

FINAL REPORT

Submitted by
Centre for Youth (C4Y)

Submitted to
India Water Partnership (IWP)

Associate Partners



FINAL REPORT

ON

C4Y-IWP WATER CHAMPIONS YOUTH FELLOWSHIP PROGRAMME 2020

Submitted to:

India Water Partnership

Submitted by:

Centre for Youth

Year:

2020

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ACKNOWLEDGEMENT

The report follows a detailed exposition of the successful implementation of Cohort 2.0 of C4Y-IWP Water Champions Youth Fellowship in the year 2020. The team of Centre for Youth (C4Y) would like to convey sincere gratitude to all the partners, experts, jury members, mentors and the fellows for their support which resulted in a successful fellowship programme, despite under extraordinary circumstances posed by Covid-19 pandemic.

EXECUTIVE SUMMARY

C4Y-IWP Water Champions Youth Fellowship was conceptualised & initiated by Centre for Youth (C4Y) in 2019. To foster and empower Sustainable Youth Leadership in the country, and build their capacities on developing water smart solutions for efficient management of water resources, the six month of intensive fellowship aimed at aspiring young leaders. The 2020 C4Y-IWP Water Champions Youth Fellowship programme was implemented by the C4Y and IWP teams with support from premier organisations working in water resource management sector- Development Alternatives (DA); WaterAid India; Centre for Science and Environment (CSE); J S Water Energy Life Co; Council on Energy, Environment and Water (CEEW) and TARU Leading Edge Pvt. Ltd. In 2020, Ministry of Jal Shakti, Government of India and WAPCOS Limited also supported the fellowship for strengthening and scaling its reach.

The students pursuing graduation and post-graduation courses in the environmental engineering, environmental management, environmental sciences, sustainability, natural resources, water management and other related subjects from Delhi & NCR were invited to participate. The fellowship primarily engaged with almost 200 plus students and over 30 premium educational institutes and received 70 applications. An eminent jury panel of 12 water sector experts was constituted who shortlisted and interviewed the applicants. 13 promising students were selected to form Cohort 2.0.

In 2020, amid COVID-19, the fellowship was designed to be VIRTUAL and the digital mode was strategically leveraged. The fellows were placed with partner organisations for three months where they could experience a holistic 360 degree exposure to water concerns.

With online learning going beyond boundaries, 13 fellows worked on series of deliverables - blog postings, case studies, photo slides & narratives, info-graphic posters, report on water smart solutions during their virtual placement with the partner organisations. In the course of their experiential journey, they have also participated in a digital orientation workshop, six online webinars on #watersmartsolutions and peer learning workshop. About 48 hours of online learning and dynamic interactive sessions were held with 43 sectoral experts from various parts of India.

The fellows undertook dynamic projects and developed tools like Shit Flow Diagrams (SFD), Climate Resilient Assessment Framework for water infrastructures, Water Security Plan for water access in rural areas and a global compendium of case studies elucidating successful sustainable practices. Detailed study was undertaken on Decentralised Wastewater Management Systems (DWWT) prevalent in India and Analytical Hierarchy Process (AHP) that can be used to streamline the multi-criteria decision making approach required for groundwater recharge potential site delineation. Analysis on lack of access to safe drinking water was done for people with disabilities, slum dwellers and those living in fluoride endemic districts. Observations on period poverty amid Covid-19 and documentation of rejuvenation of water body through phyco-remediation process were also recorded by the fellows.

Deliverables produced by the fellows and the outcome of the programme were uploaded on the IWP website (https://cwp-india.org/?page_id=5750) as well as the C4Y website (<http://www.c4yindia.in>). The fellowship 2020 comprehensively enhanced knowledge and experience of the next generation leaders towards the goals of sustainability and self-reliance. The commendable fellowship journey successfully completed with 13 Water Youth Champions in India.

