

A DESCRIPTION OF SUSTAINABILITY AND LIVING IN THE INKIRI PIRACANGA ECOVILLAGE

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ABSTRACT. In the context of the current environmental crisis, topics such as the preservation of environmental resources, minimizing the environmental impacts of human activities on Earth, and sustainability and sustainable development are particularly notable. Consequently, ecovillages have gained prominence as human settlements that combine community life with greater integration with nature. This study describes the sustainable practices, community life, and the organization and functioning of the Inkiri Piracanga Ecovillage. The study employs an ethnographic approach based on informal interviews and participant observation. The results reveal practices and values associated with self-knowledge, solidarity, and community, which strengthen emotional bonds. Furthermore, projects and techniques for nature conservation through participatory management are evident. It is noted that ecovillages contribute to the development and implementation of sustainable solutions to the environmental crisis.

Keywords: Community psychology; sustainable development; ethnography.

UMA DESCRIÇÃO DA SUSTENTABILIDADE E O VIVER NA ECOVILA INKIRI PIRACANGA

RESUMO. A preservação dos recursos ambientais e a minimização dos impactos ambientais da vida humana na terra, sustentabilidade e desenvolvimento sustentável são tópicos que se sobressaem frente ao contexto de crise ambiental experimentado. Em função disso, o fenômeno das ecovilas vem tomando destaque por ser um assentamento humano que reúne vida em comunidade e maior integração com a natureza. O objetivo desse estudo é descrever as práticas sustentáveis, a vivência comunitária e a forma de organização e funcionamento da ecovila Inkiri-Piracanga. Os procedimentos metodológicos partem de uma abordagem etnográfica, utilizando-se principalmente de entrevistas informais e observação participante. Os resultados indicam práticas e valores referentes ao autoconhecimento, à solidariedade e à comunidade, fortalecendo assim, os vínculos afetivos. Além de serem evidentes projetos e técnicas de cuidado com a natureza em formato de gestão participativo. Nota-se que ecovilas contribuem para a construção e implantação de meios sustentáveis para lidar com a crise ambiental.

Palavras-chave: Psicologia comunitária; desenvolvimento sustentável; etnografia.

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UNA DESCRIPCIÓN DE LA SOSTENIBILIDAD Y EL VIVIR EN LA ECOALDEA INKIRI PIRACANGA

RESUMEN. La preservación de los recursos ambientales y la minimización de los impactos ambientales de la vida humana en la Tierra, la sostenibilidad y el desarrollo sostenible son temas que destacan en el contexto de la crisis ambiental experimentada. Por ello, el fenómeno de las ecoaldeas ha ido tomando protagonismo por ser un asentamiento humano que reúne la vida comunitaria y una mayor integración con la naturaleza. El objetivo de este estudio y describir las prácticas sostenibles, la experiencia de la comunidad y la forma en que se organiza y funciona la Ecoaldea Inkiri-Piracanga. Los procedimientos metodológicos parten de un enfoque etnográfico, utilizando principalmente entrevistas informales y la observación de los participantes. Los resultados indican prácticas y valores relacionados con el conocimiento de sí mismo, la solidaridad y la comunidad, fortaleciendo así los lazos afectivos. Además de ser evidentes los proyectos y técnicas de cuidado de la naturaleza en un formato de gestión participativa. Se observa que las ecoaldeas contribuyen a la construcción y aplicación de medios sostenibles para hacer frente a la crisis ambiental.

Palabras clave: Psicología comunitaria; desarrollo sostenible; etnografía.

Sustainable development, sustainability, and ecovillages

The intensification of social and economic inequalities, the degradation of working conditions, and the depletion of natural resources are realities associated with capitalist growth (Suša, 2019). There is a mutual relationship between environmental and social issues, such that environmental problems are created or intensified by social and economic factors linked to neoliberalism. For example, social inequality, labor exploitation, and access to basic sanitation are interrelated (Soares, 2020). However, discussions about these issues gained prominence after the creation of initiatives such as the World Commission on Environment and Sustainable Development (Brundtland Commission), which opened a space for discussion about “sustainable development” (Boff, 2013).

Sustainable development refers to the rational use of natural resources by the present generation in a way that does not compromise the use of these resources by future generations, based on economic, environmental, and social dimensions (e.g., Pereira et al., 2011). According to Boff (2013), ‘sustainability’ involves preserving the Earth and its ecosystems to ensure good living conditions. The focus is not on increasing progress or maintaining capitalist standards.

Against this backdrop of environmental concern, the ecovillage movement emerged, offering a lifestyle integrated with nature. There is no standard ecovillage model (Santos Júnior, 2006), but the foundation is to be an intentional community (i.e., communal and intentional living) and to be sustainable (Morais & Donaire, 2019). Furthermore, aspects of the following four dimensions are generally present: (a) community, (b) economics, (c) spirituality, and (d) ecology (Santos Júnior, 2006).

