Master's Thesis - Master Sustainable Business and Innovation
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Harnessing Agroecological Business Models Potential

The case study of ASPROCIG - Colombia

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Abstract

In the face of numerous socio-ecological challenges confronting our current food systems, businesses have increasingly adopted sustainable practices based on western perspectives, often employing triple bottom line strategies. However, limited research exists on how rural communities develop their own business models based on their own knowledge systems. This study addresses this gap by investigating agroecological business models grounded in local epistemologies. The research centers on ASPROCIG, an organization situated in the Cienega Grande del Bajo Sinú region of Colombia.

The research objective is to understand the key features of agroecological business models that contribute to sustainability transitions. As research design a qualitative inductive approach coupled with participatory action research was employed. The research process involved three main steps. Firstly, the community's perception and understanding of value were explored to analyze how these concepts translated into the business model. Secondly, a critical reflection on the model was undertaken, along with discussions encompassing theories of agroecology, solidarity economy, economy of care, and sustainable business models. Lastly, an overarching strategy was formulated to guide and enhance the business.

The findings showcase that the underlying features of ASPROCIG's business model are deeply rooted in a collective knowledge system known as *vivir sabroso* (well-being), founded on pluralistic values and principles of solidarity and care that extend beyond mere financial gains. This model represents a food network ensuring Food Sovereignty for its stakeholders while fostering a platform for political engagement and co-creation. Following a SWOT analysis, identifying strengths, weaknesses, opportunities, and threats, a systemic strategy was developed, incorporating objectives in ten critical areas that are fundamental to enhancing sustainability transitions. A main outcome is a nuance conceptualization of an Agroecological Business Model canvas that serves as tool to analyze business models thoroughly.

This research highlights the implications for agroecology and sustainable business model literature, underscoring its significance as an opportunity to reconceptualize prevailing paradigms regarding value, business, and development. Through the incorporation of pluralistic values grounded in a biocentric perspectives, embracing emancipatory agroecology, shaping to solidarity-based and care-oriented economies, and employing strategic approaches, Agroecological Business Models present a feasible path for communities to effectively tackle contemporary socio-ecological challenges and attain food sovereignty.

Acknowledgements

I would like to express my sincere gratitude to ASPROCIG, the host organization, for providing us with a unique perspective on life and the profound values of a meaningful existence embedded in *vivir sabroso*. ASPROCIG's exemplary commitment to showcasing what an agroecological transition looks like has been truly inspiring, and it has significantly enriched the context of my research.

A heartfelt thank you to my parents for instilling in me the values of sustainability from a very young age. Their unwavering commitment to fighting against injustices and advocating for the preservation of marine coastal communities in Ecuador has been a profound influence on my own path.

At Utrecht University (UU) special thanks go to Heitor Mancini for being an enthusiastic supervisor who played a pivotal role in the development of this research. His mentorship and profound insights have not only contributed to my understanding of agroecology in all its facets but also ignited a passion for sustainability within me.

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My heartfelt appreciation goes out to Silvia Rizzolo for being an invaluable field partner in this research. Her in-depth discussions and unconditional care have guided me through the process and helped me grow both as a researcher and an individual.

Lastly, I must acknowledge the transformative experience I had during my time in La Cienega Grande del Bajo Sinú in Colombia. This enriching and insightful journey will forever stay with me, serving as a constant source of inspiration and motivation to continue working towards sustainability transitions. I am committed to being a voice on international platforms for those with valuable experiences to share, recognizing the immense knowledge we can gain from diverse perspectives. In this way to contribute to the epistemological revolution.

Thank you for being a part of this meaningful journey.

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List of Abbreviations

Abbreviation or Acronym	Definition
ABIF	Agro-Biodiverse Family System
ANLA	National Authority of Enviroment
ABM	Agroecological Business Model
BM	Business Model
BoP	Bottom of the Pyramid
CBO	Community Based Organization
CSES	Collective Socio-Ecological Systems
IB	Inclusive Business
IBM	Inclusive Business Model
NCP	Nature's Contribution to People
SBM	Sustainable Business Model

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1. Introduction

The contemporary global food systems are currently facing numerous challenges, including hunger, inequality, climate change, ecosystem degradation, biodiversity loss, and issues related to water and nutrient cycles (Holt Giménez & Shattuck, 2011; IPES, 2017; Rockström et al., 2023). These pressing issues have been exacerbated by the practices of industrial agriculture. The principles of industrialization introduced through the green revolution have led to a business-as-usual approach in agriculture, characterized by its extractive nature and intensive input use to enhance productivity (Clapp, 2023). However, this agri-business approach has had adverse effects on environmental, social, and economic dimensions, disproportionately impacting communities dependent on ecosystems for their subsistence, often comprising small-scale farmers (Clapp, 2023; Steve Gliessman, 2022).

The business-as-usual approach has been widely acknowledged as a major contributor to adverse environmental and societal impacts (Benn et al., 2014), additionally, it has faced criticism for their inadequate commitment to addressing externalities and a broader range of stakeholders (Evans et al., 2017). As a consequence, the emergent field of sustainable business studies has introduced the incorporation of environmental, social, and economic dimensions within the existing framework (Aagaard, 2019; Boons & Lüdeke-Freund, 2013; Geissdoerfer et al., 2018). However, current sustainable business literature mainly reflects a western perspective (Hart et al., 2016; Hossain, 2021) framing income constraint groups as merely producers or consumers. There is a clear lack of research on how communities can develop business models based on their own epistemologies. Nevertheless, alternative perspectives, such as agroecology (Altieri, 2017), indigenous epistemologies (Mrabure, 2019), solidarity economy (Rojas Herrera, 2019), and economy of care (Esquivel, 2011) offer insights into how businesses can further integrate sustainability principles considering pluralistic values and non-material relationships.

This study addresses these research gaps by conducting an assessment of the experience in Colombia, particularly focusing on the business model of ASPROCIG, a community-based organization located in the Sinú River region. These territories are characterized by escalating environmental and socio-economic challenges such as climate change, natural disasters, poverty, and inequality (K. Acosta, 2013; Durango et al., 2021; Rodriguez Castro, 2021).

Employing a participatory approach, this research focuses on investigating strategic measures in addressing the aforementioned challenges through the implementation of a business model based on agroecology. The business model facilitates the exchange of agroecological products within the community through a food network system. The model is deeply rooted in ancestral epistemology, emphasizing food sovereignty, solidarity, and care relationships. While the business model has shown success, the organization sought assistance in formulating an integrated strategy to enhance its development.

This research aims to comprehensively understand the key elements of Agroecological Business Models that foster sustainability transitions. To achieve this, participatory action

research and qualitative narrative methods were employed. The research process consists of three main steps: (1) gaining insights into the pluralistic value conceptualization from the community's epistemology, while examining the current state of the business model; (2) critically reflecting on the business model and connecting it to relevant theoretical perspectives; and (3) co-creating strategic objectives to enhance and consolidate the business model, while presenting a novel Agroecological Business Model framework.

1.1 Scientific Background: Inclusive Business

Research on Inclusive Business (IB) and Inclusive Business models (IBM) is extensive but heterogeneous. Inclusive Business is rooted in the idea of inclusive growth, namely, that economic and development goals can be reconciled by engaging with the "bottom of the economic pyramid" (BoP), meaning low-income populations (Likoko & Kini, 2017; Schoneveld, 2020). Therefore, the IB concept evolved as a potential solution to market failures that impede the participation of low-income groups in the economy (Schoneveld, 2020).

For instance, the International Finance Corporations (2022), as well as the G20 Development Working Group (2015) defines IB as viable businesses that enable BoP to participate in economic activities and provide commercially viable goods, services, and livelihood opportunities. Conversely, the World Business Council for Sustainable Development (WBCS) (2011) the Netherlands Development Organization (SNV) (2011), and the FAO (2015) define IB as those that result from a win-win bargaining situation and improve low-income populations' livelihoods while increasing the company's profits. However, this view implies an ambiguous assumption that fails to specify the power, risk, and cost distribution (Schoneveld, 2020).

IB research included multiple industries and scales. For instance, Kaminski et al. (2020) researched IB applications in the aquaculture industry. In agriculture, German et al. (2020) researched IB on agricultural value chains; Hilmi's (2019) research focuses on IBM based on small-scale credit system in agroecological systems; Danse et al. (2020) investigated IBM for food and nutrition security in BoP markets; Addinsall et al. (2017b) researched on IBM for agritourism that supports livelihoods in South Pacific.

The vast literature highlights the frequent frame of the BoP as producers or consumers, however, there is no thorough research on how BOP communities might develop and implement an IBM themselves acting as the enterprise as well as the entrepreneurs (Peredo & Chrisman, 2006).

1.2 Knowledge Gap and Research Objective

1.2.1 Knowledge Gap

There are few empirical examples of how agricultural community-based organizations construct inclusive business models (Addinsall et al., 2017a; Hilmi, 2019). Furthermore,

limited empirical research exists on the development and implementation of business models that are rooted in indigenous epistemology and cultural identity, emphasizing the pluralistic conceptualization of value (Himes & Muraca, 2018; Mrabure, 2019; Pascual et al., 2017).

The knowledge on how sustainable business models' innovation is entangled in emergent economies is limited (Hart et al., 2016). Thereby the significance of filling this gap lies in the potential of insights derived from these perspectives to support communities, practitioners, and policymakers in the formulation of effective and transformative business models that facilitate just sustainability transitions.

Furthermore, there is considerable consensus on the environmental and social benefits of agroecology (FAO, 2014; HLPE, 2019; Méndez et al., 2019) and many studies analyzed its economic potential (D'Annolfo et al., 2017; Schwab do Nascimento et al., 2020; van der Ploeg, 2021; van der Ploeg et al., 2019). However, achieving consensus on its economic sustainability has proven difficult, as it is often evaluated within a limited framework that reduces social and environmental dimensions to labor and commodities without considering the significance of social movements radical systemic agendas (Sanderson Bellamy & Ioris, 2017).

1.2.2 Research Objective

The main objective of this research was to investigate the potential of Agroecological Business Models (ABM) to support sustainability transitions. To achieve this goal, the study first explored how ASPROCIG implements their current business in line with their cultural identities and epistemologies. A business model perspective was used to map out the business model key components, systematize them, and establish an explicit framework for future analytical iterations. Next, the research evaluated the extent to which the business model aligns with pluralistic value conceptualizations, and the principles of agroecology, solidarity economy, and economy of care. Lastly, the study utilized a participatory approach to develop a vision and strategy that can assist the community in strengthening and consolidating its business model.

The overarching research question aimed to examine the critical components of ABM that can enable a sustainability transition holistically:

"What are key elements of Agroecological Business Models that can support sustainability transitions?"

The following sub-questions contribute to answering the main question:

1. *"How do the pluralistic perceptions on value held by farmers translate into the creation, delivery, and capture of value within the current business model?"*

This first question sought to understand and map out how the current business model creates, delivers, and captures value. This inquiry involved examining the model at the family and

system levels to comprehend how farmers perceive and conceptualize value, including the intrinsic, instrumental, and relational dimensions. The study also assessed the mechanisms that contribute to value creation, value delivery, and value capture.

2. *"To what extent the current business model is in line with the principles of agroecology, social and solidarity economy, and the economy of care?"*

To address this question, a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was conducted through a participatory process. Additionally, the research examined the application of agroecology, solidarity economy, and the economy of care principles within the existing business model. The purpose was to critically evaluate the business model and identify any gaps or deficiencies compared to the proposed theoretical. These served as foundation for strategy formulation.

3. *"What strategy and objectives can be employed to effectively address and improve the deficient components and limitations of the current business model in order to enhance it?"*

After evaluating the business model and correlating the outcomes with relevant theoretical perspectives, the objective centered around formulating a system-level strategy. This was achieved through an inclusive approach, incorporating participation from various stakeholders to collectively formulate a roadmap or strategy delineating a clear mission, vision, and specific objectives to guide the business long term direction and aspirations.

1.3 Societal and Scientific Relevance

First, this research is a valuable case study of how community-based organizations systematically incorporate agroecological business models by implementing their epistemology throughout the organization and externally. It serves as a valuable reference for understanding the relevance of Agroecological Business Models for rural development and gain insights on its potential in strengthening the sustainability of inclusive business models (IBM) and sustainable business models (SBM).

Second, this case study contributes to the sustainable business and agroecology literature by exploring how indigenous epistemologies lead to alternative value perceptions and considerations, fostering innovative business models that promote collective and solidarity initiatives for sustainability transitions. The research highlights the importance of agroecological business models in promoting sustainability and emancipatory empowerment within rural territories at a community level and beyond.

2. Regional Framework

2.1 Colombia

Colombia is located in northwestern South America and is bordered by the Pacific Ocean and the Caribbean Sea. Its economic development mainly depends on its natural resources, including oil, gold, silver, emeralds, coal, and minerals (BBVA Research, 2023). Colombia is exceptionally biodiverse, harboring approximately (10%) of global animal and plant species (OECD, 2014). Its economy is diverse, with a prominent agricultural sector, particularly in coffee and fresh flowers, making Colombia a leading global producer in these domains (World Bank, 2023).

Figure 1 *Map of Colombia. Google Earth, 2023*

The history of Colombia has been marked by political unrest, instability, and regional conflicts, including civil wars and the presence of armed groups like the Revolutionary Armed Forces of Colombia (FARC) and paramilitary groups (LeGrand, 2003). In 2016, the government signed a peace agreement with the FARC, however, challenges related to drug trafficking, armed conflicts, human rights violations, and corruption persist (Gordon et al., 2020).

According to the World Bank (2023), Colombia ranks 44th among major economies with a GDP of 314.46 billion USD and GDP per capita of about 6.104 USD. The economy is aggregated in: services (58%), industry (25%) and agriculture (7.43%) (DANE, 2023; World Bank, 2023). Major exports include crude petroleum, coffee, and gold, with the U.S being the main export market (DANE, 2023; World Bank, 2023). Despite economic growth, Colombia

faces challenges such as poverty, income inequality, informal employment, corruption, and the impact of the illicit drug trade.

The population of Colombia is approximately 51 million, with around (80%) residing in urban areas, while the remaining (20%) in rural regions. In terms of demographics, the majority of the population is mestizo (80%), followed by (17%) white, (9 %) black, and (5%) indigenous populations (DANE, 2023). In rural areas, the populations comprises often small-scale farmers, fisherfolk, landless farm workers and families that engage in both agriculture and fishery activities (IFAD, 2016). These segments of the population face significant challenges, including high levels of poverty approximately (31.1%) as of 2021, and limited access to education, water, and healthcare(DANE, 2023).

Overall, Colombia faces increasing environmental and socio-economic challenges, including climate change, natural disasters, poverty, and inequality (Durango et al., 2021). These issues are further exacerbated by a history of armed conflict fueled by drug trafficking and political and economic inequalities (Rettberg, 2020). These threats pose significant risks to the country's natural ecosystems, biodiversity, and the livelihoods of rural communities. Nevertheless, agroecology offers a viable alternative to address these challenges.

2.2 The Business Case for Agroecology

Small scale agriculture and fishery have play crucial roles in sustaining the livelihoods of Colombian and Latin American populations, particularly in rural areas where communities depend on natural ecosystems for their subsistence (Durango et al., 2021). However, these sectors often face several threats that give rise to challenging living conditions and conflicts in the region.

In response, numerous communities across Latin America have adopted strategies such as agroecology, solidarity economy, and knowledge sharing platforms to safeguard their well-being and assume responsibility for their own development (Altieri, 2017; Val et al., 2019). Such communities organize themselves through the collaborative creation of knowledge and preservation of historical memory (Utter, White, Méndez Ernesto, & Morris, 2021). In this sense, agroecology not only plays a pivotal role in promoting sustainable agriculture but also contributes significantly to the socio-economic development of marginalized groups. ASPROCIG, the local community-based organization, that held this research, serves as a notable case study that effectively exemplifies this approach.

