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FINAL REPORT

WATER AND CLIMATE CHANGE RESILIENT YOUTH CHAMPIONS AND COMMUNITIES IN HINDON RIVER BASIN 2018 PHASE II

**A Centre for Youth (C4Y) & India Water Partnership (IWP)
Collaborative Programme**

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WATER AND CLIMATE CHANGE RESILIENT YOUTH CHAMPIONS AND COMMUNITIES IN HINDON RIVER BASIN – **PHASE II**

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1.0 BACKGROUND

Hindon River is a tributary between Ganga and Yamuna rivers, meandering through 355 kilometres across Western UP from Saharanpur to Noida. In Uttar Pradesh, the Hindon River is one of the most negatively affected Ganga sub-basins. The surrounding environment as well as the people depending on Hindon water is severely affected by its reduced water quality and diminishing flows (2030 WRG). There are over 100 drains that fall into the Hindon discharging industrial effluents from sugar, paper, textile, and tannery industries. The second major source of pollution stems from large inflows of untreated sewage from the cities located along the river basin. The Central Pollution Control Board (CPCB) has said that the river is not meeting the criteria with respect to Dissolved Oxygen, Conductivity, BOD, Total Coliform, and Faecal Coliform. River Hindon receives the municipal as well as industrial effluents from the township of Saharanpur, Muzaffarnagar, Shamli, Meerut, Baghpat and Gautam Buddha Nagar. A very high organic load in the river water makes it highly unsuitable for even bathing purposes. Chromium levels within drinking water supplies at Kudhla Village, Meerut district are found to be 140 times the maximum permissible limit for drinking water set by the Bureau of Indian Standards for this heavy metal.



The River Krishna, a tributary of the River Hindon, flows across the village Salfa, district Shamli

An integrated strategy was strategised to bring about a change in the attitude and behaviour of the people towards the Hindon River Basin in the Phase I of this unique C4Y & IWP Collaborative Programme and carried forward with fresh learnings in Phase II under the

continuing title, "WATER AND CLIMATE CHANGE RESILIENT YOUTH CHAMPIONS AND COMMUNITIES IN HINDON RIVER BASIN PHASE II - 2018."

The success of the Phase I pilot programme resulted in the creation of C4Y & IWP Collaborative Programme Phase II, which was launched in two districts in Western Uttar Pradesh – Meerut and Shamli.

2.0 PROGRAMME COMPONENTS

As in Phase I, the Phase II programme, in **partnership** with **Janhit Foundation (Meerut)** and **Green India Corporation (Shamli)** and under the **mentorship** of the **Nirmal Hindon Initiative, Govt of Uttar Pradesh**, aimed to generate and communicate knowledge among stakeholders in the Hindon Basin on climate change, water security, the linkages with River Hindon on these issues and how the lives of the people in the community were impacted by climate change and water concerns.

Focus areas:

1. Strengthening stakeholders with access to knowledge sources and platforms on water security and climate resilience.
2. Outreach with youth and communities (rural households, farmers, and schools) on water and climate change through meetings as well as display material, flyers, leaflets, information booklets, social media, emails, YouTube channel on Hindon River basin.

3.0 OUTREACH

Partners in the respective districts of Meerut and Shamli were selected based on their experience and expertise in the topics of climate change and water security. Three schools were selected per district taking the number to six schools from two districts and four panchayats.

4.0 REACHING OUT TO A CROSS-SECTION OF SOCIETY

The stakeholders comprised a mix of school children, youth, teachers, women, and farmer groups. Children and youth are the future of our nation and influencers of change. They were hence an important stakeholder group if future attitudes need to be moulded towards conservation. It is said, educate a woman and you educate a family and precisely why the programme sought to pass on its knowledge to women to be able to bring a change in the entire family. Teachers are the most influential group of individuals who nurture future generations and comprised a very important segment to reach out to. With Uttar Pradesh being a largely agriculture driven economy, the need of the hour was also to teach our farmers eco-friendly farming methods, and so, farmers formed a strategic stakeholder group.



Teachers & Youth participating in Teachers & HYCC capacity building workshop at Vikas Bhavan, Sabhagar, Shamli, December 04 and 05, 2018

5.0 PROGRAMME ACTIVITIES

Selection of Schools and Gram Panchayats

In the two selected locations for the programme implementation, namely, Shamli and Meerut, C4Y, in consultation with its partners, selected gram panchayats and educational institutions in the Hindon Basin. The institutions at the inter college level as middle to senior school students were considered to be an appropriate age group to engage with for Water Security and Climate Change issues in their areas, as they were better suited in terms of understanding and maturity levels to grasp the topic.