Characteristics of the community dimension include the perspective of sharing, unity, conflict resolution, respect for diversity, strengthening ties, and integrative activities such as celebrations and circle dances (Cecchetto et al., 2014), and a sense of belonging and community identity (Santos Júnior, 2006). In a study of an ecovillage, Cavalcanti (2019)

emphasizes a sense of belonging to a group or community, idealized coexistence, and the existence of tensions between individual freedoms and collectivity. Approaching the community and spiritual aspects, Comunello and Carvalho (2015) mention circle dances, human development, and cultural diversity (various nationalities and languages). In the spiritual dimension, Roysen (2013) mentions the expansion of spiritual experiences with elements of various religions, a connection with nature, health, emotions, self-knowledge, and holistic practices. This concept is partially verified in the ethnography of Comunello and Carvalho (2015).

The economic dimension involves generating income and achieving self-sufficiency through tourism, managing socio-environmental projects, offering courses, and encouraging community projects (Belleze et al., 2017). Cecchetto et al. (2014) highlight promoting the local economy through implementing a local currency, exchanging objects among residents, producing local food, detaching from goods, and reducing consumption. In line with this, the 'solidarity economy' (e.g., Boff, 2013) emphasizes practices and values that are contrary to capitalism. In this model, human relationships are prioritized over profit. Labor relations involve solidarity, democratic forms of self-management, local development, and improving the quality of life for workers. In governance, leadership plays a key role in creating new forms, ideas, and co-participants. Borges and Sguarezi (2019) stress the role of self-management based on democratic decision-making and cooperation in labor relations. This approach involves local action, initiatives, and social inclusion projects.

In governance, management, and leadership are observed with division of responsibilities, decision-making processes, trust, creativity, and member participation (e.g., Algarvio, 2010). Muñoz-Villarreal (2018) described an ecovillage as organized through thematic action cells, where members have different roles and responsibilities and make decisions based on each cell's theme while considering how it interacts with other cells.

In the ecological dimension, practices are employed to minimize the environmental impact of human life, foster a connection with nature, promote alternative dietary practices (e.g., vegetarianism), utilize renewable energy sources, and employ biodigesters (Cecchetto et al., 2014). The goal is to build settlements that are compatible with local ecosystems, to use natural resources rationally, and to invest in environmental restoration and organic food production (Santos Júnior, 2006). Solid waste treatment systems, dry toilets, recycling, selective collection, composting, and biofertilizer production are used (Algarvio, 2010), and bioconstruction (Belleze et al., 2017).

Psychology and environmental care

Pro-environmental behavior (PEB) has been studied in various fields, such as psychology (e.g., Chi-Errito-Arruda et al., 2019; Corral-Verdugo & Pinheiro, 1999; Espitia-Torres & Naranjo-Montoya, 2020; Nascimento, 2019). PEB is behavior aimed at maintaining life, environmental care, and preservation (Corral-Verdugo & Pinheiro, 1999). In psychology, sustainability is a prominent theme, especially in areas such as environmental psychology and community social psychology (CSP).

Environmental psychology studies the mutual relationship between human behavior and the environment. The 'environment' encompasses the tangible (physical-chemical), contexts, and sociocultural variables (Corral-Verdugo, 2005; Santos et al., 2019). CSP was influenced by grassroots movements and focuses on issues related to social transformation and political reality (Maciel & Alves, 2015). The 'community' is the place where residents live and share. The 'community subject' is an active social actor who develops affective bonds, mutual support, commitment, identification with their reality, and a sense of

belonging. 'Community participation' is essential for transforming reality, and involves social development, protagonism, control of reality, recovery and appreciation of local culture, and visibility and voice for forgotten and invisible sectors. It should lead to the development and awareness of individuals (Góis, 2008; Wiesenfeld, 2015).

Development originates within the community, through sociohistorical, cultural, and subjective factors, but it relies on contributions from external agents (Góis, 2008). However, there are challenges in articulating the role of social actors as active subjects in promoting development and sustainability (e.g., Maciel & Alves, 2015). For example, Favero et al. (2016), in an action research study of a community, investigated residents' perceptions of environmental risks. The study identified elements such as a sense of belonging and community support, but found little community mobilization.

Elvas and Moniz (2010) investigated the relationship between belonging, satisfaction, and quality of life among 30 participants (ages seven to 15) living in two neighborhoods of Lisbon, Portugal. The data collection instrument consisted of 52 questions, based on the Multidimensional Student Life Satisfaction Scale (MSLSS) and the Sense of Community Index (SCI). The results indicated a moderate positive correlation between the sense of community and life satisfaction ($p < 0.001$, $r = 0.60$), meaning that an increased sense of belonging is associated with increased life satisfaction. A sense of belonging contributes to community programs, which, in turn, are related to sustainable development; and in the older neighborhood (with stronger connections between neighborhoods), a greater sense of belonging and identity was observed, compared to the newer neighborhood.

Given the current environmental scenario, studying ecovillages is important because they encompass social equity, nature preservation, and quality of life. This has been observed in empirical studies from various fields (e.g., Cavalcanti, 2019; Flores & Trevizan, 2015; Comunello & Carvalho, 2015; Muñoz-Villarreal, 2018; Morais & Donaire, 2019; Roysen, 2013; Sales, 2017; Siqueira, 2017; Silva, 2021; Tres & Souza, 2022). The present study aimed to describe the sustainable practices, community life, organization, and functioning of the Inkiri Piracanga Ecovillage.

