

# Climate change resilience via production that preserves biocultural heritage

Producer organization: Artisanal Producers Association of Agricultural and Livestock Goods of Napo – KALLARI



Ecuador - Climate Resilience Case Study No. 2

Carlos Poso, 2020



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Cover photo: Kichwa women engaged in the traditional Chakra agricultural activities in Ecuador.

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## EXECUTIVE SUMMARY

The Artisanal Producers Association of Agricultural and Livestock Goods of Napo – known as KALLARI is an association that spans by 21 communities and involves 850 families (and a total of 5,000 beneficiaries). It is in Tena Canton, Napo Province, Ecuadorian Amazon Region. This case study demonstrates how the indigenous Kichwa families involved with KALLARI are maintaining their biocultural heritage in the form of the 'chakra' agroforestry system and in so doing maintaining resilience to climate change.

The Kichwa families integrated in KALLARI are mainly engaged in agricultural activities both for commercial production and for food sovereignty purposes. The main agricultural products from the area are cassava, banana, cocoa, guava, vanilla, coffee, corn, beans, and peanuts as well as a great variety of fruits. In addition, within the productive systems are integrated a series of forest species and plants for medicinal use. Many plants are also used to produce local tools, cosmetics, and handicrafts. All these crops are managed under the traditional system of production of the Kichwas, called 'chakra'.

KALLARI has managed to turn the traditional production system into a market advantage. It has researched and promoted how the cocoa, guava and vanilla cultivated by KALLARI's members, and grown under this traditional system, has unique organoleptic characteristics of taste and smell that are due to its special cultivation conditions. Because of this, KALLARI has managed to position itself very well in the markets and its origin is recognized and valued by the chocolate, vanilla, and guava industry at a national and international level. The commercialization strategy for cocoa, guava, vanilla and KALLARI crafts is tied to the chakra and its inherent conservation of agrobiodiversity, as well as the Kichwa culture. Together these elements comprise part of Kichwa biocultural heritage.

The Amazon chakra itself refers to a diversity of agroforestry systems developed by the Kichwa communities, due to their heterogeneousness and biocultural diversity they offer multiple services to the populations in the Ecuadorian Amazon, ranging from climate change resilience, climate change mitigation and adaptation to issues such as food sovereignty. At the level of biodiversity conservation, the different agroforestry systems of the chakra offer various habitats for species of mammal, reptile and amphibians, birds, invertebrates, etc.

Resilience to climate change has been linked to the levels of crop biodiversity (both diversity with species and diversity between species but within the productive ecosystem). The greater the numbers of crops, the more likely it is that failure of any one crop component will be offset by production of other crops. The inherent diversity of species and products within the agroforestry systems of cocoa guava and vanilla have been found to perform better during extreme climatic events than monoculture cropping systems, especially taking into account the characteristics of the Amazon land, for example, the shallow depth of the fertile soil layer and the deficiencies of certain nutrients. In the Amazon, soil management is an essential element of sustainable agricultural practices and the chakra agroforestry systems are particularly good at maintaining soil organic matter and water retention.

# 1. INTRODUCTION

## 1.1 NAME AND VISION

This case study covers the Agro-artisan Producers Association of Agricultural and Livestock Goods of Napo – named KALLARI. It comes from the Napo region of the Ecuadorian Amazon.

The KALLARI case pays particular attention to respecting (and sometimes recovering) ancestral production practices of the Kichwa indigenous peoples that retain the values of ‘Sumak Kawsay’ (Good living or living well). Within the indigenous Kichwa communities, production systems are not just shaped by profit, but by a wide range of social, economic, cultural, and environmental values. These values fundamentally shape the local production of cocoa, guava, vanilla, and coffee.

The breadth of values in no way diminishes the importance of maintaining quality and generating income. Indeed, this case study describes a progressive movement towards the transformation of agroforestry products, in a productive process that allows members of the association to:

- raise the quality of their products, improve their prices,
- increase their production volumes without losing quality,
- certify what they produce, and
- internationalize their markets,
- all in a framework that preserves their biocultural heritage.

