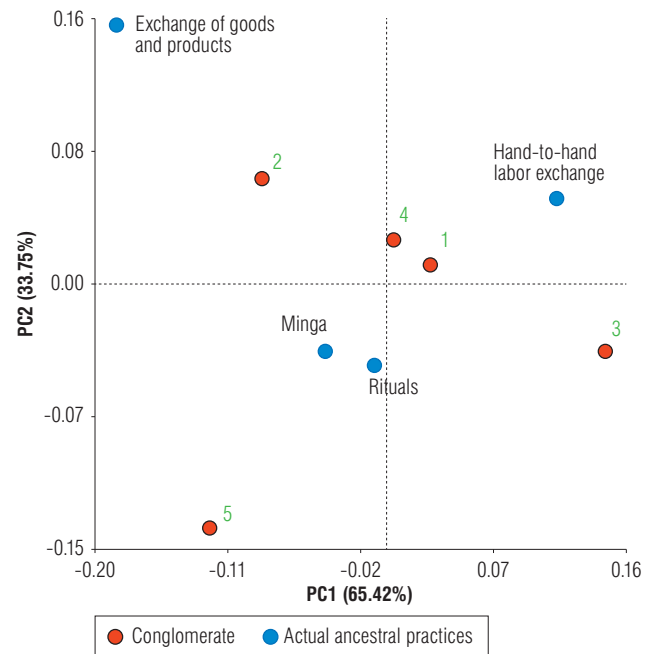


FIGURE 5. Association between typologies and current ancestral practices.

According to Bermúdez Guerrero *et al.* (2005), the indigenous person does not represent the world, but makes it symbolically present through ritual and celebration; he/she knows it through his/her own life, in an experiential way. This is clearly seen in the rites carried out on the summer solstice or in the celebration in honor of the Rainbow that the Ingas perform to guarantee good harvests and also in the mingas and their celebrations. The minga is understood as the feast of planting and harvesting, where the members of the community gather to make the furrows, sow, talk and thank Mother Earth for the fruits and food provided. For the Iku, the “pagamentos” (payments) are rituals of gratitude and return to Mother Earth for everything received. Human societies have survival strategies that are mediated by cosmologies, mythical structures, rituals, habits and customs (Reichel-Dolmatoff, 1997). However, “the relations of communities with the environment are not always adaptive strategies determined by materialistic rationality, and not all practices are aimed at preserving the homeostasis of the system”, as Rappaport (1982) stated when studying rituals.

Taking into account that there are several types of mingas (family and community; work and thinking, among others), these acquire certain particularities; in the family minga, it is the heads of the household who are in charge

of the convocation and organization, while in the community minga, it is the authorities of the Resguardo who do these tasks (Franco & Chate, 2016). According to Mendoza Hernández *et al.* (2017): “These mingas are of great value, as they allow the transmission of a wealth of information regarding work, knowledge of nature (vegetation, animals, soils, etc.), norms of social and natural conduct, etc.”. The practice of the minga as a work, learning and social relationship strategy has been undermined by the individualization of work due to personal interests, less respect for traditional authorities and the loss of traditional knowledge. The decline of this work strategy contributes, to some extent, to community disintegration, as the opportunity for space and time for social and cultural exchange is lost. Thus, a form of community work of great importance is disappearing, despite being socially and environmentally sustainable (Mendoza Hernández *et al.*, 2017).

Finally, it is worrying that the elderly, considered the current support of culture, already at the end of their life cycle, may take with their passing an accumulation of knowledge and information that has not been transmitted; their advanced age and small number make this concern even greater. Therefore, it is urgent to promote an internal dialogue in an analytical and reflective environment, establishing actions and strategies that achieve in the immediate, the reunion of these two generations and their genders, so that the agreements can be established that transcend into facts and reactivate the flow of knowledge.

Participation in the minga, the hand-to-hand labor exchange and their relation to the loss of the *Tul*

Groups G1, G3 and G4 are those that participate the most in the minga and in the hand-to-hand labor exchange (Fig. 6). In contrast, G2 and G5 are those with the least participation in these activities and are also the groups that have lost the *Tul*. The minga and the labor exchange are two forms of work that allow sharing resources and forces to carry out a task; in addition, the knowledge acquired during these activities not only has to do with material work but also includes spiritual guidance.

