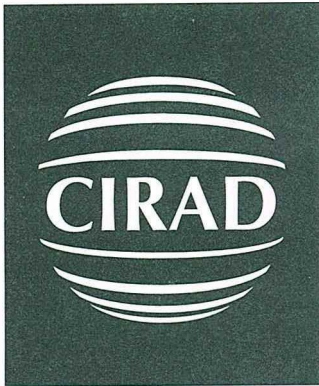


**Back to Office Report**

**Mission to Vietnam and China**



***Technical Follow-up of the Regional Asia Research Programme  
IMPHOS-CIRAD:***

***“Improvement of Crop Production on Acid Sulphate Soils by Direct  
Application of various Rock Phosphates”***

Contact with 3 research institutes:

National Institute for Soils and Fertilisers - Hanoi (Vietnam)  
Centre for Soils and Fertilisers – Ho Chi Minh City (Vietnam)  
South China Agricultural University - GuangZhou (China)

***From 10 / 09 to 25 / 09 / 1999***

***Proposition of fertilisers adapted to local cropping conditions  
in Vietnam***

Contact with 2 companies of fertilisers production:

BACONCO – Ho Chi Minh City  
Van Dien Fused Magnesium Phosphates - Hanoi

***From 26 / 09 to 06 / 10 / 1999***

Denis Montange





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The first part of this mission consisted in the technical follow-up of the field activities of the IMPHOS Regional Asia Research Programme: "Improvement of Crop Production on Acid Sulphate Soils by Direct Application of various Rock Phosphates". This mission was undertaken with Dr Abderrahim Nassir, responsible for Asian projects at IMPHOS Casablanca.

The second part was spent visiting two companies producing phosphate fertilisers in Vietnam: BACONCO in South Vietnam and Van Dien in the North. These visits were planned to be done along with M. Bambang Suprihadi, Director of the Indonesian company P.T. Polowijo Gosari, producing fertilisers in Surabaya (Java Island). Contacts have been already taken with this company in Montpellier and in Indonesia.

## **1. Crop Fertilisation on Acid Sulphate Soils**

### **1.1 Vietnam**

The National Institute for Soil and Fertilisers (NISF) is in charge of the technical backstopping of activities for the North of Vietnam (actual acid sulphate soil in Kien An - Hai Phong), while CSF is in charge for the South (potential acid sulphate soil in Binh My and actual acid sulphate soil in Kenh Dong).

A report concerning the first cropping season has been prepared, giving a lot of information on yield components. The yield increases due to the various P applications are not very high (less than 20% for the 3 experiments). However statistical tests should be done to assess the significance of these differences.

#### **1.1.1. Hai Phong region**

The visit paid to the paddy field in Kien An has shown no visible differences between the 7 treatments. The rice plants in the field were 80 days old (30 days in nursery). The control yield for the first crop was 5.2 tons/ha, indicating that the P fertility of the soil is high.

It will be necessary to split each plot into sub-plots (with and without P application), in order to measure the residual effect of each treatment. As the second crop is already in the field, the splitting should be done during the third cropping season. Each plot might be divided into 3 equal subplots in order to measure the residual effect of 2 doses of  $P_2O_5$ : 180 and 270 kg/ha, compared to 360  $P_2O_5$  (total P applications for 3 cropping seasons).

	P Fertilisation per crop	Total P Fertilisation
1st Crop	90 P <sub>2</sub> O <sub>5</sub>	
2nd Crop	90 P <sub>2</sub> O <sub>5</sub>	180 P <sub>2</sub> O <sub>5</sub>
3rd Crop	0 P <sub>2</sub> O <sub>5</sub> 90 P <sub>2</sub> O <sub>5</sub>	180 P <sub>2</sub> O <sub>5</sub> 270 P <sub>2</sub> O <sub>5</sub>
4th Crop	0 P <sub>2</sub> O <sub>5</sub> 0 P <sub>2</sub> O <sub>5</sub> 90 P <sub>2</sub> O <sub>5</sub>	180 P <sub>2</sub> O <sub>5</sub> 270 P <sub>2</sub> O <sub>5</sub> 360 P <sub>2</sub> O <sub>5</sub>
5th Crop	90 P <sub>2</sub> O <sub>5</sub>	270 P <sub>2</sub> O <sub>5</sub> 360 P <sub>2</sub> O <sub>5</sub> 450 P <sub>2</sub> O <sub>5</sub>