Within the KALLARI association, education has played a fundamental role in involving the population in the fight against climate change. This phenomenon is still little known to the public, but changes that are occurring can be managed through practices that are part of the daily Kichwa reality and are related to the sustainable use of resources.

The Kichwas of the Napo are settled in the provinces of Napo, Orellana, and Sucumbíos. The total Kichwa population is around 70,000 people who are found in rural communities and in the urban part of the provinces of Napo Orellana and Sucumbíos. Their native language is called ‘Runa Shimi’ which is believed to be native to Kichwa serrano, however, it presents different characteristics across its range. The second language is Spanish, used for the relationship with other communities and tourists.

The main Kichwa economic activities are based on agriculture, hunting, fishing, gathering, and the exchange of products and crafts. This indigenous people have a rich medicinal knowledge especially regarding plants, but despite this material and cognitive richness, the presence and spread of chemical medicine is undeniable.

KALLARI is an organization made up of 95% Kichwa members and with 5% of mestizos or settlers as they are usually known. The Kallari Association was legally constituted on December 10th, 2003 in the city of Tena. It is made up of 850 families belonging to 21 communities located in the Canton Tena, capital of the Province of Napo.

The main productive activities of KALLARI lie in the production, commercialization of organic cacao, guayusa and vanilla, and the production, commercialization, and sale of chocolate to local, national, and international markets. The commercial activities of KALLARI have enabled it to become a sustainable source of income for Kichwa families, allowing them to improve their quality of life.

KALLARI is a cooperative that competes in the market with private companies, both nationally and internationally, and thanks to the quality and innovation of its products, it has managed to open a space in the market for fine chocolate with particular flavours and aromas, alongside (and sometimes mixed with) vanilla and guayusa. The cooperative uses an unusual combination of cocoa beans that grow in the Kichwa Chakra: the chocolate is soft, rich and a mixture of fruity and floral tones. To become chocolate makers, the Kichwas first had to decide to be more than just farmers and break the chain of intermediaries, who bought cocoa at low prices.

‘Kallari’ is a Kichwa word that means ‘to start or initiate’, or ‘beginning’.

KALLARI's vision is to be a community association with a business outlook in the Ecuadorian Amazon that carries out agro-productive practices, to produce, process and commercialize in local, national, and international markets. Its values include quality, sustainability and permanent innovation of organic products and crafts which maintain cultural identity and are sourced from the chakra. It aspires towards production based on the formation of human talent, equity, participation, that helps to improve the socioeconomic situation, conserve the Amazon ecosystem, and take advantage of the resources in a sustainable way.

## 1.2 LOCATION

As noted above, the KALLARI Association spans 21 communities, and comprises 850 families with a total of 5,000 beneficiaries, located in Tena Canton, Napo Province, Ecuadorian Amazon Region.

The chakra system involves the agricultural practices implemented ancestrally in the Amazon, mainly in Napo. These agricultural practices group many different plants in the same plot. For example, farmers will cultivate main products such as cassava, banana, cocoa, guayusa and vanilla, etc. and other associated sub-products that can be of different species such as medicinal, fruit, citrus, wood, among others, which help to flavour and contribute to the organoleptic characteristics of fine aroma cocoa, which has made cocoa from the region a highly demanded product in the world market an account of its quality.

The chakra as a living space is managed mainly by the Chakramama or woman of the chakra with the participation of the broader members of the family. Beyond the productive dynamics, the chakra is characterized by maintaining a high agrobiodiversity that is rotated and combined. The same productive landscape is also the habitat of birds, insects, mammals, amphibians, and small reptiles. The system offers important ecosystem services. In its socio-cultural dynamics, the families that live there have developed invaluable ancestral knowledge for the management of polyculture and natural resources with the application of good practices for the sustainable use of the forest, seeds, water, and soil. The ancestral systems guarantee food security and income generation for the families.