1.0 PURPOSE

The C4Y-IWP Water Champions Youth Fellowship programme 2020 with focus on youth and water issues was implemented in National Capital Region (NCR) of Delhi for the second consecutive year. The fellowship reinforces our joint commitment to harness and promote capabilities of youth to develop sustainable water smart solutions to address the water stress issues in India. The key objectives of the 2020 Fellowship were as follows:

- **To understand India's water concerns:** Raise awareness and social consciousness on India's pressing water concerns.
- **To engage with existing problems and solutions:** See first-hand the problems and strategies to deal with the water exigency in the country.
- **To evolve as aspiring young leaders:** Develop leadership skills among youth towards a sustainable future.
- **To support partner organisations:** Contribute positively in the non-profit partner's working processes.
- **To develop strategies:** Explore disruptive concepts for reducing the India's pressing water concerns.
- **To implement projects:** Research, ideate and execute the innovative water smart solutions.

2.0 CHRONOLOGICAL BRIEF OF THE PROCESS/ WORKSHOPS/ EVENTS

The C4Y-IWP Water Champions Youth Fellowship programme 2020 with focus on youth and water issues was implemented in National Capital Region (NCR) of Delhi for the second consecutive year. 13 fellows this year worked on water smart solutions with mentoring and guidance from the fellowship ecosystem. Amid COVID-19, in the year 2020 the fellowship was VIRTUAL. The snapshot of the fellow journey is presented in annexure III. The fellowship and learning & knowledge process are enlisted chronologically below:

- 1. Development of virtual fellowship 2020 framework, themes, collateral and outline (April – May 2020):** In consultation with IWP, the call for application poster, brochure and application form was developed in the beginning of the fellowship programme. The contemporary eight fellowship themes were adopted i.e. Access to Safe Drinking Water; Water Security and Climate Change; River Rejuvenation and Tributary Management; Water Literacy through Digital Media; Water Security and Availability amid Covid-19; Water Efficient Agriculture Management; Groundwater Conservation and Rainwater Harvesting and Water Policies and Governance.
- 2. Call for Applications (May – June 2020):** The eligible young students from the educational institutions located in Delhi & NCR were invited to participate in the fellowship application process. The fellowship was accepted as the mandated summer internship in accordance with the academic requirement of the applicant's institutions.
- 3. Selection Process & Jury Panel (June – July 2020):** After an overwhelming response from the applicants, the candidates were peer-reviewed and shortlisted by the C4Y and IWP teams. The final selection was entrusted to an eminent Jury Panel of 12 members, chaired by Shri Giriraj Goyal, Director, Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Government of India.

Shri Avinash C. Tyagi, Vice President-IWP, who has been associated with fellowship since 2019, was one of the prominent member in the jury panel. The shortlisted applicants were online interviewed on June 30 & July 01, 2020 and the selected students were offered the fellowship for the year 2020.

4. **Online Orientation Workshop (July 13-15, 2020):** A three days Online Orientation Workshop was scheduled from July 13-15, 2020. Spread across 13 sessions, the workshop was organised for the young students who were selected as fellows of Cohort 2.0. Overall, the virtual workshop focused on diverse range of issues in the water sector specifically aligned to the thematic areas of the fellowship. Water literacy, communication, blog writing, social media and documentation was also the thrust of the workshop. Shri U. P. Singh, IAS, Former Secretary, Ministry of Jal Shakti, Government of India was the Chief Guest of this virtual inaugural ceremony.
5. **Fellow's Deliverables Document (July 2020):** Fellow's guidelines document for the deliverables i.e. – Innovative water smart solution project outline, info-graphics & report, case studies, blog post and photo slides & narratives were developed by the team.
6. **Virtual Placement with Partner Organisations (July – October 2020):** The fellows were virtually placed with the partner organisations as given below. The fellows contributed in the projects and initiatives of the partner organisations. The mentors in the organisations provided guidance to the fellows for working on their set of deliverables.

