

Secha Sahabhagita

PARTICIPATORY IRRIGATION MANAGEMENT

## FOREWORD



Pani Panchayat Fortnight is being observed across the state from 1<sup>st</sup> to 15<sup>th</sup> February 2023 with the active participation of members of Pani Panchayats and members of the farming community. This is an opportunity to recognise the seminal contributions made by them in water management and augmentation of agricultural production.

From a modest 700 Water Users' Associations formed during 1995-2002 covering 3.32 lakh hectares, more than 37,000 Pani Panchayats have been formed in the state in the meantime covering 23.46 lakh hectares in the Major, Medium, Minor and Lift Irrigation Projects. Water management in our state has now been made more participatory and inclusive.

Pani Panchayat are being empowered through the Odisha Pani Panchayat Act, 2002 and Rules, 2003. I am glad that the process of formation of Pani Panchayats are a foot in the Mega Lift Irrigation Projects of our state. In keeping with the commitment of my Government towards participation of more and more women in the participatory water management process, I am glad that in the near future more women will be in the forefront of the Pani Panchayat management.

Nearly Rs 600 Cr has been allotted from the state funds for command area development from 2021-22 to 2023-24. e-CAD, a web based application has been introduced for realtime monitoring of the functioning of Pani Panchayats. Besides these, climate smart irrigation is being adopted through sustainable use of water. Capacity of stakeholders are being enhanced through their initiation to scientific water management and exposure to best practices. Our such efforts have been recognised at the national level.

While my Government is sincerely attempting to construct more and more irrigation structures in the state and cover more areas under irrigation, and, take legislative measures to strengthen Pani Panchayats, I call upon all members to join hands in ensuring judicious and equitable distribution of irrigation water among various users, promote a culture of conservation and reuse of water; diversify crops and increase crop intensity; adopt appropriate technology for efficient water use; bring in equitable water distribution; encourage women to take leadership in water management and amicable resolution of disputes in water sharing.

I am glad that this publication faithfully records the modest journey of Pani Panchayats in our state, and I commend the efforts of the department of Water Resources in strengthening Pani Panchayats and convey my best wishes to all the stakeholders in carrying forward this inclusive initiative.

NAVEEN PATNAIK

NAVEEN PATNAIK

CHIEF MINISTER, ODISHA





MESSAGE

**Smt. Tukuni Sahu**  
Honourable Minister,  
Water Resources, Commerce & Transport  
Government of Odisha



As we celebrate and observe the annual Pani Panchayat Pakhya across Odisha, from the 1<sup>st</sup> to 15<sup>th</sup> of February, 2023, it is befitting to congratulate all our stakeholders, including water users and farmers. For twenty years now, the Pani Panchayat programme has grown from strength to strength, showcasing the power of participation and partnership and centre-staging women in water governance.

Following COVID-19, our Department has accelerated activation of Pani Panchayats under Major, Medium and Minor Irrigation Projects across the state. This will foster greater participation of the Pani Panchayats in participatory irrigation management. Besides, a host of initiatives have been taken up for effective monitoring of activities in the command area development front.

I am delighted that this commemorative book is being published to showcase significant achievements and to narrate the stories of Pani Panchayats. I take this opportunity to place on record my appreciation for the functionaries of the Department and congratulate them for their effort in bringing out this coffee table book.

I also convey my sincere thanks to all stakeholders for their overwhelming participation in the events and activities organised during this fortnight.

(TUKUNI SAHU)

MESSAGE

**Shri Suresh Chandra Mahapatra, IAS**  
Chief Secretary & Chief Development Commissioner  
Government of Odisha



I am glad to know that the Department of Water Resources, Odisha is bringing out a Coffee Table Edition on the occasion of state level Pani Panchayat Pakhya-2023.

With the vision of providing timely and assured irrigation, focusing on equity, efficiency and social inclusion, Government of Odisha have envisioned Pani Panchayats as a successful model in water governance at the grass root level. They also play a crucial role in the agricultural growth of our state.

Formation of Pani Panchayats under the Mega Lift Projects and inclusion of spouses of water users as members will ensure gender mainstreaming and usher in equity. eCAD application for real time monitoring of Pani Panchayats will further help to track functioning of Pani Panchayats in real time.

I hope, the Coffee Table Edition will highlight the success stories and best practices for greater awareness among all concerned on the initiatives being taken at government level.

I convey my greetings to one and all associated with it and wish the Pani Panchayat pakhya all success.

(SURESH CHANDRA MAHAPATRA)

MESSAGE

Smt. Anu Garg, IAS  
Additional Chief Secretary  
Water Resources at Government of Odisha




Water Resources Department has been engaged in sustainable development and management of water resources in the state over the years. The 5T drive of the state offers further opportunities to set new goals like online grievances redressal; real time flood forecasting system; online tracking of water allocation to industrial and other commercial establishments, effective monitoring through ERP solutions; ground water mapping, water conservation; collaborating with knowledge partners etc.


