



# REBEL WITH A CAUSE; SOLAR DRYING IN PERU

After receiving information and advice from our 'Practical Answers' service in Peru, Bruno Caracchini has followed up on his idea of producing and marketing dehydrated fruit. His business is in the pilot stage and according to him, cannot go wrong.

A mechanical engineer by profession, Bruno Caracchini has always been determined to run his own business. "People always tell me I'm crazy", he told us as we admired the Caraz landscape from the top of a hill, "but I consider myself a rebel". Bruno left his home town at age twenty, training up in an uncle's engineering business in Lima before returning to his home town to raise his children, Bruno and Francesca.



From the top of the hill there is a good view of the houses, the main square and the river in miniature. The sun is shining placidly, but Bruno Caracchini doesn't smile. "Caraz is a time bomb" he exclaimed, "More than 400 students leave school every year and there are not even enough jobs for 10% of them...In Peru there are a thousand cities in the same situation as Caraz".

This may explain Bruno's constant efforts to become productive without depending on anyone - he is thinking of his children and the future that awaits them, and has reached the conclusion that, under no circumstances will they be "one more of the 400".

## Dreaming about fruit

In Caraz, people typically make their living from farming, but that market is saturated. "With the technical modernization of agriculture, the market grew, but then pests and pesticides appeared" Bruno told us. "Consequently, the fruit produced reached consumers with a high content of poison. In my family, when we see perfectly shaped shiny red fruits, we don't buy them. We choose the more bruised, lacklustre ones because that means they have not been processed and will not contain as much poison". He came up with the idea to get around this situation through the dehydrated fruit market, which prompted him to seek the advice of *Practical Action*.



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Bruno Caracchini conducted his own market survey and found that dehydrated fruit was only consumed by a select minority in his country, who were more inclined to live a healthy life, and that the foreign market should be his real target. “It occurred to me to venture into the dehydrated fruit business, but using native fruits (which are increasingly more sought after outside Peru). The problem was that I had no knowledge about how to work with such fruits efficiently”.

### Proven business

Bruno built a solar-powered drying machine to dehydrate the fruit, but preserving it was proving to be the problem. This was where the input of *Practical Action*, according to Bruno Caracchini, was fundamental. “I was already aware of the NGO from some publications I had obtained at a book fair years ago and have been a follower ever since. I discovered the Technical Enquiries service on the website, and contacted Giannina Solari, who was a great help.” Giannina gave Bruno information about the different antioxidant components suitable as preservatives in processing dehydrated fruit. Once he knew which preservative and how much to use, his final product was ready within a couple of days. He works with apples, oranges and peaches, but at the same time “we opted for a not so well-known product like *yacon* (a Peruvian Tuber similar to sweet potato) which grows easily in our highlands”, said Bruno Caracchini. This has now become his flagship product and as it contains fructose instead of sucrose “even though it is sweet it can be consumed freely by diabetics”.



Bruno did a pilot test with his farmers; distributing samples commercially and holding tasting sessions in shops in Lima, where he discovered that *yacon* was well accepted by consumers and that many people on a diet or suffering from diabetes could be interested in the product.

### Scaling up

Bruno Caracchini now needs to secure capital if his business is to succeed - he is talking to a couple of investors who have expressed an interest and are waiting to see whether *yacon* grows as quickly as expected. Nevertheless, the fact that the business is in a proven pilot stage is a great step forward. It has not been easy, he said. “We have had to fight against plagues and pesticides



and fortunately we have identified some small farmers who are growing organic crops”. As soon as he obtains the approval of the investors, Bruno Caracchini is prepared to compete. Everything is ready; the proven pilot, the machinery and a 200 metre plot located in the hills to take advantage on the “highland promotion law” whereby businesses located at higher altitude pay lower taxes.

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Having met Bruno Caracchini, we cannot help believing in him. Bruno gives the impression of being a relaxed foreign tourist who fell in love with the country and, as he himself says, sometimes people think he is mad. Nevertheless, he is as Peruvian as they come and is so focused that he has found a way to succeed, both in his own country and abroad. It is only a matter of time.

### Further reading

- *Solar Drying*, Practical Action Technical Brief
- *Drying of foods*, Practical Action Technical Brief
- *Small-scale drying technologies* Practical Action Technical Brief
- *Drying of Chillies*, Practical Action Technical Brief
- *Drying of Apricots*, Practical Action Technical Briefs
- *Drying Food for Profit - A Guide for Small Businesses* Barrie Axtell, 2002, Practical Action Publishing ISBN 1 85339520 X
- *Setting up a Food Drying Business: A step-by-step guide*, Fabrice Thuillier, 2002, Practical Action Publishing, ISBN 1 85339 498 X
- *Drying Foodstuffs*, Jean François Rozis, 1997, Backuys Publishers
- *Producing Solar Dried Fruit and Vegetables for Small-scale Enterprise Development*. Natural Resource Institute, Central Avenue, Chatham Maritime, Kent ME4 4TB. 1996. Available from Practical Action Publishing <http://developmentbookshop.com/>
- *Procesamiento de Papa Seca* <http://www.solucionespracticas.org.pe/>

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