



**"FOOD SOVEREIGNTY AS A
STRATEGY FOR ABUNDANCE AND
PEACE IN THE ZENU INDIGENOUS
COMMUNITY".**





SUMMARY

Given the risk of loss of cultural identity of the Embera indigenous community, settled in the municipality of Tierralta, who due to violence was evicted from their ancestral territory in Cauca, has reduced production for self-consumption by dedicating themselves to the cultivation of corn. In order to strengthen food sovereignty, ethnic empowerment and leadership of local actors, contributing to peace and building social fabric under the logical framework methodology, this project was designed, implemented and evaluated. In the formulation, the Sequential Transformative Design "DITRAS" was used for the collection and analysis of the information and under the mixed method of Participatory Action Research, an integral knowledge of the Embera indigenous community was achieved, obtaining alternative solutions to the problems encountered. The effect of the community empowerment process was interpreted and evaluated with the application of a monitoring tool, Abundance Evaluation (EvA), according to the degree of systemic balance. As a result, training processes were developed as a strategy to strengthen the values and talents of indigenous families, generate cultural and territorial roots and identity, articulate the social with the organizational, the environmental with the productive, the agroecological with the economic, cultural and political as part of sustainable rural development.

KEY WORDS: Sustainable development, ethnic empowerment, leadership, well-being.



INTRODUCTION

Thirty-five years ago, the indigenous communities of the Embera people were forcibly displaced and settled in the foothills of the department of Cordoba on the border with Antioquia, forming the Tuis Tuis resguardos. Although traditionally their subsistence activities have had an agricultural focus, in recent years they have focused their economy on the production of dry, roasted and ground parchment coffee under monoculture, which has led to the loss of crop diversity for their own sustenance, despite having fertile land for it. As a result, external dependence forces them to buy food at high prices due to geographic isolation, coupled with the poor condition of the roads.

Considering that, in the different Latin American meetings of indigenous peoples, they affirm that food is a collective right and food sovereignty is essential to guarantee their cultural identity, it is important for the survival of indigenous ethnic groups to preserve their customs and traditions, and what better way than through the improvement of their food condition to have a positive impact on their living conditions and cultural identity. Thus, the communities of this project are aligned with two of the Sustainable Development Goals (UNDP, 2016): *"End hunger, achieve food security and improved nutrition and promote sustainable agriculture"* and *"Ensure sustainable consumption and production patterns"* (p. 18).

Once the family's healthy nutrition is guaranteed, it is necessary to provide training in transformation and conservation processes to take advantage of their own food crops, according to their cultural identity, guaranteeing food security at any time of the year, encouraging the exchange of products with nearby communities, generating the conditions to participate in farmers' markets, creating market alliances, which constitute a real source of income for the Embera and improve their living conditions. the same time, it is necessary to strengthen the leadership of the Embera families as main actors of the territory, where each one is free, independent, sovereign, autonomous and capable of transforming their reality; taking advantage of the opportunities offered by the environment and thus obtaining the capacity to face conflicts and challenges through dialogue, generating alternatives of abundance and peace.



To achieve an integral perception of the reality of the Embera reservation (culture, socio-political, economic and territorial organization) of the municipality of Tierra Alta, we worked under the mixed method of research applying the tools of the Sequential transformative design "DITRAS" having equal relevance of quantitative and qualitative information, through the Participatory Action Research that allows the expansion of our knowledge of the Embera indigenous community; generating concrete answers to the problems encountered and at the same time contributing to variables of solution alternatives and the application of a monitoring tool for sustainable rural development processes, used by the Andean Foundation called Abundance Evaluation (EvA), which consists of evaluating and interpreting the effect of the process of empowerment of a family and/or community, in the degree of systemic balance between the PESCA components (Political, Economic, Social, Cultural and Environmental), assigning a valuation and quantitative scale to each segment.



Background

According to the Food and Agriculture Organization of the United Nations, international law defines the right to human food as that which guarantees people access to a balanced diet and sufficient resources for permanent and sustained food security (FAO, 2012). Hence, food security is the fulfillment of this right.

With a clear concept of food security, it is important to know the background of the work, progress and studies specifically with indigenous communities.

In 1992, in Rio de Janeiro, it led to the Food Security Treaty, which recognizes that traditionally agricultural peoples possess significant knowledge of the principles of food security, which can be applied to sustainable production systems (FAO, 2012). In the different Latin American meetings of indigenous peoples, they maintain that food is a collective right and food sovereignty is indispensable to guarantee their cultural identity, but that they face problems in the administration of territories and in taking sustainable advantage of the natural resources of the environment.