2.3 The Research Location: Cienega Grande del Bajo Sinú

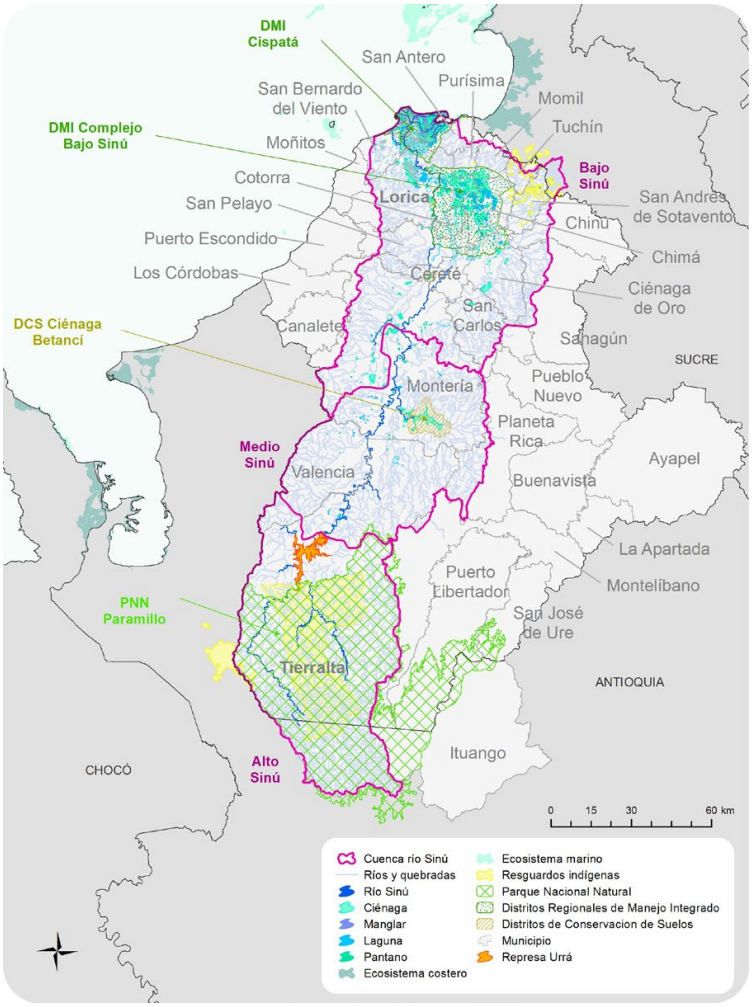

Figure 2 *Cuenca del Rio Sinú Map. González-Madera, 2021*

ASPROCIG operates in the Ciénaga Grande del Bajo Sinú, which is a vast wetland complex in the Caribbean region of Colombia, this research focus on the following five municipalities: Purísima, Momil, Lorica, Chima, Cispatá. In this areas the flood risk area surpasses the (10%) of the total extension (K. Acosta, 2013). This area has been home to a culture that adapted to the water for thousands of years. The Zenú, an indigenous group that inhabited the region 2,000 years ago, built a society based on philanthropy and non-violence, and developed impressive irrigation channels, fishing, and farming techniques adapted to both dry and wetlands, and thereby known as amphibian culture (Banco de la República de Colombia, 1991; Daniel Velandía Diaz, 2003).

2.3.1 Ecology of the Ciénaga Grande del Bajo Sinú

The area encompasses various ecosystems, including tropical dry forests, swamps, marshes, and small wetlands. The wetland complex of Bajo Sinú forms an ecosystem that can be classified as a positive estuary, characterized by an excess of freshwater and significant presence of organic sediments. The estuary reaches depths of up to (5.5) meters on average but generally remains shallow (ANLA, 2019).

The complex can be categorized into two distinct classifications. Firstly, there are permanent freshwater marshes, which are characterized by shallow water bodies that experience fluctuations in depth depending on the patterns of rainfall and river flow. Secondly, there are marshy areas with swamps, which encompass flat regions within the floodplain that undergo temporary inundation (ANLA, 2019). In recent years, the intensity of floods has increased, resulting in adverse consequences for local communities. For instance, extended periods of flooding, lasting up to six months in 2022, have led to migration, the deterioration of critical infrastructure, and hindered agricultural activities, including the loss of crops (ASPROCIG, 2023).

The study area is characterized by a semi-dry climate, exhibiting a relative humidity surpassing (80%). Throughout the year, consistently high temperatures prevail, with an average annual temperature of (27°C) (ANLA, 2019). Concerning precipitation, the multiannual average is approximately (1,350 mm). The rainfall pattern in the area follows a unimodal distribution, featuring a pronounced dry season from November to April, succeeded by a humid season from April or May to October or November. The humid season accounts for more than (80%) of the total annual precipitation (ANLA, 2019).

2.3.2 Demographics

The Ciénaga del Bajo Sinú region has a total population of 167,837, with (61%) residing in rural areas, it exhibits significant ethnic diversity due to the presence of indigenous and Afro-Colombian communities, comprising over (30%) of its population (DANE, 2023). A substantial portion of the population, based on their cultural background, identity, or physical characteristics, identifies as indigenous, with more than 27,000 individuals in the swamp area belonging to or being descendants of the Zenú people (ANLA, 2019; DANE, 2023). The region experiences a relatively high population density, largely influenced by its rural characteristics (ASPROCIG, 2022).

2.3.3 The Zenú Amphibian Culture

The Zenú descendants and the people within the communities of the Ciénaga del Bajo Sinú have preserved their traditional way of life, referred to as the *amphibian culture*. This culture is defined by the communities engaging in fishing activities in the upper basin when it rains, and then migrating to the wetlands during the dry season for hunting and farming. The farmers and fisherfolk in these areas have a close connection with the river and the water cycle. (K. Acosta, 2013; Banco de la República de Colombia, 1991).

The culture’s symbolic structure is based on its ethical stance on life, balance, and adaptation, with the human organization defined by associations and collective work. The culture's permanence and ability to adapt are deeply embedded on the complexity of life where energy is a fundamental part of it (K. Acosta, 2013; Banco de la República de Colombia, 1991; Sepulveda et al., 2020).

2.3.4 Education

The educational landscape in the municipalities of the Ciénaga Grande del Bajo Sinú is a matter of concern, as evidenced by the high proportion of individuals, in 2013 more than (80%) of the population fell into level 1 out of 3, which denotes the lowest category within the Colombian education score system and signifies the most severe educational conditions (K. Acosta, 2013).

Furthermore, the prevalence of illiteracy in these municipalities is notably high, with approximately (12%) of the population unable to read or write. Additionally, access to higher education, specifically at the university level in the Cordoba region, is limited to only (23%) of the population (Gobernación de Córdoba, 2020).

2.3.5 Economy

The predominant economic activities in the region revolve around fishing, agriculture, and livestock. Moreover, land ownership is primarily characterized by extensive cattle ranching, resulting in the establishment of large-scale landholding systems known as latifundista models. Despite the extensive allocation of land for pastures, their economic significance remains relatively modest, primarily due to their limited capacity to generate employment opportunities (K. Acosta, 2013; Durango et al., 2021). Is worth noting that the region also hosts various public and private initiatives pertaining to energy, infrastructure development, hydrocarbon exploration, and mining, which further contribute to the economic landscape of the area (ANLA, 2019).

In terms of land use for agriculture, activities are observed mainly in the municipalities of Cotorra and Lorica. These areas cultivate various crops, including annual crops such as yam and cassava, as well as permanent crops such as plantains and oil palms (Durango et al., 2021). Additionally, transitory crops such as cotton, yellow and white corn, beans, sideburns, irrigated and dry rice, and tomatoes are cultivated to a certain extent (Durango et al., 2021).

The region's extractive economic activity primarily revolves around fishing, with a particular emphasis on species such as "*bocachico*" *(Prochilodus magdalenae)*. Within this area, (99) hectares are dedicated to community-based fishing, (16) hectares are utilized for fish aquaculture, and (280) hectares are designated for shrimp farming (Durango et al., 2021; Hernando & Díaz, 2022). Nevertheless, the productivity of these activities has been on a decline, particularly following the implementation of a large-scale infrastructure project, the URRA hydroelectric dam.

2.3.6 The Hydroelectric URRA Conflict

The Urrá dam project implementation represents a significant milestone in the region, but its adverse effects on the Sinú river and neighboring communities have been notable. The project was approved without consulting the affected communities or considering the environmental, social, and cultural losses it would cause. Local communities, predominantly fishing and hunting communities of the Upper Sinú, have consistently resisted the project since its initiation in 1977 (González-Madera, 2021; Sepulveda et al., 2020).

Despite peaceful protests, legal actions, and discussions with authorities, the concerns of the affected communities have been disregarded, leading to severe human rights violations, including threats, violence, and even murders (ASPROCIG, 2022).

The dam's construction has resulted in a dramatic decrease in the river level downstream, causing infrastructure damage and the collapse of the river's fish banks. The reduction of natural floods due to the dam has led to the drying of wetlands and a decline in fish populations, particularly the main protein source, the fish "*bocachico*" (González-Madera, 2021; Sepulveda et al., 2020).

The reservoir's filling without removing existing biomass has led to water eutrophication and increased methane and carbon dioxide emissions (ASPROCIG, 2022). The disruption of the hydrological system has negatively impacted water quality and disturbed food networks, potentially affecting various aquatic and terrestrial species (González-Madera, 2021; Sepulveda et al., 2020). As a response to the challenges presented in the aforementioned context, ASPROCIG organization developed a rural territorial development approach that centers on agroecology.

2.4 The Host Organization: ASPROCIG

ASPROCIG is a community-based organization (CBO) operates in the following zones: Chimá, Cotorra, Lorica, Momil, and Purísima. The organization starts fighting for access to land in the lower Sinú river in the 1960s. The communities of the area faced a land conflict that intensified since the 1920s, leading to the Colombian Instituto de Reforma Agraria (INCORA) sending a commission to support the farmers (ASPROCIG, 2022).

Despite the commission's report, the landowners won the case in 1962. Since the 16th century, the hacienda model of land ownership expanded into the Caribbean with slave labor, deforestation, and land reclamation. Indigenous and farmers struggles for land rights followed in the 20th century, consequently leading to the formation of organizations such as the Asociación Nacional de Usuarios Campesinos (ANUC) and the Federación Agraria Nacional (FANAL).

These organizations successfully won back land for farmer communities, but political tensions led to their dissolution. In the 1980s and 1990s, new committees were formed to organize farmers and restore their political organization and native seed stock. These committees were later consolidated into ASPROCIG, an organization that represented a diverse range of stakeholders, including fisherfolk, farmers, indigenous people, and Afro-Colombians. Since then, ASPROCIG has developed its proposal for territorial rural development. Nowadays the proposal has been successful in building resilient communities of socio ecological systems at a family and community levels.

The organization is comprised of ninety-eight municipal-level sub-organizations, forming a general assembly with two representatives from each group. A directive team, consisting of

one representative from each zone and a legal representative, rotates annually among the five zones. Additionally, there is a seventy-six-member support team, known as "*dinamizadores*", who provide assistance across all nine municipalities (*see figure 3*). The *dinamizadores* receive continuous training and capacity building in various aspects of ASPROCIG's operations, including technical farm work, capacity building, representation, and communication.

The organization's decision-making processes are characterized by collective and horizontal leadership, involving both the support team and the directive team. Nevertheless, a conceptual framework named the "*Z Methodlogy*", has facilitated such leadership approach and ASPROCIG's development over the past three decades.

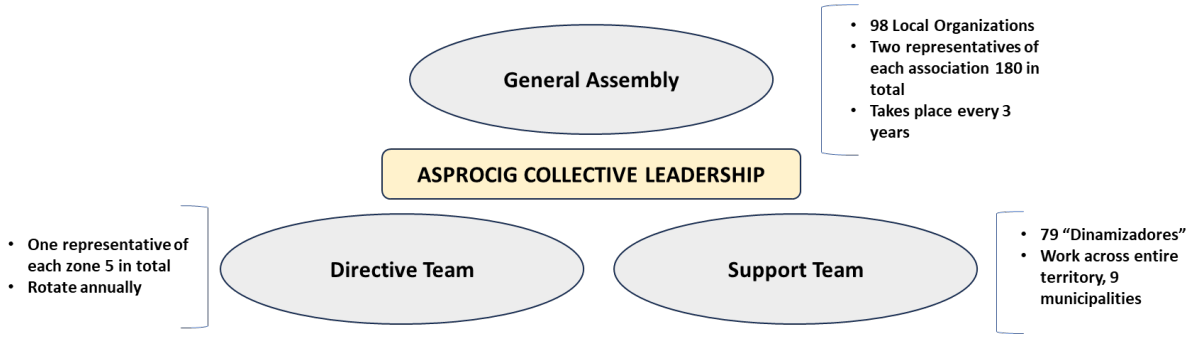

Figure 3 *Organigram ASPROCIG. Collective horizontal leadership*

2.4.1 The Z Methodology

ASPROCIG developed the *"Z Methodology"* as a key conceptual foundation to nurture their knowledge system *(see figure 4)*. This knowledge system revolves around the concept of co-creation. It comprises three pillars, two of which are horizontal, and one transversal.

The upper pillar involves the integration of traditional knowledge and scientific knowledge, emphasizing the importance of harmonizing traditional wisdom with technology. The lower pillar encompasses the practical implementation of activities that stem from this knowledge system. Both pillars are connected through its transversal pillar that represent core values such as love, solidarity, fraternity, and equity, emphasizing the interconnectedness and interdependent relationship between humans and nature.

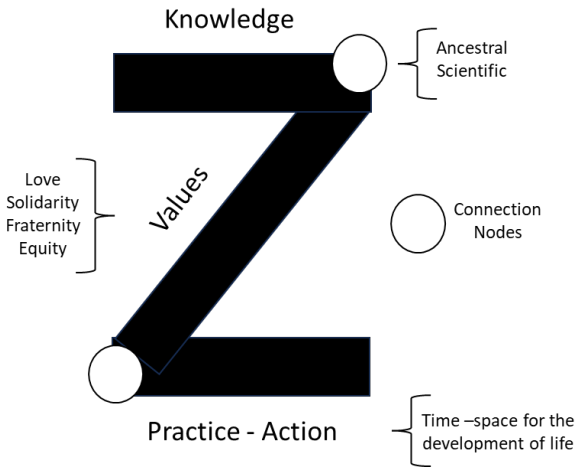

Figure 4 *ASPROCIG "Z Methodology" Conceptual Framework*

The Z Methodology enables innovation to improve community well-being, foster co-evolution and adaptation with ecosystems. This methodology involves various epistemic exercises, including direct dialogue, observation, and experimentation, promoting co-creation of knowledge (ASPROCIG, 2023). Notably, the Z Methodology adopts a long-term perspective spanning approximately 200 years, serving as the basis for ASPROCIG's agroecological business model.

2.4.2 ASPROCIG's Business Model

ASPROCIG´s main objective is to overcome poverty by strengthening the process of life regeneration within their coastal marine territories. Their approach supports prevention, mitigation, and adaptation to the threats of these territories. To do so, they have developed a business model that is structured in the following manner.

ASPROCIG's business model operates at two levels. First, there are the Community and Family Biodiverse Systems (CSES and ABIFs). These are farm systems that are structured according to a dry-forest ecosystem model. These systems comprise six types of plants: medicinal, ornamental, productive-protective, fruit trees, energetic, and vegetables. Moreover, a minimum of eighty-two different plant species are incorporated into these systems. The diverse uses of these plants allow for mutual complementarity, environmental protection, and sustenance for the community. These systems facilitate food production, enabling crop diversification and the integration of animals.

The ABIFs are designed to mimic the natural distribution found in forests, reducing the reliance on external inputs like pesticides or fertilizers. This design promotes synergy, biodiversity, and the aesthetic development of the ecosystem. Similarly, the CSES, which often involve ten or more families, allocate land equally among participants. Today ASPROCIG has about three hundred farm systems between CSES and ABIFs.

Second, ASPROCIG business model has implemented an exchange platform at a system level. In this platform, products are primarily allocated to fulfill the requirements of family self-consumption and local exchange. Any excess production can be channeled to a locally situated shop in Lorica, collectively owned by the organization. To further enrich the understanding of agroecological business models, the following chapter presents a theoretical framework.

3. Theoretical Framework

There are close links between sustainable business models and underlying fields such as inclusive business. However, the literature on agroecology, social and solidarity economy, economy of care, and indigenous epistemologies have not spoken directly to the former, even so, it offers complementary insights into the way organizations articulate development processes, experience emancipatory empowerment, and develop innovative business models.

First, utilizing epistemology as an analytical lens aid in understanding the value conceptualization, which are the building blocks of a business model. Furthermore, the organization incorporates certain principles of agroecology, solidarity economy, and economy of care within their current business model to some extent. In this sense, by integrating pluralistic value perceptions and theoretical perspectives into the business model, strategy formulation is facilitated, and a nuanced comprehensive conceptualization of the Agroecological Business Model (ABM) is proposed.

3.1 A Holistic Approach to Value Conceptualization

3.1.1 Indigenous Epistemology

Epistemology comprises the body of knowledge emerging from the theorization, generation, encoding , and transmission of knowledge (Audi, 2011; Fumerton, 2006; Greco & Sosa, 2017). Specifically, indigenous epistemology focuses on these processes within indigenous communities (Gegeo & Watson-Gegeo, 2001). Prior research has explored indigenous knowledge systems in relation to social, cultural, political, legal, and economic frameworks (Caicedo Tapia, 2018; Macfarlane et al., 2008). In this research, epistemology serves as an analytical lens for comprehending how farmers engage in epistemological exercises, shape a cultural identity, and establish a value system as the foundation for business model development and implementation.

3.1.2 Pluralistic Value

The ways in which people understand, perceive, and address value are complex, and they are in line with their knowledge systems, which may differ from mainstream western lenses (Pascual et al., 2017). For instance, the value from classical economics to management literature has been differentiated into two types: *use value* and *exchange value*, the first being the value of the use of a good or a service, while the second being the ratio in which one good or service exchanges for another (Groot & Steg, 2008; Hitlin & Piliavin, 2004; Sinha, 2013). On the other hand, the “exchange value” of a good produced by an indigenous farmer might not be perceived as such but in a different manner, for example as an integral part of their cultural identity and self-realization (Pascual et al., 2017).

Often this wide spectrum of values to which communities attribute meaning and importance to their relationship with nature are not recognized or considered in processes of decision-making. Therefore, in order to propose a nuance from of business model, it is important to recognize

the diversity of values and their contribution to people's livelihoods as these are inherent to a social, cultural, and institutional context. (Arias-Arévalo et al., 2018; Pascual et al., 2017)

In traditional business model literature, the value focus is simply economic and its stakeholders are mainly shareholders or customers (Bowman & Ambrosini, 2000; Teece, 2010). These frameworks have been critiqued for their limited value conceptualization and stakeholder consideration (Evans et al., 2017). To establish a comprehensive agroecological business model (ABM), however, a holistic perspective of value is required, building from sustainable business models (SBM) in which such value must benefit all the relevant stakeholders rather than simply the customers and shareholders and include to a greater extent society and the environment (Aagaard, 2019; Bocken et al., 2014).

