#### NOMINATION FORM

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Signature of the Candidate

RECOMMENDATION BY THE CONTROLLING OFFICER(SIGNATURE OF THE RECOMENDING OFFICER)

DESIRED

Name & Designation with Seal

N.B: Mail this form to email id. of course director prajaicariiswc@gmail.com under Intimation to the Under Secretary (Training), DST at trngcell.dst@nic.in

### **Important Information:**

- i. Lectures will be delivered by the eminent scientists and professors from all over India.
- ii.100% attendance is necessary for all the participants.
- iii. Certificates (both soft and hard copies) will be issued to all the successful participants.
- iv. Interested and eligible applicants should mail the scanned copy of the application form along with bio-data (duly signed) and nomination form (duly signed and forwarded by the competent authority) to the Course Director and to DST, New Delhi. Also, they should post the original of the same to the Course Director address.
- v. Only 25 participants will be admitted for the above training programme.
- vi. For the Word Document of Nomination and Bio-data form, and other details please refer institute website www.cswcrtiweb.org
- vii. Details of the web platform and link with User name and Password for the online training programme will be mailed to all the selected candidates before the training programme.
- viii. Course Director decision is final in all discrepancies.

# Address for correspondence

# Dr. P. Raja

Course Director & Principal Scientist (Soil Science) ICAR-Indian Institute of Soil and Water Conservation Research Centre, Fernhill (PO)

Udhagamandalam - 643 004, The Nilgiris, Tamil Nadu. www.iiswcooty.com Email ID: prajaicariiswc@gmail.com; dsttraining@iiswcooty.com Contact No.: 8875197316

#### Also can contact

### Dr. K. Rajan

Principal Scientist & Course Co-Director

Email ID: krajanars@gmail.com; Mob: 9790445504

#### Dr. H.C. Hombe Gowda

Senior Scientist & Course Co-Director

Email ID: hombegowdaars@gmail.com; Mob: 9437955519

# **Important Dates**

- ➤ Last date for receiving nomination : 16.01.2021
  ➤ Intimation to selected candidate : 17.01.2021
- Advance copy of nomination should be send immediately

**Note:** Decision of the Course Director shall be final in all the training related issues.



# **Information Brochure**





# Department of Science and Technology Government of India, New Delhi

Sponsored

# **Online Training Progaramme**

On

Integrated Nutrient Management and Nutrient Budgeting through Advanced Models to Improve Crop Productivity

18.01.2021 to 22.01.2021

Course Director

Dr. P. Raja

Principal Scientist (Soil Science)

Course Co-Directors

Dr. K. Rajan, Principal Scientist (Soil Science)Dr. H.C. Hombe Gowda, Senior Scientist (Forestry)



# Organized by

ICAR – Indian Institute of Soil and Water Conservation, Research Centre, Udhagamandalam (Ooty) – 643 004, The Nilgiris, Tamil Nadu, India

### **Background**

Integrated Nutrient Management (INM) is maintenance of soil fertility and supply of plant nutrients to an optimum level for sustaining the desired crop productivity through optimization of benefits from all possible sources of plant nutrients in an integrated manner. This concept of nutrient management brings cultural operations, chemical fertilizers, organic sources, legumes, crop residues and bio-fertilizers together in a systematic way to supply plant nutrients in an optimum level. The deficit of 10 million tons of inorganic nutrient production in India can be compensated through INM practices to the maximum extent. Therefore, the dependency on chemical fertilizer is drastically reduced. The long term studies in India revealed that neither chemical fertilizers nor organic sources in isolation can achieve sustained production. Integration of all possible sources to supply plant nutrients starts from land preparation to crop maturity stage and to obtain higher productivity. It brings in account of available nutrients from soil, manures, crop residues, chemical fertilizers and bio-fertilizers to ensure the optimum supply of nutrients to crops. Hence, the improvement and maintenance of soil fertility through integrating various nutrient sources along with fertilizer is helpful for sustaining crop productivity on a long-term basis. INM practices will prevent ill effects such as acidification, imbalanced nutrients, low fertility and eutrophication, thus bring sustainability in getting profitable crop yield. Instead, optimum growth, yield and quality of crops and cropping system can be achieved. Though, the INM brings all possible nutrient sources together for optimum supply of plant nutrients, the balanced nutrient supply need to be ensured through nutrient budgeting for each crop. An accurate nutrient budgeting with appropriate Decision Support Systems (DSS) will help us to avoid potential problem in time arising from nutrient surplus and deficit. Nutrient budgeting helps and ensures that the farming practices are conducted in an efficient, economic and environmentally sustainable manner. Therefore, INM practices and nutrient budgeting are helpful in maintaining optimum soil fertility, crop yield and environmental conditions. Keeping all these in view, DST sponsered online training programme on "Integrated Nutrient Management and Nutrient Budgeting through Advanced Models to Improve Crop Productivity" will be organized from 18.01.2021 to 22.01.2021 by ICAR - Indian Institute of Soil and Water Conservation, Research Centre, Udhagamandalam (Ooty).

