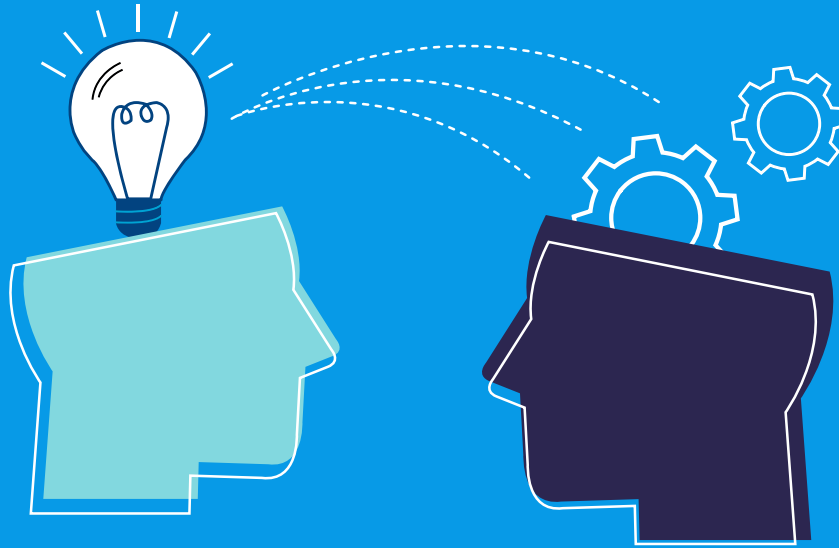




THE
AUSTRALIAN
WATER
PARTNERSHIP



India Young Water Professionals (YWP)

Training

Program (Cohort-II)

2023-24

Jointly organised by

Australian Water Partnership (AWP), Australia India Water Centre, Australia National Hydrology Project (NHP), and National Water Academy (NWA) Pune, India

Under

National Hydrology Project (NHP)

DoWR, RD&GR, Ministry of Jal Shakti, Government of India



Background and Context

The Government of India signed the Memorandum of Understanding (MoU) with the Government of Australia to cooperate in the field of Water Resources Management on 10th November, 2009 and subsequently renewed on 5th September, 2014. The said MoU was superseded with the signing of a new MoU on 20th May, 2020. The effectiveness of the MoU is for a period of 5 years with effect from the date of signing. The Para 3 of signed MoU stipulates '[forms of cooperation](#)' in the identified areas related to Water Resources Management. One of the identified forms of cooperation is capacity building, training, study tours, education and knowledge sharing. Under this form of cooperation, Australia Water Partnership (AWP), during the year 2019-20 had proposed to initiate India Young Water Professional Programme (YWP) in collaboration with National Hydrology Project (NHP).

Objectives

The specific objectives of this training program are:

- To create a group of Young water professionals in India who are transdisciplinary in their approach and can provide effective leadership in implementing water projects.
- Develop leadership skills and management competencies of YWPs in India.
- Improve practices and management approaches in sustainable water management.
- Widen knowledge base related to the water sector reforms based on Australia's experience in this area.
- Build a strong alumni network of YWPs for seamless and continuous professional development and networking.

Tentative Outline of the Proposed Training Program

Aim	To build a group of trained young water professionals and water leaders to support the water sector reforms and sustainability agenda of the Government of India
Duration	Total 14 weeks (Tentatively) Planned Commencement Workshop during last week of November 2023 at NWA, Pune (1 week) SUIP + Online workshops, supervision and mentoring (2 nd -11 th week)- 10 weeks Advanced training in Australia (12 th – 14 th week) (3 weeks) Total: 14 weeks program.
Mode of the Training	Hybrid – Online + Physical (India-Australia) Commencement workshop (physical mode) and online workshops and working on the SUIP and client - India Advanced in-person training- Australia
Target Participants	<ul style="list-style-type: none">• NHP Implementing Agencies (IA)• Training institutes of DoWR, RD & GR, Ministry of Jal Shakti (NWA, Pune; RGNGWTRI, Raipur; NERIWALM, Tezpur)
Age group and Number	21-35 years Total - 20 participants (10 Male +10 Female)