In 2004, within the framework of the IV Meeting of Indigenous Women of America Peru, it was recognized that indigenous women play an indispensable role in the nutrition of their peoples; , they committed themselves to retake the values, traditions and the recovery of their food and seeds.

The first review corresponds to Monje (2015) in his scientific article raises an analysis of the different economic models and postulating agroecology as a strategy of ethno-ecodevelopment; ensuring that the current transformations, social dynamics, land use and unsustainable use of natural resources generate an impact on local culture, consumption standards, production models and living conditions.



Arias; Carpio; Herrera and González (2016) analyze the Amazonian Kichwa agro- biodiverse system, where they describe the main species with added value, which have been produced in diversified crops, and quantify the income, making an economic evaluation of this agro-biodiversity, in order to establish models of sustainable local development for rural communities, whose real results are reflected in the sustainable management and conservation of natural resources and constitute tools to reduce poverty and the permanence of cultural identity.

The study provides tools that justify the project activities, with the objective of strengthening the processes proposed by the community, the conservation of its culture and environment, and productive diversification.

Fajardo (2016), reviews basic aspects of the agrarian sector and analyzes the main proposals that contribute to the design of an alternative development system, from a construction of peace

territories and where communities are actors that propose alternatives for the satisfaction of their fundamental needs. The strengthening of the social fabric, the reconstruction of territories through the conservation and restoration of ecosystems, with priority given to water sources,



soils and native forests. It also states that technical assistance is the opportunity to establish peasant cooperative community nuclei at the local and regional levels with national coordination (p. 46).

The productive capacity must be strengthened, articulated with environmental protection, supported by active social groups, strengthening them and restoring those affected by the armed struggle. It is necessary to build social fabric and unity ties among rural communities (aboriginal, peasant, Afro-descendant) to generate empowerment processes and articulation with the State.

It is directly related to the project, it states that in order to build peace, social factor must be a priority, respecting the processes of organization and government of the communities.

communities, which must be strengthened with actions with actions that guarantee the restoration, recovery and strengthening of local leadership and cultural identity.

Plazas and García (2017), state that in order to develop empowerment processes, it is necessary to implement strategies that involve different branches of knowledge and technical accompaniment according to the context of each community, where the main objective is to contribute to local human development, that is, from the sustainable approach, the social axis is the pillar, before the economic and environmental axis. The authors consider that it is necessary to strengthen qualitative research on technical, social and cultural processes, with respect to the ancestral knowledge of the community and families, in order to contribute to the processes of empowerment at the governmental and economic level; with leadership at the local level. (p. 131).

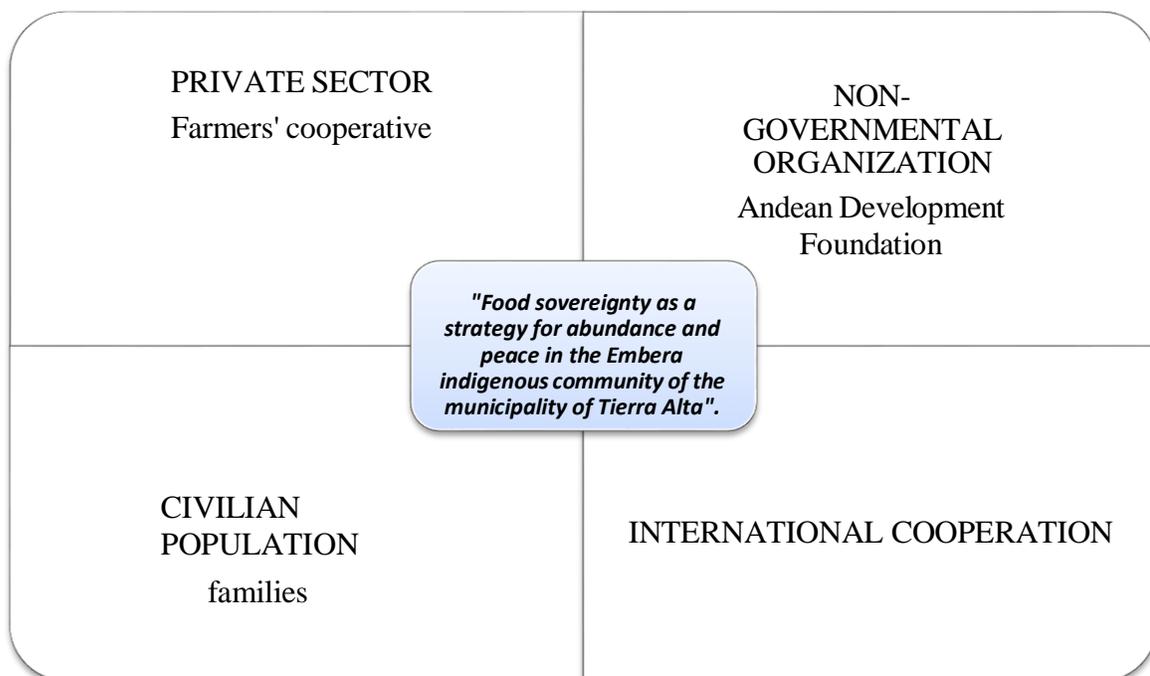
Within empowerment, associative and cooperative processes of participatory action must be strengthened to provide strategies that guarantee food sovereignty and security, from the individual to the collective, showing positive effects on the social axis. To achieve the above, the knowledge of producers must be strengthened, their qualities must be enhanced and confidence must be generated in their life projects, through the dialogue of knowledge articulated with scientific knowledge,

