



IAEA

الوكالة الدولية للطاقة الذرية
国际原子能机构
International Atomic Energy Agency
Agence Internationale de l'énergie atomique
Международное агентство по атомной энергии
Organismo Internacional de Energia Atómica

Atoms For Peace

Wagramer Strasse 5, P.O. Box 100, A-1400 Wien, Austria
Phone: (+43 1) 2600 • Fax: (+43 1) 26007
E-mail: Official.Mail@iaea.org • Internet: <http://www.iaea.org>

IAEA Research Contract No: 15557

Research Contract

This Research Contract is made between the International Atomic Energy Agency (herein after referred to as the "IAEA") whose address is Wagramer Strasse 5, P.O. Box 100, A-1400 Vienna, Austria and the Department of Zoology (herein after referred to as the "Contractor") whose address is
Department of Zoology
University of Delhi
NEW DELHI 110 007
INDIA.

Whereas

the IAEA is authorized under its Statute and the decisions of its competent organs to encourage and assist research on, and the development and practical applications of atomic energy for peaceful purposes throughout the world by entering into contracts for research and development.

Whereas

the Contractor is able and willing to carry out a Research Project desired by the IAEA;

Now, therefore

the IAEA and the Contractor hereby agree as follows:

1. Scope of the Research Project

a) The Contractor shall undertake a Research Project entitled 'Evaluation of Various Bio-Characteristics of Radio-Sterilized Lepidopteran Pest, Spodoptera Litura and its Progeny to Establish the Fitness (Quality) Traits for a Critical Appraisal of "F1 Sterility Technique" for Pest Management'.

The Chief Scientific Investigator shall be **Mr. Seth, Rakesh.**

b) The programme of work shall be:

1. Identify various bio-characteristics (behavioural, physiological and bio-chemical) and assess the relationship with the quality of irradiated common cutworm

F.No.CPS 5- 2/2013-NFSM
GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
DEPARTMENT OF AGRICULTURE & CO OPERATION
CROPS DIVISION, NFSM-CELL

Krishi Bhawan, New Delhi
Dated the 4th July, 2013

To

- 1. The Vice Chancellor**
University of Agriculture Sciences
Raichur-584102
Karnataka
- 2. The Vice Chancellor**
University of Delhi
North Campus, Delhi-110007

Subject: Administrative Approval of project on "Investigation on the Present Pigeonpea Pest complex and their Management with emphasis on Radiation Technology as an Integral Component in IPM" under NFSM-Pulses – regarding.


Sir,

I am directed to refer to joint proposal received from UAS, Raichur and University of Delhi, Delhi vide No. VC / UASR / 1033 / 2013-14 dated 15.06.2013 entitled "Investigation on the Present Pigeonpea Pest complex and their Management with emphasis on Radiation Technology as an Integral Component in IPM" for four years i.e. 2013-14 to 2016-17 with budgetary provision of Rs. 656.0 lakh.

In this context, it is to inform you that DAC will not bear any institutional/overhead charges to this project and the UAS, Raichur will be the lead centre for implementation of the Project, as proposed. The competent authority has approved the proposal for four years with budgetary provision of Rs. 656.0 lakh. However, for the year 2013-14, the project is approved with an allocation of Rs. 283.50 lakh as proposed. Yearly, component-wise approved activity is enclosed as **Annexure**.

Encl.: As stated.

Yours faithfully


(Dr. D.P. Malik)

Additional Commissioner (Crops)

Copy for kind information to **Dr. Rakesh Kumar Seth, Professor and In-charge, Applied Entomology & Radiation Biology Unit, North Campus, Delhi-110007.**

1 - 1

DBT/INDBI-CREST Award/16/05/2011-12
Ministry of Science & Technology
Department of Biotechnology
Government of India

Block No. 2, 6th Floor
CGO Complex, Lodhi Road
New Delhi - 110 003
Dated 08th May, 2012

ORDER

Sanction of the President is hereby accorded under Rule 18 of the Delegation of Financial Powers Rules, 1978, towards DBT-CREST (formerly known as Biotechnology Overseas Associateship) for the year 2011-12 to Dr. Rita Singh, Associate Professor, Department of Zoology, University of Delhi, Delhi-110 007. The total amount of award money is Rs. 21, 00,000/- (Rupees Twenty one lakhs only) as per details in Para 5 below.