Method

This study was conducted at the Inkiri Piracanga Ecovillage (state of Bahia, Brazil) during a seven-day immersion in July 2017. Two researchers collected data through participant observation and informal interviews using field diaries, audio recorders, and photographs. These are procedures and instruments frequently used in ethnographic research. Participant observation involved interacting with people in the ecovillage (e.g., through circle dances, yoga, circus, and activities at the recycling center and gardens). Interviews were conducted with 13 participants (P1–P13), all over the age of 18, two males and 11 females. Most of the accounts were collected from 11 of the 13 participants, as they were ecovillage residents. The other two participants were included because they participated in immersion programs, which offer an intimate experience of ecovillage life. The main topics covered in the interviews were the process of arriving at the ecovillage, daily life, personal beliefs and values, ecovillage projects, ecovillage operations and management, and areas for improvement. Additional data on ecovillage management and organization were collected via WhatsApp.

Data were analyzed through an exhaustive reading of the material (interview transcripts), photo analysis, a category search, triangulation (by comparing the researchers' perceptions with the different data collection techniques used), and pattern identification. The interviewees' reports were grouped into four themes to construct the categories. The

Research Ethics Committee of the Doutor Leão Sampaio University Center in Juazeiro do Norte, Brazil, approved this research (CAAE: 72931317.0.0000.5048). All participants signed an informed consent authorizing the use of audio recordings and photographs.

Results

Origins of the Inkiri Piracanga Ecovillage

Located at the confluence of the sea and the Piracanga River, Inkiri Piracanga was previously part of a degraded area of a coconut farm. Around the year 2000, A.A., the founder of the ecovillage, purchased the land and began subdividing it and building the Holistic Center, a process that lasted about five years. Most of the subdivision buyers are foreigners, resulting in many residents and visitors coming from other countries and regions of Brazil. Initially, there were few residents, and a community had not yet formed. It was only after a few years that the Holistic Center gained strength, thanks to aura reading retreats. Around 2010, concerned about the resident children, the residents came together, leading to the formation of the Inkiri Community. Later, the Inkiri School was developed, and the Holistic Center began to grow. The founder's life and the origin of the ecovillage are associated with mystical experiences that are not discussed in this study. See other studies conducted at the Inkiri Piracanga Ecovillage for more information (e.g., Flores & Trevizan, 2015; Sales, 2017).

Holistic Center and Spirituality

The central part of the ecovillage houses the activities of the Holistic Center and its projects, courses, retreats, lodging, holistic therapies, and more. There are spaces offering vegan and raw foods, as well as a store selling biodegradable products. Meat consumption and the use of products that are not 100% biodegradable are not permitted. The ecovillage also has a circus, lodging huts and cabins, meditation and yoga spaces, residents' homes, and a housing program. The peripheral area contains the largest concentration of homes and a forested area.

Spirituality is the cornerstone of the Holistic Center and the Inkiri Community. It is evident in the creation of the ecovillage, the individual and community decision-making processes, the pursuit of self-knowledge, and the activities of the Holistic Center (e.g., yoga, sound meditation, courses, aura reading retreats, etc.). Spirituality is also present in the name of the place, decor, music, and mantras, in elements of shamanism and Buddhism, and in the connection between spirituality and nature.

Community Dimension and Governance

The ecovillage's territory is home to 250–300 people (number varies), organized primarily into two groups. The first, the Inkiri Community, is made up of approximately 40 adults and 18 children, who identify themselves as a family of people who are determined to live in close proximity and respect one another while reclaiming values of solidarity, unity, and connection with nature. This core community consists of the longest-standing and most dedicated residents. They have the greatest level of responsibility for managing and supporting the Holistic Center and implementing projects. They are the most committed to realizing the community's purpose—the Inkiri Dream—of transforming reality in alignment with the transformation of the people who pass through the ecovillage. They create a laboratory for experimenting with new practices linked to self-discovery through spiritual practices and other Center activities.

In addition to having a founder as its leader, the Inkiri Community is organized into four councils: (1) Administrative and Financial, (2) Nature, (3) Children, and (4) Community. Each council is composed of residents closely connected to the council's topic. They discuss issues and make decisions related to their council. The most important decisions are debated with the community. Rigidity, inequalities, and taboos were rarely observed in the interviewees' accounts in this study.

The second group of residents, called the extended community, is more heterogeneous and consists of people who do not belong to the Inkiri Community (core), are non-permanent residents, and have a lower level of dedication and responsibility. They are participants in the Purpose in Action Program (PAP) and work on a community project in exchange for a stipend. Thus, they are connected to the community's purpose, or the Inkiri Dream, through their work. PAP participants are also aware of, and have a say in, some important decisions regarding the ecovillage's operations. Some PAP participants are in a process called community engagement, which is the first step toward becoming a member of the Inkiri Community. Residents who serve voluntarily by connecting to a project also comprise the extended community. Some people are not part of the extended community, who live in the ecovillage, but are not connected to the Holistic Center and its projects (they do not necessarily share the values and beliefs of the Inkiri group), and people who spend time in the ecovillage, such as renters and owners during holidays.