In the Command Area Development (CAD) sector a number of reform measures have been taken keeping the tail end in mind. They are: legislative measures such as the amendment to the Pani Panchayat Act including the spouses of the water users as members and formation of Pani Panchayats under mega lift projects; IT Initiatives such as e-CAD for real time tracking of activities of Pani Panchayats; formation of more than 14,000 Pani Panchayats in recent past; adoption of technology such as use of under ground pipe lines; capacity building of Pani Panchayats and functionaries; exposure visits to progressive states etc.


I am delighted that this volume is being published during the Pani Panchayat Pakhya, 2023. The fortnight is being observed in the state during 1<sup>st</sup> -15<sup>th</sup> February, 2023 to acknowledge the importance of Pani Panchayats in water governance, participatory irrigation management and ensuring equity at the grassroot level.

I hope this Coffee Table Book will be appreciated by one and all, and that the Department will continue its tireless endeavour for the betterment of our people.


  
(ANU GARG)

THE WATER SPECIAL


 ODISHA PANI PANCHAYATS




ODISHA  
CUTTACK

 15%

Growth in yield in Odisha's arid areas since the pani panchayats became active



INDIA TODAY



INDIA TODAY

# RISE OF THE PANI PANCHAYATS

They have ensured equitable supply of water and spurred cultivation in Odisha. More importantly, they have put an end to the water wars

By ROMITA DATTA

of land under irrigation is 'water-deprived or water-denied'. A farmer who loves his land will naturally want to see the farmlands of others taken care-of. True, there have been major fights in the past, blood has been spilled over unequal distribution of water but it was all in the interests of the land,' says Samiullah Khan, secretary of the Usuma Pani Panchayat.

Even though Odisha is a water-abundant state with a number of major rivers criss-crossing the state, getting the water to the fields has been a huge task. Of the 6.1 million hectares of cultivable land in the state, 4.3 million hectares are irrigated with the help of canals, channels and other minor irrigation techniques. The rest of the land is rain-fed; the state averages annual rainfall of 1,400 mm.

Launched almost two decades ago, the pani panchayat concept has evolved through experience and the demands of the farmers. To begin with, they were given command of a minimum area of 40-100 hectares, going up to 500 hectares. For every

## THE BIG PICTURE

- **The Crisis:** Inequitable distribution of canal water leading to violence, law and order issues
- **The Solution:** 'Pani panchayats' were formed comprising farmers and locals to oversee fair water distribution and operation, maintenance of canals at the local level


10-40 hectares, there was a water outlet (a sort of water point, fed by the main canal through field channels) manned by a committee ('*chak*') which governs the distribution of water and operation, maintenance and desiltation of channels within its area. Now the water resources department is looking to reduce the command area of the *chak* to one hectare for better management and to further decentralise the pani panchayat system.

"By empowering farmers, we succeeded in minimising conflict


and ensuring that not a single block is deprived of water. There are provisions for penalties and fines for missing the supply," says D.K. Samal, chief engineer, water resources department. "Initially, getting the farmers to agree on sharing water was not easy. We had to impress upon them that if the water stagnated in their fields without flowing to adjacent ones (through the feeder channels), it would endanger the crops, do more harm than good. The scientific explanation paid off."

The need to reduce the command area of the *chaks* and empower the farmers on crop selection has arisen following the agriculture department's demand for crop diversification and cash crops. Paddy requires a lot of water whereas groundnut, oilseeds and pulses can be cultivated with minimum water resources. "Instead of pushing all farmers into paddy, if we can encourage crop diversification, we'll be able to save a considerable amount of water. This is possible if the land parcel is small and there are fewer stakeholders for managing water over a small area," says the chief engineer.

"Even drought-prone Kalahandi is cultivating two crops a year with the average yield up by 15 per cent, courtesy the 297 pani panchayats there. They have been active for two decades, covering a command area of 128,000 hectares in and around river Indravati," says Rajendra Besra, chief engineer of the Command Area Development. ■

 **LUSH GROWTH**

Usuma's pani panchayat members at a meeting; a farmer checks a water supply channel in the village

 35,511

Number of 'pani panchayats' active in Odisha

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MARCH 29, 2021 | INDIA TODAY | 57