2. **Title of study:** The molecular mechanism of breast cancer initiation and metastasis.
3. **Host PI and Institution:** Dr. Rexford S. Ahima, MD, PhD, Associate Professor of Medicine, 12-104 Translational Research Center, 3400 Civic Center Boulevard, Bldg. 421, Perelman School of Medicine, Philadelphia, PA 19104-5160, USA.
4. **Period of award:** the period of award will be 12 months.
5. **Amount of award:** the total amount of award money is detailed as under:

S. No.	Head	Total	Total in INR equivalent @ 1US\$=Rs. 50.0/-*
a.	Fellowship @ US\$ 3000/- pm for 12 months	US\$ 36000/-	18,00,000/-*
b.	Preparatory allowance	1,00,000/-	1,00,000/-
c.	Travel costs	2,00,000/-	2,00,000/-
Total			Rs. 21,00,000/-

*Exact amount may be calculated on the prevailing rate of US\$ on the date of release of fellowship amount to the associate.

6. Head of the account:

The expenditure involved is debit to

Demand No.87 : Department of Biotechnology
3425 : Other Scientific Research (Major Head)
60 : Others (Sub Major Head)
60.798 : International Cooperation
03 : International Bilateral Programme & SAC Overseas
03.00 : International Bilateral Programme & SAC Overseas
03.00.31 : Grants-in-aid General during the year 2012-2013 (Plan)

Singh

RC-15-

Prosjektnr.(NTNU):
Prosjektnr.(underleverandør):

Agreement

between

Norwegian University of Science and Technology
org.number 974 767 880

hereinafter referred to as **NTNU**

and

University of Delhi

hereinafter referred to as **Subcontractor**

NTNU and University of Delhi are hereinafter commonly referred to as the "Parties".

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13. Disputes

The terms in the Contract between NARC and NTNU are applicable.

14. Contact persons

NTNU's contact person: Prof Kjell J. Nilssen

University of Delhi's contact person: Prof Rina Chakrabarti

15. Signature

This Contract is signed in two copies where each of the Parties has received one

Trondheim, 24 / 10 2013


For NTNU:

Kjetil Skjærve
Head of Department

For University of Delhi

Rina Chakrabarti

Prof. Rina Chakrabarti
Aqua Research Lab
Department of Zoology
University of Delhi
Delhi-110 007, INDIA

 NTNU
Norges teknisk-
naturvitenskapelige universitet
Institutt for biologi
7491 Trondheim

R.C.

INDIAN COUNCIL OF AGRICULTURAL RESEARCH
NATIONAL AGRICULTURAL SCIENCE FUND
KAB-I, New Delhi-110012

Des - 9

F.No. NFBSFARA/ WQ-3032/2013-14

Date: 10.08.2015

Sub: Authorization for release of funds for the first half of financial year 2015-16.

The following release of funds has been approved for the NASF as per details given below: -

1. Name of the Project/Programme/Activity: **"Bioremediation of contaminants in polluted sites: use of weedy plants"**
2. Reference of Sanction letter: Letter No. NFBSFARA/WQ-3032/2013-14
3. Name of the lead centre: **DWSR, Jabalpur**
4. Name of the Cooperating centre(s): (a) WTC, IARI New Delhi (b) DU, Delhi,
5. Scheme Code: NASF
6. Total sanctioned amount for the project: **Rs. 206.3169 lakh**
7. Total sanctioned amount for the project for the current financial year 2015-16: **Rs. 39.79190 lakh**
8. Total sanctioned amount for the project (DU, Delhi): **Rs. 48.23920 lakh**
9. Total sanctioned amount for the project (DU, Delhi) for the current financial year 2015-16: **Rs. 11.06500 lakh**
10. Amount now authorized for payment of : **Rs. 2.82965 lakh**
11. Year wise details of amount already authorized for released: Nil
12. Audit Utilization Certificate received up to (date): NA
13. Grant to be released in favour of: **The Registrar, Delhi University, Delhi**
14. Release under NEH/TSP/Other than NEH region: Other than NEH region
15. The break up of amount now authorized for payment is given overleaf in Table 1 (p2/3):

IFSC Code: SBIN0001067, Bank Account No. 10851298650

The fund for non-recurring expenditure is being released almost in the beginning of the financial year. Hence, under no circumstances will there be any revalidation of this amount in the next financial year.

(P. K. Agarwal)
ADG (NASF)

Section Dairy
Section File No.

Date:
Sl. No. of App. Ledger

Budget Allocation checked and found correct. Submitted and Budget Allocation Register and Remittance Register.

