



World Bank aided ICAR-NAHEP Programme

Centre for Advanced Agricultural Science and Technology
for Climate Smart Agriculture and Water Management (CAAST-CSAWM)

Mahatma Phule Krishi Vidyapeeth, Rahuri

Tal: Rahuri 413 722, Dist: Ahmednagar, Maharashtra

Web: www.mpkv-caast.ac.in Mail: info.rahuri@mpkv-caast.ac.in



No. CAAST-CSAWM/Notification/RA/1776/2020

Date: 04/01/2020

NOTIFICATION FOR WALK-IN-INTERVIEW

Applications are invited from the eligible candidates for the following posts of Research Associate in the disciplines of Irrigation and Drainage Engineering purely on temporary and contractual basis in the project entitled "Centre for Advance Agriculture Science and Technology (CAAST) on Climate Smart Agriculture and Water Management (CSAWM)" operational in this University. This position is available until the end of the project. The interested candidates are encouraged to be present on the date of interview along with the application (hard copy) complete with self-attested copies of certificates/material; and the original documents thereof for verification purpose at the Placement cell, Dr. A.S. College of Agricultural Engineering and Technology, MPKV Rahuri-413 722, Maharashtra, as per the enclosed schedule.

For any questions/queries on application-procedure, candidates can contact Dr. N. N. Firake, Recruitment Officer, CAAST-CSAWM, MPKV, Rahuri on the email ID: recruitment@mpkv-caast.ac.in or on a cell phone (02426-243176, 07775818077).

The details of the post and required qualifications are given below;

Name of the Post	Discipline/ Subject	No. of Posts	Qualifications
Research Associate	Irrigation and Drainage Engineering	01	<p>Essential: Ph.D. degree in Irrigation and Drainage Engineering /Water Resources Development and Management/ Water Resources Management/ Irrigation Water Management Engineering or equivalent.</p> <p>OR Masters or M.Tech. (Agri.Engg.) degree in Irrigation and Drainage Engineering/Water Resource Development and Management/Water Resources Engineering/Irrigation Water Management Engineering or equivalent having 1st Division or 60 % marks or equivalent overall grade point average, with at least three years research experience, as evidenced from Fellowship/Associate ship/Training/other engagements and one research paper in Science Citation Index (SCI)/NAAS rated (≥ 4.0) Journal.</p> <p>Desirable: (for positions at Central Campus, Rahuri)</p> <ul style="list-style-type: none">• Knowledge and /or experience in pressurized irrigation systems such as sprinkler, drip and its automation, moisture sensors, weather based irrigation scheduling system, IoT for water resources.• Knowledge and /or experience of developing/working with simulation models, decision support system; open source or commercially available software such as DSSAT, MIKE SHE/11, MODFLOW <p>(for positions at College of Agriculture, Pune)</p> <ul style="list-style-type: none">• Knowledge and /or experience of different systems in controlled environment (polyhouse and shadenet house); climate and other controls, automatic operations of different systems in polyhouse/shadenet house.

Note: For the post stated above, the teaching or teaching assistantship/training experience is desirable.

Emoluments for Research Associate:

1. With Ph.D.: Rs. 54,000=00 per month consolidated Emoluments + HRA as applicable.
2. With a Master's degree holder: Rs. 49,000=00 per month consolidated Emoluments + HRA as applicable.

Age limit:

The Upper age limit for Research Associate will be 40 years for men and 45 years for women.

1. Application

The candidates need to submit the application form in the prescribed proforma (enclosed) along with self-attested copies of certificates/materials on or before the date of interview. The originals are required for verification of self-attested copies.

2. Reporting

- a) **Time:** The candidates are informed to report to the "Verification of Documents" desk on the date and time mentioned in the schedule.
- b) **Submission of application:** The candidates shall submit the application in the prescribed format along with self-attested copies of certificates/materials to the "Verification of Documents" desk.

3. Verification of the Documents and allotment of marks based on Educational Qualification, Experience, Publication and Special Contribution

- a) Candidates need to bring all original documents in support of their claims in the application. Candidates need to especially produce the original documents in support of eligibility (date of birth, educational qualifications along with the statement of marks and certificates; and the minimum experience for Masters Degree holder), additional degree, additional experience, publications (full length research papers in journals, full length research papers in the proceedings and other publications); special contributions and other claims.
- b) If candidates are unable to produce the original documents in support of their minimum eligibility, they will be considered as ineligible for the interview.
- c) Screening Committee will give the marks (out of 40 maximum) for candidates academic qualification, experience, publications and special contributions based on the documents attached with the application. The details of the marks obtained by the candidate will be shown to confirm or otherwise.
- d) Candidates are not allowed to submit documents other than those submitted with the applications during the "Verification of Document" process.
- e) In support of publication, candidates need to produce the original publications or reprints or confirm from the website of the Journals/Association/Society or Publishers.