S No.	Fellows Name	University Name	NGOs Partners
1.	Preethi Vasudevan	TERI School of Advanced Studies	Centre for Science and Environment (CSE)
2.	Saiyami Bhardwaj	University of Delhi	
3.	Abhishek Bharti		
4.	Upma Garg		
5.	Niharika Kaushik	YMCA University of Science and Technology, Faridabad	
6.	Lipi Gandhi	TERI School of Advanced Studies	Council on Energy, Environment and Water (CEEW)
7.	Niharika Nitin Labhsetwar		
8.	Ekansha Khanduja	TERI School of Advanced Studies	Development Alternatives (DA)
9.	Amrita Singh	University of Delhi	J S Water Energy Life Co
10.	Ananya Mukherjee	Ambedkar University Delhi	TARU Leading Edge Pvt. Ltd
11.	Shweta Choubey	YMCA University of Science and Technology, Faridabad	WaterAid India
12.	Anubhav	University of Delhi	
13.	Ajay Kumar		

7. **Webinar on Deliverables Guidelines (July 31, 2020):** A webinar was organised to orient the fellows on the deliverables guidelines.

8. #WaterSmartSolutions Webinar Series (August – October 2020): In the efforts to create collective learning opportunities for the fellows, a webinar series was conceptualised #WaterSmartSolutions for the designated fellows to develop an understanding of water resource management problems and solutions in the Indian context. The purpose of each one-hour long webinar in this series was to enhance fellows’ learnings on water smart solutions and to engage them on existing problems & solutions. The webinars helped them to see first-hand the problems and strategies to deal with the water exigency in the country. The partner organisations shared their organisation’s initiatives, experiences, innovative water smart solutions and strategies with the fellows. The timeline for the webinar series is illustrated below:

S No	Webinar	Time	Date	Expert from Partner Organisation
1.	Webinar 1	16:00 -17:00	Friday, August 28, 2020	Dr K Vijayalakshmi , Vice President, Development Alternatives (DA)
2.	Webinar 2	16:00 -17:00	Friday, September 04, 2020	Saumyaditya Bose PhD , Partner - Disaster & Climate Change, Taru Leading Edge
3.	Webinar 3	16:00 -17:00	Friday, September 11, 2020	Ms Ramya Pandyan Communication Expert, Business Strategist & Storyteller
4.	Webinar 4	16:00 -17:00	Friday, September 18, 2020	Mr Anand Kumar , Head of Programmes & Shalini Chaturvedi , Program Coordinator, Water Aid India
5.	Webinar 5	16:00 -17:00	Friday, September 25, 2020	From Centre for Science and Environment (CSE) Mahreen Matto , Programme Manager Bhitush Luthra , Programme Manager Shivali Jainer , Programme Manager
6.	Webinar 6	16:00-17:00	Friday, October 09, 2020	Ms Shuva Raha , Head- New Initiatives, Council on Energy, Environment and Water (CEEW) Ms Kangkanika Neog , Programme Associate, Council on Energy, Environment and Water (CEEW)

9. Final Digital Concluding Peer Learning Workshop for Cohort 2.0 (Nov 27, 2020): In a continuous efforts towards grooming the fellows as future water youth ambassadors and to facilitate collective learning a day long final concluding workshop wherein the fellows shared their water smart solution related projects with their peers was organised. The efforts and achievements of the fellows were highly appreciated by the mentors from partner organisations who also provided their valuable insights in the mentoring and work process. The learning journeys of all the thirteen fellows was found to be satisfactory.

10. Monitoring and Assessments (July – Dec 2020): Both C4Y and IWP teams, through telephonic, mails and sms / whatsapp, interactions were held with the fellows, mentors of the partner organisation and the educational institutions. The regular updates helped in reviewing the progress of the fellows during the placements and submission of the deliverables. Each fellow were assessed based on their submission of the deliverables and their conduct as per the pre- defined criteria. The outstanding fellows were awarded the certificate of excellence.

11. Virtual Felicitation Ceremony (Jan 29, 2021): Live Streaming of the Virtual Felicitation ceremony for demonstrating innovative solutions, sharing experiences, takeaways and awarding certificates to the successful fellows was scheduled on December 2020 and held on January 29, 2021.