The chakra is also a productive space located within the farm, managed by the family under an organic and biodiverse approach, valuing ancestral knowledge, where commercial, timber, fruit, artisanal, edible, medicinal and ornamental species are found as well as endemic and domestic fauna. Managed with an ecological distribution of plants that allows balanced and sustainable production, the system serves both family consumption and commercial marketing. There is a strong emphasis placed on preserving the agro-ecological and cultural characteristics of ancestral production processes, avoiding the modern production modalities of monocultures.

## 1.3 FOUNDATION AND MEMBERS

Almost two decades ago, some Kichwa individuals began the journey of strengthening an association with a new perspective. The new perspective was to go beyond the short-term actions of traditional organizations, many of which were driven by short or medium-term external projects, which, at the end of the financing, typically faced extinction. The new approach also rejected the 'welfare approach' of the State and some non-governmental organizations (NGOs), in which it was thought that only external aid to communities could inspire development processes. Further dependency was not wanted.

Based on lessons learned, the KALLARI Association was established to implement an endogenous organizational model based on concepts and definitions related to the understanding of each link in the value chain for products such as cocoa and handicrafts and also linking other local actors such as mestizo communities. The idea was not to mix partisan interests with the organization's activities. The basic premise was that members of KALLARI firmly believe in the capacity of the people of KALLARI to generate their own income. In this way, they will contribute to the construction of a more equitable and sustainable development model for society that is friendly to the environment.

KALLARI began in 2003 with the legal incorporation under MICIP (Ministry of Industry, Trade, Integration and Fishing), which later became MIPRO (Ministry of Industry and Productivity). With the reform of the structure of its constitution, its management then fell under SEPS, the Supervision of Popular and Solidarity Economy.

As KALLARI evolved, the goal of producing chocolate began to take hold, and for this they would need at least one production facility to allow them to make commercial production samples. The Salinerito of the canton Salinas in the province of Bolivar allowed them to produce those commercial samples within their production facility and supported them with their technicians. They also used the support of a volunteer from a company in San Francisco-USA, who originally travelled with the intention of buying cocoa, but discovered KALLARI and fell in love with it, supported them in producing chocolate by leaving them the best recipes for chocolate manufacture.

The year of its foundation as an Association for Business Purposes, a process was undertaken to develop a long-term vision of the KALLAI group members which was articulated in 2003 in the following way:

- To produce delicious chocolate
- To have their own factory
- To export products directly
- To establish their own credit union, with low requirements for members
- To install a health service system
- To contribute to teaching and training through a school

**By 2005**, KALLARI had already improved the amount of cocoa collected by each bean producer and had managed to sell cocoa directly to exporters. A Swiss company, (Max Felchlin) offered to buy one container per year. They sent samples, but those samples did not have enough quality. The company, tired of buying from brokers, was looking to buy from producers. It established contact, then visited them, and learned about production methods in the forest, including collection and the whole process of community organization. The problem they noticed was that individual farmers did not have any homogeneity. The fermentation and drying in each of the farms generated variable quality, and to sell to exporters, the quality had to be homogeneous.

This encounter led KALLARI to realise that they needed a collection centre where a single process of fermentation and drying could be carried out, with the controls and best methods that the organization's technicians had applied up to that point, with certain improvements in accordance with the recommendations made by various chocolate makers in the world with the intention of improving quality. In 2005, the ultimate result was that they made a commitment to sell the Swiss client a container (12.5 T.) but they only produced 4 T. The Swiss company (Max Felchlin) decided to accept it just the same. But at least the quality was to the customer's satisfaction. This was a big step forward for Kallari and the producers.

