

— Eco-Innovation success story from Peru —

The Grains of Success at Peru's IMSA

The production of coffee and cocoa features strongly in Latin America's agri-food industry, which covers an extensive value chain of very different businesses. Peru is no exception, and one Lima-based company, IMSA, has been navigating the big challenges of the sector since 2001. It manufactures machinery for its customers in Peru and the Americas, who then process the coffee and cocoa beans. But for IMSA, growth has been hampered by waste, insufficient plant capacity, high energy consumption and constrained domestic markets. Fortunately, the Eco-innovation Project guided IMSA towards new success.



According to IMSA, the company is the only one in Peru dedicated to metal working for clients in the coffee and cocoa bean sectors. Around 90% of its activity is focused on the manufacture of machines for cocoa processing, the “wet processing” and drying of coffee beans, as well as other machinery for coffee and cocoa grains. IMSA's remaining production

is focused on “densimetric” machinery for grains (machines which separates grains based on their size).

Targeting hotspots

Despite IMSA’s unique market position in Peru, the company’s management decided to undertake a full analysis of production processes and the value chain, searching for weaknesses and areas needing improvements. In other words, IMSA began its “hotspot analysis” – and it identified four particular problems which were preventing growth.

The first issue for IMSA was that demand for its products outstripped plant capacity. The company was simply unable to expand into new niche markets, and potential contracts were missed.

Not only was plant capacity insufficient, but cutting, welding, bending and painting processes at the plant consumed too much energy and, the company says, raw materials were not being used optimally with “large amounts of material wastage”.

Other hotspots which the initial eco-innovation process identified were the large volumes of *organic* waste at the end of the coffee processing value chain, and the fact that smaller coffee producers in remote and rural areas of Peru have difficulty in using electric machinery due to limited access to electricity supplies.

New innovations

These were vital aspects of the business that IMSA wanted to change. To improve its competitiveness, and bring about social, economic and environmental benefits for its clients, the company developed a new set of strategic goals and targeted new product offerings.

Two particular goals by IMSA stand out in terms of innovation and growth. By 2018, the company aims to design an innovative new technology, called “Pirotec”, which treats organic waste from coffee processing to generate energy. The company says this new strategic product would be commercialised as “part of the company’s new eco-innovative focus”. IMSA add that the machine will even produce biochar by-product for farmers to improve soil quality and then crop yield.

IMSA has also targeted a drive into foreign markets. The company says it is “identifying potential international clients to expand its export market”.

However, IMSA will still focus on developing the business closer to home in its core Peruvian market, notably by building machinery that can be used by even the smallest producers who

want to automate their coffee processing – many in remote or rural areas as the hotspot analysis identified.

IMSA's hope is that this will also create growth and generate revenue for all its clients, thus attracting further sales of its products.

Partnering up for growth

To boost its chances of bringing new innovations to market, and successfully reaching its new strategic goals, IMSA has been actively working to develop partnerships across the board – a key factor for any successful eco-innovative business.

Not only has the company been reaching out to traditional partners such as coffee producers and cocoa and coffee co-operatives, but also to research centres who can provide technical and engineering support for the construction of the Pirotec prototype. IMSA has also been developing links with suppliers of its machine's materials, and crucially to financial entities for business loan support.

In an important step for IMSA, support has already come from the government in Peru, who are keen to back initiatives and research on the use of alternative energy generation – exactly what IMSA intends to achieve with its Pirotec machine. The idea of subsidies for the company has already been floated by a number of ministries to help IMSA promote its new innovation. Here, key strategic partnerships with the Ministry of Environment (MINAM), the Ministry of Energy and Mines (MINEM) and MINAGRI, the Ministry of Agriculture, have been vitally important.

These partnerships, in combination with a new strategy and new product offering, mean that eco-innovation looks like a smart move for IMSA. On one hand, the ecological and financial benefits for its customers, including smaller farms and producers, promise exciting developments ahead.

On the other hand, IMSA itself looks set to successfully deploy its ideas in the Peruvian market, and potentially overseas. This would lead to a period of growth for this ambitious coffee and cocoa innovator. In time, another successful eco-innovation project looks set to appear on the map.

The Eco-Innovation Project was funded by the European Commission with the administrative support of UN Environment and local implementing partners in Asia, Africa and Latin America.