3.0 RESULTS

3.1 Narrative Reporting on Results

Key Partnerships: Centre for Youth and India Water Partnership received support from prominent associate partners - Development Alternatives, Centre for Science & Environment (CSE), Council on Energy, Environment and Water (CEEW), Taru Leading Edge, JS Water Energy Life Co. and WaterAid-India, partnered and mentored the fellows. These partners also contributed substantially to the stipend of the fellows. The fellows gained mentorship for strategising and executing their ideas from partner organisations. Aligning with the prominent sector specialist organisations was critical and impacted the overall success of the fellowship. The immense knowledge & guidance was extended by the jury panel members, water sector experts and the educational institutions of Delhi and NCR. The Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Government of India and WAPCOS also provided support in 2020 for strengthening the reach and scale of the fellowship.

Virtual format leveraged: The fellowship strategically leveraged digital mode to comprehensively build awareness of the next generation leaders towards the goals of sustainability and self-reliance. A robust digital call for application and online selection process by eminent jury panel & peer review led to the selection of thirteen admirable candidates of Cohort 2.0 from the premium educational institutions in Delhi & NCR. The fellows were placed virtually for three months with partner organisations to work under their mentorship and guidance to contribute in development of unique and innovative water smart solutions. The series of knowledge and learning workshops, webinars & sessions were possible due to the online format.

Learnings sessions (orientation, webinars and peer learning workshop): The fellowship ventured beyond developing water smart solution and the partners worked extensively with the fellows on building their capacities on documenting and communicating the learnings & the experiences of the fellowship journey as well the concepts of water smart solutions. With online learning going beyond boundaries, the knowledge dissemination sessions in the three days of virtual orientation workshop, water smart solution webinars series, peer learning final concluding workshop, overall culminated in 48 hours of online learning and dynamic interactive sessions with 43 sectoral experts from across the country.

Fellow's deliverables: As part of the fellowship, the young fellows were required to work on documenting their learnings and experience which have been comprehensively collated in varied publications. Each fellow worked on the innovative water smart solution project outline, infographics & report, case studies, blog post and photo slides & narratives. The documentation process enhanced the communication skills of the fellows and propagated sensitisation about the water related challenges.

Innovative Water Smart Solutions contributed by the fellow: The fellows undertook dynamic projects and developed tools like Sanit Flow Diagrams (SFD), Climate Resilient Assessment Framework for water infrastructures, Water Security Plan for water access in rural areas and a compendium of case studies elucidating successful sustainable practices.

Detailed study was undertaken on Decentralised Wastewater Management Systems (DWWT) prevalent in India and Analytical Hierarchy Process (AHP) that can be used to streamline the multi-criteria decision making approach required for groundwater recharge potential site delineation. Analysis on lack of access to safe drinking water was done for people with disabilities, slum dwellers and those living in fluoride endemic districts. Observations on period poverty amid Covid-19 and documentation of rejuvenation of water body through phyco-remediation process were also recorded by the fellows.

Developing young water champions and next generation leaders: The second edition of 2020 fellowship programme commenced with 13 fellows pursuing courses in the environmental engineering, environmental management, environmental sciences, sustainability, natural resources, water management and other related subjects from noted universities like, Delhi University, Ambedkar University, TERI School of Advanced Studies and J C Bose University of Science and Technology, YMCA, Faridabad. The intensive C4Y-IWP Water Champions Youth Fellowship 2020 aimed at empowering young leaders by providing them with relevant and comprehensive work experience in the water sector. The young Fellows have gone through an experiential learning curve in terms of knowledge and experience on water issues & concerns and evolved into confident future leaders who shall work towards nation building and sustainable future of India. The fellows also explored their strengths and leadership potential over the course of the programme.

