

PORVENIR- FINNPARTNERSHIP

1) PORVENIR - DESCRIPTION COMMUNITY AND HISTORY

Porvenir is a community located northeast of the Department of Santa Cruz, inhabited by 130 families or its equivalent to 600 inhabitants.

2) COMMUNITY PRODUCTIVE POTENTIAL

The community of Porvenir has a variety of natural resources, among the most important are the Amazonian fruits such as the Açaí and the Buriti, which can be used in their entirety. On the other hand their lands have the necessary characteristics for other crops such as: coffee, cocoa, moringa, among others.

3) ACAI - BURITI - URUCU AND OTHERS (CHARACTERISTICS, POTENTIAL AND OPPORTUNITY)

3.1.) Acai.- Asaí, acai or Euterpe precatoria is the fruit of a palm tree, it is round, about 10 mm in diameter, of violet color that darkens according to its degree of maturity and grows in the form of a cluster called chubs. This fruit is considered a superfood for all its nutritional attributes, it stands out mainly for its high concentration of antioxidants. It contains flavonoids and anthocyanins, both powerful antioxidants that protect against cellular aging and free radicals.

It is an excellent source of fibers, amino acids, unsaturated fatty acids. Among those that stand out palmitic acid, oleic (Omega 9), linoleic acid (Omega 6) and Omega 3. It is also rich in vitamin A, B, C, calcium, iron, aspartic acid, glutamic acid and phytosterols. Both the pulp and the pepa of this fruit can be exploited, which represents a greater economic benefit being synonymous with a great business opportunity that benefits all interested parties. Of the pulp of asaí it is possible to be obtained: liquid pulp, frozen. Freeze-dried, and from these you can get soft drinks, energy drinks, ice cream, shake, among others. This fruit is found in abundance in the Porvenir community, in the place there are families willing to work and who know the place very well.

3.2.) Buriti.- Buriti, aguaje, Palma Real or Mauritia Flexousa, is one of the most representative palm trees in the Amazon. Within the worldview of indigenous peoples is considered "The tree of life." Buriti fruit is rich in phytoestrogens, has a high content of essential fatty acids (oleic and palmitic), beta-carotene and alpha-tocopherols (Vitamin A and E respectively). The fleshy part of the fruit is consumed raw by people and is very good food because it contains calories, minerals (calcium, phosphorus and iron), proteins, oils, carbohydrates, vitamins (A, B1, B2, B5, C). The Buriti is suitable for human use in a variety of ways. For its sweetness the fruit is used to make drinks, preserves and ice cream. If it is subjected to cold pressing, flour and oil can be obtained. Buriti oil is used as a scar, sunscreen, prevention of skin aging, anti-inflammatory and antibiotic. Palm fibers are produced from the fibers of the palm tree. Taking as reference the previous uses, it can be said that like the asaí, the Buriti represents a great opportunity as a resource that can be used. Since its presence in the Porvenir community is abundant, market supply is guaranteed, on the other hand the presence of families is an

important factor since they would be the ones who would work in the industrialization of this natural resource.

3.3.) Urucú.- The urucú, achiote or Bixa Orellana, is a fruit that comes from a shrub, this fruit contains some red seeds, it must be dried to later take advantage of these seeds. The urucu is a great source of vitamin A (carotene), retinoic acid (stimulates the replacement of epidermal cells), bixin (has coloring properties), tocotrienols (antioxidants), thus being beneficial for skin treatments. On the other hand it contains fiber in its leaves, which favors the efficient absorption of nutrients and therefore better digestion.

It is used mainly as colorants to color food, dye clothes, improve the presentation of dairy products, cheeses, butter, fish, noodles, candy, ice cream, chocolates, popcorn, refreshing drink. On the other hand it is used in the cosmetic industry for the manufacture of soaps and others.

In Porvenir and nearby communities this fruit is in abundance, with possibilities to expand crops. Labor is available locally, which together with other factors represents a great business opportunity.

4) ENERGY GENERATION WITH BIOMASS

The generation of energy with biomass represents a form of clean energy, thus being favorable for the care of the environment. In the Porvenir community, there is the possibility of producing energy with biomass using the Asai and Buriti seeds as fuel.

4.1.) Advantages, competitiveness, opportunity and need

- Positive impact for the environment.
- This alternative represents a factor of competitiveness since the costs for electric power generation would be lower compared to those of other forms of energy.
- The raw material product of the use of the pulp of Asaí and Buriti would be available.
- The electric power generated will be distributed both for the daily consumption of families and for the industry.
- Women would be taken into account for work since in Porvenir about 36% of the population is made up of women between 20 and 45 years old. The fact of including women in this model allows us better results in jobs that require detail and supervision.

5) THE GREAT COMPETITIVE ADVANTAGE OF THE ECONOMIC COLD

The alternative of combining the use of a cold chamber and a freezing tunnel represents a great advantage when wanting to obtain a frozen product in less time and keep it until before being distributed.

Using the biomass as fuel will generate the electric power necessary for the operation of these machines and as previously said, the generation cost will be lower than it would be in case of using another fuel.

6) TECHNOLOGY

It is intended to use Stirling engines to generate this type of energy with biomass.

As a way forward, we were investigating the products of a Swedish company, which have this technology.

7) REPLICABILITY

The model of community productive development that we propose as a company seeks the development of those communities that have great economic potential which will be a reality through the joint work of the community members and Agroseller. As a result, there will be greater income for the community due to the production of pulp, flour and oils, electricity supply, new business opportunities, among others. In addition, having a presence in the area will be able to manage the construction of schools, hospitals, roads, among others, which will improve the quality of life of Porvenir and the nearby communities.

8) POTENTIAL FOR INTEGRAL AND ORGANIC DEVELOPMENT

The Porvenir community has shown that it has the potential to develop and that is why attention has been paid to it. To achieve the integral and organic development of it, the following is proposed:

- Generate economic and social impact through the creation of employment sources that allow the generation of income for the inhabitants and therefore improve their quality of life.
- Promote the efficient management of natural resources that promotes the conservation of the environment.
- Transmit knowledge to the new generations and in this way ensure generational change.
- Make Porvenir a reference community in the region and thus obtain the support of authorities to allocate resources that improve the health, education and communication of the area.
- Production throughout the year thanks to perennial and annual crops such as chia, coffee, moringa, cocoa, among others.