In the region of Hai Phong, the irrigated rice is planted after one up to two months in nursery. The recommended rates of fertilisation per hectare per each crop are the following:

150 to 180 kg of urea = 69 to 83 N

300 kg of SSP or FMP (Fused Magnesium Phosphate) = 54 P<sub>2</sub>O<sub>5</sub>

120 kg of KCl = 72 K<sub>2</sub>O

The price for 1 kg of urea is 2 000 dong, for 1 kg of SSP or FMP: 1 000 dong, for 1 kg of KCl: 2 300 dong. The application of recommended rates will represent 936 000 dong (370 to 470 kg of paddy).

The average paddy yields are the following:

Alluvial Soils: 6 to 7 tons/ha

Acid Sulphate Soils : 3 to 4 tons/ha

Sodic Soils: 2 to 3 tons/ha

These yields are fluctuating, according to variety planted and cropping season (2 to 3 according to water availability in the field).



Visit to another experiment near Tam Dao, 50 km north of Hanoi, shows that farmers are adapting their cropping system to the climatic conditions, *i.e.* this year, as the first season rice gave poor yield due to drought, instead of growing upland dry crops (groundnut, maize or soybean) during the second season, they try to grow an irrigated rice on the plots usually planted with upland crops. The farmer responsible for part of the experimental field is cultivating 700 sqm of irrigated rice field (3 rice crops per year) and 2 000 sqm of upland rainfed field. For irrigated rice, the fertilisation used is 64 N, 76 P<sub>2</sub>O<sub>5</sub> and 34 K<sub>2</sub>O. 150 to 200 kg of farmyard manure are used for 1 sao (Vietnamese area unit equivalent to 360 sqm in the North or 500 sqm in the Centre, as 1 công is 1 000 sqm in the South).

The National Institute for Soil and Fertilisers (NISF) is 30 years old this year. 211 persons are employed by this institute (from these, 90 are researchers). The Institute is dealing with soil genesis, classification and mapping (GIS); land use planning, research on soil environment, soil fertility and plant nutrition. A laboratory for analyses and 2 experimental stations complete the research facilities of the institute. NISF is the Reference Centre for soils in Vietnam for ISRIC. The former classification of Vietnamese soils, established in collaboration with scientists from USSR, is now replaced by the FAO classification. NISF is also responsible of the testing of new fertilisers with consideration of their efficiency on plant growth on the main types of soils. The fertility status of the main soil classes is currently monitored in order to obtain trends in fertility evolution. Moreover a monitoring is done to control soil contamination by heavy metals. NISF has collaborative projects with the Swiss Development Fund (on forestry), PPI (on balanced fertilisation), IBSRAM (on management of slope land), IRRI (on reversing trend of soil productivity of rice cropping) and IMPHOS of course, on P nutrition of crops.

#### 1.1.2. South Vietnam

The experiments have been fielded in the Cu Chi region, 60 kilometres North West of HCMC.

The Binh My experiment has been fielded on a potential acid sulphate soil. Farmers are growing 2 crops of rice per year instead of 3 because of rats attacks during the second one.

Fertilisation used by the farmer in Binh My for his paddy fields:

20 days after planting: NPK (16-16-8) + Urea + SSP

40 days after planting: KCl

Before flowering: Urea + NPK + KCl

The quantities of fertilisers are adapted according to the available budget of the farmer for the growing season. It was impossible to make any calculation on the cost of fertilisation. The splitting of potash application is recommended as the fixing capacity of the soil (or the "washing away") for K is considerable.

The price for 1 kg of NPK 16-16-8 is 2 600 dongs, for 1 kg of urea: 2 200 dongs, for 1 kg of SSP or FMP: 1 000 dongs, for 1 kg of KCl: 3 000 dongs.