Economic Dimension and Projects

The ecovillage is self-sufficient, and its main source of income is the Holistic Center (for those working on projects), but some residents also have other sources of income. For the Inkiri group, money is seen as an energy of exchange, fulfillment, and manifestation. Services are paid for in Brazilian Real and Inkiri (the local currency), but the goal is to eventually use only Inkiri. The design of this currency expresses spiritual meanings and values that are important to the Inkiri group. Benefits of using a local currency include reduced theft rates and a boost to the local economy. Furthermore, priority is given to locally produced products and foods purchased at markets.

Economic activities are concentrated in an NGO, the Inkiri Institute (legal representation). Some people living near the ecovillage, particularly from one specific village, work at the Holistic Center on community projects as contract workers (CLT). As the ecovillage grew, so did this village, improving the living conditions of some people. One of the Inkiri Institute's goals is to empower local people connected to the Institute to manage various aspects of their lives, such as developing small businesses and providing education.

The 'projects' are hubs of work on several fronts: nature, school, communication, among others. The work carried out through the projects is important to the Inkiri group, as it is the means used to realize the Inkiri dream, which has spiritual meanings of self-realization and self-discovery. Roles within the projects are hierarchized according to the level of work responsibilities. This hierarchy follows a tree format, with the roots (people leading the projects, called guardians) at the base; they have a higher level of responsibility and are more dedicated to the project. Below the roots are other levels with lower responsibilities (e.g., trunk and branches) until reaching the flowers, which are more specific activities and have fewer responsibilities. Compensation varies according to the level of responsibility and dedication. Labor relations are more friendly and flexible, and health (physical, mental, and spiritual) is valued.

Some of the projects include: (1) the Aura Reading School, which offers holistic therapy courses and retreats; (2) the Kitchen, which has a restaurant and other spaces that

serve vegan and live food; (3) the Inkiri Atelier, which fosters art and creativity; (4) the Circular Dances, a community-building movement; (5) the Inkiri Music, which provides musical experiences; (6) the Inkiri Firefly Circus, which offers self-awareness and self-expression practices through circus activities; (7) the Inkiri School, which educates children and adolescents; and (8) the University Village, where young people share housing, experience self-awareness, strengthen bonds, and serve on projects. The following describes Inkiri Nature, which brings together environmental management projects and activities.

Inkiri Nature - is a work center that brings together areas of action and environmental management. Plante is a branch that focuses on water conservation and manufactures biodegradable products in a laboratory. The Plante laboratory has a dedicated area for addressing certain health-related issues. The vision of health is holistic and linked to spirituality and nature.

Another hub, the Permaculture Center, uses knowledge and techniques derived from permaculture for care. In Piracanga, there were only coconut trees, a few native plants, and sandy, nutrient-poor soil. This work has enabled environmental change, particularly in the management of agroforestry systems, using the fertilizer produced through composting to transform waste into a useful resource. To speed up the composting process, they cultivate a recipe for multiplying microorganisms harvested from the forest. The composting yard has 12 stalls where organic waste and shredded coconut husks are composted to produce fertilizer for plantings. Agroforestry seeks to create an ecological succession system, with the addition of increasingly demanding species; the goal is to become a fruit-collecting community. This area of activity also includes gardens, the creation and maintenance of water treatment systems (banana circles), evapotranspiration pits, and dry toilet systems. The latter are the most widely used and recommended, as they not only save water but also produce fertilizer through composting.

Another area of activity is the Selective Collection Center, which is dedicated to solid waste management. Items are reused for residents/visitors and for other projects (e.g., eco-brick manufacturing). Non-recyclable waste is sent to a nearby city landfill. Due to the large volume of waste, much of it is not yet managed within the ecovillage, but the goal is to manage all waste within the ecovillage and, more than recycling, to promote an understanding of the importance of minimizing environmental impacts and raising awareness. Most of the buildings were constructed using masonry techniques; however, bioconstruction techniques are now primarily used with low-impact, regionally sourced materials (e.g., clay, piassava, and eco-bricks). The energy system is solar, and each owner is responsible for their own.

This community's green core is also organized into a nature council, responsible for discussing issues related to nature and environmental management rules. For example, there are regulations that require preserving a certain percentage of forest on each lot, as well as building restrictions, such as the number of floors and bathrooms. Housing construction is planned based on the number of residents and environmental impacts. The green core is also a Nature School committed to learning from and sharing knowledge about local nature. Since there are few references in Brazil, it is necessary to seek inspiration from other experiences abroad, experiment, innovate, and adapt.

Categories

Self-knowledge and spirituality. Self-knowledge and spiritual practices were often linked, so they were grouped. Self-knowledge was understood as actions that promote the

identification and understanding of one's behaviors, feelings, thoughts, and expressions, as illustrated in these accounts:

[...] I was very closed off and didn't want to access my feelings or express myself. When I felt anger or pain, I repressed it, pretending everything was okay. I came here and started to see that everything wasn't okay and that everything inside me was forming a little ball [...] (P7).