4. The Schedule for the selection process

The interview of the eligible candidates will be conducted by the Selection Committee in the **Placement Cell of Dr. Annasaheb Shinde College of Agricultural Engineering and Technology, Mahatma Phule Krishi Vidyapeeth, Rahuri, Dist: Ahmednagar (MS), 413 722** as mentioned in the schedule.

5. Presentation and Interview Process

- a) The candidates found eligible after the "Verification of Documents" and "Screening" will only be allowed to appear for presentation and interview process. The eligible candidates need to present before the Selection Committee for about 8-10 mins any topic but related to the discipline for which candidate has applied and in context of the objectives of the CAAST-CSAWM (preferably in the form of power point presentation). The presentation will be followed by the defense by the candidate.
- b) Immediately after the presentation process is over, the Selection Committee will conduct the interview.

6. The Distribution of Marks

Educational Qualification, Experience, Publications and Special Contribution	:	40 Marks
Presentation	:	40 Marks
Interview	:	20 Marks

7. Schedule

Discipline	Date	Reporting Time	Verification of Documents and Screening	Presentation and Interview
Irrigation and Drainage Engineering	15/01/2020	09:00 AM	09:00 to 10:30 AM	10:30 AM Onwards

8. Conditions

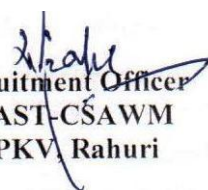
- It is the responsibility of the candidate to submit the application and to attend the interview on scheduled date and time and at a scheduled place.
- The candidate will have to attend the interview at his/her own cost and no TA/DA will be paid for attending the interview.
- The post is purely on a temporary basis for the specified period and the candidate is subjected to termination on the expiry of the period or the project "CAAST-CSWAM" or by giving the notice of one month from either side.
- Canvassing in any form will make the candidate ineligible.
- The candidate should bring photo identity which needs to be produced during the "Verification of Document" Process.
- It is to inform to note all the terms and conditions of the temporary employment as stated below.

Terms and conditions:

- The Research Associate will be under the administrative control of the concerned Co-Principal Investigator (Co-PI) and Principal Investigator (PI).
- The engagement/appointment will stand terminated on completion of the tenure of the scheme or on the date stated in the appointment order whichever is earlier; whether so communicated formally on an individual basis or not. The University (MPKV) or this project (CAAST-CSAWM) holds no responsibility for regularization/ appointment by absorption or otherwise against any regular post on termination of the project as it is purely temporary; time-bound arrangement on contractual and co-terminus basis with the project.
- The Research Associate shall have no legal right to claim his/her regularization/ appointment by absorption or otherwise against any regular posts or any further contractual engagement on termination of this CAAST-CSAWM Project. The engagement in the scheme is purely time-bound, non-regular and on co-terminus basis with the CAAST-CSAWM Project. The services of the incumbent shall stand terminated automatically on expiry of the project/appointment order whichever is earlier.
- If any Research Associate leaves his/her assignment without permission for one month, he/she will stand terminated from the date of his/her absence.
- The appointment of Research Associate will be terminated at any time by the issue of 24 hours' notice if the Research Associate found to be negligent in his/her work or found guilty of gross negligence in his/her duties or of grave misconduct or of discipline.
- Research Associate will not leave the project in the middle of his/her tenure. Further, however, if he/she intends to do so he/she has to give one month notice in writing in advance or remit the amount of one month's salary. Alternatively, CAAST-CSAWM Project, MPKV can terminate the services of Research

Associate by giving one month notice by citing no reasons thereof. Research Associate has not any right of claiming permanency benefit of the said post or such posts by virtue of this appointment.