Baseline Knowledge, Attitude and Practice (KAP) Tools

The most important first step before implementing any programme is to understand the levels of knowledge, the attitude of the target audience and the prevalent practices and barriers. The outcomes of such a KAP study help to make the intervention activities customised to needs. C4Y developed a Knowledge, Attitudes, and Practices (KAP) questionnaire to understand the stakeholders' knowledge levels on water security and climate change. This study also helped to design the information booklet based on their needs and gaps; the KAP questionnaire also looked at their attitude towards the two topics and whether they were willing to learn more about solutions to the concerns related to the two topics.

The Capacity-building Information Booklet on Water Security and Climate Change

The Capacity Building Information Booklet on Water Security and Climate Change served as the training guide for the five stakeholder groups. The Booklet covers the two focus issues of Climate Change and Water security in an interactive format to keep participants engaged mentally and physically. The entire message was conveyed to all five stakeholder groups via discussions, group activities, and role plays, which lead to key learning being effectively imbibed by participants. There were opening and energising games as well as summative games to help the participants overcome their initial hesitation, remain attentive towards the session and give well-thought out feedback, unhesitatingly, for the sessions.

Empowering Women and Farmer Groups

The capacity building workshops for the women and farmer groups engaged close to 90 women and 82 farmers in the four gram panchayats on the two topics. The training empowered them with water saving techniques and alternative farming methods to adapt to and mitigate climate change and water stress. The workshops were held in Kalyanpur, Kaithwari, Mimla and Salfa gram panchayats from July 23-31, 2018.



Community women being trained as part of the Capacity building workshop, Kalyanpur, Block Rohta, Meerut

Building Capacities of Teachers and Youth

The training of teachers and youth as Hindon Youth Champions of Change (HYCC) was conducted as per the interactive Capacity Building Information Booklet on Water Security and

Climate Change created by C4Y. The training was held at the **Vikas Bhavan Sabhagar, Shamli** and inaugurated on **December 04, 2018** by the **Hon'ble District Panchayati Raj Officer, Shri Arun Atri**. Speaking on the occasion, **Shri Atri** said that the C4y & IWP Collaborative Programmes is helping to create trainers on the topics of climate change and water security. He gave a clarion call to communities to come forward and take charge of these issues in their communities. **Shri Atri** also **inaugurated** the **C4Y & IWP Capacity Building Information Booklet**.



Inauguration and Release of the C4Y & IWP Capacity Building Information Booklet by DPRO Shri Arun Atri (in the centre), Vikas Bhavan Sabhagar, Shamli, December 04, 2018

Fifteen hours of training was imparted in a span of two days. The teachers came from the partner schools. Learning objectives were established at the outset and the training proceeded to involve the participants in an interactive manner.



Group Photograph: Teachers & Youth participants in Teachers & HYCC capacity building workshop, Vikas Bhavan Sabhagar, Shamli, December 04 and 05, 2018

The Hindon Inter-district Quiz

The Hindon Inter-district Quiz was prepared in three rounds – intra-school, inter-school and the third and final round of the Inter-district Hindon Quiz. The final round was conducted at the Hindon Mela, organised at the Janta Inter College, Kaithwari, Meerut presided over by the **Chief Guest, Assistant Development Officer (ADO), Rohta Block, Meerut, Shri Vivek Anand** and the **Guest of Honour** being **Shri Sachin, Block Development Officer (BDO), Rohta Block, Meerut**. Around 400 students from the two intervention districts of Shamli and Meerut were engaged in the entire quiz rounds. The intervention schools were:

- Janta Inter College, Kalyanpur, Block Rohta, Meerut
- Major Asharam Sharma Girls High School, Kaithwari, Block Rohta, Meerut
- Janta Inter College, Kaithwari Block Rohta, Meerut
- Shahid Hawaldar Singh Kanya Uchhatar Madhyamik Vidyalaya, Mimla, Block Kandhla, Shamli
- Hari Bal Public Junior High School, Mimla
- Kanya Uchh Prathmik Vidyalaya, Salfa, Block Kandhla, Shamli



Students of Janta Inter College, Kalyanpur, Block Rohta, Meerut participating in the Hindon Quiz



Students of Hari Bal Public Junior High School, Mimla, Block Kandhla, Shamli take part in the Hindon Quiz

A pre-quiz PPT was also prepared by C4Y to help the students prepare for the quiz. The PPT explained in detail the history behind River Hindon, the present day concerns, and concepts of water security and climate change.