[...] we also look at the waters within, which are our emotions and our feelings. If there's one big issue facing humanity today, it's the difficulty people have looking inside themselves and addressing what's unresolved. It's much easier to stay busy, talking to other people, working, or being on the internet. But at night, when we're alone with our pillows, our anxieties, emotions, and everything unresolved come out. [...] (P2).

The pursuit of self-knowledge also occurs through work, relationships with nature, and social interaction. Self-knowledge appears to be a fundamental pillar in developing and maintaining behaviors:

[...] you may live in a place that cares about environmental issues, social issues, and spiritual issues [...] You may or may not feel integrated into a complete cycle related to nature [...] Self-knowledge is a very powerful word here. I see it as the foundation of everything we do here because the more you know yourself, the more you want to be in balance with nature and with the people you live with [...] (P10).

[...] we know everything about each other's lives after only knowing each other for a short time, and that's really cool because it's a relationship that, for me, is totally innovative. It's trusting that you can open up and tell someone everything and that they will respect you and not negatively interfere with your process. Each person has their own process, and we embrace it collectively. This really helps us overcome everything we go through within ourselves [...] (P12).

Self-responsibility and community life. Self-responsibility involves taking personal responsibility for creating reality. Each person feels involved in acting to change their reality: “[...] you don't do it simply because you have to, you do it because it's part of the balance, of what I was talking about, the cycle. Washing your own dishes is so simple, so minimal. If something is dirty and bothers me, I'll clean it [...] (P10). Self-responsibility is present in various contexts, such as work, household chores, and caring for nature: “[...] we're in a place where we strongly believe in self-responsibility. Unfortunately, just like with waste, water treatment, and biodegradable products, self-responsibility isn't so respected [...]” (P6). The actions described primarily originate from some people who spend time in the area and highlight the effects of a lack of self-responsibility on community life.

Changes in worldview, unity, and a sense of belonging, affection, solidarity, and shared responsibilities are also noted:

[...] it works much better when you're together, and that's what brought me to the community. It makes life much easier when dealing with the demands of everyday life. That's what gives me the sense of community; it's like a brotherhood. Everyone has their own task, but when we need to resolve something together, we work as a team [...] (P5).

Resignification of life, work, and potential. This category includes elements related to questioning and resignifying concepts, habits, and values, especially those related to work:

[...] resignifying our relationship with money and work has intensified our ways of thinking and confronting our limiting beliefs about owning things, such as money and a social life. It was truly a moment of rupture. I'm working with something I believe in, so this is completely changing my perception of work [...] (P10).

These are work concepts in which human relationships and quality of life are important. There is flexibility and identification with work, as well as an understanding that one's work is important to the community. There are working relationships that stimulate creativity and quality of life, and other aforementioned aspects are observed:

[...] it was one thing when I was forced to go into that reality because I put myself in that role. I created my own sense of security, which was my salary [...] Here, you can come and go as you please. Here, you believe in something. From the moment you stop believing in what you're doing, you can gather your things and leave [...] (P6).

In the following account, the interviewee talks about how the experience of serving (i.e., working without pay), one of the activities offered by the University Village, changed her perspective on work:

[...] it's a project where you learn to serve without expecting anything in return. I think it's very interesting, very cool, because it really gives you a different perspective on work, on service. You begin to understand who you are in a work environment. Whether you're someone who likes to produce, or someone who likes to procrastinate [...] (P13).

Relationship with nature. This category encompasses issues such as identification with nature, awareness, habits, and vegetarianism. This account is an instrument for disseminating environmental preservation, and identification with nature is seen in this account:

[...] we are a hub for disseminating this knowledge and encouraging people to immerse themselves in the experience of being part of nature. This allows us to take responsibility for our impact on the planet. This can happen with ease. People leave here feeling motivated and confident. You will inevitably have to accept that you are an animal on this planet, that your waste matters, and that what you put into your body through your diet, your thoughts, your actions, and the way you interact with nature, your environment, and your ecosystem matter as well [...] (P4).

Discussion

This study described the sustainable practices, community life, organization, and operations of the Inkiri Piracanga Ecovillage. Environmental protection is fundamental to the ecovillage, and the holistic center and its projects are the economic backbone. Elements related to redefining life practices and values were observed through self-awareness (i.e., identification of feelings, behaviors, strengths, and limitations), social interaction, community life, strengthening emotional bonds, and taking accountability for one's social reality.

Being an intentional and sustainable community is a basic and striking characteristic of an ecovillage (Morais & Donaire, 2019). These characteristics were observed in Inkiri Piracanga through the interviewees' self-reports, in the form of organization and governance, in the physical structure of the space, in the practices of the residents, through participant observation, and through the perceptions of the two researchers who were immersed in the ecovillage.

