## SUSTAINABLE AGRICULTURE IN SURINAME WORKING TO IMPROVE YIELDS



The sector for sustainable <u>agriculture</u> in <u>Suriname</u> is uniquely poised to take advantage of a highly valuable market, eschewing new and higher value organic crops while intensifying the long-held tradition of rice farming. In 2012, agriculture constituted only <u>9 percent</u> of <u>Suriname</u>'s GDP, decreasing from 15 percent in the 1990s.

The country's most important crops, rice and bananas, have become <u>nearly stagnant</u> in terms of yield and are facing major overseas competition, causing high export and transportation costs. Rice, as the essential backbone of sustainable agriculture in Suriname, is a focus of the Anne van Dijk Rice Research Institute (ADRON). In addition to rice production, sustainable agriculture in <u>Suriname</u> can increase its value significantly by developing a framework for organic farms.

## Rice Production

Through ADRON, the Ministry of Agriculture developed a system for intensifying rice production, increasing it from 4.1 to 4.7 tons per hectare at one point. However, ADRON's research on seed breeding and crop productivity only got them so far. Small farmers lack proper education and knowledge of the most effective rice production practices, resulting in only 400 hectares of rice being planted in 2007, as opposed to the expected 1000 hectares.

ADRON has since supported the Seed Growers Association, an extension program for the support of small farmers and providing them with the technology they need to create sustainable agriculture in <u>Suriname</u>. According to the <u>International Institute for Sustainability</u>, world rice production must increase 50 percent by 2025 to accommodate average consumption per capita. Since 2009, rice production has shown an upward trend of above 200,000 tons per year, but ADRON is looking to push it even further with the following programs:

• Plant breeding program: breeding a seed with higher yields and better quality when cooked that will flower at a specific time after it is planted.

- Crop management program: researching the potential results of planting rice at higher elevations, as well as soil, weed and pest management.
- Post-harvest processing program: optimizing waste management and researching the cooking quality of different rice varieties.
- Technology transfer program: reaching out to farmers and farmer field schools through mass media.
- Rice seed production program: transferring rice produced in Suriname to a separate agency for continued research.

These five ADRON programs will provide the education and technology necessary for the expansion of rice production, as well as an assurance of rice quality that will survive rising competition in the world market.

## Organic Farming

Organic farming has become a worldwide trend and highly dynamic market, particularly in Europe, and Suriname is going along with the trend. The Suriname Business Development Center and the United Nations Development Programme (UNDP) have funded multiple projects for boosting organic farming and sustainable agriculture in Suriname. With funding from the Global Environment Facility (GEF), UNDP created the GEF Small Grants Programme, allowing Suriname to begin instituting projects involving biodiversity, sustainable land management and non-timber forest products.

Institutions like the Centre for Agricultural Research provide a gateway to the national market for organic food, creating initiatives to capture national interest. Safe farming, an environmentally friendly initiative for the small-holder farmers, is one of many that uses fewer chemicals in their crops.

Sustainable agriculture in Suriname has become a nationwide focus, with support from the government, research institutions and local farmers. They have the means to succeed and they are taking advantage of it.