3.2 Outcomes

The main beneficiaries of the programme were youth as aspiring leaders. The fellows got exposure to water concerns and solutions as they learnt and implemented new skills & understanding. The other key beneficiaries of the programme were the partner organisations with whom the fellows were placed during the fellowship. The long-term impact of the fellowship programme would be on the non-government organisations, sector specialists, government organisations, academia and research institutions who will benefit with empowered youth, innovative water smart solutions and communication collaterals on the fellowship. The demonstrated outcome for 2020 fellowship included:

- Youth for creating a sustainable future nurtured
- Sustainable youth leadership developed
- Holistic 360 degree exposure to water concerns & solutions
- Innovative water smart solutions generated
- Youth in water sector empowered
- Confident aspiring leaders for nation building evolved
- Communication and documentation skills enhanced

3.3 Outputs

The fellowship in 2020 has achieved beyond the committed outputs because of the enduring support of all the associate partners.

Expanding Reach

- 200 + Students Reached
- 30 + Educational Institutions Engaged
- 70 Applicants
- 50 Shortlisted
- 12 Eminent Jury Members
- 13 Fellows Designated (Planned for 10 Fellows)

Enhanced Knowledge and Competencies

- 48 Hours of Online Learning
- 43 Prominent Experts
- 13 Knowledge Sessions
- 8 Associate Partner Organizations
- 6 # Water Smart Solutions Webinars
- 3 Days Online Orientation Workshop
- 1 Final Concluding Workshop

Deliverables by Fellows: 80 Outputs by 13 Fellows (Project Outlines | Blog Posts | Case Studies | Photo-slides & Narratives | Info-graphics | Water Smart Solution Reports)

Fellowship Blog: One such initiative is a blog of the fellowship. Thirteen insightful blog posts authored by the fellows surmising their experiential learnings and understanding of the water sector scenario based on their fellowship journey, has been published along with their bio-sketches. Refer annexure III.

Live Streaming and Broadcasting of Virtual Felicitation Ceremony: An hour long virtual felicitation ceremony was live broadcasted on www.facebook.com/C4YIndia.

4.0 DELAYS IN IMPLEMENTATION, CHALLENGES AND LESSONS LEARNED & BEST PRACTICES

The second edition of Fellowship faced an initial challenge posed by the Covid-19 pandemic which was followed by lockdown and social distance advisory by the government of India. However, the C4Y-IWP team adapted the fellowship completely on VIRTUAL platform and leveraged to its fullest potential. Sustained communication channels were developed with the fellows through telephonic exchanges, mails and virtual meetings that eliminated the constraints of distance. Substantive knowledge enhancement of fellows was enabled through modes like orientation workshop, webinar series and peer learning workshop which resulted in robust 48 hours of virtual learning. The online mode further brought together 43 prominent water sector experts from across the country who enthusiastically contributed towards capacity building of the fellows which could be only possible through virtually.

The empanelled fellows by virtue of their enthusiasm, readiness to learn and determinate to face challenges, overcame the hurdles by digital mode. While some of the fellows could carry ground research pertaining to their projects while adhering to the safety norms and some could not due to travel and social distancing constraints. The fellows worked regularly under the guidance of their mentors from partner organisations who also ensured that the lockdown or pandemic did not disrupt the learning and experience process of the fellows. All the intended outputs and milestones included the committed outputs were over-achieved and also well within stipulated timelines.

5.0 FELLOWS' DELIVERABLES

The fellows placed with CSE have successfully implemented their projects like developing Shit Flow Diagrams to assess the sanitation value chain of cities; analysing viability of decentralised wastewater management system in densely populated areas and creation of an online compendium of case studies elucidating best sustainable practices of water resource management from across the world. Two fellows were placed with Council on Energy, Environment and Water worked in close coordination with their mentors to contribute in development of frameworks that can be used to analyse the sustainability of water infrastructures against climate change and a water security plan for rural water access. The fellows placed with Development Alternatives (DA), J S Water Energy Life and TARU Leading Edge Private Ltd., undertook dynamic projects to assess and highlight successful ways of implementing multi-criteria decision making, rejuvenation of water body and the rise in period poverty among slum dwellers amid Covid-19 pandemic respectively. The fellows placed with WaterAid-India amply inculcated this motive in their projects where they have analysed and devised ways to provide access to safe & clean drinking water to people living in slums or in areas afflicted by excessive fluoride levels in their water resources or to people with disabilities. Each fellow also worked on the innovative water smart solution project outline, info-graphics and report, case studies, blog post and photo slides & narratives. The innovative water smart solutions info-graphics are appended in annexure II.