# The Progressive Journey of Pani Panchyat in Odisha

- Participatory Irrigation Management (PIM) is a tool for improving irrigation management and ensuring sustainability is water use. Increasing demand of water in irrigation, necessitates it's efficient use. The State Water Policy, 2007, therefore, recognises participatory irrigation management as an essential strategy for improving the performance of all the irrigation projects. This is ensured by handholding Pani Panchayats in distribution of water and maintenance canals at the tertiary level of the canal systems and building their capacity.
- The objectives of PIM are to promote and secure equitable distribution of water among its users, adequate maintenance of irrigation system efficient and economical utilization of water to optimize agricultural production; to protect the environment and to ensure ecological balance, inculcating sense of ownership of the irrigation system in accordance with the water budget and the operational plan; to bridge the gap between irrigation potential created and utilized; to resolve issues and disputes related to water sharing and to foster collective involvement in better application and management of agricultural extension services.
- PIM was introduced in the state in 1995 on a pilot basis under the Odisha Water Resources Consolidation Project (OWRCP) under the banner of Farmers Organization and Turnover (FOT). Experiencing it's success, it was extended to all the commands of Major, Medium, Minor and Lift Irrigation Projects. Subsequently, in 2000, the Water Users Associations (WUAs) were renamed as Pani Panchayats. They are the fulcrum in implementing PIM.
- Pani Panchayats are farmers' organizations at the primary level, consisting of all water users, as constituted within a specific hydraulic boundary of a Major, Medium, Minor and Lift Irrigation Projects.
- They operate in four tiers under Major Irrigation (Chak Committee/Pani Panchayat/Distributary Committee/ Project Committee ); three tier under Medium and Minor Irrigation (Chak Committee/Pani Panchayat/ Project Committee ) and one tier in Lift Irrigation Projects (Pani Panchayat).
- There also a provision for a State Level Committee to lay down policies for implementation of the provisions of the Odisha Pani Panchayat Act, 2002 and directions to any Farmers' Organisation, for exercising powers and performing functions in accordance with the Act.
- Initially Pani Panchayats were formed and registered under the societies Registration Act, 1860. Now, they are being formed by conducting elections as per the Act, 2002, 2008 and 2014 and the Odisha Pani Panchayat Rules, 2003. Steps are afoot for the formation of Pani Panchayats under the Mega Lift Irrigation Projects of the state. In keeping with the commitment of my Government towards greater participation of women I am happy that more women will be involved in the Pani Panchayats.
- With about 700 Water Users' Associations in 1995-2002, covering 3.32 lakh Ha to more than 37,000 Pani Panchayats covering 23.46 lakh Ha under the Major, Medium, Minor and Lift Irrigation Projects now, water governance has been made more participatory in the state.
- During this period, massive awareness campaigns have been done; capacity of the stakeholders built through trainings, workshops, exposure visits inside and outside the state at regular intervals.









↑  
Operation and maintenance of minor and sub-minor canals of Major and Medium Irrigation Projects are being done through Pani Panchayats.

↗  
Workshop on the Pani Panchayat Act and Rules.

←  
With the recent amendment, women are being included in the participatory process ensuring inclusion and equity.





Preparatory Activities for  
Elections in Ranibeda MIP,  
Ghasipura, Keonjhar

Pani Panchayat Elections at  
Ambadali MIP, Mayurbhanj









Channelisation of Water Till the Tail-end.  
Field Channels are being built under the  
Command Area Development and Water  
Management (CADWM) programme









Micro-plan for enhancing the capacity of the farmers to adapt to a changing climate; sustainable resource management under Rahanja MIP, Bhadrak block



Participatory Walk Through for Survey and Planning





Crop Diversity in Lift  
Irrigation Project











Water use efficiency focused on; farmers motivated to adopt sub-duration crop varieties during Kharif; and grow pulses and oil-seeds leveraging residual moisture





Promoting Economic Use of Water





Pani Panchayat Taking up  
MGNREGS Works











↖  
Awareness Programme on Adoption  
of Scientific Fish Farming at  
Talakholaghai MIP, Ganjam

←  
Capacity Building of Farmers on Seed  
Treatment, Acid Soil Management and  
Climate Resistant Seed Variety Under  
Sahada MIP, Bhadrak

↗  
Skill Development Training for  
Minor Repair of Lift Irrigation  
Points is Imparted to Pani  
Panchayats





- ↑  
National Level Training  
on Participatory Irrigation  
Management
- ↗  
Demonstration of Seed  
Treatment Using Fungicide
- ←  
Cropping-plan in Water  
Management Sub-  
committee Meeting













➤  
Exposure Vsit of WR Officials  
to Maharashtra

⏮  
WR Officials Observing  
Drip Irrigation at WALMI,  
Dharwad, Karnataka







Pre-harvesting Field Visit on  
Varietal Practice in Balangir



Field Visit of WR  
Officials to Dhenkanal









Transforming the lives of  
Women Leading the Way in Ret  
Irrigation Project: Maa Manikeswari  
Pani Panchayat







↳ Steering Planning, Management and Distribution of Water by Empowered Women Smallholders.

↳ Unique distinction of being an all-women, spearheading empowered women group in water governance. Preparation of organic manure by them.