As highlighted by Morais and Donaire (2019), in intentional communities, more than sharing a physical space, people who choose this life experience with greater social proximity share lifestyles or goals. This sharing of life and goals is evident in Inkiri Piracanga through practices of self-knowledge and spirituality, interactions that promote social closeness and strengthened bonds, environmental stewardship, and projects. The characteristics that classify Inkiri Piracanga as an intentional community encompass the different dimensions of ecovillages (e.g., Santos Júnior, 2006; Morais & Donaire, 2019).

One of these dimensions is the spiritual. Spirituality is a notable aspect of Inkiri Piracanga, as evidenced by other studies (e.g., Comunello & Carvalho, 2015; Flores & Trevizan, 2015; Morais & Donaire, 2019; Roysen, 2013; Sales, 2017). For example, Morais and Donaire (2019) gather practices related to spirituality and culture into the same category and highlight characteristics such as ecumenism, respecting the diversity of religions, spiritual and cultural practices of various origins, and spaces dedicated to dances and events (e.g., retreats) and other cultural activities. These elements are also highlighted in studies by Comunello and Carvalho (2015) and Roysen (2013). These elements, along with the search for self-knowledge through spiritual practices, are observed in Inkiri Piracanga through self-reports, courses, and retreats, without the presence of a specific religion (e.g., the presence of elements of Buddhism, shamanism, and Hinduism). Spirituality is a basic element of the ecovillage and is present from its inception, in the design of the local currency, in self-knowledge practices, and in decision-making processes related to governance, economics, and community life.

In the economic dimension, the implementation of a local currency, incentives for the commercialization of local products and foods, investment in internal projects, and incentives for the development of nearby villages were observed, which are examples of actions that promote local development and culture (e.g., Maciel & Alves, 2015; Góis, 2008; Wiesenfeld, 2015; Belleze et al., 2017; Cecchetto et al., 2014). These actions encourage empowerment and protagonism in the search for transforming reality (Maciel & Alves, 2015; Góis, 2008; Wiesenfeld, 2015), as well as ecotourism practices (Flores & Trevizan, 2015; Sales, 2017). On the other hand, Flores and Trevizan (2015) reported that people with lower incomes disagreed on support, equal opportunities for development, and hierarchical organization. These concepts were also observed in this study, albeit to a lesser extent.

In Inkiri Piracanga, income is individualized and obtained through work at the Holistic Center or through other projects unrelated to the ecovillage. This is similar to what Morais and Donaire (2019) describe regarding individual income sources within and outside the ecovillage. The same study described other ecovillage income sources not found in Inkiri Piracanga (or no information was obtained about them), such as food exchanges with nearby communities, monthly contributions, collective income for residents, work focused on organic markets, and seminars. The organization of work through projects in Inkiri Piracanga also resembles Muñoz-Villarreal's (2018) description of thematic action cells with different roles and responsibilities. This aligns with the findings of Sales (2017).

The council-based organization is similar to that discussed by Algarvio (2010), which focuses on governance with management and leadership related to shared responsibilities, participatory and creative ways for residents in decision-making processes, and is described by Sales (2017) regarding this same ecovillage. It also aligns with that discussed in CSP, with spaces for participatory decision-making, problem-solving, setting goals or dreams, and expressing residents' opinions about their reality (Góis, 2008). On the other hand, Morais and Donaire (2019) describe an organizational structure without defined leadership, in which everyone participates. This differs from the management structure of the Inkiri Piracanga Ecovillage, which, despite having shared responsibilities and councils, exhibits a strong leadership presence.

Promoting closer social ties and seeking to transform reality are aspects observed in the ecovillage and can be categorized within the community dimension. These elements have also been observed in other ecovillages (Cavalcanti, 2019; Flores & Trevizan, 2015; Muñoz-Villarreal, 2018; Sales, 2017) and are important characteristics discussed in the CSP (Góis, 2008; Wiesenfeld, 2015). Morais and Donaire (2019) list characteristics of the social

dimension found in ecovillages that are also observed in Inkiri Piracanga. These characteristics include integration, trust, respect, cooperation, and friendship among residents.

The ecological dimension is also important in ecovillages. It involves harmoniously occupying local ecosystems, experimenting with practices, creating techniques and strategies, and sharing and encouraging sustainable experiences. This was seen in various ways in the ecovillage: (a) care for water and biodegradable products, (b) ecosystem restoration, vegetation growth, and conservation of natural resources (Flores & Trevizan, 2015), (c) permaculture techniques and principles, seeking non-exploitative forms of relationships, with water and waste treatment, creation of composting systems, and biofertilizer production (e.g., Algarvio, 2010; Flores & Trevizan, 2015; Santos Júnior, 2006), (d) selective collection, construction, and control for forest preservation, (e) diets (vegetarian, vegan, live food) and renewable energy (Cecchetto et al., 2014), and (f) recycling and selective collection (Algarvio, 2010).

These categories enable us to examine the perspectives of different resident profiles, including those who have lived there for a long time, those who have lived there for a short time, and those who are only staying temporarily. The reports in these categories are similar to the descriptions of the ecovillage: (a) self-knowledge as a basic pillar and related to spiritual practices (Flores & Trevizam, 2015), in relation to nature, social interaction, and work; (b) stimulation of creativity, the capacity for transformation, and achievement, aligned with the solidarity economy (Boff, 2013); and (c) identification with nature, awareness, low consumption, and alternative food (e.g., Cecchetto et al., 2014; Flores & Trevizan, 2015; Santos Júnior, 2006).