The Situation Understanding and Improvement Project (SUIP)

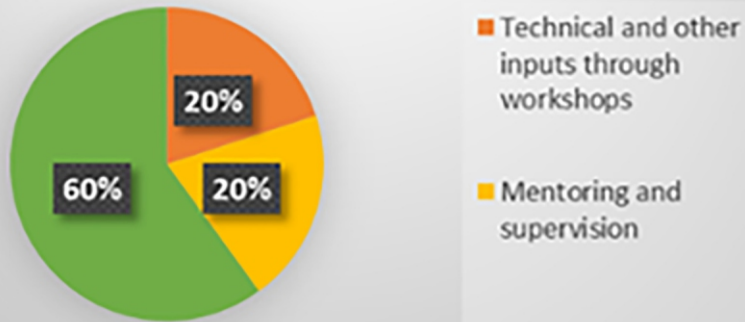
The Situation Understanding and Improvement Project (SUIP) is the 'engine room' of the training program. YWPs devote a significant part of their effort and time to develop their competencies and leadership qualities suitable for future tasks and workplace needs. Participants work on a 10-week group project (2 persons/group) and select a SUIP topic relevant to the local water ministry or their professional interests. The SUIP helps YWPs to understand and improve complex and problematic water management situations. Each SUIP has a client with an interest/stake in the SUIP, thus enabling to implementation of the recommendations coming out of the YWPs work. The competency and leadership development through SUIP is supported through in-person and online workshops on relevant topics, coaching, mentoring and some hands-on activities throughout the training program.

The SUIP helps YWPs to research a real-life situation and understand and improve the situation while internalising water management concepts and approaches, dealing with complexity, communicating with the SUIP client and leading and conducting a case study from start to finish. Completing a SUIP, gives young professionals the confidence to work on a project independently, acquiring skills and competencies in critical thinking, communicating, researching, leading and managing a project.

Since, the Situation Understanding and Improvement Project (SUIP) is the pillar of this training program, in cohort II effort would be made to make this component more effective by overcoming the limitations faced during cohort I of YWP.

This time, it is proposed that the nominee candidates would themselves propose a topic for SUIP, while submitting their candidature for the training. The shortlisting criteria will also include the evaluation of submission made by the candidates on SUIP. Such measures are expected to improve the effectiveness of the programme as trainees will devote a significant part of their effort and time in developing their competencies and leadership qualities for assigned SUIP.

Time allocation for the YWP training



The multidisciplinary SUIP will help YWPs to research a real-life situation and understand and improve the situation while internalising water management concepts and approaches, dealing with complexity, communicating with the SUIP client and leading and conducting a case study from start to finish.

Indicative List of SUIP (Broad Topics)

- Urban flooding
- Riverfront Development and Flood Plain Zoning – Group 1 topic
- Riverfront Development and Flood Plain Zoning – Group 2 topic
- Increasing Water Use Efficiency in Irrigation Sector
- Safety Evaluation of Water Infrastructure – Group 1 topic
- Safety Evaluation of Water Infrastructure – Group 2 topic
- Water Pricing – Group 1 topic
- Water Pricing – Group 2 topic
- Use of ML and AI Techniques and Deep Learning with ANN in Water Resources
- Lakes and Reservoir Restoration Projects – Group 1 topic
- Lakes and Reservoir Restoration Projects – Group 2 topic
- Hydrographic Survey for Reservoir
- Hydropower and Environmental Sustainability
- GIS-based Watershed Management
- Real-time Flood Monitoring and Alert Systems
- Sustainability of Groundwater Resources in arid and semi-arid agro climatic zones especially in Hard rock aquifers
- Groundwater Quality Issues – Geogenic/ Anthropogenic :Origin, Characterization and Remediation
- Impact of continued reuse of treated wastewater
- Water Logging, Inland salinity, and remediation for land reclamation in the affected area
- Water Intensive cultivation and Need of Crop Diversification for WUE

Tentative Programme Schedule

Week no.	Time Commitment (Working Days)	Remark
Week 1	5 days	In-person workshop in India with one day dedicated to the clients of SUIP
Week 2 – 11	2 days per week (Thursdays and Fridays); Total 20 days	Thursdays Online workshops
		Fridays Work on SUIP
Week 12-14	15 days	In-person workshops and field visits in Australia

Registration

There will be no registration fee for the proposed training programme, and the seats will be limited to 20 with equal participation from females and males.