Gender Integration : Empowering and promoting the leadership of rural women



Addressing issues of drought , water scarcity, water conservation, reviving traditional water bodies and overall water management of village





High efficiency organic fertilizers used for improving the texture of the soil and water holding capacity







OBSERVATION OF  
PANI PANCHAYAT PAKHYA



Event during Pani  
Panchayat Pakshya



Prize distribution to the  
winners competing in  
essay, debate and drawing.







MAHANADI UTSAV

- ↗ Oath Taking, Awareness Campaign by the students with display of placards.
- Folk Media Show on Occasion of Mahanadi Utshav.
- ↓ Cultural Program on the Occasion of Mahanadi Utshav. Yachting Competition on the Occasion of Mahanadi Utshav.



ମହାନଦୀ ଉତ୍ସବର ତୃତୀୟ ଦିନ

## ନାଟକ ଓ ମାନବ ଶୃଙ୍ଖଳା ଜରିଆରେ ସଚେତନତା

ଆମର ପ୍ରଥମ ସଫଳତା ହେଲା ଯେତେବେଳେ ମହାନଦୀ ଉତ୍ସବର ତୃତୀୟ ଦିନ ଶୁଭକାରୀ ଶ୍ରମିକମାନଙ୍କ ସହିତ ଏକ ଶାନ୍ତି ସମାବେଶ ଯାହା ଶ୍ରମିକମାନଙ୍କ ଦ୍ୱାରା ଆୟୋଜିତ ହୋଇଥିଲା। ଏହି ସମାବେଶରେ ଶ୍ରମିକମାନଙ୍କର ଅସୁବିଧା ସମ୍ବନ୍ଧରେ ଆଲୋଚନା ହୋଇଥିଲା ଏବଂ ଶ୍ରମିକମାନଙ୍କର ସ୍ୱାଧୀନତା ସମ୍ବନ୍ଧରେ ଆଲୋଚନା ହୋଇଥିଲା। ଏହି ସମାବେଶରେ ଶ୍ରମିକମାନଙ୍କର ଅସୁବିଧା ସମ୍ବନ୍ଧରେ ଆଲୋଚନା ହୋଇଥିଲା ଏବଂ ଶ୍ରମିକମାନଙ୍କର ସ୍ୱାଧୀନତା ସମ୍ବନ୍ଧରେ ଆଲୋଚନା ହୋଇଥିଲା।

**କୌକାକୌଡ଼, ମହାନଦୀ ଆକଟି ଆଜି**

ଶ୍ରମିକମାନଙ୍କର ଅସୁବିଧା ସମ୍ବନ୍ଧରେ ଆଲୋଚନା ହୋଇଥିଲା ଏବଂ ଶ୍ରମିକମାନଙ୍କର ସ୍ୱାଧୀନତା ସମ୍ବନ୍ଧରେ ଆଲୋଚନା ହୋଇଥିଲା। ଏହି ସମାବେଶରେ ଶ୍ରମିକମାନଙ୍କର ଅସୁବିଧା ସମ୍ବନ୍ଧରେ ଆଲୋଚନା ହୋଇଥିଲା ଏବଂ ଶ୍ରମିକମାନଙ୍କର ସ୍ୱାଧୀନତା ସମ୍ବନ୍ଧରେ ଆଲୋଚନା ହୋଇଥିଲା।











➤ Promoting High Yield Intensive Fish-farming in Small Area Fish Fingerlings Stocking in Purunapani MIP, Mayurbhanj.

⏪ Sabji Coolerer Used to Improve Shelf Life of the Fruits and Vegetables, Khaprakhol Block, Bolangir.

⏪ Climate Resilient Millet Cultivation in Badabandha Balarampur MIP, Hinjlikatu Block, Ganjam









Mulching Practices/ Water Saving Technology for Growing Vegetables at Jhaunria MIP of Harichandanpur Block, Keonjhar.



Crop Diversification Practices as a Climate Smart Approach in Buguda Block of Ganjam.



Organic Paddy Grown in Kesinga Block, Kalahandi











Community Lift Irrigation  
Project in Village Ratanga,  
Kandhamal







←  
‘Best Deep Bore Well Farmer’  
Developing a Mango Orchard in  
Kandhamal; awarded SKOCH.

↗  
Scientific Agricultural Practices  
and Crop Diversification

↗  
950 Kg Ragi in 1 Acre of Land  
in Badabandha MIP, Ganjam.  
Scientific Agricultural Practices  
and Crop Diversification.

→  
Vegetable Cultivation in Rabi  
Under JICA Project, Bhuban







Improved Kewda  
Faming in Ganjam  
District



Multiple Cash in Baghalati Command



Women Leading Innovations in Vegetable  
Cultivation in Rajabandha MIP of Udala Block,  
Mayurbhanj.