The average yield on this field is, according to the farmer, 4 to 4.5 tons/ha for spring season and 3 to 3.5 tons/ha for autumn season.

In Kenh Dong, the second crop of the experiment was already harvested and the maximum yield increase is 30% over the control without P. A statistical test will be done.

The fertilisation used by the farmer per hectare is 100 kg of urea + 200 kg of SSP, 1 month after planting, and 160 kg of NPK 16-16-8, 1 month later. This represents 74 N, 62 P<sub>2</sub>O<sub>5</sub> and 13 K<sub>2</sub>O. The cost of such a fertilisation is 900 000 dongs or equivalent to 360 - 530 kg of paddy.

The main constraint for the 3 experiments in this season is due to the rats attacks. Plastic sheets are used to isolate the plots and poisoned grains are also employed. It seems that these attacks are more important during the second cropping season, and farmers are now reluctant to grow rice during this period. In the South for example, our experiments stand alone without rice showing the same degree of maturity around. The cropping pattern followed for the IMPHOS experiment should be more related to the farmers' one.

According to the Institute of Agricultural Science of South Vietnam (HCMC), the fertilisation recommended for rice on grey soils in the Mekong Delta is 78 / 46 / 48 with the following repartition: 10 days after planting: 100 kg of urea / ha, 1 month later: 200 kg of 16-16-8 / ha and at panicle initiation: 80 kg of KCl and 80 kg of SSP / ha. Such a fertilisation represents nearly 1 million dongs or 600 kg of paddy per hectare.

The CSF (Centre for Soil and Fertiliser Research and Techno-Transfer) of HoChiMinh City, in charge of IMPHOS acid sulphate soil experiments in South Vietnam, has 10 researchers dealing with soil fertility and crop fertilisation in the South of Vietnam: soil properties, environmental preservation, soil protection against pollution, land use planning, soil/plant suitability, test of new fertilisers. The CSF operates a laboratory for the main soil analyses.

## 1.2. China

The IMPHOS experiments on acid sulphate soils are located in the south of China (Guangdong and Hainan Provinces) and the technical follow-up is done by the South China Agricultural University (SCAU) of Guangzhou. Dr Yan Xiao Long, Director of the Agrochemistry Department of the SCAU, is responsible for this follow-up.

1200 teachers and technicians/administrators are working at the SCAU for 6 000 students. Students, mainly in agronomy, biology, agricultural engineering, forestry, animal husbandry and veterinary medicine, come from 16 provinces of China; foreign students are accepted in SCAU and agricultural training centres are also located within the SCAU premises.

Some researchers of the Agrochemistry Department are dealing with integrated plant nutrition (i.e. balanced fertilisation). Some experiments are conducted on the influence of architecture of rooting system and root exudates on P efficiency uptake of common beans in acid soils. Some researchers are dealing with hydroponic cultivation (tomato, melon, lettuce,...) and with gene mapping of rice recombinants; they are trying to find the location of genes linked to P efficiency uptake / tolerance to low P level in the soil.



The present mission consisted in field visits to the 2 sites of rice experiments (1 in Guangdong Province and 1 in Hainan Province) on acid sulphate soils and technical discussions with researchers in Guangzhou (SCAU), Zhanjiang and Haikou (research centres).

### 1.2.1. Guangdong Province.

The experiment has been fielded near Zhanjiang. The field activities are followed by the Southern Subtropical Crops Research Institute managed by the Ministry of Agriculture, institute dealing mainly with subtropical crops breeding (i.e. fruits such as mango, macadamia, litchee,...) and crop nutrition. The experimental station situated near Zhanjiang covers 400 hectares mainly devoted to fruit and ornamental productions.

