

The *De Vuelta a Casa* project becomes an international scientific case study

- It will be featured in a publication at an international conference on Artificial Intelligence.
- The article highlights the ecological and technological value of the Costa Rican project as a replicable solution for marine restoration on a global scale.
- 2025 also saw a second return of seized shells.

September 2025. The *De Vuelta a Casa (Back Home)* project, promoted by Imperial and FIFCO, achieved a new milestone in its history by officially becoming an international scientific case study after being accepted as a paper at the prestigious International Conference on Computer Vision (ICCV 2025) organized by the Institute of Electrical and Electronics Engineers (IEEE), which will take place in Hawaii from October 19 to 23, 2025.

The document, entitled ***"Back Home: A Computer Vision Solution to Seashell Identification for Ecological Restoration,"*** was reviewed and approved by specialists in computer vision and ecology and will be presented at one of the world's most important scientific forums on artificial intelligence. This publication was authored by Alexander Valverde, Luis Solano, and André Montoya, and it consolidates the project's technical and ecological value, which combines science, innovation, and conservation to address an environmental problem such as massive seashell extraction.

The research details the development of the system that uses artificial intelligence to identify the coastal origin of shells confiscated at the country's airports and return them safely to their ecosystem. The model has already processed more than 70,000 images and is trained with its own database called **BackHome19K**, which will also be available to the international scientific community as an open resource.

"The fact that this project has been referenced for a scientific case study reaffirms that Costa Rica can generate solutions with a global impact. 'De Vuelta a Casa' was born as a local response to an urgent environmental problem, and today it is validated by science as a replicable model. When purpose, technology, and partnerships come together, it transforms the way we protect our ecosystems," said Maria Pía Robles, FIFCO's Director of Corporate Relations.

The impact of this publication is not only symbolic; it represents the scientific validation of a tool designed in Costa Rica that is already being used by wildlife officials and could be replicated in other countries. By releasing the database and model as open resources, FIFCO and Imperial are encouraging other nations to adapt this technology to their own ecosystems, generating tangible change on a global level.

Second shell return: Guanacaste joins forces

As the project advances in the scientific field, its impact on the national territory also continues. For the second consecutive year, and for the second time in 2025, from July 21 to 25, another volunteer day was held in Liberia, with the participation of more than 150 people, including FIFCO collaborators, consumers, local associations, and new allies such as the Guanacaste Airport.

For five days, the seashells were sorted, washed, and prepared at the FIFCO Distribution Center in Liberia, to finally be returned to the sea on Friday, July 25. The event took place at Playa Conchal,



Guanacaste, thus closing another cycle of ecological restoration. With this new day, the project has surpassed 120,000 shells sorted in 2025 and more than 1.2 tons returned to the sea so far this year (1.1 tons to the Pacific and 100 kilograms to the Caribbean).

This second edition of the volunteer program also marks a key point in the decentralization of actions, expanding the impact to Guanacaste, involving local actors, and strengthening environmental culture in new regions. Incorporating allies such as the Guanacaste Airport allows for the amplification of efforts and the creation of a collaborative network that enhances results and ensures the project's continuity.

De Vuelta a Casa continues to position itself by combining environmental education, science, advanced technology, institutional cooperation, and volunteer work. Since its launch, the project has evolved from an awareness campaign to a platform with real impact, validated by the scientific community and recognized worldwide.

- Link to the official paper: <https://arxiv.org/pdf/2501.04873v3>
- Link to the BackHome19K database: <https://huggingface.co/datasets/FIFCO/BackHome19K>

About FIFCO

FIFCO is a beverage and food company with 117 years of history, with operations in Costa Rica, Central America, Dominican Republic, Mexico, and the United States, 5 manufacturing plants and 13 distribution centers. It has 3 business divisions that include Florida Bebidas (food and beverages), FIFCO Hospitality (real estate sector) and FIFCO Retail (retail sales). It exports to over 10 countries around the world and has a portfolio of more than 2,000 products.