**By 2006**, the first full container was exported (the full 12.5 T). The founder of Slow Food, Carlo Petrini, learned about KALLARI and invited them to a Production Fair to show the production of cocoa beans. KALLARI participated in this fair with three representatives and was chosen as a 'Valuarte' product. This success increased the associations motivation to keep adapting and improving. They began to experiment with new samples at the El Salinerito plant

**By 2007**, through contact facilitated by the father of a volunteer and organic meat producer in the U.S., they came to talk with the 'Whole Food' organic store. The associations chocolate product was not yet well packaged, but with the designers provided by a Foundation, they managed to upgrade the product such that it could happily be placed on the shelves of this Whole Food store (the design of packaging has remained until today). The store asked them for 50,000 bars a month, which was impossible for the scale they were handling at the time. They managed to negotiate 15,000 bars a month at first. This was how the KALLARI brand was born in the international market, but only sold by this store. It was not possible to process the anticipated level of demand at the El Salinerito plant, so they began to look for another plant that would allow them to do so and that would have larger facilities. The 'Ecuadorian chocolate company', was with inactive production facilities and allowed them to use them.

By 2008, KALLARI had made its first shipment, and launched 'Kallari Chocolates' in the Whole Food Market stores. In November of the same year, the New York Times magazine published an article about the experience. KALLARI meanwhile created a new brand of chocolates called sachas, which included combinations of dried fruits with chocolate, since the KALLARI brand was exclusive for one year to the Whole Food Market store.

By 2009, the KALLARI organization had matured. Its mission statement and its strategic plan had been defined.

By 2010 – 2011 sales had commenced to Sweden, Japan, Switzerland, Germany, Italy, England, and Holland. Construction of the KALLARI factory was initiated and completed. The marketing of Kallari Chocolate bars in the Super Maxi supermarkets had commenced. Additionally, KALLARI stood out in the Fifth Edition of the Los Angeles Luxury Chocolate Salon, in the Pasadena Convention Centre, California. It was awarded the following prizes:

- Silver Medals (3): Best Dark Chocolate, Best Chocolate Bar and Best Flavored Chocolate Bar.
- Bronze Medals (1): Best Organic Fairtrade Product

By 2012, they had also won an award for the best chocolate bar voted by 75 % of panellists in a competition in the USA (San Francisco).

By 2013, KALLARI had developed new gingerbread chocolate bars and other recipes with flavours and dried fruits from the same farms that supplied the cocoa, including pineapple, banana, ginger, lemon grass, cinnamon, vanilla, chili, orange and lemon. They received support from a project known as Geo Project Promotion and Conservation of Biodiversity in Traditional Production Systems (Chakras) of cocoa from the Kichwa Kallari producers. At this point they updated and changed their legal status in line with a solidarity organisation.

Between 2014-2015, the KALLARI group suffered technical, economic, and inter-institutional declines and loss of customer confidence because of an economic recession. The management of the Board of Directors proved unsatisfactory. The policies dictated by the government structures did not allow the continuity of the Board of Directors that had been managing organizational, technical, and commercial processes. Insisting on a new leadership team with little experience in business management and commercial relations affected the normal development and growth of the organization.

Between 2016-2019, KALLARI underwent organizational, technical, administrative, and financial restructuring. This resulted in a return of trust from public and private institutions, clients, and international co-operations. It also led to the opening of new markets for cocoa and vanilla, guayusa and other Chakra products. KALLARI designed 4 new Kallari Chocolate recipes and launched them to the market. All this time KALLARI was developing its commercial networks at provincial level and across the Ecuadorian Amazon, Its production processes (especially the incorporation of multiple flavours) was allowing for a diversification of income through the reconversion of production systems, and choice of crops resistant to climate change. This highlighted to members the importance of agroforestry systems as a source of ecosystem services fundamental to life such as water, biodiversity, and carbon capture. The chakra system guarantees these services. Additionally, KALLARI encouraged the use of artisanal species found in the chakras such as fibres, seeds, and natural dyes for the elaboration of high-quality crafts that are sold together with chocolate, guayusa and vanilla. This further augmented and diversified income for the families that produce for KALLARI.