In this research, to conceptualize value, the IPBES framework is used (*see table 1*) (Pascual et al., 2017). It conceptualizes the foci of value into three categories*: Nature*, *Nature's Contribution to People (NCP)*, and *Good Quality of Life*. Moreover, it presents three types of value. First, *intrinsic value* as the inherent value that nature has independent of human judgment; second, *instrumental value* as the value of nature as a means to satisfy human needs; third, *relational value* which refers to the symbolic relationship between humans and nature and the responsibility towards it, and which rely on cultural identity, social cohesion, and moral responsibility.

FOCI OF VALUE	TYPES OF VALUE		EXAMPLES
NATURE	Non-anthropocentric (intrinsic)		• Animal welfare • Gaia, Mother Earth
NATURE'S CONTRIBUTIONS TO PEOPLE (NCP)	Anthropocentric	Instrumental	• Habitat creation and maintenance • Food, energy, materials
GOOD QUALITY OF LIFE	Anthropocentric	Relational	• Experiential interactions with nature • Cultural identity • Way of life

Table 1 *IPBES framework pluralistic value. Pascual et al, 2017. Adapted by the author*

3.1 Agroecology as a Catalyst for the Development of Rural Territories

Agroecology is currently recognized as a holistic approach that encompasses three dimensions, namely, a scientific discipline, a set of practices, and a social movement (HLPE, 2019; Wezel et al., 2020) By integrating ecological, socio-economic, and political principles, agroecology might serve as a sustainable alternative to conventional developmental approaches (HLPE, 2019).

Agroecological practices are rooted in farmers' knowledge and they are established in relation to specific geographical, socio-cultural, and political contexts (Utter, White, Méndez, & Morris, 2021). Moreover, scientists (Migliorini & Wezel, 2017), social movements (Declaration of the International Forum for Agroecology, 2015), and international

organizations (FAO, 2018), have developed different sets of agroecological principles that include ecological, socio-economic, cultural, and political dimensions to have reference framework that aid the broader applicability and inform local practices (Wezel et al., 2020).

Since the core activities of ASPROCIG's business model entail agroecological approaches, this research incorporates relevant ecological, sociocultural, and political principles from the framework proposed by the High-Level Panel of Experts on Food Security and Nutrition (*see table 2*). (HLPE, 2019).

Principle	Description
Recycling	Preferentially use local renewable resources and close as far as possible resource cycles of nutrients and biomass
Input reduction	Reduce or eliminate dependency on purchased inputs and increase self-sufficiency
Soil health	Secure and enhance soil health and functioning for improved plant growth, particularly by managing organic matter and enhancing soil biological activity
Animal health	Ensure animal health and welfare
Biodiversity	Maintain and enhance diversity of species, functional diversity and genetic resources and thereby maintain overall agroecosystem biodiversity in time and space at field, farm and landscape scales
Synergy	Enhance positive ecological interaction, synergy, integration and complementarity among the elements of agroecosystems (animals, crops, trees, soil and water)
Economic diversification	Diversify on-farm incomes by ensuring that small-scale farmers have greater financial independence and value addition opportunities while enabling them to respond to demand from consumers
Co-creation of knowledge	Enhance co-creation and horizontal sharing of knowledge including local and scientific innovation, especially through farmer-to-farmer exchange
Social values and diets	Build food systems based on the culture, identity, tradition, social and gender equity of local communities that provide healthy, diversified, seasonally and culturally appropriate diets
Fairness	Support dignified and robust livelihoods for all actors engaged in food systems, especially small-scale food producers, based on fair trade, fair employment and fair treatment of intellectual property rights
Connectivity	Ensure proximity and confidence between producers and consumers through promotion of fair and short distribution networks and by re-embedding food systems into local economies
Land and natural resource governance	Strengthen institutional arrangements to improve, including the recognition and support of family farmers, smallholders and peasant food producers as sustainable managers of natural and genetic resources
Participation	Encourage social organization and greater participation in decision-making by food producers and consumers to support decentralized governance and local adaptive management of agricultural and food systems

Table 2 *Agroecology principles. HLPE, 2019. Adapted by the author*

3.2 Solidarity Economy and Economy of Care

3.2.1 Solidarity Economy

Despite overlapping principles between solidarity economy and agroecology such as sharing, social equity, market access and autonomy (Dumont et al., 2016). The solidarity economy is emerging as a theory that refers to a type of economy in which its main actors are often low-income populations, and it represents a broadly heterogeneous and holistic model which comprises different economic, political, and cultural dimensions (Csoba, 2020; Rojas Herrera, 2019). This theory helps to understand the underlying features of non-material relationships within an Agroecological Business Model. Certainly, the economic processes of ASPROCIG are organized around a caring rationale that encompasses all stakeholders. The primary focus lies on establishing solidarity relationships as a norm of interaction and means to attend social needs (Blanc, 2014; Caillé & Coraggio, 2009; Villalba-Eguiluz et al., 2020). Moreover, the economy of care deepens this rationale and incorporates a gender perspective, which aligns effectively with the features of an Agroecological Business Model.

3.2.2 Economy of Care and Reproductive Work

The economy of care is the base for human development and is characterized by reproductive work as it enables the production of goods, and services, the improvement of living standards, and the production of potential workforce (Benería, 2006; ONU Mujeres et al., 2011). Economy of care emphasizes the domestic and care work which extends income by transforming goods into consumables, for instance, domestic food preparation, and by providing care services such as child and elderly care that would otherwise be purchased on the market (Esquivel, 2011; ONU Mujeres et al., 2011). Even so, this reproductive work imposes costs on its providers, including time, effort, and even non-perceived income (Esquivel, 2011). As this form of work is reliant on household income its important taking into account its material and financial dimensions and its clear connection to gender, class, and social position (Benería, 2006; Esquivel, 2011).

3.4 From Inclusive Business Model to Agroecological Business Model

Inclusive business (IB) and inclusive business models (IBM) differ from one another. On one hand, IB might be referred to as an entrepreneurial activity that engages with the segments of the bottom of the economic pyramid (BoP) namely, income constraint groups (2020). On the other hand, a business model (BM) is commonly understood as the architecture that facilitates the execution of a business strategy (Casadesus-Masanell & Ricart, 2010). A business model may also include a systemic description, a framework depicting the firm's logic, its operations, and the manner in which it creates value for its stakeholders; in other words, how a company conducts business (Geissdoerfer et al., 2018; Teece, 2010). In the BM, value is of critical importance (Geissdoerfer et al., 2018). As Richardson (2008) proposes a business model can be comprehended by four main components: value proposition, value creation, value delivery, and value capture.

Traditionally, value proposition specifies what value is supplied to which customers, as well as the basic strategy for acquiring these customers and building a competitive advantage (Bocken et al., 2014; Richardson, 2008). Value creation refers to the specific aspects of the organization's architecture, including key resources, activities, and stakeholders that enable the delivery of value. Value delivery pertains to the distribution channels and methods through which value is provided to stakeholders, while value capture traditionally involves the cost and revenue structure associated with the business's operations (Richardson, 2008).

3.4.1 Inclusive Business Models as Sustainable Business Models

A sustainable business model (SBM) differs from a regular business model (BM) as it intends to go beyond economic value delivered to a broader consideration of value (sustainable value) for a broader range of stakeholders (Bocken et al., 2013). Furthermore, such a business model will comprehend ecological, social, and economic objectives (Bocken et al., 2014; Lüdeke-Freund, Massa, Bocken, Brent, Musango, 2016). Thus, sustainable value principles are fully included into all parts of the business model. Consequently, sustainable value is created and supplied to stakeholders, and it is converted into economic benefit for the company's shareholders (Aagaard, 2019; Geissdoerfer et al., 2018).

Following Schoneveld's (2020) conceptualization of an inclusive business model (IBM) as a sustainable business model (SBM), the author contends that an inclusive business can be understood as a self-sustaining business entity with an IBM that generates net value for socioeconomically disadvantaged populations and reinvest the value captured into value creation activities *(see figure 5)*. As a result, IBM exhibits a notable similarity to the ASPROCIG business model. While not entirely identical, adopting such a business model perspective facilitates the construction of a novel comprehensive framework: the Agroecological Business Model, which emerges as a key outcome of the present research.

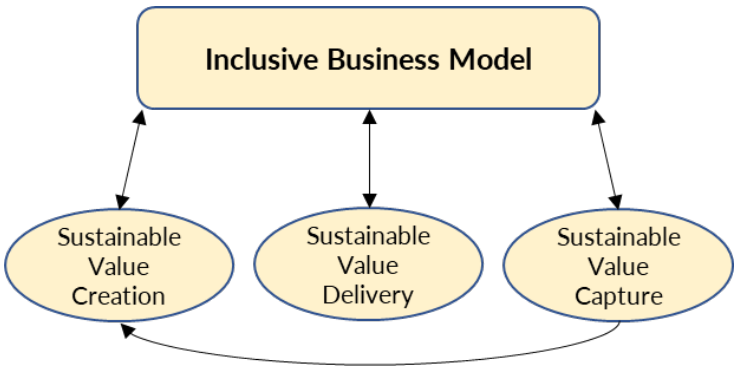

Figure 5 *Inclusive Business Model diagram - Elaborated by the author*

3.5 Conceptual Framework

The literature currently lacks examples of how epistemology, pluralistic values, and business models are connected. This is particularly true in the context of community-based organizations, who may develop alternative models based on their cultural identity and knowledge systems. To address this gap, this research proposes a conceptual framework *(Figure 6)* that integrates indigenous epistemology and pluralistic value as foundational components of agroecological business models within the social and solidarity economy and the economy of care. The goal is to hypothesize an empirical relationship between these concepts that has not yet been fully explored.

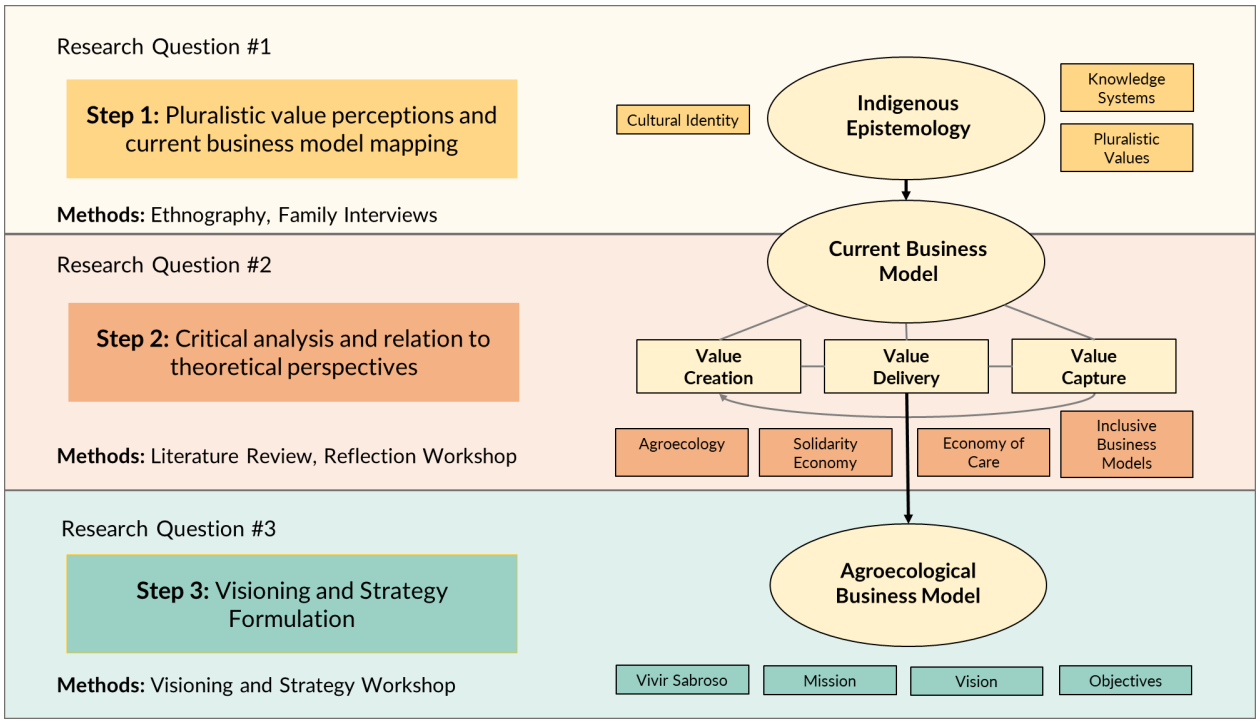

Figure 6 *This conceptual framework demonstrates the connections between key steps and concepts guiding this study. The first step includes data on farmers' pluralistic value perceptions and the architecture of the current business model were collected using ethnographic methods and interviews. The second step involved a critical assessment conducted through a SWOT analysis in a workshop, and a literature review to link the business model to relevant theoretical perspectives including agroecology, economy of care, solidarity economy, and inclusive business models. Lastly, an integrated strategy was envisioned and formulated in a participatory workshop, defining the strategy statement called "vivir sabroso," a mission statement, vision statement, and objectives guiding the business model's trajectory. Overall, this research process led to the development and conceptualization of the nuanced agroecological business model framework*

4. Methodology

The present study was conducted in the Cienega Grande del Bajo Sinú complex located in Colombia from December 2022 till May 2023. The research design employed an exploratory case-study approach, focusing on an Agroecological Business Model and incorporating participatory action research (PAR) methodologies. To facilitate the investigation, a business canvas was formulated, serving as a crucial tool in supporting the iterative research process and emerging one of the principal outcomes of this study. The research encompassed three stages. First, extensive fieldwork was undertaken to gather data pertaining to value perceptions and to map the existing business model within the case study context. Subsequently, a review of the literature was conducted, followed by a critical analysis of the business model under examination. Lastly, a comprehensive strategy was formulated at a system level.

Research Steps	Methods
Step 1: RQ #1 Pluralistic value perceptions and current business model mapping	• 20 Family interviews / TA Qualitative Coding • Ethnographic observations / TA Qualitative Coding
Step 2: RQ #2 Critical analysis and relation to theoretical perspectives	• Literature Review • Critical Analysis Workshop / SWOT Analysis
Step 3: RQ #3 Visioning and Strategy Formulation	• Visioning and Strategy Workshop

Table 3 *Research steps and methods*

4.1 Research Design

Because of the particularity of the case and the opportunity to incur in a novelty study, ASPROCIG business model can be categorized as a combination of a unique case and a revelatory one (Yin, 2009). The research used participatory action research (PAR) because it was a collective effort between the researcher and the community, therefore its direct link to action was influenced by the understanding of history, culture, and local context embedded in livelihoods (Baum et al., 2006). This approach, therefore, allows to engage in several participation points namely inform, consult, involve, collaborate and empower (Vaughn & Jacquez, 2020).

The data collection comprised of qualitative methods, including family interviews, ethnographic observations, and a workshop. They were employed across the five areas where the organization operates to ensure the acquisition of a representative sample and the validation of the research findings. The selection of these narrative approaches was based on their demonstrated effectiveness in identifying pluralistic values (Klain et al. 2014, Tadaki et al. 2017, Jacobs et al. 2018).

In terms of the sample, *table 4* shows the sample composition of the group interviews comprising (20) family interviews sourced from (20) farms, denoted by the acronym ABIF. The collective participation consisted of (32) individuals, comprising (13) females and (19) males. The mean age of the participants was calculated to be (55) years.

ABIF				Participants			
Name	Code	Location	Dimension in m²	Number of people	Sex	Age	Code
El Pinal	A1	Playón	800	2	M	65	F1
					F	63	F2
El Alivio	A2	Isla de Saba	2,500	3	F	50	F3
					M	55	F4
					M	25	F5
Reserva Natural Sol y Luna	A3	Cuchilla de Cispatá	70,000	2	M	55	F6
					F	20	F7
El Girasol	A4	San Sebastián	275	2	F	54	F8
					F	82	F9
Agua Prietas	A5	San Sebastián	960	2	M	55	F10
					F	45	F11
Collectivo Purissima	A6	Purísima	80,000	2	M	68	F12
					M	70	F13
San Francisco Moralito	A7	Cotorra	11,000	2	M	69	F14
					F	63	F15
Todos Lo Miran	A8	San Bernardo	400	2	F	54	F16
					M	56	F17
Mis Querencias	A9	Purísima	15,000	2	M	68	F18
					M	70	F19
Las Piedras	A10	San Sebastián	600	2	M	55	F20
					F	50	F21
Siempre Tengo	A11	Purísima	400	1	M	50	F22
La Esperanza	A12	San Bernardo	7,500	1	F	45	F23
El Naranjal	A13	San José	400	1	M	52	F24
La Esperanza	A14	San José	400	1	M	65	F25
Collectivo San Bernardo	A15	San Bernardo	20,000	1	M	55	F26
Collectivo Villa Lucia	A16	El Limón	20,000	1	M	60	F27
Pasatiempo	A17	Isla De Saba	1,050	1	M	64	F28
El Fefere	A18	San Sebastián	400	2	F	25	F29
					F	54	F30
Nicolas	A19	San Nicolás	300	1	F	40	F31
Rizoma De Vida	A20	Cuchilla de Cispatá	25,000	1	M	50	F32
Total farms (ABIF) = 20				Total = 32	F = 13 M = 19	Mean = 55	

Table 4 *Interviews Sample. ABIFs and Participants*

In addition, the following *table 5* illustrates a sample composition of the workshop comprising (12) participants, (3) females and (9) males, divided into (4) groups. The mean age of participants was calculated to be (51) years.