SF&AO

Pay Rs. (In words) _____

Senior Finance & Accounts Officer

Paid by Cheque No. _____ Date: _____

Cash Book Voucher No. _____ Date: _____

De Singh

INDIAN COUNCIL OF AGRICULTURAL RESEARCH
NATIONAL FUND FOR BASIC, STRATEGIC AND FRONTIER APPLICATION RESEARCH IN AGRICULTURE
KAB-I, New Delhi-110012

F.No. NFBSFARA/BSP-4012/2013-14

Dated: 19.08.13

Sub: Authorization for release of funds for the first half (non-recurring only) of financial year 2013-14.

The following release of funds has been approved for the NFBSFARA as per details given below: -

1. Name of the Project/Programme/Activity: *"The role of bacterial endosymbionts in shaping the insect-virus relationship in Bemisia tabaci"*
2. Reference of Sanction letter: Letter No. F.No. NFBSFARA/BSP-4012/2013-14
3. Name of the lead centre: **Delhi University, New Delhi**
4. Name of the Cooperating centre(s): **IARI, New Delhi**
5. Scheme Code: NFBSFARA
6. Total sanctioned amount for the project: **Rs. 144.70390 lakh**
7. Total sanctioned amount for the project for the current financial year 2013-14: **Rs. 64.68320 lakh**
8. Total sanctioned amount for the project (DU, New Delhi): **Rs. 106.82500 lakh**
9. Total sanctioned amount for the project (DU, New Delhi) for current financial year 2013-14: **Rs. 45.91320 lakh**
10. Amount now authorized for payment: **Rs. 14.75000 lakh (non-recurring only)**
11. Year wise details of amount already authorized for released: Nil
12. Audit Utilization Certificate received up to (date): NA
13. Grant to be released in favour of: **IFSC Code: SBIN0001067, Bank account No. 10851298650, State Bank of India, University of Delhi Branch, University of Delhi, Delhi 110 007**
14. The breakup of amount now authorized for payment is given overleaf in Table 1 (p2/3):

The fund for non-recurring expenditure is being released almost in the beginning of the financial year. Hence, under no circumstances will there be any revalidation of this amount in the next financial year.

(A. Bandyopadhyay)
National Coordinator (NFBSFARA)

Section Diary
Section File No.

Date:
Sl. No. of App. Ledger

Budget Allocation checked and found correct. Submitted and Budget Allocation Register and Remittance Register.

F&AO

Pay Rs. (In words) _____

Finance & Accounts Officer

Paid by Cheque No. _____ Date: _____

Cash Book Voucher No. _____ Date: _____

Dileep Singh 17



IAEA

Atoms For Peace

الوكالة الدولية للطاقة الذرية

国际原子能机构

International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

Organismo Internacional de Energía Atómica

SINGH Dileep Kumar
Department of Zoology
University of Delhi
University Road
New Delhi 110 007
Delhi
India

Vienna International Centre, P.O. Box 100, A-1400 Vienna, Austria

Phone: (+43 1) 2600 • Fax: (+43 1) 26007

E-mail: Official.Mail@iaea.org, Internet: <http://www.iaea.org>

In reply please refer to: RC-16407-R4

Dear Mr Singh,

2015-06-02

Renewal of Research Contract No. 16407/R0

Reference is made to Research Contract No. 16407/R0 between the IAEA and the University of Delhi which entered into force on 09 February 2011.

The IAEA desires to renew the Contract No. 16407/R0 for the period 01 August 2015 to 08 February 2016 with the following modifications:

1. Programme of Work

1. Vegetable and fruit : Molecular techniques for identification of Lettuce, Grape, Mango and Apple varieties will continue in 2015-2016. Experiments will be carried out for food traceability using stable isotopes of carbon. We are continuing the following works this year (2015-2016) also because these are the seasonal fruits and 1 to 2 years fruits sampling is required to conclude the proposed work. Samples will be taken from different localities of India.

(i) Molecular techniques for identification of Lettuce, Grape, Mango and Apple varieties will be validated.

(ii) Molecular markers will be developed for traceability of Lettuce, Grape, Mango and Apple varieties.

(iii) $^{12}\text{C}/^{13}\text{C}$ ratio for Lettuce, Grape, Mango and Apple traceability will be estimated.

(iv) Biological contaminants/pathogen for vegetable and fruits will be identified and estimated

2. Wheat, Rice and Orange : Methods will continue for identification and estimation of food contaminants in year 2015-2016 i.e. chemicals (metals, pesticides, fertilizers) and microbial contaminants (toxins) using GLC, HPLC, GCMS, NMR, ELISA and PCR.

