#### Important Dates

•	Last date for receiving application	: 20.01.2022
•	Intimation to selected candidate	: 21.01.2022
	Confirmation from selected candidate	· 22 01 2022

# Address for correspondence:

#### Course Director

Dr. P. Raja, Principal Scientist

E-mail ID : prajaicariiswc@gmail.com Contact No.: 8875197316 Also can contact : Course Co Directors

#### **Course Co-Directors**

Dr. K. Kannan, Principal Scientist

Email ID: kannan\_wtcer@yahoo.com ; Mob: 9487341919

### Dr. H.C. Hombegowda, Senior Scientist

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

### Dr. Sudheer Kumar Annepu, Scientist

Email ID: sudheerannepu@gmail.com ; Mob: 98496 41751

### **Important Information**

- i. Lectures will be delivered by the eminent scientists and professors from all over India.
- ii. Course completion Certificate will be issued to all the successful participants
- iii. 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 the DST, New Delhi.
- iv. For the Word Document of Nomination and Bio-data form, and other details please refer institute website www.cswcrtiweb.org
- v. 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.
- vi. Course Director decision is final in all discrepancies.

# NOMINATION FORM

INSTITUTE,	DATE OF TH	ie, Raining								
NAME Prof.	/Dr./ Mr./Ms	S.								
DESIGNATIO		0	ORGANISATION							
DATE OF BI		D. (A	DATE OF ENTRY IN GOVT. SERVICE (AS GROUP 'A')							
SEX (M/F)		PI	PRESENT PAY AND							
CATEGORY (GEN/SC/ST		P	PAY LEVEL							
COMPLETE ADDRESS / CONTACT NUMBER / E-MAIL										
EDUCATIONAL/PROFESSIONAL QULALIFICATIONS (GRADUATION ONWARDS)										
SL. No.	YEAR	DEGREE	UNIVERSITY/ INSTITUTE							
RESEARCH	EXPERIEN	CE								
SL. No.	SL. No. YEAR TOPIC OF RESEAF				SPONSORING AGENCY					
EXPERIENCE / POSTING FROM LEVEL SCIENTIST 'B' ONWARDS (IN GROUP 'A')										
SL. No.	SL. No. NAME OF THE ORGANISA		SATION	ATION POST H		LD FROM TO		TO		
TRAINING ATTENDED										
SL. No.	L. No. YEAR NAME OF THE PROGRAM		THE TRAI	e training Amme		1e of the in:	DURATION			
SPECIFIC AREA IN WHICH SKILL UPGRADATION DESIRED				1. 2. 3.						

#### Signature of the Candidate

#### RECOMMENDATION BY THE CONTROLLING OFFICER SIGNATURE OF THE RECOMENDING OFFICER

#### Name & Designation with Seal

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



# **INFORMATION BROCHURE**





Department of Science and Technology Government of India, New Delhi

DST

Sponsored National Online Training programme On

# Soil & Water Conservation Technologies for Climate Smart Agriculture in the Context of Extreme Weather Events

24<sup>th</sup> January - 04<sup>th</sup> February, 2022

# **Course Director**

**Dr. P. Raja** Principal Scientist (Soil Science)

#### **Course Co-Directors**

Dr. K. Kannan, Principal Scientist (Agronomy) Dr. H.C. Hombegowda, Senior Scientist (Forestry) Dr. Sudheer Kumar Annepu, Scientist (Vegetable Science)



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

#### Background

Population growth and the dynamics of climate change will exacerbate issues, such as desertification, deforestation, soil erosion, depletion of groundwater resources and deterioration of water quality, further adding the challenges in restoring environmental and ecological balance and for achieving the food security. Climate change would likely to impose greater stress on soil quality and its productivity potential. Global warming is expected to lead to a more vigorous hydrological cycle, including higher total rainfall and frequent occurrence of weather extreme events (Drought & Floods). Rainfall intensities and frequency of events become erratic across different agro-climatological regions in India. Regional and global climate model simulations predicted alarming changes in the meteorological parameters viz., temperature, solar radiation, and atmospheric CO<sub>2</sub> concentrations that would increase the rainfall frequency and intensity and accelerate the erosion of fertile top soils and lower the agricultural productivity by 10% to 20%. Water availability for agricultural use has reached a critical level as the country uses more than 80 per cent of the surface water for the Agriculture sector alone. In-situ rainwater harvesting is one solution that may improve water availability for agriculture. Scientific management practices for climate smart agriculture with sound soil and water conservation technologies practices will be the key for elevating the socio-economic status of farming community under changing climate scenario.

Keeping all these in view, DST sponsored National Online training programme on Soil & Water Conservation Technologies for Climate Smart Agriculture in the Context of Extreme Weather Events will be organized from from 24<sup>th</sup> January to 4<sup>th</sup> February, 2022 by ICAR-Indian Institute of Soil and Water Conservation, Research Centre, Udhagamandalam (Ooty), The Nilgiris, Tamil Nadu, India.

#### Objective

1.To acquaint the participants about the latest Soil and Water Conservation Technologies for Climate Smart Agriculture.

#### **Course Module**

- Climate Change effects on Natural Resource Management
- > Climate Change implications on Soil and Water Resources
- Regional and Global Climate Models for prediction of extreme weather events

- Implications of Extreme Weather Events (Floods & Drought) on Water Resources and Soil health
- Drought and Flood management options in Climate Smart agriculture
- Soil loss modelling from different ecosystem and under extreme rainfall events
- Soil and Water Conservation Technologies (SWCT) for Climate Smart Agriculture
- Application of Advanced tools and geospatial technologies in Soil and Water Conservation Measures
- > Climate Change implications on Soil and Water Resources
- > Organic Farming for climate resilient agriculture
- Agronomical and Agroforestry measures for climate smart agriculture
- Artificial research and drainage line treatments to mitigate climate change impact
- > Water harvesting and recycling for Climate Smart Agriculture (CSA)
- > Urban Planning and its implications on Global Farming
- Green House Gas (GHG) emissions and its implications on Global Farming
- Adoption and Dissemination Pathways for SWC technologies under Climate-Smart Agriculture Technologies and Practices for Climate-Resilient Livelihoods
- Indigenous Technical Knowledge (ITK) on Soil and Water Conservation Technologies (SWCT) for Climate Smart Agriculture

#### About the host Institute

#### About ICAR - IISWC, Research Centre, Udhagamandalam, TN

Government of India on 20<sup>th</sup> October 1954, established a Soil Conservation Research, Demonstration and Training Centre at Udhagamandalam in Tamil Nadu. Later on, this Centre along with other such centers 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 & 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 live models on participatory integrated watershed management in farmers' field. Salaiyur and Ayalur watersheds in semi-arid region and Iduhatty in high rainfall area are the living examples of sustainable development and rural transformation in the region. 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

# 24<sup>th</sup> January to 4<sup>th</sup> February, 2022

# Eligibility

Applicant should be Group 'A' officer from any discipline of agriculture or allied sciences working as Scientist/Technologist/Engineer/Teacher with a age limit of 58 years working in Central and State Governments/ Central and State Universities/ Autonomous Institutions / Public sector undertakings and any other R & D institutes under Central or State Government.

### 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 E-mail ID : dsttrainingooty@gmail.com Contact No. : 88751 97316

The advance copy of application may be sent to the following Email Id : dsttrainingooty@gmail.com trngcell.dst@nic.in