Workshop			
Code	**Sex**	**Age**	**Group Number**
W1	**F**	25	1
W2	M	55	1
W3	M	52	1
W4	M	55	2
W5	M	50	2
W6	M	69	2
W7	**F**	40	3
W8	M	50	3
W9	M	60	3
W10	M	50	4
W11	M	64	4
W12	**F**	45	4
Total = 12	F = 3 M = 9	Mean = 51	Total = 4

Table 5 *Workshop sample, participants, groups*

The data analysis was conducted through qualitative coding. The coding process was conducted in two rounds: the first round followed Clark et al. (2021) thematic analysis technique based on pre-identified categories, while the second round utilized an open coding strategy to uncover any missing components and identify emerging patterns within the dataset.

4.3 Step 1: Pluralistic Value Perceptions and Current Business Model Mapping

RQ#1 "How do the pluralistic perceptions on value held by farmers translate into the creation, delivery, and capture of value within the current business model?"

The initial step of this research aimed to gain insights into how farmers within the ASPROCIG communities perceive value, which involved understanding their epistemology. Concurrently, their current business model was mapped, drawing on the data collected during this process. The map was later employed as a tool for further analytical iteration in a subsequent workshop.

A total of 20 in-depth and semi structured group interviews with farmer families were conducted to map the current business model. The choice to conduct an interviews, rather than employing a focus group, was based on the interest in obtaining data regarding the foundational structure of the business model, as opposed to exploring group dynamics (Kidd & Parshall, 2000). Crucial variables related to the structural aspects of the business model were obtained, including time utilization, resource allocation, engagement in productive and reproductive activities, distribution channels, relational dynamics, and costs and benefits.

To complement the interviews, ethnographic observation was conducted. This method consists of making regular observations of the behavior of community members, engaging in conversations with key participants, and collecting documents relevant to the community (Clark et al., 2021). Ethnographic observation is consistent with the nature of this research as it aims the documentation of the *"inner experience of individuals, how they interpret,*

understand, and define the world around them" (Faraday & Plummer, 1979). This process resulted in a comprehensive record that encompassed contextual details, value perceptions, livelihood activities and the underlying dynamics of relationships within the community.

Both the interviews and ethnographic observations followed a structured process, which included recording, note-taking, transcribing, and systematizing the data using NVIVO software to create an initial business model map. Qualitative coding was employed, resulting in the generation of 65 codes, which were further categorized into 15 themes representing key features of the business model.

4.4 Step 2: Critical Analysis and Relation to Theoretical Perspectives

RQ#2 "To what extent the current business model is in line with the principles of agroecology, social and solidarity economy, and the economy of care?"

The second step of the research involved a critical assessment of ASPROCIG's current business model. The evaluation was carried out through a workshop, the results were then discussed with pertinent theoretical principles and concepts to establish a solid foundation for strategy formulation.

The workshop was organized with the participation of 12 representatives from the organization. It aimed to validate findings related to the business model map, critically analyze its fundamental features, and develop strategies to reinforce the business model based on the insights gained. The workshop format was chosen for its capacity to facilitate engagement with diverse stakeholder perspectives, particularly pertaining to the business model specific matter (Clark et al., 2021).

The workshop was structured into three rounds: in the first round, participants worked in small groups to validate and complete a semi-informed business model map. This involved validating information about the community's perceptions of value, resources, activities, stakeholders, distribution channels, costs, and revenues, and environmental and social benefits and impacts. In a second-round participants engaged in a SWOT analysis on the business model. Plenary discussions allowed groups to present their findings, while other participants offered questions and insights. The outcome of these two rounds included the validation of key features within the business model, and a comprehensive set of participants' perceptions regarding its strengths, weaknesses, opportunities, and threats.

To complement the insights gained from the workshop's critical reflection, a literature review was conducted to identify key theories that could enrich the analysis and enhancement of the business model. The review encompassed fields such as agroecology, solidarity economy, economy of care, and sustainable business models. The outcome of these processes was solid record of the critical elements and leverage points to establish a system level strategy. As well as a solid foundation to propose a nuanced Agroecological Business Model framework.

4.5 Step 3: Visioning and Strategy Formulation

RQ#3 *"What strategy and objectives can be employed to effectively address and improve the deficient components and limitations of the current business model in order to enhance it?"*

The final step of the research aimed to formulate a system-level strategy, which was achieved through the third round of the workshop. Building upon the insights gained from the previous rounds and extensive discussions, a collaborative process of strategy crafting was undertaken.

In the plenary session of the third round, intensive discussions led to the establishment of a purpose (*mission*) and an ideal long-term perspective (*vision*) for the business model. Following this, a comprehensive set of objectives and corresponding strategies were defined. The resulting outcome was a comprehensive strategy backbone encompassing a clearly articulated mission and vision statement, accompanied by ten distinct components or focus areas, each with a set of objectives.

Furthermore, the focus areas and its objectives derived from the strategy development process were discussed in the context of existing sustainable business literature, to reinforce and further complete the fundamental features of the novel Agroecological Business Model (ABM) framework. This framework not only captures ASPROCIG's business model essence but also serves as a dynamic tool for researching and analyzing agroecology-based business models comprehensively.

4.6 Ethical Issues

Prior to starting each data collection activity, a formal request for permission was initiated, ensuring that the activity could be recorded only upon obtaining explicit consent. In order to provide utmost protection for the privacy of the interviewees, a comprehensive disclosure was made, assuring them of strict confidentiality measures in place, including the anonymization of their identities. Adhering to the guidelines set by the General Data Protection Regulation (GDPR), the Netherlands Code of Conduct for Research Integrity, and the regulations established by Utrecht University, all recorded materials and interview notes were securely preserved within Utrecht University's cloud system. Furthermore, in accordance with the conclusion of the study, all primary interview data will be systematically and irreversibly erased, ensuring complete data privacy and confidentiality.

4.7 Reliability and Validity

For the reliability and validity triangulation of methods and validation were conducted. This helped to cross-check the information and sources in order to strengthen the internal validity of the case study. The research procedures were designed to assure the reliability of the findings through practices such as careful record-keeping, the provision of verbatim interview transcripts, and the disclosure of all interpretations. Moreover, the data collection was based in several locations in the area where the business model operates, with different environmental and social conditions, to provide more reliability and validity of the research.

5. Results

This research provides valuable insights into the development and implementation of agroecology-based business models by community-based organizations, highlighting key features that support sustainability transitions. The study reveals findings in the three steps.

Step 1: The business model adopts a foundational biocentric perspective, emphasizing nature's intrinsic value. It attributes significance to instrumental value in their farm resources for income generation. The interconnection of systems enables the emergence of relational values such as "vivir sabroso" (well-being) and the campesino (farmer) identity, promoting social cohesion and collaborative action. The business model architecture is described at family and system levels.

Step 2: A SWOT analysis identifies strengths like vast experience, social cohesion and resilient agroecological systems. Weaknesses include high initial investments, external funding dependency, limited formal education access, and logistical challenges in remote areas. Opportunities lie in international partnerships and value addition, while climate change, ecosystem degradation, and armed groups pose threats. Moreover, the business model aligns with agroecology principles, giving priority to concepts like Food Sovereignty, political engagement, capacity building, and the adoption of sustainable agricultural practices. Furthermore, the business model underscores characteristics associated with solidarity economy, typified by non-material relationships founded on trust and care. Additionally, it accentuates the importance of reproductive work and adopts a gender perspective in its approach.

Step 3: The business model strategic framework outlines components for successful development, including a guiding definition of "*vivir sabroso*," mission statement, vision statement, and ten areas of work with defined objectives. The Agroecological Business Model (ABM) framework is presented as the main outcome, encompassing key features supporting sustainability transitions.

5.1 Pluralistic Values and Their Integration in the ASPROCIG Business Model Architecture (Step 1)

Farmers and community members belonging to the organization ASPROCIG exhibit a distinct conceptualization of value that surpasses the conventional emphasis on financial features while maintaining its relevance. They present a pluralistic perspective that encompasses the recognition and appreciation of the intricate relationships that emerge from ecosystems, humans, and communities. Rather than solely valuing monetary gains, these farmers acknowledge the *intrinsic* worth of nature, the *instrumental* value that their ecosystems provide and the *relational* value that emerges from these interconnected systems. The pluralistic value perspectives are translated into the described *business model*, which consists of two levels: a family level and a system level.

5.1.1 Intrinsic Value: Indivisible part of nature

The premise of ASPROCIG's business model rely on the recognition of the intrinsic value of nature, which means acknowledging its inherent worth independent of human evaluation (Curry, 2011). This perspective differs from instrumental value, which ascribes the value in nature as being a mere means to a particular end (Pascual et al., 2017).

ASPROCIG's foundational principle: *"We are not owners of nature but an indivisible part of it"* (F32), aligns with a biocentric perspective rooted in fostering a respectful relationship with all living beings, including plants, animals and ecosystems (Curry, 2011). By attributing inherent worth to all forms of life, ASPROCIG introduces a moral dimension to nature, emphasizing the need for its conservation regardless of its significance to human interest. This ethical standpoint shapes ASPROCIG's business model development and calls for a reevaluation of our moral responsibilities towards nature. Notably, farmers adopt a biocentric perspective, viewing themselves as integral components of the ecosystem and acknowledging the value of non-human knowledge derived from plant and animal decision-making processes:

"ASPROCIG has two very important epistemic principles. The first is that we do not own nature, but we are an indivisible part of it. (...) Under this premise, ASPROCIG really has an approach not of resistance, but of a proposal towards the conventional conditions somehow established for Western society. The other principle is that knowledge is individual and only human, and we at ASPROCIG realize that knowledge is collective and also that it is not only human. (...) Animals make decisions, plant species make decisions, ecosystems change and learn how to behave under pressure. So, it is not only man who produces knowledge but nature as a whole." (F6)

5.1.2 Instrumental Value: Means to a dignified life

Farmers acknowledge the role of monetary resources in community development, but they adopt a broader perspective that considers the instrumental value of resources from their own farming systems and local ecosystems. These resources include food, construction materials, medicine and more. The business model facilitates exchange, encompassing product exchanges, monetary transactions, and donations.

In contrast to a neoliberal approach that prioritizes profit maximization through cost reduction and productivity increase (Sinha, 2013). The business model objectives center on promoting well-being and collective poverty alleviation rather than accumulation. Their goal is to ensure the sustenance of life and happiness while forging alternative relationship dynamics. This approach leverages the instrumental value of resources derived from their agroecological systems, forming the foundation of their food sovereignty. For instance, farmers highlight the value of producing food for self-consumption because of financial benefits (lowering costs), but also to maintain their health:

"As for our income, we produce what we are going to consume, and that saves us some expenses, if you understand me? There is the example, see, there are beans, the eggs that the same hens lay there suddenly. Also, there are bananas, there are cucumbers, there are beans, there is cabbage,

there are chili peppers, the fish, the pigs, everything. And, as I tell you mainly what we consume comes from our ABIF and its healthy food without contamination." (F4)

5.1.3 Relational Value: *Vivir Sabroso*

Relational value emerges from the interconnectedness of systems engaging at various levels. This is fostered through a shared acknowledgment of the intrinsic value of life, leading to stronger community bonds and a shared knowledge system. ASPROCIG farmers conceptualize relational values through the notion of *vivir sabroso* (well-being), an aesthetic framework underlying the ultimate pursuit of life realization. By fostering such values throughout their farming systems for their food sovereignty, the business model establishes caring and supportive relationships, culminating in the development of a collective cultural identity known as *campesino* (farmer). These forms of value, expressed through both formal and informal institutions, are deeply linked to well-being and encompass principles, actions, and habits that contribute to a meaningful and satisfying life (Pascual et al., 2017).

Vivir sabroso, for farmers, encompasses satisfying the needs of the community and ecosystems while fostering harmonious relationships built on trust and care. This approach facilitates effective ecosystem management at both family and collective levels, contributing to the reproduction of life. As an aesthetic framework, *vivir sabroso* represents farmer's particular perception of experiencing life through beauty, emphasizing the sensorial aspects and the pursuit of happiness in daily life. This collective imaginary catalyzes a sense of connection and meaning for the community. For instance, community members emphasize their detachment from Western aesthetic patterns based on consumerism. Instead, they redirect their focus towards deriving meaning from the aesthetic characteristics inherent in their farms and their sense of belonging with them.

"Positivism brought with it an aesthetic pattern, an aesthetic model that was imposed, what many call "Western culture" is none other than an aesthetic model that has become universal and that defines what is beautiful and what is ugly. So, of course, beauty is what is manufactured by my industry, and I want to sell it to you. Maybe you previously had something beautiful, but so many have told you that it is not beautiful but ugly so that you can buy the other new thing. So, what aesthetics allows is to seize brains, reconfigure and convert human beings into an instrument of the model. (...) It eliminates the possibility that people have a decent life, there are disposable people, and there are other people with privileges. (...) What we do is that we elevate aesthetics. We have our own aesthetic pattern. So, the aesthetic pattern itself must be started from the base. What is it then for us? to be surrounded by plants, to be surrounded by animals, like the beautiful place, the place where I feel, the place where I am, and where I understand myself as part of the beauty that I am a part of." (F32)

Relational values arise as the business model brings together diverse demographic groups, such as farmers, fisherfolk, women, and young people, within the overarching identity of "*campesino*" (farmer). This concept, however, extends beyond the conventional farmer stereotype, encompassing individuals with a wide range of skills and abilities, for instance, art or science. By promoting this inclusive identity, ASPROCIG aims to empower community members, recognizing their inherent value and cultivating a strong sense of identity rooted in

their relationships and responsibilities within their communities and ecosystems (Pascual et al., 2017). These symbolic connections strongly influence individuals' identity, self-esteem, and overall life fulfillment. For instance, farmers reject being seen solely as food production machines and, instead, embrace their human potential for diverse aspirations and self-realization.

"The governments have always framed us as a rigid cultural subject, that is the farmer as this is the person who works in the fields, who plows the land. They have never seen us as a singer, as an artist, as a scientist, not because "you are a farmer, your thing is there, plow the land, produce food for the rest of the world to eat." So, it is not like that, we are also actors, we are singers, we are scientists. (...) That is why we are not that fixed cultural subject of the system. For example, when, the governor, the president himself comes to visit, so he brings a shovel, a pick, a hoe, as a gift, but he doesn't come and give us some books, he doesn't give us a guitar because for them we are fixed cultural subjects." (F9)

Having established fundamental pluralistic value perception as the underlying driving forces within the business model, the following section will delve into the description of the business model architecture to showcase the translation and materialization of pluralistic values into key business model features.

5.1.5 ASPROCIG's Business Model

ASPROCIG business model is structured into two levels: the family level, including Collective Socio-Ecological Systems (CSES) and Agro-Biodiverse Family Systems (ABIFs), and the system level, encompassing the organization's overall operations within its territory. The research outcomes offer insights at both levels, concentrating on value creation, value delivery, and value capture.

Value Creation

The findings outline the essence of the value proposition by identifying the specific needs addressed by the business and the key resources, activities, and stakeholders enabling value creation. Moreover, it emphasizes the significance of solidarity and care in establishing meaningful connections through collective governance exhibited by the organization.

Value Creation	
Key Resources	The business requires various resources at both levels, including administrative staff, *dinamizadores* (technical supporters), the families, financial resources, technology (solar panels, oxygenators) and environmental resources such as water, soil and compost.
Key Activities	The activities encompass productive work, aimed at generating economic value for business sustainability. And, reproductive work, including household chores, care responsibilities but goes even further by considering activities that facilitates the reproduction of life. At the system level, productive activities involve administrative tasks and store operations, while reproductive work includes community engagement activities, conservation, and restoration projects. At the family level, productive work includes commercialization, and external jobs, while reproductive work entails daily farm operations, household chores and care responsibilities.
Value Proposition	The value proposition revolves around "vivir sabroso", addressing needs for the community to overcome limited opportunities, poverty, food insecurity, and climate change adaptation, offering dignified livelihoods, capacity building, developmental opportunities, and resilience.
Key Stakeholders	Critical stakeholders range from local families and ecosystems to external actors within the region. The scope of their influence extends further to encompass the broader society and the international community. Most of these stakeholders are united in their common objective of ensuring the protection of life and fostering territorial development.
Governance and People	The business model operates on principles of democracy, fairness, and participation, with collective leadership and active engagement of community members, particularly including women and youth.
Solidarity Relationships	Relationships within the model are built on trust, solidarity, and care, leading to collective value creation and development. ASPROCIG's role as a stewardship organization extends to the international level, earning recognition from critical stakeholders and international organizations.

Table 6 *ASPROCIG's Business Model Map, Value Creation*

Value Delivery

The research reveals value delivery in two key components: distribution channel composition and identification of stakeholder segments, with a brief analysis of their power and influence on operations. Furthermore, a distinction was made between stakeholders contributing to the business's success and those hindering its development.