## 1.4 BUSINESS PROPOSAL

KALLARI sees its value proposition as a twofold concept oriented both to its producers and to the market. For example, to the Producers KALLARI:

- Transfers technology and applies ancestral knowledge.
- Advises locally on the fine aroma cocoa chain to the producer partners.
- Supports the certification of fine aroma cocoa in the "Chakra" system, management of the internal control system.
- Provides certified plants of fine aroma cacao and forest species, guayusa and vanilla.
- Facilitates the commercialization of fine aroma cacao, guayusa and vanilla
- Processes and commercializes chocolates.
- Articulates the elaboration and commercialization of handicrafts.
- Fosters strategic alliances between organizations, public and private institutions
- Consolidates national and international markets

On the other hand, its value proposition to the markets involves meeting the demands of local, national, and international clients in special market niches where they value:

- Quality.
- Quantity.
- Reliability.
- Traceability
- Customization
- And the conservation of biodiversity

The products currently offered by KALLARI to the market include:

- Cocoa beans
- Cocoa Nibs
- Cocoa liquor
- Cocoa butter
- Cocoa powder
- Chocolate bars
- Truffles and chocolates
- Vanilla
- Guayusa and
- handicrafts

By maintaining a broad range of products that KALLARI offers to the national and international market, such as chocolates with dried fruit from the same chakras, products derived from cocoa, guayusa, vanilla, and crafts made with fibres, seeds and dyes, KALLARI improves the income of its members. This increases the value per unit area of land and helps to avoid the expansion of the agricultural frontier. The result is both forest conservation and better cultivation within the chakras products that help to generate income and serve to feed the family. The chakra is an agroforestry cultivation system that adapts to adverse climate conditions and is resilient to climate change.

## 1.5 MARKET CONTEXT

The main point to make here is that the strength of the KALLARI Association is that within the cocoa chain, they started as producers, but ended up as traders. The transition from selling raw material at prices dictated by traders to becoming a trader that has conquered and won awards in international markets is a substantial leap.

But critically, KALLARI has been able to position itself above all others in the international market because of its products that are organic, cultivated through a sustainable and traditional biocultural system. Much has been made of KALLARI's production without the use of chemicals that affect the natural ecosystem and its work to maintain Kichwas customs. The chocolate bars, the vanilla powder and the guayusa powder, in addition to representing products from the Amazon, are the insignia of the history of the Kichwa families, their culture, the biodiversity generated by the chakra and the associative work. This strength has allowed them to achieve and add value that their competitors cannot.

## 2. THE NATURE OF THE THREAT OF CLIMATE CHANGE

### 2.1 PERCEIVED CLIMATE CHANGE THREATS

KALLARI, being a Kichwa association, has encouraged the creation of a sustainable system of cultivation called *chakra* which is a traditional model of ecological agriculture. Each *chakra* represents an ancient history of the families that gather the plants of the Amazon and domesticate them. This system of managing the Amazon soils provides food, medicine, water, protein and generates income for the families. In each *chakra* you can find yucca, bananas, naranjilla, beans, and other plants typical of the indigenous diet along with cocoa trees that produce for the association.

The *chakra* is the space where market and subsistence strategies are synthesized, in this case cocoa and banana are combined as products for trade, while for self-consumption rice, beans, peanuts, yucca, plantain, corn, the Chinese potato and other tubers are sown. Kichwa families also obtain diverse fruit species such as: guava, papaya, mountain grape, chonta, sugar cane. Although the strategy of self-consumption is prevalent, the surpluses are sold in small quantities either to local intermediaries or in markets in the area.

Climate change has impacts on crop productivity. In this case one of the most affected crops has been cocoa, which is one of the species most affected by water stress. Variations in water availability not only during the year but also in times of intense summer, are considered the most important climatic factor that controls physiological processes including cocoa flowering. Its effects are a reality and an ongoing process.