7. While leaving the job, Research Associate has to hand over the complete charge to a person nominated by the Principal Investigator and obtain No Objection Certificate from Principal Investigator.
8. Since Research Associate are engaged for the CAAST-CSAWM Project work full time, the Research Associate will not be allowed to do any other work or to accept or hold another appointment with or without remuneration elsewhere.
9. Research Associate will devote whole time to the assignment given and will not be allowed to accept or hold another appointment paid or otherwise during the period.
10. Research Associates are full-time workers and are required to adhere to the administrative, financial and disciplinary regulations of University/Institute where the incumbent is working. Regular attendance of the Research Associate may be ensured by the concerned Co-PI/PI by keeping an attendance register.
11. Research Associate will have to work anywhere in the jurisdiction of MPKV as and when the need arises.
12. Research Associate has to perform all duties, responsibilities that will be assigned to him/her by the Principal Investigator/Co-Principal Investigator authorities as per the requirements of the project.
13. The research or any work done by the Research Associate will be the property of the CAAST-CSAWM Project, Mahatma Phule Krishi Vidyapeeth, and the Research Associate will have no control or right on the same.
14. The CAAST-CSAWM Project, MPKV, Rahuri will have the intellectual property rights/proprietary right on research outputs of the RA made during the period of working in the CAAST-CSAWM Project. However, in case the RA has done some research work, his/her name can accordingly be acknowledged/included appropriately in the research paper(s) as solely decided by the PI. No right in this regard can be claimed.
15. The Research Associate may be deputed by the PI to attend symposia/seminars/conferences/workshop/training etc., in India.
16. The Research Associate shall settle their claims within one month and in no case after the final settlement of the accounts of the scheme.
17. The Research Associate should execute the bond on bond paper if Rs. 100/- stating the terms and conditions are acceptable to him/her and will abide by the same as per the format provided from time to time.


Recruitment Officer
CAAST-CSAWM
MPKV, Rahuri

Copy submitted with respects for the favour of information to:

- 1) Finance and Account Officer, PIU-NAHEP, Krishi Anusandhan Bhawan-II, Pusa, New Delhi 110 012
- 2) National Director and Dy. Director General (Agril. Education), ICAR, Krishi Anusandhan Bhawan-II, Pusa, New Delhi 110 012
- 3) Under Secretary, NAHEP, ICAR, Krishi Anusandhan Bhawan-II, Pusa, New Delhi 110 012
- 4) National Coordinator, M&E, NAHEP, ICAR, Krishi Anusandhan Bhawan-II, Pusa, New Delhi 110 012
- 5) National Coordinator (CAAST), NAHEP, ICAR, Krishi Anusandhan Bhawan-II, Pusa, New Delhi 110 012
- 6) The Director General, MCAER, 13218, Bhosalenagar, Bhamburda, Pune-411007
- 7) All SAUs/ICAR Institutes in India
- 8) The Dean, F/Agril. and Director of Instruction, MPKV/Dr.PDKV/Dr.BSKKV/VNMKV
- 9) The Director of Research, MPKV/Dr.PDKV/Dr.BSKKV/VNMKV
- 10) The Director of Extension Education, MPKV/Dr.PDKV/Dr.BSKKV/VNMKV
- 11) The Associate Deans (All),
- 12) The Associate Director of Research, (NARP) (All)

- 13) The Specialists (All)
- 14) The Heads of Departments (All), MPKV, Rahuri
- 15) The Planning Officer, MPKV, Rahuri
- 16) The Comptroller, MPKV, Rahuri
- 17) The Deputy Registrar (Admn.) MPKV, Rahuri
- 18) The Asstt. Registrar, (Admn.) MPKV, Rahuri
- 19) The PA to Hon'ble Vice-Chancellor, MPKV, Rahuri

Copy f.w.c.s. for information to:

- 1) Associate Dean, Dr.ASCAE & T, MPKV, Rahuri/ Dr. PDKV, Akola / VMKV, Parbhani / Dr. BSKKV, Dapoli.
- 2) Head, Dept. of IDE, MPKY, Rahuri / Dr. PDKV, Akola /VNMKV, Parbhani /Dr. BSKKV, Dapoli
2/- It is requested to give vide publicity to this notification.
- 3) In-charge ARIS Cell, MPKV, Rahuri.
2/- It is requested to upload this notification on University web site for wide publicity.



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Application Form
for Requirement of Research Associate (Irrigation and Drainage Engineering)

1	Post applied for								Photo
2	Full Name (in Block letters)								
3	Father's /Husband Name								
4	Gender		Male/Female						
5	Date of Birth								
6	Age as on 15.01.2020								
7	Marital Status								
8	Mobile Number								
9	E-mail Address								
10	Correspondence Address (with pin code)								
11	Permanent Address								
12	Whether belongs to SC/ST/OBC/General								
13	Subject specialization								
14	Sr. No.	Name of degree	Board/ University	Year of passing	Duration of Course (in year)	Max. Marks	Marks Obtained	Marks/ Percentage OGPA	
	1.	10 th Class equivalent							
	2.	10+2/ Higher Secondary equivalent							
	3.	Bachelor's Degree							
	4.	Master's Degree							
	5.	Ph.D.							
	6.	Others (Specify)							
15	Are you NET Qualified?		Yes/No If yes, which of the following. (✓) 1. ASRB- NET 2. CSIR-NET 3. UGC-NET 4. MHRD-GATE						