Community Onion Storage Facility in  
Ganjadharjore MIP, Bolangir







[illegible][illegible]

Pani Panchayat Rath flagged off by Shri Ranendra Pratap Swain, Hon'ble Minister, Agriculture & Farmers' Empowerment and Fisheries & ARD.

Planning & effective implementation through dissemination of information



# ପାଣି ପ୍ରଜ୍ଞାୟତନ ପ୍ରମୁଖ କାର୍ଯ୍ୟାବଳୀ

(କେବାଲ ପରିଚାଳନା ଓ ଉପଶାସନେଷଣ)



ମିଳିତ ଗଠନରୁ ପୂର୍ବ କେବାଲର ମହାନ୍ତି ଓ ଉଚ୍ଚତରତମର କାର୍ଯ୍ୟ ଗ୍ରହଣଯୋଗ୍ୟ କରିବେ କରନ୍ତୁ।

ପାଣି ଗଠନର ପରିଚାଳନା କାର୍ଯ୍ୟକାରୀ କରିବେ କରନ୍ତୁ।





ବର୍ଷା ପରିଚାଳନା କେବାଲର ଉଚ୍ଚ କେବାଲ ଗଠନର ଓ ପାଣି କେବାଲର କାର୍ଯ୍ୟକାରୀ କରିବେ ପାଣି ଗଠନର କାର୍ଯ୍ୟକାରୀ କରିବା ପୂର୍ବ କରିବେ କରନ୍ତୁ।

କେବାଲ କାର୍ଯ୍ୟର ଗ୍ରହଣର ବିଭିନ୍ନ ପଦକ୍ଷେପ ଗ୍ରହଣ କରନ୍ତୁ।


ପରବାରୀ ପରବାରୀ ଗ୍ରହଣର କେବାଲର ମିଳିତରୁ ପାଣିର ଉଚ୍ଚତରତମର କେବାଲ ଗଠନରୁ ପାଣି, ପ୍ରମୁଖ, ପାଣି ପାଣି କରନ୍ତୁ।

କେବାଲ ଗ୍ରହଣର ପରିଚାଳନା ପାଣି କେବାଲ କରନ୍ତୁ।








କେବାଲ ଗ୍ରହଣ ଓ ପରବାରୀ କେବାଲ ଗ୍ରହଣ


କେବାଲ ଗ୍ରହଣ, କେବାଲ ଗ୍ରହଣ



# ପାଣି ପଞ୍ଚାୟତ ଏହାର କାର୍ଯ୍ୟକାରିତା





- ପାଣି ପଞ୍ଚାୟତ ସମ୍ପର୍କରେ ଗଢ଼ି ସେବାଗତ କଲେଜ
- ଗାଁ ଗାଁ ଯେଉଁ ଗାଁରେ ପାଣି ପଞ୍ଚାୟତ ନାହିଁ ତାହା
- ସମ୍ପର୍କ ନାହିଁ ଏବଂ ପାଣି ପଞ୍ଚାୟତ ସହ ଶୁଦ୍ଧ କଲେଜ
- ପଞ୍ଚାୟତ ଶୁଦ୍ଧ କଲେଜରୁ ପ୍ରାୟୋଗ ଗାଁରେ ନିର୍ମିତ କଲେଜରୁ
- ଗାଁରେ ପାଣି ପଞ୍ଚାୟତ ଗୋଟିଏ ଗାଁରେ ପାଣି ପଞ୍ଚାୟତ
- ନିର୍ମିତ ପାଣି ପଞ୍ଚାୟତ ଗୋଟିଏ ଗାଁରେ ପାଣି ପଞ୍ଚାୟତ ନାହିଁ
- ନିର୍ମିତ ପାଣି ପଞ୍ଚାୟତ ଗୋଟିଏ ଗାଁରେ ପାଣି ପଞ୍ଚାୟତ ନାହିଁ
- ପାଣି ପଞ୍ଚାୟତ ଗୋଟିଏ ଗାଁରେ ପାଣି ପଞ୍ଚାୟତ ନାହିଁ

**ପଞ୍ଚାୟତ ପାଣି ପଞ୍ଚାୟତ - ପଞ୍ଚାୟତ ପାଣି ପଞ୍ଚାୟତର ନିର୍ଦ୍ଦେଶିକା**

ପାଣି ପଞ୍ଚାୟତ ଗୋଟିଏ ଗାଁରେ

ପାଣି ପଞ୍ଚାୟତ ଗୋଟିଏ ଗାଁରେ

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E-CAD: A 5T INITIATIVE

An application for monitoring in real time the command area development and participatory irrigation management activities in the state. Pani Panchayat, the first module is being implemented and the infrastructure getting added to it.

Status of their functionality, conduct of mandatory meetings, maintenance of records, availing trainings, formation of higher fora such as distributory and project committee etc is being monitored in real time.

an end-to-end process flow based automated system for realtime monitoring of the abovementioned aspects through a dashboard. The relevant data on the Pani Panchayats, fed by the JEs/AEEs in the Mobile Application, will be accessible to the key higher functionaries of the Department.