3. Wheat, Rice and Orange : Work will continue for more varieties and more different locations.

(i) Molecular markers will be developed and validated for traceability of wheat, rice and orange varieties for more different localities of India. This work will continue for the year 2015-2016.

(ii) $^{12}\text{C}/^{13}\text{C}$ ratio for wheat, rice and orange traceability will be estimated for more different localities of India. This work will continue for the year 2015-2016.

2. IAEA's Contribution

The IAEA shall pay a sum not exceeding € 3 500 (Three Thousand Five Hundred).

X 5 years

ORDER

Sanction of the President is hereby accorded under Rule 18 of the Delegation of Financial Power Rules, 1978 for the implementation of the Joint Research Project titled "**Development of alternative sustainable fish feeds to promote human health using novel non-conventional indigenous ingredients**" under DBT-BBSRC-DFID joint call of proposals on "Developing aquaculture for food security, development and poverty reduction in developing countries" with Indian investigators as detailed in Para 2.2. Indian components of the project is sanctioned at a total cost of **Rs. 300.696 lakhs (Rupees Three Crore Sixty Nine Thousand and Six Hundred Only)** for a period of 3 years on the terms and conditions as detailed here under:

- 2.0 The Project :
- 2.1 Project Title : "Development of alternative sustainable fish feeds to promote human health using novel non-conventional indigenous ingredients".
- 2.2 Investigators :
- A. Indian Investigators:
- University of Delhi, Delhi:
- a. Prof Rina Chakrabati, Department of Zoology, University of Delhi, Delhi -PI and coordinator
- Goa University, Goa:
- a. Prof. Ramaballav Roy, Department of Zoology, Goa University, Goa-PI
- b. Prof. Savita Kerkar, Department of Biotechnology, Goa University, Goa-CO-PI
- Kerala University of Fisheries and Ocean Studies, Kochi:
- a. Dr. K. Padma kumar, Kerala University of Fisheries and Ocean Studies, Kochi- PI
- b. Dr. S. Shyama, School of Aquaculture and Biotechnology, Kerala University of Fisheries and Ocean Studies, Kochi- CO-PI
- Delhi Technological University, Delhi:
- a. Dr. J. G. Sharma, Department of Zoology and Applied Aquaculture, Barkathullah University, Bhopal- PI
- B. UK Investigators:
- a. Professor Douglas Tocher, Institute of Aquaculture, University of Stirling, UK.
- 2.3 Project Objectives:
- i. University of Delhi, Delhi:
- a. To screen the free floating macrophytes from various freshwater bodies and assessment of their application as aquafeed ingredients.
- b. To evaluate the proximate composition viz., moisture, crude protein, crude lipid, carbohydrates, fibres, ash, amino acids composition of selected macrophytes.
- c. Development of culture techniques for selected macrophytes in laboratory (outdoor cemented tanks) condition.
- d. To evaluate the composition (moisture, crude protein, crude lipid, carbohydrates, fibres, ash, amino acids) of prepared diets.
- e. *In vitro* digestibility study of prepared diets for *Cyprinus carpio* and *Oreochromis niloticus* using pH-Stat method.
- f. To formulate and prepare diets for *Cyprinus carpio* (common carp) and *Oreochromis niloticus* (tilapia).
- g. Evaluation of performance of fishes fed with prepared diets in laboratory condition.
- h. To disseminate knowledge and train farmers with culture techniques of freshwater macrophytes and selected fish species and preparation of diets.

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Contd. 2/-

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भारत सरकार
विज्ञान और प्रौद्योगिकी मंत्रालय,
विज्ञान और प्रौद्योगिकी विभाग,
प्रज्ञापीठ जी भवन, मेहरौली मार्ग,
नई दिल्ली-110016

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY,
DEPARTMENT OF SCIENCE AND TECHNOLOGY,
TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD,
NEW DELHI 110016

No. INT/FRG/DAAD/P-231/2013

Dated: 05-09-2013

ORDER

Sanction of the President is hereby accorded for implementation of the Indo-German (DST-DAAD) joint research project entitled "Assessing Natural and Stimulated Biodegradation of the Pesticide Hexachlorocyclohexane (HCH) at Contaminated Field Sites Using Compound-Specific Stable Isotope Analysis (CSIA)" at a total cost of **Rs. 9,08,000/- (Rupees Nine Lac Eight Thousand Only)**. The duration of the project shall be 2 years from date of issue of this sanction order. The requests for extension of the project beyond this validity shall NOT be considered in any case.

