

# PARTICIPATORY GROUNDWATER MANAGEMENT WORKSHOP IN GOSABA

## Report of Workshop

June 14, 2019



INDIA-UK  
Water Centre  
भारत-यूके  
जल केन्द्र



## Participatory Groundwater Management in Gosaba

Report of Workshop 14-06-2019

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The India-UK Water Centre promotes cooperation and collaboration between the complementary priorities of NERC-MoES water security research.

भारत-यूके जल केंद्र, एनईआरसी-एमओईएस जल सुरक्षा अनुसंधान की मानार्थ प्राथमिकताओं के बीच सहयोग और सहकार्यता को प्रोत्साहित करता है।

Front cover image: River Ganga

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## Executive Summary

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Rajarhat PRASARI in collaboration with National Institute of Hydrology (NIH), Roorkee and British Geological Survey with the funding of India United Kingdom Water Centre (IUKWC) organized a workshop on Participatory Ground Water Management (PGWM) in Pathankhali Gram Panchayat of Gosaba Community Development Block. The main objective of the workshop was to initiate the pump priming project on aquifer study in the Sunderbans. The workshop was held in 14/06/2019 from 11am in the morning and ends with a lunch in the venue at 3pm. In the said workshop women leaders of local Self Help Groups (SHGs), local Gram Panchayat members, engineers, assistant engineers, surveyors and GP's representative for water resource management were present and shared their views on their present situation of ground water.

After end of the session 6 volunteers came up to take the task of regular water sample collection from their field for isotope testing whom Dr. Gopal Krishan from NIH gave hands on training with water sample collection kit (sample water collection bottles, EC, pH & TDS tester).



Figure 1: Participatory groundwater management workshop

# 1. Workshop Conveners

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The workshop was convened by the Prasari and NIH, Roorkee under India-UK Water Centre (IUKWC) and led by the co-coordinators/Activity Leads:

NAME: Dr. Gopal Krishan  
ROLE: co-coordinator  
Organisation: National Institute of Hydrology,  
Roorkee  
Address: NIH Roorkee-247667, Uttarakhand,  
India  
Email: [drgopal.krishan@gmail.com](mailto:drgopal.krishan@gmail.com)

NAME: Dr. Purnaba Dasgupta  
ROLE: Convenor  
Organisation: Raharhat PRASARI  
Address: Jadhavpur, Kolkata, India  
Email: [Purnaba.irdm@gmail.com](mailto:Purnaba.irdm@gmail.com)

NAME: Mr. Andrew Mackenzie  
ROLE: Co-Coordinator  
Organisation: BGS, UK  
Address: Wallingford, UK  
Email: [aam@bgs.ac.uk](mailto:aam@bgs.ac.uk)

The workshop was held at the Gosaba on 14-06-2019.

## 2. Workshop (or Activity) Aims

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The India-UK Water Centre is based around five key cross-sectoral themes and aims to deliver a portfolio of activities across these themes. This activity focused on the theme: Using new scientific knowledge to help stakeholders set objectives for freshwater management; Improving freshwater monitoring frameworks and data for research and management;

The main objectives of the workshop were –

- Getting a picture of the Ground Water Table of Gosaba Block,
- Understanding of the problems associated with drinking and irrigation water in the Block,
- Problems faced by the local people in general to get access and use of fresh water for various purposes like- agriculture and or, household chores
- Training of the volunteers to collect water samples for isotope test

## 3. Workshop Participants

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{Participants details):

Gosaba an important gate way to the core zone of Sunderbans and a community Development Block is located at 22°09'55"N & 88°48'28"E. It has an average elevation of 6 metres (20 ft) from the sea level.

- Participants were residents of Gosaba Block;
- Women leaders of the SHGs, GP members and others associated ground water of the area were invited by the field facilitator appointed for this project
- Officials from village panchayats ;

Total 31 participants participated in the workshop where women leaders came from six GPs 40% (6 out of 14 GPs) of Gosaba Block. All the participants came from the six GPs of Gosaba Block namely- Tentultali I, Tentultali II, Pathankhali, Bot-tala, Kumor Para, Jele Para.