Additionally, climate change brings the threat of genetic erosion around native and special types of cocoa. The threat is that farmers substitute traditional varieties with other crops, or by other clonal varieties (e.g. by CCN-51: highly productive cocoa that is resistant to climate change, but with a low flavour profile). Producers prefer to plant this type of material and there are crosses between clones and native varieties such that in the end the originality of the variety can be lost. Materials from INIAP (National Institute of Agricultural Research) despite being more productive and with a good flavour profile, do not adapt to the climate, soil and environment of the Amazon, which are more humid and less fertile soils and do not compare with the unique taste generated by the traditional plantations of these areas. The ultimate result may be the loss of the very characteristics that make KALLARI chocolate so highly demanded by special markets.

### 2.2 IMPACT ON FOREST AND AGRICULTURAL RESOURCES

Cocoa, guayusa and vanilla crops are produced in a sustainable way under the agroforestry system called *chakra*. In that system the plants take advantage of the environmental services (shade and nutrient recycling) of the upper strata to develop.

Climate related drought reduces production levels and stresses the plants. These then become more susceptible to pests and diseases and can dry out in the plantations. Even in agroforestry systems that sustain soil moisture, these effects can eventually cause problems.

On the other hand, intense rains accelerate soil erosion and can sweep away cropland. For these reasons, the cocoa, guayusa and vanilla *chakras* are better able to adapt to a climate change scenario. The agroforestry systems reduce the impact of rainfall and adequately conserve soil moisture.

The organoleptic properties of the cocoa beans, the quality of the vanilla bean and the guayusa leaf are different when they are produced under the *chakra* system, gaining in flavour and aroma from the flowers and fruits that are found around these plants, qualities that are highly valued in the national and international markets. These properties of the *chakra* system are largely protected by the complex ecosystems in which their production takes place.

## 2.3 IMPACT ON BUSINESS AND FINANCE

The impacts on business and finance have been minimal. Indeed, in many ways the unique production system of chakra helps to give market advantage. The cultivation of cocoa, guayusa and vanilla can be said to be truly environmentally friendly. They are crops that are ideally developed within the agroforestry systems called chakra, in which short cycle crops, forestry, fruit, medicinal, ornamental and food crops are associated with cocoa. From the environmental and productive point of view, this has a series of positive aspects such as: preserving biodiversity, conserving or promoting a favourable microclimate, increasing plant and animal productivity, diversifying production, integrating forestry and agricultural production, reducing producer risks, mitigating the harmful effects of sun, wind and rain on the soil, combining the best of ancestral knowledge with modern knowledge, ensuring sustainability through appropriate intensification of land use, providing food, raw materials, fuel, fodder and promoting biodiversity, etc. These advantages can help to strengthen sales through careful marketing.

One of the evident threats noted above might be the loss of traditional crop varieties because of the destruction of the forests and by the possible homogenization of the genetic base of cacao, with the use of a single clone. Therefore, a strategy of conservation of the genetic diversity of the cacao with which it counts the Province of Napo would be to impel the rescue of traditional cacao found in farms of producers who are resistant, highly productive and with high organoleptic profiles.

## 2.4 IMPACT ON VULNERABLE GROUPS

The organization is mostly made up of Kichwa communities, which are marked by their customs and culture. Currently women represent 60% of KALLARI members, who have an active participation in meetings, workshops, training in the handling of cocoa, guava and vanilla and the management of the chakra itself, and who are also concerned about carrying the daily food of his family. Women have a greater participation in the agricultural work environment, since they are the ones who work the chakra, take care of the forest, and help with resources for the education of their children.

Through its business strategy, KALLARI encourages its current members to attract new members, because members with their experience can make known the advantages of belonging to an organization in the area.

