



**Intergovernmental Institution  
for the Use of Micro-algae Spirulina  
Against Malnutrition**

**Permanent Intergovernmental Observer to the United Nations Economic and Social Council**

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*"There are people in the world so hungry that God cannot appear to them except  
in the form of bread"*

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*" Il y a des gens dans le monde qui sont si affamés que Dieu ne peut leur  
apparaître que sous la forme d'un pain."*

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*"Hay personas en el mundo tan hambrientas que Dios no puede a parecerles  
a ellos más que en la forma de pan"*



*Mahatma Gandhi*

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***EMERGENCY-RELIEF IIMSAM/KKEO  
SPIRULINA PILOT PROJECT PROPOSSAL  
DEMOCRATIC REPUBLIC OF CONGO  
OFFICIAL MEMBER STATE OF THE IIMSAM TREATY***



**BRIEF-SUMMARY**

## ***EMERGENCY APPEAL BY IIMSAM`s DIRECTOR-GENERAL AMBASSADOR H.E. REMIGIO MARADONA***



***Emergency Spirulina Relief Programme for the  
Maniema Region of Democratic Republic of Congo,  
An Official Member State of The IIMSAM-Treaty***

DATE-18/11/2008

REF- IIMSAM/ACCInc./1/11/2008

**Dear IIMSAM Supporters,**

On behalf of IIMSAM, I am appealing to your goodwill to generate support and resources for our ***Emergency Spirulina Relief Programme*** to alleviate the inhuman conditions in the Democratic Republic of Congo- IIMSAM`s Official Treaty Member State.

The Democratic Republic of Congo, in particular the Maniema Region is suffering from severe crises situation where people are forced to eat from the bushes. Our urgent appeal is to let everyone involved with IIMSAM`s activities to come and assist our initiatives to help our fellow brethren in Africa.

IIMSAM has already taken emergency steps to get our Official Working Partner from Turkey, the Soley Institute to contribute their *scientific and technological knowhow* in the field of Spirulina cultivation and necessary equipment for the cultivation of a 500 square meter sized, "SPIRULINA CENTRE" that shall cater for the whole province of Maniema by providing the region with a comprehensive Spirulina Nutritional Programme to alleviate the immense suffering of the populace from starvation and severe malnutrition.

IIMSAM along with its Official Working Partner in Kenya, Kisumu Kids Empowerment Organization, KKEO, will also be providing a Clean Water Programme which is an affordable and economic way to curtail water borne diseases that are affecting almost 50% of the local population as people are forced to drink contaminated and polluted waters from the rivers.

An IIMSAM team led by **Mrs Els Wjt Mulder- Director IIMSAM-KKEO** of Kenya, IIMSAM Spirulina Expert **Dr. Jean Louis Vidalo** from Switzerland, **Dr. D. Agobe** and **Prince Fundi** of the Maniema region would be visiting the

Democratic Republic of Congo on the 28<sup>th</sup> of November 2008 to facilitate the operations in an effective and efficient way.

We need the collective efforts of everyone to eradicate starvation and acute malnutrition in the Maniema Region of the Democratic Republic of Congo and actuate the very efforts for the same.

Your support is crucial for the success of our initiatives that would help save the lives of thousands of children, adults, disabled, and refugees that suffer and perish every day from starvation, acute malnutrition in the Democratic Republic of Congo. It would also empower the lives of the locals that are negatively affected.

While conveying my best wishes to you on the occasion, I look forward for a prompt response from you on the matter.

I am confident that your association with the IIMSAM would not only save innumerable lives lost to malnutrition and starvation; but would also be a ray of hope in the lives of the unfortunate ones in the Developing and Least Developed Countries. Please feel-free to peruse our website and in particular the emergency appeal menu-bar for further details on the aforementioned.

Sincerely,



**(Remigio M. Maradona)**



IIMSAM

## **BACKGROUND**

IIMSAM/KKEO Technical Director is a Congolese Agriculture Engineer; Mr. Dieudonné Fundi Malombo specialized in the cultivation of algae. He is the son of the traditional "King" of Kilumbu, Kasongo, Maniema, D.R.Congo, a "kingdom" of about 5000 to 7000 km<sup>2</sup> of rainforest along the Congo River. (*For the moment not involved in the war*). The present war in the DRC has displaced some 100,000 from their homes, according to UN sources on the ground, UNICEF, UNHCR Etc.