Games for Participants

A separate set of more than **20 games categorised as Openers, Energisers, Review Games, Team Builders, and Evaluation Games** was created as a handy resource for trainers. This helped the trainers to keep the interest and motivation levels up during the trainings. Openers helped participants to overcome their initial hesitation; Energizers helped to recharge the mind and body mid-session; Review Games helped to take stock of the understanding levels; Team Building Games shook off differences and ego issues, and the Evaluation Games acted as an important tool to generate honest feedback on the pros and cons of the training schedule.

Social Media

C4Y social media channels for the programme have comprised a **facebook group** on the Programme and close to **50 videos** on **YouTube** as a **Hindon Voices Channel** to chronicle the activities of the intervention. Students, teachers and social workers in the sector, farmers, and women have expressed their views on the River Hindon, its impact on their lives and the impact of the C4Y & IWP Collaborative Programme in the videos. The Channel has become a

defining record of a varied cross-section of the Hindon Basin dwellers on their critical concerns on water security, climate change and the River Hindon. The facebook page encapsulates the intervention from the inception to the final Hindon Mela held in Meerut at the Office of the Divisional Commissioner, Meerut.

Programme disseminated on Social Media: The **facebook page** developed by C4Y is a comprehensive platform which chronicles the activities of the Programme from inception to culmination in vibrant pictures. The **Hindon Voices Channel on YouTube** is a defining reference point for views from students, teachers, women and farmers on the River Hindon and the programme, and gives voice to their thoughts.

Join the group on facebook: Water and Climate Change Resilient Youth Champions and Communities

Watch the Hindon Voices Channel here:

<https://www.youtube.com/watch?v=zteDftlc8Yo&index=1&list=PLnTLUQexX5AXZ6PzbV9UP1VYKzZOflg71>

6.0 THE HINDON MELA PHASE II 2018

The C4Y & IWP Collaborative Programme "Water And Climate Change Resilient Youth Champions and Communities In Hindon River Basin" culminated on **Friday, December 07, 2018** with a **Hindon Mela** held at the **Janta Inter College, Kaithwari, Block Rohta, Meerut**. The Mela was presided over by **Chief Guest, Assistant Development Officer (ADO), Rohta Block, Meerut, Shri Vivek Anand** and the **Guest of Honour** being **Shri Sachin, Block Development Officer (BDO), Rohta Block, Meerut**. Speaking on the occasion, the **Hon'ble Chief Guest, ADO Shri Vivek Anand** said that the C4Y & IWP Collaborative Programme was a commendable initiative in raising community awareness on the important topics of climate change and water security, especially among youth.



Guests and partner representatives at the Hindon Mela Phase II – 2018

The Mela was attended by district authorities, social workers from the sector, and mediapersons, apart from students, school teachers, principals of the intervention schools, and the principals of the participating schools, apart from the Partner organisation representatives. In all, **241 guests** attended the **Hindon Mela 2018**.



Participants at the colourful and engaging Hindon Mela, held at the Janta Inter College, Kaithwari, Meerut

The final round of the **Inter-district Hindon Quiz** was held at the **Mela** with **30 students** participating in the final round. The winning team was from the **Shahid Hawaldar Singh Kanya Uchhatar Madhyamik Vidyalaya, Mimla, Shamli**. Hindon Youth Champions of Change (HYCC) shared their programme experiences, the teachers who participated in the capacity building workshop were happy to share their learnings from the programme. At the Mela, the four gram pradhans from the four intervention gram panchayats, and the principals of the six participating schools were especially felicitated for their immense support and contribution towards the success of the Programme. The participating teachers and the HYCC were honoured with certificates. The Hindon Mela ended with the prize distribution for the winners of the final round of the Hindon Quiz.



Certificates for the participants of the final round of the Inter-district Hindon Quiz

7.0 OUTCOMES

Quantitative Outcomes

- KAP Baseline Study Highlights:**

64% of the respondents **understand climate change** as a change in the **temperature, wind, rain patterns**.

80% are extremely worried about the climate change patterns.

58% think it is important to find solutions to mitigate climate change as it will diminish the quality of life for their children.