Conferred Skotch Awards for digitization of existing manual procedures of Pani Panchayat.



Smt Tukuni Sahu Hon'ble Minister, Water Resources Launched -CAD.





### About eCAD

Pani Panchayats are the Water Users Associations, created by Odisha Water Resources Department (OWRD) to manage the water resources in the state. The eCAD initiative was conceived by the Department, with technical support of IISc, for real time monitoring of CDD-200 activities in the state.

### Benefits of the Pani Panchayat Module

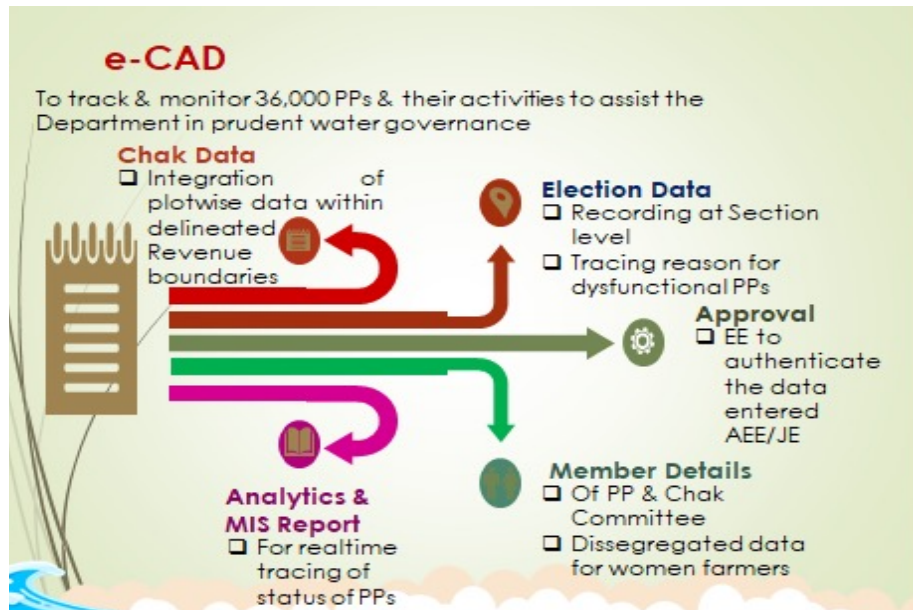
- Real Time Monitoring**
  - Track & monitor 36,000 PPs
  - GIS based mapping
- Digitization of Process**
  - Digitizing manually managed data
  - Legacy migration of existing data
- Water Governance**
  - Track formation of Pani Panchayats through elections / re elections
  - Monitor participation of Pani Panchayats, Track, Activities
- Data Integrity**
  - Integrity of data (Sub-Division / Division / Circle / Block) with master data
  - Multi-level validation

### Impediments encountered:

- Training of staff of Pani Panchayats in physical mode
- Training of staff of Water Resources Department in physical mode
- Training of staff of Water Resources Department in physical mode
- Training of staff of Water Resources Department in physical mode

### Solutions through the Module

- Chak Data**
  - Integration of plotwise data within delineated Revenue boundaries
- Election Data**
  - Recording of election data within delineated Revenue boundaries
  - Tracing reason for dysfunctional Pani Panchayats
- Approval**
  - EE to authenticate the data entered by AEE/JE
- Authentication**
  - Provision to approve master data
- Member Details**
  - Of Pani Panchayat & Chak Committees
  - Dissegregated data of women farmers
- Analytics & MIS Report**
  - For real time tracing of status of PPs



### SINGLE WINDOW PORTAL

Department Of Water Resources, Govt. of Odisha

#### PP/WUA Membership

Select Pani Panchayat :

| Total Small Farmer (1-2Ha.): |                      |                      | Total Semi-Medium Farmer(2-4Ha.): |                      |                      | Total Medium Farmer (4-10Ha.): |                      |                      |
|------------------------------|----------------------|----------------------|-----------------------------------|----------------------|----------------------|--------------------------------|----------------------|----------------------|
| Male :                       | Female :             | Total :              | Male :                            | Female :             | Total :              | Male :                         | Female :             | Total :              |
| <input type="text"/>         | <input type="text"/> | <input type="text"/> | <input type="text"/>              | <input type="text"/> | <input type="text"/> | <input type="text"/>           | <input type="text"/> | <input type="text"/> |

| Total Large Farmer(>10Ha.): |                      |                      | Total Member of the PP/WUA: |                      |                      | Total Landless Member of the PP/WUA: |                      |                      |
|-----------------------------|----------------------|----------------------|-----------------------------|----------------------|----------------------|--------------------------------------|----------------------|----------------------|
| Male :                      | Female :             | Total :              | Male :                      | Female :             | Total :              | Male :                               | Female :             | Total :              |
| <input type="text"/>        | <input type="text"/> | <input type="text"/> | <input type="text"/>        | <input type="text"/> | <input type="text"/> | <input type="text"/>                 | <input type="text"/> | <input type="text"/> |