Recently an IIMSAM/KKEO team headed by Eng. Fundi visited his "kingdom" (for him it was the first time after 28 years because of the war) and they were shocked about the situation.

**Extreme poverty, extreme malnutrition,**

- 🌱 **no medical care, no schools, no drinking water,**
- 🌱 **no electricity, no roads, no cattle (people are eating bush-meat),**
- 🌱 **pollution, deforesting, poaching,**
- 🌱 **many people were killed during the war, etc. The population is more than desperate.**
- 🌱 **30% to 50% of the diseases are caused by drinking water from the rivers and a lack of vitamins and minerals.**

*The "King", Mr. Augustin Fundi Buyaka, and his "Ministers"* pleaded with his son and members of the IIMSAM/KKEO team to help them urgently. Also the "King" asked his son to take over the "Kingdom", because of his age (86 years old). Eng. Fundi is ready to accept his "*Royal Status*", realizing that probably he will be the last "*King*".

His aim is to save the forest and wildlife and to give his population the skills to live in symbiosis with their territory. **The Provincial Government of Maniema gave us their full cooperation.**

### **EMERGENCY STEPS TAKEN BY THE DIRECTOR GENERAL TO COMMENCE THE EMERGENCY PLAN OF ACTION FOR THE DRC.**

- 🌱 IIMSAM's Director-General has requested our partner experts in Turkey the Soley Institute to provide *pro-bono* the necessary equipment for the cultivation of 500 m<sup>2</sup> Spirulina in a remote village to start a SPIRULINA CENTRE" for the whole province of Maniema.

- 🌱 All forms and pre-requisites have been done by IIMSAM/KKEO Kenya to conform to the Soley Institute requirements. Official water sample scientific reports have been provided to Soley Institute.
- 🌱 IIMSAM/KKEO Emergency Clean Water Programme to be implemented at the field level using affordable and sustainable local technology already being used by IIMSAM/KKEO Spirulina Programme in Kenya.
- 🌱 IIMSAM/KKEO have secured 3 water machines to clean the water and provide immediate relief to the affected population.
- 🌱 IIMSAM/KKEO will be making efforts to serve clean water for two refugee camps, near Goma in the DRC. It will take **\$100** per day to provide clean water to both camps some 60,000 refugees.
- 🌱 IIMSAM will be appealing to its supporters, public and private sectors, wealthy individuals, the GEMS Foundation and others for emergency funding.
- 🌱 Dr. J. L. Vidalo, is organising the official IIMSAM trip to the DRC along with Mrs. Els Mulder IIMSAM/KKEO Executive Director in Kenya. Team will depart on the 28 of November to the DRC.

**(Pro Bono) CONTRIBUTIONS OF THE SOLEY, INSTITUTE**  
**OUR OFFICIAL PARTNERS IN TURKEY:**

- The construction & installation of primary cultivation pond (1 m<sup>3</sup>).
- Soley Institute will be sending approximately 50 liters of high quality Spirulina culture, which is enough for culturing the primary Cultivation Pond.
- Soley Institute will also send a 3 liter capacity glass laboratory type photobioreactor
- (LPBR) for backup culture for emergency situations against any contaminations.
- Circulation pump will be sent for primary Cultivation Pond.
- After the primary Cultivation Pond begins to work, Soley Institute will be sending Special
- Nanotechnological Harvest Filter Fabrics.
- During this period TWO 50 m<sup>3</sup> pond will be constructed (by KKEO). All the construction plans will be sent by Soley Institute and the construction should be according to these plans.
- The Circulation Pumps (and hoses) needed for these two 50 m<sup>3</sup> ponds will be provided by Soley Institute.
- The Starter Chemicals needed for cultivation of spirulina in these two 50 m<sup>3</sup> ponds will be provided by Soley Institute.