The *Tul* is the main source of food and medicinal plants; it is also a symbol of social cohesion among the community, as it is also used in minga. However, the process of globalization and modernization has pressured the adoption of foreign consumption, uses and customs, which have been detrimental to ancestral knowledge and practices, leading to the loss or disuse of both their traditional plant species and the knowledge and practices associated with them.

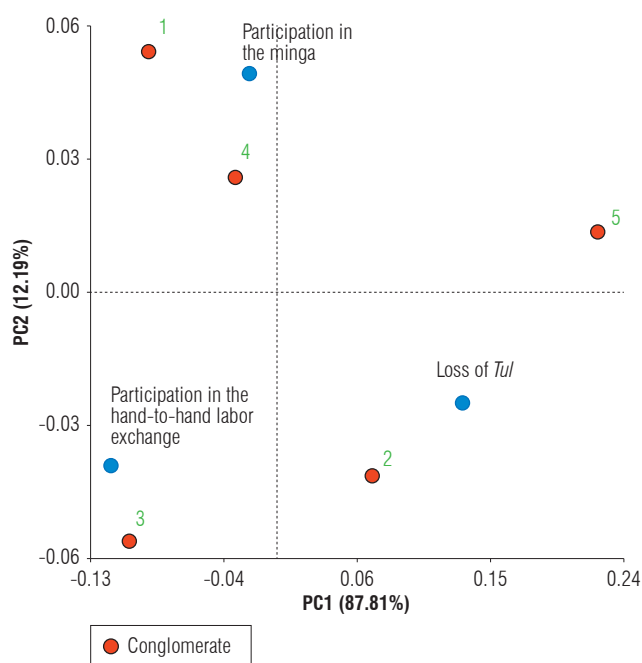


FIGURE 6. Participation in the minga, hand-to-hand labor exchange and their relation to the loss of the *Tul*.

According to Franco Valencia (2010), the *Tul* is considered the expression of the capacity for domestication and technological adaptation to the diversity of Andean agro-ecological conditions, where the passes or meeting places of basins and sub-basins constituted points of Andean economic dynamization, for a living local territory. These dynamization points (which are more than 500 years old and have resisted the onslaught of green revolution production models) continue to provide benefits to the communities, where the reciprocity and exchange systems of products and food remain dynamic and intense. This testimony of historical permanence is a reliable indicator of their sustainability (Vásquez, 2004).

Spiritual meaning of the *Tul* from the *Nasa* worldview

Groups G2 and G5 mainly associate the spiritual meaning of the *Tul* with ancestry, while groups G1, G3, and G4 associate it with good living, food sovereignty and autonomy (Fig. 7). For Franco-Valencia and Sánchez de Prager (2018), despite the western socio-cultural onslaught, the *Nasa* skillfully maintained much of the cultural legacy such as: thought through language, spirituality manifested through rituals, traditional medicine, minga as a form of collective work and the *Tul* as part of food sovereignty, dignity, and autonomy. In addition, it is in the *Tul* where a whole process of spiritual relationship between the indigenous and nature is manifested and expressed, to guarantee food production and good living (Chate & Franco, 2016).

