The IIMSAM Haiti Initiative

Haiti, the third hungriest country in the world

According to the World Bank statistics, Haiti continues to be the poorest country in the Western Hemisphere and the third hungriest country in the world. 80% of the population lives below the level of absolute poverty. One in 10 children dies before the age of 5 and malnutrition is the leading cause of death in children. One third of 1 year olds show signs of severe growth retardation and forty percent of all 5 year olds have stunted growth and brain development. Less than half of the population has access to health care. There are 3,970 babies born infected with HIV each year. Moreover, recent statistics put the unemployment rate at 70%, and over half of the population is illiterate.

Spirulina cultivation, a sustainable solution to combat malnutrition

In eradicating extreme poverty and hunger, the U.N. Millennium Development Goal #1, sustainable and long term solutions are essential. These are imperative not only in emergency situations but also as an investment in a productive society to make a change in people's everyday life. How can society end poverty and achieve prosperity, if its children are underdeveloped, mentally retarded or too weak to attend school? One such sustainable solution is Spirulina, a blue-green microalgae which can serve as a vital source of nutrition.

Spirulina is an algae growing naturally under tropical conditions in alkaline water and can be cultivated in small ponds with little investment. In the long run, there are no cheaper and better ways to sustainability than creating local businesses which make use of the knowledge and skills of local women. A truly sustainable solution will emerge if rural women can be profitably involved in the eradication of malnutrition and, in the process, make a living out of it. Spirulina can become a sustainable long-term solution if programs can be designed which enable profitable enterprises that are capable of combating malnutrition as a business

How can Spirulina eradicate extreme poverty and hunger in Haiti?

- Spirulina is cheap: to feed a child in India costs between one and two Rupees a day (US$ 6 to 12 per year). Many other feeding solutions are more costly and less sustainable.
- Spirulina is effective: one gram per day is sufficient enough to correct severe malnutrition in a child in a few weeks. New studies suggest that Spirulina not only improves the physical development of the child but also cognitive performance.
- Moreover, spirulina helps people affected by HIV/AIDS to gain weight and feel better in their daily life.
- It is a relatively simple process and requires a low investment of only US$ 500 per tank (18 m2) to produce 150 grams per day.
- It empowers women: spirulina cultivation is labor-intensive, hence an ideal job for rural women and others.
- It is a local business: spirulina production can be organized as a decentralized rural industry and can involve local people. Individuals can generate an income through producing, processing and selling spirulina as a business. It is thus a sustainable long-term solution.

Objectives

GOAL 1: Immediate relief for Haiti

IIMSAM will provide immediate emergency relief for the areas where nutritional and medical assistance is most needed. Based on IIMSAM's preliminary analysis, this would be the northern part of the country and the area close to the border of the Dominican Republic. In the initial phase IIMSAM will be able to provide relief to 350-500 peoples. However, the emergency relief program will be expanded to the whole area as well as other regions based on need.

- Under IIMSAM's IMAP Program (International Medical Assistance Program) a team of highest quality medical doctors and practitioners will be brought in to provide emergency medical care.
- IIMSAM will be treating malnourished children, primarily with ready-to-use spirulina, that includes all the minerals, vitamins, and nutrients that rapidly growing young children need.