The main conclusion is that communities develop empowerment when they are able to participate, decide, negotiate, influence and control, generate institutional alliances; so that they can generate positive impacts in their family and productive environments, thus achieving leadership processes in their territories.

is evidence of the importance of strengthening leadership and ethnic empowerment that our project aims to achieve.



In the following diagram we can see that they belong to the education sector, private sector, civil population, non-governmental organizations and international cooperation.



Justification



In the municipality of Tierra Alta, Cordoba, there are two Tuis Tuis indigenous reservations made up of 314 and 394 inhabitants of the Embera ethnic group, who arrived in the region in the early 1970s. The indigenous community of Tierra Alta owes its subsistence to small-scale agriculture and cattle ranching (POT, Municipality of Tierra Alta).

The Tierra Alta Veredal Zone in Cordoba is the place where the end of the FARC as an illegal armed group was symbolically marked, beginning the implementation of the peace process; From a leading role of the municipality, it shows the oblivion to which it was subjected for decades due to the absence of the state as evidenced by the roads that connect this area with the rest of the Eastern Plains that are still in poor condition, the health center and educational institutions, the rural sector and the indigenous communities in the area have not developed rural development projects because they have been in oblivion. Today, thanks to this peace process, it is expected that resources will arrive to improve the quality of life, especially for the peasants and indigenous people.

The natural resources for historical reasons (economic bonanzas) have diminished notably, their land cultivation methodology impoverishes the soil and causes families to use more natural resources, cut down trees and do not protect water sources. Overcoming this system generates very important results

for the families that manage to improve the living conditions of peasants and indigenous people with the methodology of exchanging knowledge, human empowerment, leadership training and agroforestry systems.

Poor nutrition, especially for children and the elderly, is critical, since the food and preparation is not varied due to the loss of the diversity of cultivated food, and despite having fertile land to grow their own food, they must buy it at expensive prices due to transportation in the area; to mitigate, the project seeks food sovereignty that promotes a varied and nutritious native cuisine based on cultivated products. Given that the products are seasonal, one solution to provide a diverse diet that meets nutritional requirements throughout the year is to process some products to preserve them for a longer or shorter period of time.

With the purpose of responding to the rights of indigenous people as set forth in the Political Constitution of Colombia of 1991 and Law 21 of 1991, the project seeks to contribute to the improvement of the living conditions of indigenous communities, strengthening food security based on the strategies stipulated in the regional and municipal development plans, respecting local indigenous knowledge.



The need to conserve, restore and make sustainable use of productive ecosystems becomes an environmental, social and economic priority that cannot be postponed by the different actors who must implement actions that benefit the peasant and indigenous communities that have been involved in the armed conflict.

Objectives

General

Strengthen the food sovereignty of the Embera indigenous community as a strategy of abundance, guaranteeing sustainable human development, the permanence of the communities in the territory, contributing to peace and the construction of the social fabric.

Specific

Strengthen productive, social and political processes for food sovereignty of the Embera culture through the application of participatory methodologies.

Develop pedagogical processes with Embera leaders for the implementation of agroecological models that guarantee the sustainable management of soil, water, forest and seeds.

Strengthen leadership as an empowerment strategy.

Project design

Project identification

Articulation of the project with public policy

The project "Food sovereignty as a strategy for abundance and peace in the Embera de Tierra Alta Resguardo", is articulated to the National Development Plan 2018-2022 "***Pact for Colombia. Pact for equity***", complying with the following pact: "***Pact for equity of opportunities for indigenous, black, Afro, Raizal, Palenquero and Rrom groups.***" (DPN, 2018).