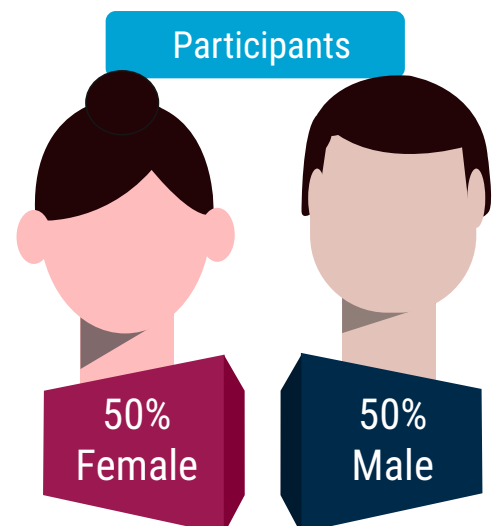
Registration for the training shall be done through the MIS portal of NHP.

Basic Eligibility Criteria

- The program will target **50% female and 50% male participants**
- Applicants should be from Implementing agencies under NHP, training institutes of DoWR, RD&GR, Ministry of Jal Shakti (NWA, NERIWALM, RGNGWTRI)

Age group 21-35 years

Minimum working experience of 3 years



Proposed Selection Criteria (Total 40 Marks)

Length of service (10)	Educational Qualification (10)	Write up by the candidate: A short write-up articulating candidate case for selection in this training program focussing on the following four key questions (each question 2.5 marks (10)	Proposed Research Synopsis (10)
<p>(I) Min. 3 years (3)</p> <p>(ii) 4 years (4)</p> <p>(iii) 5 years (5)</p> <p>(iv) 6 years (6)</p> <p>(v) 7 years (7)</p> <p>(vi) 8 and above (10)</p>	<p>(vii) BE/ B.Tech/ Graduation with science subjects (5)</p> <p>(viii) Post- graduation & above (10)</p>	<p>(ix) Why do you want to participate in this training program?</p> <p>(x) What skills and competencies you hope to develop for yourself from the program?</p> <p>(xi) How the learning from this training will help in your current and future works in your Department?</p> <p>(xii) How will this program help in your future career advancements?</p> <p>The write-up per question is to be limited to 250 words.</p>	<p>(xiii) Problem statement of the SUIP you have selected (2)</p> <p>(xiv) How will the SUIP help you in developing competencies in problem-solving, communication, leadership and transdisciplinary aspects?(2)</p> <p>(xv) How will your SUIP help the client's work and outcomes on the ground? (3)</p> <p>(xvi) How will the skill and competencies you develop will change the way we manage water in the country? (3)</p>

Expenses of Young Water Professional Program-Cohort-II

The local and foreign travel expenses of participants from NHP Implementing Agencies (IA) shall be borne by respective IAs from NHP funds

However, the training fees raised by various institutions in India and Australia would be borne by NPMU, NHP.

Outcome of the YWP

- Understand transdisciplinary aspects of water management;
- Critique the complexities of sustainable water management challenges by adopting a systematic approach;
- Design and conduct a real-world project to improve a water resource situation using evidence and resources in an ethical manner;
- Communicate effectively and succinctly to a range of diverse stakeholders;
- Appraise gender equity, diversity and social inclusion in the water sector;
- Report findings, or make recommendations, to improve a water resource situation; and
- Critically reflect and improve on own professional practice and leadership skills in promoting optimal outcomes in the water sector.



NATIONAL HYDROLOGY PROJECT

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