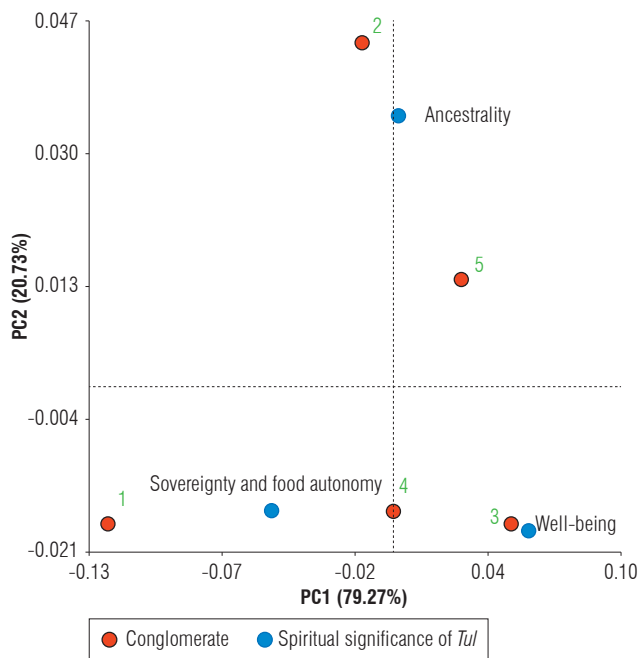


FIGURE 7. Spiritual meaning of the *Tul* from the Nasa worldview.

Like the *Tul*, Román (2007) considers that “the practice of the *chagra* entails a whole work protocol that is related to myths, which support incantations to take care of physical and spiritual health; the *chagra* is the strength of spiritual and physical work”. Myths, legends and rituals constitute the cosmogony through which indigenous people interpret their environment, organize it and give the communities regulatory guidelines for the use of the territory. For example, the conservation of sacred or mythological places, modeled by supernatural beings, whose violation may be subject to punishment by these beings (Rappaport, 1982; Van der Hammen, 1992).

For Mendoza Hernández *et al.* (2017), “The construction of a healthy person, physically, spiritually and morally, depends on the food consumed; the product of each species sown contributes with its nutrients to this construction. Hence the importance of the variety of species and their conservation to ensure a healthy and integral diet.” The traditional strategy for the conservation of the species is the transfer of the seeds to a new *chagra*, together with the exchange that takes place through community work (*minga*). The consumption of their products is also a guarantee for their conservation; as long as they are used, production is encouraged. Additionally, an important particularity that defines the *chagra* is the existence of a spiritual relationship between the different elements of nature and human beings, which guarantees the success of production and its benefits. In this regard, Van der Hammen (1992) refers to the importance of the magical-religious knowledge that

sustains the proper functioning of traditional productive systems.

Mendoza Hernández *et al.* (2017) also evaluated in a general way the content of traditional species in the *chagras* and found that traditional species have lost almost half of their presence in the *chagra*. Consequently, the situation is critical from three perspectives: from the loss of the cultural value that is related to their identity; from the loss of the opportunity to consume healthy and nutritious food; and from the risk of economic dependence on processed products of external origin. All the above impacts the loss of knowledge that has been forged through practice and transmitted orally for hundreds of years. In short, food sovereignty and autonomy, provided by the *Tul*, would be strongly affected.

Conclusions

The study of traditional practices, visualized from the interaction with the community, corroborates that together with the loss of biological diversity, there has been a loss of cultural diversity. The cultural heritage linked to food production associated with their worldview has been reduced and the use of external inputs (pesticides and fertilizers) has increased, with serious economic, environmental and social consequences. In contrast, the Yaquivá community is trying to retake the most important aspects of their worldview to maintain and survive in the territory for many years, leaving a legacy for future generations.

Despite the above, globalizing modernity has permeated the community, and the socioeconomic decisions they have made are immersed in this vision rather than in their culture. This modernization is also reflected in the transformation of the agricultural sector and its traditional practices of production (*Tul*) and collective work (*minga* and hand-to-hand labor exchange), which are intimately linked to education and preserved through time. Today, they are decreasingly practiced by the new generations. However, the ethno-education component of the Jiisa Fxiw Agroecological School has become a defense of the traditional Yaquivá culture and has sought the socio-agricultural reinterpretation of these practices.

Finally, this research process, extended over fifteen years, allows us to reflect on the role of academia in the development of communities and, from agroecology, to understand with full knowledge of the facts that the academia is a qualified companion that can be present in community processes of feedback such as the one experienced and, at

the same time, provide feedback. However, decision making and actions correspond to the autonomy and identity of the Yaquivá community.

Conflict of interest statement

The author declares that there is no conflict of interests regarding the publication of this article.

Author's contributions

MHFV: writing, review and editing. The author approved the final version of the manuscript.

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