The IMPHOS experiments have been fielded outside the station. One of the interests of this location is that part of the land was already reclaimed by farmers and used for rice cultivation, while an other part (in the vicinity) was abandoned since a long time due to soil acidity and infertility (this field is mentioned as unreclaimed). We can see many differences between treatments in this experiment, either in the reclaimed or in the unreclaimed parts of the field. At the tillering stage, the best-looking rice plants were observed for the soluble P treatments (SSP better than TSP). This has been noticed for the number of tillers per plant which is more important for soluble P, even if the height of the plants is not much differing from one treatment to the other.

The results of the first cropping season show that on the already cultivated field, no significant difference was observed within the phosphate fertilisers: there is no effect of P on rice yield. On the unreclaimed field, compared to the control without P fertilisation, the yield of paddy has increased due to P application, minimum with Kunyang RP and maximum with TSP.

It should be noted that, due to low pH of the soil, some lime has been applied before the cultivation (1 500 kg/ha on the cultivated field and 3 750 kg on the unreclaimed plot). This lime application has increased the soil pH, thus lowering the efficiency of the rock phosphates, as soil acidity is needed to dissolve the RP and release phosphorus.

The control plot (receiving 207 N and 258 K<sub>2</sub>O during 3 split applications) has a paddy yield of 3 tons/ha on the unreclaimed plot and nearly 5 tons/ha on the already cultivated field.

The average paddy yield is 4.5 t/ha/year on ASS while it is 7.5 t on rice fields other than ASS. The recommended fertilisation for rice in this region is 450 kg of urea and 375 kg of KCl (for N and K, 1/2 in basal application and 1/2 40 days after transplanting) and 75 P<sub>2</sub>O<sub>5</sub> as SSP as basal. The seedlings remain 1 month in nursery. Such an application corresponds to the following fertilisation: 207 N, 75 P<sub>2</sub>O<sub>5</sub> and 225 K<sub>2</sub>O. Usually, in South China, the recommended fertilisation for irrigated rice should follow the ratio 2 - 1 - 1.5. We are not within this figure for the paddy fertilisation in Zhanjiang. As in many places in China, the crop fertilisation is unbalanced.

Retail Price of Urea: 2.2 Y/kg, of KCl: 1.4 Y/kg, of SSP: 0.3 Y/kg

The price of paddy sold to the government is 1.6 Y/kg.

The average area cropped for irrigated rice is 600 sqm per capita in the region, together with 800 sqm for upland crops. The paddy is used for feeding the family and other money incomes are used to buy inputs and pay for the government taxes, instead of selling some rice for this purpose.

### 1.2.2. Hainan Province

The 2 experiments (on reclaimed and unreclaimed soils) have been fielded in a zone near a mangrove. The same fertilisation as in Zhanjiang has been used (207 N, 90 P<sub>2</sub>O<sub>5</sub> and 258 K<sub>2</sub>O), but without lime application.

As for the Zhanjiang experiment, the treatments with soluble phosphate seem to give a better plant growth at the growing stage corresponding to our visit (i.e. flowering).

For the first two cropping seasons, all the P treatments have given a significant yield increase when compared to the control without P. During the second season, the yield increase was not so clearly different from one treatment to the other.

## 2. Contacts with fertilisers producers

The mission in Vietnam of M. Bambang Suprihadi, Director of the Indonesian company P.T. Polowijo Gosari, producing fertilisers in Surabaya (Java Island) was planned in order to visit fertiliser companies in Vietnam using methods which might be used in Indonesia to increase the diversity of fertilisers and propose formulas adapted to the farmers' demand.

### 2.1. BA CON CO (Ho Chi Minh City)

BA CON CO is a joint venture between the French company SCPA (Société Commerciale des Potasses et de l'Azote) and a Vietnamese company for production of fertilisers. 2 other companies having SCPA as a partner are dealing i) with production of animal feed in Bien Hoa (PROCONCO) and ii) with the management of a deep water harbour near the BACONCO factory in Phu My (BARIA SERECE).

100 000 tons of fertilisers have been produced during the first year and 150 000 tons are planned for the second one. The total capacity for the 3 lines of fertiliser production working in BACONCO is 300 000 tons. These 3 lines are:

- 1. Bulk blending for NPK high grade fertilisers (i.e. 20-20-15 or 16-16-8 which are prepared by mixing DAP, urea and KCl).