The composition of the project team is as below:

<u>Indian side</u>	<u>German side</u>
i.) Dr. Rup Lal, Professor, Molecular Biology Laboratory, Dept. of Zoology, University of Delhi, Delhi-110007 ii.) Pushp Lata iii.) Puneet Kohli	i.) Dr. Hans H. Richnow, Department of Isotope, Biogeochemistry, Helmholtz Centre for Environmental Research - UFZ, Permoserstraße 15 / 04318 ii.) Dr. Anko Fischer iii.) Safdar Bashir iv.) Natalija Ivdrá

The change/ replacement of project participants is not allowed. The participating scientists should be working on the project and affiliated with the Institute/University holding the indicated position at the time of start of the project as well as at the time of exchange visits under the project. The expenditure related to approve visits of participating scientists, as mentioned above, only can be met from the project grant.

The break-up of estimated expenditure is as indicated below and no re-appropriation shall be allowed under this project:-

<u>Headings</u>	<u>Estimated expenditure(s)</u>		
	<u>1st year</u>	<u>2nd year</u>	<u>Total</u>
<u>1. Expenses for Indian scientists to visit Germany under the project</u> International air-fare (by IATA excursion/ economy class by shortest route) including surface travel from place of work in India to place of work in Germany & back; Visa charges; Medical Insurance etc @ Rs. 65000/- per visit	(2 visits) (30&60 days) 1,30,000/-	(2 visits) (30&60 days) 1,30,000/-	(4 visits) 2,60,000/-
<u>2. Expenses for German scientists to visit India under the project</u> (i) Accommodation charges @ Rs. 1100/- per day. (ii) Per-diem charges @ Rs. 2500/- per day	(2 visits) (30&60 days) 99,000/- 2,25,000/-	(2 visits) (30&60 days) 99,000/- 2,25,000/-	(4 visits) 1,98,000/- 4,50,000/-
3. Total	4,54,000/-	4,54,000/-	9,08,000/-

(Rupees Nine Lac Eight Thousand Only)

Contd. p/2

INDIAN COUNCIL OF AGRICULTURAL RESEARCH
NATIONAL AGRICULTURAL SCIENCE FUND (NASF)
KAB-I, New Delhi-110012

DWS - 12

F.No. NFBSFARA/WQ-2023/2012-13

Dated: 27.05.2016

Sub: Authorization for release of funds for two months (April-May, 2016) for the financial year 2016-17

The following release of funds has been approved for the NFBSFARA as per details given below: -

1. Name of the Project/Programme/Activity: **"Bioremediation of agrochemicals and heavy metals present in Yamuna and drainage water used for irrigation in urban and peri-urban agricultural areas"**
2. Reference of Sanction letter: Letter No. NFBSFARA/WQ - 2023/2012-13
3. Name of the lead centre: **Delhi University, Delhi**
4. Name of the Cooperating centre(s): (a) IIT, Delhi, IARI, New Delhi
5. Scheme Code: NFBSFARA
6. Total sanctioned amount for the project: **Rs. 226.34604 lakhs**
7. Total sanctioned amount for the project for the current financial year 2016-17: **Rs. 3.8948 lakhs**
8. Total sanctioned amount for the project (DU, Delhi): **Rs. 97.1416 lakh**
9. Total sanctioned amount for the project (DU, Delhi) for the current financial year 2016-17: **Rs. 1.60160 lakh**
10. Fresh release for the financial year 2016-17: **Rs .37665 lakhs**
11. Authorized to spent from saving of 2015-16: **Rs. 1.22495 lakhs**
12. Total release for the financial year 2016-17: **Rs. 1.60160 lakhs**
13. Year wise details of amount already authorized for released: Nil
14. Audit Utilization Certificate received up to (date): NA
15. Grant to be released in favour of: **The Registrar, University of Delhi, Delhi -110007**
16. Release under NEH/TSP/Other than NEH: **Other than NEH region and TSP**
17. The breakup of amount now authorized for payment is given overleaf in Table 1 (p2/3):

IFSC Code: SBIN0001067, Bank Account No. 10851298650

(P.K.Agrawal)
ADG (NASF)

Section Dairy
Section File No.

Date:
Sl. No. of App. Ledger

Budget Allocation checked and found correct. Submitted and Budget Allocation Register and Remittance Register.

F&AO (NASF)

Pay Rs. (In words) _____

Finance & Accounts Officer (NASF)

Paid by Cheque No. _____ Date: _____

Cash Book Voucher No. _____ Date: _____

Dr. Singh