Value Delivery	
Distribution Channels	The business model's distribution channels are categorized into three levels. Level 1 involves self-consumption and local exchange, prioritizing family food security. Level 2 promotes intra-community exchanges to diversify agricultural products and enhance food security. Level 3 includes a store in Lorica for selling surplus produce to the external community.
Stakeholder Segments	The stakeholders in the business model are categorized into two groups: facilitators and restraints to business development. Facilitators include community members, families, the international community, and local ecosystems, sharing common goals of territorial development, agroecology, and sustainability. They exert influence over farm operations and organizational path. Restraints encompass economic groups, landowners, and armed groups operating in the region. Control over land and involvement in narcotrafficking hinder progress. Negotiations with these stakeholders involve implicit agreements due to coercion.

***Table** 7 ASPROCIG's Business Model Map, Value Delivery*

Value Capture

Value capture in this business model pertains to the architecture by which value is acquired through cost and revenue structures, encompassing both social and environmental costs and benefits. The captured value is primarily reinvested in the value creation process rather than solely serving shareholder profits.

Value Capture	
Cost Structure 	At the system level, fixed costs relate to services and worker wages, while variable costs involve project expenses, investments, and capacity-building workshops. Staff wages, transportation, and technological investments are the most significant cost components. Capacity-building workshops emerge as the most expensive activity. For family costs, fixed expenses encompass services, transportation, education, and women's reproductive work linked to ABIF operations. Variable costs include inputs for farming activities, such as water, seedlings, animal feed, external animal food, tools, and machinery. Among the resources, land, technology elements like ponds, water purifiers, and solar panels, are the costliest. Aquaculture stands out as the most expensive activity. Around 40% of the ABIF income is allocated to farming-related expenses, with the remaining 60% going to other expenditures like education and transportation.
Environmental and Social Impacts 	Environmental concerns relate to mobilization and water usage, particularly in remote locations and intensive aquaculture ponds. Nonrenewable resources, like grid electricity, also contribute to impacts. Socially, the operations require a substantial workload, exceeding eight hours per day, which may affect the quality of life of the individuals involved. However, no formal measurements are implemented yet.
Revenue Streams  	At the system level, the mainly income sources comprise 90% from international funding projects and 10% from store fees collected from community members. The store fee is 2% of sales value, with stakeholders generally accepting prices at or below average market rates. The organization's income fluctuates due to project availability, with store fees primarily covering service costs and supporting operations. At the family level, the average monthly income falls within the range of $800,000 to $1,500,000 Colombian Pesos (€180 - €350 in Euros). This income slightly surpasses that of other families in the region. Approximately 70% of this income is derived from ABIF production, while the remaining 30% originates from external activities such as fishing, mining, or sand collection. ABIF production and store exchanges together satisfy 90% of the family's food requirements, with 30% to 40% of the total income reinvested for ABIF reproduction.
Environmental and Social Benefits 	There is a positive balance between environmental and social impacts and the associated benefits. Ecosystem services, including biodiversity conservation, food security, and climate change mitigation, form the core of these benefits. Moreover, diverse stakeholders, comprising families, the community, and ecosystems, derive such benefits from the business. Socially, the positive balance is evident through community empowerment via capacity building initiatives.

Table 8 *ASPROCIG's Business Model Map, Value Capture*

5.2 Business Model Critical Analysis and its Exemplification of Agroecology Principles (Step 2)

Upon breaking down the business model features, the following SWOT analysis revealed crucial facets of the business model including extensive experience, dependence on external financial support, innovation opportunities, challenges with hostile stakeholders, and environmental changes. These findings were linked to relevant theoretical frameworks, aligning with agroecological principles such as political engagement, food sovereignty, social cohesion, and sustainable agricultural practices. Emphasis was placed on features of the solidarity economy and economy of care, considering gender, reproductive work, and solidarity relationships.

5.2.1 SWOT Analysis

SWOT ANALYSIS	
Strenghts • Strong social cohesión (6000 families members) • 30 years working experience as CBO • ABIF and SSE resilience proven • Self-sufficiency (basic needs), food, water, shelter • Food Sovereignty (decision making and political system, epistemology, and collective imaginary) • Ecosystem Services enhancement • Acknowledge and recognition of stakeholders and authorities in the regional and international levels	**Weaknesses** • High starting investment for new ABIFs (technology) • Income dependent of external financial institutions • Necessity of high capabilities for management of the ABIF • Lack of access to formal education • Low volumes in the market • No-value addition or elaborated products • Remote locations with difficult access for transportation
Opportunities • Value addition to agroecological products (food lab) • Regional and international replication of the methodology • Representation on international arenas • Stakeholder engagement	**Threats** • Climate change, more severe catastrophic events. (droughts, floods, storms, hurricanes) • Deterioration of ecosystems by industry (livestock, mining) • Hostile security environment (paramilitary, armed groups, narcotrafficking) • Extortion

Table 9 SWOT Analysis on ASPROCIG Business Model

5.2.2 Unleashing the Potential of Agroecology within a Business Model

ASPROCIG's business model effectively exemplifies an agroecological approach, with self-organization leading to shared values and strong community institutions for decision-making processes (Altieri, 2017). Emphasizing food sovereignty and political engagement, the business model empowers active participation in decision making processes related to livelihoods and food systems (Patel, 2012). The business model fosters social cohesion through capacity-building, grounded in ancestral Zenú knowledge and pluralistic values, which inform

sustainable ecosystem management. This translates into agroecological practices encompassing ecosystem conservation, reduced inputs, nutrient cycling promotion, and biodiversity preservation. Additionally, the business model establishes a solidarity economic system, with a particular focus on reproductive work and gender considerations.

Agroecology as a catalyst for sustainable business models

ASPROCIG operates as a community-based organization (CBO), employing processes that empower marginalized groups of *campesinos*. Through collective governance, the business model facilitates active participation in decision-making processes. By engaging diverse stakeholders, it aligns with multistakeholder strategies (Adebayo et al., 2018). As a hybrid organization, it secures funding through international projects as well as direct sales (Battilana & Lee, 2014), involving the entire community in the ownership, management, and regulation of the business, leading to strong relational dynamics (Peredo & Chrisman, 2006). Farmers emphasize the collective leadership style within the organization, characterized by a lack of hierarchies, allowing peers to actively engage at all levels of its development:

"In the case of ASPROCIG, there is not a single leader or group that directs, it is a community-based organization, where the base itself is the people themselves who have said we want to get out of poverty, ourselves and not that someone support us or helps us. (...) There is a collective leadership where everyone participates. The condition to be a director of ASPROCIG is to have an ABIF. The people who are part of it are supportive people, who are respectful, who are recognized by others as people who can represent and who have a good ABIF, that totally changes the relationship. (...) There are no hierarchies but horizontal collaboration." (F15)

The collective governance facilitates ASPROCIGs political engagement which relies on advocating for small-scale farmers and fisherfolk, recognizing their agency in shaping their livelihood strategies and addressing challenges related to land ownership rights and food sovereignty. The business model emphasizes to advance food sovereignty, granting communities the right to determine their food and agriculture policies, and ensuring decision-making authority rests within the people dependent on the food systems (Via Campesina, 2021; Wittman, 2011).

To effectively engage in political arenas, the business model aims to establish alternative educational processes that challenge the dominance of conventional educational paradigms. Instead, it seeks to promote ecologically, and politically sound education based on agroecology. Agroecological approaches transcend Western epistemologies and offer opportunities for transdisciplinary innovation (Vandermeer & Perfecto, 2012). By broadening discussions, agroecology enables critical examination and contestation of the agro-industrial food system, challenging its detrimental underlying features (Toledo, 2022). Agroecology incorporates traditional knowledge accumulated by farmers over time (Utter, White, Méndez, & Morris, 2021).

Capacity building withing the business model is based on the ancestral Zenú cultural knowledge is linked to sustainable ecosystem management in the Sinú River region,

empowering farmers to preserve subsistence practices and cultural heritage, bolstering their capacity to learn and adapt to climate change impacts (Ruiz-Mallén & Corbera, 2013). Community members recognize the importance of political engagement as a means to establish dialogues with local authorities, while also acknowledging the significance of capacity building processes to enhance the quality and effectiveness of these dialogues:

"Political incidence is that we have rights dictated by the State, we politically engage with the State so that they guarantee those rights, but we no longer do it from violent confrontation. (…). But in the year 2000 we said that the solutions are not there by force, but in education, what is in dispute is not the territory, what is in dispute are the brains of the people, so by understanding things that way, our capacity building proposals are super important, ASPROCIG has become an actor of power in the territory, but not of power of force but of propositional power, so the political incidence program allows us to sit down with mayors, with landowners, with people that operate in the territory, and finding solutions without intermediaries." (F32)

Social and governance principles translate into concrete practices focusing on ecosystem sustainable management. For instance, within the business model conservation and restoration efforts involve collaborative initiatives with local authorities, universities, and communities to address degraded ecosystems. Traditional ecological knowledge plays a significant role in enhancing adaptive capacity and successful implementation of conservation initiatives (Ruiz-Mallén & Corbera, 2013).

Agroecological practices prioritize minimizing inputs, promoting closed-loop nutrient cycles, and efficient water management, as exemplified in the business model waste management system using fish waste for plant fertilization and irrigation while recycling water back to the ponds. Farmer explains the waste management system within their farms:

"(…) The water that is used for the fish is not thrown away, because it is a very rich and nutrient water. Although we have a lot of water, we do not misuse it, because it is always recirculating. The water that comes out of the fish allows us to water the plants. Well, there is a system that recirculates water, the pools have a recirculation system, outside there are two tanks for settling, and we add a little molasses to this decanted water, a little lime, to neutralize the acidity and then we make watering the plants, every morning. (…) The one that works through the pipe recycles, and that allows the roots of the plants to also capture the nitrogen from the fish and also transform it into energy and food." (F10)

Fostering biodiversity is a fundamental principle in agroecology (Migliorini & Wezel, 2017) The business model embraces biodiversity throughout their farming systems that integrate six categories of crops, non-crop plants, and trees, requiring at least 83 plant species across all ABIFs irrespective of farm size, additionally, to animal integration. Biodiversity enhances ecosystem stability and resilience (Loreau & Mazancourt, 2013). Farmers highlight the positive outcomes of biodiverse farming systems, citing their ability to foster synergies between different species and support farm resilience and stability:

"Biodiversity is about, for example, you have a tomato plant, put an aromatic one on it, which at the same time serves as medicine. It is about stratifying, the stratification based on the use of the

energy of the Sun, so that there is no competence in the capture of the sun and the roots of the plants. Let there be no nutrient competition. Under a papaya stick, let's say a pepper plant or an eggplant. That it does not compete with you neither for light nor for nutrients (...) To foster biodiversity will aid in the stability and resilience of the whole ABIF" (F18)

Solidarity and Care: Fundamental features for an Agroecological Business Model

ASPROCIG's business model also embodies solidarity economy features, characterized by active involvement of campesinos from low-income backgrounds in a fully governed alternative economic system, fostering shared identity based on solidarity (Rojas Herrera, 2019). For instance, the business operates a local shop for farmers to sell and exchange surplus produce. Despite the potential for premium prices due to superior products from meticulous agroecological practices and business responsibility (Anselmsson et al., 2014), ASPROCIG deliberately maintains prices at or below average market rates. This deliberate approach prioritizes community well-being, and the fulfillment of marginalized families' needs, underscoring their commitment to stewardship towards the community:

"The surplus goes to the store. But initially we didn't have that clarity yet and we didn't have that many people, so we took it to the common market. Later, analyzing it, we decided that we have to set up and open a store. So, the discussion among farmers was: does the product have to be more expensive than on the regular market or not? Until we concluded: well, if we sell it more expensively, who buys it? Do the rich buy it, and the poor what? Aha, and who are we? We are poor and that's how the discussion began between all of us. And we decided that we have to sell a product for everyone. (...) So, a site was chosen in Lorica, where the poorest people are. The biggest and poorest neighborhood in Lorica is the Tenis neighborhood where we are. We set up the store and office at once. And there the product that arrives today is gone tomorrow. All at the same market price, so that the poor can consume this product." (F1)

By establishing solidarity relationships, the business model proactively tackles gender and generational inequalities, empowering women, and youth in decision-making. Despite prevailing gender inequality and intrafamily abuse in the local context, the business empowerment initiatives have elevated women's status and acknowledged their essential contributions, particularly in reproductive work. For instance, young members recognize the value of reproductive work, even without financial rewards, as it fosters strong bonds of care within families and the wider community, supporting the development of every other activity:

"The work that my mom does is essential, even if it is not paid in something that is monetary, it is essential here at home. That is the indispensable work, from there all the rest derive. (...) Without that work the house does not go forward. She goes out for 3 for 2 days, I think if she spends a day, it seems like it was almost a month" (F5)

5.3 Visioning and Strategy Formulation for an Ideal Agroecological Business Model (Step 3)

Following a comprehension of the fundamental features of the business model, its theoretical connections, and the identified potential leverage points, the objective of this step was to devise effective strategies to enhance the business model. Through in-depth discussions during the workshop, a collective vision and strategies were formulated to address weaknesses and threats while strengthening existing advantages and exploiting opportunities. The resultant strategy backbone reflects these efforts. Furthermore, as a significant outcome of this research, a novel Agroecological Business Model (ABM) is proposed as an answer to the central question of identifying fundamental features in a business model that can support sustainability transitions.

5.3.1 Business Model Strategy Backbone

The strategic approach employed within this research serves as guidelines to enhance the business model, providing a systemic perspective and adaptable long-term goals. While the overall vision extends over a 200-year time horizon, the selected objectives are not strictly long-term, reflecting the organization's emphasis on adaptability and flexibility, principles deeply embedded in their cultural context. The delineated areas of work considered the existing ASPROCIG's emphasis placed on aspects like Food Sovereignty, climate change adaptation, conservation, water and sanitation, and agroecological products and services exchanges. Additional areas, such as finance, collaborators, communities, and environmental impact, were incorporated into the strategy backbone.

Objectives were established based on current performance, capabilities, and ambitions, with general objectives and indicators that aid guiding the business operations. Such general objectives were deliberately chosen to keep the model flexible and prioritize stakeholders' well-being over a solely performance-driven business approach. Notably, emphasis was placed on implementing a management system for performance measurement, monitoring, and evaluation. The defined strategy reinforces the community's collective vision, provides long-term guidance, and enhances capacity-building through a tangible framework for training and effective communication with external stakeholders.

ASPROCIG's BUSINESS STRATEGY BACKBONE

VIVIR SABROSO

The search for well-being is marked by the concept of "vivir sabroso" which is an aesthetic construction, a vision of the wonderful reality, a collective construction of the inhabitant of the Caribbean. It starts from the family and the ABIF, as the beautiful place, the place where I feel, the place where I am and am an indivisible part of nature, the place where I understand myself as part of the beauty that I am a part of

MISSION

ASPROCIG is dedicated to promoting territorial development using a socio-ecological approach, with the aim of assisting over 6,000 peasant families in establishing ABIFs as a means to overcome poverty. Our commitment extends to spreading awareness and sharing the methodology that forms the foundation of our organization, enabling us to reach and assist a greater number of individuals in need

VISION

In 200 years, thanks to our work, we will overcome poverty at the regional level and we will be an international benchmark for sustainable development with a socio-ecological approach based on the Z methodology and the popular organization of campesinos

OBJECTIVES

Climate Change	Conservation & Restoration	Water and Sanitation	Food Sovereignty & Food Security	Comercialization and Exchange of Agroecological Services and Products
By 2025, establish an information and communication system with a forecast of climatic events (droughts, floods) Continue strengthening resilience through fostering biodiversity to adapt to climate change	By 2030, restore at least 20% of the deteriorated wetland ecosystems of the Ciénega Grande del Bajo Sinú	By 2025, establish water and sanitation systems in all the municipalities of the ASPROCIG communities	By 2025, ensure the sovereignty and food security of 7,000+ families in the ASPROCIG communities	By 2030, establish a collection and distribution center with more than 300 ABIF that functions as a food network for the communities of the whole region By 2030, open a laboratory for the transformation of agroecological food products
Environmental Impact	**Collaborators**	**Communities**	**Communication**	**Finance**
By 2025, establish an environmental management system to measure and continue to reduce the environmental impact of the business operations	By 2025, train more than 3,000 ASPROCIG active and new members	Continue collaborating with the different actors at the regional and international level to facilitate cooperation and development of long-term and large-scale projects	By 2025, communicate and promote the Z methodology and the work of ASPROCIG internationally	By 2025, establish ASPROCIG as an organization that finances large scale projects in the Ciénega Grande del Bajo Sinú region and supports 7,000+ families

Table 10 *Strategy Backbone of ASPROCIG's Business Mode*

5.3.2 Agroecological Business Model Canvas

As an outcome of this research the Agroecological Business Model (ABM) canvas was developed. This nuanced framework draws inspiration from the analysis of ASPROCIG's business model and various sources, including the triple-layered business model canvas (Joyce & Paquin, 2016), agroecology principles (HLPE, 2019), pluralistic values (Pascual et al., 2017), social and solidarity economy (Csoba, 2020), and economy of care (Esquivel, 2011). The ABM canvas facilitates the breakdown of business model processes into key components, enabling a systematic analysis for setting ground for strategy formulation. The dimensions of the Agroecological Business Model (ABM) and its key components are presented as follows (*see Table 11)*.