- 2. Dry compacting used to produce various formulas of fertilisers. It is interesting to note that this dry compaction is very easy to handle, as the minimum fertiliser batch is 50 tons and the formula might be adjusted just by changing the components of the fertiliser. Under these conditions, the flexibility of the fertiliser production is very high.

Various components can be mixed under dry compaction: urea (not more than 10 %) or ammonium sulphate for nitrogen, Rock phosphate (raw or partially acidulated), MAP, DAP, SSP, TSP, FMP for phosphorus, KCl or SOP for potash, kieserite for magnesium,...



- 3. USP production: Urea Super Phosphate is a new product in the fertiliser industry. BACONCO is managing the second larger plant in the world. USP is produced by attacking the rock phosphate with a mixture of sulphuric acid and urea. USP is a 20-10-0, plus 7 S and 15 CaO. It can be used directly or mixed with MOP to produce a NPK formula. The nitrogen contained in USP is no more free urea but is combined with P (substantial amount of tetra urea calcium sulphate), so it is more stable than urea in neutral or alkaline soils (lower volatilization). 90% of P is under a water-soluble form.

Moreover there is no by-product such as phosphogypsum to evacuate, this reducing the environmental cost of (or damage due to) the production of phosphate fertilisers.

Using these 3 lines, BA CON CO produces several types of fertilisers adapted to farmers' demands (for various crops and soils types).

Experiments under controlled conditions or in farmers field are done every year in collaboration with agronomic research centres in Vietnam. The designs of confirmation experiments have been prepared during this mission.

## 2.2. Van Dien (Hanoi)

The capacity of this factory is 200 000 tons of Fused Magnesium Phosphates, but it is not working at its full capacity. It has been built in 1963, using a Chinese technology, which has been adapted and modified.

The rock phosphate coming from Lao Cai is mixed with coal and serpentine (magnesium silicate). The required size for these components is 20 to 80 mm. The 3 components are washed in order to avoid dust to be introduced into the furnace as it could explode. The remaining powder is moulded into briquettes. The mixture (600 kg of Lao Cai RP, 500 kg of serpentine, 300 kg of coal, needed to obtain 1 ton of FMP) is cooked for 2 hours at 1 400°C. The fused mixture is then rapidly cooled in water. The FMP can be sold as granular or ground. The granular form is interesting when used for fertilisation of rice on acid sulphate soils as it can be applied even if some water is on the ground (it is not floating). The powdered form is used as a basis for mixing/granulating with other nutrients (i.e. nitrogen) in order to produce complex fertilisers.

This P fertiliser is interesting as it can be produced using medium quality rock phosphates, the P of FMP is not soluble in water but it is soluble in neutral ammonium citrate, so that it is easily available for the crops. Moreover, FMP contains amorphous silica, also available for crops uptake (silica is important for rice growing).

The FMP can be obtained under 3 different grades ( $P_2O_5$  content of 15-16%, 17-18% or 19-20%), when the P content of the initial rock phosphate is differing. Export price (FOB Hai Phong) for these 3 products is 67, 75 or 90 USD per ton respectively.

The price of FMP in North Vietnam is 900 dongs / kg. The transportation cost to send it to South (where there are a lot of acid sulphate soils) is subsidised by the government (300 dongs per kg), so that the price of FMP in the South of Vietnam is nearly the same as in the North.

## Conclusion

After visiting these 2 fertilisers production units, we have discussed with M. Bambang Suprihadi upon possibilities of collaboration between CIRAD and PT Polowijo Gosari on formulation of fertilisers, experiments (under controlled or field conditions) for confirmation of agronomic efficiency of these formulas. These experiments could be realised by researchers from Indonesian agronomic research centres with a technical follow-up by CIRAD.

Some collaboration will be needed on technical and financial subjects. CIRAD will assist PT Polowijo Gosari on these points, the reporter being the focal point or liaison officer. CIRAD will share its experience on these subjects with PT. Polowijo Gosari.