| Total Fishermen Member of the PP/WUA: |                      |                      | Total Marginal Farmer (<1 Ha.): |                      |                      |
|---------------------------------------|----------------------|----------------------|---------------------------------|----------------------|----------------------|
| Male :                                | Female :             | Total :              | Male :                          | Female :             | Total :              |
| <input type="text"/>                  | <input type="text"/> | <input type="text"/> | <input type="text"/>            | <input type="text"/> | <input type="text"/> |

#### Asset Register

Asset Register

Select Command :  Select District :  Select Block :  Select Project :

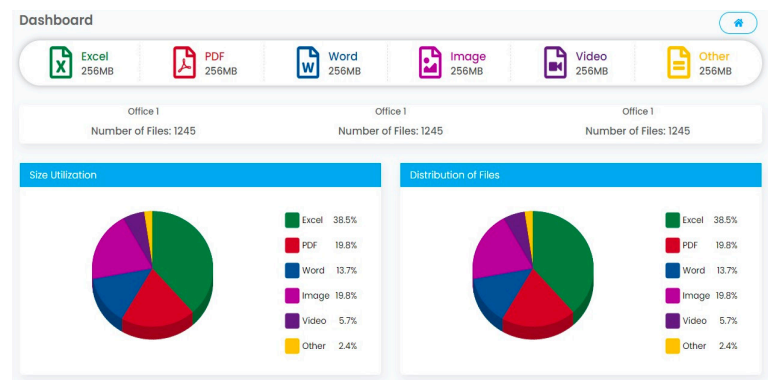
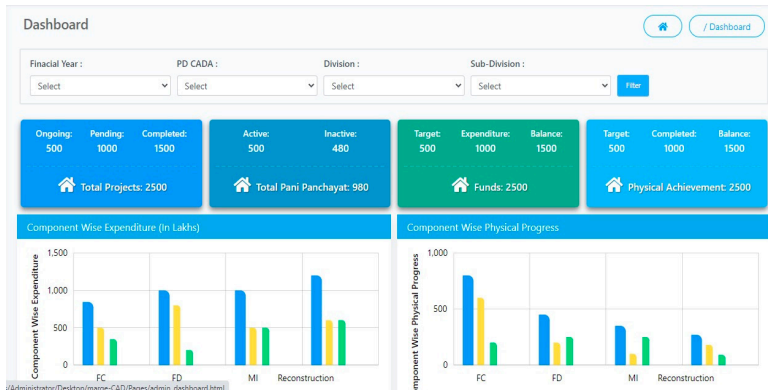
Name of Pani Panchayat :  Village :  Irrigation Source :  CCA (Number) :

PP Name :  RD length of Masonary Channel :  RD Length of Earthen Channel :

Outlet No (Number) :

Total Number of Structure (Number) :

DT :  CB :  FALL :  RC :  DS :  TO :



← Pani Panchayat Module

↗ SKOCH Award for Successful Implementation of e-CAD



## UNDERGROUND PIPELINE-BASED IRRIGATION SYSTEM

Odisha Government has launched Underground pipeline-based Irrigation system in a big way can help farmers to adopt drip irrigation without pumping.

Launched in 2017, the pipeline-based irrigation system helps in the efficient use of water and crop diversification.











Laurels for Effective Participatory Irrigation Management - CBIP Awards, 2019





**SMT. ANU GARG**  
IAS, Principal Secretary Department of Water Resources Government of Odisha

## MAKING ODISHA CLIMATE RESILIENT

**Q** If we have to single out one state which faces the brunt of extreme weather, it is Odisha. For years the state has been battered by cyclones, floods as well as droughts. So, how well is the department geared up for these crisis situations?

AG: Odisha really bears a disproportionate burden of the wrath of natural forces; we see floods, cyclones, even drought in the same year. So, Odisha's disaster mitigation preparedness is very meticulous. Regular patrolling of canal and river embankments is done to arrest piping & breaches during monsoons. We have flood forecasting mechanisms and reservoir operation schedules for flood moderation. Mock drills for reservoir gates and flood escape structures are done periodically. Climate resilient infrastructures like strengthening our long coastal embankments are constructed to prevent saline ingress. Uses of geo-synthetics in saline embankments have started to withstand such kind of frequent cyclonic surges.