- The needed harvest filters for one year will be sent by Soley Institute.
- Soley Institute will be distributing high quality dry spirulina for IIMSAM to approximately 1000 families designated by the IIMSAM/KKEO Emergency Relief Team for the DRC. between 01.01.2009 – 01.06.2009 dates. The approximate amount to be distributed is 400 kilograms.
- One child needs approximately 6 grams of spirulina per day The contribution will be calculated by; number of children x 6 grams x 30 days. a brochure in English and Turkish will be provided with the contribution, explaining the benefits of Spirulina and how to use spirulina.
- Requested conditions to be eligible for spirulina aid; - families who are not able to provide enough food to their children due to financial insufficiencies, refugees, victims of severe malnutrition and starvation. and those requiring urgent nutritional support against nutritional deficiencies due to diseases such as HIV, cancer, etc.
- Only children between one to twelve year old will be able to benefit from this aid.
- This aid will continue to go on depending on the needs and the feedback.
- After feedbacks are approved that spirulina is beneficial for that family, an indoor & outdoor photobioreactor will be donated, which can produce 10-20 grams of spirulina per day.
- Each photobioreactor costs approximately 1000 USD and this cost will be provided by Soley Institute and AlgalPBR photobioreactor company.



- **The Interagency Working Group, Disaster Preparedness for Central & East Africa, Humanitarian Aid Department of the European Commission(ECHO)** will provide the logistical support (by flying our team and supplies of water purification system, medical supplies etc, to the affected areas where IIMSAM has an emergency mandate in any of the following countries:

- Countries covered : Uganda, Burundi, Tanzania, DRC, CAR, ROC, Sudan, Eritrea, Ethiopia, Kenya, Somalia, Zimbabwe, Zambia, Madagascar, Mozambique, Malawi, Lesotho, Swaziland
- IIMSAM-KKEO team led by Mrs Els Wjt Mulder- Director IIMSAM-KKEO of Kenya, IIMSAM Spirulina Expert Dr. Jean Louis Vidalo from Switzerland, Dr. D. Agobe and Prince Fundi of the Maniema region would be visiting the Democratic Republic of Congo on the 28<sup>th</sup> of November 2008 to facilitate the operations for the distribution of medical supplies and the Water Purification Systems to alleviate the immense sufferings of the local population in a prompt and an effective and efficient manner.

**THE TEAM DESIGNATED BY IIMSAM's DIRECTOR GENERAL FOR EMERGENCY OPERATIONS IN DEMOCRATIC REPUBLIC OF CONGO, MANIEMA REGION:**



Eng. **Dieudonné Fundi Malombo**, is the Project Manager of IIMSAM-KKEO, Kenya-East Africa for the Spirulina cultivation; and leads the team involved in the production of Spirulina. Is an agricultural engineer by trade specialized in phytotechnology from IFA/Yangambi Institut Facultaire des Etudes Agronomiques) in the Democratic Republic of Congo. His experiences of extreme poverty, severe malnutrition, unemployment, diseases including HIV/AIDS in the country played a major role in choosing his occupational career. He has long been motivated by the negative effects of the war to find a lasting solution for malnutrition, which is a major problem affecting the people of the Democratic Republic of Congo and Africa. In 2003, he signed a contract with ANTENNA Technologies, Geneva branch of Goma, Democratic Republic of Congo as the leader of their Spirulina cultivation and production project. He is also involved in conducting seminars, cultivating and harvesting Spirulina for ready use. Since February 2008 for the IIMSAM/KKEO Spirulina Kenya East-Africa Programme.



**Dr. M. Mustafa Kizililsoley, IIMSAM's Facilitator**– Operations from the Republic of Turkey, was born in Istanbul. He has a MS Degree in Molecular Cell Biology from the University of California, Los Angeles (UCLA) and a MD Degree from the School of Medicine, University of Southern California (USC). Dr. Kizililsoley is on the board of various international organisations in the field of medicine and psychology. He is also a member of many Turkish and international aid foundations. Dr. Kizililsoley has around a dozen scientific publications in Psychiatry, Hypnosis, Learning Systems and various facets of micro-algae among others; and has addressed various international symposiums and congresses. He is also actively involved in contemporary issues that concern global

sustainable development. Dr. Kizililsoley is the founder of the Soley Institute in Istanbul, Turkey that is a non-profit organization which works in the field of micro-algal biotechnology. He would play a pivotal role to establish Spirulina infrastructure in DRC.



