



# 2008 GLOBAL DEVELOPMENT MARKETPLACE PROPOSAL SUMMARY



**Project Number:** 5381

**Booth Number:** 17

## **Converting Rice Fields into Green Fertilizer Factories**

**COUNTRY:** Ecuador

**ORGANIZATION:** Escuela Superior Politecnica

**FUNDING REQUEST:** \$196,752

**CONTACT:** Mariano Montaña

Tel: +593 42269566

Email: [ecosistemaquayas@gmail.com](mailto:ecosistemaquayas@gmail.com)

Website:

[www.espol.edu.ec](http://www.espol.edu.ec)

**OBJECTIVE:** To increase rice yields and reduce dependency on imported artificial nitrogen fertilizers through the cultivation of Azolla Anabaena (AA) as a nitrogenic biofertilizer. The project will adopt a gender sensitive and participatory approach.

**RATIONALE:** Food prices are increasing worldwide. In Ecuador, agriculture faces great challenges, one of them being the sustained use of artificial nitrogen fertilizers, which contaminate the soil, surface water and groundwater, negatively affecting native environments and long term productivity. Purchases of imported chemical fertilizers for agriculture account for about 30% of current production costs. As rice is an essential and primary food for the population, it is important that it is produced cost-efficiently and in an environmentally sustainable manner. Compared with current technology, a rice field fertilized with AA is more productive, cleaner and more sustainable in the economic, social and environmental sense.

**INNOVATION:** The project will introduce a new and innovative crop (AA) that presents a novel opportunity to expand and diversify the supply of fertilizers and production of rice fields. The production of this bio fertilizer in flooded rice paddies and its application in other crops is a novelty in Ecuadorian agriculture. While the benefits of introducing AA in rice cultivation have been known for 20 centuries in China, this is not the case in Ecuador where farmers have mostly eliminated it, thinking that AA was a weed.