Table 1. List of Delegates

অংশগ্রহণকারীদের তালিকা

আলোচ্য বিষয় :- Community Workshop in Pathankhali GP  
 তারিখ : 14/06/19  
 স্থান : Pathankhali GP Office

ক্রমিক সংখ্যা	নাম	স্বাক্ষর
1	Masbar Rahman Sheikh	Masbar Rahman Sheikh
2	Bimal kr Nayen	Bimal kr Nayen
3	Botur Moral	Botur Moral
4	Anarul Molla	Anarul Molla
5	Hasem ali Sardar	Hasem ali Sardar
6	Purnaleha Dasgupta	Purnaleha Dasgupta
7	Gopal Krishna	Gopal Krishna
8	Debashit Mondal	Debashit Mondal
9	Samrat Das	Samrat Das
10	Dulal Mandal	Dulal Mandal

অংশগ্রহণকারীদের তালিকা

আলোচ্য বিষয় :- Community Workshop in Pathankhali GP  
 তারিখ : 14/06/19  
 স্থান : Pathankhali GP Office

ক্রমিক সংখ্যা	নাম	স্বাক্ষর
11.	আব্দুল নসর	আব্দুল নসর
12.	প্রতিমা মুখা	প্রতিমা মুখা
13.	আলমগীর মন্ডল	আলমগীর মন্ডল
14.	প্রমতি হাওড়া	প্রমতি হাওড়া
15.	মদ্বালী মালী	Madbalei Mali
16.	বীণা নসর	বীণা নসর
17.	কুমারস্বামী মন্ডল	কুমারস্বামী মন্ডল
18.	ভৈরবী মন্ডল	Chaitaly Mandal
19.	স্বপ্না স্বামী মন্ডল	স্বপ্না স্বামী মন্ডল
20.	সীতা মন্ডল	সীতা মন্ডল
21.	সুসমা মন্ডল	সুসমা মন্ডল
22.	সোনারী বৈদ্য	সোনারী বৈদ্য
23.	সেবা মতি মন্ডল	সেবা মতি মন্ডল
24.	করুণা মন্ডল	Kanuna Sardar
25.	বেকী মন্ডল	বেকী মন্ডল
26.	নদিতা মন্ডল	নদিতা মন্ডল
27.	সুখিকা মন্ডল	সুখিকা মন্ডল
28.	অঞ্জলি মন্ডল	অঞ্জলি মন্ডল
29.	উলি মন্ডল	Uli Mandal
30.	সম্মতি মন্ডল	সম্মতি মন্ডল
31.	প্রদেব মন্ডল	Praden Mandal



## 4. Activity Structure

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Participants were supposed to provide a primary hands on idea of the salinity and pH, for this participants were also requested to bring water from the sources they use frequently for farming and or, household chores. Analysing the sample waters it was found that in Jele Para the salinity, TDS and pH were maximum of all the six GPs present there whereas, Tentultali's deep tube well's water quality was found better amongst the six GPs water we tested on that day using EUTech's EC, pH and TDS tester.



Figure 2: Participants interaction and samples testing

## 5. Activity Conclusions and Outputs

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As per the women members from the community their water is very poor and the quality of taste further worsen during summer time. They said that “from November onwards water quality falls heavily and in April-May it become unthinkable. We cannot drink water even from deepest tube wells on that time without boiling and filtering them”. They also said the salinity is highest in Bot-tala and Jele Para whereas adjacent Tentultali and Kumor Para's water is okay to taste and has less salinity.

### 5.1. Key themes/Points/outcomes arising

Workshop was very useful in getting first hand information on groundwater levels, seasonal variations and salinity ingress in the study area and it helped the participants building their confidence that ground water recharge is possible to replenish their ground water table and spreading the message of fresh water conservation for meaningful use in the near future or in the lean period.

### 5.2. Conclusions and next steps/recommendations from the activity

There was no doubt that the activity helped in getting a primary information on the groundwater conditions of the area.

### 5.3. Participant feedback ( where applicable)

At the conclusion of the Activity participants were asked to provide comment on:

- the Workshop content; **all said it is a very good initiative**
- the meeting venue and organisation; **Venue was GP office**
- networking opportunities; **and all very happy to share their views and got a first hand information on the groundwater salinity**
- provide an overall score out of 10 for the workshop. **10**



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