A collaboration convention will be prepared in a near future to formulate this future co-operation.



## Itinerary

- 11/09 Arrival in Hanoi: Meeting with National Institute for Soils and Fertilisers (Dr Tran Thi Tam, Vice Director, Dr Nguyen Van Bo and Dr Tran Thuc Son) + Dr Vo Dinh Quang (Centre for Soil and Fertiliser Research)
- 12/09 Travel Hanoi - Haiphong (car), visit of rice experiment on ASS, Discussions with the researchers from the Research station of Haiphong. Travel to Halong.
- 13/09 Halong Bay - Hanoi
- 14/09 Hanoi - Tam Dao: visit of upland research experiment on crop fertilisation in a rotation "groundnut - soybean - maize"  
pm. Meeting with Dr Son, Quang and Mrs Cong Thi Yen (NISF)
- 15/09 Hanoi - HoChiMinh City (air). Discussions with Dr Vo Dinh Quang
- 16/09 HoChiMinh City - CuChi: visit of rice experiments on ASS.
- 17/09 HoChiMinh City: Meeting at IAS (Institute of Agricultural Science of South Vietnam)
- 18/09 HoChiMinh City - Guangzhou: Meeting with Dr Yan Xiao Lpong (South China Agricultural University)
- 19/09 Travel Guangzhou - Shenzhen (car): visit of experiments on litchi (Xili Orchard farm), Travel to Jiangman (car)
- 20/09 am. Travel Jiangman - Zhanjiang (car)  
pm. discussions with researchers from the Research Station of the Chinese Academy of Tropical Agricultural Sciences (Southern Subtropical Crops Research Institute)
- 21/09 Zhanjiang:  
am. visit of rice experiments on ASS,  
pm. Travel by car to Haikou City (Province of Hainan)
- 22/09 Hainan:  
am. visit of rice experiments on ASS,  
pm. Discussions with researchers from the Hainan Academy of Agricultural Sciences (Soil and Fertiliser Research Institute)
- 23/09 am: Travel Haikou - Guangzhou (air); pm: Technical discussions with Dr Yan Xiao Long
- 24/09 Guangzhou:  
am. Meeting in SCAU with president and 3 vice-presidents of the university  
pm. Technical discussions with Dr Yan Xiao Long
- 25/09 Guangzhou - Ho Chi Minh City
- 26/09 Report preparation
- 27/09 BACONCO, HoChiMinh City
- 28/09 Visit to Ben Tre, Mekong Delta
- 29/09 Visit to Tan Phu, 170 km of HCMC, peat deposit
- 30/09 Arrival of M. Bambang Suprihadi, director of PT Polowijo Gosari, Surabaya, Indonesia  
pm. Meeting with Mr. Franck Bodin: presentation of the 3 companies of SCPA in Vietnam, presentation of the various fertilisers produced by BACONCO.
- 01/10 Visit of the 3 factories of SCPA in South Vietnam
- 02/10 Technical discussions on possible collaboration PTPG - CIRAD - BA CONCO
- 03/10 HoChiMinh City - Hanoi, discussion with NISF on Fused Magnesium Phosphate
- 04/10 Hanoi, visit of Van Dien factory producing FMP, Travel: Hanoi - Ho Chi Minh City
- 05/10 am. Technical discussions with B. Suprihadi and B. Truong  
pm. Ho Chi Minh City- Paris
- 06/10 Paris - Montpellier

## Persons encountered

### Vietnam

#### National Institute for Soils and Fertilisers, Hanoi

Dr Nguyen Van Bo, Director, responsible of the IMPHOS Project on ASS  
Dr Tran Thi Tam, Vice Director,  
Dr Tran Thuc Son, Head of Plant Nutrition Department  
Dr. Bui Dinh Dinh  
Mrs Cong Thi Yen, responsible for IMPHOS experiment

#### Centre for Soil and Fertiliser Research and Techno-Transfer, HoChiMinh City

Dr Nguyen Van Khiem, Director,  
Dr Nguyen Bich Thu, Vice Director  
Dr Vo Dinh Quang, Plant Nutrition, Soil Chemistry, Environment Research  
Mrs Tran Thi Tuong Linh, Agricultural Engineer