Within the ABM, the value proposition encompasses intrinsic, instrumental, and relational values to address community needs. Value creation is driven by key resources, key activities, and key stakeholders. These activities encompass crucial reproductive work, including life conservation and restoration, capacity building, climate change adaptation, and water and sanitation measures. The key stakeholders adopt a biocentric perspective, prioritizing nature and life as primary stakeholders. The governance and people aspect of the model emphasizes the significance of Food Sovereignty, political engagement, and inclusivity in business institutions and resource management. Furthermore, the model fosters solidarity relationships characterized by non-material interactions among stakeholders. The implementation of stakeholder segments allows for a comprehensive breakdown and analysis of the impact and interest of various stakeholder groups in the business.

Value delivery explores the composition and integration of distribution channels to deliver value to stakeholders. Captured value (revenue streams, environmental and social benefits) supports sustainability and economic diversification. Net value is assessed by balancing environmental and social impacts (externalities) during the value creation life cycle. The value surplus is reinvested to reinforce value creation, thereby supporting the regeneration of life.

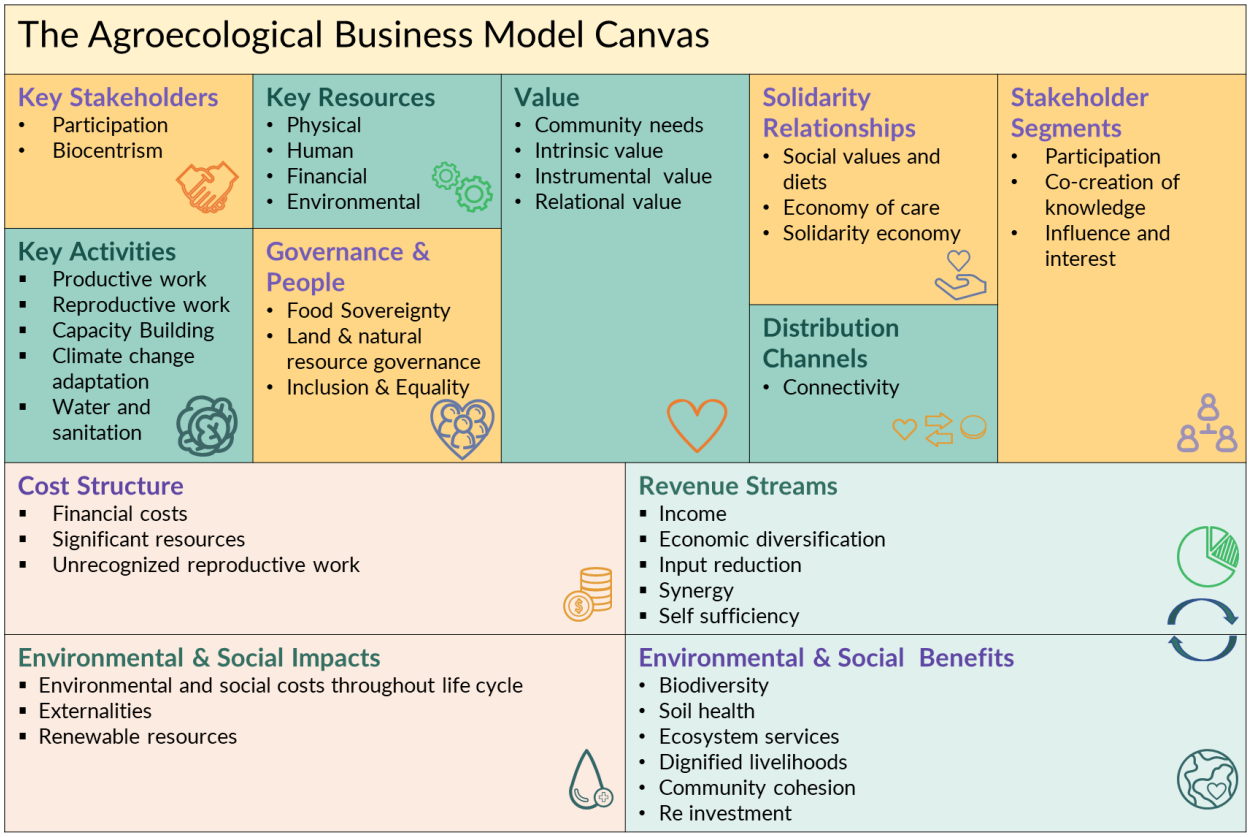

Table 11 *Simplified Version Agroecological Business Model Canvas*

6. Discussion

6.1 The Significance of Pluralistic Values to Support Sustainability Transitions (Step 1)

Agroecology plays a transformative role in global food systems by advocating for environmentally, economically, socially, and culturally appropriate practices (Stephen Gliessman, 2014). This transformation is primarily driven by small-scale food producers, representing around 1.5 billion of the world's population, with approximately 700 million belonging to indigenous cultures (Barrera-Bassols & Toledo, 2008).

Given the current environmental, political, social, economic, and climate crises (Holt Giménez & Shattuck, 2011; Rockström et al., 2023), this study demonstrates that it becomes imperative to explore pluralistic values in order to gain insights from small-scale agroecological farmers who hold diverse worldviews to inform business practices. For example, ASPROCIG adopts a biocentric perspective, that represents a broader range of indigenous cosmovisions. These perspectives view Earth as a mother, stressing spirituality and interconnectedness with all living beings (Caicedo Tapia, 2018; Martínez-Torres & Rosset, 2014). Human beings are regarded as equal participants in this interconnected web of life, echoing the principles of the deep ecology movement (Sessions, 1987). Consequently, these views emphasize the need to explore deeper connections to promote sustainability in agroecological food systems.

This research underscores how agroecology, through its engagement with pluralistic values, recognizes the significance of traditional agricultural and ecosystem management practices rooted in ancestral wisdom. Simultaneously, it fosters the emergence of innovative approaches. To facilitate this, agroecology emphasizes the importance of engaging in a "*dialogue of knowledges*," encouraging enriching discussions between scientific and traditional knowledge (Martínez-Torres & Rosset, 2014). However, achieving this necessitates a process of decolonizing the mind from cultural biases inherited from Western thought, which often dismisses traditional knowledge as nonscientific, useless, and subjective (Toledo, 2022).

Through these processes, agroecology encourages the questioning of seemingly fixed paradigms that underpin the failed agro-industrial food systems, transforming it into a "*dialogue between worldviews*" (Toledo, 2022). This inquiry raises concerns about whether agroecology should prioritize technological innovation, environmental stewardship, economic efficiency, or sustainability, with all these embedded in a ultimate goal derived from the cosmovisions of traditional communities, such as "harmonious living" (*buen vivir*) (A. Acosta, 2008; Toledo, 2022) or "*vivir sabroso*" as in the case of ASPROCIG (2023). These philosophies revolve around viewing Earth as a living being, with human beings being an integral part of the natural world, contrasting with the industrial, technocratic, and capitalist contemporary worldview.

This research demonstrates that integrating pluralistic values into the perspective of an agroecological business model goes beyond merely incorporating spirituality. Instead, it enhances agroecology as an emancipatory activity that radically questions prevailing paradigms and life objectives, providing a viable sustainable alternative (Altieri & Toledo, 2011; Via Campesina, 2021).

As a result, addressing pluralistic values within Agroecological Business Models foster a spiritual connection with the land, territories, and the web of life, guiding activities based on culture, non-material relationships, and spirituality rather than solely focusing on productivism (Giraldo & Rosset, 2023; Val et al., 2019; Via Campesina, 2021). This research offers empirical evidence by presenting a successful case study that showcases the implementation of this deep Agroecological Business Model approach, steering away from presenting a utopic scenario and representing a possible solution to this crisis.

Furthermore, this study demonstrates that fully grasping pluralistic values requires a profound exercise of understanding and a willingness to transcend traditional valuation methods. Overcoming fixed biases is essential to embracing pluralism and enabling transdisciplinary collaboration (Foley, 2003). The narrative methods adopted in this research resulted effective to immerse in the local epistemology. Identifying pluralistic values involves recognizing and respecting how people ascribe meanings and importance to nature and their understanding of a good quality of life (Pascual et al., 2017). However, such exercises as exemplified from this research are resource consuming as they require the involvement of multiple stakeholders, and extensive communication efforts. Nevertheless, this process itself provides value and it represents an equitable and fair approach to fostering true sustainability.

The adoption of a pluralistic valuation approach can be extrapolated to encompass all forms of organizations and policy-making processes. This approach enables the recognition of genuine values and thereby needs held by communities, in contrast to imposed Western values. Embracing pluralistic values becomes particularly crucial in rural scenarios and conflict territories during times of radical crisis, necessitating transformative solutions. To genuinely facilitate sustainability transitions, the field of sustainable business should incorporate insights from pluralistic values, acknowledging the income constraints of communities and empowering them as capable entrepreneurial agents. By doing so, inclusive business narratives can avoid greenwashing and ensure a more authentic and impactful approach to sustainability.

6.2 Emancipatory Agroecology for Stronger Sustainable Business Models (Step 2)

The implementation of an agroecological business model presents various challenges, which emancipatory agroecology proposes potential solutions for. These challenges include adopting a political stance, reducing dependency on external actors, transitioning to solidarity economies, and engaging in effective communication and negotiation with external stakeholders, taking into account their diverse terms and perspectives.

The first primary challenge to implement an Agroecological Business Model is adopting a political stance. Agroecology goes beyond mere technological aspects; it demands a just reconfiguration of societal power structures (Giraldo & Rosset, 2023; Rosset et al., 2019). This requires addressing various challenges, including land grabbing, privatization, lack of social fabric, insufficient knowledge, and incentives favoring conventional agribusiness policies (Rosset & Altieri, 2017). To address social crises like land grabbing, political activism is essential. Farmer associations, such as the Landless Farmers Movements in Brazil (Carter, 2010) exemplify such engagement. However, achieving effective political engagement poses difficulties due to geo-economic interests adhering to neoliberal principles, leading to inequality and neglect of land access for marginalized populations (Burchardt & Dietz, 2014).

Second, the successful implementation of the agroecological business model requires enabling farmers to develop and implement their production and consumption strategies independently, minimizing reliance on external support like private sector projects or government subsidies. Agroecology has shown a positive contribution to improving financial capital (D'Annolfo et al., 2017) However, limited access to adequate land, technology, and resources poses challenges, as seen in the ASPROCIG business model, which depends on external funding for critical components like solar panels and infrastructure projects. To address this, potential solutions include streamlining funding schemes to reduce intermediaries and accessing direct investment resources designated for such projects (Nunnenkamp, 2004). Additionally, ASPROCIG farmers perceive diversifying agroecological products and services including value-added items and community tourism, can enhance economic performance and diminish reliance on external funding, promoting self-sufficiency within the business model.

Third, significant challenge entails transitioning the Agroecological Business Model away from the competitive nature of the modern economy towards economies rooted in pluralistic values, prioritizing use value over exchange value, and reorienting markets according to principles of solidarity economy and economy of care (Giraldo & Rosset, 2023; Pimbert, 2023). This involves promoting direct, fair, and short distribution chains, fostering transparent relationships between producers and consumers, fostering non-material relationships based on care and trust and ensuring equitable sharing of risks and benefits (Giraldo & Rosset, 2023; Rojas Herrera, 2019). Overcoming the competition-driven market paradigm, particularly beyond the community, is difficult, as prevailing concentration of resources, corporate political activities and power of influence from agri-business incumbents, capital, investors, external markets, international certification, and new green businesses (Béné, 2022; Delmas & Burbano, 2011).

To address these challenges effectively, it is crucial to strengthen organizational structures through collective processes rather than individualized projects (Giraldo & Rosset, 2023). Capacity-building plays a vital role in facilitating systemic transitions towards local economies that prioritize solidarity and food sovereignty. Agroecological movements strive to develop alternative educational processes to challenge conventional education rooted in dominant cultural thinking, necessitating capacities for unlearning and re-meaning to deconstruct neoliberal discourses and capitalist hegemony (McCune et al., 2017). Furthermore, an

Agroecological Business Model thrives within collective self-organization and mobilization. Collective processes, such as ASPROCIG leadership centered on horizontal structures, dialogues of knowledge and peasant-to-peasant learning, play a key role in shaping these collective efforts (Utter, White, Méndez, & Morris, 2021).

Finally engaging in multistakeholder approaches can enhance the strength of agroecological business models and foster solidarity-based economies through community engagement. Embracing co-creation of knowledge allows various actors to participate in epistemic exercises, leading to unique insights and values (Berkes, 2009) However, challenges persist in effectively communicating and negotiating with external stakeholders, as co-creation is sometimes misinterpreted as a simple merging of different knowledge forms, while certain forms may remain inherently incompatible and resist integration (Blaser & La Cadena, 2017). It is crucial to identify opportunities for facilitating multi-stakeholder dialogues to contribute to discussions, converge expectations and collaboratively find solutions.

6.3 Agroecological Business Model – A new Sustainable Business Perspective (Step 3)

The literature on Sustainable Business Models (SBMs) primarily adopts a Western perspective, focusing on technical strategies for sustainability. However, sustainable business in rural contexts may require different approaches, such as paradigm shifts, integrating traditional knowledge and innovation, and recognizing farmers as entrepreneurial agents. There is a pressing need to reassess the role of business in the current crisis to prevent succumbing to conventional developmental dynamics and greenwashing practices. Nonetheless, the business model perspective remains valuable for its systematicity and facilitation of strategy development.

An example of western SBM perspective is founded in Bocken et al. (2014) whom proposed archetypes for SBMs that consider material and energy efficiency, organizational structures, and technological innovations. The triple bottom line approach, emphasizing economic, environmental, and social dimensions, is also commonly adopted (Aagaard, 2019). However, this perspective may not suit developing countries, where business models should account for radical paradigm shifts, emancipation, integration of plural values, and deep ecological perspectives (Declaration of the International Forum for Agroecology, 2015; Giraldo & Rosset, 2023).

Another narrative from traditional inclusive business models perspective frame the popular sectors at the bottom of the economic pyramid (BoP) as nodes in the system to be engaged in some manner (Likoko & Kini, 2017; WBCSD & SNV, 2011). Differently, the ABM recognizes income-constraint groups, particularly farmers, as the core of the enterprise and as entrepreneurs in their own right. It seeks to include and empower a wide range of stakeholders, redefining the role of these groups as more than just producers or consumers.

In the current context, characterized by frequent crises, sustainability is gaining track as there is a growing need for society to establish a new paradigm (Burns, 2012). This requires thorough discussions regarding the role of institutions, in this case businesses, in effectively addressing significant social and environmental emergencies, while being cautious to avoid greenwashing and techno-optimism (Ribeiro & Soromenho-Marques, 2022). Despite the ongoing global debate surrounding the establishment of this new paradigm, practical implementation is still a considerable challenge. Agroecological Business Models play a crucial role in advancing these discussions by offering concrete illustrations of what such a paradigm shift might entail.

In order to advance, it is imperative to exercise caution regarding the potential hazards of distortion, corruption, simulation, and co-optation associated with the term “agroecology” (Dunster, 2020). Scholars have highlighted the potential danger of large-scale agri-business incumbents appropriating and assimilating agroecology, resulting in simplified and diverted understandings of the concept (Dunster, 2020; Levidow et al., 2014). These entities may use agroecology as a means to greenwash capitalist practices and perpetuate the principles of conventional developmentalism (Anderson & Maughan, 2021).

It is imperative to emphasize that an Agroecological Business Model (ABM) must embrace Agroecology principles at an emancipatory level. Such businesses present an alternative to the prevailing modern business paradigm, even so, innovation is still encouraged. Despite representing a radical departure, the fusion of modernity and tradition can nurture positive advancements in the food systems (Altieri & Toledo, 2011). The ABM introduces a novel perspective that enriches the conventional concept of sustainable business models, going beyond the holistic approaches like triple bottom line strategies. It enables a redefinition of business, value, success, and development, empowering communities to make autonomous strategic decisions concerning their own business models within their economic systems.

It is noteworthy that an Agroecological Business Model must take into account certain fundamental aspects that were crucial for the success of ASPROCIG's business model and its effectiveness in rural critical scenarios. These include considerations of ecosystem conservation and restoration, access to clean water and sanitation, promotion of food sovereignty, and the shaping of a collective identity.

Finally, in this research, the business model perspective plays a vital role in bringing a sense of systematicity to the overarching business strategy formulation process. This approach has proven to be valuable in breaking down the business model into its essential elements, thus facilitating a comprehensive critical analysis and establishing the foundation for strategy formulation.

6.4 Limitations

The study encountered three main limitations that should be taken into account when interpreting the findings. Firstly, due to the challenging nature of engaging with external stakeholders and the remote locations of the research sites, the study was primarily focused on

internal aspects. This limitation restricted the researchers' ability to gather comprehensive insights from external stakeholders, potentially limiting the depth of the findings.

Secondly, some limitations were encountered regarding the sharing of information on the costs and revenues of the families. Privacy concerns from the participating families prevented the complete disclosure of this information. As a result, the researchers had to rely on estimates, which may not accurately represent the financial situation of all families involved in the study.

Lastly, it is important to note that due to constraints such as remote locations, conflict zones and difficult access, it was not feasible to conduct a larger sample size. Therefore, the findings should be interpreted with caution, considering the potential limitations presented in this study.

6.5 Further Research

In order to advance our understanding of how Agroecological Business Models support sustainability transition towards agroecological food systems over time, there are several key areas for further investigation.

First, longitudinal studies should be undertaken to encompass a wider representation of the key elements contributing to this transition. By studying changes and developments over an extended period, we can gain valuable insights into the dynamics and complexities involved in adopting agroecological business models.