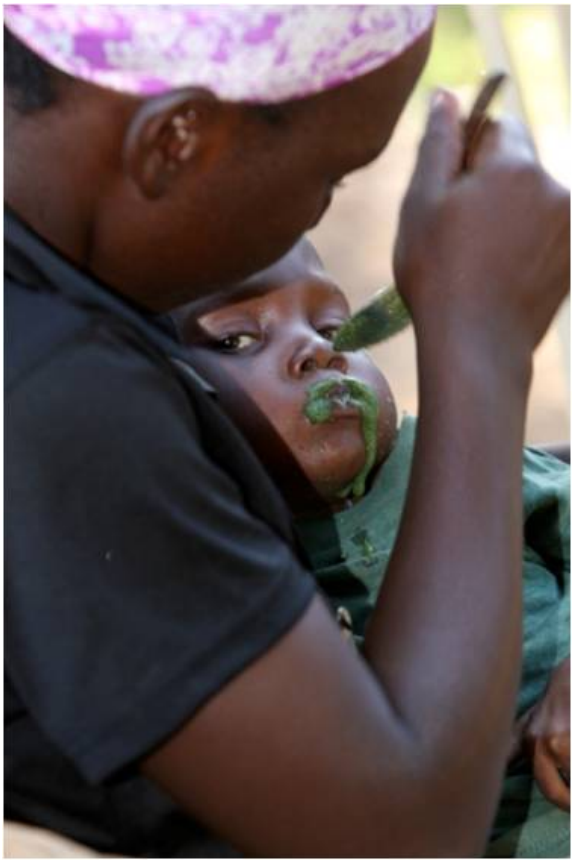
GOAL 2: Spirulina as a long-term solution

IIMSAM will facilitate local spirulina production. Based on the same model as IIMSAM is using in Kenya where it has been proven to be very successful, the local population will be educated by IIMSAM's technical experts on how spirulina farming can be organized as a decentralized rural industry generating an income through producing, processing and selling spirulina as a business.

The IIMSAM Dar al Muamineen center – a success story in Kenya

The IIMSAM Dar al Muamineen center in Kenya uses Spirulina to eradicate deprivations and diseases resulting from undernourishment amongst disabled children and others suffering from malnutrition and HIV/Aids. As IIMSAM's Goodwill Ambassadors, the Mama Sarah Obama and Said Obama, grandmother and uncle of U.S. President Barak Obama, are assisting and facilitating the mandate of IIMSAM in Kenya to utilize Spirulina, cultivated locally by the IIMSAM East & Central Africa Spirulina Program.

While improving long-term capacities and capabilities, the program not only provides employment to the local population, but also localizes the benefits and other spillover effects associated with Spirulina cultivation. IIMSAM is proud to have a daily production which is enough for daily doses of 100 HIV/AIDS infected adults or 200 HIV/AIDS infected children or 500 malnourished children.



Children being fed by Spirulina at the IIMSAM Dar al Muamineen center.

Spirulina endorsed by FAO, as a follow-up on a General Assembly draft resolution initiated by IIMSAM

During the sixtieth session of the United Nations General Assembly (Second Committee, Agenda item 52), IIMSAM initiated a revised draft resolution on the "Use of spirulina to combat hunger and malnutrition and help achieve sustainable development" which was submitted by: Burundi, Cameroon, Dominican Republic, Nicaragua and Paraguay. As a follow-up on this resolution, the United Nations Food and Agriculture Organization (FAO) was requested to prepare a draft position on spirulina. FAO's report was presented in 2008 and includes the following recommendations:

- To improve technical and economic solutions to spirulina production in environmentally impoverished conditions, as well as to prepare tested production packages for rapid deployment in emergency situations.
- To develop a practical guide to small-scale spirulina production that could be used for development mythologies, oriented towards:

i) providing nutritional supplements for use in rural and urban communities where the diet is inadequate;

ii) allowing diversification from traditional crops in cases where land or water resources are limited;

iii) an integrated system for waste water treatment, small-scale aquaculture production and other livestock feed supplication;

iiii) as a short- and medium-term solution to emergency situations where a sustainable supply of high protein/high vitamin foodstuff is required. This implies the ability to rapidly install systems in a variety of environments that can be sustained by local communities to cover both the short-term food needs and to supplement longer-term nutritional requirements especially once other forms of food relief cease to be delivered.

- To establish a better monitoring of global spirulina production and product flows.
- To develop some form of web-based resource that allows the compilation of scientifically robust information and statistics for public access.
- To develop clear guidelines on food safety aspects of spirulina so that human health risks can be managed.

Source: FAO Fisheries and Aquaculture Circular No. 1034. A review on culture, production and use of spirulina as food for humans and feeds for domestic animals and fish.