#### Experimental Station of Haiphong

Nguyen Trong Vinh, Director of Seed production,  
Nguyen Thi Ngoc Anh, Agronomist

#### Institute of Agricultural Science of South Vietnam, HoChiMinh City

Prof. Dr Cong Doan Sat, Deputy Director,  
Eng. Nguyen Quang Chon, Soil and Fertiliser Department  
Mrs Pham Thi Doan, Soil and Fertiliser Department  
Dr. Nguyen Dang Nghia, Vice Head, Soil Science Department

#### Oil Plant Institute of Vietnam

Dr. Diep Thi My Hanh, Agronomist

#### SCPA and BACONCO, HoChiMinh City

Jean-Luc Richard, PDG of the 3 companies in JV with SCPA in Vietnam  
Franck Bodin, Deputy Director general, BACONCO (HCMC)  
Bernard Leblanc, responsible at SCPA Paris for Africa and Asia  
Michel Marchand, SCPA, International Agriculture Division, Mulhouse  
Nguyen Thanh-Phong, fertiliser production in BACONCO Factory,  
Richard Szuflak, general manager of the Phu My port, BARIA - SERECE Company  
Louis-Marie Tricot, Animal Feeding Process engineer, PROCONCO, Bien Hoa

#### VAFCO Van Dien, Hanoi

Eng. Nguyen Van Viet, Director

## China

South China Agricultural University, Guangzhou (Guangdong Province)

Pr. Luo Shi Ming, President

Pr Xiwen Luo, Vice President

Dr. Han Hui, Deputy Director, Foreign Affairs Office

Pr. Li Huaxing, Vice Dean, College of Natural Resources & Environment

Pr. Yan XiaoLong, Director Department of Agrochemistry, responsible IMPHOS Project.

Xili Orchard Farm, Shenzhen (Guangdong Province)

Zhou Xian Jun, Vice Director

Southern Subtropical Crops Research Institute, Zhanjiang (Guangdong Province)

Zhang Hailin, Director

Sun G.M., Deputy Director

Haikou City (Hainan Province)

Soil and Fertiliser Research Institute, Hainan Academy of Agricultural Sciences

Li Kexiang, Vice President

Hie Liangshang, Director

Hainan Province Tropical Industrial Crops Popularize Stand

Xing Fu Huo, Director



Objet: [Fwd: [Fwd: EC framework contract; lot 6: ENVIRONMENT]]  
Date: Thu, 21 Oct 1999 11:24:58 +0100  
De: Dominique POLTI <dominique.polti@cirad.fr>  
A: Jean-Luc Farinet <jean-luc.farinet@cirad.fr>,  
Denis Montange <denis.montange@cirad.fr>  
Copies à: Jean-Luc Khalfaoui <jean-luc.khalfaoui@cirad.fr>

Bonjour,

Je vous fais parvenir ce message et un 2° pour compléter les fichiers attachés selon les modèles. Merci de renvoyer le tout à J.L Khalfaoui qui répercutera ensuite à A. Guyot.  
A+.

----- Original Message -----

Objet: [Fwd: EC framework contract; lot 6: ENVIRONMENT]  
Date: Thu, 21 Oct 1999 07:59:08 +0200  
De: "Alain Guyot" <alain.guyot@cirad.fr>  
A: valo <valo@cirad.fr>

Collègues...