Secondly, it is of paramount importance to conduct thorough investigations employing diverse research designs and methodologies to establish linkages between sustainable business models and agroecology across different contexts. This should encompass the incorporation of both qualitative and quantitative methods to ensure the incorporation of multidisciplinary studies that capture a comprehensive systemic level of analysis. This multifaceted approach offers the advantage of drawing insights from various geographical regions, thereby playing a pivotal role in supporting the sustainability transition across diverse areas.

Third, it is imperative to delve into the power configurations at play in shaping the narrative of agroecology. Investigating the roles of agri-business, governments, NGOs, and community organizations can shed light on the influence and dynamics of various actors in driving or hindering the adoption of emancipatory agroecological business models.

Last, a critical area for further research lies in evaluating the effectiveness of strategies aimed at reducing financial dependence within the context of agroecological business models. Understanding which approaches yield the most favorable outcomes can inform policy and decision-making to support the successful implementation and expansion of agroecological business models. By addressing these areas of research, we can enhance our understanding of the complexities involved in the sustainability transition towards agroecological food systems.

7. Conclusion

This thesis presents valuable insights into the essential characteristics of an agroecological business model (ABM) that support sustainability transitions. The study utilizes the case of ASPROCIG to demonstrate the successful application of an ABM, showcasing its close connection to sustainable ecosystem management and the establishment of sovereign, resilient food systems for communities.

First, the research underscores the complexity of understanding the pluralistic values held by farmers, rooted in traditional knowledge systems. The study emphasizes the significance of considering intrinsic, instrumental, and relational dimensions in crafting strategies that align with farmers' life visions and aspirations. Epistemology served as a crucial analytical lens in this endeavor, leading to the identification of relational values that shape a collective cultural identity. This alternative conceptualization, is embedded in indigenous cosmovisions with a biocentric perspective, signifying profound departure from prevailing mental frameworks, and ultimately striving for *vivir sabroso*—a meaningful life marked by comprehensive, spiritual, and inclusive approaches. Integrating these pluralistic values into agroecological business models highlights agroecology's emancipatory nature as it challenges prevailing paradigms and offers a viable alternative.

Second, the ASPROCIG business model exemplifies principles of agroecology, solidarity economy, and economy of care. Agroecology serves as a broad framework supporting reflections on pluralistic value processes and facilitating food system management through social organization, political engagement, capacity building, and sustainable agriculture. The model places emphasis on non-material relationships founded on solidarity and recognizes the vital role of reproductive work and gender in life regeneration. While the agroecological business model holds the potential to present appropriate strategies for rural communities through its emancipatory nature, challenges persist in adopting a political stance, reshaping markets, fostering collective and horizontal processes, and effectively engaging with stakeholders and diverse forms of knowledge. The Agroecological Business Model promotes food sovereignty and creates the opportunity to re-evaluate and re-imagine development, business, success paradigms.

Third, the strategy formulation process identified ten dimensions of work and corresponding objectives that outline indispensable characteristics for an Agroecological Business Model to effectively drive sustainability transitions. These dimensions encompass meeting fundamental needs such as access to water and food while also emphasizing long-term visions focused on ecological conservation, restoration, and life regeneration. The incorporation of a business model perspective facilitated critical introspection and strategic development. However, it was revealed that the conventional Western sustainable business literature fails to adequately address the genuine needs of rural communities when actively participating in crafting their own business models, beyond their prevailing role as mere producers or consumers. Furthermore, the research also highlights the importance of reassessing the role of business in the current crisis and the necessity for paradigm shifts. Agroecological Business Models offer

an alternative perspective by recognizing farmers as entrepreneurial agents and addressing their income constraints. In doing so, ABMs avoid greenwashing and ensure a more authentic and impactful approach to sustainability.

In conclusion, in face of the escalating environmental, political, social, economic, and climate crises, the findings presented in this thesis provide a valuable point of reference for advancing a just sustainability transition towards agroecological food systems. Agroecological Business Models assume a pivotal role in the comprehensive emancipatory development of communities and serve as catalysts for promoting sustainable transitions. By adhering to agroecological principles and emphasizing solidarity, care, and well-being, ASPROCIG stands as a compelling exemplar of agroecology's transformative capacity in fostering resilient and equitable food systems.

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9. Appendix

Appendix 1: The ASPROCIG'S Agroecological Business Model

AGROECOLOGICAL BUSINESS MODEL CANVAS		
Dimension ABM	**System**	**Family**
Key Stakeholders	**Who are the main stakeholders for whom we are creating value?** • ASPROCIG families • Local communities • Bajo Sinú Ecosystems (Bosque Seco, Cienega) • External stakeholders (landowners, armed groups) **Which key resources are provided by the stakeholders?** • Ecosystem services (ecosystems) • Money (customers, funding organizations) • ASPROCIG families (work) • Local communities (participation, knowledge) **What could be the motivations that stakeholders have to form partnerships? (Economy development, particular resources, and activities)** • Territory development • Territory recovery, safeguard • Life development • Community cohesion	• Whole family participation (young, elder, women)
Key Resources	**What resources do the value creation require?** • Administrative staff • Dynamizers • Families, community • Financial or project resources (investments machinery, capacity building, operations) • Office and store • Energy and services (grid, water)	**What resources do the value creation require?** • Human labor (family workload) • Financial resources: family (monthly income for operations) • Technology and infrastructure: Solar panels, motor bomb ponds, electro domestics, ponds (geomembrane), animal cages, fences, working tools. Environmental • Soil, compost, land • Water (ponds, irrigation, household) • Plants, seeds, seedlings • Animals, feed • Energy (grid) • Solar energy
Key Activities	**What key activities do the value creation require?** **Production work** • Store management (inventory, selling, exchange) • Project management and administrative tasks (operations) **Reproduction work** • Community engagement, projects • Conservation activities • Capacity Building, Training • Technical assistance (problem solving) • Investments	**What key activities do the value creation require?** **Production work** • Harvesting • Selling • Exchange • External job **Reproduction work** • ABIF work daily operations (Irrigation, pruning, weeding, composting, seedlings, feeding animals, cleaning) • Food preparation, childcare, elderly care, household chores
Value Proposition	**What value do we deliver to the stakeholders?** • Dignified livelihood	

	• Opportunity for self-sufficiency • Consistent capacity building • Reciprocity relationship • Resilience **What problems are we helping to solve?** • Lack of opportunities • Migration • Limited access to education • Poverty • Gender inequality • Shame identity **Which community needs are we satisfying?** • Food security • Empowerment • Education • Community cohesion and leadership • Mitigation and adaptation to Climate Change • Cultural Identity **Why is important to conserve the ecosystems? (Intrinsic value, relational value)** • Relationship with nature • Ecosystem and environmental awareness • Long term sustainability **What goods and services are provided by the ecosystems? (Instrumental value)** • Food • Medicine • Materials • Recreational • Aesthetics **What are the beneficial relationships we have with the ecosystems? (Relational value)** • Identity: Amphibian, culture • Cultural Subject: campesino (fisherman, farmer, women, technician, singer, poet, etc) • Empowerment • Sense of belonging	
Distribution Channels	**Through which channels do our stakeholders want to be reached?** • Local, remote geographical areas • More stores • Delivery **How are we reaching the stakeholders now?** • Level 1Locally (vereda exchange and direct sales) • Level 2 Local Community (ASPROCIG exchange) • Level 3 Store (External sell point) **How are these channels integrated?** • Hierarchy from local to the store **Which ones work best and perform best environmentally and financially?** • Local vereda direct exchange and sell	
Governance and People	**Organizational form** • ABIF (family level) • Socio Ecological System (community level) • 1st degree organizations (organizational level)	**Organizational form** • ABIF (family level)

	• 2nd degree organization ASPROCIG (organizational level) **Decision making policies** • Directive Team (5 members, 1 external, rotates annualy) • General Assembly (1 time every 3 year, representatives of each community, municipalities) • Support Team (72 members, dinamizadores) • Collective leadership, horizontal configuration (consultation, transparency, fairness, participation) **How many people and what type of people are considered?** • 9 municipalities • Around 6000 families • Demographics: sujeto cultural campesino **Land and natural resource Governance (recognition)** • Concessions • Commons • Family farms • Territory management	
Solidarity Relationships	**What type of relationships do we have with our family? (intrafamilial)** • Purpose • Love, care • Solidarity • Team • Realization **What type of relationships do we expect to establish with the community members? (intraorganizational)** • Extended family • Collective development • Reciprocity • Community cohesion **What type of relationships do we expect to establish with external actors? (interorganizational - system)** • Respect • Acknowledgement and recognition • Role model **What type of relationships do we establish with ecosystems and society? (holistic, societal)** • Respect • Stewardship • Biocentric	
Stakeholder Segments	**Stakeholder Segments** **Who are the stakeholders that foster community development and those who hinder?** **Foster** • Community members, international community, Farmers. **Hinder** • Armed Groups, Economic Interest Groups, Landowners **How much interest in agroecology and sustainability do these stakeholders have?**	

	• Community members are interested in sustainable development • Agroecology • Other actors less or none **How much power and influence do these stakeholders have?** • Power implicit stakeholders • Vulnerability to extortion • Implicit bargain • State Infrastructure and limited willingness to collaborate • Self-empowerment	
Cost Structure	**What are the most important costs inherent in our business model?** **Fixed costs** • Services (water, electricity) • Store maintenance operations • Administrative staff • Dynamizers **Variable costs** • Capacity Building Workshops and Training • Investments Projects (Tools, technology, machinery, and infrastructure) **Which key resources are the most expensive?** • Staff, dynamizers • Transportation • Food • Investments (Tools, technology, machinery, and infrastructure) **Which key activities are the most expensive?** • Investments Projects (Tools, technology, machinery, and infrastructure) • Capacity Building Workshops and Training	**What are the most important costs inherent in our business model?** **Fixed costs** • Water • Electricity • Reproductive work (time) • Family expenses (transportation, education, toiletries, clothing) **Variable costs** • Farm inputs (manure, seeds, seedlings, pots) • Animal feed • Unexpected expenses • Services (season - farm) • External Food • Tools and machinery **Which key resources are the most expensive?** • Land • Machinery and Infrastructure (Solar panels, motor bomb, pond, batteries) • Services • Animal feed (fishes) • Clothing **Which key activities are the most expensive?** • Aquaculture **How much of the income is direct costs related to the ABIF and how much to others?** • 90% to 100% of the income is used to sustain the costs • ABIF (40%) – Other costs (60%) • Other costs include family expenses like clothing, university fees, etc
Revenue Streams	**For what value, our stakeholders are willing to pay? How much? How would they prefer to pay?** • Market price or lower **System** **What are the different income streams that we have?** • International Funding 90% • Fee usage store 10% **What is the average income for the organization?** • Project dependent, fluctuates constantly • Fee usage cover service costs even	**What are the different income streams that we have?** • Selling and exchange locally and at the store • Plants (flowers) • Food (ñame, yuca, hortalizas, arroz) (peces, gallinas, huevos, cerdos) • Fruits (mango, nispero) • Medicinals (hierbas medicinales) **External work** • Pescadores • Areneros • Electricistas • Constructores **What is the average income of the families?** • $800.000 - $1.500.000 (Colombian Pesos) €180 – €350 (Euro Equivalent) • Monthly average **How much does each income stream contribute to the overall revenues?** • ABIF Production (70%) – External Work (30%)

		How much of your food consumption comes from ABIF production or within the business model and how much from external stores? • ABIF + ABM (90%) – External (10%) **Is the income stream reinvested into the value creation? If so, how much?** • The re investment is about (30%) to (40%) • Additional investments when profits are about (10%)
Environmental and Social Impacts	**Environmental Impacts** **What environmental impacts our business is causing?** • Mobilization (GHG emissions) • Water **What key resources are not renewable?** • Electricity • Water **Which key activities use a lot of resources?** • Ponds **Social Impacts** **What social costs our business is causing?** • Minimum or none **How much time and effort does the reproductive work demand? (Domestic work, care work)** • Daily work up to 8+ hours	**Environmental Impacts** **What environmental impacts our business is causing?** • Mobilization (GHG emissions) • Livestock (GHG emissions) • Water **What key resources are not renewable?** • Electricity • Water **Which key activities use a lot of resources?** • Ponds **Social Impacts** **What social costs our business is causing?** • Minimum or none **How much time and effort does the reproductive work demand? (Domestic work, care work)** • Daily work up to 8+ hours
Environmental and Social Benefits	**Environmental** **What environmental benefits the business model is generating?** • Ecosystem services • All value creation, delivery and capture • Positive balance against impact **Who are the main beneficiaries?** • Families, community and ecosystems **Can these benefits be transformed into value proposition if yes for whom?** • Yes, for the community, ecosystems and society including external stakeholders **Social** **What social benefits the business model is generating?** • Empowerment • Self-sufficiency • Capacity building • Sovereignty and autonomy • Social cohesion **Who are the main beneficiaries?** • Community spillovers **How and how much does the reproductive work contribute to the social benefits?** • 90% Is reproductive work including community and family care	

Appendix 2: Code Tree

1. ABIF
    a) Diversified farming system
    b) House
    c) Beautiful place
2. ASPROCIG
    a) Capacity building
    b) Dinamizadores
    c) Investments
    d) Stewardship
3. Climate Change Adaptation
4. Cost Structure
    a) Most relevant costs
    b) Expensive activities
    c) Expensive resources
        i. Feed
        ii. Technology
        iii. Education
        iv. Transportation
5. Distribution Channels
    a) Leve 1 vereda
    b) Level 2 local community
    c) Level 3 local shop
    d) Remote locations
6. Environmental and Social Benefits
    a) Ecosystem services
    b) Social cohesion
    c) Capacity building
    d) Aesthetics
7. Environmental and Social Impacts
    a) Positive balance
    b) Transportation
    c) Heavy workload farm
8. Governance
    a) Collective leadership
    b) Decision making

c) Consultation
d) Fairness
e) Inclusion
f) Transparency

9. Political incidence
    a) Engagement
    b) Advocacy
    c) Negotiations
10. Key activities
    a) Productive activities
        i. Animal husbandry
        ii. Chickens
        iii. Aquaculture
        iv. Commercialization
        v. Construction
        vi. Exchanges
    b) Farm
        i. 6 plant categories
        ii. Organic compost
        iii. Pest and diseases
    c) Reproductive activities
        i. Care activities
        ii. Household chores
        iii. Conservation and restoration
        iv. Life regeneration
11. Key Resources
    a) Animal feed
    b) Animals
    c) Environmental conditions
    d) Farming tools
    e) Monetary
    f) Plants
    g) Seeds
    h) Technology
    i) Water
12. Resilience

a) Adaptation
b) Synergies
c) Organization
d) Floods

13. Revenue Streams
    a) Alternative work
    b) Exchanges
    c) Direct selling
    d) Shop
    e) Reinvestments
    f) Funded projects
14. Solidarity Relationships
    a) Community cohesion
    b) Ecosystem respect
    c) External actors
    d) Family
    e) Inclusion
15. Stakeholder Segments
    a) ASPROCIG Families
    b) Community
    c) Ecosystems
    d) Implicit Actors
    e) Landowners
    f) Local authorities
    g) Urra
    h) Hostile actors
16. Value
    a) Aesthetics
    b) Community needs
    c) Instrumental
        i. Goods and services
        ii. Self-consumption
    d) Intrinsic
        i. Ecosystems
        ii. Identity
    e) Problem solving

f) Relational

   i. Vivir sabroso

   ii. Campesino

   iii. Socio ecological synergies

Appendix 3: Interview Guide – ASPROCIG

Guía Entrevista miembros ASPROCIG

Informaciones generales

1. ¿Como naces ASPROCIG y cuándo?

2. ¿Me pueden hablar del contexto historico de ASPROCIG?
   a. ¿Y cómo era el contexto politico en temas de territorio, tierra, agua, ecosystema, bienes comunes?
   b. Pasado y presente

3. ¿Cuáles son los problemas y necessidades que busca solucionar el modelo asprocig?

4. ¿Cuáles son los objectivos principales?
   a. Mision (presente) y vision (futura)

5. ¿Cómo es estructurada y cuántos socios y trabajadores directos hay?
   a. Socios, administracion, collaboraciones

Actividades y creacion de valor

6. ¿Cuáles son los principales areas de trabajo y las principales actividades que se realizan por area?

   a. Areas de trabajo: agua y saneamiento, seguridad alimentaria, producion y conservacion, adaptacion al cambio climatico, transversales (educacion, gestion e incidiencia politica y equidad de género y intergeneracional)

      i. Formacion y Capacitación (practicas agroecológicas y otros):
         1. ¿Cómo crean conocimiento a nivel de asociación?
         2. ¿Cómo transmiten este conocimiento a los miembros?
         3. Métodos de transmisión (cursos, talleres)
      ii. ABIF
         1. Metodología (6 plantas)
         2. Fases (I, II, III)
         3. Autoevaluación e indicadores
         4. ¿Como está estructurada la cadena de valor en asprocig?
            a. producción, distribución, uso, manejo de desperdicios
      iii. Administrativas
         1. operativas, de red, plataforma, incidencia
      iv. Conservacion
      v. Equidad de genero

   b. ¿Cuáles actividades son relacionadas a la producción de bienes y servicios?
      i. Económicas, alimentos, turismo
      ii. icono
   c. ¿Cuáles actividades son relacionadas a la reproducción de la vida?
      i. Conservación, restauración, educación, cuidado, trabajo domestico
      ii. icono

7. ¿Cómo ASPROCIG promueve su propuesta a la sociedad?