22% of respondents say **negative agricultural practices** such as **chemicals** used in **agriculture** have caused **climate change**.

98% would like to take part in workshops that explain and give solutions to manage climate change

50% say submersibles are the only source of obtaining water **and 21%** say hand pumps do not function.

54% say the water they use is not clean.

89% say waste is dumped near the Hindon River as there is not waste management system in their villages.

95% would like such a waste management system in their village.

86% feel conserving rainwater is a way ahead to achieving water security.

- **Around 400 students** were engaged in the first round of the quiz.
- **Around 80 youth were** trained as Hindon Youth Champions of Change (HYCC).
- **Around 90 plus women were trained** on climate change and water security.



Community women from Gram Panchayat Salfa, district Shamli participate in the C4Y & IWP capacity building workshop

- **Close to 80 plus farmers have been empowered** on the two topics.
- **Nine teachers** have been empowered to take the positive messages on climate change and water security to their students and to the community.

End line Learning Curve

- **Rise in climate change understanding:** After the completion of the programme, **92% understand climate change** as a change in the temperature, wind, rain patterns, as against **64% in the baseline**.
- **100% now worried about climate change:** A **100%, up** from the **80% of baseline**, are now worried about climate change and its impacts on water security along with other aspects of their life.
- **Almost complete agreement on finding sustainable solutions:** A **cumulative total of 92%** think it is important to find solutions to climate change as it will impact their lives and the lives of their children. The learning impact is heartening.

- **Endline shows need to create improved infrastructure:** An **aggregated 59%** say that most of the hand pumps in the village do not work and submersible are their sole go-to for accessing water. **75%** say that **water is not available** at the **designated spots**. Accessing water from **non-designated sources** most of the times leads to use of **unsafe water**. The understanding on the need for quality safe drinking water has increased multi-fold in the community.
- **Villages urgently need an efficient waste management system:** **92%** of people from the **baseline of 89%** say that **waste is dumped** near the **Hindon River** as there is **no waste management system** in their village and all the respondents – **100% as against baseline of 95%** - would **like a waste management system** in their villages.
- **Programme shows positive growth towards rainwater conservation:** As against the **baseline of 86%**, after the programme, **100%** feel that **conserving rainwater** is the way ahead to achieving **water security**.
- **Dominant desire to learn about doable solutions to manage climate change:** A **100%** of the respondents are **eager** to learn about **tools** and **participate** in **workshops** that explain and give solutions to **manage climate change**.

Qualitative Outcomes

- **Teachers have loved the capacity building modules.** The interactive manner in which the workshop has been conducted with games, flipcharts, role plays, a rapid fire quiz and a final summing up of key learnings has been a new experience for the stakeholders. Teachers are now prepared to impart the same learning in a similar manner to their students.
- **Farmers' are gradually showing their understanding** on how the indiscriminate use of submersibles to extract water as groundwater levels is depleting.



Farmers in Salga Gram Panchayat attending a capacity building session

- **Capacities of students, teachers, Hindon Youth Champions of Change, Women and Farmer groups** built on climate change and water security.
- Women are the nurturers of positive habits at home and water security has the biggest impact on their lives. The **programme has focused much on engaging women** who have participated enthusiastically.
- The programme has yielded **rich data in the form of photos and videos** of the various sessions conducted.
- **A 360-degree integrated programme is ready** with fun, informative and interactive capacity building modules ready which **can be used to upscale the programme in all seven towns set on the banks of River Hindon.**

8.0 VOICES FROM THE PROGRAMME

- **Sushma Sharma, Housewife, Village Mimla, District Shamli**
"Use of submersibles is rampant in the village. As conveniences increase, water wastage also increases."
- **Anil Kumar, Farmer, Village Mimla, District Shamli**
"Government needs to introduce some steps such as a water tax or a meter to control the indiscriminate use of water. Also, effluents from the factories go directly into the River Krishna and is polluting the river."
- **Sunita, Student, Village Salfa, District Shamli**
"When I was a child, the water in the River Krishna was very clean. Villagers used to drink from the river. But today, the river water is very dirty due to the effluents being discharged from the mills in Shamli. I want the water to be clean again and we should all conserve water."
- **Mansingh, Farmer, Village Salfa, District Shamli**
"As farmers, we should restrict the use of submersibles, conserve water in the tanks and limit the use of fertilisers in the fields as it causes climate change."