Sharing successes and mistakes among associates will always be a great help for all those who are part of the organization, and it is also something that fluctuates constantly, since markets are always moving and this causes new challenges, new proposals, new problems and new solutions to arise

## 3. THE BUSINESS AND FINANCIAL MODEL RESPONSE TO IMPROVE CLIMATE RESILIENCE

### 3.1 AGRO-ECOLOGICAL DIVERSIFICATION

It is difficult to speak of additional agro-ecological diversification because 95% of KALLARI's partner communities are Kichwas, which constitute the largest indigenous population in Ecuador and have highly diverse agricultural practices. They have their own way of life, with specific customs and traditions in terms of music, dance, and other forms of cultural expression. Their health system is based on the yachak (shaman) and the use of medicinal plants. The main economic activities and traditional subsistence are based on hunting, fishing, gathering, exchange of products and crafts, and finally the agro-ecological agriculture called Chakra

As noted above, the chakras cultivate a great diversity both between and within the same genus and with periods of fallow rest. The role of organisations such as KALLARI has been to protect this traditional and diverse pattern of cultivation. The most important agricultural products for self-consumption and the local and national market are banana, yucca; orange, palm, vanilla, guayusa, coffee and cocoa. The chakra is extremely important not only for the economic reproduction of the Kichwa but for their social and cultural reproduction; for that reason before building the house the first thing that is prepared is the land that will serve as chakra. The first product that is sown is the yucca since it constitutes the base of their daily diet.

The Kichwa nationality is still governed by an ancestral patriarchy. This has historically reduced women's professional development through system of oppression against indigenous women that limits their role to that of looking after the land and their families. Leaders still say that women have a very close relationship with the land because they are the ones in charge of taking care of the chakra and raising their children, which has led them to be the ones who work more for the well-being and economic income for their families and have been limited to their professional development. But the work of KALLARI is helping to overcome such stereotypes and improve gender equality.

### 3.2 ECONOMIC DIVERSIFICATION

While starting with only one product, producing, industrializing, and commercializing cocoa gave KALLARI members autonomy from traders and fostered economic growth, allowing them to leave behind the status of being only subsistence farmers. The completion of the cocoa value chain can be considered the fundamental key to the foundation for the Association's continued growth. This objective was achieved by creating strategic alliances with chocolate companies to add value to the product. But now that same chocolate value chain can incorporate a wide variety of other products in flavours and mixtures – as well as to finance investment into other value chain developments. Economic diversification represents a triumph in each value chain. A Kallari Chocolate bar, a vanilla powder or guayusa powder is not only cocoa, guava, vanilla, or chocolate, but a history of perseverance in product development, the protection of cultural identity, and the conservation of natural resources. That same perseverance has now conquered the very demanding palate of foreign markets. Therefore, the most important thing is to continue develop the complete chain of each product that Kichwas want to produce and marketing.

### 3.3 SOCIAL DIVERSIFICATION

KALLARI, and its support institutions and international co-operations have jointly developed training services in several agricultural topics. These have focused to date especially in cocoa, vanilla and guayusa production for the implementation of good agricultural practices, the rescue of local genetic material of species in danger of extinction, the renewal of old plantations through a grafting methodology to be more productive and resistant to pests and diseases with materials from the area and adapted to the climate and soil. KALLARI also provides training in gender and generational issues to ensure that all social sectors are included and can access capacity building in business management.

### 3.4 OTHER RESILIENCE MEASURES

The conservation of their own traditions of culture are the primary means of Kichwa resilience- but allied to commercial development that serves those interested. KALLARI recognises that maintaining the fine flavour of cacao, guayusa, and vanilla rests in how the production system allows each generation to pass knowledge on to the next generation involving all the members of a family – maintaining the ancestral characteristics of agroforestry production, in systems of chakras.

#### 3.4.1 PARTNERSHIPS

Since its inception and throughout its associative life, KALLARI has maintained a network of links with international cooperation agencies, public and private organizations interested in organic cocoa production, and from which it has received both technical and economic support. This network of relationships has benefited the association in the production and commercialization of cocoa and its derivatives through the generation of added value to the products. It has also meant support for the progress and continuity of the association and in recognition of its support for the progress made by the Kichwa people.

For example, the commercial alliance that KALLARI maintains at this time with the Max Felchlin company of Switzerland was achieved through the support and cooperation of GIZ, German Technical Cooperation, support in the construction of adequate infrastructure that allows for the improvement of the post-harvest quality of cocoa, in addition to training technicians and managers. The company in this case gives some recommendations and makes the purchase of the cocoa according to the technical parameters established in the commercial agreement.