6.0 MONITORING ARRANGEMENTS

C4Y team developed a detailed monitoring system to oversee the implementation of fellowship programme as stated below:

- **Regular interactions with the partners & fellows:** Progress mapping with fellows, non-profit partners and educational institutions was done through telephonic calls, emails and virtual meetings.
- **Assessments of the fellows on pre-defined criteria:** List of deliverables with set timelines were assigned to the fellows. The fellow's performance was assessed by all the partners through a pre-defined assessment criteria.
- **Online assessments:** Digital mechanisms were developed to receive the feedback on all the online workshops and webinar series from the fellows.
- **Regular guidance:** The fellows were constantly engaged to facilitate their learning process.

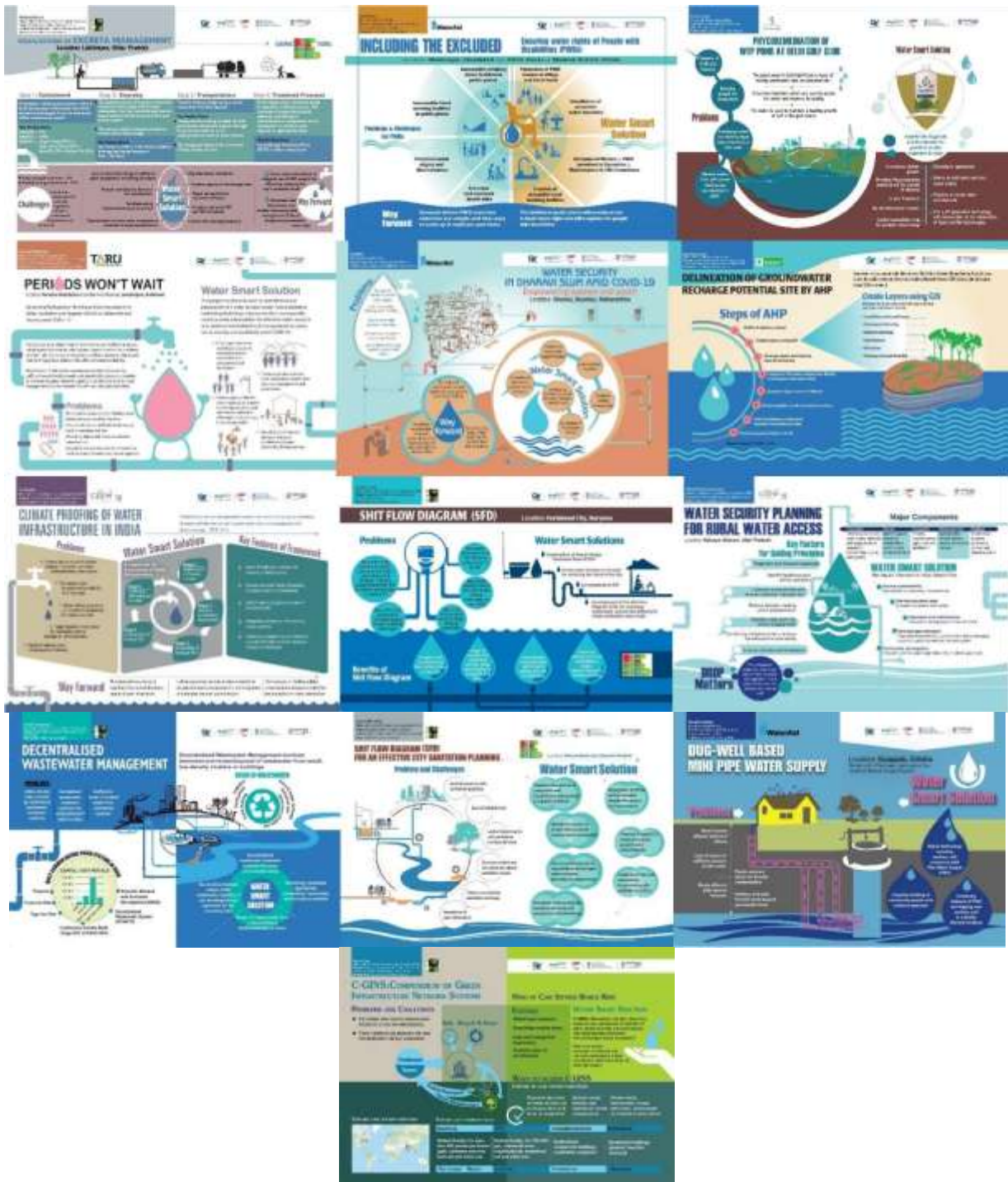
ANNEXURE I: COHORT 2.0

COHORT 2.0 OF 2020 FELLOWS



 <p>Abhishek Bharti MSc Environmental Studies Department of Environmental Studies University of Delhi Placed with Centre for Science and Environment (CSE)</p>		 <p>Ajay Kumar MSc Environmental Studies Department of Environmental Studies University of Delhi Placed with WaterAid India</p>	
 <p>Anurita Singh MSc Environmental Studies Department of Environmental Studies University of Delhi Placed with At Water Energy Life Co</p>	 <p>Ananya Mukherjee MA Development and Development School of Urban Ecology Dr R.R. Ambedkar University Delhi Placed with TWR Leading Edge Pvt.Ltd</p>	 <p>Anubhav MSc Environmental Studies Department of Environmental Studies University of Delhi Placed with WaterAid India</p>	 <p>Ekansh Khunduja M Tech Water Resource Engineering and Management Department of Regional Water Studies TPII School of Advanced Studies Placed with Development Alternatives</p>