The strategies in which the project is framed are the following.

We will strengthen programs aimed at generating income for ethnic groups through productive projects, strengthening food security, managing the sustainable use of biodiversity and the environment, and economic



sustainability.

We will formulate and implement strategies to safeguard all traditional knowledge related to biodiversity and risk management.

We will promote the participation of ethnic groups and Afro-descendant peoples (black, Afro-Colombian, Raizal and Palenquero communities) in the municipal culture councils.

The project is framed in axis 3 "**economic and territorial sustainability**" of the departmental development plan "*Cordoba Land of Opportunities*" (Development Plan of the Department of Cordoba 2016) which is related to the following programs:

Program 1: the countryside, an opportunity for peace. This seeks to develop the agricultural sector by improving the living conditions of rural inhabitants through training and access to public goods, greater productivity with technical assistance, better production practices, and improved marketing (Development Plan of the Department of Cordoba 2016, p. 141).

In order to generate alternatives for immediate solutions to the nutritional needs of the indigenous population in imminent conditions of nutritional risk and on a par with the large productive projects, it is of vital importance to design and execute projects that ensure the family economy of indigenous and peasants, projects that are articulated with the life plans and the conditions of the territories, projects that work in an articulated manner with aid, technical support, training and management of access to new marketing channels, especially in territories of peace (post- conflict).

Analyzing the Development Plan of the Municipality of Tierra Alta 2017 -2019 "**With the heart for Tierra Alta**", the following program is fulfilled:

Program 20. Differential Approach, which promotes concertation and indigenous life plans in municipal development. (POT, Municipality of Tierra Alta, 2017).

The project "Food sovereignty as a strategy for abundance and peace in the Embera Resguardo of Villa Lucia and Onda del Cafre" contributes to the fulfillment of the following cordobas.

Support community projects for food security and autonomy, production and territorial management for indigenous families in the municipality.



4.1.4 Alternative solutions

The project seeks to contribute to the construction of social fabric, cultural identity and peace by strengthening the food sovereignty of the Embera indigenous community of the municipality of Tierra Alta in the Department of Cordoba.

In order to fulfill the purpose of strengthening the food sovereignty of the Embera indigenous community as a strategy of abundance, guaranteeing sustainable human development, the permanence of the communities in the territory and contributing to peace and the construction of the social fabric, the following alternatives are proposed:

Develop training processes in Sustainable Tropical Agriculture, Food Security and empowerment and leadership.

It is proposed to develop training processes as a strategy to strengthen the values and capacities of indigenous families, to generate a sense of belonging, pride the identity of their culture and territory, to articulate the axes of sustainable development: social (community building), economic (implementation of agroecological production models) and environmental (responsible use of natural resources, ensuring their



conservation). With the purpose of strengthening the leadership of the Embera families as the main actors of the territory to overcome and confront conflicts and challenges in an organized and coexistent manner, generating alternatives of abundance and peace.

Implementation of agroecological models that guarantee the sustainable management of soil, water, forest and seeds.

In the implementation of the multi-productive plots (chagras), the bases of the Agroforestry System will taken into account, in the first recognition of the territory, following Agroecological model of one thousand (1,000 m²) square meters has been established, with a variety of 35 species, whose productive cycle begins in the third month.

Consulting and technical support

As a solution, a participatory diagnosis is proposed to initiate the project with the objective of identifying the characteristics of the territory, in workshops and tours with the communities and the local communities. recognize the main problems of the Embera Resguardo. It has a systemic character that integrates different components of good human living; the environmental, social, and productive component, all of which allows to guide and define the work schedule to ensure food security and in the long term exercise food sovereignty for its population. technical accompaniment seeks to develop a vision of work with the communities where it is conceived as a family to family accompaniment, which goes hand in hand with the practice, approach of sustainable tropical agriculture based on human development under an integral approach from the indigenous worldview, whose purpose is to develop skills so that the community becomes a manager and promoter of its own development (Rodriguez and Hesse, 2012).