The company has helped a lot in the consolidation of institutional capacities and strategic alliances, both public and private, that support the producer partners and the organization in the implementation and maintenance of the agroforestry system called Chakra. Through a plan, the company has helped to strengthen the technical capacities and training of human talent in different areas for an adequate business management of the Cocoa Chain, This has helped KALLARI to develop new chains and offer a range of products to clients, enabling access to exclusive markets with a variety of products, which improves the income of KALLARI and therefore of the producer members.

#### 3.4.2 CLIENTS

The search for sales strategies for the products is fundamental to achieve sustainability of the organization. To this end, it is important to consolidate alliances with exporters and direct clients in Ecuador, Europe, North America, South America and Asia that value the origin, culture, motivated by the quality of the bean and the diversification of products derived from cocoa, guayusa and vanilla. Diversifying clients allows for a decrease in dependency and vulnerability to possible supply shocks and international price levels.

Currently, buyers of cocoa, guayusa and vanilla are looking for new suppliers that have some type of differentiation in quality, traceability from origin, sustainability in their processes and international certifications that accredit the social and environmental work, guaranteeing cultural recovery. This process is accompanied by commercial visits directly to the organizations by clients from niche and special markets to farms and collection centres of the Organization. The instruments for establishing commercial relations with clients normally involve commercial contractual agreements.

#### 3.4.3 COMMERCIAL STRATEGY

The distinctive element of KALLARI's commercial strategy is to align commercialization and export of products with the sustainable production within the chakra system. These strategies must be in line with the strengthening of the collective association but with solutions tailored to each producer, respecting the indigenous worldview of Sumak Kawsay that contains requirements that economic elements must be promoted from the communities themselves.

## 4. CONCLUSIONS

### 4.1 MAIN CONCLUSIONS

The indigenous enterprise of KALLARI is transforming livelihoods for the families that belong to this association. Climate change resilience is one of the benefits - but it is largely based on a preceding commitment to the ancestral chakra production system based on complex and biodiverse agroforestry. Both gains in income and broader resilience that have come through economic development of the cocoa value chain have been fundamental elements for the guarantee of happiness that allow the collective to prevail over the particular, privileging the chakra in front of the monoculture, and the strengthening of the indigenous identity through the development of the productive enterprise.

These economic dimensions are fundamental to understanding and perpetuating the Sumak Kawsay (Good living or living well) movement. That movement proposes from its philosophy: the close union of man with nature but with a vision of conservation; the strengthening of the community to preserve ancestral practices; and food sovereignty in the fight against poverty.

### 4.2 INVESTMENT CHALLENGES

Indigenous community enterprises developed by KALLARI allow for the empowerment of communities around principles that respect their cosmovision. This maintains community relations through the Minga, food sovereignty through the chakra and a political empowerment that allows for the discussion of public policies proposed from the periphery to the centre.

KALLARI is a resistance movement, in which the excluded (Kichwa families) lead processes of social inclusion and business revolution, as a symbol of freedom and territorial autonomy. There is an expressed desire to eliminate through their example, the stereotype built by Western society about indigenous populations (that they are poor, isolated, unable to compete in the market with high quality products and services). Removing these stereotypes from their heads played an important role KALLARI and it obviously affects those who wish to invest in support of KALLARI.

### 4.3 BENEFITS AND THEIR DISTRIBUTION

The contribution that KALLARI gives to its members includes the direct commercialization of cocoa, vanilla and guayusa at a fair prices and weights, the development of new productive chains that generate income for their families without altering the productive system, training and technical assistance, follow-up and mentoring, payment of the costs of organic certification, provision of vanilla, guayusa and cocoa processing plants, and support for the renovation of their plantations under the chakra system. These benefits are distributed to KALLARI's membership fairly which has a majority of women.