

# Marketing biodiversity

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Farmers in the high Andes of Bolivia, Ecuador and Peru traditionally grow hundreds of different varieties of potatoes. Selected over centuries for their taste, texture, shape and colour, these potato varieties are very well adapted to the harsh conditions that prevail in the high Andes, at altitudes ranging from 3500 to 4200 metres. Farmers generally produce these native varieties with minimal or no use of agrochemicals.



Harvesting native potatoes. Aymara, Peru.

Despite the nutritional benefit of these varieties and their resistance to drought and frost, as well as pests and diseases such as potato blight, the production has decreased in the last decades. Farmers are increasingly shifting towards conventional yellow potato varieties that are known by the consumers and that can more easily be sold on the market.

This scenario endangers the continued production of the native potato varieties traditionally grown for subsistence in different parts of the Andes. To reverse this trend, the *International Potato Center* (CIP) in Peru has started to look for new ways to make use of these varieties in order to keep them in farmers' fields and preserve the rich biodiversity and cultural heritage they represent.

## Consumer-focused lab research

Knowing that there is an increased interest in exotic, tasty and natural products, CIP scientists began experimenting with

making potato chips out of native potatoes. They discovered that many varieties were delicious and, because of their high dry matter content, absorbed much less oil than typical potato chips during frying. They started to screen around 350 yellow, red and purple-fleshed potato varieties found in CIP's gene banks, which counts almost 4000 varieties. Thirty varieties were selected for their good frying qualities and attractive shapes and colours. These varieties are also interesting from a nutritional perspective: yellow varieties contain high levels of Vitamin C whereas red or purple potatoes hold high levels of antioxidants that have a protective function in the human body. Since the potato chips are made of unpeeled potatoes, consumers will ingest the minerals, vitamins, and fibre present in the potato skin.

## Marketing Approach to Conserve Agricultural Biodiversity

Having achieved good results with this initial work, CIP faced a difficult question: how should it proceed in bringing these native coloured potato chips to the market, benefiting both farmers and consumers?

CIP started to think of a feasible strategy to engage as a non-profit institution in this venture. After a thorough reflection on how to link potato chips with the market, the *Marketing Approach to Conserve Agricultural Biodiversity* (MACAB) concept was developed. This is a new research and development approach aiming at helping to conserve biodiversity by using a market-oriented focus. MACAB defines a number of steps to be followed, from the discovery of interesting crop attributes to the development of an elaborated and tested marketing concept and the selection of a company that best represents farmers' interests as well as biodiversity conservation (See Reference for a downloadable version of the MACAB approach).

## Development of a market concept

Following the guidelines of the MACAB approach, CIP hired a consultant to help identify the most interesting market segments for this potential product and elaborate a sound marketing concept. It was his task to identify *to whom* these native coloured potato chips should be sold, *why* and *how*. He obtained most answers to these questions from potential consumers who were involved in the process of developing the marketing concept (see Box).

As a first step, the chips were presented at an international cooking fair, where 72 personal in-depth interviews with consumers helped to evaluate which product elements are perceived as most valuable. The consumers mostly valued the product's exclusiveness and the fact that the product is healthier and more "natural" than conventional chips. The fact that the product benefits small producers and helps with biodiversity conservation was considered less important.

As a result, a rather exclusive marketing concept was developed with emphasis on "*natural & healthy*". The brand name "Jalca Chips" – Jalca being the agro-ecological zone where these coloured native potatoes are grown organically and under harsh natural conditions – backed up the positioning of the product. A prototype package was developed, mentioning the social benefits generated by the product on the back, as this had proven to be less important to potential consumers. This package was then tested in a five star hotel, where customers were confronted with a "real" product. Their comments were used to improve the final product package.

## How do farmers benefit?

To launch the product on the market, CIP involved a collaborating private company in processing the first 600 kilograms of native potatoes harvested in Aymara, a farmer community in the Department of Huancavelica that collaborates with CIP in conserving native potato varieties. Lima Airport's Duty Free section was chosen to be the first market segment, providing an excellent exhibition opportunity for this product and generating an optimal image for native potatoes at an international level. There is much hope that under these circumstances Jalca Chips will enhance the interest in native potatoes in general and provoke new marketing opportunities that will allow small-scale farmers to benefit from future expansion of native potato production.

At the same time, CIP has been looking for ways to directly benefit farmers with a percentage of each package sold. It is planned that ten percent of the retail price of each package of Jalca Chips sold will go to the Native Potato Project, which carries out activities that help small-scale farmers use and conserve their native potato varieties. This project could then become an interesting information platform for consumers, as they would find not only the description of the activities they indirectly support but also information on native potatoes in general, including nutritional facts and recipes.

Good coordination with the processing company is essential for the success of the initiative. It is very important to select the processing company that demonstrates professionalism in all its activities, from a favourable relationship with farmers to high quality in the production and commercialization process. CIP is currently evaluating the best way for achieving optimum collaboration between farmers, the processor and CIP, in order to create the best conditions to help Andean farmers use and conserve their precious native potato varieties.

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## Reference

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## Steps for developing marketing concepts

### 1. Identify a product with interesting characteristics

Not surprisingly, taste is one of the key values for most consumers when selecting a product. However, it is rarely the only factor in the decision to purchase. Elements such as colour, shape, ease of use, nutritional elements, user-friendly packaging etc. can all add value to a product. Potential consumers should be given the opportunity to taste the product and give their opinion on the advantages and disadvantages. They are the experts!

### 2. Analyze ways of increasing the value of the product at reasonable cost

If the product seems interesting to consumers, what is the best way to differentiate the product and guarantee product quality at a low cost? Focusing on the perception of different types of consumers, the most important advantages and disadvantages of the product must be determined. This information together with a rapid market survey on competing products will provide essential information on how the product can make a real difference for a specific group of consumers.

### 3. Design a marketing concept

With the information obtained it should be possible to design and implement a marketing concept that targets a specific consumer group emphasizing the two, or maximum three, most interesting elements that make a purchase worthwhile. The consumer must clearly perceive this main message and easily understand the main advantages of the product, compared to other products. These must be adequately visualized on the package and can be intrinsic, like natural, healthy or nutritious, or extrinsic, like colour, taste, smell, shape, size or ease of use. All aspects of the package – size, shape, material, brand name, photos, drawings, and texts – must be in harmony with each other and emphasize the main message to the consumer.

### 4. Evaluate the marketing concept using Focal Groups

Once a prototype package is designed, the real "test" will begin. One or several special meetings are planned with six to eight people who represent (in terms of socioeconomic level, sex, age and consumption habits) the market segment that is the focus of the product. The facilitator must carefully plan and execute the different steps for this meeting, with questions that are specific but open. The following sequence of steps is best:

- Obtain the participants' perceptions of the product before demonstrating it
- Obtain their opinions of the package
- Obtain their perception of the product after they taste it
- If the perceptions about package and product are not in accordance with each other, evaluate the reasons.

### 5. Refine the marketing concept

With the results of the focal groups, the marketing concept is corrected and improved. The package must clearly position the product in the market but without generating conflict of perception at the moment of purchase and the moment of consumption. To prevent this from happening, the final package can be re-evaluated and approved in a new focal group.



Photo: T. Bernet

Marketing concept of Jalca Chips.