Vous trouverez ci-joint une copie du mail d'agrifor avec une série de documents qui serviront à préparer l'offre du consortium . Vous y trouverez en particulier le formulaire de CV à remplir ou faire remplir en anglais par tous les candidats que nous aurons retenu. (je signale à ce titre qu'à ce jour seul le Ca a envoyé des propositions, j'aurai aimé que ce dossier soit pris en priorité et que chacun d'entre vous dans les départements fasse son possible pour éviter que ce soit une course au dernier moment. (J'ai eu Agrifor au téléphone hier, les cv des autres partenaires ont commencé à arriver, quand pourrons nous transmettre ceux du Cirad ?). Pour remplir ce cv des informations complémentaires sont nécessaires, elle vont vous parvenir dans la matinée par S Stein qui va scanner le dossier. Avec chaque cv proposer remplir le tableau appelé table of geographical and field of qualification for lot 6 en respectant la normalisation proposée, remplir également la déclaration d'exclusivité et/ou (nous devons en décider) la déclaration de disponibilité (availability) jointe au second message qui va suivre celui-ci. Je me chargerai de remplir les autres formulaires. Par ailleurs j'aimerais avoir votre interprétation du dernier paragraphe du point 10 du document instructions aux soumissionnaires (fichier que doit vous envoyer D Stein.).

Je serai en réunion toute la journée, donc non joignable. (c'est la raison de mon envoi matinal), mais je serai au bureau demain toute la journée. Nous enverrons à Agrifor 20 cv les plus représentatifs des compétences que nous voulons mettre en avant. Je pense les apporter avec moi le mardi 26 à Bruxelles. S'il y a des retardataires nous les enverrons au fur et à mesure sans garanti qu'ils soient retenus par le consortium.

Je viens de recevoir l'avis de préqualif du NRI sur le lot 1. Nous allons avoir à faire le même exercice avec le NRI. Commencez donc aussi à préparer les cv que nous allons envoyer. Même procédure, nous sélectionnons 20 CV représentatifs de notre savoir faire dans les domaines concernés par l'appel d'offres.

Le complément des documents suit dans un second message et les parties les plus importantes du dossier vont vous être envoyées par D Stein dans la matinée dès qu'ils seront scannés.

Merci de me retourner les cv et les autres documents par E mail en fichier attaché avec copie à D Stein.

Bon courage. Amitiés.

Bon courage

--

ALAIN GUYOT



CIRAD - Direction des Relations Extérieures  
Partenariats de Développement  
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Objet: EC framework contract; lot 6: ENVIRONMENT  
Date: Tue, 19 Oct 1999 20:20:53 +0100  
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Subject: - Framework contract N° IB/AMS/451  
- Lot 6: Environment

Dear Madam, dear Sir,

We hope that you already have received the tender dossier by mail, otherwise it should arrive soon as we sent it last Thursday (14/10).

Some comments on the tender dossier:

#### A- SELECTION OF EXPERTS

Please find attached some documents:

1- a dossier of selection for each expert, including:

- an invitation letter asking them to be part of our pool of experts,
  - an EC model of CV,
  - the model of declaration of exclusivity,
  - and a table of geographical and fields of qualification (file: Expert - Lot 6 - Table of qualification.doc).
- Please send this dossier to each expert you want to contact.

2- a model of table for each company (file: Company - Lot 6 - Table of qualification.doc).

We ask you to send us regularly this table updated with the names of the latest selected experts. We will then compile all the experts names of the consortium in one general table and quickly identify the fields/geographical areas where we are "weak", in order to ask to each company to find experts qualified in those specific sectors.

As specified in the tender dossier, we will have to present 20 experts in the technical offer. Due to the number of sectors and geographical areas we must cover, it is clear that (we think) we will have to present only highly qualified experts (category I). Obviously, this list will not be exhaustive and not only those 20 experts will carry out short term missions, but that list must prove our capability to provide expertise in every field/geographical area covered by Lot 6 (see table).

Please, start immediately the contacts with the experts, as all the other consortia are also looking for "their"/our best experts !

#### B- FINANCIAL OFFER AND ORGANISATION OF THE CONSORTIUM

This is another important aspect. Hence, AFCO's General Manager, Mr Legrand, will send you in November (he is at present 'on duty') a draft of the financial offer as well as a proposal for the consortium's organisation (incl. co-ordination, management fee, etc.).

Of course, we will make sure that every member of the consortium will receive a copy of both the technical and financial offer.

I remain at your disposal for any further clarification you may request.

Yours sincerely

Philippe Veron