 <p>Lipi Ganesh MSc Water Science and Governance Department of Regional Water Studies TPII School of Advanced Studies Placed with Council on Energy, Environment and Water (CEEW)</p>	 <p>Niharika Kaushik MSc Environmental Sciences Department of Environmental Sciences J.C. Bose University of Science and Technology, YMCA Placed with Centre for Science and Environment (CSE)</p>	 <p>Niharika Nile Lathsewar M Tech Water Resource Engineering and Management Department of Regional Water Studies TPII School of Advanced Studies Placed with Council on Energy, Environment and Water (CEEW)</p>	 <p>Preeti Vasudevan M Tech Water Resource Engineering and Management Department of Regional Water Studies TPII School of Advanced Studies Placed with Centre for Science and Environment (CSE)</p>
 <p>Saiyami Bhartiya MSc Environmental Studies Department of Environmental Studies University of Delhi Placed with Centre for Science and Environment (CSE)</p>	 <p>Shweta Choubey MSc Environmental Sciences Department of Environmental Sciences J.C. Bose University of Science and Technology, YMCA Placed with WaterAid India</p>	 <p>Iyami Garg MSc Environmental Studies Department of Environmental Studies University of Delhi Placed with Centre for Science and Environment (CSE)</p>	

ANNEXURE II: WATER SMART SOLUTIONS BY 2020 FELLOWS



ANNEXURE III: SNAPSHOTS OF THE FELLOWSHIP JOURNEY

Virtual Felicitation Ceremony



Orientation Workshop
July 13-15, 2020



Final Concluding Workshop
November 27, 2020

#WaterSmartSolutions Webinar Series



Development Alternatives (DA)
August 28, 2020



Taru Leading Edge
September 4, 2020



Communication Expert, Business
Strategist & Storyteller
September 11, 2020



WaterKil India
September 18, 2020



Centre for Science and Environment (CSE)
September 25, 2020



Council on Energy, Environment and
Water (CEEW)
October 09, 2020

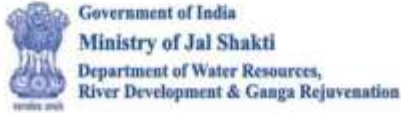
Dedicated Blog for Fellowship 2020: www.c4yindia.in



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