Valores

8. ¿Qué significa ser parte de una comunidad como asprocig?

9. ¿Qué papel representa la naturaleza en asprocig? (Que significa la naturaleza- intrinsic value)
    a. tiene derechos, autonomía, valor, reconocimiento
    b. ¿Por qué es importante la conservación, restauración de los ecosistemas del bajo Sinu? (Intrinsic value)

10. ¿A qué se refieren con el sujeto cultural? y como se relaciona con los ecosistemas del bajo Sinu? (relational)

11. ¿Qué significa la estética y qué papel juega en asprocig?

Toma de decisiones

12. ¿Cómo son los procesos de toma de decisiones?
    a. ¿Cuántas personas toman las decisiones?
    b. ¿Quién forma parte?
    c. ¿Como se toma en consideración a todos los miembros de la comunidad?
    d. ¿Como se toma en consideración las mujeres?
    e. ¿Como se toma en consideración a los jovenes?
    f. ¿A quién y cómo se decide como destinar los recursos?

Actores clave

13. ¿Con que actores externos interactua ASPROCIG? Hagamos una lista y vamos desarollando uno por uno.
    a. NGO, municipio, universidades, organizaziones internacionales, redes
        i. ¿Qué recursos proveen/aportan estos actores?
        ii. ¿Qué actividades efectúan estos actores?
        iii. ¿Cuáles son las principales razones por las que estos actores se asocian?
        iv. -> hacer mapeo durante la entrevista

14. ¿Qué tan interesado estan en el desarrollo de la propuesta de ASPROCIG?
        i. Matrix

15. ¿Qué poder y influencia tienen en ASPROCIG?
        i. Matrix

16. ¿Cuáles actores promueven el desarrollo de asprocig, cuales lo dificultan

Business

Canales de Distribución

17. ¿Podremos elabor de los canales de distribucion que los miembros usan?
    a. Intercambio
    b. Venta directa
    c. Tienda
    d. Ferias

18. ¿Cuáles son los que mejor funcionan, por qué?

    a. ¿Estos canales están integrados? ¿Cómo? ¿si no, como podrían integrarse?

19. ¿Qué otros canales piensan que los actores estarían interesados en promover?
    a. Puntos, entrega a domicilio, etc

Recursos y costos

20. ¿Qué tipo de recursos necesita asprocig para funcionar?
    a. Naturales, materiales, energía
    b. físicos, humanos, financieros

21. ¿Cuáles son los costos más importantes que tiene la organización?
    a. Fijos y variables

22. ¿Cuáles son los costos más importantes que tienen cada familia?
    a. Fijos y variables
    b. ¿Cuáles son los recursos más caros?
    c. ¿Cuáles son las actividades más caras?

23. ¿Cuánto y como se les paga a los trabajadores?

24. ¿Cuánto tiempo dedican las mujeres a trabajo doméstico y esto es reconocido o compensato?
    a. Algun tipo de estrategia

Ingresos

25. ¿Cuáles son las principales fuentes de ingresos de las familias y de la organización?
    a. Salario, ventas, alquiler, intercambio

26. ¿Cuáles son las principales fuentes de ingresos de la organización?

27. ¿Qué precios se manejan en la organización? ¿Qué precio piensan es justo?

28. ¿Cuánto contribuye cada canal al agregado de ingresos de la organización?

29. ¿De esos ingresos, cuanto es re-invertido en la comunidad y de qué forma?

30. ¿Son suficientes los ingresos que tienen para desarrolar las actividades de ASPROCIG?

Impactos

Impactos Ambientales

31. ¿Cuáles son los impactos ambientales que se generan atravez de la cadena de valor?
    a. Basura, desperdicios, emisiones, sobreextraccion

32. ¿Qué recursos no son renovables?
    a. Gasolina, gas, carbon, electricidad

33. ¿Qué actividades usan recursos de manera intensiva?
    a. Agua, aquacultura

Impactos Sociales

34. ¿Cuáles son los desafíos más grandes de trabajar en ASPROCIG?

Beneficios

Beneficios Ambientales

35. ¿Qué beneficios ambientales está generando este modelo?
    a. Servicios ecosistema
    b. Quienes son los beneficiarios de esos beneficios (para las familias, para la comunidad, para la sociedad)

Beneficios Sociales

36. ¿Qué beneficios sociales está generando este modelo?
    a. Quiénes son los principales beneficiarios (para las familias, para las comunidades, para la sociedad)

37. ¿Como piensa que las mujeres con su trabajo aportan a generar estos beneficios?
    a. trabajo domestico
    b. trabajo de cuidado
    c. conservación

Estrategia y futuro

38. ¿Cuáles han sido los eventos más importantes para aprocig en la última década?

39. ¿Cuáles han sido los desafíos más grandes que han enfrentado y como lo han hecho?

40. ¿Cuáles son la fortaleza, debilidades, oportunidades y amenazas?

41. ¿Cómo piensan que ASPROCIG pueda mejorar su propuesta? ¿Y que se necesita para eso?

- la cadena de valor (ABIF, tienda, transporte, manejo de desperdicios)
- conservaciones
- productos procesados
- diversificaciones de actividad (turismo)
- inclusión y participación de jóvenes

42. ¿Como ven el trabajo y desarrollo de ASPROCIG en el largo plazo? (futuro)

Appendix 4: Interview Guide Farmers

Guía Entrevista socios ASPROCIG

Informaciones participantes

1. Cuénteme de su familia: integrantes, sus nombres, sus edades y sus niveles de educación
2. ¿Qué significa para usted su familia?
3. Cuénteme de su padres y abuelos, ¿qué trabajo hacían? ¿Eran agricultores y pescadores como usted?
4. ¿Me puede contar un poco de la comunidad donde vive? ¿Qué actividad se realizan aquí?

Dimensiones social y económica ABIF

5. ¿Cuéntame de su ABIF, de cuánto tiempo lo tiene, que dimensiones tienes, en qué fase esta?

6. ¿Cuáles son las principales actividades que realiza y que productos obtiene?
   - ¿Hace algún tipo de producto procesado casero?
   - ¿Hay algún tipo de actividad adicional en la que participen?

7. ¿Me puede describir como es un día típico de trabajo?
   - ¿Cuántas horas trabaja en un día promedio, incluyendo tareas del hogar o ayudando a otros miembros de la familia?
   - ¿Qué tan satisfactorio y significativo encuentra su trabajo?

8. ¿Hay alguna división de trabajo entre la familia?

9. ¿Como se toman las decisiones para su ABIF?
   - decisiones de plantas, animales, maquinas, comercio

10. ¿Cuál es el rol de la mujer en la familia y ABIF? ¿Porque es importante?
    - Cuanto tiempo trabaja

11. ¿La producción de su ABIF es destinada para el consumo de la familia?
    - ¿Tiene alimento para todo el año?
    - ¿Y qué tipo de alimentación tiene en su familia? ¿Cuáles son las comidas de un día típico?

12. ¿Intercambia sus productos o animales con otros socios?

13. ¿Y comercializa excedentes a nivel local y en la tienda de ASPROCIG?
    - ¿Este en que porcentaje seria?
    - ¿Cuál de estos canales es el mejor y como piensas que se podría mejorar este aspecto?

14. ¿Cuáles son sus principales fuentes de ingresos en su familia?
    - Trabajo externo a parte de ABIF (que tipo)
    - ¿De esos ingresos, cuanto es reinvertido en su familia y ABIF?
    - ¿El dinero que percibe cubre lo que necesitan?
    - ¿Cuándo tiene que hacer una inversión grande como consigue los fondos?

15. ¿Cuáles son los costos más importantes que tienen tu familia?
    - Recursos y actividades más cara

Beneficios e impactos

16. ¿Como se manejan los desperdicios?
17. ¿Usa energías renovables?
    - Solar
18. ¿Qué recursos se usa de manera intensiva?
    - Cuanto

19. ¿Cuáles son los principales beneficios que le proporciona su ABIF?

20. Cuale es el recuerdo más feliz que tiene en su ABIF?

21. ¿Como ve su ABIF en el largo plazo? (futuro)

ASPROCIG

22. ¿En qué actividades de ASPROCIG participa y cada cuánto?
    - nivel de implicación
    - creación y compartición de conocimiento
    - ventas colectivas de productos
    - partes interesadas externas
    - poder y acceso a todos los miembros (mujeres, jóvenes, ancianos)

23. ¿Qué significa para usted ser parte de una comunidad como ASPROCIG?

24. ¿Qué significa para ustedes la naturaleza?
    - ¿Y porque es importante su conservación?

25. ¿En ASPROCIG se habla del sujeto cultural, a que se refiere?

26. ¿Qué problemas y necesidades ayuda a resolver y satisfacer la comunidad de asprocig?

27. ¿Cuáles han sido los eventos más importantes en su vida desde que es miembro de asprocig?

28. ¿De qué es lo que está más agradecido-a?

29. ¿Cuál es el papel de los jóvenes en ASPROCIG y cómo piensa que se pueden motivarlos a participar?

Dimensión ambiental ABIF

Cultivos

30. Por favor, me puede decir todos los cultivos que tiene (como especies y variedades)

31. ¿Como eliges los cultivos?
    - resistencia, competencia o factores puramente de mercado?

32. ¿Realiza rotaciones de cultivos?
    - ¿Qué secuencia usa?
    - ¿Cuánto duran las rotaciones?

33. ¿Plantan o tienen árboles, cómo se integran en tus sistemas de cultivo y animales?

Suelo

Arar

34. ¿Como trabaja el suelo?
    - ¿Con qué máquinas?
    - ¿Sabes hasta qué profundidad llegas al labrar?
    - ¿Cada cuanto trabaja el suelo por año?

Reciclaje de nutrientes

35. ¿Qué sucede después de cosechar un campo? ¿Deja los residuos, los compostas o los quemas?

Erosión

36. ¿Utiliza alguna práctica agrícola para reducir el escurrimiento (cuando el agua corre y se escapa en la superficie)?

37. ¿Utiliza alguna práctica agrícola para reducir la erosión del suelo en su granja? (por ejemplo, siembra en contorno, terrazas u obras de tierra)

Fertilidad

38. ¿Qué usa para mejorar la fertilidad en sus campos?
    - leguminosas en rotación de cultivos; leguminosas en abonado verde; abono orgánico: compostaje superficial, compostaje en montón; siembra de plantas compañeras en el cultivo principal; ¿reciclaje de residuos de cultivo?

39. ¿Compra fertilizantes sintéticos?

40. ¿Utilizas abono orgánico (estiércol de granja, compost, etc.)?
    - ¿Qué tipo?
    - ¿Lo compra, lo produce tú mismo o lo obtiene de alguna parte (ya sea gratis o a cambio de tus productos)?

Agua

41. ¿Como hace el riego?
    - ¿Ahorra agua (agua de lluvia, reciclaje de aguas grises)?

Semillas

42. ¿Cómo obtiene semillas para sus cultivos?
    - ¿Compra todas tus semillas o guarda algún porcentaje de la cosecha del año anterior?
    - ¿Hace sus propias plántulas?
    - ¿Compra semillas que sean híbridos F1 o variedades modernas, o semillas orgánicas o variedades de conservación/variedades desarrolladas para cultivar en condiciones particulares?

Manejo de plagas

43. ¿Tiene problemas con plagas de cultivos?

44. ¿Cómo lo maneja?
    - ¿Existen infraestructuras ecológicas intencionales creadas contra estas plagas (por ejemplo, franjas de flores y setos diseñados para mejorar las poblaciones de enemigos naturales)?
    - ¿Usa algún agente de control biológico? (enemigos naturales comerciales introducidos de la plaga, por ejemplo, hongos, bacterias, artrópodos, etc.)
    - ¿Usa pesticidas? ¿cuáles?

- ¿Usa algún pesticida orgánico (por ejemplo, insecticidas: nin, piretro; herbicidas: aceite de clavo y canela; fungicidas: sulfato de cobre)?
- ¿Cómo decides cuándo aplicar pesticidas?
- ¿Sigue algún sistema de monitoreo/alerta?

Manejo de Enfermedades

45. ¿Tiene problemas con enfermedades de cultivos?

46. ¿Cómo lo maneja?

Gestión de malezas

47. ¿Tiene problemas con malezas?

48. Si es así, ¿cómo los maneja?
    - ¿Utiliza deshierbe mecánico?
    - rotación de cultivos a largo plazo; pradera temporal en rotación de cultivos; especies y variedades de cultivos competitivas; cultivos asociados (por ejemplo, mezclas de cereales / legumbres); complejas mezclas de abonos verdes (cultivos de cobertura) en cultivos mixtos; cultivo principal sembrado en mucho de abono verde; cubierta del suelo permanente con especies acompañantes de los principales cultivos

Animales

Listas de animales

49. ¿Qué animales cría?

50. ¿Cuántas y qué razas tiene?

51. ¿Por qué decidió tener estas razas en particular (qué características tienen)?

52. ¿Tiene potreros o los animales están al aire libre?
    - ¿Cuántos potreros hay y cuán grandes son?

53. ¿Para qué están destinados los animales?

54. ¿Cuándo ya los van a matar para comer como lo hace animales?

Parásitos animales

55. ¿Tiene problemas con parásitos animales?

56. ¿Cómo lo maneja?

Enfermedades animales

57. ¿Tiene problemas con enfermedades animales?

58. ¿Cómo lo maneja?

Alimento

59. ¿Prepara usted mismo los alimento para animales o lo compra?

60. ¿Qué tipo de alimento es?

Acuicultura

Lista de animales

61. ¿Qué peces crías?
    - Por favor, enumera todas las especies presentes en tu granja y los números aproximados de cada especie/raza.

- ¿Por qué decidió tener estas razas en particular (qué características tienen)?

Parásitos animales

62. ¿Tiene problemas con parásitos animales?

63. ¿Cómo lo maneja?

Enfermedades animales

64. ¿Tiene problemas con enfermedades animales?

65. ¿Cómo lo maneja?

Alimento

66. ¿Compra todo o la mayor parte del alimento para animales o lo preparas tú mismo?

67. ¿De qué tipo de alimento se trata?

Conocimiento

69. ¿Dónde aprendió a hacer todas esas prácticas?
    - observación
    - TEK
    - experimentación
    - experiencia técnica
    - intercambio con los agricultores

Appendix 5: Workshop Guide

Taller: ASPROCIG - Un Modelo de Negocios Agroecológico y Sustentable

Sistema Solidario de Comercialización e ***Intercambio*** de Productos Agroecologicos

Objetivos

- Validar resultados investigación del modelo de negocios actual
- Analizar las fortalezas, debilidades, oportunidades y amenazas (FODA) del modelo
- Definir la misión y visión de ASPROCIG y sus familias
- Discutir estrategias para mejorar el modelo y fortalecer la comunidad

Información Práctica

- Participantes: 10-12
- Duración: 2 horas

Agenda

Introducción (10 minutos)

Dar la bienvenida a los participantes y explicar los objetivos del taller. Establecer expectativas para el día y discutir la importancia de la participación comunitaria.

Ronda 1: Validando el Modelo (25 minutos)

Dividir a los participantes en grupos de 3-4 y pedirles que discutan las siguientes preguntas:

- ¿Es una representación justa de SISIPA?
- ¿Falta algo, o se puede mejorar algo?

Después de 15 minutos, pedir a cada grupo que informe al grupo general sus conclusiones.

Ronda 2: Análisis FODA SISIPA (25 minutos)

Dividir a los participantes en grupos de 3-4 y pedirles que realicen un análisis FODA del modelo SISIPA. Después de 20 minutos, pedir a cada grupo que informe al grupo general sus conclusiones.

- **F**ortalezas
- **O**portunidades

- **D**ebilidades
- **A**menazas

Descanso (10 minutos)

Tomar un descanso para refrescarse y reenfocarse.

Ronda 3: Misión y Visión (25 minutos)

Dividir a los participantes en grupos de 3-4 y pedirles que discutan las siguientes preguntas:

Misión

- ¿Cuál es el principal objetivo del modelo SISIPA?
- ¿Cuáles son los principales objetivos de sus familias?

Visión

- ¿Dónde ven el modelo SISIPA dentro de 10 años? ¿Hacia dónde quieren que vaya?
- ¿Cuál es la visión ideal a 200 años?

Después de 15 minutos, pedir a cada grupo que informe al grupo general sus conclusiones.

Descanso (10 minutos)

Tomar otro descanso para refrescarse y reenfocarse.

Ronda 4: Estrategia (25 minutos)

Dividir a los participantes en grupos de 3-4 y pedirles que discutan las siguientes preguntas:

- ¿Cómo podemos aprovechar las fortalezas del modelo SISIPA?
- ¿Qué oportunidades podemos aprovechar SISIPA?
- ¿Cómo podemos abordar las debilidades del modelo SISIPA?
- ¿Cómo podemos moderar las amenazas al modelo SISIPA?

Después de 20 minutos, pedir a cada grupo que informe al grupo general sus conclusiones. Luego, discutir las siguientes preguntas en grupo:

- ¿Qué tipo de procesos podemos iniciar para fortalecer el SISIPA y la comunidad?
- ¿Qué ideas podemos perseguir en proyectos?

Conclusión (10 minutos)

Resumir las conclusiones principales del taller y discutir los próximos pasos. Pedir a los participantes que compartan su opinión y reflexion del taller.

Appendix 6: Agroecological Business Model Canvas (Analytical Framework)