5.1 Project Phases

Within the methodology used in the project, Logical Framework, which is elaborated by objectives, is oriented towards beneficiary groups and facilitates participation and communication among the parties involved, we find the following phases:



DESIGN

- Identification and analysis of the problem
- Analysis of objectives and alternatives.
- Project identification (logical framework)

EXECUTION

- Execution plan
- Development of activities
- Management reports

EVALUATION

- Compliance with indicators
- Relevance
- Impact

Figure 4: Phases of the project as a strategy for abundance and food sovereignty peace according to the logical framework. *Own source



5.2 Schedule of activities.

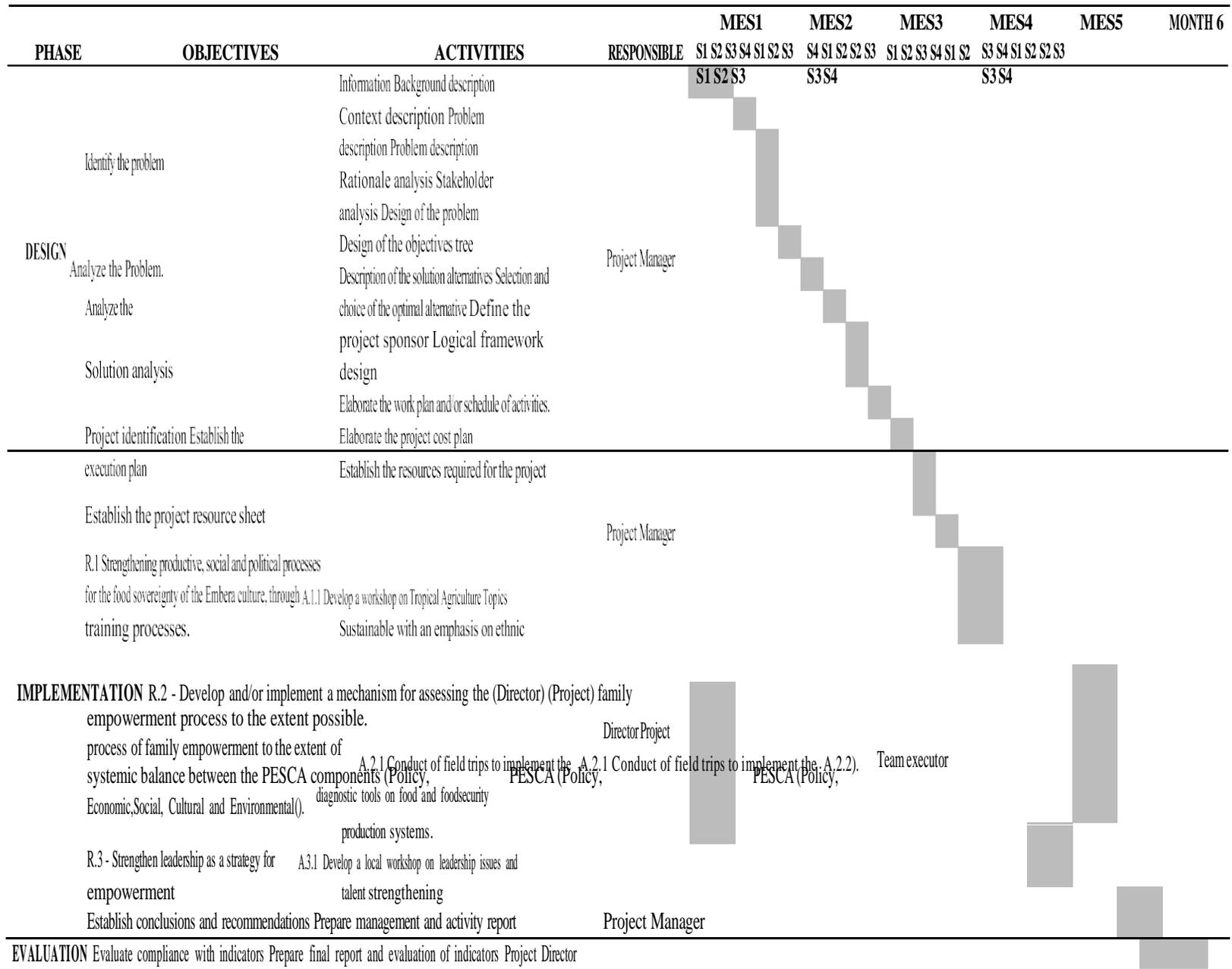


Figure 5.: Gantt chart of the food sovereignty project as a strategy for abundance and peace. * own source



4. 3 Cost estimation

The cost of the project was established based on historical information from the La Andina Foundation, in relation to the last workshops held.