The study by Flores and Trevizan (2015), also conducted in Inkiri Piracanga, revealed disagreements among groups concerning organizational hierarchy, support for individuals, talent development, and appreciation of diversity. These factors were rarely reported in this study. What could explain this? One hypothesis is that the short immersion period (the limitation of this study) was insufficient to observe conflicts, tensions, or inequalities. Therefore, replications with a longer immersion period are important for investigating issues related to the inclusion of different groups (e.g., related to income, gender, race, etc.). A quantitative study with a representative sample of different groups (e.g., leaders, PAP members, people approaching, and contractors from the region) could better describe the relationships between economic variables and organizational and community structure. In addition, a study describing environmental management techniques and psychological research on school education in the ecovillage would be important.

Final Considerations

The findings of this study, particularly those related to the interviews, highlight more supportive, close, and affectionate social relationships, encouragement of local development, harmonious relationships with the local ecosystem, and the sharing of meanings, values, and lifestyles. The contributions include descriptions of (a) more participatory management and friendlier working relationships; (b) human settlements that integrate nature conservation techniques and practices, providing inspiration; (c) closer social relationships, shared responsibilities, and more participatory management; and (4) self-awareness practices and understanding of social and environmental impacts. These elements are related to psychological processes such as awareness, accountability, empowerment, community participation, quality of life, and self-knowledge. Self-reports

allow visualization of the connection between practices of different ecovillage dimensions, such as how self-awareness can lead to more harmonious social interactions and how social interactions can help develop self-awareness (e.g., identifying and describing feelings). This does not mean that the described ecovillage is without difficulties or is a model, but rather demonstrates the existence of human habitation with less environmental impact and encourages and contributes to the expansion of research on ecovillages and other forms of environmental care.

References

- Algarvio, I. C. C. (2010). *Ecoaldeias: práticas para um futuro sustentável* (Dissertação de Mestrado). Universidade Técnica de Lisboa. <https://www.repository.utl.pt/bitstream/10400.5/2891/1/Disserta%C3%A7%C3%A3o.pdf>
- Belleze, G., Bernardes, M. E. C., Pimenta, C. A. M., & Nunes Júnior, P. C. (2017). Ecovilas brasileiras e indicadores de desenvolvimento sustentável do IBGE: uma análise comparativa. *Ambiente & Sociedade*, 20(1), 223-238. doi.org/10.1590/1809-4422asoc20150164r2v2012017
- Boff, L. (2013). *Sustentabilidade: o que é: o que não é* (2a ed.). Vozes.
- Borges, J. L., & Sguarezi, S. B. (2019). Economia solidária e educação. *Akrópolis-Revista de Ciências Humanas da UNIPAR*, 27(1). <https://doi.org/10.25110/akropolis.v27i1.3842>
- Cavalcanti, A. D. L. (2019). O mal-estar do coletivo: uma análise sobre as liberdades individuais dentro de uma ecovila. *Pesquisas e Práticas Psicossociais*, 14(2), 1-16. http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1809-89082019000200015&lng=pt&tng=pt
- Cecchetto, C. T., Christmann, S. S., Dagort, C., Güntzel, V., Silveira, M., Oliveira, T. D., & Pasinato, L. (2014). Ecovilas e condomínios ecológicos como alternativas na habitação sustentável. *RevInt*, 2, (1). <http://revistaelectronica.unicruz.edu.br/index.php/electronica/article/view/1050>
- ChiErrito-arruda, E., Rosa, A. L., Paccola, E. A. D. S., Macuch, R. D. S., & Grossi-Milani, R. U. T. E. (2019). Comportamento pró-Ambiental e reciclagem: revisão de literatura e apontamentos para as políticas públicas. *Ambiente & Sociedade*, 21. <https://doi.org/10.1590/1809-4422asoc0209r3vu18L4AO>
- Comunello, L. N., & Carvalho, I. C. M. (2015). Ecovilas: aprendizagens, espiritualidade e ecologia. *Avá. Revista de Antropologia*, (27), 81-99. https://www.researchgate.net/publication/312317883_Ecovilas_aprendizagens_espiritualidade_e_ecologia
- Corral-Verdugo, V., & Pinheiro, J. Q. (1999). Condições para o estudo do comportamento pró-ambiental. *Estudos em Psicologia*, 4(1), p. 7-22. http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-294X1999000100002
- Corral-Verdugo, V. (2005). Psicologia ambiental: objeto, “realidades” sócio-físicas e visões culturais de interações ambiente-comportamento. *Psicologia Usp*, 16(1-2), 71-87. <https://www.redalyc.org/pdf/3051/305123708009.pdf>