**Mrs. Els Wijt-Mulder Is an IIMSAM Special-Adviser and facilitator as well as Director-Founder of the IIMSAM-KKEO Kenya Spirulina Programme.** She was born in Amsterdam the Netherlands in 1942 during the Second World War. On the 13th April 1946 at the tender age of three and a half years, she had a train accident where she lost both her legs from under knee. These were trying moments when her country was faced with severe hunger just after the war. Health facilities were equally inadequate. The accident marked the beginning of a long journey to be exposed to difficulties that would prepare her to overcome challenges in the real life situations. She was hardened and learned to be a fighter in the struggle in support of IIMSAM's affirmative action initiative aimed to save victims of malnutrition in Kenya. Mrs. Mulder is a living testament on the enormous contributions Spirulina can make to the restoration of health for persons/children with severe malnutrition, HIV/AIDS and other varied health conditions. As demonstrated by the IIMSAM-KKEO Spirulina Programme through the cultivation of Spirulina of 140 m<sup>2</sup> and her visit to the Democratic Republic of Congo which she visited Goma in May 2006 where she witnessed how Spirulina was use as a key-driver to provide solution to the problem of Hunger and Malnutrition to help the physically, mentally and malnourished challenged children.



Dr. Jean Louis Vidalo, M.D., IIMSAM's International Expert on Spirulina is a specialist in experimental medicine and sport medicine. Dr. Vidalo is the Chairman of the Medical Institute Hippocampe, located in Geneva, Switzerland. He has worked for over fifteen years on various varieties of Spirulina, their development and production. To realize his ambition of a world free of hunger and malnutrition, Dr. Vidalo's research on the micro-algae always included R&D on nutritional aspects for human beings along with pharmaceuticals aspects and bio-energy considerations; and also its industrial processing. Dr. JL Vidalo was the personal consultant to President H.E. Ange Patasse of the Central African Republic and in-charge of the Research & Development Project of Spirulina Farm from 1993 to 2003. He is an integral part of the European programme for photo-bio reactors SINTE, sponsored by the chemical and pharmaceutical Group Solvay in the Acores Islands. Dr. Vidalo is the legal developer and owner of a patent on Production of Spirulina with High Active Elements Contents known as 'Spiruline HTPA'. He is also in-charge of High scale development programs on Spirulina in Tunisia and also in-charge of humanitarian projects on Spirulina in Senegal and Ivory Coast. Dr. Vidalo is the author of a comprehensive book on Spirulina; "Spirulina, Health and well being algae" which has been published by Le Dauphin- Paris.

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## HOW YOU CAN HELP!

THE IIMSAM EMERGENCY OPERATIONS SPIRULINA RELIEF PROGRAMME IN THE  
DEMOCRATIC REPUBLIC OF CONGO

SEE BELOW:



**YOU CAN SEND YOUR DIRECT CONTRIBUTIONS TO  
OUR FIELD DIRECTOR MRS. ELS MULDER  
C/O IIMSAM/KKEO**

Kisumu Kids Empowerment Organization  
P.O. Box 3666 40100 Kisumu, Kenya  
Reg.nr. OP.218/051/2007/044/4471  
Bank account: Diamond Trust Bank Kenya Ltd.  
Kisumu Branch, Diamond Trust House  
Oginga Odinga Road 1081-40100 Kisumu Kenya  
**Account: 0400986001**  
**Swift Code: DTKEKENA**



**FOR AMERICAN CITIZENS FOR TAX DEDUCTIBILITY  
GLOBAL ERADICATION OF MALNUTRITION & STARVATION  
SENT YOUR DONATION TO: PRESIDENT OF GEMS  
MR. ANTHONY ANGIULLI**

The U.S. Gems Foundation a 501-C-3 non-profit was formed for IIMSAM to support the work of the mandate of IIMSAM (Intergovernmental Institution for the use of Micro-algae Spirulina Against malnutrition) by raising funds for its programmes and increasing awareness of the challenges facing the world's malnourished children and adults. We are part of a global effort to save, protect and improve children's lives.

**Mission**

The Mission of The GEMS Foundation can be described in three points:

- Raising vital resources necessary to secure the Global Eradication of Malnutrition and Starvation on behalf of IIMSAM
  - Advocating and raising awareness about the aspirations of the United Nations MDGs especially to ameliorate the plight of the malnourished
  - Complementing the mandate of IIMSAM by financial planning, resource management and allocation, and other best practices

**DONATIONS FOR GEMS FOR EMERGENCY OPERATIONS FOR THE IIMSAM/KKEO  
SPIRULINA RELIEF PROGRAMME IN THE DEMOCRATIC REPUBLIC OF CONGO  
SHOULD BE SENT TO:  
245 Park Avenue, 39<sup>th</sup> Floor.  
New York, N.Y. 10167**