Table 5

Costs of the food sovereignty project as a strategy for abundance and peace

ITEM	DESCRIPTION	UNIT	QUANTITY (1)	RATE\$ (2)	COST TOTAL\$ (3)= (1)x(2)
BASIC TRAINING WORKSHOP ON TROPICAL AGRICULTURE WITH 1 EMPHASIS ON EMPOWERMENT					0
1.1	Lodging (3 nights)	Und.	75	60.000	4.500.000
1.2	Meals (includes breakfast, lunch, dinner, 2 snacks for 3 days)	Und.	25	141.000	3.525.000
1.3	Transportation	Gl	1	3.000.000	3.000.000
1.4	Speakers	Gl	1	4.500.000	4.500.000
1.5	Logistics and materials	Gl	1	500.000	500.000
2 ETHNIC EMPOWERMENT AND LEADERSHIP TRAINING WORKSHOP					
1.2	Food (lunch, 1 snack)	Und.	15	16.500	247.500
1.3	Vergeal transportation	Und.	1	250.000	250.000
1.4	Speakers	Gl	1	800.000	800.000
1.5	Logistics and materials	Gl	1	250.000	250.000
3 EVALUATION TOOL APPLICATION					
3.1	Professional fees	Month	2	3.200.000	6.400.000
3.2	Travel expenses	Gl	1	1.000.000	1.000.000
			TOTAL		24.972.500

5. 4 Project resource

5.4.1 Human Resources

Project Director: Industrial Engineer; in the process of completing her degree in project management; with skills and experience in administrative, financial and accounting processes, management systems, human resources and strategic planning.

Executing team - lecturers.

Professional agronomist, specialist in sustainable tropical agriculture.

Professional zootechnician, specialist in applied ecology: Graduated from the National University of Colombia in Zootechnics, specialist in applied ecology from the University of Sherbrooke (Canada). With knowledge and experience in animal welfare, clean production, management of sustainable tropical production systems, inclusion of multipurpose tree component, restoration and protection of riparian forests, land management and rural mapping. Professional practice in different cultural and ecosystemic environments, both national (tropical rainforest in the Orinoco foothills, flat and dissected highlands and



high Andean forest), as well as international (dry subtropical forest in North Africa -Morocco- and boreal forest in North America -Canada).

5.4.1 Financial resources:

The project executed an allocation in Colombian pesos of twenty-four million nine hundred seventy-two thousand five hundred pesos (\$24,972,500), financed by the La Andina Foundation.

5.4.2 Technological resources.

The following technological devices were used in the development of the project: personal computers (owned by each of the professionals), *video-beam* (owned by the La Andina Foundation).

5.4.2 Physical resources.

The training workshops were held at the La Andina Agroecological Center, located in the village of La Floresta, Restrepo (Cordoba), where food and lodging expenses were covered with financial resources.





5. 6 Plan of implementation of activities

Within the action plan, the theme of the training workshops was established, in order to be framed within the project's objectives.

5.6.1 Basic Workshop on Sustainable Tropical Agriculture with emphasis on empowerment.

Objective: Restore sovereignty over food, family economy, ethnoculture, political values, conservation and control over their territories, under a systemic approach of abundance.

Cordoba: 25 farmer leaders trained in Sustainable Tropical Agriculture and life plan from the inner strengthening of the self and its relationship with the environment.

Methodology: Participatory action

Description: This workshop is a collective space of integral formation, where around reflections on the self, family and community work, the participants are oriented to a change of mentality and the breaking of paradigms, triggering a process of peasant empowerment. Where everyone is free, independent, sovereign, autonomous and capable of transforming their reality by taking advantage of the opportunities offered by the environment. It is demonstrated that to be indigenous is to live in abundance, convinced by example, this, according to the testimony of successful cases of families who have achieved changes in their lives by adopting the principles disseminated by the foundation and through exercises and practices where everyone learns by doing.

Themes: Construction of the baseline of the life plan; systemic approach (tour of the Tuis Tuis Agroecological Center); food sovereignty, ethnic empowerment, testimonies of the Life Plan of the promoters who have advanced in the process; inventory of local abundance, dry design, planting plot and construction of life plan (practice and socialization).

Duration: twenty-five (25) hours

Speakers: Agronomist José Zárate and zootechnician César Guevara.

5.6.1 Workshop on empowerment and leadership.

Objective: To understand the importance of strengthening leadership in order to contribute to the solution of problems and the strengthening of the social fabric and peace.

Cordoba: 15 farmer leaders trained in empowerment and leadership strengthening.



Methodology: Participatory action.

Description: The workshop addresses the topic of leadership, analyzing the history of mankind where it is evident that there have always been people who generate changes, leadership is innate to social relations. Tools are explored to develop in the leader the ability to work as a team, that is, that each member works and contributes the best of himself to achieve a common goal and is intended to raise awareness that leadership generates changes that benefit everyone.