Water conservation is a huge priority in the state. Even though Odisha does get 1400 mm of rainfall on an average, the numbers of rainy days have reduced in recent years due to climate change effects. We have adopted construction of barrages called In-stream Storage Structures well within the river embankments to conserve the post monsoon rainwater. More than 15,000 check dams have also been constructed in smaller streams mainly for water

conservation. Further, we have started an integrated project jointly with the Department of Agriculture & Farmers Empowerment and Fisheries, called OIP CRA in 538 Minor Irrigation Tanks for climate resilient agriculture. Another project with the Green Climate Fund has been taken up in 10,000 tanks for installation of water recharge structures to replenish the local aquifer and groundwater table.

**Q** So, are you turning adversity into an opportunity with rainwater harvesting in these tanks?

AG: Absolutely, we are trying to conserve maximum rain water. And it's not just Water Resources Department, Housing & Urban Development Department did 10,000 water harvesting structures in parks and public places along with rooftop rainwater harvesting structures. All surveys and reports show that despite increase in groundwater usage, our groundwater recharge has improved and there are no over exploited or critically water stressed blocks in the state.



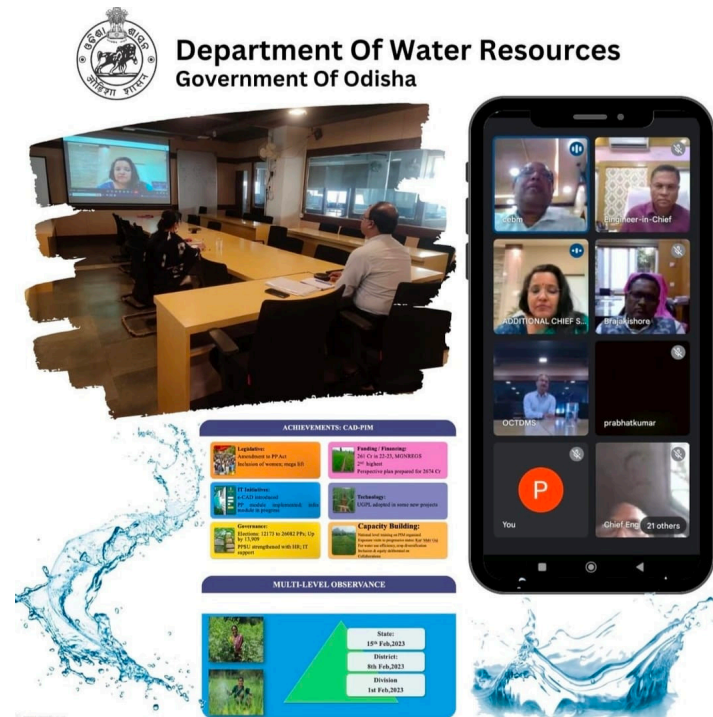
PLANET OUTLOOK TAKES A DEEP DIVE INTO WATER CONSERVATION IN A STATE SADDLED WITH MULTIPLE CHALLENGES AGGRAVATED BY THE CRUEL VAGARIES OF NATURE. HERE IS AN EXCERPT FROM AN EXCLUSIVE INTERVIEW WITH SMT. ANU GARG, PRINCIPAL SECRETARY DEPARTMENT OF WATER RESOURCES GOVERNMENT OF ODISHA.

**Q What about extending this same idea to a citizen centric approach?**  
AG: In Odisha we have water user associations, the Pani Panchayats. The state has a very robust Pani Panchayat system with more than 34,000 user associations. We give them adequate training and some funds to do minor repairs, but it is for them to use it, manage all water and resolve various issues amicably. So, that is one way in which we kind of ensure citizens participation.

We also have something called the 5-T Mantra; the five T's are using technology, teamwork, time, transparency and transformation. All payments, transactions, procurements and applications are processed online, digitally – especially for being transparent and efficient. Another citizen centric approach is 'Mo Sarkar' where feedback of stake holders is randomly & periodically collected about the Department to ensure right service.

**Q** What's the bigger holistic vision for next 10 years?

AG: Solar pumping in a big way is taken up for lift irrigation system. Underground pipelines (UGPL) in canal systems are promoted to increase water conveyance efficiency. Steps are being taken in association with Agriculture & Farmers Empowerment Department to educate & encourage farmers to diversify to non-paddy crops.



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Print Media Coverage of Introductory Workshop of OIIPCR Stakeholders  
arranged by SOPMT-IRDMS, ZONE-2 on 18.12.2021

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Senior officers of the department in Doordarshan Talk Show themed 'Role of Pani Panchyat in Sustainable use of Water'



Officers of the department in Doordarshan Talk Show themed 'Role of Pani Panchyat in Optimal use of water in Infractructure' and 'Role of Pani Panchyat in Water Governance'



Senior officers of the department in All India Radio Talk Show themed 'Role of Pani Panchyat in Sustainable use of Water'



Officers of the department in All India Radio Talk Show themed 'Role of Pani Panchyat in Optimal use of water in Infractructure' and 'Role of Pani Panchyat in Water Governance'







