

Contract

between

Institute of Applied Ecology,
Chinese Academy of Sciences

and

Research Institute for Humanity and Nature
Inter-University Research Institute
Corporation
National Institutes for the Humanities

on

The Research on the Distribution of Soil
Chemistry in Sanjiang Plain for 2008

Contract
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and
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Inter-University Research Institute Corporation
National Institutes for the Humanities
on
The Research on
the Distribution of Soil Chemistry in Sanjiang Plain
for 2008

The Amur-Okhotsk Project of The Research Institute for Humanity and Nature (RIHN) hereinafter to be called CUSTOMER in the person of Prof. Akihiro Kinda, Director of Inter-University Research Institute Corporation, National Institute for The Humanities, on one side, and Institute of Applied Ecology, Chinese Academy of Sciences (IAE-CAS) hereinafter to be called EXECUTOR in the person of Professor Chen Xin, Assistant Director of IAE-CAS, on the other side, concluded the present contract for the following.

1. Subject of the Contract

1.1 The CUSTOMER is to be charged with and the EXECUTOR is to be taken the responsibility for the continuation of the research project entitled "The Research on the Distribution of Soil Chemistry in Sanjiang Plain for 2008".

1.2 The EXECUTOR is to be responsible for following works in 2008:

- to conduct, from August 2008 to March 2009, research on soil profile of iron and other soil properties under different soil types and different utilizations in Sanjiang plain as described below.
- necessary procedures to ship the samples to CUSTOMER for specialized analyses in Japan.
- to submit the final report and analyzed data to the CUSTOMER by 15 March, 2009.

1.3 The CUSTOMER is to be responsible for following works:

- to provide necessary tools, determine methods and make observations with Chinese colleagues for the research.
- to make specialized analyses in soil samples in various institutions in Japan.

- to provide the Japanese members with the transportation (including payment of customs taxes) between Japan and China.
- to provide shipping cost of necessary equipments and samples between Japan and China.
- to prepare the expenses for the EXECUTOR's works noted in Item 1.2.

2. Technical conditions

- 2.1 The program of the work noted in Items 1.2 and 1.3 is given in the schedule of the Study (Supplement 1).
- 2.2 The period of implementation is from 1 August 2008 till 15 March 2009.
- 2.3 The EXECUTOR and the CUSTOMER are to make copies of observation records and results obtained within the framework of the work program (Supplement 1) and are to provide them to each other.
- 2.4 The CUSTOMER and EXECUTOR have equal rights on the results of work and are to use them for the joint investigations within framework of the Implementation Arrangement between IAE-CAS and RIHN.

3. Costs

- 3.1 The EXECUTOR is to provide Quotation to the CUSTOMER on expenses of EXECUTOR's works noted in the Item 1.2 prior to the conclusion of the Contract.
- 3.2 The CUSTOMER is to pay in US Dollars 21,042 to the EXECUTOR for the work noted in item 1.2 in accordance with the calculations for individual stage of the works, given in Supplement 2.
- 3.3 Japanese members who will participate in the work noted in Items 1.2 and 1.3 are to pay for the following expenses (these expenses are not involved in the amount above): air, and train fares between Japan and the research fields and personal fees such as accommodations.
- 3.4 Expenses of the surface transportation in the local research area are to be involved in the amount above and are to be paid by the EXECUTOR.
- 3.5 The payment is to be made as follows:
 - The first payment of US Dollars 16,834 (80 %) being just after the conclusion of the Contract;
 - The second (final) payment of US Dollars 4,208 (20%) being just after the receipt of Final Report.
- 3.6 All payments to the EXECUTOR are transferred through the bank on the account of the EXECUTOR (See Item 6) according to Supplement 3.

4. Other conditions

- 4.1 The EXECUTOR is to submit Final Report including all results of works before March 15, 2009.
- 4.2 On termination of the work at March 15, 2009, the EXECUTOR is to submit the Document about the accomplishment of the work to the CUSTOMER in two copies. The Contract is considered to be over after final payment and signing of the Document is done by both sides.
- 4.3 The both sides bear responsibility for safety measures of their representatives, taking part in the field experimental works.
- 4.4 In case of destroying of habitable premises, devises and equipment due to natural disaster (fire, earthquake, lightning etc.) the schedule of the work and calculations are to be corrected taking into account an occurred damage.
- 4.5 The equipment, tools and other properties obtained for the implementation of the Contract are to be belonged to the side, which purchased them.
- 4.6 The CUSTOMER shall not be liable for any losses or damages occurring to the equipment belonging to IAE-CAS or for any loss, cost, injury or damages to any third party during the research activity.
- 4.7 The EXECUTOR shall not be liable for any loss or damages occurring to the equipment belonging to the CUSTOMER during the research activity.

5. Effective period of the Contract

- 5.1 The Contract is to be effective after the signing by both sides, and is to terminate at the time of signing of the Document by both sides.