Topics: what it means to be a leader, the leader is born or made, the leader gives meaning to the life of his followers, type of leadership, qualities of a leader, change of habits, the secret of a leader, teamwork.

Duration: five (5) hours

Speakers: Industrial Engineer Sonia Marleny Garzón.

5.6.3 Application of the Abundance Assessment tool.

Sustainability as a multidimensional concept that encompasses the articulation of social, economic and environmental aspects requires a systemic approach for its interpretation or analysis. Hence, a systemic approach is required for its interpretation or analysis.





sustainability monitoring is to observe, assess and interpret the effect of a family's farmer empowerment process on the degree of systemic balance between the PESCA components (Political, Economic, Social, Cultural and Environmental) at a given time.

Description. It is a tool to detect imbalances and disconnections that may exist among the PESCA elements of a peasant and/or indigenous family; in which it is determined on which of the factors the family must work to restore the balance of the farm system, improving its functioning and therefore its own wellbeing. Given the temporal nature of monitoring, it allows comparing the progress or dynamics of a family's sustainability with respect to an initial state. This provides a dynamic follow-up that aims to ensure the stability and balance of a family's systemic sustainability over time.

Methodology: Through the observation and analysis of the criteria of the PESCA factors considered most relevant. This group of criteria is used for the construction of a multi-criteria sustainability evaluation tool.

Components: The tool is composed of five dimensions Political, Economic, Social, Cultural and Environmental. The relative importance of each dimension is valued according to a weighting coefficient on a scale of 100 points.

Table 7
Abundance assessment dimensions and weighting coefficients

Factor	Weighting coefficient
1. Political	15
2. Economic	15
3. Social	30
4. Cultural	20
5. Environmental	20
Total	100

Note: Retrieved from Fundación la Andina 2018. <http://www.fundacionlaAndina.org/es/>



The score assigned to each dimension is redistributed to the criteria selected by segment, also weighted in a range of 100 points (Tables 2 to 6). The criteria to be considered in each dimension are presented below:

The political dimension considers the participation and incidence of the family in criteria such as local politics, the construction of local land-use planning policies, the monitoring and evaluation of local development public policies and the effect of the family as a reference for local development by involving other families.

Table 8

Criteria and weighting of the political dimension of the abundance assessment.

Dimension	Criteria	
1. Policy	1.1. Incidence of the family in the political arena	30
	1.1. Construction of local management policies territorial	20
	1.2. Monitoring and evaluation of public policies for local development	20
	1.3. Advocacy as a development benchmark	30
Total		100

Note: Retrieved from Fundación la Andina 2018. <http://www.fundacionlaAndina.org/es/>

The economic dimension values the family's participation in associations in the productive area of interest, the development of innovation processes and the implementation of sustainable production practices that favor the reduction of production costs, the improvement of its competitiveness, as well as the application of business concepts and processes to the production system (value added, brand design, type of packaging, etc.) and the development and implementation of marketing strategies that allow the family to simplify the commercialization chain.



Table 9

Criteria and weighting of the economic dimension of the abundance assessment.

Dimension	Criteria	
2. Economic 2.2.	2.1. Aggregation	10
	Efficiency	30
	2.3. Degree of innovation and competitiveness	40
	2.4. Agricultural Marketing	20





Total

100

Note: Retrieved from Fundación la Andina 2018. <http://www.fundacionlaAndina.org/es/>

The social dimension evaluates the family's knowledge, understanding and daily practice of the criteria quality of life defined as the degree of satisfaction under the current living conditions in aspects such as housing, health, food, education, clothing, recreation, transportation; family integration determined by intra-family relations in terms of inclusion, generational replacement and gender equity; food sovereignty seen as the independence to decide what to eat without resorting to external sources to provide food; the construction of the life plan as a guide that determines a vision of where we want to go and how through the mission; responsible consumption in relation to consumption habits that respond to real needs and ensure environmental care and social equity.

Table 10

Criteria and weighting social dimension of abundance assessment.

Dimension	Criteria	
3. Social	Quality of life	20
	Food sovereignty	20
	3.3. Family integration	15
	3.4. Life plan	25
	3.5. Responsible consumption	10
	3.6. Community coexistence	10
Total		100

ote: Retrieved from Fundación la Andina 2018. <http://www.fundacionlaAndina.org/es/>

Within the cultural dimension, the family's self-recognition and identification with its cultural legacy are valued, assessing whether the family feels proud of its rural origin, of the memories, knowledge and practices of its ancestors, by regularly carrying out and participating in traditional folkloric and culinary activities, festivities and celebrations.