# **Objectives**

- 1. To explore the imperceptible changes in soil fertility for its improvement and sustenance of soil resilience to achieve desired crop productivity through integrated nutrient management.
- 2. To update on the nutrient management technology in relation to its importance, application as a tool for crop improvement.
- 3. To provide exposure to "NUTMON" Tool Box and other models (both theory and practical) to nutrient budgeting at micro and macro level.
- 4. To provide insight in to organic, inorganic and precision farming with DSS (both theory and practical)
- 5. To orient the scientists to understand policy issues nutrient subsidy, fertilizer control order, new directives for sustainable farming.

#### **Course Module**

- Integrated Nutrient Management (INM) Principles and applications
- Nutrient budgeting Different spatial scales micro and macro level- Theory
- DSS / Models in nutrient management Theory
- Hands on training-"NUTMON" Tool Box practical with case studies under different management scenarios
- · Macro-micro nutrients and soil health issues.
- · INM under changing climate scenario
- Nutrient budgeting Organic, Inorganic farming, Precision farming, Agroforestry system etc.
- Policy issues Nutrient subsidy, fertilizer control order, new directives for sustainable farming

#### **About the Host Institute**

Government of India on 20th October 1954 established a Soil Conservation Research, Demonstration and Training Centre at Udhagamandalam in Tamil Nadu. Later on, this centre along with other such centres under the Ministry of Agriculture were transferred to the Indian Council of Agricultural Research in 1967 and subsequently brought under the administrative control of Central Soil and Water Conservation Research and Training Institute, Dehradun. Recently, the Institute has been renamed as Indian Institute of Soil and Water Conservation.

The primary mandate of this regional centre is to undertake research and develop technologies for controlling land degradation under all primary production systems and rehabilitating degraded lands in the high rainfall hilly regions of southern India. The centre is involved in imparting specialized training on soil and water conservation and watershed management, undertaking consultancies on planning, execution and evaluation of soil and water conservation projects and watershed management. Demonstrating package of practices for higher production without deteriorating natural resources also form integral component of the mandate of the centre.

The centre is actively involved in developing models on participatory integrated watershed management in semi-arid and high rainfall hilly regions for sustainable development and rural transformation. The centre conducts different types of short courses of one to two weeks duration in the field of soil and water conservation, agro-forestry and watershed management sponsored by Central and State Governments, Autonomous bodies and NGOs. One to four months practical training programme is also organized for the College / University students.

#### Duration

#### 18.01.2021 to 22.01.2021

# **Eligibility**

Applicants should be from any discipline of agriculture or allied sciences working as Scientist / Technologist / Engineers/Teachers with a maximum age limit of 58 years. They should have a minimum working experience of 9 years in Central and State Governments / Central and State Universities / Autonomous Institutions / Public sector undertakings and any other R & D institute under Central or State Government. The total number of participants is restricted to a maximum of 25.

### **Application Procedure**

The interested scientists/teachers/officers of government departments can send the filled, approved and forwarded applications to the following address:

#### Dr. P. Raja

Course Director & Principal Scientist (Soil Science) ICAR-Indian Institute of Soil and Water Conservation, Research Centre, Fernhill (PO) Udhagamandalam-643 004,

The Nilgiris, Tamil Nadu.

Email ID: prajaicariiswc@gmail.com; dsttraining@iiswcooty.com Contact No. 8875197316

The advance copy of application should be sent to the following Email ID: prajaicariiswc@gmail.com; trngcell.dst@nic.in