6. Legal Address and Signs of sides

CUSTOMER

Research Institute for Humanity and Nature (RIHN)
Inter-University Research Institute Corporation
National Institutes for the the Humanities
457-4 Motoyama Kamigamo, Kita-ku, Kyoto 603-8047, JAPAN
Phone: +81-75-707-2320; Fax: +81-75-707-2508

EXECUTOR

Institute of Applied Ecology,
Chinese Academy of Sciences
P. O. Box 417
Shenyang 110016, CHINA

Phone: +86-24-83970318; Fax: +86-24-83970300

Bank requisites: China Bank: Shenyang subsidiary bank 60982708094014

CUSTOMER

EXECUTOR

Prof. Akihiro Kinda
Inter-University Research
Institute Corporation, National
Institute for the Humanities
(Tokyo, Japan)



DD, MM, 30, 06 2008

Dr. Chen Xin
Assistant Director, Professor
Institute of Applied Ecology
Chinese Academy of Sciences
(Shenyang, CHINA)



DD, MM, 12, 06 2008

The Contract is made in two copies in English

Date and place:

Detailed contents of "The Research on the Distribution of Soil Chemistry in Sanjian Plain for 2008"

1. Research on vertical profile of physico-chemical soil properties under different soil covers: wetlands, paddy field, upland field, forests and other types.

- 1) The major objective is to demonstrate a significant difference in the soil features among different land covers.
- 2) The word "other types" implies "meadow", or something like pasture, grassland or abandoned land area, which may be of a potential importance as an Fe source.
- 3) Suggested sampling strategy is:
 - wetlands (hopefully, 2 areas), paddy field (2 areas), upland field, forest, other type such as grassland (2 areas)
 - two profiles per 1 region. In total, 16 profiles.
 - 6 depths per 1 profile
- 4) Appropriate measures are to be carried out to avoid oxygenation during the transportation, storage of samples and the analytical procedures for chemically labile components such as reductive forms of Fe.
- 5) Soil samples are to be measured by the EXECUTOR for the items as below.
 - Fe
 - water soluble Fe²⁺
 - acid soluble Fe²⁺
 - Ferric chelate
 - Mn
 - water soluble Mn²⁺
 - acid soluble Mn²⁺
 - Al
 - Si
 - TOC (Total organic carbon)
 - DOC (Dissolve organic carbon)
 - pH (H₂O)
 - Soil bulk density
 - Moisture content
 - Particle size distribution (relative content of clay, silt, sand)
 - Hydraulic conductivity
 - Absolute specific gravity

2. General management and co-ordination of works

EXECUTOR is to be responsible for logistical support and assistance for the activities done by Japanese members.

3. Shipping items to Japan:

EXECUTOR is to send soil samples to CUSTOMER for specialized analyses of organic matter and isotopes in Japan (fluorescence spectra, size exclusion chromatography, stable isotope ratio of Fe).

4. Data transformation:

EXECUTOR should send all data of chemical analyses and measurements in these research activities to CUSTOMER. These data should be shared among EXECUTOR, CUSTOMER and associated researcher in China and Japan. All authorities of these data should be preserved against third parties.

Calculation of "The Research on the Distribution of Soil Chemistry
in Sanjiang Plain for 2008"

1. Wage for faculty and graduate	
Wage for faculty staff (\$1208/month/person x 1 person x 1.5 month)	\$ 1,812
Wage for faculty staff (\$ 725/month/person x 1 person x 2 month)	\$ 1,450
Wage for graduate (\$181/month/person x 2 people x 10 month)	\$ 3,620
Wage for graduate (\$121/month/person x 2 people x 2 month)	\$ 484
2. Travel expenses and others	
Transportation	\$1,305
Accomodation	\$ 566
Compensation fee for the resource	\$ 605
3. Consumption material	\$3,700
4. Physical and chemical analyses	\$7,500
Total	<u>US\$ 21,042</u>

Document
on the cost of work
According to the Contract between IAE-CAS and RIHN for 2008

Project title: "The Research on the Distribution of Soil Chemistry in Sanjiang Plain for 2008".

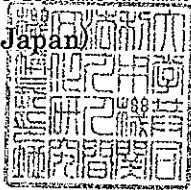
We, undersigned Prof. Akihiro Kinda, on behalf of the Inter-University Research Institute Corporation, National Institute for the Humanities, hereinafter to be called CUSTOMER, on the one side, and Professor Chen Xin, on behalf of Institute of Applied Ecology, Chinese Academy of Sciences (IAE-CAS), hereinafter to be called EXECUTOR, on the other side, concluded the agreement about the cost on the above mentioned research in sum in US Dollars 21,042 (Twenty one thousands, forty two US Dollars).

This Document is the basis for the calculations and payments between CUSTOMER and EXECUTOR.

CUSTOMER

EXECUTOR

Prof. Akihiro Kinda
Inter-University Research
Institute Corporation, National
Institute for the Humanities
(Tokyo, Japan)



06, 30, 2008

Dr. Chen Xin
Assistant Director, Professor
Institute of Applied Ecology
Chinese Academy of Sciences
(Shenyang, China)



Chen Xin

06, 12, 2008

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