Table 11
Criteria and weighting of the cultural dimension of the abundance assessment

Dimension	Criteria	
4. Cultural	4.1. Self-recognition and identification with the legacy cultural	40
	Folkloric traditions	30
	4.3. Gastronomic traditions	30
Total		100

Note: Retrieved from Fundación la Andina 2018. <http://www.fundacionlaAndina.org/es/>

The environmental dimension measures the coherence of the family production system with the

The systemic approach is reflected in the complementarity and interaction between the different productive components of the farm, through its family life plan, where the implementation of agroecological practices aimed at the recovery and conservation of water, soil, forest and seeds, the generation of goods and ecosystem services, and essentially, with the protection of the existing wealth (for this we identify the number of goods (dairy products, meat, eggs, skins, fruits, vegetables, etc.), and the number of products (dairy products, meat, eggs, hides, fruits, etc.) that are produced in the farm, legumes) and services generated (water regulation, soil protection and construction, climate change mitigation).

Table 12
Criteria and weighting environmental dimension of abundance assessment.

Dimension	Criteria	
5. Environmental	5.1. Soil	15
	5.2. Water	25
	5.3. Forest	15
	5.4. Seeds	15



5.5. Systemic approach	15
5.6. Ecosystem goods and services	15
Total	100

Note: Retrieved from Fundación la Andina 2018. <http://www.fundacionlaAndina.org/es/>

For each criterion, the situation encountered is selected, the score of which is predetermined in the rating scale. The value found is written in the "Rating" column. These values are totaled by dimension and the results of the sum are plotted in Radial form. The evaluation scale determined to establish the level of sustainability of each family is summarized in the following table:

Table 13

Abundance assessment sustainability rating scale.

	Qualitative	Quantitative
Family with system of sustainability	outstanding	≥ 90
	high	75 - < 90





half	55 - <75
low	30 - <55
very low	< 30

Note: Retrieved from Fundación la Andina 2018, <http://www.fundacionlaAndina.org/es/>

Under this model, those families that obtain an average sustainability estimate of at least 65 points are considered to be acceptably sustainable.

EVALUATION

In the following matrix we evaluated compliance with the established cordobas, since we had all the information that allowed us to compare the project indicators in relation to the components and activities.

Taking into account the mixed approach, a qualitative scale is used with the following features: very satisfactory, satisfactory, unsatisfactory and very unsatisfactory. The quantitative valuation in percentage according to the significant degree, with an acceptance equal to or higher than 70%.



Table 14
Evaluation of the food sovereignty project as a strategy for abundance and peace

	OBJECTIVES	INDICATORS SET	EXECUTED	QUALITATIVE ASSESSMENT	QUANTITATIVE ASSESSMENT
FIN	Contribute to the construction of social fabric, cultural identity and peace by strengthening food sovereignty of the Embera indigenous community.	R.0 Strengthen sovereignty food from community (indigenous Embera), as strategy	70% of of families trained, 17 families participate, expressing interest in		
PURPOSE	the abundance ensuring the (human) development) sustainable, the permanence of) the communities in the territory and contributing to peace and weaving social.	actively in the different of continuing with the process of processes and is organized in training, activities and own structures that have an impact on strengthening the life plan the life) (plans) (of the) (delresguardo)		Satisfactory	94%
COMPONENTS	mechanism of valuation of empowerment process (valuation)	At the end of project 25 families 23 leaders were trained in food sovereignty of the Embera culture, through the development process, with emphasis on empowerment and sustainable tropical agriculture through the development process, with emphasis on empowerment and sustainable tropical agriculture, through training processes. participatory, contributing to the social fabric and peace		Very satisfactory	92%
	R.2 - Develop and/or apply a mechanism of valuation of empowerment process (valuation)	The 50% of the families development development y The Evaluation of Sustainable			
	family in the degree of equilibrium systemic between components PESCA (Political, Economic, Social, Cultural and Environmental).	include the abundance abundance a 12 families. productive and cultural, such as strategy of peace		Very satisfactory	92%
	R.3 - Strengthen leadership like empowerment	At the end of the project 15 families 12 leaders are trained in strategy to strengthen in leadership for leadership and ethnic empowerment strengthen empowerment ethnic.		Satisfactory	80%
ACTIONS	Related to Result 1 A.1.1 Develop a workshop in Topics in Sustainable Tropical Agriculture with emphasis on ethnic empowerment	Budget	16.025.000		
	Related to Result 2 A.2.1 Conduct of tours of field to apply instruments of food safety and food safety systems diagnostics production.		7.400.000		
	Related to Result 3 A.3.1 Develop a local worksh				



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