		5. DBT-Biotechnology Eligibility Test 7 Test Conducted in Bioinformatics by Bioinformatics National Consortium 6. ICMR-JRF Entrance Exam 7. ICAR JRF Entrance Exam 8. Dop – GPAT 9. DAE-JEST & JGEEBILS, NBHM				
16	Work experience:					
	Sr. No	Designation	Name of employer	Period		No. of years and month
				From	To	
	1.					
	2.					
3.						
17	Publications (Number only and attached the list separately, and provide the copies of full-length papers): 1. Published papers in Journals: 2. Chapters published in Book: 3. Books published:					
18	Present employment details					
19	Additional Information, If any					

The information given above by me is true to the best of my knowledge and belief. If any information is being found false, my candidature/ services, if selected, may be terminated without any notice.

Date: / /2020

Signature of Applicant

**Centre for Advance Agriculture Science and Technology (CAAST) Project on
“Climate Smart Agriculture and Water Management” (CSAWM)
Mahatma Phule Krishi Vidyapeeth, Rahuri**

About the Project

India ranks second worldwide in farm output but has very low agricultural productivity. Currently, in spite of the great efforts put forth for improving the productivity of rice and wheat, India ranks 13 and 14 in the world. India ranks still lower for the productivity of other food commodities. If we enhance our productivity, we can produce more, save land and water resources and improve the soil health by appropriate use of chemicals. As an example, we could produce 2.5 times what we currently do, if we were to produce wheat at the rate at which New Zealand does. Similarly, if we produce rice at Chinese levels, we could halve the amount of land devoted to rice cultivation making available the land for other purposes. Thus, productivity needs to be increased to enable the farmers to get more remuneration with fewer resources, maybe it is land, water, labor, fertilizers, and chemicals. On 28th February 2016, while talking at the Farmers' rally in Uttar Pradesh, the Prime Minister stated that it is his dream to see farmers double their income by 2022 when India completes 75 years of its independence. Thus, the goal of the Agriculture University scientists/teachers need to be to produce the technology and competent human resources for enabling the farmers to adopt the technology for doubling the farm income in the realm of climate change and climate variability. Precise use and application of inputs considering the Principles of climate-smart agriculture can provide a way to do it. Precision agriculture is the technique of the site-specific management of crops taking in to account in-field variability by using GIS, GPS and Remote Sensing technologies to produce and manage climate, soil and crop variability in order to optimize the use of water, fertilizers, and chemicals in agriculture

There is growing concerns about climate change and variability and their adverse impact on different sectors of development including agriculture and water. Hence while enhancing the productivity of agriculture and efficiency of water use, it is necessary that increase in agricultural productivity, water use efficiency and farm income is on a sustainable basis and without having an adverse impact on the environment. At the same time, it is necessary to reduce the exposure of farmers to short-term risks, while also strengthening their resilience to adapt to longer-term stresses; and whenever possible, help farmers to reduce greenhouse gas emissions. Climate-smart agriculture offers a solution to this. FAO defined climate-smart agriculture as “agriculture that sustainably increases productivity, enhances resilience (adaptation), reduces/removes greenhouse gas emissions (mitigation) wherever possible, and enhances the achievement of national food security and development goals”

The current perception of scientists, extension workers, and farmers respectively for developing, disseminating and adopting the generic practices need to be changed if the limited available natural resources such as land and water need to be utilized efficiently and optimally and the inputs such as fertilizers and chemicals are to be used efficiently so as to make farming more remunerative, environmental friendly and less polluted. Hence the focus needs to be changed from generic to specific, meaning specific to crop, soil, weather, different systems and finally to farm. The IT technologies coupled with remote sensing, including satellite, GIS, GPS, SDSS enable to connect the aspects of precision agriculture, water management, climate-smart agriculture; facilitate the intricacies associated with offering solutions to providing farm specific precision technologies in real time considering the climate variability and climate change; and provide the means for dissemination and adoption.

Currently, globally the agriculture and water management are moving towards precision, climate-smart, specific and in real time; and many multinationals are showing interest in India. Few Indian companies have also started the thought process. Under such circumstances, it is necessary to develop the human resources in India by equipping them with the technologies and tools that suit to Indian agriculture and water sectors. Thus, there is a need for both developing technologies and human resources.