- Elvas, S., & Moniz, M. J. V. (2010). Sentimento de comunidade, qualidade e satisfação de vida. *Análise Psicológica*, 28(3), 451-464. http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S0870-82312010000300006&lng=pt&tlng=pt
- Espitia-Torres, N. V., & Naranjo-Montoya, J. D. (2020). As representações sociais da água: ferramentas para determinar um comportamento pró-ambientalista. *Producción+ Limpia*, 15(1), 111-127. <https://doi.org/10.22507/pml.v15n1a5>
- Favero, E., Trindade, M. C., Passuello, A., Pauletti, C., Foresti, A. J., Castellá Sarriera, J., & Silva Filho, L. C. P. (2016). Percepção de risco ambiental: Uma análise a partir de anotações de campo. *Interamerican Journal of Psychology*, 50(1), 64-74. <https://lume.ufrgs.br/handle/10183/143974>
- Flores, B. N., & Trevizan, S. D. P. (2015). Ecofeminismo e comunidade sustentável. *Estudos Feministas*, Florianópolis, 23(1), 11-34. <https://doi.org/10.1590/0104-026X2015v23n1p/011>
- Góis, C. W. L. (2008). *Saúde comunitária: pensar e fazer*. Aderaldo & Rothschild.
- Maciel, T. M. F. B., & Alves, M. B. (2015). A importância da psicologia social comunitária para o desenvolvimento sustentável. *Pesquisas e Práticas Psicossociais*, 10(2), 272-282. http://www.ufsj.edu.br/portal2-repositorio/File/revistalapip/4_PPP_Importancia.pdf
- Morais, S. F., & Donaire, D. (2019). Comunidades intencionais: um estudo sobre dimensões da sustentabilidade em ecovilas paulistas. *South American Development Society Journal*, 5(14), 326. <http://dx.doi.org/10.24325/issn.2446-5763.v5i14p326-346>
- Muñoz-Villarreal, E. M. (2018). Ecoaldeas en Colombia transitando hacia el buen vivir. *Entramado*, 14(2), 114-131. [doi.org/http://dx.doi.org/10.18041/1900-3803/entramado.2.4754](http://dx.doi.org/10.18041/1900-3803/entramado.2.4754)
- Nascimento, T. M. (2019). Examinando o domínio do comportamento pró-ambiental na promoção do bem-estar individual e coletivo. *Consumer Behavior Review*, 3(1), 27-41. <https://periodicos.ufpe.br/revistas/cbr/article/download/237497/32142>
- Pereira, A. C., Silva, G. Z., & Carbonari, M. E. E. (2011). *Sustentabilidade, responsabilidade social e meio ambiente*. Saraiva.
- Royzen, R. (2013). *Ecovilas e a construção de uma cultura alternativa* (Dissertação de mestrado). Universidade de São Paulo. <http://www.teses.usp.br/teses/disponiveis/47/47134/tde-31072013-114650/pt-br.php>
- Sales, C. B. (2017). *Ecovila e permacultura: uma nova forma de viver* (Dissertação de mestrado). Universidade Federal do Ceará. <http://www.repositorio.ufc.br/handle/riufc/31888>
- Santos Júnior, S. J. (2006). *Ecovilas e comunidades intencionais: ética e sustentabilidade no viver contemporâneo*. III Encontro da Associação Nacional de Pós-Graduação em Ambiente e Sociedade, Brasília, DF. www.anppas.org.br/encontro_anual/encontro3/GT8.html

- Santos, I. S. D., Felipe, M. L., & Kuhnen, A. (2019). Psicologia ambiental e recursos em sustentabilidade: revisão integrativa. *Psicologia: Ciência e Profissão*, 39. <https://doi.org/10.1590/1982-3703003185833>
- Siqueira, G. D. M. V. (2017). Tensão entre as racionalidades substantiva e instrumental: estudo de caso em uma ecovila no sul da Bahia. *Cadernos EBAPE. BR*, 15(4), 768-782. <https://doi.org/10.1590/1679-395155014>
- Silva, A. L. D. (2021). Movimento de ecovilas no Estado de Goiás. https://bdm.unb.br/bitstream/10483/29792/1/2021_AndersonLeiteDaSilva_tcc.pdf
- Soares, L. R. (2020). O neoliberalismo e sua impossibilidade de solucionar os problemas ambientais. *Revista Fim do Mundo*, (02), 53-74. <https://doi.org/10.36311/2675-3871.2020.v1n02.p53-74>
- Suša, O. (2019). Global dynamics of socio-environmental crisis: dangers on the way to a sustainable future. *Civitas-Revista de Ciências Sociais*, 19, 315-336. <https://doi.org/10.15448/1984-7289.2019.2.31969>
- Tres, G. S., & Souza, W. J. D. (2022). Economia plural em ecovilas: para além da monocultura da mente. *REAd. Revista Eletrônica de Administração*, 28, 125-153. <https://doi.org/10.1590/1413-2311.341.113426>
- Wiesenfeld, E. (2015). Las intermitencias de la participación comunitaria ambigüedades y retos para su investigación y práctica. *Psicología*, 5(2), 335-387. <https://revista.psico.edu.uy/index.php/revpsicologia/article/view/276>

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