The Climate Smart Agriculture and Water Management (CSAWM) is the science of adapting and building the resilience of agricultural and food security systems to climate change through smart agricultural and water management practices for reducing greenhouse gas emissions from agriculture (including crops, livestock, and fisheries). More productive and more resilient agriculture requires a major shift in the way land and water are managed to ensure that these resources are used more efficiently and precisely. Cultural, environmental, social, institutional, political and governance factors affect the adaptation and mitigation processes in agriculture. It is important to identify suitable practices, methods and technologies to transform the larger scale agriculture into the climate-smart precision agriculture with smart water management.

With these views, the project CAAST (Centre for Advance Agriculture Science and Technology) Project on “Climate Smart Agriculture and Water Management” (CSAWM) is being implemented in Mahatma Phule Krishi Vidyapeeth, Rahuri under World Bank-ICAR 'National Agricultural Higher Education Programme"

Rational of the CSAWM

- Growing pressure on the natural resources such as land and water; and in turn the need of their precise use and application, precise use of fertilizers and chemicals to enhance the productivity, improve soil health and reduce pollution
- Precision farming technologies developed in the US and European countries may not be applicable for the Indian agro-eco system.
- Address the challenges faced by climate change and variability
- The necessity to develop the tools and methodologies such as SDSS and real-time advisories for making precision agriculture and water management smart by employing geoinformatics.
- It is expected that this sector which is currently in infant stage in India will expand geometrically to keep pace with fulfilling the goal of doubling farm income by 2022.
- This is the importunate time that we develop the human resources that have expertise and competence to start the entrepreneurship and meet the requirement of the industries in precision and climate-smart agriculture and water management.

Objectives of the Project

- To develop the capacity amongst the faculties and scientists for the development and adoption of the precise Climate Smart Agriculture and Water Management technologies.
- To start the one year Post Graduate Diploma in “Climate Smart Agriculture and Water Management” for developing the human resources enabling them to start entrepreneurship and employable in public sectors and private industries, strengthen the current M.Sc., M. Tech. and Ph. D. programme (for their research projects); and make provision for the perspective beginner/middle level faculties/researchers for Post Doctorate studies in precision water management, precise climate-smart agriculture, and Geo-informatics.
- To develop an integrated system including RS/GIS and GPS tools, modeling and SDSS tools using unmanned aerial system (UAS aka. drone) and sensor-based technologies; and mobile applications and their applications for climate-smart and precision agriculture and water management.
- To conduct end-to-end capacity building through on-the-job training and case study-based learning; enhance the employment and placement rate; and business and entrepreneurship opportunities.

Linkages established

International

- Washington State University, Pullman, WA, USA
- Mississippi State University, Starkville, MS, USA

- Asian Institute of Technology, Bangkok, Thailand
- International Water Management Institutes (IWMI), Colombo, Sri Lanka
- Michigan State University, USA (proposed; they have shown interest)

National

- Indian Institute of Remote Sensing (IIRS), Dehradun
- National Institute of Abiotic Stress Management (NIASM), Malegaon (Kh), Baramati
- Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad
- National Bureau of Soil Science and Land Use Planning (NBSS and LUP), Nagpur
- Indian Meteorological Department (IMD), Pune
- Maharashtra Remote Sensing Application Centre (MRSAC), Nagpur
- Water and Land Management Institute, Aurangabad

Industries

- AECOM, USA based multinational (industry partner)
- KisanHub, St John's Innovation Centre, Cambridge, United Kingdom.
- Climate Change Agriculture and Food Security, CCAFS (CGAIR Organization)
- Sahyadri –Agro, Nashik
- Netafim Irrigation, Pune
- Jain Irrigation Systems Limited, Jalgaon
- InnosapienAgro. Technologies Pvt. Ltd., Thane
- Quantela, Bangalore

NGOs

- WOTR
- BAIF
- GRASP, Aurangabad
- LUPIN

Achievable Expected Outcome

- The competent human resources created ready for generation, adoption, and dissemination of tools and technologies for Climate Smart Precision Agriculture and Water Management
- Improved competence amongst the faculties on precision agriculture and water management, climate-smart agriculture and Geo-informatics (by way of change in attitude and knowledge) through faculty up-gradation programmes by way of international and national training
- Enhanced employment opportunities of the students in industries
- The entrepreneurship and consulting opportunities for the students in the sectors of Geo-informatics, precision agriculture, and water management and climate-smart agriculture
- International alliance and exposure and thereby enhancing the diversified environment in the University
- Enhanced collaboration with private industries
- Development of the tools and technologies
- Enhanced production and productivity of agricultural commodity.
